### **Supplementary Online Content**

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This supplementary material has been provided by the authors to give readers additional information about their work.

# Supplement 2 to "The State of US Health: Burden of Diseases, Injuries, and Risk Factors among US states, 1990 to 2016"

This supplement provides appendix tables on the GBD cause and location hierarchy, as well as supplemental results.

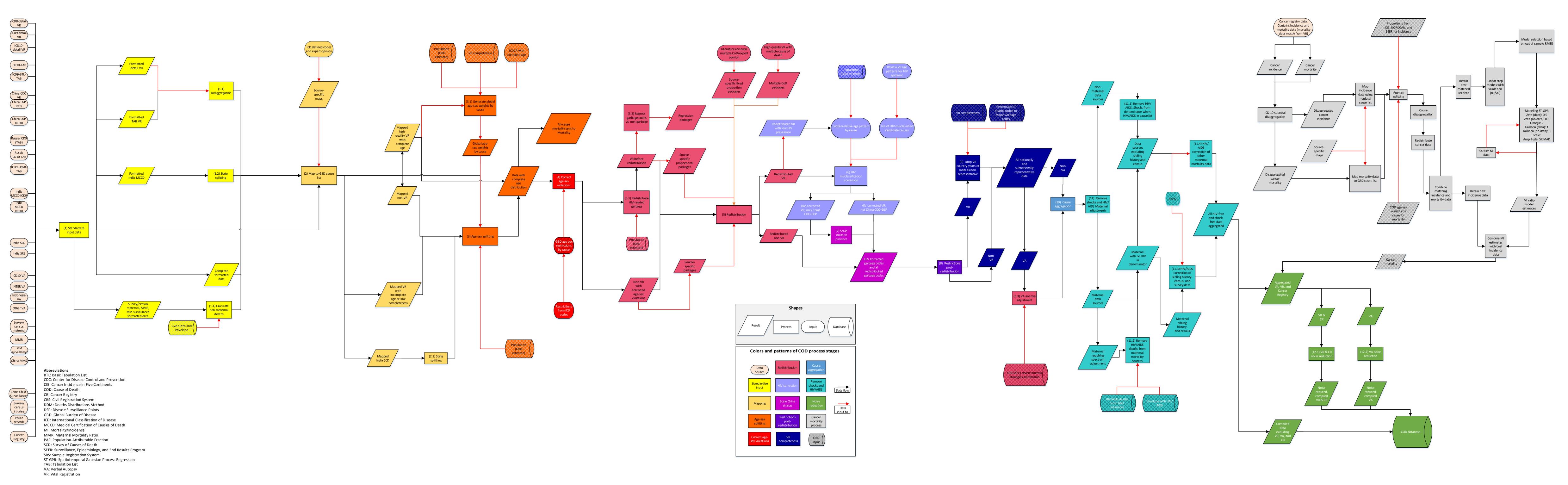
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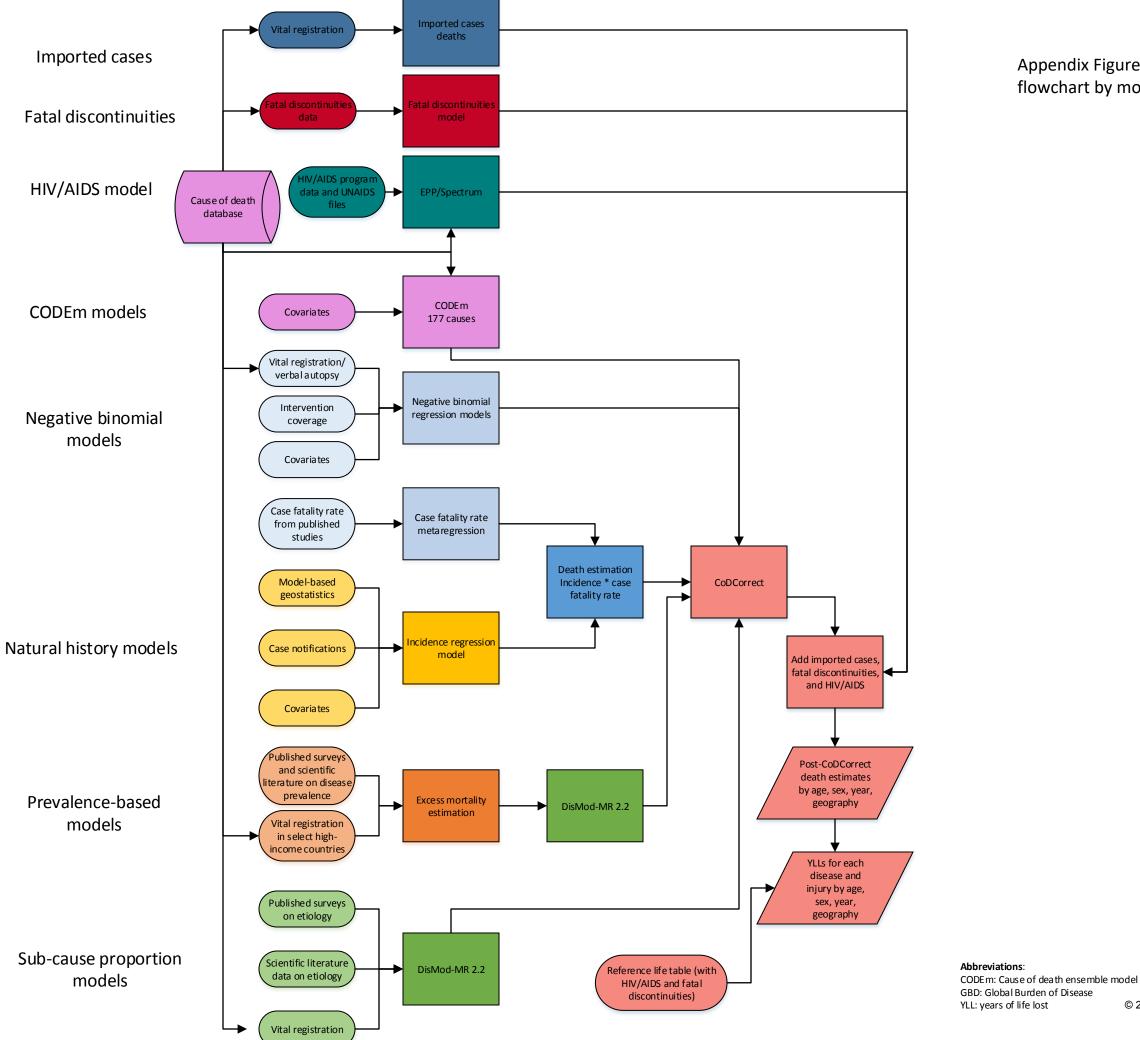
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Appendix Table 1. GBD 2016 location hierarchy with levels

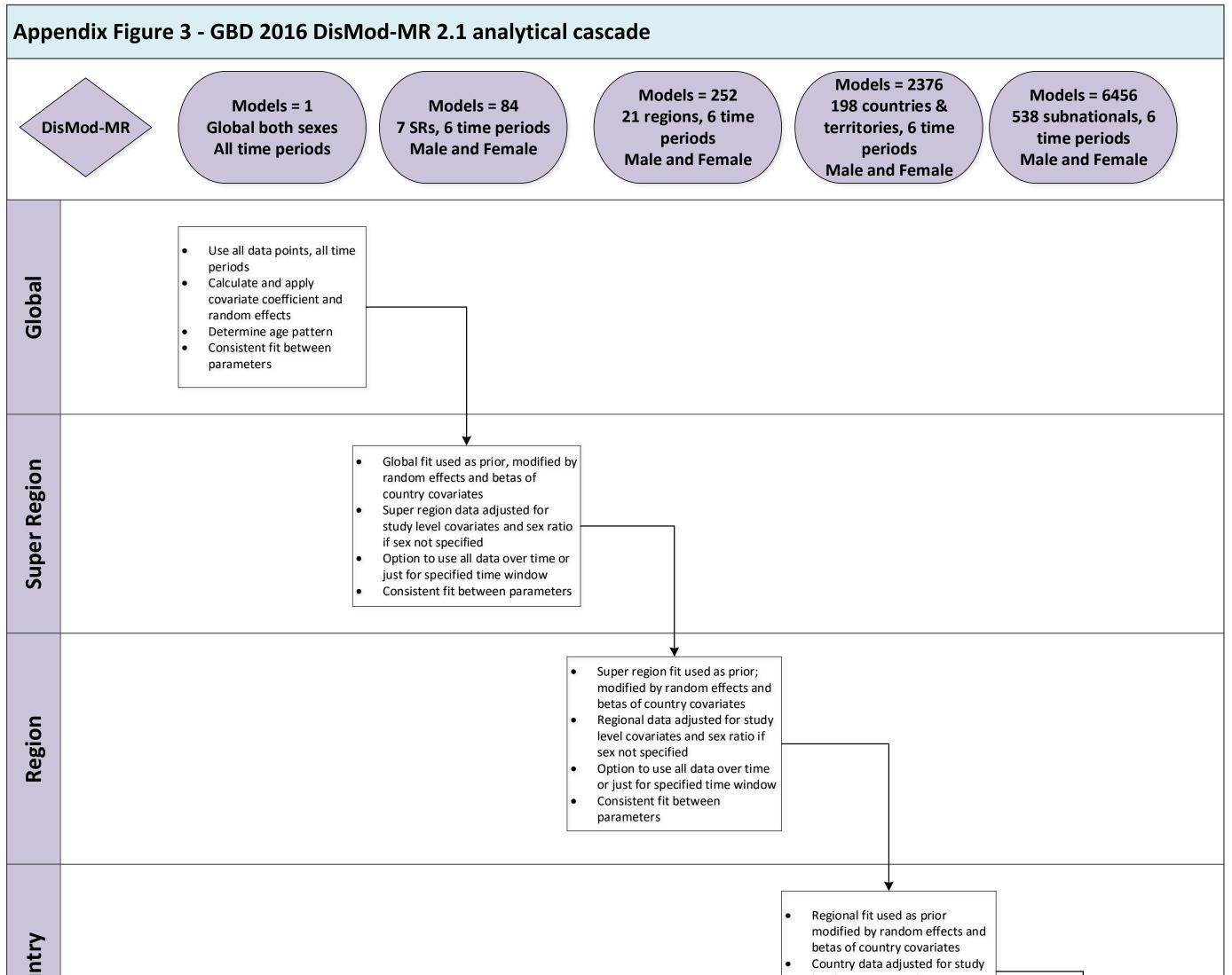
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## Appendix Figure 1. Analytical flowchart for the development of the GBD 2016 cause of death database



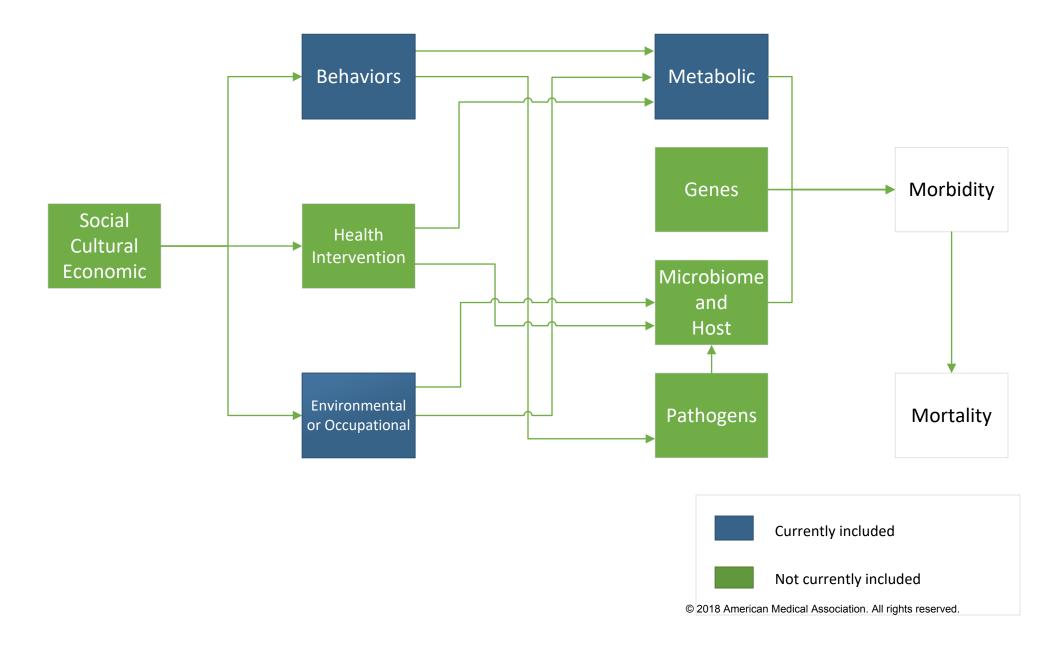


Appendix Figure 2. GBD 2016 Causes of death estimation flowchart by modeling group

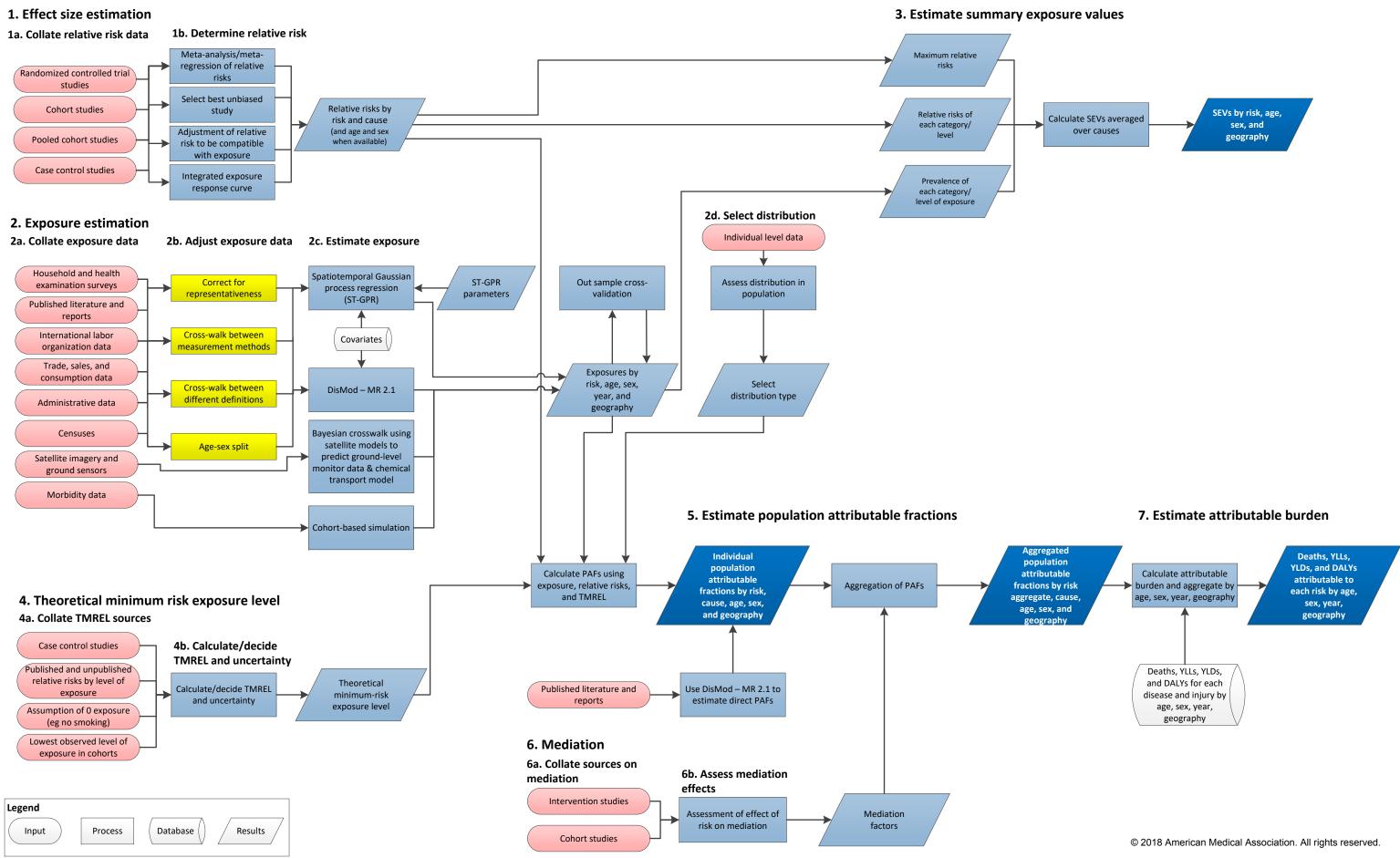


Coul	<ul> <li>level covariates and sex ratio</li> <li>Specified time window</li> <li>Consistent fit between parameters</li> </ul>		
Subnational		Country fit used a by betas of count adjustment by ava available data of s country prior Subnational data level covariates an Specified time win Consistent fit betw	ry covariates plus erage of residuals subnational and adjusted for study nd sex ratio ndow

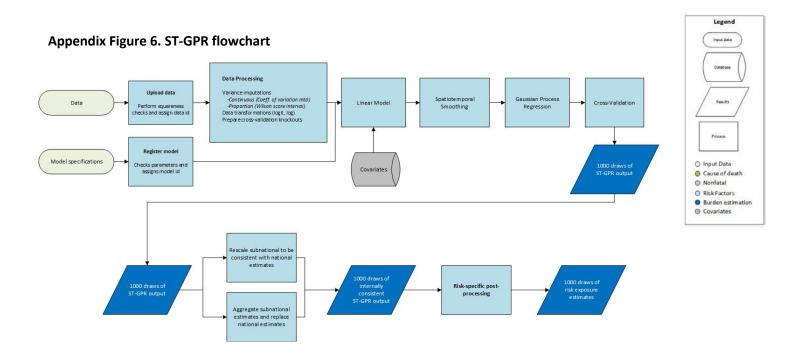
Appendix Figure 4. A more general causal web of the causes of health outcomes with the categories of causes included in this analysis shown in blue.



Appendix Figure 5. Analytical flowchart of the comparative risk assessment for the estimation of population attributable fractions by geography, age, sex, and year for GBD 2016. Ovals represent data inputs, rectangular boxes represent analytical steps, cylinders represent databases, and parallelograms represent intermediate and final results. GBD=Global Burden of Disease. SEVs=Summary exposure values. TMREL=Theoretical minimum-risk exposure level. PAFs=Population attributable fractions. YLLs=years of life lost. YLDs=years lived with disability. DALYs=disability-adjusted life-years.







Appendix Table 1: GBD 2016 location hierarchy with levels	
Location	Level
Global	0
Southeast Asia, East Asia, and Oceania	1
East Asia	2
China	3
Anhui	4
Beijing	4
Chongqing	4
Fujian	4
Gansu	4
Guangdong	4
Guangxi	4
Guizhou	4
Hainan	4
Hebei	4
Heilongjiang	4
Henan	4
Hong Kong Special Administrative Region of China	4
Hubei	4
Hunan	4
Inner Mongolia	4
Jiangsu	4
Jiangxi	4
Jilin	4
Liaoning	4
Macao Special Administrative Region of China	4
Ningxia	4
Qinghai	4
Shaanxi	4
Shandong	4
Shanghai	4
Shanxi	4
Sichuan	4
Tianjin	4
Tibet	4
Xinjiang	4
Yunnan	4
Zhejiang	4
North Korea	3
Taiwan (Province of China)	3
Southeast Asia	2
Cambodia	3
Indonesia	3
Aceh	4
Bali	4
Bangka Belitung	4
Banten	4

Appendix Table 1: GBD 2016 location hierarchy with levels	
Location	Level
Bengkulu	4
Gorontalo	4
Jakarta	4
Jambi	4
Cental Java	4
West Java	4
East Java	4
West Kalimantan	4
South Kalimantan	4
Central Kalimantan	4
East Kalimantan	4
North Kalimantan	4
Riau Islands	4
Lampung	4
Maluku	4
North Maluku	4
Nusa Tenggara Barat	4
East Nusa Tenggara	4
Papua	4
West Papua	4
Riau	4
West Sulawesi	4
South Sumatera	4
Central Sulawesi	4
Southeast Sulawesi	4
North Sulawesi	4
West Sumatera	4
South Sumatera	4
North Sumatera	4
Yogyakarta	4
Laos	3
Malaysia	3
Maldives	3
Mauritius	3
Myanmar	3
Philippines	3
Sri Lanka	3
Seychelles	3
Thailand	3
Timor-Leste	3
Vietnam	3
Oceania	2
American Samoa	3
Federated States of Micronesia	3
Fiji	3
Guam	3

Appendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level	
Kiribati	3	
Marshall Islands	3	
Northern Mariana Islands	3	
Papua New Guinea	3	
Samoa	3	
Solomon Islands	3	
Tonga	3	
Vanuatu	3	
Central Europe, Eastern Europe, and Central Asia	1	
Central Asia	2	
Armenia	3	
Azerbaijan	3	
Georgia	4	
Georgia	3	
Kazakhstan	3	
Kyrgyzstan	3	
Mongolia	3	
Tajikistan	3	
Turkmenistan	3	
Uzbekistan	3	
Central Europe	2	
Albania	3	
Bosnia and Herzegovina	3	
Bulgaria	3	
Croatia	3	
Czech Republic	3	
Hungary	3	
Macedonia	3	
Montenegro	3	
Poland	3	
Romania	3	
Serbia	3	
Slovakia	3	
Slovenia	3	
Eastern Europe	2	
Belarus	3	
Estonia	3	
Latvia	3	
Lithuania	3	
Moldova	3	
Russia	3	
Ukraine	3	
High-income	1	
High-income Asia Pacific	2	
Brunei	3	
Japan	3	

Appendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level	
Aichi	4	
Akita	4	
Aomori	4	
Chiba	4	
Ehime	4	
Fukui	4	
Fukuoka	4	
Fukushima	4	
Gifu	4	
Gunma	4	
Hiroshima	4	
Hokkaidō	4	
Нуōgo	4	
Ibaraki	4	
Ishikawa	4	
Iwate	4	
Kagawa	4	
Kagoshima	4	
Kanagawa	4	
Kōchi	4	
Kumamoto	4	
Kyōto	4	
Mie	4	
Miyagi	4	
Miyazaki	4	
Nagano	4	
Nagasaki	4	
Nara	4	
Niigata	4	
Ôita	4	
Okayama	4	
Okinawa	4	
Ōsaka	4	
Saga	4	
Saitama	4	
Shiga	4	
Shimane	4	
Shizuoka	4	
Tochigi	4	
Tokushima	4	
Tōkyō	4	
Tottori	4	
Toyama	4	
Wakayama	4	
Yamagata	4	
Yamaguchi	4	

Appendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level	
Yamanashi	4	
South Korea	3	
Singapore	3	
Australasia	2	
Australia	3	
New Zealand	3	
Western Europe	2	
Andorra	3	
Austria	3	
Belgium	3	
Cyprus	3	
Denmark	3	
Finland	3	
France	3	
Germany	3	
Greece	3	
Iceland	3	
Ireland	3	
Israel	3	
Italy	3	
Luxembourg	3	
Malta	3	
Netherlands	3	
Norway	3	
Portugal	3	
Spain	3	
Sweden	3	
Stockholm	4	
Sweden except Stockholm	4	
Switzerland	3	
United Kingdom	3	
England	4	
East Midlands	5	
Derby	6	
Derbyshire	6	
Leicester	6	
Leicestershire	6	
Lincolnshire	6	
Northamptonshire	6	
Nottingham	6	
Nottinghamshire	6	
Rutland	6	
East of England	5	
Bedford	6	
Cambridgeshire	6	
Central Bedfordshire	6	

Appendix Table 1: GBD 2016 location hierarchy with levels	
Location	Level
Essex	6
Hertfordshire	б
Luton	б
Norfolk	6
Peterborough	6
Southend-on-Sea	6
Suffolk	6
Thurrock	6
Greater London	5
Barking and Dagenham	6
Barnet	6
Bexley	6
Brent	6
Bromley	6
Camden	6
Croydon	6
Ealing	6
Enfield	6
Greenwich	6
Hackney	6
Hammersmith and Fulham	6
Haringey	6
Harrow	6
Havering	6
Hillingdon	6
Hounslow	6
Islington	6
Kensington and Chelsea	6
Kingston upon Thames	6
Lambeth	6
Lewisham	6
Merton	6
Newham	6
Redbridge	6
Richmond upon Thames	6
Southwark	6
Sutton	6
Tower Hamlets	6
Waltham Forest	6
Wandsworth	6
Westminster	6
North East England	5
County Durham	6
Darlington	6
Gateshead	6
Hartlepool	6

Appendix Table 1: GBD 2016 location hierarchy with levels	
Location	Level
Middlesbrough	6
Newcastle upon Tyne	6
North Tyneside	6
Northumberland	6
Redcar and Cleveland	6
South Tyneside	6
Stockton-on-Tees	6
Sunderland	6
North West England	5
Blackburn with Darwen	6
Blackpool	6
Bolton	6
Bury	6
Cheshire East	6
Cheshire West and Chester	6
Cumbria	6
Halton	6
Knowsley	6
Lancashire	б
Liverpool	6
Manchester	6
Oldham	6
Rochdale	б
Salford	6
Sefton	6
St Helens	6
Stockport	6
Tameside	6
Trafford	6
Warrington	6
Wigan	6
Wirral	6
South East England	5
Bracknell Forest	6
Brighton and Hove	б
Buckinghamshire	6
East Sussex	б
Hampshire	б
Isle of Wight	б
Kent	6
Medway	6
Milton Keynes	6
Oxfordshire	6
Portsmouth	6
Reading	6
Slough	6

Appendix Table 1: GBD 2016 location hierarchy with levels	
Location	Level
Southampton	6
Surrey	6
West Berkshire	6
West Sussex	6
Windsor and Maidenhead	6
Wokingham	6
South West England	5
Bath and North East Somerset	6
Bournemouth	6
Bristol, City of	6
Cornwall	6
Devon	6
Dorset	6
Gloucestershire	6
North Somerset	6
Plymouth	6
Poole	6
Somerset	6
South Gloucestershire	6
Swindon	6
Torbay	6
Wiltshire	6
West Midlands	5
Birmingham	6
Coventry	6
Dudley	6
Herefordshire, County of	6
Sandwell	6
Shropshire	6
Solihull	6
Staffordshire	6
Stoke-on-Trent	6
Telford and Wrekin	6
Walsall	6
Warwickshire	6
Wolverhampton	6
Worcestershire	6
Yorkshire and the Humber	5
Barnsley	6
Bradford	6
Calderdale	6
Doncaster	6
East Riding of Yorkshire	6
Kingston upon Hull, City of	6
Kirklees	6
Leeds	6

Appendix Table 1: GBD 2016 location hierarchy with levels	
Location	Level
North East Lincolnshire	б
North Lincolnshire	6
North Yorkshire	б
Rotherham	6
Sheffield	6
Wakefield	6
York	6
Northern Ireland	4
Scotland	4
Wales	4
Southern Latin America	2
Argentina	3
Chile	3
Uruguay	3
High-income North America	2
Canada	3
Greenland	3
USA	3
Alabama	4
Alaska	4
Arizona	4
Arkansas	4
California	4
Colorado	4
Connecticut	4
Delaware	4
District of Columbia	4
Florida	4
Georgia	3
Georgia	4
Hawaii	4
Idaho	4
Illinois	4
Indiana	4
Iowa	4
Kansas	4
Kentucky	4
Louisiana	4
Maine	4
Maryland	4
Massachusetts	4
Michigan	4
Minnesota	4
Mississippi	4
Missouri	4
Montana	4

Appendix Table 1: GBD 2016 location hierarchy with levels	
Location	Level
Nebraska	4
Nevada	4
New Hampshire	4
New Jersey	4
New Mexico	4
New York	4
North Carolina	4
North Dakota	4
Ohio	4
Oklahoma	4
Oregon	4
Pennsylvania	4
Rhode Island	4
South Carolina	4
South Dakota	4
Tennessee	4
Texas	4
Utah	4
Vermont	4
Virginia	4
Washington	4
West Virginia	4
Wisconsin	4
Wyoming	4
Latin America and Caribbean	1
Caribbean	2
Antigua and Barbuda	3
The Bahamas	3
Barbados	3
Belize	3
Bermuda	3
Cuba	3
Dominica	3
Dominican Republic	3
Grenada	3
Guyana	3
Haiti	3
Jamaica	3
Puerto Rico	3
Saint Lucia	3
Saint Vincent and the Grenadines	3
Suriname	3
Trinidad and Tobago	3
Virgin Islands, U.S.	3
Andean Latin America	2
Bolivia	3

Appendix Table 1: GBD 2016 location hierarchy with levels	
Location	Level
Ecuador	3
Peru	3
Central Latin America	2
Colombia	3
Costa Rica	3
El Salvador	3
Guatemala	3
Honduras	3
Mexico	3
Aguascalientes	4
Baja California	4
Baja California Sur	4
Campeche	4
Chiapas	4
Chihuahua	4
Coahuila	4
Colima	4
Distrito Federal	4
Distrito Federal	4
Durango	4
Guanajuato	4
Guerrero	4
Hidalgo	4
Jalisco	4
México	4
Michoacán de Ocampo	4
Morelos	4
Nayarit	4
Nuevo León	4
Oaxaca	4
Puebla	4
Querétaro	4
Quintana Roo	4
San Luis Potosí	4
Sinaloa	4
Sonora	4
Tabasco	4
Tamaulipas	4
Tlaxcala	4
Veracruz de Ignacio de la Llave	4
Yucatán	4
Zacatecas	4
Nicaragua	3
Panama	3
Venezuela	3
Tropical Latin America	2

ppendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level	
Brazil	3	
Acre	4	
Alagoas	4	
Amapá	4	
Amazonas	4	
Bahia	4	
Ceará	4	
Distrito Federal	4	
Distrito Federal	4	
Espírito Santo	4	
Goiás	4	
Maranhão	4	
Mato Grosso	4	
Mato Grosso do Sul	4	
Minas Gerais	4	
Pará	4	
Paraíba	4	
Paraná	4	
Pernambuco	4	
Piaui	4	
Rio de Janeiro	4	
Rio Grande do Norte	4	
Rio Grande do Sul	4	
Rondônia	4	
Roraima	4	
Santa Catarina	4	
São Paulo	4	
Sergipe	4	
Tocantins	4	
Paraguay	3	
North Africa and Middle East	1	
North Africa and Middle East	2	
Afghanistan	3	
Algeria	3	
Bahrain	3	
Egypt	3	
Iran	3	
Iraq	3	
Jordan	3	
Kuwait	3	
Lebanon	3	
Libya	3	
Могоссо	3	
Palestine	3	
Oman	3	
Qatar	3	

Appendix Table 1: GBD 2016 location hierarchy with levels	ppendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level		
Saudi Arabia	3		
'Asir	4		
Bahah	4		
Eastern Province	4		
Haïl	4		
Jawf	4		
Jizan	4		
Madinah	4		
Makkah	4		
Najran	4		
Northern Borders	4		
Qassim	4		
Riyadh	4		
Tabuk	4		
Sudan	3		
Syria	3		
Tunisia	3		
Turkey	3		
United Arab Emirates	3		
Yemen	3		
South Asia	1		
South Asia	2		
Bangladesh	3		
Bhutan	3		
India	3		
Andhra Pradesh	4		
Andhra Pradesh, Rural	5		
Andhra Pradesh, Urban	5		
Arunāchal Pradesh	4		
Arunāchal Pradesh, Rural	5		
Arunāchal Pradesh, Urban	5		
Assam	4		
Assam, Rural	5		
Assam, Urban	5		
Bihār	4		
Bihār, Rural	5		
Bihār, Urban	5		
Chhattīsgarh	4		
Chhattīsgarh, Rural	5		
Chhattīsgarh, Urban	5		
Delhi	4		
Delhi, Rural	5		
Delhi, Urban	5		
Goa	4		
Goa, Rural	5		
Goa, Urban	5		

ppendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level	
Gujarāt	4	
Gujarāt, Rural	5	
Gujarāt, Urban	5	
Haryāna	4	
Haryāna, Rural	5	
Haryāna, Urban	5	
Himachal Pradesh	4	
Himachal Pradesh, Rural	5	
Himachal Pradesh, Urban	5	
Jammu and Kashmīr	4	
Jammu and Kashmīr, Rural	5	
Jammu and Kashmīr, Urban	5	
Jharkhand	4	
Jharkhand, Rural	5	
Jharkhand, Urban	5	
Karnātaka	4	
Karnātaka, Rural	5	
Karnātaka, Urban	5	
Kerala	4	
Kerala, Rural	5	
Kerala, Urban	5	
Madhya Pradesh	4	
Madhya Pradesh, Rural	5	
Madhya Pradesh, Urban	5	
Mahārāshtra	4	
Mahārāshtra, Rural	5	
Mahārāshtra, Urban	5	
Manipur	4	
Manipur, Rural	5	
Manipur, Urban	5	
Meghālaya	4	
Meghālaya, Rural	5	
Meghālaya, Urban	5	
Mizoram	4	
Mizoram, Rural	5	
Mizoram, Urban	5	
Nāgāland	4	
Nāgāland, Rural	5	
Nāgāland, Urban	5	
Orissa	4	
Orissa, Rural	5	
Orissa, Urban	5	
Punjab	4	
Punjab, Rural	5	
Punjab, Urban	5	
Rājasthān	4	

ppendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level	
Rājasthān, Rural	5	
Rājasthān, Urban	5	
Sikkim	4	
Sikkim, Rural	5	
Sikkim, Urban	5	
Tamil Nādu	4	
Tamil Nādu, Rural	5	
Tamil Nādu, Urban	5	
Telangana	4	
Telangana, Rural	5	
Telangana, Urban	5	
Tripura	4	
Tripura, Rural	5	
Tripura, Urban	5	
Uttar Pradesh	4	
Uttar Pradesh, Rural	5	
Uttar Pradesh, Urban	5	
Uttarakhand	4	
Uttarakhand, Rural	5	
Uttarakhand, Urban	5	
West Bengal	4	
West Bengal, Rural	5	
West Bengal, Urban	5	
The Six Minor Territories	4	
The Six Minor Territories, Rural	5	
The Six Minor Territories, Urban		
	5	
Nepal	3	
Pakistan	3	
Sub-Saharan Africa	1	
Central Sub-Saharan Africa	2	
Angola	3	
the Central African Republic	3	
Congo (Brazzaville)	3	
Democratic Republic of the Congo	3	
Equatorial Guinea	3	
Gabon	3	
Eastern Sub-Saharan Africa	2	
Burundi	3	
Comoros	3	
Djibouti	3	
Eritrea	3	
Ethiopia	3	
Kenya	3	
Baringo	4	
Bomet	4	
Bungoma	4	

ppendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level	
Busia	4	
Elgeyo-Marakwet	4	
Embu	4	
Garissa	4	
HomaBay	4	
Isiolo	4	
Kajiado	4	
Kakamega	4	
Kericho	4	
Kiambu	4	
Kilifi	4	
Kirinyaga	4	
Kisii	4	
Kisumu	4	
Kitui	4	
Kwale	4	
Laikipia	4	
Lamu	4	
Machakos	4	
Makueni	4	
Mandera	4	
Marsabit	4	
Meru	4	
Migori	4	
Mombasa	4	
Murang'a	4	
Nairobi	4	
Nakuru	4	
Nandi	4	
Narok	4	
Nyamira	4	
Nyandarua	4	
Nyeri	4	
Samburu	4	
Siaya	4	
TaitaTaveta	4	
TanaRiver	4	
TharakaNithi	4	
TransNzoia	4	
Turkana	4	
UasinGishu	4	
Vihiga	4	
Wajir	4	
WestPokot	4	
Madagascar	3	
Malawi	3	

ppendix Table 1: GBD 2016 location hierarchy with levels		
Location	Level	
Mozambique	3	
Rwanda	3	
Somalia	3	
South Sudan	3	
Tanzania	3	
Uganda	3	
Zambia	3	
Southern Sub-Saharan Africa	2	
Botswana	3	
Lesotho	3	
Namibia	3	
South Africa	3	
Eastern Cape	4	
Free State	4	
Gauteng	4	
KwaZulu-Natal	4	
Limpopo	4	
Mpumalanga	4	
North-West	4	
Northern Cape	4	
Western Cape	4	
Swaziland	3	
Zimbabwe	3	
Western Sub-Saharan Africa	2	
Benin	3	
Burkina Faso	3	
Cameroon	3	
Cape Verde	3	
Chad	3	
Cote d'Ivoire	3	
The Gambia	3	
Ghana	3	
Guinea	3	
Guinea-Bissau	3	
Liberia	3	
Mali	3	
Mauritania	3	
Niger	3	
Nigeria	3	
Sao Tome and Principe	3	
Senegal	3	
Sierra Leone	3	
Togo	3	

Cause level	Cause Names: Long and Short	Cause of death	Cause of burden
0	All causes	Х	Х
1	Communicable, maternal, neonatal, and nutritional disorders, CMNN	Х	Х
2	HIV/AIDS and tuberculosis, HIV+TB	Х	Х
3	Tuberculosis, TB	Х	Х
4	Drug-sensitive tuberculosis, Drug-Sus TB	Х	х
4	Multidrug-resistant tuberculosis without extensive drug resistance, MDR-TB	Х	Х
4	Extensively drug-resistant tuberculosis, XDR-TB	Х	Х
4	Latent tuberculosis infection, LTBI		х
3	HIV/AIDS, HIV	Х	Х
4	Drug HIV/AIDS - Tuberculosis, Drug HIV-TB	Х	Х
4	Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance, MDR HIV-TB	Х	Х
4	Extensively drug-resistant HIV/AIDS - Tuberculosis, XDR HIV-TB	Х	Х
4	HIV/AIDS resulting in other diseases, Oth HIV	Х	х
2	Diarrhoea, lower respiratory infections, and other common infectious diseases, Diar+LRI+Oth	Х	Х
3	Diarrhoeal diseases, Diarrhea	Х	Х
3	Intestinal infectious diseases, Intest infec	Х	Х
4	Typhoid fever, Typhoid	Х	Х
4	Paratyphoid fever, Paratyph	Х	х
4	Other intestinal infectious diseases, Other intest	Х	Х
3	Lower respiratory infections, LRI	Х	Х
3	Upper respiratory infections, URI	Х	Х
3	Otitis media, Otitis	Х	Х
3	Meningitis, Meningitis	Х	Х
4	Pneumococcal meningitis, Mng Pne	Х	Х
4	H influenzae type B meningitis, Mng HiB	Х	Х
4	Meningococcal infection, Mng Men	Х	Х

opendix Table 2. Causes included in the 2016 Global Burden of Disease Study			
Cause level	Cause	Cause of death	Cause of burden
4	Other meningitis, Oth Mng	Х	Х
3	Encephalitis, Enceph	Х	Х
3	Diphtheria, Diphtheria	Х	Х
3	Whooping cough, Whooping	Х	Х
3	Tetanus, Tetanus	Х	Х
3	Measles, Measles	Х	Х
3	Varicella and herpes zoster, Varicella	Х	Х
2	Neglected tropical diseases and malaria, NTD+Malaria	Х	Х
3	Malaria, Malaria	Х	х
3	Chagas disease, Chagas	Х	х
3	Leishmaniasis, Leish	Х	Х
4	Visceral leishmaniasis, Vis Leish	Х	Х
4	Cutaneous and mucocutaneous leishmaniasis, Cut Leish		Х
3	African trypanosomiasis, Afr Tryp	Х	Х
3	Schistosomiasis, Schisto	Х	Х
3	Cysticercosis, Cysticer	Х	Х
3	Cystic echinococcosis, Echino	Х	Х
3	Lymphatic filariasis, LF		Х
3	Onchocerciasis, Oncho		Х
3	Trachoma, Trachoma		Х
3	Dengue, Dengue	Х	Х
3	Yellow fever, Yellow Fev	Х	Х
3	Rabies, Rabies	Х	Х
3	Intestinal nematode infections, Nematode	Х	Х
4	Ascariasis, Ascaria	Х	Х
4	Trichuriasis, Trichuria		Х

Cause level	Cause	Cause of death	Cause of burden
4	Hookworm disease, Hookworm		x
3	Food-borne trematodiases, FB Trema		х
3	Leprosy, Leprosy		x
3	Ebola, Ebola	х	х
3	Zika virus, Zika	х	x
3	Guinea worm disease, GWD		х
3	Other neglected tropical diseases, Oth NTD	х	x
2	Maternal disorders, Maternal	х	х
3	Maternal hemorrhage, Mat Hem	х	х
3	Maternal sepsis, Mat Sepsis	х	х
3	Maternal hypertensice, Mat HTN	х	x
3	Maternal obstructed labor, Obst Labor	Х	х
3	Maternal abortion, Comp Abort	х	x
3	Indirect maternal deaths, Mat Indir	х	
3	Late maternal deaths, Mat Late	х	
3	Maternal HIV/AIDS, Mat HIV	Х	
3	Other maternal disorders, Oth Mat	х	x
2	Neonatal disorders, Neonatal	х	х
3	Neonatal preterm birth complications, NN Preterm	х	x
3	Neonatal encephalopathy, NN Enceph	х	х
3	Neonatal sepsis and other neonatal infections, NN Sepsis	х	x
3	Hemolytic disease and other neonatal jaundice, NN Hemol	х	Х
3	Other neonatal disorders, Oth NN	x	Х
2	Nutritional deficiencies, Nutr Def	х	Х
3	Protein-energy malnutrition, PEM	х	x
3	Iodine deficiency, Iodine	Х	Х

Cause level	Cause	Cause of death	Cause of burden
3	Vitamin A deficiency, Vit A Iron-		Х
3	deficiency anaemia, Iron	Х	Х
3	Other nutritional deficiencies, Oth Nutr	Х	Х
2	Other communicable, maternal, neonatal, and nutritional diseases, Oth Group 1	Х	Х
3	Sexually transmitted diseases excluding HIV, STDs	Х	Х
4	Syphilis, Syphilis	Х	х
4	Chlamydial infection, Chlamydia	х	х
4	Gonococcal infection, Gonorrhea	х	х
4	Trichomoniasis, Trich		х
4	Genital herpes, Herpes		Х
4	Other sexually transmitted diseases	Х	х
3	Hepatitis, Hep	х	х
4	Acute hepatitis A, Hep A	Х	х
4	Hepatitis B, Hep B	Х	х
4	Hepatitis C, Hep C	Х	х
4	Acute hepatitis E, Hep E	Х	х
3	Other infectious diseases, Other Inf	Х	х
1	Non-communicable diseases, NCDs	Х	х
2	Neoplasms	Х	х
3	Lip and oral cavity cancer	Х	х
3	Nasopharynx cancer	Х	Х
3	Other pharynx cancer	Х	Х
3	Oesophageal cancer	Х	Х
3	Stomach cancer	Х	Х
3	Colon and rectum cancer	Х	х
3	Liver cancer	Х	Х

opendix Table 2. Causes included in the 2016 Global Burden of Disease Study			
Cause level	Cause	Cause of death	Cause of burden
4	Liver cancer due to hepatitis B	Х	Х
4	Liver cancer due to hepatitis C	Х	Х
4	Liver cancer due to alcohol use	Х	Х
4	Liver cancer due to other causes	Х	Х
3	Gallbladder and biliary tract cancer Pancreatic	Х	Х
3	cancer	Х	Х
3	Larynx cancer	Х	Х
3	Tracheal, bronchus, and lung cancer, Lung C	Х	Х
3	Malignant skin melanoma	Х	Х
3	Non-melanoma skin cancer	Х	Х
4	Non-melanoma skin cancer (squamous-cell carcinoma)	Х	Х
4	Non-melanoma skin cancer (basal-cell carcinoma)		х
3	Breast cancer, Breast C	Х	Х
3	Cervical cancer, Cervical C	Х	х
3	Uterine cancer	Х	Х
3	Ovarian cancer	Х	х
3	Prostate cancer	х	х
3	Testicular cancer	Х	Х
3	Kidney cancer	Х	Х
3	Bladder cancer	Х	Х
3	Brain and nervous system cancer	Х	Х
3	Thyroid cancer	Х	Х
3	Mesothelioma	Х	Х
3	Hodgkin lymphoma	Х	Х
3	Non-Hodgkin's lymphoma	Х	Х
3	Multiple myeloma	Х	Х

Cause level	Cause	Cause of death	Cause of burden
3	Leukaemia	х	х
4	Acute lymphoid leukaemia	х	х
4	Chronic lymphoid leukaemia	х	х
4	Acute myeloid leukaemia	Х	Х
4	Chronic myeloid leukaemia	х	х
4	Other leukaemia	х	х
3	Other neoplasms	х	х
2	Cardiovascular diseases, CVD	х	х
3	Rheumatic heart disease, RHD	х	х
3	Ischaemic heart disease, IHD	Х	Х
3	Cerebrovascular disease, Stroke	х	х
4	Ischaemic stroke, Isch Stroke	Х	Х
4	Hemorrhagic stroke, Hem Stroke	х	Х
3	Hypertensive heart disease, HTN HD	х	х
3	Cardiomyopathy and myocarditis, CMP	х	х
4	Myocarditis, Myocarditis	Х	Х
4	Alcoholic cardiomyopathy, Alcohol CMP	х	х
4	Other cardiomyopathy, Other CMP	х	Х
3	Atrial fibrillation and flutter, A Fib	х	х
3	Aortic aneurysm, Aort An	х	
3	Peripheral vascular disease, PAD	х	х
3	Endocarditis, Endocar	х	Х
3	Other cardiovascular and circulatory diseases	х	Х
2	Chronic respiratory diseases	х	Х
3	Chronic obstructive pulmonary disease, COPD	х	Х
3	Pneumoconiosis, Pneumo	Х	Х

Cause level	Cause	Cause of death	Cause of burden
4	Silicosis, Silicosis	Х	х
4	Asbestosis, Asbestosis	Х	х
4	Coal workers pneumoconiosis, Coal W	Х	Х
4	Other pneumoconiosis, Other Pneum	Х	Х
3	Asthma, Asthma	Х	Х
3	Interstitial lung disease and pulmonary sarcoidosis, ILD	Х	Х
3	Other chronic respiratory diseases, Oth Resp	Х	Х
2	Cirrhosis and other chronic liver diseases, Cirrhosis	Х	х
3	Cirrhosis and other chronic liver diseases due to hepatitis B	Х	Х
3	Cirrhosis and other chronic liver diseases due to hepatitis C	х	Х
3	Cirrhosis and other chronic liver diseases due to alcohol use	Х	х
3	Cirrhosis and other chronic liver diseases due to other causes	х	Х
2	Digestive diseases, Digestive	Х	Х
3	Peptic ulcer disease, PUD	Х	Х
3	Gastritis and duodenitis, Gastritis	Х	Х
3	Appendicitis, Appendicit	Х	Х
3	Paralytic ileus and intestinal obstruction, Ileus	Х	Х
3	Inguinal, femoral, and abdominal hernia, Hernia	Х	Х
3	Inflammatory bowel disease, IBD	Х	Х
3	Vascular intestinal disorders , Vasc Intest	Х	Х
3	Gallbladder and biliary diseases, Gall Bile	Х	Х
3	Pancreatitis, Pancreatit	Х	Х
3	Other digestive diseases, Other digest	Х	Х
2	Neurological disorders, Neuro	Х	Х
3	Alzheimer's disease and other dementias, Alzheimer	Х	Х
3	Parkinson's disease, Parkinson	Х	Х

Appendix Table 2	ppendix Table 2. Causes included in the 2016 Global Burden of Disease Study				
Cause level	Cause	Cause of death	Cause of burden		
3	Epilepsy, Epilepsy	Х	Х		
3	Multiple sclerosis, MS	х	Х		
3	Motor neuron disease, ALS	х	Х		
3	Migraine, Migraine		х		
3	Tension-type headache, Tens head		Х		
3	Other neurological disorders, Oth Neuro	Х	х		
2	Mental and substance use disorders, Mental	х	х		
3	Schizophrenia, Schiz		х		
3	Alcohol use disorders, Alcohol	х	Х		
3	Drug use disorders, Drugs	Х	Х		
4	Opioid use disorders, Opioids	Х	х		
4	Cocaine use disorders, Cocaine	Х	Х		
4	Amphetamine use disorders, Amphet	Х	х		
4	Cannabis use disorders, Cannabis		Х		
4	Other drug use disorders, Oth Drug	Х	х		
3	Depressive disorders, Depression		Х		
4	Major depressive disorder, MDD		х		
4	Dysthymia, Dysthymia		Х		
3	Bipolar disorder, Bipolar		Х		
3	Anxiety disorders, Anxiety		Х		
3	Eating disorders, Eating	х	Х		
4	Anorexia nervosa, Anorexia	Х	Х		
4	Bulimia nervosa, Bulimia	Х	х		
3	Autistic spectrum disorders, ASD		Х		
4	Autism, Autism		Х		
4	Asperger syndrome and other autistic spectrum disorders, Asperger		Х		

opendix Table 2. Causes included in the 2016 Global Burden of Disease Study				
Cause level	Cause	Cause of death	Cause of burden	
3	Attention-deficit/hyperactivity disorder, ADHD		Х	
3	Conduct disorder, Conduct		Х	
3	Idiopathic developmental intellectual disability, ID		Х	
3	Other mental and substance use disorders, Oth Ment		Х	
2	Diabetes, urogenital, blood, and endocrine diseases	Х	Х	
3	Diabetes mellitus, Diabetes	Х	Х	
3	Acute glomerulonephritis, AGN	Х	Х	
3	Chronic kidney disease, CKD	Х	Х	
4	Chronic kidney disease due to diabetes mellitus	Х	х	
4	Chronic kidney disease due to hypertension	Х	х	
4	Chronic kidney disease due to glomerulonephritis	Х	Х	
4	Chronic kidney disease due to other causes	Х	Х	
3	Urinary diseases and male infertility	Х	Х	
4	Interstitial nephritis and urinary tract infections	Х	Х	
4	Urolithiasis, Urolith	Х	Х	
4	Benign prostatic hyperplasia, BPH		Х	
4	Male infertility, Infert M		Х	
4	Other urinary diseases, Oth Urin	Х	Х	
3	Gynecological diseases	Х	Х	
4	Uterine fibroids, Fibroids	Х	Х	
4	Polycystic ovarian syndrome, PCOS	Х	Х	
4	Female infertility, Infert F		Х	
4	Endometriosis, Endo	Х	Х	
4	Genital prolapse, Prolapse	Х	Х	
4	Premenstrual syndrome, PMS		х	
4	Other gynecological diseases, Other gyne	Х	Х	

Cause level	Cause	Cause of death	Cause of burden
3	Hemoglobinopathies and hemolytic anaemias	Х	Х
4	Thalassemias, Thalass	Х	х
4	Thalassaemias trait, Thal trait		х
4	Sickle cell disorders, Sickle	Х	х
4	Sickle cell trait, Sickle trait		х
4	G6PD deficiency, G6PD	Х	х
4	G6PD trait, G6PD trait Other hemoglobinopathies and		х
4	hemolytic anaemias, Oth Hem	Х	х
3	Endocrine, metabolic, blood, and immune disorders	Х	х
2	Musculoskeletal disorders, MSK	Х	х
3	Rheumatoid arthritis, Rheu Arth	Х	х
3	Osteoarthritis, Osteoarth		Х
3	Low back and neck pain, Back+Neck		х
4	Low back pain, Back pain		Х
4	Neck pain, Neck pain		х
3	Gout		х
3	Other musculoskeletal disorders, Oth MSK	Х	х
2	Other non-communicable diseases, Oth NCDs	Х	х
3	Congenital anomalies	Х	х
4	Neural tube defects	Х	х
4	Congenital heart anomalies	Х	Х
4	Orofacial clefts	Х	Х
4	Down's syndrome	Х	Х
4	Turner syndrome		Х
4	Klinefelter syndrome		х
4	Other chromosomal abnormalities	Х	Х

ppendix Table 2. Causes included in the 2016 Global Burden of Disease Study			
Cause level	Cause	Cause of death	Cause of burden
4	Congenital musculoskeletal and limb anomalies	Х	Х
4	Urogenital congenital anomalies	Х	Х
4	Digestive congenital anomalies	Х	Х
4	Other congenital anomalies	Х	Х
3	Skin and subcutaneous diseases	Х	Х
4	Eczema		Х
4	Psoriasis		Х
4	Cellulitis	Х	Х
4	Pyoderma	х	Х
4	Scabies		Х
4	Fungal skin diseases		Х
4	Viral skin diseases		Х
4	Acne vulgaris		Х
4	Alopecia areata		Х
4	Pruritus		Х
4	Urticaria		Х
4	Decubitus ulcer	х	Х
4	Other skin and subcutaneous diseases	х	Х
3	Sense organ diseases		Х
4	Glaucoma		Х
4	Cataract		Х
4	Macular degeneration		Х
4	Refraction and accommodation disorders		Х
4	Age-related and other hearing loss		Х
4	Other vision loss		Х
4	Other sense organ diseases		Х

Cause level	Cause	Cause of death	Cause of burden
3	Oral disorders, Oral		x
4	Deciduous caries		x
4	Permanent caries		x
4	Periodontal disease		x
4	Edentulism and severe tooth loss		x
4	Other oral disorders		x
3	Sudden infant death syndrome, SIDs	х	
1	Injuries	Х	x
2	Transport injuries	х	x
3	Road injuries, Road injury	X	x
4	Pedestrian road injuries	х	x
4	Cyclist road injuries	X	х
4	Motorcyclist road injuries	х	x
4	Motor vehicle road injuries	X	x
4	Other road injuries	х	x
3	Other transport injuries	X	x
2	Unintentional injuries	х	x
3	Falls	Х	x
3	Drowning	х	x
3	Fire, heat, and hot substances	Х	x
3	Poisonings	х	x
3	Exposure to mechanical forces	х	Х
4	Unintentional firearm injuries	х	x
4	Unintentional suffocation	х	Х
4	Other exposure to mechanical forces	х	x

pendix Table 2 Cause level	Cause	Cause of death	Cause of burden
3	Animal contact	X	Х
4	Venomous animal contact	Х	Х
4	Non-venomous animal contact	Х	х
3	Foreign body	Х	х
4	Pulmonary aspiration and foreign body in airway	Х	х
4	Foreign body in eyes		х
4	Foreign body in other body part	Х	х
3	Environmental heat and cold exposure	х	х
3	Other unintentional injuries	Х	х
2	Self-harm and interpersonal violence	Х	Х
3	Self-harm	Х	х
4	Self-harm by firearm	Х	х
4	Self-harm by other specified means	Х	х
3	Interpersonal violence	Х	х
4	Assault by firearm	Х	х
4	Assault by sharp object	Х	х
4	Sexual violence		х
4	Assault by other means	Х	х
2	Forces of nature, conflict and terrorism, and executions and police conflict	Х	х
3	Exposure to forces of nature	Х	х
3	Conflict and terrorism	Х	х
3	Executions and police conflict	Х	х

Appendix Table 3: CoDCorrect cause hierarchy with levels		
Cause name	CoDCorrect level	
All causes	0	
Tuberculosis	1	
Drug-sensitive tuberculosis	2	
Multidrug-resistant tuberculosis without extensive drug resistance	2	
Extensively drug-resistant tuberculosis	2	
Diarrhoeal diseases	-	
Typhoid fever	1	
Paratyphoid fever	-	
Other intestinal infectious diseases	1	
Lower respiratory infections	1	
Upper respiratory infections	1	
Otitis media	1	
Meningitis	1	
Pneumococcal meningitis	2	
H influenzae type B meningitis	2	
Meningococcal infection	2	
Other meningitis	2	
Encephalitis	1	
Diphtheria	1	
Whooping cough	1	
Tetanus	1	
Measles	1	
Varicella and herpes zoster	1	
Malaria	1	
Chagas disease	1	
Visceral leishmaniasis	1	
African trypanosomiasis 1		
Schistosomiasis 1		
Cysticercosis	1	
Cystic echinococcosis	1	
Dengue	1	
Yellow fever	1	
Rabies	1	
Intestinal nematode infections	1	
Ascariasis	2	
Zika virus	1	
Other neglected tropical diseases	1	
Maternal disorders	1	
Maternal haemorrhage	2	
Maternal sepsis and other pregnancy related	2	
infections		
Maternal hypertensive disorders	2	
Maternal obstructed labour and uterine rupture	2	
Maternal abortion, miscarriage, and ectopic pregnancy	2	

ppendix Table 3: CoDCorrect cause hi	-
Cause name	CoDCorrect level
Indirect maternal deaths	2
Late maternal deaths	2
Maternal deaths aggravated by HIV/AIDS	2
Other maternal disorders	2
Neonatal disorders	1
Neonatal preterm birth complications	2
Neonatal encephalopathy due to birth asphyxia and trauma	2
Neonatal sepsis and other neonatal infections	2
Hemolytic disease and other neonatal jaundice	2
Other neonatal disorders	2
Nutritional deficiencies	1
Protein-energy malnutrition	2
Iodine deficiency	2
Iron-deficiency anaemia	2
Other nutritional deficiencies	2
Sexually transmitted diseases excluding HIV	1
Syphilis	2
Chlamydial infection	2
Gonococcal infection	2
Other sexually transmitted diseases	2
Hepatitis	1
Acute hepatitis A	2
Hepatitis B	2
Hepatitis C	2
Acute hepatitis E	2
Other infectious diseases	1
Lip and oral cavity cancer	1
Nasopharynx cancer	1
Other pharynx cancer	1
Oesophageal cancer	1
Stomach cancer	1
Colon and rectum cancer	1
Liver cancer	1
Liver cancer due to hepatitis B	2
Liver cancer due to hepatitis C	2
Liver cancer due to alcohol use	2
Liver cancer due to other causes	2
Gallbladder and biliary tract cancer	1
Pancreatic cancer	1
Larynx cancer	1
Tracheal, bronchus, and lung cancer	1
Malignant skin melanoma	1

ppendix Table 3: CoDCorrect cause h	
Cause name	CoDCorrect level
Non-melanoma skin cancer Non-melanoma skin cancer (squamous-cell	1
carcinoma)	2
Breast cancer	1
Cervical cancer	1
Uterine cancer	1
Ovarian cancer	1
Prostate cancer	1
Festicular cancer	1
Kidney cancer	1
Bladder cancer	1
Brain and nervous system cancer	1
Thyroid cancer	1
Viesothelioma	1
lodgkin lymphoma	1
Non-Hodgkin's lymphoma	1
/ultiple myeloma	1
Leukaemia	1
Acute lymphoid leukaemia	2
Chronic lymphoid leukaemia	2
Acute myeloid leukaemia	2
Chronic myeloid leukaemia	2
Other leukaemia	2
Other neoplasms	1
Cardiovascular diseases	1
Rheumatic heart disease	2
Ischaemic heart disease	2
Cerebrovascular disease	2
Ischaemic stroke	3
Hemorrhagic stroke	3
Hypertensive heart disease	2
Cardiomyopathy and myocarditis	2
Myocarditis	3
Alcoholic cardiomyopathy	3
Other cardiomyopathy	3
Atrial fibrillation and flutter	2
Aortic aneurysm	2
Peripheral vascular disease	2
Endocarditis	2
Other cardiovascular and circulatory diseases	2
Chronic respiratory diseases	1
Chronic obstructive pulmonary disease	2
Pneumoconiosis	2
Silicosis	3
Asbestosis	3

Appendix Table 3. CoDCorrect cause hierarchy with levels		
Cause name	CoDCorrect level	
Coal workers pneumoconiosis	3	
Other pneumoconiosis	3	
Asthma	2	
Interstitial lung disease and pulmonary	2	
sarcoidosis	-	
Other chronic respiratory diseases	2	
Cirrhosis and other chronic liver diseases Cirrhosis and other chronic liver diseases due to	1	
hepatitis B	2	
Cirrhosis and other chronic liver diseases due to hepatitis C	2	
Cirrhosis and other chronic liver diseases due to alcohol use	2	
Cirrhosis and other chronic liver diseases due to other causes	2	
Digestive diseases	1	
Peptic ulcer disease	2	
Gastritis and duodenitis	2	
Appendicitis	2	
Paralytic ileus and intestinal obstruction	2	
Inguinal, femoral, and abdominal hernia	2	
Inflammatory bowel disease	2	
Vascular intestinal disorders	2	
Gallbladder and biliary diseases	2	
Pancreatitis	2	
Other digestive diseases	2	
Alzheimer's disease and other dementias	1	
Parkinson's disease	1	
Epilepsy	1	
Multiple sclerosis	1	
Motor neuron disease	1	
Other neurological disorders	1	
Alcohol use disorders	1	
Drug use disorders	1	
C	2	
Opioid use disorders Cocaine use disorders		
	2	
Amphetamine use disorders	2	
Other drug use disorders	2	
Eating disorders	1	
Anorexia nervosa	2	
Bulimia nervosa	2	
Diabetes mellitus	1	
Acute glomerulonephritis	1	
Chronic kidney disease	1	
Chronic kidney disease due to diabetes mellitus	2	
Chronic kidney disease due to hypertension	2	

Appendix Table 3: CoDCorrect cause hierarchy with levels	
Cause name	CoDCorrect level
Chronic kidney disease due to glomerulonephritis	2
Chronic kidney disease due to other causes	2
Urinary diseases and male infertility	1
Interstitial nephritis and urinary tract infections	2
Urolithiasis	2
Other urinary diseases	2
Gynecological diseases	1
Uterine fibroids	2
Polycystic ovarian syndrome	2
Endometriosis	2
Genital prolapse	2
Other gynecological diseases	2
Hemoglobinopathies and hemolytic anaemias	1
Thalassemias	2
Sickle cell disorders	2
G6PD deficiency	2
Other hemoglobinopathies and hemolytic anaemias	2
Endocrine, metabolic, blood, and immune disorders	1
Musculoskeletal disorders	1
Rheumatoid arthritis	2
Other musculoskeletal disorders	2
Congenital anomalies	1
Neural tube defects	2
Congenital heart anomalies	2
Cleft lip and cleft palate	2
Down's syndrome	2
Other chromosomal abnormalities	2
Congenital musculoskeletal and limb anomalies	2
Urogenital congenital anomalies	2
Digestive congenital anomalies	2
Other congenital anomalies	2
Skin and subcutaneous diseases	1
Cellulitis	2
Pyoderma	2
Decubitus ulcer	2
Other skin and subcutaneous diseases	2
Sudden infant death syndrome	1
Transport injuries	1
Road injuries	2
Pedestrian road injuries	3
Cyclist road injuries	3

Appendix Table 3: CoDCorrect cause hierarchy with levels		
Cause name	CoDCorrect level	
Motorcyclist road injuries	3	
Motor vehicle road injuries	3	
Other road injuries	3	
Other transport injuries	2	
Falls	1	
Drowning	1	
Fire, heat, and hot substances	1	
Poisonings	1	
Unintentional firearm injuries	1	
Unintentional suffocation	1	
Other exposure to mechanical forces	1	
Adverse effects of medical treatment	1	
Animal contact	1	
Venomous animal contact	2	
Non-venomous animal contact	2	
Pulmonary aspiration and foreign body in airway	1	
Foreign body in other body part	1	
Environmental heat and cold exposure	1	
Other unintentional injuries	1	
Self-harm	1	
Self-harm by firearm	2	
Self-harm by other specified means	2	
Interpersonal violence	1	
Assault by firearm	2	
Assault by sharp object	2	
Assault by other means	2	
Executions and police conflict	1	

Appendix Table 4: List of Inte	ernational Classification of Diseases (ICD) codes mapped to the Globa	Burden of Disease cause list for causes of death
Cause	ICD10	ICD9
Communicable, maternal, neonatal, and nutritional diseases	A00-A00.9, A01.0-A14, A15-A28.9, A30-A30.9, A32-A39.9, A48.1-A48.2, A48.4-A48.5, A49.1, A50-A58, A60-A60.9, A63-A63.8, A65-A65.0, A68-A70, A74, A74.8-A75.9, A77-A96.9, A98-A98.8, B00-B06.9, B10-B10.8, B15-B17.9, B19-B27.9, B29.4, B33-B33.1, B33.3-B33.8, B47-B48.8, B50-B53.8, B55.0, B56-B57.5, B60-B60.8, B63, B65-B67.9, B69-B72.0, B74.3-B75, B77-B77.9, B83-B83.8, B90-B92, B94.1-B94.2, B95-B95.5, B97.4-B97.6, D50.1-D50.8, D51-D52.0, D52.8-D53.9, D64.3, E00-E02, E40-E46.9, E51-E61.9, E63-E64.0, E64.2-E64.9, F07.1, G00.0-G00.8, G03-G03.8, G04-G05.8, G14-G14.6, H70-H70.9, 100, 102, 102.9, 198.0-198.1, J01-J01.9, J02.0, J03.0, J04.0, J05-J05.0, J09-J15.8, J16-J16.9, J20-J21.9, J36-J36.0, K67.0-K67.8, K71.2, K71.6, K74.7-K74.8, K75.3, K76.3, K77.0, K93.0-K93.1, M03.1, M12.1, M490-M49.1, M73.0-M73.1, M49.0-M49.1, M73.0-M73.1, M49.0-M49.1, M73.0-W73.1, P19-P22.9, P23.0-P23.4, P24-P29.9, P35-P37.2, P37.5-P39.9, P50-P61.9, P70, P70.3-P72.9, P74-P78.9, P80-P81.9, P83-P84, P90-P94.9, P96, P96.3-P96.4, P96.8, R19.7, U04-U04.9, U06-U06.9, U82-U89, Z16-Z16.3	001-001.9, 002.0-030.9, 032-034.9, 036-036.3, 036.5-037.9, 040, 040.1-041.0, 042-066.9, 070-074.1, 074.3-075.9, 078.3-078.7, 079- 079.7, 080-083.9, 084.0-084.5, 084.7-084.9, 085.0, 086-088, 088.8, 088.9, 090-101.6, 104-104.9, 120-124.9, 125.4-125.9, 127-127.1, 128-1290, 136-136.2, 137-1390, 244.2, 260-263.9, 265-269.9, 280.1-280.8, 281.0-281.9, 320.0-320.8, 321-323.9, 381-383.9, 390- 390.9, 392, 392.9, 425.6, 461-461.9, 464.0, 464.2, 464.4, 464.8- 464.9, 466-469, 470.0, 475-475.9, 476.9, 480-482.8, 483.0-483.9, 484.0-484.7, 487-489, 630-636.9, 638-638.9, 640-679.1, 716.0, 730.4-730.6, 760-760.6, 760.8-768, 768.2-770, 770.1-775, 775.4- 779.3, 779.6-779.8, V09-V09.9
HIV/AIDS and tuberculosis	A10-A14, A15-A19.9, B20-B24.9, B90-B90.9, K67.3, K93.0, M49.0, N74.1-N74.2, P37.0, U84.3	010-019.9, 042-044.9, 137-137.9, 138.0-138.9, 730.4-730.6
Tuberculosis	A10-A14, A15-A19.9, B90-B90.9, K67.3, K93.0, M49.0, N74.1-N74.2, P37.0, U84.3	010-019.9, 137-137.9, 138.0-138.9, 730.4-730.6
Drug-susceptible tuberculosis	A10-A14, A15-A19.9, B90-B90.9, K67.3, K93.0, M49.0, P37.0	010-019.9
Multidrug-resistant tuberculosis without extensive drug resistance	U84.3	
Extensively drug-resistant tuberculosis		
HIV/AIDS	B20-B24.9	042-044.9
Drug-susceptible HIV/AIDS - Tuberculosis	B20.0	
Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance		
Extensively drug-resistant HIV/AIDS - Tuberculosis		
HIV/AIDS resulting in other diseases	B20.1-B23.9, B24.0	042-044.9
Diarrhea, lower respiratory, and other common infectious diseases	A00-A00.9, A01.0-A09.9, A33-A37.9, A39-A39.9, A48.1, A70, A83-A87.9, B01-B02.9, B05-B05.9, B94.1, B97.4-B97.6, F07.1, G00.0-G00.8, G03-G03.8, G04-G05.8, H70-H70.9, J01-J01.9, J04.0, J05-J05.0, J09-J15.8, J16-J16.9, J20-J21.9, J36-J36.0, P23.0-P23.4, P35.8, R19.7, U04-U04.9	001-001.9, 002.0-009.9, 032-033.9, 036-036.3, 036.5-037.9, 047- 049.9, 052-053.9, 055-055.9, 062-064.9, 079.6, 139.0, 320.0- 320.8, 321-323, 323.4-323.9, 381-383.9, 461-461.9, 464.0, 464.2, 464.4, 464.8-464.9, 466-469, 470.0, 475-475.9, 476.9, 480-482.8, 483.0-483.9, 484.0-484.3, 484.6-484.7, 487-489, 771.3
Diarrheal diseases	A00-A00.9, A02-A04.1, A04.3, A04.5-A07, A07.2-A07.4, A08-A09.9, R19.7	001-001.9, 003-006.9, 007.4-007.8, 008.2-009.9
Intestinal infectious diseases	A01.0-A01.4, A04.2, A04.4, A07.0-A07.1, A07.8-A07.9	002.0-002.9, 007-007.3, 007.9-008.1
Typhoid fever	A01.0	002.0
Paratyphoid fever	A01.1-A01.4	002.1-002.9
Other intestinal infectious diseases Lower respiratory infections	A04.2, A04.4, A07.0-A07.1, A07.8-A07.9 A48.1, A70, B97.4-B97.6, J09-J15.8, J16-J16.9, J20-J21.9, P23.0-P23.4, U04-U04.9	007-007.3, 007.9-008.1 079.6, 466-469, 470.0, 480-482.8, 483.0-483.9, 484.1-484.2, 484.6- 484.7, 487-489
Upper respiratory infections	J01-J01.9, J04.0, J05-J05.0, J36-J36.0	461-461.9, 464.0, 464.2, 464.4, 464.8-464.9, 475-475.9, 476.9
Otitis media	Н70-Н70.9	381-383.9
Meningitis	A39-A39.9, A87-A87.9, G00.0-G00.8, G03-G03.8	036-036.3, 036.5-036.9, 047-049.9, 320.0-320.8, 321-322.9

Cause	ICD10	Burden of Disease cause list for causes of death
Pneumococcal meningitis	G00.1	320.1
H influenzae type B meningitis	G00.0	320.0
Meningococcal meningitis	A39-A39.9	036-036.3, 036.5-036.9
Other meningitis	A87-A87.9, G00.2-G00.8, G03-G03.8	047-049.9, 320.2-320.8, 321-322.9
Encephalitis	A83-A86.4, B94.1, F07.1, G04-G05.8	062-064.9, 139.0, 323, 323.4-323.9
Diphtheria	A36-A36.9	032-032.9
Whooping cough	A37-A37.9	033-033.9, 484.3
Tetanus	A33-A35.0	037-037.9, 771.3
Measles	B05-B05.9	055-055.9, 484.0
Varicella and herpes zoster	B01-B02.9, P35.8	052-053.9
Neglected tropical diseases and malaria	A30-A30.9, A68-A68.9, A69.2-A69.9, A75-A75.9, A77-A79.9, A82-A82.9, A90-A96.9, A98-A98.8, B33.0-B33.1, B50-B53.8, B55.0, B56-B57.5, B60-B60.8, B65-B67.9, B69- B72.0, B74.3-B75, B77-B77.9, B83-B83.8, B92, K93.1, P37.1, U06-U06.9	030-030.9, 060-061.8, 065-066.9, 071-071.9, 080-083.9, 084.0- 084.5, 084.7-084.9, 085.0, 086-088, 088.8-088.9, 120-124.9, 125.4 125.9, 127-127.1, 128-129.0, 425.6
Malaria	B50-B53.8	084.0-084.5, 084.7-084.9
Leprosy	A30-A30.9	030-030.9
Chagas disease	B57-B57.5, K93.1	086-086.2, 086.9, 425.6
Leishmaniasis	B55.0	085.0
Visceral leishmaniasis	B55.0	085.0
African trypanosomiasis	B56-B56.9	086.3-086.5
21		
Schistosomiasis	B65-B65.9	120-120.9
Cysticercosis	B69-B69.9	123.1
Cystic echinococcosis	B67-B67.4, B67.8-B67.9	122-122.4, 122.8-122.9
Dengue	A90-A91.9	061-061.8
Yellow fever	A95-A95.9	060-060.9
Rabies	A82-A82.9	071-071.9
Intestinal nematode infections	В77-В77.9	127.0
Ascariasis	В77-В77.9	127.0
Ebola	A98.4	
Zika virus	U06-U06.9	
Other neglected tropical diseases	A68-A68.9, A69.2-A69.9, A75-A75.9, A77-A79.9, A92-A94.0, A96-A96.9, A98-A98.3, A98.5-A98.8, B33.0-B33.1, B60-B60.8, B67.5-B67.7, B70-B71.9, B74.3-B75, B83-B83.8, P37.1	065-066.9, 080-083.9, 087-088, 088.8-088.9, 122.5-122.7, 123- 123.0, 123.2-124.9, 125.4-125.6, 125.9, 127, 127.1, 128-129.0
Maternal disorders	N96, N98-N98.9, O00-O07.9, O09-O16.9, O20-O26.9, O28-O36.9, O40-O48.1, O60-O77.9, O80-O92.7, O96-O98.6, O98.8-O99.9	630-636.9, 638-638.9, 640-679.1
Maternal hemorrhage	020-020.9, 043.2, 044-046.9, 062-062.9, 067-067.9, 070, 072-072.3	640-641.9, 661-661.9, 665, 666-666.9
Maternal sepsis and other maternal infections	023-023.9, 085-086.8, 091-091.2	659.3, 670-670.9
Maternal hypertensive disorders	O10-O16.9	642-642.9
Maternal obstructed labor and uterine rupture	032-033.9, 064-066.9, 071-071.9	652-653.9, 660-660.9, 665.0-665.3
Maternal abortion, miscarriage, and ectopic	N96, O00-O07.9	630-636.9, 638-638.9, 646.3
pregnancy Indirect maternal deaths	024-025.3, 098-098.6, 098.8-099.9	646-646.2, 646.4-649.9
Late maternal deaths	096-097.9	040-040.2, 040.4-049.9
Late maternal deaths	090-097.9	
Maternal deaths aggravated by HIV/AIDS		
Other maternal disorders	N98-N98.9, 009-009.9, 021-022.9, 026-026.9, 028-031.8, 034-036.9, 040-043.1, 043.8-043.9, 047-048.1, 060-061.9, 063-063.9, 068-069.9, 070.0-070.9, 073-077.9, 080-084.9, 087-090.9, 092-092.7	643-645.2, 650-651.9, 654-659.2, 659.4-659.9, 662-664.9, 665.4- 665.9, 667-669.9, 671-679.1
Neonatal disorders	P00-P04.2, P04.5-P05.9, P07-P15.9, P19-P22.9, P24-P29.9, P36-P36.9, P38-P39.9, P50- P61.9, P70, P70.3-P72.9, P74-P78.9, P80-P81.9, P83-P84, P90-P94.9, P96, P96.3-P96.4, P96.8	760-760.6, 760.8-768, 768.2-770, 770.1-771, 771.4-775, 775.4- 779.3, 779.6-779.8
Neonatal preterm birth complications	P01.0-P01.1, P07-P07.3, P22-P22.9, P25-P28.9, P61.2, P77-P77.9	761.0-761.1, 765-765.9, 769-769.9, 770.2-770.9, 776.6, 777.5- 777.6
Neonatal encephalopathy due to birth asphyxia and trauma	P01.7, P02-P03.9, P10-P15.9, P20-P21.9, P24-P24.9, P90-P91.9	761.7-763.9, 767-768, 768.2-768.9, 770.1, 772.1-772.9, 779.0- 779.2
Neonatal sepsis and other neonatal infections	P36-P36.9, P38-P39.9	771.4-771.9
Hemolytic disease and other neonatal jaundice	P55-P59.9	773-774.9
Other neonatal disorders	P00-P01, P01.2-P01.6, P01.8-P01.9, P04-P04.2, P04.5-P05.9, P08-P09, P19-P19.9, P29- P29.9, P50-P54.9, P60-P61.1, P61.3-P61.9, P70, P70.3-P72.9, P74-P76.9, P78-P78.9, P80- P81.9, P83-P84, P92-P94.9, P96, P96.3-P96.4, P96.8	760-760.6, 760.8-761, 761.2-761.6, 764-764.9, 766-766.9, 770, 771, 772-772.0, 775, 775.4-776.5, 776.7-777.4, 777.7-779, 779.3, 779.6-779.8
Nutritional deficiencies	D50.1-D50.8, D51-D52.0, D52.8-D53.9, D64.3, E00-E02, E40-E46.9, E51-E61.9, E63- E64.0, E64.2-E64.9, M12.1	244.2, 260-263.9, 265-269.9, 280.1-280.8, 281.0-281.9, 716.0
	E40-E46.9, E64.0	260-263.9

Cause	ICD10	ICD9
Iodine deficiency	E00-E02	244.2
Iron-deficiency anemia	D50.1-D50.8	280.1-280.8
Other nutritional deficiencies	D51-D52.0, D52.8-D53.9, D64.3, E51-E61.9, E63-E64, E64.2-E64.3, M12.1	265-269.9, 281.0-281.9, 716.0
Other communicable, maternal, neonatal, and nutritional diseases	A20-A28.9, A32-A32.9, A38-A38.9, A48.2, A48.4-A48.5, A49.1, A50-A58, A60-A60.9, A63-A63.8, A65-A65.0, A69-A69.1, A74, A74.8-A74.9, A80-A81.9, A88-A89.9, B00- B00.9, B03-B04, B06-B06.9, B10-B10.8, B15-B17.9, B19-B19.9, B25-B27.9, B29.4, B33, B3.3-B33.8, B47-B48.8, B63, B91, B94.2, B95-B95.5, G14-G14.6, 100, 102, 102.9, 198.0- 198.1, J02.0, J03.0, K67.0-K67.2, K67.8, K71.2, K71.6, K74.7-K74.8, K75.3, K76.3, K77.0, M03.1, M49.1, M73.0-M73.1, M89.6, P35-P35.3, P35.9, P37, P37.2, P37.5-P37.9, U82-U84, U85-U89, Z16-Z16.3	020-029, 034-034.9, 040, 040.1-041.0, 045-046.9, 050-051.9, 054- 054.9, 056-059.9, 070-070.9, 072-074.1, 074.3-075.9, 078.3- 078.7, 079-079.5, 079.7, 090-101.6, 104-104.9, 136-136.2, 138, 139, 323.0-323.3, 390-390.9, 392, 392.9, 484.4-484.5, 771.0- 771.2, V09-V09.9
Sexually transmitted diseases excluding HIV	A50-A58, A60-A60.9, A63-A63.8, B63, 198.0, K67.0-K67.2, M03.1, M73.0-M73.1	054.1, 090-099.9
Syphilis	A50-A53.9, I98.0, K67.2, M03.1, M73.1	090-097.9
Chlamydial infection	A55-A56.8, K67.0	099
Gonococcal infection	A54-A54.9, K67.1, M73.0	098-098.9
Other sexually transmitted diseases	A57-A58, A63-A63.8	099.0-099.9
Hepatitis	B15-B17.9, B19-B19.9, B94.2, K71.2, K71.6, P35.3	070-070.9
Acute hepatitis A	B15-B15.9	070.0-070.1
Hepatitis B	B16-B16.9, B17.0, B19.1, P35.3	070.2-070.3
Hepatitis C	B17.1, B19.2	070.7
Acute hepatitis E	B17.2	
Other infectious diseases	A20-A28.9, A32-A32.9, A38-A38.9, A48.2, A48.4-A48.5, A49.1, A65-A65.0, A69-A69.1, A74, A74.8-A74.9, A80-A81.9, A88-A89.9, B00-B00.9, B03-B04, B06-B06.9, B10-B108, B25-B27.9, B29.4, B33, B33.3-B33.8, B47-B48.8, B91, B95-B95.5, G14-G14.6, 100, 102, 102.9, 198.1, J02.0, J03.0, K67.8, K74.7-K74.8, K75.3, K76.3, K77.0, M49.1, M89.6, P35-P35.2, P35.9, P37, P37.2, P37.5-P37.9, U82-U84, U85-U89, Z16-Z16.3	020-029, 034-034.9, 040, 040.1-041.0, 045-046.9, 050-051.9, 054- 054.0, 054.2-054.9, 056-059.9, 072-074.1, 074.3-075.9, 078.3- 078.7, 079-079.5, 079.7, 100-101.6, 104-104.9, 136-136.2, 138, 139, 323.0-323.3, 390-390.9, 392, 392.9, 484.4-484.5, 771.0- 771.2, V09-V09.9
Non-communicable diseases	<ul> <li>A46-A46.0, A66-A67.9, B18-B18.9, B33.2, B86, C00-C13.9, C15-C25.9, C30-C34.9, C37-C38.8, C40-C41.9, C43-C45.9, C47-C54.9, C56-C57.8, C58-C58.0, C60-C63.8, C64-C67.9, C68.0, C69-C75.8, C81-C86.6, C88-C96.9, D00.1-D00.2, D01.0-D01.3, D02.0-D02.3, D03-D06.9, D07.0-D07.2, D07.4-D07.5, D09.0, D09.2, DD9.3, D09.8, D10.0-D10.7, D11-D12.9, D13.0-D13.7, D14.0-D14.3, D15-D16.9, D22-D27.9, D28.0-D28.7, D29.0-D29.8, D30.0-D30.8, D31-D36, D36.1-D36.7, D37.1-D37.5, D38.0-D38.5, D39.1-D39.2, D39.8, D40.0-D40.8, D41.0-D41.8, D42-D43.9, D44.0-D44.8, D45-D47.0, D47.2-D47.9, D48.0-D48.6, D49.2-D49.4, D49.6, D52.1, D55-D58.9, D59.0-D59.3, D59.5-D59.6, D60-D61.9, D63.1, D64.0, D64.4, D66-D67, D68.0-D69.8, D70-D75.8, D76-D78.8, D86-D86.9, D89-D89.3, E03-E07.1, E09-E14.9, E15.0, E16.0-E16.9, E20-E34.8, E36-E36.8, E65-E68, E70-E85.2, E88-E89.9, F00-F03.9, F10-F16.9, F18-F19.9, F18-F19.9, F18.5-F19.9, F10.5-F50.5, G10-G13.8, G20-G26.0, G30-G31.9, G35-G37.9, G40-G41.9, G45-G46.8, G47.3, G61-G61.9, G70-G73.7, G90-G90.9, G93.7, G95-G95.9, G97-G97.9, H05.0-H05.1, 101-101.9, 102.0, 105-109.9, 111-113.9, 120-125.9, 127.1, 128-128.8, 130-131.1, 131.8-141.9, 142.1-442.8, 143-143.9, 147-148.9, 151.0-151.4, 160-163.9, 165-166.9, 167.0-167.3, 167.5-167.7, 168.0-168.2, 169.0-169.3, 170-2170.8, 171-173.9, 177-189.9, 195.2-195.3, 197-198, 198.2, 198.9, 30-335.9, 317-147.9, 160-163.8, 155-168.9, 170-170.9, 182, 184.</li> <li>J84.9, J91-J92.9, J95-J95.9, K20-K29.9, K31-K31.8, K35-K38.9, K40-K46.9, K50-K52.9, K55-K62.9, K63.5, K64-S(K4.9, K66.8, K67, K68-K68.9, K70-K70.9, K71.3-K71.5, K71.7, K72.1-K74.6, K74.9, K75.1-K75.2, K75.4-K76.2, K76.4-K77, K77.8, K80-K83.9, K85-K68.9, 800-K91.9, 892.8, K93.8-K95.8, L00-L05.9, L08-L08.9, L10-L14.0, L51-L51.9, L88-L89.9, L93-L93.2, L97-L98.4, M00-M03.0, M03.2-M03.6, M05-M09.8, M30-M36.8, M40-M43.1, M65-M65.0, M71.0-M71.1, M72.5-M72.6, M80-M82.8, M86.3-M86.4, M87-M87.1, M88-M890, M89.5, M89.7-M89.9, N00-N08.8, N10-N12.9, N14-N16.8, N18-N18.9, N20-N23.0, N25-N28.1, N29-N33.0, N34.0-N84.1, N87-N87.9, N99-N9</li></ul>	035-035.9, 036.4, 074.2, 102-103.9, 133-133.6, 135-135.9, 136.6, 140-148.9, 150-158.9, 160-164.9, 170-175.9, 180-183.8, 184.0 184.4, 184.8, 185-186.9, 187.1-187.8, 188-9, 189.0-189.8, 190 194.8, 200-208.9, 209.0-209.1, 209.4-209.5, 210.0-210.9, 211.0- 211.8, 212.0-212.8, 213-213.9, 217-220.9, 221.0-221.8, 222.0- 222.8, 223.0-223.8, 224-228.9, 229.0, 229.8, 230.1-230.8, 231.0- 231.2, 232-232.9, 233.0-233.2, 233.4-233.5, 233.7, 234.0-234.8, 235.0, 235.4, 235.6-235.8, 236.0-236.2, 236.4-236.5, 236.7, 237- 237.3, 237.5-237.9, 238.0-238.9, 239.2-239.4, 239.6, 240-243.9, 244.0-244.1, 244.3-244.8, 245-246.9, 250-259.9, 270-273.9, 275- 276, 277-277.2, 277.4-277.9, 278.0-278.8, 282-284.9, 286-286.5, 286.7-289.7, 290-292.9, 294.1-294.9, 303-303.9, 304.0-304.8, 305- 305.9, 307.1, 327.2-327.8, 330-331.2, 331.5-337.9, 340-341.9, 345 345.9, 349, 349.2-349.8, 353.6-353.9, 356-356.9, 357.0-357.7, 358 359.9, 376.0-376.1, 391-391.9, 392.0, 393-398.9, 402-404.9, 410- 414.9, 416.1, 417-417.9, 420-423, 423.1-424.9, 425.0-425.3, 437.0-437.2, 437.4-437.8, 440.2, 440.4, 441-443.9, 446-457, 457.1- 345.9, 459, 459.1-459.3, 470, 470.9-474.9, 476-476.1, 477-479, 490-504.9, 506-506.9, 508-509, 515.516-517.8, 518.6-518.7, 518.9, 519.0-519.4, 530-536.1, 536.4, 537-537.6, 537.8, 538- 543.9, 550-553.6, 555-558.9, 560-560.3, 560.8-560.9, 562-562.1, 564-564.7, 555-568.9, 560-569.7, 571-571.9, 572.2-577.9, 579- 583.9, 585-553.9, 588-590.9, 592-593.8, 594-599.6, 599.8, 601 -02.9, 604-604.9, 608.2, 610-610.9, 617-618.9, 620-620.9, 621.4 621.9, 622.3-622.7, 629-629.8, 680-689, 694-695.5, 707-707.9, 710-711.9, 714-714.3, 714.8-714.9, 730.1, 732-732.9, 733.0- 733.1, 740-749.0, 749.2-758.9, 7590-759.8, 760.7, 775.0-775.3, 779.4-779.5, 787.1, 788.0, 790.2-790.3, 798-798.0, E850-E854, E860

Appendix Table 4: List of Int	ernational Classification of Diseases (ICD) codes mapped to the Globa	l Burden of Disease cause list for causes of death
Cause	ICD10	ICD9
Neoplasms	C00-C13.9, C15-C25.9, C30-C34.9, C37-C38.8, C40-C41.9, C43-C45.9, C47-C54.9, C56- C57.8, C58-C58.0, C60-C63.8, C64-C67.9, C68.0-C68.8, C69-C75.8, C81-C86.6, C88- C96.9, D00.1-D00.2, D01.0-D01.3, D02.0-D02.3, D03-D06.9, D07.0-D07.2, D07.4- D07.5, D09.0, D09-2-D09.3, D09.8, D10.0-D10.7, D11-D12.9, D13.0-D13.7, D14.0- D14.3, D15-D16.9, D22-D24.9, D26.0, D27-D27.9, D28.0-D28.1, D28.7, D29.0-D29.8, D30.0-D30.8, D31-D36, D36.1-D36.7, D37.1-D37.5, D38.0-D38.5, D39.1-D39.2, D39.8, D40.0-D40.8, D41.0-D41.8, D42-D43.9, D44.0-D44.8, D45-D47.0, D47.2-D47.9, D48.0- D48.6, D49.2-D49.4, D49.6, K31.7, K62.0-K62.1, K63.5, N60-N60.9, N84.0-N84.1, N87- N87.9	140-148.9, 150-158.9, 160-164.9, 170-175.9, 180-183.8, 184.0- 184.4, 184.8, 185-186.9, 187.1-187.8, 188-188.9, 189.0-189.8, 190- 194.8, 200-208.9, 209.0-209.1, 209.4-209.5, 210.0-210.9, 211.0- 211.8, 212.0-212.8, 213-213.9, 217-217.8, 219.0, 220-20, 220.9, 221.0- 221.8, 222.0-222.8, 223.0-223.8, 224-228.9, 229.0, 229.8, 230.1- 230.8, 231.0-231.2, 232-232.9, 233.0-233.2, 233.4-233.5, 233.7, 234.0-234.8, 235.0, 235.4, 235.6-235.8, 236.1-236.2, 236.4-236.5, 236.7, 237-237.3, 237.5-237.9, 238.0-238.9, 239.2-239.4, 239.6, 569.0, 610-610.9
Lip and oral cavity cancer	C00-C08.9, D10.0-D10.5, D11-D11.9	140-145.9, 210.0-210.6, 235.0
Nasopharynx cancer	C11-C11.9, D10.6	147-147.9, 210.7-210.9
Other pharynx cancer	C09-C10.9, C12-C13.9, D10.7	146-146.9, 148-148.9
Esophageal cancer	C15-C15.9, D00.1, D13.0	150-150.9, 211.0, 230.1
Stomach cancer	C16-C16.9, D00.2, D13.1, D37.1	151-151.9, 211.1, 230.2
Colon and rectum cancer	C18-C21.9, D01.0-D01.3, D12-D12.9, D37.3-D37.5	153-154.9, 209.1, 209.5, 211.3-211.4, 230.3-230.6
Liver cancer	C22-C22.9, D13.4	155-155.9, 211.5
Liver cancer due to hepatitis B		
Liver cancer due to hepatitis C		
Liver cancer due to alcohol use		
Liver cancer due to other causes		
Gallbladder and biliary tract cancer	C23-C24.9, D13.5	156-156.9
Pancreatic cancer	C25-C25.9, D13.6-D13.7	157-157.9, 211.6-211.7
Larynx cancer	C32-C32.9, D02.0, D14.1, D38.0	161-161.9, 212.1, 231.0, 235.6
Tracheal, bronchus, and lung cancer	C33-C34.9, D02.1-D02.3, D14.2-D14.3, D38.1	162-162.9, 212.2-212.3, 231.1-231.2, 235.7
Malignant skin melanoma	C43-C43.9, D03-D03.9, D22-D23.9, D48.5	172-172.9
Non-melanoma skin cancer	C44-C44.9, D04-D04.9, D49.2	173-173.9, 222.4, 232-232.9, 238.2
Non-melanoma skin cancer (squamous-cell carcinoma)	C44-C44.9, D04-D04.9, D49.2	173-173.9, 222.4, 232-232.9, 238.2
Breast cancer	C50-C50.9, D05-D05.9, D24-D24.9, D48.6, D49.3, N60-N60.9	174-175.9, 217-217.8, 233.0, 238.3, 239.3, 610-610.9
Cervical cancer	C53-C53.9, D06-D06.9, D26.0	180-180.9, 219.0, 233.1
Uterine cancer	C54-C54.9, D07.0-D07.2, N87-N87.9	182-182.8, 233.2
Ovarian cancer	C56-C56.9, D27-D27.9, D39.1	183-183.0, 220-220.9, 236.2
Prostate cancer	C61-C61.9, D07.5, D29.1, D40.0	185-185.9, 222.2, 236.5
Testicular cancer	C62-C62.9, D29.2-D29.8, D40.1-D40.8	186-186.9, 222.0, 222.3, 236.4
Kidney cancer	C64-C65.9, D30.0-D30.1, D41.0-D41.1	189.0-189.1, 189.5-189.6, 223.0-223.1
Bladder cancer	C67-C67.9, D09.0, D30.3, D41.4-D41.8, D49.4	188-188.9, 223.3, 233.7, 236.7, 239.4
Brain and nervous system cancer	C70-C72.9	191-192.9
Thyroid cancer	C73-C73.9, D09.3, D09.8, D34-D34.9, D44.0	193-193.9, 226-226.9
Mesothelioma	C45-C45.9	
Hodgkin lymphoma	C81-C81.9	201-201.9
Non-Hodgkin lymphoma	C82-C86.6, C96-C96.9	200-200.9, 202-202.9
Multiple myeloma	C88-C90.9	203-203.9
Leukemia	C91-C95.9	204-208.9
Acute lymphoid leukemia	C91.0	204.0
Chronic lymphoid leukemia	C91.1	204.1
Acute myeloid leukemia	C92.0, C92.3-C92.6, C93.0, C94.0, C94.2, C94.4-C94.5	205.0, 205.3, 206.0, 207.0
Chronic myeloid leukemia	C92.1	205.1, 206.1, 207.1
Other leukemia	C91.2-C91.9, C92.2, C92.7-C92.9, C93.1-C93.9, C94.1, C94.3, C94.6-C95.9	204.2-204.9, 205.2, 205.8-205.9, 206.2-207, 207.2-208.9
Other neoplasms	C17-C17.9, C30-C31.9, C37-C38.8, C40-C41.9, C47-C4A, C51-C52.9, C57-C57.8, C58- C58.0, C60-C60.9, C63-C63.8, C66-C66.9, C68.0-C68.8, C69-C69.9, C74-C75.8, D07.4, D09.2, D13.2-D13.3, D14.0, D15-D16.9, D28.0-D28.1, D28.7, D29.0, D30.2, D30.4- D30.8, D31-D33.9, D35-D36, D36.1-D36.7, D37.2, D38.2-D38.5, D39.2, D39.8, D41.2- D41.3, D42-D43.9, D44.1-D44.8, D45-D47.0, D47.2-D47.9, D48.0-D48.4, D49.6, K31.7, K62.0-K62.1, K63.5, N84.0-N84.1	152-152.9, 158-158.9, 160-160.9, 163-164.9, 170-171.9, 181- 181.9, 182.9, 183.2-183.8, 184.0-184.4, 184.8, 187.1-187.8, 189.2- 189.4, 189.8, 190-190.9, 194-194.8, 209.0, 209.4, 211.2, 211.8, 212.0, 212.4-212.8, 213-213.9, 221.0-221.8, 222.1, 222.8, 223.2, 223.8, 224-225.9, 227-228.9, 229.0, 229.8, 230.7-230.8, 233.4- 233.5, 234.0-234.8, 235.4, 235.8, 236.1, 237-237.3, 237.5-237.9, 238.0-238.1, 238.4-238.9, 239.2, 239.6, 569.0
Cardiovascular diseases	B33.2, G45-G46.8, 101-101.9, 102.0, 105-109.9, 111-111.9, 120-125.9, 128-128.8, 130-131.1, 131.8-141.9, 142.1-142.8, 143-143.9, 147-148.9, 151.0-151.4, 160-163.9, 165-166.9, 167.0-167.3, 167.5-167.6, 168.0-168.2, 169.0-169.3, 170.2-170.8, 171-173.9, 177-183.9, 186-189.0, 189.9, 198, K75.1	036.4, 074.2, 391-391.9, 392.0, 393-398.9, 402-402.9, 410-414.9, 417-417.9, 420-423, 423.1-424.9, 425.0-425.3, 425.5, 425.7- 425.8, 427-427.3, 427.6-427.8, 429.0, 430-435.9, 437.0-437.2, 437.5-437.8, 440.2, 440.4, 441-443.9, 447-454.9, 456, 456.3-457, 457.1, 457.8-457.9, 459, 459.1-459.3

• •	ernational Classification of Diseases (ICD) codes mapped to the Globa	
Cause	ICD10	ICD9
Rheumatic heart disease	101-101.9, 102.0, 105-109.9	391-391.9, 392.0, 393-398.9
Ischemic heart disease	120-125.9	410-414.9
Cerebrovascular disease	G45-G46.8, I60-I63.9, I65-I66.9, I67.0-I67.3, I67.5-I67.6, I68.1-I68.2, I69.0-I69.3	430-435.9, 437.0-437.2, 437.5-437.8
Ischemic stroke	G45-G46.8, I63-I63.9, I65-I66.9, I67.2-I67.3, I67.5-I67.6, I69.3	433-435.9, 437.0-437.1, 437.5-437.8
Hemorrhagic stroke	160-162.9, 167.0-167.1, 168.1-168.2, 169.0-169.2	430-432.9, 437.2
Hypertensive heart disease	I11-I11.9	402-402.9
Cardiomyopathy and myocarditis	B33.2, I40-I41.9, I42.1-I42.8, I43-I43.9, I51.4	422-422.9, 425.0-425.3, 425.5, 425.7-425.8, 429.0
Myocarditis	B33.2, I40-I41.9, I51.4	422-422.9
Alcoholic cardiomyopathy	142.6	425.5
Other cardiomyopathy	142.1-142.5, 142.7-142.8, 143-143.9	425.0-425.3, 425.7-425.8, 429.0
Atrial fibrillation and flutter	I48-I48.9	427.3
Aortic aneurysm	171-171.9	441-441.9
Peripheral artery disease	170.2-170.8, 173-173.9	440.2, 440.4, 443.0-443.9
Endocarditis	133-133.9, 138-139.9	421-421.9, 424.9
Other cardiovascular and circulatory diseases	128-128.8, 130-131.1, 131.8-132.8, 134-137.9, 147-147.9, 151.0-151.3, 168.0, 172-172.9, 177- 183.9, 186-189.0, 189.9, 198, K75.1	036.4, 074.2, 417-417.9, 420-420.9, 423, 423, 423.1-424.8, 427-427.2 427.6-427.8, 442-443, 447-454.9, 456, 456.3-457, 457.1, 457.8- 457.9, 459, 459.1-459.3 135-135.9, 136.6, 327.2-327.8, 470, 470.9-474.9, 476-476.1, 477.
Chronic respiratory diseases	D86-D86.2, D86.9, G47.3, J30-J35.9, J37-J47.9, J60-J63.8, J65-J68.9, J70-J70.1, J70.8- J70.9, J82, J84-J84.9, J91-J92.9	155-155.9, 156.6, 527.2-527.8, 470, 470,9-474,9, 476-476.1, 477 479, 490-504.9, 506-506.9, 508-509, 515, 516-517.8, 518.6, 518.5 519.1-519.4
Chronic obstructive pulmonary disease	J40-J44.9, J47-J47.9	490-492.9, 494-494.9, 496-499
Pneumoconiosis	J60-J63.8, J65-J65.0, J92.0	500-504.9
Silicosis	J62-J62.9	502-502.9, 503.0, 503.9
Asbestosis	J61-J61.0, J92.0	501
Coal workers pneumoconiosis	J60-J60.0	500-500.9, 501.0-501.9
Other pneumoconiosis	J63-J63.8, J65-J65.0	503, 503.1, 504-504.9
Asthma	J45-J46.9	493-493.9
Interstitial lung disease and pulmonary sarcoidosis	D86-D86.2, D86.9, J84-J84.9	135-135.9, 136.6, 515, 516-516.9
Other chronic respiratory diseases	G47.3, J30-J35.9, J37-J39.9, J66-J68.9, J70-J70.1, J70.8-J70.9, J82, J91-J92, J92.9	327.2-327.8, 470, 470.9-474.9, 476-476.1, 477-479, 495-495.9, 506-506.9, 508-509, 517-517.8, 518.6, 518.9, 519.1-519.4
Cirrhosis and other chronic liver diseases	B18-B18.9, 185-185.9, 198.2, K70-K70.9, K71.3-K71.5, K71.7, K72.1-K74.6, K74.9, K75.2, K75.4-K76.2, K76.4-K76.9, K77.8	456.0-456.2, 571-571.9, 572.2-573.9
Cirrhosis and other chronic liver diseases due to hepatitis B Cirrhosis and other chronic liver diseases		
due to hepatitis C Cirrhosis and other chronic liver diseases due to alcohol use		
Cirrhosis and other chronic liver diseases due to other causes		
Digestive diseases	184-184.9, K20-K29.9, K31-K31.6, K31.8, K35-K38.9, K40-K42.9, K44-K46.9, K50- K52.9, K55-K62, K62.2-K62.6, K62.8-K62.9, K64-K64.9, K66.8, K67, K68-K68.9, K77, K80-K83.9, K85-K86.9, K90-K90.9, K92.8, K93.8, M09.1	455-455.9, 530-536.1, 537-537.6, 537.8, 538, 540-543.9, 550- 551.1, 551.3-552.1, 552.3-553.6, 555-558.9, 560-560.3, 560.8- 560.9, 562-562.1, 564-564.1, 564.5-564.7, 565-566.9, 569.1- 569.5, 569.7, 574-577.9, 579-579.2, 579.4-579.9, 787.1
Peptic ulcer disease	K25-K28.9, K31, K31.1-K31.6, K31.8	531-534.9
Gastritis and duodenitis	K29-K29.9	535-535.9
Appendicitis	K35-K37.9, K38.3-K38.9	540-542.9
Paralytic ileus and intestinal obstruction	K56-K56.9	560-560.3, 560.8-560.9
Inguinal, femoral, and abdominal hernia	K40-K42.9, K44-K46.9	550-551.1, 551.3-552.1, 552.3-553.0, 553.6
Inflammatory bowel disease	K50-K52.9, M09.1	555-556.9, 558-558.9, 569.5
Vascular intestinal disorders	K55-K55.9	557-557.9
Gallbladder and biliary diseases	K80-K83.9	574-576.9
Pancreatitis	K85-K86.9	577-577.9, 579.4
Other digestive diseases	I84-I84.9, K20-K24, K31.0, K38-K38.2, K57-K62, K62.2-K62.6, K62.8-K62.9, K64- K64.9, K66.8, K67, K68-K68.9, K77, K90-K90.9, K92.8, K93.8	455-455.9, 530-530.9, 536-536.1, 537-537.6, 537.8, 538, 543- 543.9, 553.1-553.3, 562-562.1, 564-564.1, 564.5-564.7, 565- 566.9, 569.1-569.4, 569.7, 579-579.2, 579.8-579.9, 787.1
Neurological disorders	F00-F03.9, G10-G13.8, G20-G21.0, G21.2-G24, G24.1-G25.0, G25.2-G25.3, G25.5, G25.8-G26.0, G30-G31.1, G31.8-G31.9, G35-G37.9, G40-G41.9, G61-G61.9, G70-G72, G72.2-G73.7, G90-G90.9, G95-G95.9, M33-M33.9	290-290.9, 294.1-294.9, 330-331.2, 331.5-337.9, 340-341.9, 345 345.9, 349, 349.2-349.8, 353.6-353.9, 356-356.9, 357.0-357.1, 357.3-357.4, 357.7, 358-359.9, 775.2
Alzheimer disease and other dementias	F00-F03.9, G30-G31.1, G31.8-G31.9	290-290.9, 294.1-294.9, 331-331.2

Appendix Table 4: List of fill	ernational Classification of Diseases (ICD) codes mapped to the Globa	
Cause	ICD10	ICD9
Parkinson disease	G20-G21.0, G21.2-G22.0	332-332.9
Epilepsy	G40-G41.9	345-345.9
Multiple sclerosis	G35-G35.9	340-340.9
Motor neuron disease	G12.2-G12.9	335-335.2, 335.8-335.9
Other neurological disorders	G10-G12.1, G13-G13.8, G23-G24, G24.1-G25.0, G25.2-G25.3, G25.5, G25.8-G26.0, G36-G37.9, G61-G61.9, G70-G72, G72.2-G73.7, G90-G90.9, G95-G95.9, M33-M33.9	330-330.9, 331.5-331.9, 333-334.9, 335.3, 336-337.9, 341-341.9, 349, 349.2-349.8, 353.6-353.9, 356-356.9, 357.0-357.1, 357.3- 357.4, 357.7, 358-359.9, 775.2
Mental and substance use disorders	F10-F16.9, F18-F19.9, F24, F50.0-F50.5, G31.2, G72.1, P04.3-P04.4, P96.1, Q86.0, R78.0- R78.5, X45-X45.9, X65-X65.9, Y15-Y15.9	291-292.9, 303-303.9, 304.0-304.8, 305-305.9, 307.1, 357.5, 760.7, 790.3, E850-E854, E860
Alcohol use disorders	F10-F10.9, G31.2, G72.1, P04.3, Q86.0, R78.0, X45-X45.9, X65-X65.9, Y15-Y15.9	291-291.9, 303-303.9, 305.0, 357.5, 790.3, E860
Drug use disorders	F11-F16.9, F18-F19.9, P04.4, P96.1, R78.1-R78.5	292-292.9, 304.0-304.8, 305, 305.1-305.9, 760.7, E850-E854
Opioid use disorders	F11-F11.9, P96.1, R78.1	304.0, 305.5
Cocaine use disorders	F14-F14.9, R78.2	304.2, 305.6
Amphetamine use disorders	F15-F15.9	304.4, 305.7
Other drug use disorders	F13-F13.9, F16-F16.9, F18-F19.9, R78.3-R78.5	292-292.9, 304.1, 304.5-304.8, 305, 305.1, 305.3-305.4, 305.8- 305.9
Eating disorders	F50.0-F50.5	307.1
Anorexia nervosa	F50.0-F50.1	307.1
Bulimia nervosa	F50.2-F50.5	
Diabetes, urogenital, blood, and endocrine diseases	D25-D26, D26.1-D26.9, D28.2, D52.1, D55-D58.9, D59.0-D59.3, D59.5-D59.6, D60-D61.9, D63.1, D64.0, D64.4, D66-D67, D68.0-D69.8, D70-D75.8, D76-D78.8, D86.8, D89-D89.3, E03-E07.1, E09-E14.9, E15.0, E16.0-E16.9, E20-E34.8, E36-E36.8, E65-E68, E70-E85.2, E88-E89.9, G21.1, G24.0, G25.1, G25.4, G25.6-G25.7, G72.0, G93.7, G97-G97.9, I12-I13.9, I95.2-I95.3, I97-I97.9, I98.9, J70.2-J70.5, J95-J95.9, K43-K43.9, K62.7, K91-K91.9, K94-K95.8, M87.1, N00-N08.8, N10-N12.9, N14-N16.8, N18-N18.9, N20-N23.0, N25-N28.1, N29-N32.0, N32.3-N32.4, N34-N34.3, N36-N36.9, N39-N39.2, N41.9, N44-N44.0, N45-N45.9, N49-N49.9, N65-N65.1, N72-N7.0, N75-N77.8, N80-N81.9, N83-N83.9, N99-N99.9, P70.0-P70.2, P96.2, P96.5, Q61-Q62.8, R50.2, R73-R73.9	218-219, 219.1-219.9, 236.0, 240-243.9, 244.0-244.1, 244.3- 244.8, 245-246.9, 250-259.9, 270-273.9, 275-276, 277-277.2, 277.4-277.9, 278.0-278.8, 282-284.9, 286-286.5, 286.7-289.7, 357.2, 357.6, 403-404.9, 518.7, 519.0, 536.4, 539-539.9, 551.2, 552.2, 564.2-564.4, 569.6, 579.3, 580-583.9, 585-585.9, 588- 590.9, 592-593.8, 594-599.6, 599.8, 601-602.9, 604-604.9, 608.2, 617-618.9, 620-620.9, 621.4-621.9, 622.3-622.7, 629-629.8, 753- 753.3, 775.0-775.1, 775.3, 779.4-779.5, 788.0, 790.2
Diabetes mellitus	E10-E10.1, E10.3-E11.1, E11.3-E12.1, E12.3-E13.1, E13.3-E14.1, E14.3-E14.9, P70.0- P70.2, R73-R73.9	250-250.3, 250.5-250.9, 357.2, 775.0-775.1, 790.2
Acute glomerulonephritis	N00-N01.9	580-580.9
Chronic kidney disease	D63.1, E10.2, E11.2, E12.2, E13.2, E14.2, I12-I13.9, N02-N08.8, N15.0, N18-N18.9, Q61-Q62.8	250.4, 403-404.9, 581-583.9, 585-585.9, 589-589.9, 753-753.3
Chronic kidney disease due to diabetes mellitus	E10.2, E11.2, E12.2, E13.2, E14.2	250.4
Chronic kidney disease due to hypertension	112-113.9	403-404.9
Chronic kidney disease due to glomerulonephritis	N03-N06.9	581-583.9
Chronic kidney disease due to other causes	N02-N02.9, N07-N08.8, N15.0, Q61-Q62.8	589-589.9, 753-753.3
Urinary diseases and male infertility	N10-N12.9, N15, N15.1-N16.8, N20-N23.0, N25-N28.1, N29-N32.0, N32.3-N32.4, N34- N34.3, N36-N36.9, N39-N39.2, N41-N41.9, N44-N44.0, N45-N45.9, N49-N49.9	588-588.9, 590-590.9, 592-593.8, 594-598.1, 598.8-599.6, 599.8, 601-602.9, 604-604.9, 608.2, 788.0
Interstitial nephritis and urinary tract infections	N10-N12.9, N15, N15.1-N16.8, N30-N30.9, N34-N34.3, N39.0-N39.2	590-590.9, 595-595.9, 597-597.9, 599.0
Urolithiasis	N20-N23.0	592-592.9, 594-594.9, 788.0
Other urinary diseases	N25-N28.1, N29-N29.8, N31-N32.0, N32.3-N32.4, N36-N36.9, N39, N41-N41.9, N44- N44.0, N45-N45.9, N49-N49.9	588-588.9, 593-593.8, 596-596.9, 598-598.1, 598.8-599, 599.1- 599.6, 599.8, 601-602.9, 604-604.9, 608.2
Gynecological diseases	D25-D26, D26.1-D26.9, D28.2, E28.2, N72-N72.0, N75-N77.8, N80-N81.9, N83-N83.9	218-219, 219.1-219.9, 236.0, 256.4, 617-618.9, 620-620.9, 621.4- 621.9, 622.3-622.7, 629-629.8
Uterine fibroids	D25-D26, D26.1-D26.9, D28.2	218-219, 219.1-219.9, 236.0
Polycystic ovarian syndrome	E28.2	256.4
Endometriosis	N80-N80.9	617-617.9
Genital prolapse	N81-N81.9	618-618.9
Other gynecological diseases	N72-N72.0, N75-N77.8, N83-N83.9	620-620.9, 621.4-621.9, 622.3-622.7, 629-629.8
Hemoglobinopathies and hemolytic anemias	D55-D58.9, D59.1, D59.3, D59.5, D60-D61.9, D64.0, D64.4	282-284.9
Thalassemias	D56-D56.9	282.4
Sickle cell disorders	D57-D57.2, D57.4-D57.8	282.6
CAPD definition and	D55-D55.2	282.2-282.3
G6PD deficiency		

	ernational Classification of Diseases (ICD) codes mapped to the Global	
Cause	ICD10	ICD9
Endocrine, metabolic, blood, and immune disorders	D52.1, D59.0, D59.2, D59.6, D66-D67, D68.0-D69.8, D70-D75.8, D76-D78.8, D86.8, D89-D89.3, E03-E07.1, E09-E09.9, E15.0, E16.0-E16.9, E20-E28.1, E28.3-E34.8, E36-E36.8, E65-E68, E70-E85.2, E88-E89.9, G21.1, G24.0, G25.1, G25.4, G25.6-G25.7, G72.0, G93.7, G97-G97.9, 195.2-195.3, 197-197.9, 198.9, J70.2-J70.5, J95-J95.9, K43-K43.9, K62.7, K91-K91.9, K94-K95.8, M87.1, N14-N14.4, N65-N65.1, N99-N99.9, P96.2, P96.5, R50.2	240-243.9, 244.0-244.1, 244.3-244.8, 245-246.9, 251-256.3, 25 259.9, 270-273.9, 275-276, 277-277.2, 277.4-277.9, 278.0-278 286-286.5, 286.7-289.7, 357.6, 518.7, 519.0, 536.4, 539-539. 551.2, 552.2, 564.2-564.4, 569.6, 579.3, 598.2, 775.3, 779.4-77
Musculoskeletal disorders	127.1, 167.7, L93-L93.2, M00-M03.0, M03.2-M03.6, M05-M09.0, M09.2-M09.8, M30- M32.9, M34-M36.8, M40-M43.1, M65-M65.0, M71.0-M71.1, M80-M82.8, M86.3-M86.4, M87-M87.0, M88-M89.0, M89.5, M89.7-M89.9	416.1, 437.4, 446-446.9, 695.4-695.5, 710-711.9, 714-714.3, 71 714.9, 730.1, 732-732.9, 733.0-733.1
Rheumatoid arthritis	M05-M06.9, M08.0-M08.8	714-714.3, 714.8-714.9
Other musculoskeletal disorders M09.8 M30-M32.9 M34-M36.8 M40-M43.1 M65-M65.0 M71.0-M71.1 M80-M82.8		416.1, 437.4, 446-446.9, 695.4-695.5, 710-711.9, 730.1, 732 732.9, 733.0-733.1
Other non-communicable diseases	A46-A46.0, A66-A67.9, B86, D86.3, H05.0-H05.1, I89.1-I89.8, L00-L05.9, L08-L08.9, L10-L14.0, L51-L51.9, L88-L89.9, L97-L98.4, M72.5-M72.6, P96.0, Q00-Q07.9, Q10.4- Q18.9, Q20-Q28.9, Q30-Q36, Q37-Q45.9, Q50-Q60.6, Q63-Q86, Q86.1-Q87.8, Q89- Q89.8, Q90-Q93.9, Q95-Q99.8, R95-R95.9	035-035.9, 102-103.9, 133-133.6, 376.0-376.1, 457.2-457.3, 6 689, 694-695.3, 707-707.9, 740-749.0, 749.2-752.9, 753.4-758 759.0-759.8, 798-798.0
Congenital birth defects	P96.0, Q00-Q07.9, Q10.4-Q18.9, Q20-Q28.9, Q30-Q36, Q37-Q45.9, Q50-Q60.6, Q63- Q86, Q86.1-Q87.8, Q89-Q89.8, Q90-Q93.9, Q95-Q99.8	740-749.0, 749.2-752.9, 753.4-758.9, 759.0-759.8
Neural tube defects	Q00-Q01.9, Q05-Q05.9	740-741.9, 742.0
Congenital heart anomalies	Q20-Q28.9	745-747.9
Orofacial clefts	Q35-Q36, Q37-Q37.9	749-749.0, 749.2-749.9
Down syndrome	Q90-Q90.9	758.0
Other chromosomal abnormalities	Q87-Q87.8, Q91-Q93.9, Q95-Q95.9, Q97-Q97.9, Q99-Q99.8	758, 758.1-758.6, 758.8-758.9
Congenital musculoskeletal and limb anomalies	Q65-Q79, Q79.6-Q79.9	742.5, 754-756.5, 756.8-756.9
Urogenital congenital anomalies	P96.0, Q50-Q56.4, Q60-Q60.6, Q63-Q64.9	752-752.9, 753.4-753.9
Digestive congenital anomalies	Q38-Q45.9, Q79.0-Q79.5	750-751.9, 756.6-756.7
Other congenital birth defects	Q02-Q04.9, Q06-Q07.9, Q10.4-Q18.9, Q30-Q34.9, Q57, Q80-Q86, Q86.1-Q86.8, Q89- Q89.8	742, 742.1-742.4, 742.8-744.9, 748-748.9, 757-757.9, 759.0-7
Skin and subcutaneous diseases	A46-A46.0, A66-A67.9, B86, D86.3, 189.1-189.8, L00-L05.9, L08-L08.9, L10-L14.0, L51- L51.9, L88-L89.9, L97-L98.4, M72.5-M72.6	035-035.9, 102-103.9, 133-133.6, 457.2-457.3, 680-689, 69 695.3, 707-707.9
Cellulitis	L03-L03.9, M72.5-M72.6	681-682.9
Pyoderma	A46-A46.0, A66-A67.9, I89.1-I89.8, L00-L02.9, L04-L05.9, L08-L08.9, L88, L97-L98.4	035-035.9, 102-103.9, 457.2-457.3, 680-680.9, 683-689
Decubitus ulcer	L89-L89.9	707-707.9
Other skin and subcutaneous diseases	D86.3, L10-L14.0, L51-L51.9	694-695.3
Sudden infant death syndrome	R95-R95.9	798-798.0
Injuries	L55-L55.9, L56.3, L56.8-L56.9, L58-L58.9, U00-U03, V00-V86.9, V87.2-V87.3, V88.2- V88.3, V90-V98.8, W00-W46.2, W49-W62.9, W64-W70.9, W73-W75.9, W77-W81.9, W83-W94.9, W97.9, W99-X06.9, X08-X39.9, X46-X47, X47.1-X47.8, X48-X48.9, X50- X54.9, X57-X58.9, X60-X64.9, X66-Y08.9, Y15-Y84.9, Y87.0-Y87.1, Y88-Y88.3, Y89.0- Y89.1	349.0-349.1, 457.0, E800-E807, E830-E838, E840-E849, E8 E857, E861-E869, E870-E876, E878-E879, E880-E886, E8 E928, E930-E979, E990-E999
Transport injuries	V00-V86.9, V87.2-V87.3, V88.2-V88.3, V90-V98.8	E800-E807, E830-E838, E840-E849
Road injuries	V01-V04.9, V06-V80.9, V82-V82.9, V87.2-V87.3	
Pedestrian road injuries	V01-V04.9, V06-V09.9	
Cyclist road injuries	V10-V19.9	
Motorcyclist road injuries	V20-V29.9	
Motor vehicle road injuries	V30-V79.9, V87.2-V87.3	
Other road injuries	V80-V80.9, V82-V82.9	
Other transport injuries	V00-V00.8, V05-V05.9, V81-V81.9, V83-V86.9, V88.2-V88.3, V90-V98.8	E800-E807, E830-E838, E840-E849
Unintentional injuries	L55-L55.9, L56.3, L56.8-L56.9, L58-L58.9, W00-W46.2, W49-W62.9, W64-W70.9, W73- W75.9, W77-W81.9, W83-W94.9, W97.9, W99-X06.9, X08-X32.9, X39-X39.9, X46- X47, X47.1-X47.8, X48-X48.9, X50-X54.9, X57-X58.9, Y40-Y84.9, Y88-Y88.3	349.0-349.1, 457.0, E856-E857, E861-E869, E870-E876, E8 E879, E880-E886, E888-E906, E910-E928, E930-E949
Falls	W00-W19.9	E880-E886, E888
Drowning	W65-W70.9, W73-W74.9	E910
Fire, heat, and hot substances	X00-X06.9, X08-X19.9	E890-E899, E924
Poisonings	X46-X47, X47.1-X47.8, X48-X48.9	E856-E857, E861-E869
Exposure to mechanical forces	W20-W38.9, W40-W43.9, W45.0-W45.2, W46-W46.2, W49-W52, W75-W75.9	Е913, Е916-Е922
Unintentional firearm injuries	W32-W34.9	E922
Unintentional suffocation	W75-W75.9	E913
	W20-W31.9, W35-W38.9, W40-W43.9, W45.0-W45.2, W46-W46.2, W49-W52	E916-E921

Appendix Table 4: List of Int	ernational Classification of Diseases (ICD) codes mapped to the Global	Burden of Disease cause list for causes of death	
Cause	ICD10	ICD9	
Adverse effects of medical treatment	Y40-Y84.9, Y88-Y88.3	349.0-349.1, 457.0, E870-E876, E878-E879, E930-E949	
Animal contact	W52.0-W62.9, W64-W64.9, X20-X29.9	E905-E906	
Venomous animal contact	X20-X29.9	E905	
Non-venomous animal contact	W52.0-W62.9, W64-W64.9	E906	
Foreign body	W44-W45, W45.3-W45.9, W78-W80.9, W83-W84.9	E911-E912, E914-E915	
Pulmonary aspiration and foreign body in airway	W78-W80.9, W83-W84.9	E911-E912	
Foreign body in other body part	W44-W45, W45.3-W45.9	E914-E915	
Environmental heat and cold exposure	L55-L55.9, L56.3, L56.8-L56.9, L58-L58.9, W88-W94.9, W97.9, W99-W99.9, X30- X32.9, X39-X39.9	Е900-Е902, Е926	
Other unintentional injuries	W39-W39.9, W77-W77.9, W81-W81.9, W85-W87.9, X50-X54.9, X57-X58.9	E903-E904, E923, E925, E927-E928	
Self-harm and interpersonal violence	X60-X64.9, X66-Y08.9, Y87.0-Y87.1	E950-E969	
Self-harm	X60-X64.9, X66-X84.9, Y87.0	E950-E959	
Self-harm by firearm	X72-X74.9	E955	
Self-harm by other specified means	X60-X64.9, X66-X71.9, X75-X84.9, Y87.0	E950-E954, E956-E959	
Interpersonal violence	X85-Y08.9, Y87.1	E960-E969	
Physical violence by firearm	X93-X95.9	E965	
Physical violence by sharp object	X99-X99.9	E966	
Physical violence by other means	X85-X92.9, X96-X98.9, Y00-Y04.9, Y06-Y08.9, Y87.1	E961-E964, E967-E969	
Forces of nature, conflict and terrorism, and executions and police conflict	U00-U03, X33-X38.9, Y35-Y38.9, Y89.0-Y89.1	E907-E909, E970-E979, E990-E999	
Exposure to forces of nature	X33-X38.9	E907-E909	
Conflict and terrorism	U00-U03, Y36-Y38.9, Y89.1	E979, E990-E999	
Executions and police conflict	Y35-Y35.9, Y89.0	E970-E978	
Still Born	P95-P95.9	768.0-768.1	
Garbage Code (GBD Level 1)	<ul> <li>A40-A41.9, A48.0, A48.3, A49.0, A59-A59.9, A71-A71.9, A74.0, B07-B07.9, B30-B30.9, B35-B36.9, B85-B85.4, B87-B88.9, B94.0, D50-D50.0, D50.9, D62-D63.0, D63.8-D64, D64.1-D64.2, D64.8-D65.9, D68, D69.9, E15, E16, E50-E50.9, E64.1, E85.3-E87.6, E87.8-E87.9, F06.2-F06.4, F07.2, F09-F09.9, F17-F17.9, F20-F23.9, F25-F49, F51-F99.0, G06-G08.0, G32-G32.8, G43-G44.2, G44.4-G44.8, G47-G47.2, G47.4-G47.9, G50-G60.9, G62-G65.2, G80-G83.9, G89-G89.4, G91-G91.2, G91.4-G92.9, G93.1-G93.2, G93.4-G93.6, G99-H05, H05-2-H69.9, H71-H99, 126-126.9, 131.2-131.4, 146-146.9, 150-150.9, 151.7, 167.4, 176, 195-195.1, 195.8-195.9, J69-J69.9, J80-J80.9, J85-J85.3, J86-J86.9, J93-J33.1, J93.8-J93.9, J94.2, J96-J96.9, J98.1-J98.3, K00-K19, K30, K65-K66.1, K66.9, K71-K71.1, K71.8-K72.0, K75.0, L20-L30.9, L40-L50.9, L52-L54.0, L56-L56.2, L56.4-L56.5, L57-L57.9, L59-L68.9, L70-L76.8, L80-L87.9, L90-L92.9, L94-L96, L98.5-L99.8, M04, M10-M12.0, M12.2-M29, M37-M39, M43.2-M49, M49.2-M64, M65.1-M71, M71.2-M72.4, M72.8-M73, M73.8-M79.9, M83-M86.2, M86.5-M86.9, M87.2-M87.9, M89.1-M89.4, M90-M99.9, N17-N17.9, N19-N19.9, N32.1-N32.2, N32.8-N33.8, N35-N35.9, N37-N37.8, N39.3-N39.8, N42-N43.4, N44.1-N44.8, N46-N48.9, N50-N53.9, N61-N64.9, N87-2-M87.9, M89.1-M89.4, M90-M99.9, N17-N17.9, N19-N19.9, N32.1-N32.2, N32.8-N33.8, N35-N35.9, N37-N37.8, N39.3-N39.8, N42-N43.4, N44.1-N44.8, R46-N48.9, N50-N53.9, N61-N64.9, N82-N82.9, N91-N91.5, N95.1-N95.9, N97-N97.9, R02-R02.9, R03.1, R070, R08-R09, R09, R09.3, R11-R12.0, R14-R15.9, R19-R19.6, R19.8-R23, R23.1-R30.9, R32-R50.1, R50.8-R57.9, R58.0-R72.9, R74-R78, R78.6-R94.8, R96-R99.9, U05, U07-U81, U90-U99, X40-X44.9, X47.0, X47.9, X49-X49.9, Y10-Y19.9, Z00-Z15.8, Z17</li> </ul>	038-038.9, 040.0, 041.1, 076-078.2, 110-111.9, 125-125.3, 126- 126.9, 127.2-127.9, 131-132.9, 133.8-134.9, 139.1, 139.9, 176- 176.9, 247-248, 264-264.9, 274-274.9, 276.0-276.5, 276.7-276.9, 277.3, 280-280.0, 280.9-281, 285-285.9, 286.6, 293, 294-294.0, 295-302.9, 306-307.0, 307.2-307.4, 307.6-319.9, 324-327.1, 328- 329, 338-339.1, 339.3-339.8, 342-344.9, 346-347.9, 350-353.5, 354-355.9, 360-376, 376.2-380.9, 384-389.9, 415-415.9, 423.0, 427.5, 427.9-428.9, 429.3, 437.3, 458-458.9, 459.0, 507-507.9, 510-510.9, 512-513.9, 518.0-518.2, 518.5, 520-529.9, 536.3, 536.8, 536.9, 537.7, 537.9, 564.8-564.9, 567-568.9, 570-570.9, 572- 572.1, 584-584.9, 586-587.9, 600-600.9, 603-603.9, 605-608.1, 608.3-609, 611-612.1, 615-616.9, 619-619.9, 621-621.3, 622- 622.2, 622.8-623.6, 623.8-624.5, 624.8-628.9, 629.9, 690-693.9, 695.8-706.9, 708-709.9, 712-713.8, 715-716.716.2-721.6, 721.8- 730.0, 730.2-730.3, 730.7-731.9, 733, 733.2-734.2, 737-738, 738.2- 739.9, 780-782.3, 782.6-784.6, 784.9, 785.4-786, 786.6, 786.8, 787, 787.3-788, 788.1-789, 790-790.1, 790.4-796.1, 796.3-797.9, 798.1-799, 799.2-799.9, E855, E858, E980-E982, V01-V08, V10	
Garbage Code (GBD Level 2)	A14.9, A29, A45-A45.9, A47-A48, A48.8-A49, A49.3-A49.9, A61-A62, A72-A73, A76, A97, B08-B09, B11-B14, B28-B29, B31-B32.4, B34-B34.9, B61-B62, B68-B68.9, B73- B74.2, B76-B76.9, B78-B81.8, B84, B93-B94, B94.8-B94.9, B95.6-B97.3, B97.7-B99.9, D59, D59, A, D59.8-D59.9, G44.3, G91.3, G93.0, G93.3, I10-110.9, I15-I15.9, 127-127.0, 127.2-I27.9, 128.9, 170-I70.1, 170.9, 174-I75.8, J81-J81.1, J90-J90.0, J94-J94.1, J94.8- J94.9, K92.0-K92.2, N70-N71.9, N73-N74.0, N74.3-N74.8, R03-R03.0, R04-R06.9, R09.0- R09.2, R09.8-R10.9, R13-R13.9, R16-R18.9, R23.0, R58, S00, W47-W48, W63, W71- W72, W76-W76.9, W82, W95-W97, W98, X07, X55-X56, X59-X59.9, Y20-Y34.9, Y86- Y87, Y87.2, Y89, Y89.9-Y99.9	000-000.9, 041.2-041.9, 067-069, 078.8-078.9, 079.8-079.9, 089- 089.9, 105-109.9, 119, 136.8-136.9, 139.8, 279-279.9, 304, 304.9, 307.5, 339.2, 401-401.9, 405-405.9, 416-416.0, 416.2-416.9, 440- 440.1, 440.3, 440.8, 444.9, 445.4, 8, 511-511.9, 514-514.9, 515.0- 515.9, 518, 518.3-518.4, 518.8, 536.2, 578-578.9, 599.7, 613- 614.9, 714.4, 716.1, 721.7, 735-736.9, 738.0-738.1, 782.4, 784.7- 784.8, 786.3, 787.0, 787.2, 789.0-789.9, 796.2, 799.0-799.1, 800- E80, E83, E839, E85, E859, E87, E877, E88, E887, E929, E983- E985, E988-E989	

Appendix Table 4: List of International Classification of Diseases (ICD) codes mapped to the Global Burden of Disease cause list for causes of death			
Cause	ICD10	ICD9	
Garbage Code (GBD Level 3)	A01, A31-A31.9, A42-A44.9, A49.2, A64-A64.0, A99-A99.0, B37-B46.9, B49-B49.9, B55.1-B55.2, B58-B59.9, B89, C14-C14.9, C26-C29, C35-C36, C39-C39.9, C42, C46- C46.9, C55-C55.9, C57.9, C59, C63.9, C68, C68.9, C75.9-C80.9, C87, C97-D00.0, D01, D01.4-D02, D02.4-D02.9, D07, D07.3, D07.6-D09, D09.1, D09.7, D09.9-D10, D10.9, D13, D13.9-D14, D14.4, D17-D21.9, D28, D28.9-D29, D29.9-D30, D30.9, D36.0, D37.0, D37.6-D38, D38.6-D39.0, D39.7, D39.9-D40, D40.9-D41, D41.9, D44, D44.9, D48, D48.7-D49.1, D49.5, D49.7-D49.9, D54, D75.9, D79-D85, D87-D88, D89.8-D99, E07.8-E08.9, E17-E19, E34.9-E35.8, E37-E39, E47-E49, E62, E69, E87.7, E90-E998, F04- F06.1, F06.5-F07.0, F07.8-F08, F50. F50.8-F50.9, C69-G60.9, G15-G19, G27-G29, G33- G34, G38-G39, G42, G48-G49, G66-G69, G74-G79, G84-G88, G93, G93.8-G94.8, G96- G96.9, G98-G98.9, 100.0, 103-104, 114, 116-119, 129-129.9, 144-145.9, 149-149.9, 151, 151.6, 151.8-159, 190-194, 196-196.9, 198.4-198.8, 199-J00.0, J02, J02.8-J03, J03.8-J04, J04.1- J04.3, J05.1-J06.9, J48-J59, J71-J79, J81.9, J83, J85.9, J87-J89, J90.9, J93.6, J97-J98.0, J98.4-J99.8, K31.9-K34, K39, K47-K49, K53-K54, K63-K63.4, K63.8-K63.9, K69, K75, K78-K79, K84, K87-K89, K92, K92.9-K93, K96-K99, L06-L07, L09, L15-L19, L31-L39, L69, L77-L79, N09, N13-N13.9, N24, N28.8-N28.9, N38, N39.9-N40.9, N54-N59, N66- N69, N78-N79, N84, N84.2-N86, N88-N90.9, N92-N94.9, N95.0, O08-O08.9, O17-O19, O27, O37-O39, O49-O59, O78-O79, O93-O95.9, P06, P16-P18, P30-P34.2, P40-P49, P62- P69, P73, P79, P82, P85-P89, P96.9-P99.9, Q08-Q10.3, Q19, Q29, Q36.0-Q36.9, Q46- Q49, Q88, Q89.9, Q94, Q99.9-R01.2, R07, R07.1-R07.9, R31-R31.9	002, 031-031.9, 039-039.9, 085, 085.1-085.9, 088.0-088.7, 112- 118.9, 130-130.9, 136.3-136.5, 149-149.9, 159-159.9, 165-169, 177-179.9, 183.9-184, 184.5, 184.9, 187, 187.9, 189, 189.9, 194.9- 199.9, 209, 209.2-209.3, 209.6-210, 211, 211.9-212, 212, 9, 214- 216.9, 221, 221.9-222, 222.9-223, 223.9, 229, 229.1, 229.9-230.0, 230.9-231, 231.8-231.9, 233, 233.3, 233.6, 233.9-234, 234.9-235, 235.1-235.3, 235.5, 235.9-236, 236.3, 236.6, 236.9, 237.4, 239- 239.1, 239.5, 239.7-239.9, 249-249.9, 276.6, 278, 293.0-293.9, 331.3-331.4, 348.348.9, 349.9, 357, 357.8-357.9, 399-400.0, 406- 409.4, 418-419.9, 426-426.9, 427.4, 429, 429.2, 429.4-429.9, 459.5-460.9, 462-464, 464.1, 464.3, 464.5, 465-465.9, 505-505.9, 519, 519.8-519.9, 544-549, 553.8-553.9, 559-559.0, 560.4-560.7, 561, 562.2-563, 569, 569.8-569.9, 591-591.9, 593.9, 599.9, 623.7, 624.6, 637-637.9, 639-639.9, 749.1, 759, 779.9, 782.5, 785- 785.3, 786.0-786.2, 786.4-786.5, 786.7, 786.9, E986-E987	
Garbage Code (GBD Level 4)	B54-B55, B55.9, B64, B82-B82.9, B83.9, D47.1, G00, G00.9-G02.8, G03.9, I42-I42.0, I42.9, I51.5, I64-I64.9, I67, I67.8-I68, I68.8-I69, I69.4-I69.9, J07-J08, J15.9, J17-J19.6, J22-J29, I64-I64.9, P23, P23.5-P23.9, P37.3-P37.4, V87-V87.1, V87.4-V88.1, V88.4-V89.9, V99-V99.0, Y09-Y09.9, Y85-Y85.9	084, 084.6, 238, 244, 244.9, 289.8-289.9, 320, 320.9, 425, 425.4, 425.9, 429.1, 436-437, 437.9-439.6, 482.9-483, 484, 484.8-486.9, 770.0, E808-E829	

Appendix Table 5: GBD 2016 cause and sequela hierarchy
Causes and sequelae
All causes
Communicable, maternal, neonatal, and nutritional diseases
HIV/AIDS and tuberculosis
Tuberculosis
Drug-susceptible tuberculosis
Multidrug-resistant tuberculosis without extensive drug resistance
Extensively drug-resistant tuberculosis
Latent tuberculosis infection
HIV/AIDS
Drug-susceptible HIV/AIDS - Tuberculosis
Drug-susceptible HIV/AIDS - Tuberculosis with mild anemia
Drug-susceptible HIV/AIDS - Tuberculosis with moderate anemia
Drug-susceptible HIV/AIDS - Tuberculosis with severe anemia
Drug-susceptible HIV/AIDS - Tuberculosis without anemia
Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance
Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance with mild anemia
Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance with moderate anemia
Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance with severe anemia
Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance without anemia
Extensively drug-resistant HIV/AIDS - Tuberculosis
Extensively drug-resistant HIV/AIDS - Tuberculosis with mild anemia
Extensively drug-resistant HIV/AIDS - Tuberculosis with moderate anemia
Extensively drug-resistant HIV/AIDS - Tuberculosis with severe anemia
Extensively drug-resistant HIV/AIDS - Tuberculosis without anemia
HIV/AIDS resulting in other diseases
AIDS with antiretroviral treatment with mild anemia
AIDS with antiretroviral treatment with moderate anemia
AIDS with antiretroviral treatment with severe anemia
AIDS with antiretroviral treatment without anemia
AIDS without antiretroviral treatment with mild anemia
AIDS without antiretroviral treatment with moderate anemia
AIDS without antiretroviral treatment with severe anemia
AIDS without antiretroviral treatment without anemia
Early HIV with mild anemia
Early HIV with moderate anemia
Early HIV with severe anemia
Early HIV without anemia
Symptomatic HIV with mild anemia
Symptomatic HIV with moderate anemia
Symptomatic HIV with severe anemia
Symptomatic HIV without anemia

Di	arrheal diseases
	Guillain-Barré syndrome due to diarrheal diseases
	Mild diarrheal diseases
	Moderate diarrheal diseases
	Severe diarrheal diseases
In	estinal infectious diseases
	Typhoid fever
	Acute typhoid infection
	Gastrointestinal bleeding due to typhoid
	Intestinal perforation due to typhoid
	Severe typhoid fever
	Paratyphoid fever
	Acute paratyphoid infection
	Intestinal perforation due to paratyphoid
	Moderate paratyphoid fever
	Severe paratyphoid fever
	Other intestinal infectious diseases
Lo	wer respiratory infections
	Guillain-Barré syndrome due to lower respiratory infections
	Moderate lower respiratory infections
	Severe lower respiratory infections
Uj	oper respiratory infections
	Guillain-Barré syndrome due to upper respiratory infections
	Mild upper respiratory infections
	Moderate upper respiratory infections
Ot	itis media
	Acute otitis media
	Mild hearing loss due to chronic otitis media
	Mild hearing loss with ringing due to chronic otitis media
	Moderate hearing loss due to chronic otitis media
	Moderate hearing loss with ringing due to chronic otitis media
	Severe infectious complications due to chronic otitis media
	Vertigo with mild hearing loss and ringing due to chronic otitis media
	Vertigo with mild hearing loss due to chronic otitis media
	Vertigo with moderate hearing loss and ringing due to chronic otitis media
	Vertigo with moderate hearing loss due to chronic otitis media
Μ	eningitis
	Pneumococcal meningitis
	Acute pneumococcal meningitis
	Blindness due to pneumococcal meningitis
	Borderline intellectual disability due to pneumococcal meningitis

Complete hearing loss with ringing due to pneumococcal meningitis
Epilepsy due to pneumococcal meningitis
Mild behavioral problems due to pneumococcal meningitis
Mild hearing loss due to pneumococcal meningitis
Mild hearing loss with ringing due to pneumococcal meningitis
Mild intellectual disability due to pneumococcal meningitis
Mild motor impairment due to long term due to pneumococcal meningitis
Mild motor plus cognitive impairments due to pneumococcal meningitis
Moderate hearing loss due to pneumococcal meningitis
Moderate hearing loss with ringing due to pneumococcal meningitis
Moderate motor impairment due to pneumococcal meningitis
Moderate motor plus cognitive impairments due to pneumococcal meningitis
Moderate vision impairment due to pneumococcol meningitis
Moderately severe hearing loss due to pneumococcal meningitis
Moderately severe hearing loss with ringing due to pneumococcal meningitis
Monocular distance vision loss due to pneumococcal meningitis
Profound hearing loss due to pneumococcal meningitis
Profound hearing loss with ringing due to pneumococcal meningitis
Severe hearing loss due to pneumococcal meningitis
Severe hearing loss with ringing due to pneumococcal meningitis
Severe motor impairment due to pneumococcal meningitis
Severe motor plus cognitive impairments due to pneumococcal meningitis
Severe vision impairment due to pneumococcol meningitis
H influenzae type B meningitis
Acute H influenzae type B meningitis
Blindness due to H influenzae type B meningitis
Borderline intellectual disability due to H influenzae type B meningitis
Complete hearing loss due to H influenzae type B meningitis
Complete hearing loss with ringing due to H influenzae type B meningitis
Epilepsy due to H influenzae type B meningitis
Mild behavioral problems due to H influenzae type B meningitis
Mild hearing loss due to H influenzae type B meningitis
Mild hearing loss with ringing due to H influenzae type B meningitis
Mild intellectual disability due to H influenzae type B meningitis
Mild motor impairment due to long term due to H influenzae type B meningitis
Mild motor plus cognitive impairments due to H influenzae type B meningitis
Moderate hearing loss due to H influenzae type B meningitis
Moderate hearing loss with ringing due to H influenzae type B meningitis
Moderate motor impairment due to H influenzae type B meningitis
Moderate motor plus cognitive impairments due to H influenzae type B meningitis
Moderate vision impairment due to H influenza type B meningitis
Moderately severe hearing loss due to H influenzae type B meningitis
Moderately severe hearing loss with ringing due to H influenzae type B meningitis

Monocular distance vision loss due to H influenzae type B meningitis
Profound hearing loss due to H influenzae type B meningitis
Profound hearing loss with ringing due to H influenzae type B meningitis
Severe hearing loss due to H influenzae type B meningitis
Severe hearing loss with ringing due to H influenzae type B meningitis
Severe motor impairment due to H influenzae type B meningitis
Severe motor plus cognitive impairments due to H influenzae type B meningitis
Severe vision impairment due to H influenza type B meningitis
Meningococcal meningitis
Acute meningococcal meningitis
Blindness due to meningococcal meningitis
Borderline intellectual disability due to meningococcal meningitis
Complete hearing loss due to meningococcal meningitis
Complete hearing loss with ringing due to meningococcal meningitis
Epilepsy due to meningococcal meningitis
Mild behavioral problems due to meningococcal meningitis
Mild hearing loss due to meningococcal meningitis
Mild hearing loss with ringing due to meningococcal meningitis
Mild intellectual disability due to meningococcal meningitis
Mild motor impairment due to long term due to meningococcal meningitis
Mild motor plus cognitive impairments due to meningococcal meningitis
Moderate hearing loss due to meningococcal meningitis
Moderate hearing loss with ringing due to meningococcal meningitis
Moderate motor impairment due to meningococcal meningitis
Moderate motor plus cognitive impairments due to meningococcal meningitis
Moderate vision impairment due to meningococcal meningitis
Moderately severe hearing loss due to meningococcal meningitis
Moderately severe hearing loss with ringing due to meningococcal meningitis
Monocular distance vision loss due to meningococcal meningitis
Profound hearing loss due to meningococcal meningitis
Profound hearing loss with ringing due to meningococcal meningitis
Severe hearing loss due to meningococcal meningitis
Severe hearing loss with ringing due to meningococcal meningitis
Severe motor impairment due to meningococcal meningitis
Severe motor plus cognitive impairments due to meningococcal meningitis
Severe vision impairment due to meningococcal meningitis
Other meningitis
Acute viral meningitis
Blindness due to other bacterial meningitis
Borderline intellectual disability due to other bacterial meningitis
Complete hearing loss due to other bacterial meningitis
Complete hearing loss with ringing due to other bacterial meningitis
Epilepsy due to other meningitis

Mild behavioral problems due to other bacterial meningitis
Mild hearing loss due to other bacterial meningitis
Mild hearing loss due with ringing to other bacterial meningitis
Mild intellectual disability due to other bacterial meningitis
Mild motor impairment due to long term due to other bacterial meningitis
Mild motor plus cognitive impairments due to other bacterial meningitis
Moderate hearing loss due to other bacterial meningitis
Moderate hearing loss with ringing due to other bacterial meningitis
Moderate motor impairment due to other bacterial meningitis
Moderate motor plus cognitive impairments due to other bacterial meningitis
Moderate vision impairment due to other bacterial meningitis
Moderately severe hearing loss due to other bacterial meningitis
Moderately severe hearing loss with ringing due to other bacterial meningitis
Monocular distance vision loss due to other bacterial meningitis
Other acute bacterial meningitis
Profound hearing loss due to other bacterial meningitis
Profound hearing loss with ringing due to other bacterial meningitis
Severe hearing loss due to other bacterial meningitis
Severe hearing loss with ringing due to other bacterial meningitis
Severe motor impairment due to other bacterial meningitis
Severe motor plus cognitive impairments due to other bacterial meningitis
Severe vision impairment due to other bacterial meningitis
Encephalitis
Acute encephalitis
Blindness due to encephalitis
Borderline intellectual disability due to encephalitis
Epilepsy due to encephalitis
Mild behavioral problems due to encephalitis
Mild intellectual disability due to encephalitis
Mild motor impairment due to long term due to encephalitis
Mild motor plus cognitive impairments due to encephalitis
Moderate motor impairment due to encephalitis
Moderate motor plus cognitive impairments due to encephalitis
Moderate vision impairment due to encephalitis
Monocular distance vision loss due to encephalitis
Severe motor impairment due to encephalitis
Severe motor plus cognitive impairments due to encephalitis
Severe vision impairment due to encephalitis
Diphtheria
Moderate diphtheria
Severe diphtheria
Whooping cough
Tetanus

Mi	ild motor impairment due to neonatal tetanus
Mi	ild motor plus cognitive impairments due to neonatal tetanus
Mo	oderate motor impairment due to neonatal tetanus
Mo	oderate motor impairment with blindness and epilepsy due to neonatal tetanus
Mo	oderate motor impairment with blindness due to neonatal tetanus
Mo	oderate motor impairment with epilepsy due to neonatal tetanus
Mo	oderate motor plus cognitive impairment with blindness and epilepsy due to neonatal tetanus
Mo	oderate motor plus cognitive impairment with blindness due to neonatal tetanus
Mo	oderate motor plus cognitive impairment with epilepsy due to neonatal tetanus
Se	vere motor impairment due to neonatal tetanus
Se	vere motor impairment with blindness and epilepsy due to neonatal tetanus
Se	vere motor impairment with blindness due to neonatal tetanus
Se	vere motor impairment with epilepsy due to neonatal tetanus
Se	vere motor plus cognitive impairment with blindness and epilepsy due to neonatal tetanus
Se	vere motor plus cognitive impairment with blindness due to neonatal tetanus
Se	vere motor plus cognitive impairment with epilepsy due to neonatal tetanus
Se	vere tetanus
Measles	S
M	oderate measles
Se	vere measles
Varicel	la and herpes zoster
Ch	ickenpox
Не	erpes zoster
Neglected	tropical diseases and malaria
Malaria	1
As	symptomatic malaria parasitemia (PfPR)
Mi	ild anemia due to malaria parasitemia (PfPR)
Mi	ild malaria
Mi	ild malaria with mild anemia
Mi	ild malaria with moderate anemia
Mi	ild malaria with severe anemia
Me	oderate anemia due to malaria parasitemia (PfPR)
Me	oderate malaria
Me	oderate malaria with mild anemia
Mo	oderate malaria with moderate anemia
Mo	oderate malaria with severe anemia
Me	oderate motor impairment due to malaria
Me	oderate motor impairment with blindness and epilepsy due to malaria
Me	oderate motor impairment with blindness due to malaria
Me	oderate motor impairment with epilepsy due to malaria
Me	oderate motor plus cognitive impairment with blindness and epilepsy due to malaria
Me	oderate motor plus cognitive impairment with blindness due to malaria
Me	oderate motor plus cognitive impairment with epilepsy due to malaria

Severe anemia due to malaria parasitemia (PfPR)	
Severe malaria	
Severe malaria with mild anemia	
Severe malaria with moderate anemia	
Severe malaria with severe anemia	
Severe motor impairment due to malaria	
Severe motor impairment due to induction and epilepsy due to malaria	
Severe motor impairment with blindness due to malaria	
Severe motor impairment with onindices due to malaria Severe motor impairment with epilepsy due to malaria	
Severe motor plus cognitive impairment with blindness and epilepsy due to malaria	
Severe motor plus cognitive impairment with blindness due to malaria	
Severe motor plus cognitive impairment with epilepsy due to malaria	
Chagas disease	
Acute Chagas disease	
Asymptomatic Chagas disease	
Asymptomatic and mild heart failure due to Chagas disease	
Atrial fibrillation and flutter due to Chagas disease	
Mild chronic digestive disease due to Chagas disease	
Moderate chronic digestive disease due to Chagas disease	
Moderate heart failure due to Chagas disease	
Severe heart failure due to Chagas disease	
Leishmaniasis	
Visceral leishmaniasis	
Moderate visceral leishmaniasis	
Severe visceral leishmaniasis	
Cutaneous and mucocutaneous leishmaniasis	
African trypanosomiasis	
Skin disfigurement due to Trypanosoma brucei gambiense	
Skin disfigurement due to Trypanosoma brucei rhodesiense	
Sleeping sickness due to Trypanosoma brucei gambiense	
Sleeping sickness due to Trypanosoma brucei rhodesiense	
Schistosomiasis	
Ascites due to schistosomiasis	
Bladder pathology due to schistosomiasis	
Dysuria due to schistosomiasis	
Hematemesis due to schistosomiasis	
Hepatomegaly due to schistosomiasis	
Hydronephrosis due to schistosomiasis	
Mild anemia due to schistosomiasis	
Mild diarrhea due to schistosomiasis	
Mild schistosomiasis	
Moderate anemia due to schistosomiasis	
Severe anemia due to schistosomiasis	

Cysticercosis
Neurocysticercosis with epilepsy
 Cystic echinococcosis
Abdominal problems due to cystic echinococcosis
 Chronic respiratory disease due to cystic echinococcosis
Epilepsy due to echinococcosis
 Lymphatic filariasis
Acute adenolymphangitis due to lymphatic filariasis
 Hydrocele due to lymphatic filariasis
Lymphedema due to lymphatic filariasis
Prevalence of detectable microfiliaria due to lymphatic filariasis
Onchocerciasis
Asymptomatic onchocerciasis
Blindness due to onchocerciasis
Mild skin disease due to onchocerciasis
Mild skin disease without itch due to onchocerciasis
Moderate skin disease due to onchocerciasis
Moderate vision impairment due to onchocerciasis
 Severe skin disease due to onchocerciasis
Severe skin disease without itch due to onchocerciasis
Severe vision impairment due to onchocerciasis
Trachoma
Blindness due to trachoma
Moderate vision impairment due to trachoma
Severe vision impairment due to trachoma
Dengue
Moderate dengue
Post-dengue chronic fatigue syndrome
Severe dengue
Yellow fever
 Asymptomatic yellow fever
Moderate yellow fever
 Severe yellow fever
Rabies
Intestinal nematode infections
Ascariasis
Asymptomatic ascariasis
Heavy infestation of ascariasis
 Mild abdominopelvic problems due to ascariasis
Severe wasting due to ascariasis
Trichuriasis
Asymptomatic trichuriasis
Heavy infestation of trichuriasis

Mild abdominopelvic problems due to trichuriasis	
Severe wasting due to trichuriasis	
Hookworm disease	
Asymptomatic hookworm disease	
Heavy infestation of hookworm	
Mild abdominopelvic problems due to hookworm disease	
Mild anemia due to hookworm disease	
Moderate anemia due to hookworm disease	
Severe anemia due to hookworm disease	
Severe wasting due to hookworm disease	
Food-borne trematodiases	
Asymptomatic clonorchiasis	
Asymptomatic fascioliasis	
Asymptomatic intestinal fluke infection	
Asymptomatic opisthorchiasis	
Asymptomatic paragonimiasis	
Cerebral paragonimiasis	
Heavy clonorchiasis due to food-borne trematodiases	
Heavy fascioliasis due to food-borne trematodiases	
Heavy intestinal fluke infection due to food-borne trematodiases	
Heavy opisthorchiasis due to food-borne trematodiases	
Mild paragonimiasis due to food-borne trematodiases	
Moderate paragonimiasis due to food-borne trematodiases	
Severe paragonimiasis due to food-borne trematodiases	
Leprosy	
Disfigurement level 1 due to leprosy	
Disfigurement level 2 due to leprosy	
Ebola	
Ebola cases	
Post-Ebola chronic fatigue syndrome	
Zika virus	
Acute Zika infection	
Asymptomatic Zika infection	
Congenital Zika syndrome	
Guillain-Barré syndrome due to Zika infection	
Guinea worm disease	
Mild pain due to Guinea worm emergence	
Moderate pain due to Guinea worm emergence	
Moderate reduced mobility due to Guinea worm emergence	
Other neglected tropical diseases	
Acute infection due to other neglected tropical diseases	
Mild anemia due to other neglected tropical diseases	
Moderate anemia due to other neglected tropical diseases	

Severe anemia due to other neglected tropical diseases
Maternal disorders
Maternal hemorrhage
Maternal hemorrhage (< 1L blood lost)
Maternal hemorrhage (> 1L blood lost)
Mild anemia due to maternal hemorrhage
Moderate anemia due to maternal hemorrhage
Severe anemia due to maternal hemorrhage
Maternal sepsis and other maternal infections
Infertility due to puerperal sepsis
Other maternal infections
Puerperal sepsis
Maternal hypertensive disorders
Eclampsia
Long term sequelae of eclampsia
Long term sequelae of severe pre-eclampsia
Other hypertensive disorders of pregnancy
Severe pre-eclampsia
Maternal obstructed labor and uterine rupture
Obstructed labor, acute event
Rectovaginal fistula
Vesicovaginal fistula
Maternal abortion, miscarriage, and ectopic pregnancy
Ectopic Pregnancy
Maternal abortive outcome
Indirect maternal deaths
Late maternal deaths
Maternal deaths aggravated by HIV/AIDS
Other maternal disorders
Neonatal disorders
Neonatal preterm birth complications
Asymptomatic neonatal preterm birth 28-<32 wks
Asymptomatic neonatal preterm birth 32-<37wks
Asymptomatic neonatla preterm birth <28wks
Asymptomatic retinopathy of prematurity
Blindness due to retinopathy of prematurity
Mild motor impairment due to neonatal preterm birth complications 28-32wks
Mild motor impairment due to neonatal preterm birth complications 32-36wks
Mild motor impairment due to neonatal preterm birth complications <28wks
Mild motor plus cognitive impairments due to neonatal preterm birth complications 28-32wks
Mild motor plus cognitive impairments due to neonatal preterm birth complications 32-36wks
Mild motor plus cognitive impairments due to neonatal preterm birth complications <28wks
Mild vision impairment due to retinopathy of prematurity
whice vision impairment due to retinopathy of prematurity

	Medarata motor impoirment due to popostel protorm high complications 29, 20 m/s
	Moderate motor impairment due to neonatal preterm birth complications 28-32wks
	Moderate motor impairment due to neonatal preterm birth complications 32-36wks
	Moderate motor impairment due to neonatal preterm birth complications <28wks
	Moderate motor impairment with blindness and epilepsy due to neonatal preterm birth complications 28-32wks
	Moderate motor impairment with blindness and epilepsy due to neonatal preterm birth complications 32-36wks
	Moderate motor impairment with blindness and epilepsy due to neonatal preterm birth complications <28wks
	Moderate motor impairment with blindness due to neonatal preterm birth complications 28-32wks
	Moderate motor impairment with blindness due to neonatal preterm birth complications 32-36wks
	Moderate motor impairment with blindness due to neonatal preterm birth complications <28wks
	Moderate motor impairment with epilepsy due to neonatal preterm birth complications 28-32wks
	Moderate motor impairment with epilepsy due to neonatal preterm birth complications 32-36wks
	Moderate motor impairment with epilepsy due to neonatal preterm birth complications <28wks
	Moderate motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications 28-32wks
	Moderate motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications 32-36wks
	Moderate motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications <28wks
	Moderate motor plus cognitive impairment with blindness due to neonatal preterm birth complications 28-32wks
	Moderate motor plus cognitive impairment with blindness due to neonatal preterm birth complications 32-36wks
	Moderate motor plus cognitive impairment with blindness due to neonatal preterm birth complications <28wks
	Moderate motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications 28-32wks
	Moderate motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications 32-36wks
	Moderate motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications <28wks
	Moderate vision impairment due to retinopathy of prematurity
	Severe motor impairment due to neonatal preterm birth complications 28-32wks
	Severe motor impairment due to neonatal preterm birth complications 32-36wks
	Severe motor impairment due to neonatal preterm birth complications <28wks
	Severe motor impairment with blindness and epilepsy due to neonatal preterm birth complications 28-32wks
	Severe motor impairment with blindness and epilepsy due to neonatal preterm birth complications 32-36wks
	Severe motor impairment with blindness and epilepsy due to neonatal preterm birth complications <28wks
	Severe motor impairment with blindness due to neonatal preterm birth complications 28-32wks
	Severe motor impairment with blindness due to neonatal preterm birth complications 32-36wks
	Severe motor impairment with blindness due to neonatal preterm birth complications <28wks
	Severe motor impairment with epilepsy due to neonatal preterm birth complications 28-32wks
	Severe motor impairment with epilepsy due to neonatal preterm birth complications 32-36wks
	Severe motor impairment with epilepsy due to neonatal preterm birth complications <28wks
	Severe motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications 28-32wks
	Severe motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications 32-36wks
	Severe motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications <28wks
	Severe motor plus cognitive impairment with blindness due to neonatal preterm birth complications 28-32wks
	Severe motor plus cognitive impairment with blindness due to neonatal preterm birth complications 32-36wks
	Severe motor plus cognitive impairment with blindness due to neonatal preterm birth complications <28wks
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	Severe motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications 28-32wks
	Severe motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications 32-36wks
	Severe motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications <28wks
	Severe vision impairment due to retinopathy of prematurity
Ne	onatal encephalopathy due to birth asphyxia and trauma
	Asymptomatic neonatal encephalopathy due to birth asphyxia and trauma
	Mild motor impairment due to neonatal encephalopathy due to birth asphyxia and trauma
	Mild motor plus cognitive impairments due to neonatal encephalopathy due to birth asphyxia and trauma
	Moderate motor impairment due to neonatal encephalopathy due to birth asphyxia and trauma
	Moderate motor impairment with blindness and epilepsy due to neonatal encephalopathy due to birth asphyxia and trauma
	Moderate motor impairment with blindness due to neonatal encephalopathy due to birth asphyxia and trauma
	Moderate motor impairment with epilepsy due to neonatal encephalopathy due to birth asphyxia and trauma
trauma	Moderate motor plus cognitive impairment with blindness and epilepsy due to neonatal encephalopathy due to birth asphyxia and
	Moderate motor plus cognitive impairment with blindness due to neonatal encephalopathy due to birth asphyxia and trauma
	Moderate motor plus cognitive impairment with epilepsy due to neonatal encephalopathy due to birth asphyxia and trauma
	Severe motor impairment due to neonatal encephalopathy due to birth asphyxia and trauma
	Severe motor impairment with blindness and epilepsy due to neonatal encephalopathy due to birth asphyxia and trauma
	Severe motor impairment with blindness due to neonatal encephalopathy due to birth asphyxia and trauma
	Severe motor impairment with epilepsy due to neonatal encephalopathy due to birth asphyxia and trauma
trauma	Severe motor plus cognitive impairment with blindness and epilepsy due to neonatal encephalopathy due to birth asphyxia and
	Severe motor plus cognitive impairment with blindness due to neonatal encephalopathy due to birth asphyxia and trauma
	Severe motor plus cognitive impairment with epilepsy due to neonatal encephalopathy due to birth asphyxia and trauma
Ne	onatal sepsis and other neonatal infections
	Asymptomatic neonatal sepsis and other neonatal infections
	Mild motor impairment due to neonatal sepsis and other neonatal infections
	Mild motor plus cognitive impairments due to neonatal sepsis and other neonatal infections
	Moderate motor impairment due to neonatal sepsis and other neonatal infections
	Moderate motor impairment with blindness and epilepsy due to neonatal sepsis and other neonatal infections
	Moderate motor impairment with blindness due to neonatal sepsis and other neonatal infections
	Moderate motor impairment with epilepsy due to neonatal sepsis and other neonatal infections
	Moderate motor plus cognitive impairment with blindness and epilepsy due to neonatal sepsis and other neonatal infections
	Moderate motor plus cognitive impairment with blindness due to neonatal sepsis and other neonatal infections
	Moderate motor plus cognitive impairment with epilepsy due to neonatal sepsis and other neonatal infections
	Severe infection due to neonatal sepsis and other neonatal infections
	Severe motor impairment due to neonatal sepsis and other neonatal infections
	Severe motor impairment with blindness and epilepsy due to neonatal sepsis and other neonatal infections
	Severe motor impairment with blindness due to neonatal sepsis and other neonatal infections
	Severe motor impairment with epilepsy due to neonatal sepsis and other neonatal infections
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	Severe motor plus cognitive impairment with blindness and epilepsy due to neonatal sepsis and other neonatal infections
	Severe motor plus cognitive impairment with blindness due to neonatal sepsis and other neonatal infections
	Severe motor plus cognitive impairment with epilepsy due to neonatal sepsis and other neonatal infections
Hem	olytic disease and other neonatal jaundice
	Moderate motor impairment due to hemolytic disease and other neonatal jaundice
	Moderate motor impairment with blindness and epilepsy due to hemolytic disease and other neonatal jaundice
	Moderate motor impairment with blindness due to hemolytic disease and other neonatal jaundice
	Moderate motor impairment with epilepsy due to hemolytic disease and other neonatal jaundice
	Moderate motor plus cognitive impairment with blindness and epilepsy due to hemolytic disease and other neonatal jaundice
	Moderate motor plus cognitive impairment with blindness due to hemolytic disease and other neonatal jaundice
	Moderate motor plus cognitive impairment with epilepsy due to hemolytic disease and other neonatal jaundice
	Severe motor impairment severe due to hemolytic disease and other neonatal jaundice
	Severe motor impairment with blindness and epilepsy due to hemolytic disease and other neonatal jaundice
	Severe motor impairment with blindness due to hemolytic disease and other neonatal jaundice
	Severe motor impairment with epilepsy due to hemolytic disease and other neonatal jaundice
	Severe motor plus cognitive impairment with blindness and epilepsy due to hemolytic disease and other neonatal jaundice
	Severe motor plus cognitive impairment with blindness due to hemolytic disease and other neonatal jaundice
	Severe motor plus cognitive impairment with epilepsy due to hemolytic disease and other neonatal jaundice
Othe	r neonatal disorders
Nutritic	onal deficiencies
Prote	in-energy malnutrition
	Moderate wasting with edema
	Moderate wasting without edema
	Severe wasting with edema
	Severe wasting without edema
Iodir	e deficiency
	Visible goiter with profound intellectual disability and mild heart failure due to iodine deficiency
	Visible goiter with profound intellectual disability and moderate heart failure due to iodine deficiency
	Visible goiter with profound intellectual disability due to iodine deficiency
	Visible goiter with profound intellectual disability with severe heart failure due to iodine deficiency
	Visible goiter with severe intellectual disability due to iodine deficiency
	Visible goiter with symptoms without intellectual disability or heart failure
	Visible goiter without symptoms
Vitar	nin A deficiency
	Asymptomatic vitamin A deficiency
	Blindness due to vitamin A deficiency
	Moderate vision impairment loss due to vitamin A deficiency
	Severe vision impairment loss due to vitamin A deficiency
	deficiency anemia
	Asymptomatic and mild heart failure due to iron-deficiency anemia

Moderate heart failure due to iron-deficiency anemia
Moderate iron-deficiency anemia
Severe heart failure due to iron-deficiency anemia
Severe iron-deficiency anemia
Other nutritional deficiencies
Other communicable, maternal, neonatal, and nutritional diseases
Sexually transmitted diseases excluding HIV
Syphilis
Asymptomatic adult tertiary syphilis
Asymptomatic early syphilis infection
Cardiovascular complications due to adult tertiary syphilis
Mild early syphilis infection
Neurological problems and cardiovascular complications due to adult tertiary syphilis
Neurological problems due to adult tertiary syphilis
Severe disfigurement and cardiovascular complications due to adult tertiary syphilis
Severe disfigurement and neurological problems due to adult tertiary syphilis
Severe disfigurement due to adult tertiary syphilis
Severe disfigurement, neurological problems, and cardiovascular complications due to adult tertiary syphilis
Chlamydial infection
Asymptomatic chlamydial infection
Epididymo-orchitis due to chlamydial infection
Mild chlamydial infection
Moderate pelvic inflammatory diseases due to chlamydial infection
Primary infertility due to chlamydial infection
Secondary infertility due to chlamydial infection
Severe pelvic inflammatory diseases due to chlamydial infection
Gonococcal infection
Asymptomatic gonococcal infection
Epididymo-orchitis due to gonococcal infection
Mild gonococcal infection
Moderate pelvic inflammatory diseases due to gonococcal infection
Primary infertility due to gonococcal infection
Secondary infertility due to gonococcal infection
Severe pelvic inflammatory diseases due to gonococcal infection
Trichomoniasis
Acute trichomoniasis infection
Asymptomatic trichomoniasis infection
Genital herpes
Asymptomatic genital herpes
Moderate infection due to initial genital herpes episode
Symptomatic genital herpes
Other sexually transmitted diseases
Moderate pelvic inflammatory diseases due to other sexually transmitted diseases

Primary infertility due to other sexually transmitted diseases
Secondary infertility due to other sexually transmitted diseases
Severe pelvic inflammatory diseases due to other sexually transmitted diseases
Hepatitis
Acute hepatitis A
Asymptomatic acute hepatitis A
Moderate acute hepatitis A
Severe acute hepatitis A
Hepatitis B
Asymptomatic acute hepatitis B
Chronic hepatitis B
Moderate acute hepatitis B
Severe acute hepatitis B
Hepatitis C
Asymptomatic acute hepatitis C
Chronic hepatitis C
Moderate acute hepatitis C
Severe acute hepatitis C
Acute hepatitis E
Asymptomatic acute hepatitis E
Moderate acute hepatitis E
Severe acute hepatitis E
Other infectious diseases
Guillain-Barré syndrome due to other infectious diseases
Mild anemia due to other infectious diseases
Moderate anemia due to other infectious diseases
Severe anemia due to other infectious diseases
Non-communicable diseases
Neoplasms
Lip and oral cavity cancer
Controlled phase of mouth cancer
Diagnosis and primary therapy phase of mouth cancer
Metastatic phase of mouth cancer
Terminal phase of mouth cancer
Nasopharynx cancer
Controlled phase of nasopharynx cancer
Diagnosis and primary therapy phase of nasopharynx cancer
Metastatic phase of nasopharynx cancer
Terminal phase of nasopharynx cancer
Other pharynx cancer
Controlled phase of other pharynx cancer
Diagnosis and primary therapy phase of other pharynx cancer
Metastatic phase of other pharynx cancer

Terminal phase of other pharynx cancer
Esophageal cancer
Controlled phase of esophageal cancer
Diagnosis and primary therapy phase of esophageal cancer
Metastatic phase of esophageal cancer
Terminal phase of esophageal cancer
Stomach cancer
Controlled phase of stomach cancer
Diagnosis and primary therapy phase of stomach cancer
Metastatic phase of stomach cancer
Terminal phase of stomach cancer
Colon and rectum cancer
Controlled phase of colon and rectum cancers
Diagnosis and primary therapy phase of colon and rectum cancers
Metastatic phase of colon and rectum cancers
Stoma due to colon and rectum cancer
Terminal phase of colon and rectum cancers
Liver cancer
Liver cancer due to hepatitis B
Controlled phase of liver cancer due to hepatitis B
Diagnosis and primary therapy phase of liver cancer due to hepatitis B
Metastatic phase of liver cancer due to hepatitis B
Terminal phase of liver cancer due to hepatitis B
Liver cancer due to hepatitis C
Controlled phase of liver cancer due to hepatitis C
Diagnosis and primary therapy phase of liver cancer due to hepatitis C
Metastatic phase of liver cancer due to hepatitis C
Terminal phase of liver cancer due to hepatitis C
Liver cancer due to alcohol use
Controlled phase of liver cancer due to alcohol use
Diagnosis and primary therapy phase of liver cancer due to alcohol use
Metastatic phase of liver cancer due to alcohol use
Terminal phase of liver cancer due to alcohol use
Liver cancer due to other causes
Controlled phase of liver cancer due to other causes
Diagnosis and primary therapy phase of liver cancer due to other causes
Metastatic phase of liver cancer due to other causes
Terminal phase of liver cancer due to other causes
Gallbladder and biliary tract cancer
Controlled phase of gallbladder and biliary tract cancer
Diagnosis and primary therapy phase of gallbladder and biliary tract cancer
Metastatic phase of gallbladder and biliary tract cancer
Terminal phase of gallbladder and biliary tract cancer

Pancreatic cancer
Controlled phase of pancreatic cancer
Diagnosis and primary therapy phase of pancreatic cancer
Metastatic phase of pancreatic cancer
Terminal phase of pancreatic cancer
Larynx cancer
Controlled phase of larynx cancer
Diagnosis and primary therapy phase of larynx cancer
Laryngectomy due to larynx cancer
Metastatic phase of larynx cancer
Terminal phase of larynx cancer
Tracheal, bronchus, and lung cancer
Controlled phase of lung, bronchus, and trachea cancer
Diagnosis and primary therapy phase of lung, bronchus, and trachea cancer
Metastatic phase of lung, bronchus, and trachea cancer
Terminal phase of lung, bronchus, and trachea cancer
Malignant skin melanoma
Controlled phase of malignant skin melanoma
Diagnosis and primary therapy phase of malignant skin melanoma
Metastatic phase of malignant skin melanoma
Terminal phase of malignant skin melanoma
Non-melanoma skin cancer
Non-melanoma skin cancer (squamous-cell carcinoma)
Mild disfigurement due to squamous cell carcinoma
Moderate disfigurement due to squamous cell carcinoma
Severe disfigurement due to squamous cell carcinoma
Non-melanoma skin cancer (basal-cell carcinoma)
Disfigurement due to basal cell carcinoma
Breast cancer
Controlled phase of breast cancer
Diagnosis and primary therapy phase of breast cancer
Mastectomy due to breast cancer
Metastatic phase of breast cancer
Terminal phase of breast cancer
Cervical cancer
Controlled phase of cervical cancer
Diagnosis and primary therapy phase of cervical cancer
Metastatic phase of cervical cancer
Terminal phase of cervical cancer
Uterine cancer
Controlled phase of uterine cancer
Diagnosis and primary therapy phase of uterine cancer
Metastatic phase of uterine cancer

Terminal phase of uterine cancer	
Ovarian cancer	
Controlled phase of ovarian cancer	
Diagnosis and primary therapy phase of ovarian cancer	
Metastatic phase of ovarian cancer	
Terminal phase of ovarian cancer	
Prostate cancer	
Controlled phase of prostate cancer	
Diagnosis and primary therapy phase of prostate cancer	
Impotence due to prostate cancer	
Incontinence due to prostate cancer	
Metastatic phase of prostate cancer	
Terminal phase of prostate cancer	
Testicular cancer	
Controlled phase of testicular cancer	
Diagnosis and primary therapy phase of testicular cancer	
Metastatic phase of testicular cancer	
Terminal phase of testicular cancer	
Kidney cancer	
Controlled phase of kidney cancer	
Diagnosis and primary therapy phase of kidney cancer	
Metastatic phase of kidney cancer	
Terminal phase of kidney cancer	
Bladder cancer	
Controlled phase of bladder cancer	
Diagnosis and primary therapy phase of bladder cancer	
Metastatic phase of bladder cancer	
Terminal phase of bladder cancer	
Urinary incontinence due to bladder cancer	
Brain and nervous system cancer	
Controlled phase of brain and nervous system cancers	
Diagnosis and primary therapy phase of brain and nervous system cancers	
Metastatic phase of brain and nervous system cancers	
Terminal phase of brain and nervous system cancers	
Thyroid cancer	
Controlled phase of thyroid cancer	
Diagnosis and primary therapy phase of thyroid cancer	
Metastatic phase of thyroid cancer	
Terminal phase of thyroid cancer	
Mesothelioma	
Controlled phase of mesothelioma	
Diagnosis and primary therapy phase of mesothelioma	
Metastatic phase of mesothelioma	

Terminal phase of mesothelioma
Hodgkin lymphoma
Controlled phase of Hodgkin disease
Diagnosis and primary therapy phase of Hodgkin disease
Metastatic phase of Hodgkin disease
Terminal phase of Hodgkin disease
Non-Hodgkin lymphoma
Controlled phase of non-Hodgkin lymphoma
Diagnosis and primary therapy phase of non-Hodgkin lymphoma
Metastatic phase of non-Hodgkin lymphoma
Terminal phase of non-Hodgkin lymphoma
Multiple myeloma
Controlled phase of multiple myeloma
Diagnosis and primary therapy phase of multiple myeloma
Metastatic phase of multiple myeloma
Terminal phase of multiple myeloma
Leukemia
Acute lymphoid leukemia
Controlled phase of acute lymphoid leukemia
Diagnosis and primary therapy phase of acute lymphoid leukemia
Metastatic phase of acute lymphoid leukemia
Terminal phase of acute lymphoid leukemia
Chronic lymphoid leukemia
Controlled phase of chronic lymphoid leukemia
Diagnosis and primary therapy phase of chronic lymphoid leukemia
Metastatic phase of chronic lymphoid leukemia
Terminal phase of chronic lymphoid leukemia
Acute myeloid leukemia
Controlled phase of acute myeloid leukemia
Diagnosis and primary therapy phase of acute myeloid leukemia
Metastatic phase of acute myeloid leukemia
Terminal phase of acute myeloid leukemia
Chronic myeloid leukemia
Controlled phase of chronic myeloid leukemia
Diagnosis and primary therapy phase of chronic myeloid leukemia
Metastatic phase of chronic myeloid leukemia
Terminal phase of chronic myeloid leukemia
Other leukemia
Controlled phase of other leukemia
Diagnosis and primary therapy phase of other leukemia
Metastatic phase of other leukemia
Terminal phase of other leukemia
Other neoplasms

Controlled phase of other neoplasms
Diagnosis and primary therapy phase of other neoplasms
Metastatic phase of other neoplasms
Terminal phase of other neoplasms
Cardiovascular diseases
Rheumatic heart disease
Asymptomatic and mild heart failure due to rheumatic heart disease
Moderate heart failure due to rheumatic heart disease
Rheumatic heart disease, without heart failure
Severe heart failure due to rheumatic heart disease
Ischemic heart disease
Acute myocardial infarction 3 to 28 days
Acute myocardial infarction first 2 days
Asymptomatic and mild heart failure due to ischemic heart disease
Asymptomatic angina due to ischemic heart disease
Asymptomatic ischemic heart disease following myocardial infarction
Mild angina due to ischemic heart disease
Moderate angina due to ischemic heart disease
Moderate heart failure due to ischemic heart disease
Severe angina due to ischemic heart disease
Severe heart failure due to ischemic heart disease
Cerebrovascular disease
Ischemic stroke
Acute ischemic stroke severity level 1
Acute ischemic stroke severity level 2
Acute ischemic stroke severity level 3
Acute ischemic stroke severity level 4
Acute ischemic stroke severity level 5
Asymptomatic chronic ischemic stroke
Chronic ischemic stroke severity level 1
Chronic ischemic stroke severity level 2
Chronic ischemic stroke severity level 3
Chronic ischemic stroke severity level 4
Chronic ischemic stroke severity level 5
Hemorrhagic stroke
Acute hemorrhagic stroke severity level 1
Acute hemorrhagic stroke severity level 2
Acute hemorrhagic stroke severity level 3
Acute hemorrhagic stroke severity level 4
Acute hemorrhagic stroke severity level 5
Asymptomatic chronic hemorrhagic stroke
Chronic hemorrhagic stroke severity level 1
Chronic hemorrhagic stroke severity level 2

Chronic hemorrhagic stroke severity level 3
Chronic hemorrhagic stroke severity level 4
Chronic hemorrhagic stroke severity level 5
Hypertensive heart disease
Asymptomatic and mild heart failure due to hypertensive heart disease
Moderate heart failure due to hypertensive heart disease
Severe heart failure due to hypertensive heart disease
Cardiomyopathy and myocarditis
Myocarditis
Acute myocarditis
Asymptomatic and mild heart failure due to myocarditis
Moderate heart failure due to myocarditis
Severe heart failure due to myocarditis
Alcoholic cardiomyopathy
Asymptomatic and mild heart failure due to alcoholic cardiomyopathy
Moderate heart failure due to alcoholic cardiomyopathy
Severe heart failure due to alcoholic cardiomyopathy
Other cardiomyopathy
Asymptomatic and mild heart failure due to other cardiomyopathy
Moderate heart failure due to other cardiomyopathy
Severe heart failure due to other cardiomyopathy
Atrial fibrillation and flutter
Asymptomatic atrial fibrillation and flutter
Symptomatic atrial fibrillation and flutter
Aortic aneurysm
Peripheral artery disease
Asymptomatic peripheral vascular disease
Symptomatic claudication due to peripheral vascular disease
Endocarditis
Asymptomatic and mild heart failure due to endocarditis
Moderate endocarditis
Moderate heart failure due to endocarditis
Severe endocarditis
Severe heart failure due to endocarditis
Other cardiovascular and circulatory diseases
Asymptomatic and mild heart failure due to other cardiovascular diseases
Asymptomatic other cardiovascular diseases
Mild other cardiovascular diseases
Moderate heart failure due to other cardiovascular diseases
Moderate other cardiovascular diseases
Severe heart failure due to other cardiovascular diseases
Severe other cardiovascular diseases
Chronic respiratory diseases

Chronic obstructive pulmonary disease
Asymptomatic and mild heart failure due to severe chronic obstructive pulmonary disease
Asymptomatic chronic obstructive pulmonary disease
Mild chronic obstructive pulmonary disease
Moderate chronic obstructive pulmonary disease
Moderate heart failure due to severe chronic obstructive pulmonary disease
Severe chronic obstructive pulmonary disease without heart failure
Severe heart failure due to severe chronic obstructive pulmonary disease
Pneumoconiosis
Silicosis
Asymptomatic and mild heart failure due to severe silicosis
Asymptomatic silicosis
Mild silicosis
Moderate heart failure due to severe silicosis
Moderate silicosis
Severe heart failure due to severe silicosis
Severe silicosis without heart failure
Asbestosis
Asymptomatic and mild heart failure due to severe asbestosis
Asymptomatic asbestosis
Mild asbestosis
Moderate asbestosis
Moderate heart failure due to severe asbestosis
Severe asbestosis without heart failure
Severe heart failure due to severe asbestosis
Coal workers pneumoconiosis
Asymptomatic and mild heart failure due to severe coal workers pneumoconiosis
Asymptomatic coal workers pneumoconiosis
Mild coal workers pneumoconiosis
Moderate coal workers pneumoconiosis
Moderate heart failure due to severe coal workers pneumoconiosis
Severe coal workers pneumoconiosis without heart failure
Severe heart failure due to severe coal workers pneumoconiosis
Other pneumoconiosis
Asymptomatic and mild heart failure due to severe other pneumoconiosis
Asymptomatic other pneumoconiosis
Mild other pneumoconiosis
Moderate heart failure due to severe other pneumoconiosis
Moderate other pneumoconiosis
Severe heart failure due to severe other pneumoconiosis
Severe other pneumoconiosis without heart failure
Asthma
Asymptomatic asthma

Controlled asthma
Partially controlled asthma
Uncontrolled asthma
Interstitial lung disease and pulmonary sarcoidosis
Asymptomatic and mild heart failure due to severe interstitial lung disease and pulmonary sarcoidosis
Asymptomatic interstitial lung disease and pulmonary sarcoidosis
Mild interstitial lung disease and pulmonary sarcoidosis
Moderate heart failure due to severe interstitial lung disease and pulmonary sarcoidosis
Moderate interstitial lung disease and pulmonary sarcoidosis
Severe heart failure due to severe interstitial lung disease and pulmonary sarcoidosis
Severe interstitial lung disease and pulmonary sarcoidosis without heart failure
Other chronic respiratory diseases
Cirrhosis and other chronic liver diseases
Cirrhosis and other chronic liver diseases due to hepatitis B
Cirrhosis and other chronic liver diseases due to hepatitis B, compensated
Cirrhosis and other chronic liver diseases due to hepatitis B, decompensated
Cirrhosis and other chronic liver diseases due to hepatitis C
Cirrhosis and other chronic liver diseases due to hepatitis C, compensated
Cirrhosis and other chronic liver diseases due to hepatitis C, decompensated
Cirrhosis and other chronic liver diseases due to alcohol use
Cirrhosis and other chronic liver diseases due to alcohol, compensated
Cirrhosis and other chronic liver diseases due to alcohol, decompensated
Cirrhosis and other chronic liver diseases due to other causes
Cirrhosis and other chronic liver diseases due to other cause, compensated
Cirrhosis and other chronic liver diseases due to other cause, decompensated
Digestive diseases
Peptic ulcer disease
Asymptomatic peptic ulcer disease with mild anemia
Asymptomatic peptic ulcer disease with moderate anemia
Asymptomatic peptic ulcer disease with severe anemia
Asymptomatic peptic ulcer disease without anemia
Mild anemia due to peptic ulcer disease
Mild symptomatic peptic ulcer disease with mild anemia
Mild symptomatic peptic ulcer disease with moderate anemia
Mild symptomatic peptic ulcer disease with severe anemia
Mild symptomatic peptic ulcer disease without anemia
Moderate anemia due to peptic ulcer disease
Moderate symptomatic peptic ulcer disease with mild anemia
Moderate symptomatic peptic ulcer disease with moderate anemia
Moderate symptomatic peptic ulcer disease with severe anemia
Moderate symptomatic peptic ulcer disease without anemia
Severe anemia due to peptic ulcer disease
Gastritis and duodenitis

Asymptomatic gastritis and duodenitis with mild anemia
Asymptomatic gastritis and duodenitis with moderate anemia
Asymptomatic gastritis and duodenitis with severe anemia
Asymptomatic gastritis and duodenitis without anemia
Mild anemia due to gastritis and duodenitis
Mild symptomatic gastritis and duodenitis with mild anemia
Mild symptomatic gastritis and duodenitis with moderate anemia
Mild symptomatic gastritis and duodenitis with severe anemia
Mild symptomatic gastritis and duodenitis without anemia
Moderate anemia due to gastritis and duodenitis
Moderate symptomatic gastritis and duodenitis with mild anemia
Moderate symptomatic gastritis and duodenitis with moderate anemia
Moderate symptomatic gastritis and duodenitis with severe anemia
Moderate symptomatic gastritis and duodenitis without anemia
Severe anemia due to gastritis and duodenitis
Appendicitis
Paralytic ileus and intestinal obstruction
Inguinal, femoral, and abdominal hernia
Asymptomatic inguinal, femoral, and abdominal hernia
Mild symptomatic inguinal, femoral and abdominal hernia
Moderate symptomatic inguinal, femoral and abdominal hernia
Severe symptomatic inguinal, femoral and abdominal hernia
Inflammatory bowel disease
Asymptomatic Crohn's disease
Asymptomatic ulcerative colitis
Crohn's disease
Ulcerative colitis
Vascular intestinal disorders
Gallbladder and biliary diseases
Asymptomatic gallbladder and biliary diseases
Mild symptomatic episodes gallbladder and biliary diseases
Moderate symptomatic episodes gallbladder and biliary diseases
Severe symptomatic episodes gallbladder and biliary diseases
Pancreatitis
Mild pancreatitis episodes
Moderate pancreatitis episodes
Severe pancreatitis episodes
Other digestive diseases
Neurological disorders
Alzheimer disease and other dementias
Mild Alzheimer disease and other dementias
Moderate Alzheimer disease and other dementias
Severe Alzheimer disease and other dementias

Parkinson disease
Mild Parkinson disease
Moderate Parkinson disease
Severe Parkinson disease
Epilepsy
Less severe epilepsy
Seizure-free, treated epilepsy
Severe epilepsy
Multiple sclerosis
Asymptomatic multiple sclerosis
Mild multiple sclerosis
Moderate multiple sclerosis
Severe multiple sclerosis
Motor neuron disease
Diagnosis of motor neuron disease
Mild motor impairment and mild respiratory problems due to motor neuron disease
Mild motor impairment and severe respiratory problems due to motor neuron disease
Mild motor impairment and speech problems due to motor neuron disease
Mild motor impairment due to motor neuron disease
Mild motor impairment, mild respiratory problems, and speech problems due to motor neuron disease
Mild motor impairment, moderate respiratory problems, and speech problems due to motor neuron disease
Mild motor impairment, severe respiratory problems and speech problems due to motor neuron disease
Mild respiratory problems and speech problems due to motor neuron disease
Mild respiratory problems due to motor neuron disease
Moderate motor impairment and mild respiratory problems due to motor neuron disease
Moderate motor impairment and moderate respiratory problems due to motor neuron disease
Moderate motor impairment and severe respiratory problems due to motor neuron disease
Moderate motor impairment and speech problems due to motor neuron disease
Moderate motor impairment due to motor neuron disease
Moderate motor impairment, mild respiratory problems, and speech problems due to motor neuron disease
Moderate motor impairment, moderate respiratory problems, and speech problems due to motor neuron disease
Moderate motor impairment, severe respiratory problems, and speech problems due to motor neuron disease
Moderate respiratory problems and speech problems due to motor neuron disease
Moderate respiratory problems due to motor neuron disease
Severe motor impairment and mild respiratory problems due to motor neuron disease
Severe motor impairment and moderate respiratory problems due to motor neuron disease
Severe motor impairment and severe respiratory problems due to motor neuron disease
Severe motor impairment and speech problems due to motor neuron disease
Severe motor impairment due to motor neuron disease
Severe motor impairment, mild respiratory problems, and speech problems due to motor neuron disease
Severe motor impairment, moderate respiratory problems, and speech problems due to motor neuron disease
Severe motor impairment, severe respiratory problems, and speech problems due to motor neuron disease
Severe respiratory problems and speech problems due to motor neuron disease

Severe respiratory problems due to motor neuron disease	
Speech problems due to motor neuron disease	
Migraine	
Asymptomatic medication overuse headache due to migraine	
Asymptomatic migraine	
Symptomatic medication overuse headache due to migraine	
Symptomatic migraine	
Tension-type headache	
Asymptomatic medication overuse headache due to tension-type headache	
Asymptomatic tension-type headache	
Symptomatic medication overuse headache due to tension-type headache	
Symptomatic tension-type headache	
Other neurological disorders	
Guillain-Barré syndrome due to other neurological disorders	
Mental and substance use disorders	
Schizophrenia	
Schizophrenia acute state	
Schizophrenia residual state	
Alcohol use disorders	
Asymptomatic alcohol dependence	
Asymptomatic fetal alcohol syndrome	
Mild alcohol dependence	
Mild fetal alcohol syndrome	
Moderate alcohol dependence	
Moderate fetal alcohol syndrome	
Severe alcohol dependence	
Severe fetal alcohol syndrome	
Very mild alcohol dependence	
Drug use disorders	
Opioid use disorders	
Asymptomatic opioid dependence	
Mild opioid dependence	
Severe opioid dependence	
Cocaine use disorders	
Asymptomatic cocaine dependence	
Mild cocaine dependence	
Severe cocaine dependence	
Amphetamine use disorders	
Asymptomatic amphetamine dependence	
Mild amphetamine dependence	
Severe amphetamine dependence	
Cannabis use disorders	
Asymptomatic cannabis dependence	

Mild cannabis dependence
Severe cannabis dependence
Other drug use disorders
Depressive disorders
Major depressive disorder
Major depressive disorder, currently without symptoms
Mild major depressive disorder
Moderate major depressive disorder
Severe major depressive disorder
Dysthymia
Dysthymia, currently without symptoms
Symptomatic dysthymia
Bipolar disorder
Bipolar disorder depressive state
Bipolar disorder manic state
Bipolar disorder residual state
Anxiety disorders
Anxiety disorders, currently without symptoms
Mild anxiety disorders
Moderate anxiety disorders
Severe anxiety disorders
Eating disorders
Anorexia nervosa
Bulimia nervosa
Autistic spectrum disorders
Autism
Autism with borderline intellectual disability
Autism with mild intellectual disability
Autism with moderate intellectual disability
Autism with profound intellectual disability
Autism with severe intellectual disability
Autism without intellectual disability
Asperger syndrome and other autistic spectrum disorders
Attention-deficit/hyperactivity disorder
Attention-deficit/hyperactivity disorder, currently without symptoms
Symptomatic attention-deficit/hyperactivity disorder
Conduct disorder
Conduct disorder, currently without symptoms
Symptomatic conduct disorder
Idiopathic developmental intellectual disability
Borderline idiopathic developmental intellectual disability
Mild idiopathic developmental intellectual disability
Moderate idiopathic developmental intellectual disability

Profound idiopathic developmental intellectual disability
Severe idiopathic developmental intellectual disability
Other mental and substance use disorders
Mild other mental disorders
Moderate other mental disorders
Other mental disorders, currently without symptoms
Severe other mental disorders
Diabetes, urogenital, blood, and endocrine diseases
Diabetes mellitus
Blindness due to diabetes mellitus
Diabetic foot due to neuropathy
Diabetic neuropathy
Diabetic neuropathy and amputation with treatment
Diabetic neuropathy and amputation without treatment
Moderate vision impairment due to diabetes mellitus
Severe vision impairment due to diabetes mellitus
Uncomplicated diabetes mellitus
Acute glomerulonephritis
Chronic kidney disease
Chronic kidney disease due to diabetes mellitus
End-stage renal disease after transplant due to diabetes mellitus
End-stage renal disease on dialysis due to diabetes mellitus
Stage III chronic kidney disease and mild anemia due to diabetes mellitus
Stage III chronic kidney disease and moderate anemia due to diabetes mellitus
Stage III chronic kidney disease and severe anemia due to diabetes mellitus
Stage III chronic kidney disease without anemia due to diabetes mellitus
Stage IV chronic kidney disease untreated and mild anemia due to diabetes mellitus
Stage IV chronic kidney disease untreated and moderate anemia due to diabetes mellitus
Stage IV chronic kidney disease untreated and severe anemia due to diabetes mellitus
Stage IV chronic kidney disease untreated without anemia due to diabetes mellitus
Stage V chronic kidney disease untreated and mild anemia due to diabetes mellitus
Stage V chronic kidney disease untreated and moderate anemia due to diabetes mellitus
Stage V chronic kidney disease untreated and severe anemia due to diabetes mellitus
Stage V chronic kidney disease untreated without anemia due to diabetes mellitus
Chronic kidney disease due to hypertension
End-stage renal disease after transplant due to hypertension
End-stage renal disease on dialysis due to hypertension
Stage III chronic kidney disease and mild anemia due to hypertension
Stage III chronic kidney disease and moderate anemia due to hypertension
Stage III chronic kidney disease and severe anemia due to hypertension
Stage III chronic kidney disease without anemia due to hypertension
Stage IV chronic kidney disease untreated and mild anemia due to hypertension
Stage IV chronic kidney disease untreated and moderate anemia due to hypertension

Stage IV chronic kidney disease untreated and severe anemia due to hypertension
Stage IV chronic kidney disease untreated without anemia due to hypertension
Stage V chronic kidney disease untreated and mild anemia due to hypertension
Stage V chronic kidney disease untreated and moderate anemia due to hypertension
Stage V chronic kidney disease untreated and severe anemia due to hypertension
Stage V chronic kidney disease untreated without anemia due to hypertension
Chronic kidney disease due to glomerulonephritis
End-stage renal disease after transplant due to glomerulonephritis
End-stage renal disease on dialysis due to glomerulonephritis
Stage III chronic kidney disease and mild anemia due to glomerulonephritis
Stage III chronic kidney disease and moderate anemia due to glomerulonephritis
Stage III chronic kidney disease and severe anemia due to glomerulonephritis
Stage III chronic kidney disease without anemia due to glomerulonephritis
Stage IV chronic kidney disease untreated and mild anemia due to glomerulonephritis
Stage IV chronic kidney disease untreated and moderate anemia due to glomerulonephritis
Stage IV chronic kidney disease untreated and severe anemia due to glomerulonephritis
Stage IV chronic kidney disease untreated without anemia due to glomerulonephritis
Stage V chronic kidney disease untreated and mild anemia due to glomerulonephritis
Stage V chronic kidney disease untreated and moderate anemia due to glomerulonephritis
Stage V chronic kidney disease untreated and severe anemia due to glomerulonephritis
Stage V chronic kidney disease untreated without anemia due to glomerulonephritis
Chronic kidney disease due to other causes
End-stage renal disease after transplant due to other causes
End-stage renal disease on dialysis due to other causes
Stage III chronic kidney disease and mild anemia due to other causes
Stage III chronic kidney disease and moderate anemia due to other causes
Stage III chronic kidney disease and severe anemia due to other causes
Stage III chronic kidney disease without anemia due to other causes
Stage IV chronic kidney disease untreated and mild anemia due to other causes
Stage IV chronic kidney disease untreated and moderate anemia due to other causes
Stage IV chronic kidney disease untreated and severe anemia due to other causes
Stage IV chronic kidney disease untreated without anemia due to other causes
Stage V chronic kidney disease untreated and mild anemia due to other causes
Stage V chronic kidney disease untreated and moderate anemia due to other causes
Stage V chronic kidney disease untreated and severe anemia due to other causes
Stage V chronic kidney disease untreated without anemia due to other causes
Urinary diseases and male infertility
Interstitial nephritis and urinary tract infections
Mild interstitial nephritis and urinary tract infections
Moderate interstitial nephritis and urinary tract infections
Urolithiasis
Mild urolithiasis episodes
Moderate urolithiasis episodes

Sever	e urolithiasis episodes
Benign	prostatic hyperplasia
Asym	ptomatic benign prostatic hyperplasia
Symp	tomatic benign prostatic hyperplasia
Male in	fertility
	ary male infertility
	ndary male infertility
Other u	rinary diseases
	zical diseases
	fibroids
Asym	ptomatic uterine fibroids
	abdominal pain due to uterine fibroids, with mild anemia
	abdominal pain due to uterine fibroids, with moderate anemia
	abdominal pain due to uterine fibroids, with severe anemia
Mild	abdominal pain due to uterine fibroids, without anemia
	tic ovarian syndrome
	ptomatic polycystic ovarian syndrome
	tism and primary infertility due to polycystic ovarian syndrome
	tism and secondary infertility due to polycystic ovarian syndrome
	tism due to polycystic ovarian syndrome
	ary infertility due to polycystic ovarian syndrome
Secor	idary infertility due to polycystic ovarian syndrome
Female	infertility
Idiopa	athic primary female infertility
Idiopa	athic secondary female infertility
Endome	etriosis
Asym	ptomatic endometriosis
Mild	abdominal pain and primary infertility due to endometriosis
Mild	abdominal pain and secondary infertility due to endometriosis
Mild	abdominal pain due to endometriosis
Mode	arate abdominal pain and primary infertility due to endometriosis
Mode	erate abdominal pain and secondary infertility due to endometriosis
Mode	erate abdominal pain due to endometriosis
Prima	ary infertility due to endometriosis
Secor	idary infertility due to endometriosis
Sever	e abdominal pain and primary infertility due to endometriosis
Sever	e abdominal pain and secondary infertility due to endometriosis
Sever	e endometriosis
Genital	prolapse
Abdo	minal pain and stress incontinence due to genital prolapse
Abdo	minal pain due to genital prolapse
Asym	ptomatic genital prolapse
Stress	s incontinence due to genital prolapse

Premenstrual syndrome
Abdominal pain and depression due to premenstrual syndrome
Abdominal pain due to premenstrual syndrome
Asymptomatic premenstrual syndrome
Depression due to premenstrual syndrome
Other gynecological diseases
Asymptomatic other gynecological disorders
Mild anemia due to other gynecological diseases
Mild other gynecological disorders
Moderate anemia due to other gynecological diseases
Moderate other gynecological disorders
Severe anemia due to other gynecological diseases
Severe other gynecological disorders
Hemoglobinopathies and hemolytic anemias
Thalassemias
Asymptomatic and mild heart failure due to thalassemias
Beta-thalassemia major, severe infection with severe anemia
Beta-thalassemia major, with mild anemia
Beta-thalassemia major, with moderate anemia
Beta-thalassemia major, with severe anemia
Beta-thalassemia major, without anemia
Hemoglobin E/Beta-thalassemia, without anemia
Hemoglobin E/beta-thalassemia, severe infection with severe anemia
Hemoglobin E/beta-thalassemia, with mild anemia
Hemoglobin E/beta-thalassemia, with moderate anemia
Hemoglobin E/beta-thalassemia, with severe anemia
Hemoglobin H disease, severe infection with severe anemia
Hemoglobin H disease, with mild anemia
Hemoglobin H disease, with moderate anemia
Hemoglobin H disease, with severe anemia
Hemoglobin H disease, without anemia
Moderate heart failure due to thalassemias
Severe heart failure due to thalassemias
Thalassemias trait
Asymptomatic B-thalassemia trait
Asymptomatic hemoglobin E trait
Mild anemia due to B-thalassemia trait
Mild anemia due to hemoglobin E trait
Moderate anemia due to B-thalassemia trait
Moderate anemia due to hemoglobin E trait
Severe anemia due to B-thalassemia trait
Severe anemia due to hemoglobin E trait
Sickle cell disorders

H	lemoglobin SC disease, with mild anemia
H	lemoglobin SC disease, with moderate anemia
H	lemoglobin SC disease, with severe anemia
H	lemoglobin SC disease, with stroke and severe anemia
H	lemoglobin SC disease, with stroke, without anemia
H	lemoglobin SC disease, with vaso-occlusive crisis and severe anemia
H	lemoglobin SC disease, with vaso-occlusive crisis and stroke, without anemia
H	lemoglobin SC disease, with vaso-occlusive crisis, stroke, and severe anemia
H	lemoglobin SC disease, with vaso-occlusive crisis, without anemia
H	lemoglobin SC disease, without anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with mild anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with moderate anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with severe anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with stroke and severe anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with stroke, without anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with vaso-occlusive crisis and severe anemia
E	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with vaso-occlusive crisis and stroke, without anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with vaso-occlusive crisis, stroke, and severe anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, with vaso-occlusive crisis, without anemia
H	lomozygous sickle cell and severe sickle cell/beta-thalassemia, without anemia
Ν	fild sickle cell/beta-thalassemia, with mild anemia
Ν	fild sickle cell/beta-thalassemia, with moderate anemia
Ν	fild sickle cell/beta-thalassemia, with severe anemia
Ν	fild sickle cell/beta-thalassemia, with stroke and severe anemia
Ν	fild sickle cell/beta-thalassemia, with stroke, without anemia
Ν	fild sickle cell/beta-thalassemia, with vaso-occlusive crisis and severe anemia
Ν	fild sickle cell/beta-thalassemia, with vaso-occlusive crisis and stroke, without anemia
Ν	fild sickle cell/beta-thalassemia, with vaso-occlusive crisis, stroke, and severe anemia
Ν	fild sickle cell/beta-thalassemia, with vaso-occlusive crisis, without anemia
Ν	fild sickle cell/beta-thalassemia, without anemia
Sicl	cle cell trait
A	symptomatic sickle cell trait
Ν	fild anemia due to sickle cell trait
Ν	foderate anemia due to sickle cell trait
S	evere anemia due to sickle cell trait
G6I	PD deficiency
A	symptomatic G6PD deficiency
A	symptomatic and mild heart failure due to G6PD deficiency
Ν	fild anemia due to G6PD deficiency
Ν	Inderate anemia due to G6PD deficiency
N	Inderate heart failure due to G6PD deficiency
S	evere anemia due to G6PD deficiency

Severe heart failure due to G6PD deficiency
G6PD trait
Asymptomatic hemizygous G6PD deficiency
Mild anemia due to hemizygous G6PD deficiency
Moderate anemia due to hemizygous G6PD deficiency
Severe anemia due to hemizygous G6PD deficiency
Other hemoglobinopathies and hemolytic anemias
Asymptomatic and mild heart failure due to other hemoglobinopathies and hemolytic anemias
Mild anemia due to other hemoglobinopathies and hemolytic anemias
Moderate anemia due to other hemoglobinopathies and hemolytic anemias
Moderate heart failure due to other hemoglobinopathies and hemolytic anemias
Severe anemia due to other hemoglobinopathies and hemolytic anemias
Severe heart failure due to other hemoglobinopathies and hemolytic anemias
Endocrine, metabolic, blood, and immune disorders
Asymptomatic and mild heart failure due to endocrine, metabolic, blood, and immune disorders
Asymptomatic endocrine, metabolic, blood, and immune disorders
Mild anemia due to endocrine, metabolic, blood, and immune disorders
Mild endocrine, metabolic, blood, and immune disorders
Moderate anemia due to endocrine, metabolic, blood, and immune disorders
Moderate endocrine, metabolic, blood, and immune disorders
Moderate heart failure due to endocrine, metabolic, blood, and immune disorders
Severe anemia due to endocrine, metabolic, blood, and immune disorders
Severe endocrine, metabolic, blood, and immune disorders
Severe heart failure due to endocrine, metabolic, blood, and immune disorders
Musculoskeletal disorders
Rheumatoid arthritis
Mild rheumatoid arthritis
Moderate rheumatoid arthritis
Severe rheumatoid arthritis
Osteoarthritis
Mild osteoarthritis of the hip
Mild osteoarthritis of the knee
Moderate osteoarthritis of the hip
Moderate osteoarthritis of the knee
Severe osteoarthritis of the hip
Severe osteoarthritis of the knee
Low back and neck pain
Low back pain
Mild low back pain with leg pain
Mild low back pain without leg pain
Moderate low back pain with leg pain
Moderate low back pain without leg pain
Most severe low back pain with leg pain

Most severe low back pain without leg pain
Severe low back pain with leg pain
Severe low back pain without leg pain
Neck pain
Mild neck pain
Moderate neck pain
Most severe neck pain
Severe neck pain
Gout
Asymptomatic gout
Polyarticular gout
Symptomatic episodes of gout
Other musculoskeletal disorders
Asymptomatic other musculoskeletal disorders
Other musculoskeletal disorders severity level 1
Other musculoskeletal disorders severity level 2
Other musculoskeletal disorders severity level 3
Other musculoskeletal disorders severity level 4
Other musculoskeletal disorders severity level 5
Other musculoskeletal disorders severity level 6
Other non-communicable diseases
Congenital birth defects
Neural tube defects
Asymptomatic encephalocele following treatment
Borderline intellectual disability and incontinence due to encephalocele
Borderline intellectual disability due to encephalocele
Incontinence due to encephalocele
Mild intellectual disability and incontinence due to encephalocele
Mild intellectual disability due to encephalocele
Mild motor impairment and borderline intellectual disability due to encephalocele
Mild motor impairment and borderline intellectual disability due to spina bifida
Mild motor impairment and incontinence due to encephalocele
Mild motor impairment and incontinence due to spina bifida
Mild motor impairment and mild intellectual disability due to encephalocele
Mild motor impairment and mild intellectual disability due to spina bifida
Mild motor impairment and moderate intellectual disability due to encephalocele
Mild motor impairment and moderate intellectual disability due to spina bifida
Mild motor impairment and profound intellectual disability due to encephalocele
Mild motor impairment and profound intellectual disability due to spina bifida
Mild motor impairment and severe intellectual disability due to encephalocele
Mild motor impairment and severe intellectual disability due to spina bifida
Mild motor impairment due to encephalocele
Mild motor impairment due to spina bifida

М	ild motor impairment, borderline intellectual disability and incontinence due to encephalocele
М	ild motor impairment, borderline intellectual disability and incontinence due to spina bifida
	ild motor impairment, mild intellectual disability and incontinence due to encephalocele
М	ild motor impairment, mild intellectual disability and incontinence due to spina bifida
	ild motor impairment, moderate intellectual disability and incontinence due to encephalocele
	ild motor impairment, moderate intellectual disability and incontinence due to spina bifida
	ild motor impairment, profound intellectual disability and incontinence due to encephalocele
	ild motor impairment, profound intellectual disability and incontinence due to spina bifida
	ild motor impairment, severe intellectual disability and incontinence due to encephalocele
	ild motor impairment, severe intellectual disability and incontinence due to spina bifida
	oderate intellectual disability and incontinence due to encephalocele
	oderate intellectual disability due to encephalocele
	oderate motor impairment and borderline intellectual disability due to encephalocele
	oderate motor impairment and borderline intellectual disability due to spina bifida
	oderate motor impairment and incontinence due to encephalocele
	oderate motor impairment and incontinence due to spina bifida
	oderate motor impairment and mild intellectual disability due to encephalocele
	oderate motor impairment and mild intellectual disability due to spina bifida
	oderate motor impairment and moderate intellectual disability due to encephalocele
	oderate motor impairment and moderate intellectual disability due to spina bifida
	oderate motor impairment and profound intellectual disability due to encephalocele
	oderate motor impairment and profound intellectual disability due to spina bifida
	oderate motor impairment and severe intellectual disability due to encephalocele
	oderate motor impairment and severe intellectual disability due to spina bifida
	oderate motor impairment due to encephalocele
	oderate motor impairment due to spina bifida
	oderate motor impairment, borderline intellectual disability and incontinence due to encephalocele
	oderate motor impairment, borderline intellectual disability and incontinence due to spina bifida
	oderate motor impairment, mild intellectual disability and incontinence due to encephalocele
	oderate motor impairment, mild intellectual disability and incontinence due to spina bifida
	oderate motor impairment, moderate intellectual disability and incontinence due to spinic order
	oderate motor impairment, moderate intellectual disability and incontinence due to enceptimetere
	oderate motor impairment, profound intellectual disability and incontinence due to spina bilad
	oderate motor impairment, profound intellectual disability and incontinence due to enterphilocete
	oderate motor impairment, severe intellectual disability and incontinence due to encephalocele
	oderate motor impairment, severe intellectual disability and incontinence due to enceptiatocele
	ofound intellectual disability and incontinence due to encephalocele
	ofound intellectual disability due to encephalocele
	vere intellectual disability and incontinence due to encephalocele
	vere intellectual disability due to encephalocele
	vere interfectual disability due to encephalocele
	vere motor impairment and borderline intellectual disability due to encephalocele
Se	vere motor impairment and borderline intellectual disability due to spina bifida

Severe motor impairment and incontinence due to encephalocele
Severe motor impairment and incontinence due to spina bifida
Severe motor impairment and mild intellectual disability due to encephalocele
Severe motor impairment and mild intellectual disability due to spina bifida
Severe motor impairment and moderate intellectual disability due to encephalocele
Severe motor impairment and moderate intellectual disability due to spina bifida
Severe motor impairment and profound intellectual disability due to encephalocele
Severe motor impairment and profound intellectual disability due to spina bifida
Severe motor impairment and severe intellectual disability due to encephalocele
Severe motor impairment and severe intellectual disability due to spina bifida
Severe motor impairment due to encephalocele
Severe motor impairment due to spina bifida
Severe motor impairment, borderline intellectual disability and incontinence due to encephalocele
Severe motor impairment, borderline intellectual disability and incontinence due to spina bifida
Severe motor impairment, mild intellectual disability and incontinence due to encephalocele
Severe motor impairment, mild intellectual disability and incontinence due to spina bifida
Severe motor impairment, moderate intellectual disability and incontinence due to encephalocele
Severe motor impairment, moderate intellectual disability and incontinence due to spina bifida
Severe motor impairment, profound intellectual disability and incontinence due to encephalocele
Severe motor impairment, severe intellectual disability and incontinence due to encephalocele
Severe motor impairment, severe intellectual disability and incontinence due to spina bifida
profound motor impairment, profound intellectual disability and incontinence due to spina bifida
Congenital heart anomalies
Asymptomatic ventricular septal defect and atrial septal defect
Congenital heart disease and borderline intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease and borderline intellectual disability without heart failure due to other congenital cardiovascular anomalies
Congenital heart disease and borderline intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease and borderline intellectual disability without heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease and borderline intellectual disability without heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease and mild heart failure without intellectual disability due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease and mild heart failure without intellectual disability due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease and mild heart failure without intellectual disability due to single ventricle and single ventricle pathway heart defects
Congenital heart disease and mild heart failure without intellectual disability due to ventricular septal defect and atrial septal defect
Congenital heart disease and mild intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease and mild intellectual disability without heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease and mild intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease and mild intellectual disability without heart failure due to other congenital cardiovascular anomalies

Congenital heart disease and mild intellectual disability without heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease and moderate heart failure without intellectual disability due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease and moderate heart failure without intellectual disability due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease and moderate heart failure without intellectual disability due to single ventricle and single ventricle pathway heart defects
Congenital heart disease and moderate heart failure without intellectual disability due to ventricular septal defect and atrial septal defect
Congenital heart disease and moderate intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease and moderate intellectual disability without heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease and moderate intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease and moderate intellectual disability without heart failure due to other congenital cardiovascular anomalies
Congenital heart disease and moderate intellectual disability without heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease and profound intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease and profound intellectual disability without heart failure due to other congenital cardiovascular anomalies
Congenital heart disease and profound intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease and profound intellectual disability without heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease and profound intellectual disability without heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease and severe heart failure without intellectual disability due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease and severe heart failure without intellectual disability due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease and severe heart failure without intellectual disability due to single ventricle and single ventricle pathway heart defects
Congenital heart disease and severe heart without intellectual disability due to ventricular septal defect and atrial septal defect
Congenital heart disease and severe intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease and severe intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease and severe intellectual disability without heart failure due to other congenital cardiovascular anomalies
Congenital heart disease and severe intellectual disability without heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease and severe intellectual disability without heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease without heart failure or intellectual disability due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease without heart failure or intellectual disability due to ventricular septal defect and atrial septal defect
Congenital heart disease without intellectual disability or heart failure due to other congenital cardiovascular anomalies
Congenital heart disease without intellectual disability or heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease without intellectual disability or heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, boderline intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus

Congenital heart disease, boderline intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, boderline intellectual disability and mild heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, boderline intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, borderline intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, borderline intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, borderline intellectual disability and moderate heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, borderline intellectual disability and moderate heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, borderline intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, borderline intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, borderline intellectual disability and severe heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, borderline intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, mild intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, mild intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, mild intellectual disability and mild heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, mild intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, mild intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, mild intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, mild intellectual disability and moderate heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, mild intellectual disability and moderate heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, mild intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, mild intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, mild intellectual disability and severe heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, mild intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, moderate intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, moderate intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, moderate intellectual disability and mild heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, moderate intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, moderate intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, moderate intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, moderate intellectual disability and moderate heart failure due to single ventricle and single ventricle pathway heart defects

Congenital heart disease, moderate intellectual disability and moderate heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, moderate intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, moderate intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, moderate intellectual disability and severe heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, moderate intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, profound intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, profound intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, profound intellectual disability and mild heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, profound intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, profound intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, profound intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, profound intellectual disability and moderate heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, profound intellectual disability and moderate heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, profound intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, profound intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, profound intellectual disability and severe heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, profound intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, severe intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, severe intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, severe intellectual disability and mild heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, severe intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, severe intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, severe intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, severe intellectual disability and moderate heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, severe intellectual disability and moderate heart failure due to ventricular septal defect and atrial septal defect
Congenital heart disease, severe intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus
Congenital heart disease, severe intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects
Congenital heart disease, severe intellectual disability and severe heart failure due to single ventricle and single ventricle pathway heart defects
Congenital heart disease, severe intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect
Orofacial clefts

Asymptomatic orofacial clefts
Disfigurement level 1 due to orofacial clefts
Disfigurement level 2 and speech problems due to orofacial clefts
Disfigurement level 2 due to orofacial clefts
Down syndrome
Asymptomatic Down syndrome
Borderline intellectual disability and mild dementia due to Down syndrome
Borderline intellectual disability and moderate dementia due to Down syndrome
Borderline intellectual disability and severe dementia due to Down syndrome
Borderline intellectual disability due to Down syndrome
Borderline intellectual disability with congenital heart disease due to Down syndrome
Borderline intellectual disability, mild dementia, and congenital heart disease due to Down syndrome
Borderline intellectual disability, moderate dementia, and congenital heart disease due to Down syndrome
Borderline intellectual disability, severe dementia, and congenital heart disease due to Down syndrome
Congenital heart disease and mild dementia due to Down syndrome
Congenital heart disease and moderate dementia due to Down syndrome
Congenital heart disease and severe dementia due to Down syndrome
Isolated congenital heart disease due to Down syndrome
Mild dementia due to Down syndrome
Mild intellectual disability and mild dementia due to Down syndrome
Mild intellectual disability and moderate dementia due to Down syndrome
Mild intellectual disability and severe dementia due to Down syndrome
Mild intellectual disability due to Down syndrome
Mild intellectual disability with congenital heart disease due to Down syndrome
Mild intellectual disability, mild dementia, and congenital heart disease due to Down syndrome
Mild intellectual disability, moderate dementia, and congenital heart disease due to Down syndrome
Mild intellectual disability, severe dementia, and congenital heart disease due to Down syndrome
Moderate dementia due to Down syndrome
Moderate intellectual disability and mild dementia due to Down syndrome
Moderate intellectual disability and moderate dementia due to Down syndrome
Moderate intellectual disability and severe dementia due to Down syndrome
Moderate intellectual disability due to Down syndrome
Moderate intellectual disability with congenital heart disease due to Down syndrome
Moderate intellectual disability, mild dementia, and congenital heart disease due to Down syndrome
Moderate intellectual disability, moderate dementia, and congenital heart disease due to Down syndrome
Moderate intellectual disability, severe dementia, and congenital heart disease due to Down syndrome
Profound intellectual disability and mild dementia due to Down syndrome
Profound intellectual disability and moderate dementia due to Down syndrome
Profound intellectual disability and severe dementia due to Down syndrome
Profound intellectual disability due to Down syndrome
Profound intellectual disability with congenital heart disease due to Down syndrome
Profound intellectual disability, mild dementia, and congenital heart disease due to Down syndrome
Profound intellectual disability, moderate dementia, and congenital heart disease due to Down syndrome

Profound intellectual disability, severe dementia, and congenital heart disease due to Down syndrome
Severe dementia due to Down syndrome
Severe intellectual disability and mild dementia due to Down syndrome
Severe intellectual disability and moderate dementia due to Down syndrome
Severe intellectual disability and severe dementia due to Down syndrome
Severe intellectual disability due to Down syndrome
Severe intellectual disability with congenital heart disease due to Down syndrome
Severe intellectual disability, mild dementia, and congenital heart disease due to Down syndrome
Severe intellectual disability, moderate dementia, and congenital heart disease due to Down syndrome
Severe intellectual disability, severe dementia, and congenital heart disease due to Down syndrome
Turner syndrome
Asymptomatic Turner syndrome
Congenital heart disease due to Turner syndrome
Congenital heart disease with infertility due to Turner syndrome
Primary infertility due to Turner syndrome
Klinefelter syndrome
Asymptomatic Klinefelter syndrome
Borderline intellectual disability due to Klinefelter syndrome
Borderline intellectual disability with infertility due to Klinefelter syndrome
Mild intellectual disability due to Klinefelter syndrome
Mild intellectual disability with infertility due to Klinefelter syndrome
Primary infertility due to Klinefelter syndrome
Other chromosomal abnormalities
Asymptomatic other chromosomal abnormalities
Borderline intellectual disability and mild dementia due to other chromosomal abnormalities
Borderline intellectual disability and moderate dementia due to other chromosomal abnormalities
Borderline intellectual disability and severe dementia due to other chromosomal abnormalities
Borderline intellectual disability due to other chromosomal abnormalities
Borderline intellectual disability with congenital heart disease due to other chromosomal abnormalities
Borderline intellectual disability, mild dementia, and congenital heart disease due to other chromosomal abnormalities
Borderline intellectual disability, moderate dementia, and congenital heart disease due to other chromosomal abnormalities
Borderline intellectual disability, severe dementia, and congenital heart disease due to other chromosomal abnormalities
Congenital heart disease and mild dementia due to other chromosomal abnormalities
Congenital heart disease and moderate dementia due to other chromosomal abnormalities
Congenital heart disease and severe dementia due to other chromosomal abnormalities
Isolated congenital heart disease due to other chromosomal abnormalities
Mild dementia due to other chromosomal abnormalities
Mild intellectual disability and mild dementia due to other chromosomal abnormalities
Mild intellectual disability and moderate dementia due to other chromosomal abnormalities
Mild intellectual disability and severe dementia due to other chromosomal abnormalities
Mild intellectual disability due to other chromosomal abnormalities

	Mild intellectual disability with congenital heart disease due to other chromosomal abnormalities
	Mild intellectual disability, mild dementia, and congenital heart disease due to other chromosomal abnormalities
	Mild intellectual disability, moderate dementia, and congenital heart disease due to other chromosomal abnormalities
	Mild intellectual disability, severe dementia, and congenital heart disease due to other chromosomal abnormalities
_	Moderate dementia due to other chromosomal abnormalities
	Moderate intellectual disability and mild dementia due to other chromosomal abnormalities
	Moderate intellectual disability and moderate dementia due to other chromosomal abnormalities
	Moderate intellectual disability and severe dementia due to other chromosomal abnormalities
_	Moderate intellectual disability due to other chromosomal abnormalities
	Moderate intellectual disability with congenital heart disease due to other chromosomal abnormalities
	Moderate intellectual disability, mild dementia, and congenital heart disease due to other chromosomal abnormalities
	Moderate intellectual disability, moderate dementia, and congenital heart disease due to other chromosomal abnormalities
	Moderate intellectual disability, severe dementia, and congenital heart disease due to other chromosomal abnormalities
	Profound intellectual disability and mild dementia due to other chromosomal abnormalities
	Profound intellectual disability and moderate dementia due to other chromosomal abnormalities
	Profound intellectual disability and severe dementia due to other chromosomal abnormalities
	Profound intellectual disability due to other chromosomal abnormalities
	Profound intellectual disability with congenital heart disease due to other chromosomal abnormalities
	Profound intellectual disability, mild dementia, and congenital heart disease due to other chromosomal abnormalities
	Profound intellectual disability, moderate dementia, and congenital heart disease due to other chromosomal abnormalities
	Profound intellectual disability, severe dementia, and congenital heart disease due to other chromosomal abnormalities
	Severe dementia due to other chromosomal abnormalities
	Severe intellectual disability and mild dementia due to other chromosomal abnormalities
	Severe intellectual disability and moderate dementia due to other chromosomal abnormalities
	Severe intellectual disability and severe dementia due to other chromosomal abnormalities
	Severe intellectual disability due to other chromosomal abnormalities
	Severe intellectual disability with congenital heart disease due to other chromosomal abnormalities
	Severe intellectual disability, mild dementia, and congenital heart disease due to other chromosomal abnormalities
	Severe intellectual disability, moderate dementia, and congenital heart disease due to other chromosomal abnormalities
	Severe intellectual disability, severe dementia, and congenital heart disease due to other chromosomal abnormalities
	Severe motor and cognitive impairment due to Edward Syndrome or Patau Syndrome
	Severe motor and cognitive impairment with congenital heart disease due to Edward Syndrome or Patau Syndrome
_	Congenital musculoskeletal and limb anomalies
	Disfigurement level 1 due to polydactyly and syndactyly
	Disfigurement level 2 and mild motor impairment due to congenital limb deficiency
	Disfigurement level 2 and mild motor impairment due to other congenital musculoskeletal anomalies
	Disfigurement level 2 and moderate motor impairment due to congenital limb deficiency
	Disfigurement level 2 and moderate motor impairment due to other congenital musculoskeletal anomalies
	Disfigurement level 2 due to congenital limb deficiency

	Disfigurement level 2 with pain and mild motor impairment due to congenital limb deficiency
	Disfigurement level 2 with pain and mild motor impairment due to other congenital musculoskeletal anomalies
	Disfigurement level 2 with pain and moderate motor impairment due to congenital limb deficiency
	Disfigurement level 2 with pain and moderate motor impairment due to other congenital musculoskeletal anomalies
	Disfigurement level 2 with pain due to congenital limb deficiency
	Disfigurement level 2 with pain due to other congenital musculoskeletal anomalies
U	rogenital congenital anomalies
	Asymptomatic congenital anomalies of the urinary tract
	Asymptomatic congenital genital anomalies
	Atypical genital and recurrent urinary tract infections and other abdominal issues due to congenital anomalies of the urinary tract
	Atypical genital and recurrent urinary tract infections and other abdominal issues due to congenital genital anomalies
	Atypical genitalia and impotence due to congenital anomalies of the urinary tract
	Atypical genitalia and impotence due to congenital genital anomalies
	Atypical genitalia and incontinence due to congenital anomalies of the urinary tract
	Atypical genitalia and primary infertility due to congenital genital anomalies
	Atypical genitalia due to congenital anomalies of the urinary tract
	Atypical genitalia due to congenital genital anomalies
	Atypical genitalia, incontinence and impotence due to congenital anomalies of the urinary tract
congenital a	Atypical genitalia, incontinence, impotence, and recurrent urinary tract infections or other abdominal issues and impotence due to nomalies of the urinary tract
	Atypical genitalia, infertility and impotence due to congenital genital anomalies
congenital §	Atypical genitalia, infertility, impotence, and recurrent urinary tract infections or other abdominal issues and impotence due to enital anomalies
urinary tract	Atypical genitalia, recurrent urinary tract infections or other abdominal issues and impotence due to congenital anomalies of the
	Atypical genitalia, recurrent urinary tract infections or other abdominal issues and impotence due to congenital genital anomalies
the urinary t	Atypical genitalia, recurrent urinary tract infections or other abdominal issues and incontinence due to congenital anomalies of ract
	Atypical genitalia, recurrent urinary tract infections or other abdominal issues and infertility due to congenital genital anomalies
	Impotence and recurrent urinary tract infections or other abdominal issues due to congenital anomalies of the urinary tract
	Impotence and recurrent urinary tract infections or other abdominal issues due to congenital genital anomalies
	Impotence due to congenital anomalies of the urinary tract
	Impotence due to congenital genital anomalies
	Incontinence and impotence due to congenital anomalies of the urinary tract
	Incontinence and recurrent urinary tract infections or other abdominal issues due to congenital anomalies of the urinary tract
	Incontinence due to congenital anomalies of the urinary tract
anomalies o	Incontinence, impotence, and recurrent urinary tract infections or other abdominal issues and impotence due to congenital f the urinary tract
	Infertility and impotence due to congenital genital anomalies
anomalies	Infertility, impotence, and recurrent urinary tract infections or other abdominal issues and impotence due to congenital genital
	Primary infertility and recurrent urinary tract infections or other abdominal issues due to congenital genital anomalies
	Primary infertility due to congenital genital anomalies
	Recurrent urinary tract infections or other abdominal issues due to congenital anomalies of the urinary tract

Recurrent urinary tract infections or other abdominal issues due to congenital genital anomalies
Digestive congenital anomalies
Mild chronic respiratory problems and developmental delay due to congenital diaphragmatic hernia
Acid reflux, dyspahgia, and/or constipation due to other congenital malformations of the digestive tract
Asymptomatic congenital atresia and/or stenosis of the digestive tract
Asymptomatic congenital diaphragmatic hernia
Asymptomatic congenital malformations of the abdominal wall after treatment
Asymptomatic other congenital malformations of the digestive tract
Chronic abdominal pain and concern about scars due to congenital malformations of the abdominal wall
Chronic abdominal pain and developmental delay due to congenital diaphragmatic hernia
Chronic abdominal pain and disfigurement due to congenital diaphragmatic hernia
Chronic abdominal pain and mild chronic respiratory problems due to congenital diaphragmatic hernia
Chronic abdominal pain and/or nausea due to other congenital malformations of the digestive tract
Chronic abdominal pain and/or nausea with acid reflux, dyspahgia, and/or constipation due to other congenital malformations of the digestive tract
Chronic abdominal pain due to congenital atresia and/or stenosis of the digestive tract
Chronic abdominal pain due to congenital diaphragmatic hernia
Chronic abdominal pain due to congenital malformations of the abdominal wall
Chronic abdominal pain, chronic respiratory problems and developmental delay due to congenital diaphragmatic hernia
Chronic abdominal pain, disfigurement and chronic respiratory problems due to congenital diaphragmatic hernia
Chronic abdominal pain, disfigurement and developmental delay due to congenital diaphragmatic hernia
Chronic abdominal pain, disfigurement, developmental delay and chronic respiratory problems due to congenital diaphragmatic
hernia Chronic respiratory problems and abdominal pain due to congenital atresia and/or stenosis of the digestive tract
Chronic respiratory problems and dysphagia or acid reflux due to congenital atresia and/or stenosis of the digestive tract
Chronic respiratory problems including difficulty breaking and recurrent upper respiratory infections due to atresia and/or stenosis of the digestive tract
Constipation and chronic abdominal pain due to congenital malformations of the abdominal wall
Constipation and concern about scars due to congenital malformations of the abdominal wall
Constipation due to congenital malformations of the abdominal wall
Constipation, chronic abdominal pain and concern about scars due to congenital malformations of the abdominal wall
Developmental delay or mild intellectual disability due to congenital diaphragmatic hernia
Disfigurement and developmental delay due to congenital diaphragmatic hernia
Disfigurement and mild chronic respiratory problems due to congenital diaphragmatic hernia
Disfigurement due to congenital diaphragmatic hernia
Disfigurement from scars following treatment for congenital malformations of the abdominal wall
Disfigurement, chronic respiratory problems and developmental delay due to congenital diaphragmatic hernia
Dysphagia or acid reflux and chronic abdominal pain due to congenital atresia and/or stenosis of the digestive tract
Dysphagia or acid reflux due to congenital atresia and/or stenosis of the digestive tract
Dysphagia or acid reflux, chronic abdominal pain and chronic respiratory problems due to congenital atresia and/or stenosis of the digestive tract
Mild chronic respiratory problems and breathlessness due to congenital diaphragmatic hernia
Other congenital birth defects
Complete hearing loss due to other congenital anomalies

Complete hearing loss with ringing due to other congenital anomalies
Mild hearing loss due to other congenital anomalies
Mild hearing loss with ringing due to other congenital anomalies
Moderate hearing loss due to other congenital anomalies
Moderate hearing loss with ringing due to other congenital anomalies
Moderately severe hearing loss due to other congenital anomalies
Moderately severe hearing loss with ringing due to other congenital anomalies
Profound hearing loss due to other congenital anomalies
Profound hearing loss with ringing due to other congenital anomalies
Severe hearing loss due to other congenital anomalies
Severe hearing loss with ringing due to other congenital anomalies
Skin and subcutaneous diseases
Dermatitis
Asymptomatic contact dermatitis
Asymptomatic seborrhoeic dermatitis
Mild atopic dermatitis
Mild contact dermatitis
Moderate atopic dermatitis
Moderate contact dermatitis
Severe atopic dermatitis
Symptomatic seborrhoeic dermatitis
Psoriasis
Mild psoriasis
Moderate psoriasis
Severe psoriasis
Cellulitis
Mild cellulitis
Moderate cellulitis
Severe cellulitis
Pyoderma
Abscess and other bacterial skin diseases
Impetigo
Scabies
Fungal skin diseases
Other fungal skin diseases
Tinea capitis
Viral skin diseases
Mild molluscum contagiosum
Mild viral warts
Severe molluscum contagiosum
Severe viral warts
Acne vulgaris
Mild acne vulgaris

Moderate acne vulgaris
Severe acne vulgaris
Alopecia areata
Mild alopecia areata
Severe alopecia areata
Pruritus
Urticaria
Mild urticaria
Severe urticaria
Decubitus ulcer
Mild decubitus ulcer
Moderate decubitus ulcer
Severe decubitus ulcer
Other skin and subcutaneous diseases
Asymptomatic other skin and subcutaneous diseases
Symptomatic other skin and subcutaneous diseases
Sense organ diseases
Glaucoma
Blindness due to glaucoma
Moderate vision impairment due to glaucoma
Severe vision impairment due to glaucoma
Cataract
Blindness due to cataract
Moderate vision impairment due to cataract
Severe vision impairment due to cataract
Macular degeneration
Blindness due to macular degeneration
Moderate vision impairment due to macular degeneration
Severe vision impairment due to macular degeneration
Refraction and accommodation disorders
Blindness due to uncorrected refractive error
Moderate vision impairment due to uncorrected refractive error
Near vision impairment
Severe vision impairment due to uncorrected refractive error
Age-related and other hearing loss
Complete hearing loss due to age-related and other hearing loss
Complete hearing loss with ringing due to age-related and other hearing loss
Mild hearing loss due to age-related and other hearing loss
Mild hearing loss with ringing due to age-related and other hearing loss
Moderate hearing loss due to age-related and other hearing loss
Moderate hearing loss with ringing due to age-related and other hearing loss
Moderately severe hearing loss due to age-related and other hearing loss
Moderately severe hearing loss with ringing due to age-related and other hearing loss

Profound hearing loss due to age-related and other hearing loss	
Profound hearing loss with ringing due to age-related and other hearing loss	
Severe hearing loss due to age-related and other hearing loss	
Severe hearing loss with ringing due to age-related and other hearing loss	
Other vision loss	
Blindness due to other vision loss	
Moderate vision impairment due to other vision loss	
Severe vision impairment due to other vision loss	
Other sense organ diseases	
Asymptomatic acute sense organ diseases	
Asymptomatic chronic sense organ diseases	
Mild acute sense organ diseases	
Moderate acute sense organ diseases	
Moderate chronic sense organ diseases	
Severe chronic sense organ diseases	
Oral disorders	
Caries of deciduous teeth	
Asymptomatic caries of deciduous teeth	
Pain due to caries of deciduous teeth	
Caries of permanent teeth	
Asymptomatic caries of permanent teeth	
Pain due to caries of permanent teeth	
Periodontal diseases	
Chronic periodontal diseases	
Edentulism and severe tooth loss	
Asymptomatic edentulism and severe tooth loss	
Difficulty eating due to edentulism and severe tooth loss	
Other oral disorders	
Mild other oral disorders	
Severe other oral disorders	
Sudden infant death syndrome	
Injuries	
Transport injuries	
Road injuries	
Pedestrian road injuries	
Cyclist road injuries	
Motorcyclist road injuries	
Motor vehicle road injuries	
Other road injuries	
Other transport injuries	
Unintentional injuries	
Falls	
Drowning	

Fire, heat, and hot substances
Poisonings
Exposure to mechanical forces
Unintentional firearm injuries
Unintentional suffocation
Other exposure to mechanical forces
Adverse effects of medical treatment
Animal contact
Venomous animal contact
Non-venomous animal contact
Foreign body
Pulmonary aspiration and foreign body in airway
Foreign body in eyes
Foreign body in other body part
Environmental heat and cold exposure
Other unintentional injuries
Self-harm and interpersonal violence
Self-harm
Self-harm by firearm
Self-harm by other specified means
Interpersonal violence
Physical violence by firearm
Physical violence by sharp object
Sexual violence
Physical violence by other means
Forces of nature, conflict and terrorism, and executions and police conflict
Exposure to forces of nature
Conflict and terrorism
Executions and police conflict

## Appendix Table 6. GBD 2016 sequelae, health states, health state lay descriptions, and disability weights

Appendix Table 6. GBD 2016 sequelae, health states	Health state name	Health state lay description	Disability weigh
Sequela		has a persistent cough and fever, is short of breath, feels	0.333
Drug-susceptible tuberculosis	Tuberculosis, not HIV infected	weak, and has lost a lot of weight. has a persistent cough and fever, is short of breath, feels	(0.224–0.454) 0.333
Multidrug-resistant tuberculosis without extensive drug resistance	Tuberculosis, not HIV infected	weak, and has lost a lot of weight.	(0.224-0.454)
Extensively drug-resistant tuberculosis	Tuberculosis, not HIV infected	has a persistent cough and fever, is short of breath, feels weak, and has lost a lot of weight.	0.333 (0.224–0.454)
Latent tuberculosis infection	Asymptomatic		
Drug-susceptible HIV/AIDS - Tuberculosis with severe anemia	Tuberculosis, HIV infected and anemia, severe	(combined DW)	0.495 (0.353–0.64)
Drug-susceptible HIV/AIDS - Tuberculosis with moderate anemia	Tuberculosis, HIV infected and anemia, moderate	(combined DW)	0.439 (0.307–0.577)
Drug-susceptible HIV/AIDS - Tuberculosis with mild anemia	Tuberculosis, HIV infected and anemia, mild	(combined DW)	0.411 (0.278–0.551)
Drug-susceptible HIV/AIDS - Tuberculosis without anemia	Tuberculosis, HIV infected	has a persistent cough and fever, shortness of breath, night sweats, weakness and fatigue and severe weight loss.	0.408 (0.274–0.549)
Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance with severe anemia	Tuberculosis, HIV infected and anemia, severe	(combined DW)	0.495 (0.353–0.64) 0.408
Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug resistance without anemia Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug	Tuberculosis, HIV infected	has a persistent cough and fever, shortness of breath, night sweats, weakness and fatigue and severe weight loss.	(0.274–0.549) 0.439
resistance with moderate anemia Multidrug-resistant HIV/AIDS - Tuberculosis without extensive drug	Tuberculosis, HIV infected and anemia, moderate	(combined DW)	(0.307–0.577) 0.411
resistance with mild anemia Extensively drug-resistant HIV/AIDS - Tuberculosis with mild	Tuberculosis, HIV infected and anemia, mild	(combined DW)	(0.278–0.551) 0.411
anemia Extensively drug-resistant HIV/AIDS - Tuberculosis with severe	Tuberculosis, HIV infected and anemia, mild	(combined DW)	(0.278–0.551) 0.495
anemia	Tuberculosis, HIV infected and anemia, severe	(combined DW) has a persistent cough and fever, shortness of breath, night	(0.353–0.64) 0.408
Extensively drug-resistant HIV/AIDS - Tuberculosis without anemia Extensively drug-resistant HIV/AIDS - Tuberculosis with moderate	Tuberculosis, HIV infected	sweats, weakness and fatigue and severe weight loss.	(0.274–0.549) 0.439
anemia	Tuberculosis, HIV infected and anemia, moderate	(combined DW)	(0.307–0.577)
Early HIV with severe anemia	Anemia, severe; Generic uncomplicated disease anxiety		
Symptomatic HIV without anemia	HIV cases, symptomatic, pre-AIDS	has weight loss, fatigue, and frequent infections.	0.274 (0.184-0.377)
Early HIV with mild anemia	Anemia, mild; Generic uncomplicated disease anxiety		
AIDS without antiretroviral treatment without anemia	AIDS cases, not receiving ARV treatment	has severe weight loss, weakness, fatigue, cough and fever, and frequent infections, skin rashes and diarrhea.	0.582 (0.406–0.743)
AIDS with antiretroviral treatment without anemia	HIV/AIDS cases, receiving ARV treatment	has occasional fevers and infections. The person takes daily medication that sometimes causes diarrhea.	0.078 (0.052–0.111)
Early HIV with moderate anemia	Anemia, moderate; Generic uncomplicated disease anxiety		
Early HIV without anemia	Generic uncomplicated disease: anxiety about diagnosis	has a disease diagnosis that causes some worry but minimal interference with daily activities.	0.012 (0.006–0.023)
Symptomatic HIV with moderate anemia	HIV cases, symptomatic, pre-AIDS and anemia, moderate	(combined DW)	0.312 (0.217-0.418)
Symptomatic HIV with severe anemia	HIV cases, symptomatic, pre-AIDS and anemia, severe	(combined DW)	0.381 (0.269-0.505)
AIDS with antiretroviral treatment with mild anemia	HIV/AIDS cases, receiving ARV treatment and anemia, mild	(combined DW)	0.081 (0.054-0.116) 0.125
AIDS with antiretroviral treatment with moderate anemia	HIV/AIDS cases, receiving ARV treatment and anemia, moderate HIV/AIDS cases, receiving ARV treatment and	(combined DW)	0.125 (0.085–0.176) 0.215
AIDS with antiretroviral treatment with severe anemia	anemia, severe AIDS cases, not receiving ARV treatment and	(combined DW)	(0.148–0.295) 0.583
AIDS without antiretroviral treatment with mild anemia	anemia, mild AIDS cases, not receiving ARV treatment and	(combined DW)	(0.409–0.743) 0.603
AIDS without antiretroviral treatment with moderate anemia	anemia, moderate AIDS cases, not receiving ARV treatment and	(combined DW)	(0.43–0.758) 0.642
AIDS without antiretroviral treatment with severe anemia	anemia, severe HIV cases, symptomatic, pre-AIDS and anemia,	(combined DW)	(0.47–0.792) 0.277
Symptomatic HIV with mild anemia	mild	(combined DW) has diarrhea three or more times a day with occasional	(0.189–0.379) 0.074
Mild diarrheal diseases	Diarrhea, mild	discomfort in the belly. is paralyzed from the waist down, cannot feel or move the	(0.049–0.104)
Guillain-Barré syndrome due to diarrheal diseases	Spinal cord lesion below neck level (treated)	legs and has difficulties with urine and bowel control. The person uses a wheelchair to move around.	0.296 (0.198–0.414)
Severe diarrheal diseases	Diarrhea, severe	has diarrhea three or more times a day with severe belly cramps. The person is very thirsty and feels nauseous and tired.	0.247 (0.164–0.348)
Moderate diarrheal diseases	Diarrhea, moderate	has diarrhea three or more times a day, with painful cramps in the belly and feeling thirsty	0.188 (0.125–0.264)
Intestinal perforation due to typhoid	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Severe typhoid fever	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Gastrointestinal bleeding due to typhoid	Gastric bleeding	vomits blood and feels nauseous.	0.325 (0.209–0.462)

Appendix Table 6. GBD 2016 sequelae, health states			Disability
Sequela	Health state name	Health state lay description has a fever and aches, and feels weak, which causes some	Disability weigh 0.051
Acute typhoid infection	Infectious disease, acute episode, moderate	difficulty with daily activities.	(0.032–0.074)
Acute paratyphoid infection	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002–0.012)
Moderate paratyphoid fever	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
intestinal perforation due to paratyphoid	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Severe paratyphoid fever	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Other intestinal infectious diseases	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Guillain-Barré syndrome due to lower respiratory infections	Spinal cord lesion below neck level (treated)	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. The person uses a wheelchair to move around.	0.296 (0.198–0.414)
Severe lower respiratory infections	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Moderate lower respiratory infections	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Mild upper respiratory infections	Infectious disease, acute episode, mild	has a low fever and mild discomfort , but no difficulty with daily activities.	0.006
Moderate upper respiratory infections	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Guillain-Barré syndrome due to upper respiratory infections	Spinal cord lesion below neck level (treated)	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. The person uses a wheelchair to move around.	0.296 (0.198–0.414)
Vertigo with moderate hearing loss and ringing due to chronic otitis media	Vertigo with moderate hearing loss and ringing		
mena Vertigo with moderate hearing loss due to chronic otitis media	Vertigo with moderate hearing loss		
Severe infectious complications due to chronic otitis media	Ear pain	has an ear-ache that causes some difficulty with daily activities.	0.013
Acute otitis media	Ear pain	has an ear-ache that causes some difficulty with daily activities.	0.013
Vertigo with mild hearing loss and ringing due to chronic otitis	Vertigo with mild hearing loss and ringing		
media Vertigo with mild hearing loss due to chronic otitis media	Vertigo with mild hearing loss		
Moderate hearing loss due to chronic otitis media	Hearing loss, moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.	0.027 (0.015–0.042)
Mild hearing loss due to chronic otitis media	Hearing loss, mild	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street).	0.01 (0.004-0.019)
Moderate hearing loss with ringing due to chronic otitis media	Hearing loss, moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday.	0.074 (0.049–0.107)
Mild hearing loss with ringing due to chronic otitis media	Hearing loss, mild, with ringing	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears.	
Epilepsy due to pneumococcal meningitis	Epilepsy	(combined DW)	
Profound hearing loss due to pneumococcal meningitis	Hearing loss, profound	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has great difficulty hearing anything in any other situation. Difficulties with communicating and relating to othersoften cause worry, depression, and loneliness.	0.204 (0.134–0.288)
Acute pneumococcal meningitis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Severe hearing loss with ringing due to pneumococcal meningitis	Hearing loss, severe, with ringing	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.261 (0.175–0.36)
Moderately severe hearing loss due to pneumococcal meningitis	Hearing loss, moderately severe	(custom DW from hearing loss impairment envelope)	
Borderline intellectual disability due to pneumococcal meningitis	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Moderate hearing loss with ringing due to pneumococcal meningitis	Hearing loss, moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday. Is unable to near and understand anouter person tarking, even	0.074 (0.049–0.107)
Profound hearing loss with ringing due to pneumococcal meningitis	Hearing loss, profound, with ringing	Is unable to near and understand another person taiking, even in a quiet place, is unable to take part in a phone conversation, has great difficulty hearing anything in any other situation, and has annoying ringing in the ears for more than 5 minutes at a time, several times a day. Difficulties with communicating and relating to others often cause worry,	0.277 (0.182–0.387)

## Appendix Table 6. GBD 2016 sequelae, health states, health state lay descriptions, and disability weights

Sequela	Health state name	Health state lay description	Disability weight
Severe hearing loss due to pneumococcal meningitis	Hearing loss, severe	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.158 (0.105–0.227)
Mild behavioral problems due to pneumococcal meningitis	Attention deficit hyperactivity disorder	is hyperactive and has difficulty concentrating, remembering things, and completing tasks.	0.045 (0.028–0.066)
Severe motor plus cognitive impairments due to pneumococcal meningitis	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374–0.702)
Mild motor impairment due to long term due to pneumococcal meningitis	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Monocular distance vision loss due to pneumococcal meningitis	Distance vision, monocular	is blind in one eye and has difficulty judging distances	0.017 (0.009–0.029)
Severe vision impairment due to pneumococcol meningitis	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Moderately severe hearing loss with ringing due to pneumococcal meningitis	Hearing loss, moderately severe, with ringing	(custom DW from hearing loss impairment envelope)	
Moderate motor impairment due to pneumococcal meningitis	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Mild hearing loss with ringing due to pneumococcal meningitis	Hearing loss, mild, with ringing	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears.	0.021 (0.012–0.036)
Moderate motor plus cognitive impairments due to pneumococcal meningitis	Motor plus cognitive impairments, moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.	0.203 (0.134–0.29)
Mild intellectual disability due to pneumococcal meningitis	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Complete hearing loss with ringing due to pneumococcal meningitis	Hearing loss, complete, with ringing	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone, and has very annoying ringing in the ears for more than half of the day. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.316 (0.212–0.435)
Mild motor plus cognitive impairments due to pneumococcal meningitis	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Moderate hearing loss due to pneumococcal meningitis	Hearing loss, moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.	0.027 (0.015–0.042)
Moderate vision impairment due to pneumococcol meningitis	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces or objects across a room.	0.031 (0.019–0.049)
Mild hearing loss due to pneumococcal meningitis	Hearing loss, mild	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street).	0.01 (0.004–0.019)
Severe motor impairment due to pneumococcal meningitis	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Blindness due to pneumococcal meningitis	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124–0.26)
Complete hearing loss due to pneumococcal meningitis	Hearing loss, complete	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.215 (0.144–0.307)
Monocular distance vision loss due to H influenzae type B meningitis	Distance vision, monocular	is blind in one eye and has difficulty judging distances	0.017 (0.009–0.029)
Profound hearing loss due to H influenzae type B meningitis	Hearing loss, profound	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has great difficulty hearing anything in any other situation. Difficulties with communicating and relating to othersoften cause worry, depression, and loneliness.	0.204 (0.134–0.288)
Complete hearing loss due to H influenzae type B meningitis	Hearing loss, complete	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.215 (0.144–0.307)
Blindness due to H influenzae type B meningitis	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124–0.26)
Complete hearing loss with ringing due to H influenzae type B meningitis	Hearing loss, complete, with ringing	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone, and has very annoying ringing in the ears for more than half of the day. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.316 (0.212–0.435)

Appendix Table 6. GBD 2016 sequelae, health states,	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Severe hearing loss with ringing due to H influenzae type B meningitis	Hearing loss, severe, with ringing	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.261 (0.175–0.36)
Profound hearing loss with ringing due to H influenzae type B meningitis	Hearing loss, profound, with ringing	in a quiet place, is unable to take part in a phone conversation, has great difficulty hearing anything in any other situation, and has annoying ringing in the ears for more than 5 minutes at a time, several times a day. Difficulties with communicating and relating to others often cause worry,	0.277 (0.182–0.387)
Severe vision impairment due to H influenza type B meningitis	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Moderate vision impairment due to H influenza type B meningitis	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces	0.031 (0.019–0.049)
Mild hearing loss with ringing due to H influenzae type B meningitis	Hearing loss, mild, with ringing	or objects across a room. has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears.	0.021 (0.012–0.036)
Moderate hearing loss with ringing due to H influenzae type B meningitis	Hearing loss, moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday.	0.074 (0.049–0.107)
Severe hearing loss due to H influenzae type B meningitis	Hearing loss, severe	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.158 (0.105–0.227)
Moderate motor plus cognitive impairments due to H influenzae type B meningitis	Motor plus cognitive impairments, moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.	0.203 (0.134–0.29)
Mild intellectual disability due to H influenzae type B meningitis	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Mild motor plus cognitive impairments due to H influenzae type B meningitis	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Severe motor impairment due to H influenzae type B meningitis	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Mild hearing loss due to H influenzae type B meningitis	Hearing loss, mild	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street).	0.01 (0.004–0.019)
Severe motor plus cognitive impairments due to H influenzae type B meningitis	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant	0.542 (0.374–0.702)
Moderately severe hearing loss due to H influenzae type B	Hearing loss, moderately severe	supervision and help with all daily activities. (custom DW from hearing loss impairment envelope)	
meninoitie Moderate hearing loss due to H influenzae type B meningitis	Hearing loss, moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.	0.027 (0.015–0.042)
Mild behavioral problems due to H influenzae type B meningitis	Attention deficit hyperactivity disorder	is hyperactive and has difficulty concentrating, remembering things, and completing tasks.	0.045 (0.028–0.066)
Acute H influenzae type B meningitis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Mild motor impairment due to long term due to H influenzae type B meningitis	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
	Epilepsy	(combined DW)	
Moderately severe hearing loss with ringing due to H influenzae type B meningitis	Hearing loss, moderately severe, with ringing	(custom DW from hearing loss impairment envelope)	
Moderate motor impairment due to H influenzae type B meningitis	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Borderline intellectual disability due to H influenzae type B meningitis	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Mild behavioral problems due to meningococcal meningitis	Attention deficit hyperactivity disorder	is hyperactive and has difficulty concentrating, remembering things, and completing tasks.	0.045 (0.028–0.066)
Mild hearing loss with ringing due to meningococcal meningitis	Hearing loss, mild, with ringing	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears.	0.021 (0.012–0.036)
Complete hearing loss due to meningococcal meningitis	Hearing loss, complete	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.215 (0.144–0.307)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Severe hearing loss due to meningococcal meningitis	Hearing loss, severe	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	
Mild intellectual disability due to meningococcal meningitis	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Mild hearing loss due to meningococcal meningitis	Hearing loss, mild	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street).	0.01 (0.004–0.019)
Moderate hearing loss due to meningococcal meningitis	Hearing loss, moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.	0.027 (0.015–0.042)
Profound hearing loss due to meningococcal meningitis	Hearing loss, profound	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has great difficulty hearing anything in any other situation. Difficulties with communicating and relating to othersoften cause worry, depression, and loneliness.	0.204 (0.134–0.288)
Borderline intellectual disability due to meningococcal meningitis	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Moderately severe hearing loss due to meningococcal meningitis	Hearing loss, moderately severe	(custom DW from hearing loss impairment envelope)	
Moderate vision impairment due to meningococcal meningitis	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces or objects across a room.	0.031 (0.019–0.049)
Blindness due to meningococcal meningitis	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124–0.26)
Mild motor plus cognitive impairments due to meningococcal meningitis	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Epilepsy due to meningococcal meningitis	Epilepsy	(combined DW)	
Moderate motor impairment due to meningococcal meningitis	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Severe vision impairment due to meningococcal meningitis	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Severe motor impairment due to meningococcal meningitis	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Moderate motor plus cognitive impairments due to meningococcal meningitis	Motor plus cognitive impairments, moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.	0.203 (0.134–0.29)
Moderate hearing loss with ringing due to meningococcal meningitis	Hearing loss, moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday.	0.074 (0.049–0.107)
Severe motor plus cognitive impairments due to meningococcal meningitis	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374–0.702)
Monocular distance vision loss due to meningococcal meningitis	Distance vision, monocular	is blind in one eye and has difficulty judging distances	0.017 (0.009–0.029)
Profound hearing loss with ringing due to meningococcal meningitis	Hearing loss, profound, with ringing	in a quiet place, is unable to take part in a phone conversation, has great difficulty hearing anything in any other situation, and has annoying ringing in the ears for more than 5 minutes at a time, several times a day. Difficulties with communicating and relating to others often cause worry,	0.277 (0.182–0.387)
Mild motor impairment due to long term due to meningococcal meningitis	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Acute meningococcal meningitis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes	0.133
Severe hearing loss with ringing due to meningococcal meningitis	Hearing loss, severe, with ringing	great difficulty with daily activities. is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression). cannot hear at all in any situation, including even the loudest	(0.088–0.19) 0.261 (0.175–0.36)
Complete hearing loss with ringing due to meningococcal meningitis	Hearing loss, complete, with ringing	cannot near at air in any sutation, including even the toudest sounds, and cannot communicate verbally or use a phone, and has very annoying ringing in the ears for more than half of the day. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.316 (0.212–0.435)
Moderately severe hearing loss with ringing due to meningococcal meningitis	Hearing loss, moderately severe, with ringing	(custom DW from hearing loss impairment envelope)	

Appendix Table 6. GBD 2016 sequelae, health states			
Sequela	Health state name	Health state lay description	Disability weight
Mild intellectual disability due to other bacterial meningitis	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Moderate hearing loss with ringing due to other bacterial meningitis	Hearing loss, moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday.	0.074 (0.049–0.107)
Mild motor plus cognitive impairments due to other bacterial meningitis	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Borderline intellectual disability due to other bacterial meningitis	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Moderate motor plus cognitive impairments due to other bacterial meningitis	Motor plus cognitive impairments, moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.	0.203 (0.134–0.29)
Mild behavioral problems due to other bacterial meningitis	Attention deficit hyperactivity disorder	is hyperactive and has difficulty concentrating, remembering things, and completing tasks.	0.045 (0.028–0.066)
Severe motor plus cognitive impairments due to other bacterial meningitis	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374–0.702)
Severe motor impairment due to other bacterial meningitis	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Moderately severe hearing loss due to other bacterial meningitis	Hearing loss, moderately severe	(custom DW from hearing loss impairment envelope)	
Monocular distance vision loss due to other bacterial meningitis	Distance vision, monocular	is blind in one eye and has difficulty judging distances has great difficulty hearing and understanding another person	0.017 (0.009–0.029) 0.01
Mild hearing loss due to other bacterial meningitis	Hearing loss, mild	talking in a noisy place (for example, on an urban street).	(0.004-0.019)
Moderate hearing loss due to other bacterial meningitis	Hearing loss, moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.	0.027 (0.015–0.042)
Epilepsy due to other meningitis	Epilepsy	(combined DW)	
Moderately severe hearing loss with ringing due to other bacterial	Hearing loss, moderately severe, with ringing	(custom DW from hearing loss impairment envelope)	
meningitis Severe hearing loss due to other bacterial meningitis	Hearing loss, severe	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.158 (0.105–0.227)
Blindness due to other bacterial meningitis	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124–0.26)
Profound hearing loss due to other bacterial meningitis	Hearing loss, profound	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has great difficulty hearing anything in any other situation. Difficulties with communicating and relating to othersoften cause worry, depression, and loneliness.	0.204 (0.134–0.288)
Moderate vision impairment due to other bacterial meningitis	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces or objects across a room. cannot hear at all in any situation, including even the loudest	0.031 (0.019–0.049)
Complete hearing loss with ringing due to other bacterial meningitis	Hearing loss, complete, with ringing	sounds, and cannot communicate verbally or use a phone, and has very annoying ringing in the ears for more than half of the day. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.316 (0.212–0.435)
Complete hearing loss due to other bacterial meningitis	Hearing loss, complete	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone. Difficulties with communicating and relating to others often cause worry, depression or loneliness. Is unable of near and understand adjust person taiking, even	0.215 (0.144–0.307)
Profound hearing loss with ringing due to other bacterial meningitis	Hearing loss, profound, with ringing	Is unable to heaf and understand another person taking, even in a quiet place, is unable to take part in a phone conversation, has great difficulty hearing anything in any other situation, and has annoying ringing in the ears for more than 5 minutes at a time, several times a day. Difficulties with communicating and relating to others often cause worry,	0.277 (0.182–0.387)
Severe hearing loss with ringing due to other bacterial meningitis	Hearing loss, severe, with ringing	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.261 (0.175–0.36)
Mild hearing loss due with ringing to other bacterial meningitis	Hearing loss, mild, with ringing	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears.	0.021 (0.012–0.036)

Appendix Table 6. GBD 2016 sequelae, health state	s, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Moderate motor impairment due to other bacterial meningitis	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Severe vision impairment due to other bacterial meningitis	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Mild motor impairment due to long term due to other bacterial meningitis	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Other acute bacterial meningitis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Acute viral meningitis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Blindness due to encephalitis	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124–0.26)
Epilepsy due to encephalitis	Epilepsy	(combined DW)	
Monocular distance vision loss due to encephalitis	Distance vision, monocular	is blind in one eye and has difficulty judging distances	0.017 (0.009–0.029)
Severe motor plus cognitive impairments due to encephalitis	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374–0.702)
Moderate motor plus cognitive impairments due to encephalitis	Motor plus cognitive impairments, moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.	0.203 (0.134–0.29)
Mild motor plus cognitive impairments due to encephalitis	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Mild behavioral problems due to encephalitis	Attention deficit hyperactivity disorder	is hyperactive and has difficulty concentrating, remembering things, and completing tasks.	0.045 (0.028–0.066)
Severe motor impairment due to encephalitis	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Acute encephalitis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Borderline intellectual disability due to encephalitis	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Moderate motor impairment due to encephalitis	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Mild intellectual disability due to encephalitis	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Mild motor impairment due to long term due to encephalitis	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Moderate vision impairment due to encephalitis	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces or objects across a room.	0.031 (0.019–0.049)
Severe vision impairment due to encephalitis	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Severe diphtheria	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Moderate diphtheria	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Whooping cough	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe motor plus cognitive impairment with blindness due to neonatal tetanus	Severe motor plus cognitive impairment with blindness	(combined DW)	
Severe motor impairment with blindness and epilepsy due to neonatal tetanus	Severe motor impairment with blindness and epilepsy	(combined DW)	
Severe motor impairment with epilepsy due to neonatal tetanus	Severe motor impairment with epilepsy	(combined DW)	
Severe motor impairment with blindness due to neonatal tetanus	Severe motor impairment with blindness	(combined DW)	
Moderate motor plus cognitive impairment with blindness and epilepsy due to neonatal tetanus	Moderate motor plus cognitive impairment with blindness and epilepsy	(combined DW)	
Moderate motor plus cognitive impairment with epilepsy due to neonatal tetanus	Moderate motor plus cognitive impairment with epilepsy	(combined DW)	
Moderate motor impairment with epilepsy due to neonatal tetanus	Moderate motor impairment with epilepsy	(combined DW)	
Moderate motor impairment with blindness and epilepsy due to neonatal tetanus	Moderate motor impairment with blindness and epilepsy	(combined DW)	
Severe motor impairment due to neonatal tetanus	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Mild motor impairment due to neonatal tetanus	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Moderate motor impairment due to neonatal tetanus	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Severe motor plus cognitive impairment with epilepsy due to neonatal tetanus	Severe motor plus cognitive impairment with epilepsy	(combined DW)	
Severe tetanus	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Mild motor plus cognitive impairments due to neonatal tetanus	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Moderate motor plus cognitive impairment with blindness due to neonatal tetanus	Moderate motor plus cognitive impairment with blindness	(combined DW)	
Severe motor plus cognitive impairment with blindness and epilepsy due to neonatal tetanus	Severe motor plus cognitive impairment with blindness and epilepsy	(combined DW)	
Moderate motor impairment with blindness due to neonatal tetanus	Moderate motor impairment with blindness	(combined DW)	
Moderate measles	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe measles	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088-0.19)
Chickenpox	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002–0.012)
Herpes zoster	Herpes zoster	has a blistering skin rash that causes pain, with some burning and itching.	0.058 (0.035–0.09)
Moderate motor impairment with epilepsy due to malaria	Moderate motor impairment with epilepsy	(combined DW)	
	Infectious disease, acute episode, moderate, with		0.099
Moderate malaria with moderate anemia	moderate anemia	(combined DW)	(0.065-0.142)
Moderate malaria with severe anemia	Infectious disease, acute episode, moderate, with severe anemia	(combined DW)	0.192 (0.133–0.263)
Moderate motor plus cognitive impairment with epilepsy due to malaria	Moderate motor plus cognitive impairment with epilepsy	(combined DW)	
Severe malaria	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Severe motor plus cognitive impairment with blindness and epilepsy due to malaria	Severe motor plus cognitive impairment with blindness and epilepsy	(combined DW)	
Severe motor impairment due to malaria	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Moderate motor impairment due to malaria	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Mild malaria	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002–0.012)
Moderate malaria with mild anemia	Infectious disease, acute episode, moderate, with mild anemia	(combined DW)	0.054 (0.034–0.079)
Severe motor plus cognitive impairment with epilepsy due to malaria	Severe motor plus cognitive impairment with epilepsy	(combined DW)	
Moderate malaria	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Mild anemia due to malaria parasitemia (PfPR)	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Moderate anemia due to malaria parasitemia (PfPR)	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Severe motor plus cognitive impairment with blindness due to malaria	Severe motor plus cognitive impairment with blindness	(combined DW)	
Severe motor impairment with blindness due to malaria	Severe motor impairment with blindness	(combined DW)	
Severe anemia due to malaria parasitemia (PfPR)	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Severe motor impairment with blindness and epilepsy due to malaria	Severe motor impairment with blindness and	(combined DW)	
Moderate motor plus cognitive impairment with blindness and	epilepsy Moderate motor plus cognitive impairment with	(combined DW)	
epilepsy due to malaria Mild malaria with severe anemia	blindness and epilepsy Infectious disease, acute episode, mild, with	(combined DW)	0.154
Severe motor impairment with epilepsy due to malaria	severe anemia Severe motor impairment with epilepsy	(combined DW)	(0.105–0.214)
Severe motor impairment with epilepsy due to mataria	Infectious disease, acute episode, severe, with	(combined DW) (combined DW)	0.262
Severe malaria with moderate anemia	severe anemia Infectious disease, acute episode, severe, with	(combined DW)	(0.184–0.359) 0.178
Moderate motor impairment with blindness and epilepsy due to	moderate anemia Moderate motor impairment with blindness and	(combined DW)	(0.122–0.247)
malaria Moderate motor impairment with blindness due to malaria	epilepsy Moderate motor impairment with blindness	(combined DW)	
Mild malaria with mild anemia	Infectious disease, acute episode, mild, with mild anemia	(combined DW)	0.009 (0.004-0.02)
Severe malaria with mild anemia	Infectious disease, acute episode, severe, with	(combined DW)	0.137
Asymptomatic malaria parasitemia (PfPR)	mild anemia Asymptomatic		(0.091–0.192)
Mild malaria with moderate anemia	Infectious disease, acute episode, mild, with moderate anemia	(combined DW)	0.057 (0.037–0.085)
Moderate motor plus cognitive impairment with blindness due to	Moderate motor plus cognitive impairment with	(combined DW)	(0.037-0.063)
malaria	blindness	(combined DW)	

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Moderate heart failure due to Chagas disease	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103)
Atrial fibrillation and flutter due to Chagas disease	Cardiac conduction disorders and cardiac dysrhythmias	has periods of rapid and irregular heartbeats and occasional fainting.	0.224 (0.151–0.312)
Asymptomatic and mild heart failure due to Chagas disease	Heart failure, mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062)
Mild chronic digestive disease due to Chagas disease	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Acute Chagas disease	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe heart failure due to Chagas disease	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251)
Asymptomatic Chagas disease	Asymptomatic		
Moderate chronic digestive disease due to Chagas disease	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Moderate visceral leishmaniasis	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe visceral leishmaniasis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Cutaneous and mucocutaneous leishmaniasis	Disfigurement, level 2	has a visible physical deformity that causes others to stare and comment. As a result, the person is worried and has trouble sleeping and concentrating.	0.067 (0.044–0.096)
Sleeping sickness due to Trypanosoma brucei rhodesiense	Disfigurement, level 1 with itch/pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.	0.027 (0.015–0.042)
Skin disfigurement due to Trypanosoma brucei gambiense	Disfigurement, level 1 with itch/pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.	0.027 (0.015–0.042)
Skin disfigurement due to Trypanosoma brucei rhodesiense	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374–0.702)
Sleeping sickness due to Trypanosoma brucei gambiense	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374–0.702)
Mild diarrhea due to schistosomiasis	Diarrhea, mild	has diarrhea three or more times a day with occasional discomfort in the belly.	0.074 (0.049–0.104)
Severe anemia due to schistosomiasis	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Hematemesis due to schistosomiasis	Gastric bleeding	vomits blood and feels nauseous.	0.325 (0.209–0.462)
Hepatomegaly due to schistosomiasis	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Moderate anemia due to schistosomiasis	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Mild anemia due to schistosomiasis	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Hydronephrosis due to schistosomiasis	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Ascites due to schistosomiasis	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Mild schistosomiasis	Infectious disease, acute episode, mild	has a low fever and mild discomfort , but no difficulty with daily activities.	0.006 (0.002–0.012)
Dysuria due to schistosomiasis	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Bladder pathology due to schistosomiasis	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Neurocysticercosis with epilepsy	Epilepsy	(combined DW)	
Abdominal problems due to cystic echinococcosis	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Epilepsy due to echinococcosis	Epilepsy	(combined DW)	
Chronic respiratory disease due to cystic echinococcosis	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011–0.033)
Lymphedema due to lymphatic filariasis	Lymphatic filariasis, symptomatic	has swollen legs with hard and thick skin, which causes difficulty in moving around.	0.109 (0.073–0.154)
Hydrocele due to lymphatic filariasis	Epididymo-orchitis	has swelling and tenderness in the testicles and pain during urination.	0.128 (0.086–0.18)
Acute adenolymphangitis due to lymphatic filariasis	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Prevalence of detectable microfiliaria due to lymphatic filariasis	Asymptomatic		
Mild skin disease due to onchocerciasis	Disfigurement, level 1 with itch/pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.	0.027 (0.015–0.042)

Appendix Table 6. GBD 2016 sequelae, health state	s, health state lay descriptions, and dis	sability weights	
Sequela	Health state name	Health state lay description	Disability weight
Severe vision impairment due to onchocerciasis	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and	0.184
Severe vision impairment due to onchocerciasis	Distance vision, severe impairment	some difficulty going outside the home without assistance.	(0.125–0.258)
Moderate vision impairment due to onchocerciasis	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces	0.031
		or objects across a room.	(0.019–0.049)
Asymptomatic onchocerciasis	Asymptomatic		
Severe skin disease without itch due to onchocerciasis	Disfigurement, level 3	has an obvious physical deformity that makes others uncomfortable, which causes the person to avoid social	0.405
		contact, feel worried, sleep poorly, and think about suicide.	(0.275–0.546)
Course direction days to such a such as a single	Diefermennent land 2 mith itch /min	has a visible physical deformity that is sore and itchy. Other	0.188
Severe skin disease due to onchocerciasis	Disfigurement, level 2, with itch/pain	people stare and comment, which causes the person to worry. The person has trouble sleeping and concentrating.	(0.125–0.267)
		is completely blind, which causes great difficulty in some	0.187
Blindness due to onchocerciasis	Distance vision blindness	daily activities, worry and anxiety, and great difficulty going	(0.124–0.26)
	<b>D</b>	outside the home without assistance. has a slight, visible physical deformity that others notice,	0.011
Mild skin disease without itch due to onchocerciasis	Disfigurement, level 1	which causes some worry and discomfort.	(0.005-0.021)
Moderate skin disease due to onchocerciasis	Disfigurement, level 2, with itch/pain	has a visible physical deformity that is sore and itchy. Other people stare and comment, which causes the person to worry.	0.188
Moderate skin disease due to onchocerclasis	Disingurement, iever 2, with http://pain	The person has trouble sleeping and concentrating.	(0.125–0.267)
		is completely blind, which causes great difficulty in some	0.187
Blindness due to trachoma	Distance vision blindness	daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	(0.124–0.26)
		has severe vision loss, which causes difficulty in daily	0.104
Severe vision impairment due to trachoma	Distance vision, severe impairment	activities, some emotional impact (for example worry), and	0.184 (0.125–0.258)
		some difficulty going outside the home without assistance.	0.031
Moderate vision impairment due to trachoma	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces or objects across a room.	(0.019–0.049)
Severe dengue	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes	0.133
Servic deligue	· · · ·	great difficulty with daily activities.	(0.088-0.19)
Post-dengue chronic fatigue syndrome	Infectious disease, post-acute consequences (fatigue, emotional lability, insomnia)	is always tired and easily upset. The person feels pain all over the body and is depressed.	0.219 (0.148-0.308)
Moderate dengue	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some	0.051
		difficulty with daily activities.	(0.032-0.074)
Asymptomatic yellow fever	Asymptomatic		
Moderate yellow fever	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe yellow fever	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes	0.133
	incendus disease, acute episode, severe	great difficulty with daily activities.	(0.088-0.19)
Rabies	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088-0.19)
Severe wasting due to ascariasis	Severe wasting	is extremely skinny and has no energy.	0.128
·	, , , , , , , , , , , , , , , , , , ,	······································	(0.082-0.183)
Asymptomatic ascariasis	Asymptomatic		0.027
Heavy infestation of ascariasis	Intestinal nematode infections, symptomatic	has cramping pain and a bloated feeling in the belly.	(0.015–0.043)
Mild abdominopelvic problems due to ascariasis	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not	0.011
······	· · · · · · · · · · · · · · · · · · ·	interfere with daily activities.	(0.005–0.021) 0.027
Heavy infestation of trichuriasis	Intestinal nematode infections, symptomatic	has cramping pain and a bloated feeling in the belly.	(0.015-0.043)
Severe wasting due to trichuriasis	Severe wasting	is extremely skinny and has no energy.	0.128
		has some pain in the belly that causes nausea but does not	(0.082–0.183) 0.011
Mild abdominopelvic problems due to trichuriasis	Abdominopelvic problem, mild	interfere with daily activities.	(0.005-0.021)
Asymptomatic trichuriasis	Asymptomatic		
Mild anemia due to hookworm disease	Anemia, mild	feels slightly tired and weak at times, but this does not	0.004
		interfere with normal daily activities. feels very weak, tired and short of breath, and has problems	(0.001-0.008)
Severe anemia due to hookworm disease	Anemia, severe	with activities that require physical effort or deep	0.149
		concentration.	(0.101–0.209)
Asymptomatic hookworm disease	Asymptomatic		
Mild abdominopelvic problems due to hookworm disease	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not	0.011
	L L '	interfere with daily activities.	(0.005–0.021) 0.128
Severe wasting due to hookworm disease	Severe wasting	is extremely skinny and has no energy.	(0.082–0.183)
Heavy infestation of hookworm	Intestinal nematode infections, symptomatic	has cramping pain and a bloated feeling in the belly.	0.027
		feels moderate fatigue, weakness, and shortness of breath	(0.015-0.043) 0.052
Moderate anemia due to hookworm disease	Anemia, moderate	after exercise, making daily activities more difficult.	(0.034-0.076)
Asymptomatic fascioliasis	Asymptomatic		
Heavy clonorchiasis due to food-borne trematodiases	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has	0.114
		difficulties with daily activities.	(0.078–0.159)
Heavy fascioliasis due to food-borne trematodiases	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Heavy intestinal fluke infection due to food-borne trematodiases	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has	0.114
		difficulties with daily activities.	(0.078-0.159)
Asymptomatic opisthorchiasis	Asymptomatic		

Appendix Table 6. GBD 2016 sequelae, health state	s, health state lay descriptions, and disability weights
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Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Asymptomatic intestinal fluke infection	Asymptomatic		
Cerebral paragonimiasis	Epilepsy	(combined DW)	
Asymptomatic paragonimiasis	Asymptomatic		
Moderate paragonimiasis due to food-borne trematodiases	COPD and other chronic respiratory problems, moderate	has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only short distances or climb only a few stairs.	0.225 (0.153–0.31)
Severe paragonimiasis due to food-borne trematodiases	COPD and other chronic respiratory problems, severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances or climbing any stairs, feels tired when at rest, and is	0.408 (0.273–0.556)
Mild paragonimiasis due to food-borne trematodiases	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011–0.033)
Heavy opisthorchiasis due to food-borne trematodiases	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Asymptomatic clonorchiasis	Asymptomatic		
Disfigurement level 2 due to leprosy	Disfigurement, level 2	has a visible physical deformity that causes others to stare and comment. As a result, the person is worried and has trouble sleeping and concentrating.	0.067 (0.044–0.096)
Disfigurement level 1 due to leprosy	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005–0.021)
Post-Ebola chronic fatigue syndrome	Infectious disease, post-acute consequences (fatigue, emotional lability, insomnia)	is always tired and easily upset. The person feels pain all over the body and is depressed.	0.219 (0.148–0.308)
Ebola cases	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Guillain–Barré syndrome due to Zika infection	Spinal cord lesion below neck level (treated)	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. The person uses a wheelchair to move around.	0.296 (0.198–0.414)
Asymptomatic Zika infection	Asymptomatic		
Acute Zika infection	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Congenital Zika syndrome	Severe motor plus cognitive impairment with epilepsy	(combined DW)	
Mild pain due to Guinea worm emergence	Disfigurement, level 1 with itch/pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.	0.027 (0.015–0.042)
Moderate pain due to Guinea worm emergence	Disfigurement, level 2, with itch/pain	has a visible physical deformity that is sore and itchy. Other people stare and comment, which causes the person to worry. The person has trouble sleeping and concentrating.	0.188 (0.125–0.267)
Moderate reduced mobility due to Guinea worm emergence	Musculoskeletal problems, lower limbs, moderate	has moderate pain in the leg, which makes the person limp, and causes some difficulty walking, standing, lifting and carrying heavy things, getting up and down and sleeping.	0.079 (0.054–0.11)
Mild anemia due to other neglected tropical diseases	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Moderate anemia due to other neglected tropical diseases	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Acute infection due to other neglected tropical diseases	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Severe anemia due to other neglected tropical diseases	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Mild anemia due to maternal hemorrhage	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Moderate anemia due to maternal hemorrhage	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Severe anemia due to maternal hemorrhage	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Maternal hemorrhage (> 1L blood lost)	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Maternal hemorrhage (< 1L blood lost)	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Puerperal sepsis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Other maternal infections	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Infertility due to puerperal sepsis	Infertility, secondary	has at least one child, and wants to have more children. The person has a fertile partner, but the couple cannot conceive.	0.005 (0.002–0.011)
Other hypertensive disorders of pregnancy	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Long term sequelae of severe pre-eclampsia	Tension-type headaches, mild motor plus cognitive impairment	(combined DW)	
Long term sequelae of eclampsia	Tension-type headaches, mild motor plus cognitive impairment	(combined DW)	
Severe pre-eclampsia	Moderate abdominal pain, tension-type headaches, mild motor plus cognitive impairment	(combined DW)	
Eclampsia	Moderate abdominal pain and severe epilepsy	(combined DW)	
Obstructed labor, acute event	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Vesicovaginal fistula	Vesicovaginal fistula	has an abnormal opening between the bladder and the vagina, which makes her unable to control urinating. The	0.342 (0.227–0.478)
Rectovaginal fistula	Rectovaginal fistula	woman is anxious and depressed. has an abnormal opening between her vagina and rectum causing flatulence and feces to escape through the vagina. The person gets infections in her vagina, and has pain when urinating.	0.501 (0.339–0.657)
Ectopic Pregnancy	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Maternal abortive outcome	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Other maternal disorders	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Severe motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications <28wks	Severe motor plus cognitive impairment with epilepsy	(combined DW)	
Severe motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications 32-36wks	Severe motor plus cognitive impairment with epilepsy	(combined DW)	
Severe motor plus cognitive impairment with epilepsy due to neonatal preterm birth complications 28-32wks	Severe motor plus cognitive impairment with epilepsy	(combined DW)	
Mild motor plus cognitive impairments due to neonatal preterm birth complications <28wks	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Severe motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications <28wks	Severe motor plus cognitive impairment with blindness and epilepsy	(combined DW)	
Mild motor plus cognitive impairments due to neonatal preterm birth complications 32-36wks	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Severe motor plus cognitive impairment with blindness due to neonatal preterm birth complications <28wks	Severe motor plus cognitive impairment with blindness	(combined DW)	
Moderate motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications <28wks	Moderate motor plus cognitive impairment with blindness and epilepsy	(combined DW)	
Moderate motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications 32-36wks	Moderate motor plus cognitive impairment with blindness and epilepsy	(combined DW)	
Severe motor plus cognitive impairment with blindness and epilepsy due to neonatal preterm birth complications 28-32wks	Severe motor plus cognitive impairment with blindness and epilepsy	(combined DW)	
Mild motor plus cognitive impairments due to neonatal preterm birth complications 28-32wks	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Severe motor impairment with epilepsy due to neonatal preterm birth complications 32-36wks	Severe motor impairment with epilepsy	(combined DW)	
Severe motor impairment due to neonatal preterm birth complications 32-36wks	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Severe motor plus cognitive impairment with blindness due to neonatal preterm birth complications 32-36wks	Severe motor plus cognitive impairment with blindness	(combined DW)	
Severe motor impairment with epilepsy due to neonatal preterm birth complications <28wks	Severe motor impairment with epilepsy	(combined DW)	
Severe motor impairment with blindness due to neonatal preterm birth complications 32-36wks	Severe motor impairment with blindness	(combined DW)	
Severe motor impairment with epilepsy due to neonatal preterm birth complications 28-32wks	Severe motor impairment with epilepsy	(combined DW)	
Mild motor impairment due to neonatal preterm birth complications <28wks	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Mild motor impairment due to neonatal preterm birth complications 28-32wks	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Mild motor impairment due to neonatal preterm birth complications 32-36wks	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Severe motor impairment with blindness due to neonatal preterm birth complications <28wks	Severe motor impairment with blindness	(combined DW)	
Severe motor impairment due to neonatal preterm birth complications 28-32wks	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)
Severe motor impairment with blindness and epilepsy due to neonatal preterm birth complications <28wks	Severe motor impairment with blindness and epilepsy	(combined DW)	
Moderate motor impairment due to neonatal preterm birth complications 28-32wks	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Moderate motor impairment due to neonatal preterm birth complications <28wks	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Moderate motor impairment due to neonatal preterm birth complications 32-36wks	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Severe motor impairment with blindness due to neonatal preterm birth complications 28-32wks	Severe motor impairment with blindness	(combined DW)	
Severe motor impairment with blindness and epilepsy due to neonatal preterm birth complications 32-36wks	Severe motor impairment with blindness and epilepsy	(combined DW)	
Severe motor plus cognitive impairment with blindness due to neonatal preterm birth complications 28-32wks	Severe motor plus cognitive impairment with blindness	(combined DW)	

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weigh
Severe motor impairment due to neonatal preterm birth	Motor impairment, severe	is unable to move around without help, and is not able to lift	0.402
complications <28wks	-	or hold objects, get dressed or sit upright.	(0.268-0.545)
Severe motor impairment with blindness and epilepsy due to neonatal preterm birth complications 28-32wks	Severe motor impairment with blindness and epilepsy	(combined DW)	
Moderate motor plus cognitive impairment with epilepsy due to	Moderate motor plus cognitive impairment with		
neonatal preterm birth complications 28-32wks	epilepsy	(combined DW)	
Blindness due to retinopathy of prematurity	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124–0.26)
Severe motor plus cognitive impairment with blindness and epilepsy	Severe motor plus cognitive impairment with	(combined DW)	
due to neonatal preterm birth complications 32-36wks	blindness and epilepsy		
Moderate motor impairment with blindness and epilepsy due to neonatal preterm birth complications 32-36wks	Moderate motor impairment with blindness and epilepsy	(combined DW)	
Moderate motor impairment with blindness and epilepsy due to	Moderate motor impairment with blindness and		
neonatal preterm birth complications 28-32wks	epilepsy	(combined DW)	
Moderate motor impairment with epilepsy due to neonatal preterm	Moderate motor impairment with epilepsy	(combined DW)	
birth complications <28wks Moderate motor impairment with epilepsy due to neonatal preterm			
birth complications 28-32wks	Moderate motor impairment with epilepsy	(combined DW)	
Moderate motor impairment with blindness and epilepsy due to	Moderate motor impairment with blindness and	(combined DW)	
neonatal preterm birth complications <28wks	epilepsy	(combined Dw)	
Moderate motor impairment with epilepsy due to neonatal preterm birth complications 32-36wks	Moderate motor impairment with epilepsy	(combined DW)	
Moderate motor plus cognitive impairment with blindness due to	Moderate motor plus cognitive impairment with		
neonatal preterm birth complications 28-32wks	blindness	(combined DW)	
Moderate motor impairment with blindness due to neonatal preterm	Moderate motor impairment with blindness	(combined DW)	
birth complications 32-36wks			
Moderate motor impairment with blindness due to neonatal preterm birth complications 28-32wks	Moderate motor impairment with blindness	(combined DW)	
Moderate motor impairment with blindness due to neonatal preterm			
birth complications <28wks	Moderate motor impairment with blindness	(combined DW)	
Moderate motor plus cognitive impairment with blindness due to	Moderate motor plus cognitive impairment with	(combined DW)	
neonatal preterm birth complications <28wks	blindness Mederate motor plus cognitive impeirment with		
Moderate motor plus cognitive impairment with blindness due to neonatal preterm birth complications 32-36wks	Moderate motor plus cognitive impairment with blindness	(combined DW)	
Asymptomatic neonatal preterm birth 32-<37wks	Asymptomatic		
Moderate motor plus cognitive impairment with blindness and	Moderate motor plus cognitive impairment with		
epilepsy due to neonatal preterm birth complications 28-32wks	blindness and epilepsy	(combined DW)	
Severe vision impairment due to retinopathy of prematurity	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Moderate motor plus cognitive impairment with epilepsy due to	Moderate motor plus cognitive impairment with		
neonatal preterm birth complications <28wks	epilepsy	(combined DW)	
Mild vision impairment due to retinopathy of prematurity	Distance vision, mild impairment	has some difficulty with distance vision, for example reading signs, but no other problems with eyesight.	0.003 (0.001-0.007)
	<b></b>	has vision problems that make it difficult to recognize faces	0.031
Moderate vision impairment due to retinopathy of prematurity	Distance vision, moderate impairment	or objects across a room.	(0.019-0.049)
Moderate motor plus cognitive impairment with epilepsy due to	Moderate motor plus cognitive impairment with	(combined DW)	
neonatal preterm birth complications 32-36wks	epilepsy		
Asymptomatic neonatla preterm birth <28wks	Asymptomatic		
Asymptomatic neonatal preterm birth 28-<32 wks	Asymptomatic		
Asymptomatic retinopathy of prematurity	Asymptomatic		
Severe motor impairment due to neonatal encephalopathy due to	Motor impairment, severe	is unable to move around without help, and is not able to lift	0.402
birth asphyxia and trauma Moderate motor impairment due to neonatal encephalopathy due to birth asphyxia and trauma	Motor impairment, moderate	or hold objects, get dressed or sit upright. has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able	(0.268–0.545) 0.061 (0.04–0.089)
Moderate motor impairment with blindness due to neonatal	Moderate motor impairment with blindness	to walk without help. (combined DW)	
encephalopathy due to birth asphyxia and trauma	*		
Severe motor plus cognitive impairment with epilepsy due to neonatal encephalopathy due to birth asphyxia and trauma	Severe motor plus cognitive impairment with epilepsy	(combined DW)	
Moderate motor impairment with epilepsy due to neonatal		(combined DW)	
encephalopathy due to birth asphyxia and trauma would are motor prus cogmuse impainment with omigeness and	Moderate motor impairment with epilepsy	(combined DW)	
epilepsy due to neonatal encephalopathy due to birth asphyxia and	Moderate motor plus cognitive impairment with	(combined DW)	
Mild motor impairment due to neonatal encephalopathy due to birth	blindness and epilepsy	has some difficulty in moving around but is able to walk	0.01
asphyxia and trauma	Motor impairment, mild	without help.	(0.005-0.019)
Moderate motor plus cognitive impairment with epilepsy due to	Moderate motor plus cognitive impairment with	(combined DW)	
neonatal encephalopathy due to birth asphyxia and trauma	epilepsy		
Severe motor impairment with blindness and epilepsy due to	Severe motor impairment with blindness and	(combined DW)	
neonatal encephalopathy due to birth asphyxia and trauma	epilepsy	has some difficulty in moving around but is able to walk	
			0.021
Mild motor plus cognitive impairments due to neonatal encephalopathy due to birth asphyxia and trauma	Motor plus cognitive impairments, mild	without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weig
Moderate motor impairment with blindness and epilepsy due to	Moderate motor impairment with blindness and	(combined DW)	
neonatal encephalopathy due to birth asphyxia and trauma	epilepsy	(combined DW)	
Asymptomatic neonatal encephalopathy due to birth asphyxia and	Asymptomatic		
trauma			
Moderate motor plus cognitive impairment with blindness due to	Moderate motor plus cognitive impairment with	(combined DW)	
neonatal encephalopathy due to birth asphyxia and trauma Severe motor impairment with epilepsy due to neonatal	blindness		
encephalopathy due to birth asphyxia and trauma	Severe motor impairment with epilepsy	(combined DW)	
Severe motor plus cognitive impairment with blindness due to	Severe motor plus cognitive impairment with		
neonatal encephalopathy due to birth asphyxia and trauma	blindness	(combined DW)	
Severe motor impairment with blindness due to neonatal	Commente a incomingent with blinds or	(combined DW)	
encephalopathy due to birth asphyxia and trauma	Severe motor impairment with blindness	(combined DW)	
Moderate motor impairment with epilepsy due to neonatal sepsis and	Moderate motor impairment with epilepsy	(combined DW)	
other neonatal infections			
Moderate motor plus cognitive impairment with epilepsy due to	Moderate motor plus cognitive impairment with	(combined DW)	
neonatal sepsis and other neonatal infections Severe motor impairment with blindness due to neonatal sepsis and	epilepsy		
other neonatal infections	Severe motor impairment with blindness	(combined DW)	
Severe motor plus cognitive impairment with blindness and epilepsy	Severe motor plus cognitive impairment with		
due to neonatal sepsis and other neonatal infections	blindness and epilepsy	(combined DW)	
Mild motor impairment due to neonatal sepsis and other neonatal		has some difficulty in moving around but is able to walk	0.01
infections	Motor impairment, mild	without help.	(0.005-0.019
Severe motor impairment with epilepsy due to neonatal sepsis and	Severe motor impairment with epilepsy	(combined DW)	
other neonatal infections	2 instor impairment with ophopsy		
Asymptomatic neonatal sepsis and other neonatal infections	Asymptomatic		
Moderate motor impairment with blindness due to neonatal sepsis	Moderate motor impairment with blindness	(combined DW)	
and other neonatal infections	induced in the inpartment with officials		
Severe motor impairment due to neonatal sepsis and other neonatal	Motor impairment, severe	is unable to move around without help, and is not able to lift	0.402
infections	<b>x</b> ,	or hold objects, get dressed or sit upright.	(0.268-0.545
Severe infection due to neonatal sepsis and other neonatal infections	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088-0.19)
Moderate motor plus cognitive impairment with blindness and	Moderate motor plus cognitive impairment with		(0.088-0.19)
epilepsy due to neonatal sepsis and other neonatal infections	blindness and epilepsy	(combined DW)	
	r r s	has some difficulty in moving around, and difficulty in lifting	0.061
Moderate motor impairment due to neonatal sepsis and other	Motor impairment, moderate	and holding objects, dressing and sitting upright, but is able	0.061
neonatal infections		to walk without help.	(0.04-0.089)
Severe motor plus cognitive impairment with epilepsy due to	Severe motor plus cognitive impairment with	(combined DW)	
neonatal sepsis and other neonatal infections	epilepsy	(	
Severe motor impairment with blindness and epilepsy due to	Severe motor impairment with blindness and	(combined DW)	
neonatal sepsis and other neonatal infections	epilepsy	has some difficulty in moving around but is able to walk	
Mild motor plus cognitive impairments due to neonatal sepsis and		without help. The person is slow in learning at school. As an	0.031
other neonatal infections	Motor plus cognitive impairments, mild	adult, the person has some difficulty doing complex or	(0.018-0.05)
		unfamiliar tasks but otherwise functions independently.	
Severe motor plus cognitive impairment with blindness due to	Severe motor plus cognitive impairment with	(combined DW)	
neonatal sepsis and other neonatal infections	blindness	(combined D w)	
Moderate motor plus cognitive impairment with blindness due to	Moderate motor plus cognitive impairment with	(combined DW)	
neonatal sepsis and other neonatal infections	blindness		
Moderate motor impairment with blindness and epilepsy due to neonatal sepsis and other neonatal infections	Moderate motor impairment with blindness and epilepsy	(combined DW)	
Severe motor impairment with blindness and epilepsy due to	Severe motor impairment with blindness and		
hemolytic disease and other neonatal jaundice	epilepsy	(combined DW)	
Severe motor impairment with epilepsy due to hemolytic disease and			
other neonatal jaundice	Severe motor impairment with epilepsy	(combined DW)	
Severe motor plus cognitive impairment with blindness and epilepsy	Severe motor plus cognitive impairment with	(combined DW)	
due to hemolytic disease and other neonatal jaundice	blindness and epilepsy		-
Severe motor plus cognitive impairment with blindness due to	Severe motor plus cognitive impairment with	(combined DW)	
hemolytic disease and other neonatal jaundice	blindness		
Severe motor plus cognitive impairment with epilepsy due to	Severe motor plus cognitive impairment with	(combined DW)	
hemolytic disease and other neonatal jaundice Moderate motor impairment with blindness and epilepsy due to	epilepsy Moderate motor impairment with blindness and		
hemolytic disease and other neonatal jaundice	Moderate motor impairment with blindness and epilepsy	(combined DW)	
Moderate motor plus cognitive impairment with epilepsy due to	Moderate motor plus cognitive impairment with		
hemolytic disease and other neonatal jaundice	epilepsy	(combined DW)	
Moderate motor impairment with epilepsy due to hemolytic disease		(combined DW)	
and other neonatal jaundice	Moderate motor impairment with epilepsy	(combined DW)	
Moderate motor plus cognitive impairment with blindness due to	Moderate motor plus cognitive impairment with	(combined DW)	
hemolytic disease and other neonatal jaundice	blindness		
Moderate motor impairment with blindness due to hemolytic disease	Moderate motor impairment with blindness	(combined DW)	
and other neonatal jaundice	*		0.402
Source motor impoirment servers due to here total discours and at	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545
Severe motor impairment severe due to hemolytic disease and other		or nora objects, get aressed of sit upright.	(0.208-0.345
neonatal jaundice	Moderate motor plus cognitive impairment with		
neonatal jaundice Moderate motor plus cognitive impairment with blindness and	Moderate motor plus cognitive impairment with blindness and epilepsy	(combined DW)	
neonatal jaundice Moderate motor plus cognitive impairment with blindness and epilepsy due to hemolytic disease and other neonatal jaundice	Moderate motor plus cognitive impairment with blindness and epilepsy		
neonatal jaundice Moderate motor plus cognitive impairment with blindness and epilepsy due to hemolytic disease and other neonatal jaundice Moderate motor impairment due to hemolytic disease and other		(combined DW) has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able	0.061
neonatal jaundice Moderate motor plus cognitive impairment with blindness and epilepsy due to hemolytic disease and other neonatal jaundice	blindness and epilepsy	has some difficulty in moving around, and difficulty in lifting	0.061 (0.04–0.089

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Other neonatal disorders	Post-COMO calculation for residuals (YLL/YLD		
Moderate wasting without edema	ratio, other methods) Asymptomatic		
Moderate wasting with edema	Kwashiorkor	is very tired and irritable and has diarrhea.	0.051
Severe wasting without edema	Severe wasting	is extremely skinny and has no energy.	(0.031–0.079) 0.128
-			(0.082–0.183) 0.172
Severe wasting with edema	Kwashiorkor and severe wasting	(combined DW)	(0.115–0.238) 0.358
Visible goiter with profound intellectual disability due to iodine deficiency	Intellectual disability / mental retardation, profound and Iodine-deficiency goiter	(combined DW)	(0.252-0.475)
Visible goiter with severe intellectual disability due to iodine deficiency	Intellectual disability / mental retardation, severe and Iodine-deficiency goiter	(combined DW)	0.326 (0.233–0.438)
Visible goiter with profound intellectual disability and mild heart	profound and Iodine-deficiency goiter and heart	(combined DW)	0.384
failure due to iodine deficiency Visible goiter without symptoms	Disfigurement, level 1	has a slight, visible physical deformity that others notice,	(0.276–0.502) 0.011
	Intellectual disability / mental retardation,	which causes some worry and discomfort.	(0.005-0.021)
Visible goiter with profound intellectual disability and moderate heart failure due to iodine deficiency	profound and Iodine-deficiency goiter and heart failure, moderate	(combined DW)	0.403 (0.293–0.524)
Visible goiter with profound intellectual disability with severe heart failure due to iodine deficiency	Intellectual disability / mental retardation, profound and Iodine-deficiency goiter and heart failure, severe	(combined DW)	0.471 (0.344–0.602)
Visible goiter with symptoms without intellectual disability or heart failure	Iodine-deficiency goiter	has a large mass in the front of the neck. The person sometimes has weakness and fatigue, constipation and weight gain.	0.199 (0.133–0.276)
Moderate vision impairment loss due to vitamin A deficiency	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces	0.031
		or objects across a room. is completely blind, which causes great difficulty in some	(0.019–0.049) 0.187
Blindness due to vitamin A deficiency	Distance vision blindness	daily activities, worry and anxiety, and great difficulty going outside the home without assistance. has severe vision loss, which causes difficulty in daily	(0.124–0.26)
Severe vision impairment loss due to vitamin A deficiency	Distance vision, severe impairment	activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Asymptomatic vitamin A deficiency	Asymptomatic		
Moderate heart failure due to iron-deficiency anemia	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103)
Mild iron-deficiency anemia	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Asymptomatic and mild heart failure due to iron-deficiency anemia	Heart failure, mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062)
Severe iron-deficiency anemia	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Severe heart failure due to iron-deficiency anemia	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251)
Moderate iron-deficiency anemia	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Other nutritional deficiencies	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Cardiovascular complications due to adult tertiary syphilis	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe disfigurement, neurological problems, and cardiovascular complications due to adult tertiary syphilis	Level 3 disfigurement, moderate motor plus cognitive impairments, and moderate infectious	(combined DW)	0.547 (0.402–0.691)
Severe disfigurement and cardiovascular complications due to adult tertiary syphilis	disease, acute episode Level 3 disfigurement and moderate infectious disease, acute episode	(combined DW)	0.435 (0.306–0.571)
Neurological problems due to adult tertiary syphilis	Motor plus cognitive impairments, moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.	0.203 (0.134–0.29)
Severe disfigurement due to adult tertiary syphilis	Disfigurement, level 3	has an obvious physical deformity that makes others uncomfortable, which causes the person to avoid social contact, feel worried, sleep poorly, and think about suicide.	0.405 (0.275–0.546)
Asymptomatic early syphilis infection	Asymptomatic		
Mild early syphilis infection	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002–0.012)
Neurological problems and cardiovascular complications due to adult		(combined DW)	0.243
tertiary syphilis Asymptomatic adult tertiary syphilis	moderate infectious disease, acute episode Asymptomatic	-	(0.168–0.333)
Severe disfigurement and neurological problems due to adult tertiary	Level 3 disfigurement and moderate motor plus	(combined DW)	0.523
syphilis Secondary infartility due to chlamydial infaction	cognitive impairments	has at least one child, and wants to have more children. The	(0.378–0.669) 0.005
Secondary infertility due to chlamydial infection	Infertility, secondary	person has a fertile partner, but the couple cannot conceive.	(0.002–0.011)

Appendix Table 6. GBD 2016 sequelae, health states	s, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weigh
Asymptomatic chlamydial infection	Asymptomatic		
Moderate pelvic inflammatory diseases due to chlamydial infection	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Severe pelvic inflammatory diseases due to chlamydial infection	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Epididymo-orchitis due to chlamydial infection	Epididymo-orchitis	has swelling and tenderness in the testicles and pain during urination.	0.128 (0.086–0.18)
Primary infertility due to chlamydial infection	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008 (0.003–0.015)
Mild chlamydial infection	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002-0.012)
Primary infertility due to gonococcal infection	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008 (0.003–0.015)
Epididymo-orchitis due to gonococcal infection	Epididymo-orchitis	has swelling and tenderness in the testicles and pain during urination.	0.128 (0.086–0.18)
Severe pelvic inflammatory diseases due to gonococcal infection	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Asymptomatic gonococcal infection	Asymptomatic		
Mild gonococcal infection	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002-0.012)
Secondary infertility due to gonococcal infection	Infertility, secondary	has at least one child, and wants to have more children. The person has a fertile partner, but the couple cannot conceive.	0.005 (0.002–0.011)
Moderate pelvic inflammatory diseases due to gonococcal infection	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has	0.114
Asymptomatic trichomoniasis infection	Asymptomatic	difficulties with daily activities.	(0.078–0.159)
Acute trichomoniasis infection	Infectious disease, acute episode, mild	has a low fever and mild discomfort , but no difficulty with daily activities.	0.006 (0.002-0.012)
Moderate infection due to initial genital herpes episode	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Asymptomatic genital herpes	Asymptomatic		
Symptomatic genital herpes	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002–0.012)
Primary infertility due to other sexually transmitted diseases	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008 (0.003–0.015)
Severe pelvic inflammatory diseases due to other sexually transmitted diseases	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22-0.442)
Other sexually transmitted diseases	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Secondary infertility due to other sexually transmitted diseases	Infertility, secondary	has at least one child, and wants to have more children. The person has a fertile partner, but the couple cannot conceive.	0.005 (0.002–0.011)
Moderate pelvic inflammatory diseases due to other sexually transmitted diseases	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Asymptomatic acute hepatitis A	Asymptomatic		
Severe acute hepatitis A	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Moderate acute hepatitis A	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe acute hepatitis B	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Moderate acute hepatitis B	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Chronic hepatitis B	Asymptomatic		(0.032-0.074)
Asymptomatic acute hepatitis B	Asymptomatic		
Moderate acute hepatitis C	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe acute hepatitis C	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Chronic hepatitis C	Asymptomatic		
Asymptomatic acute hepatitis C	Asymptomatic		
Asymptomatic acute hepatitis E	Asymptomatic		
Moderate acute hepatitis E	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Severe acute hepatitis E	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
Guillain-Barré syndrome due to other infectious diseases	Spinal cord lesion below neck level (treated)	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. The person uses a wheelchair to move around.	0.296 (0.198–0.414)
Mild anemia due to other infectious diseases	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001-0.008)
Other infectious diseases	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Moderate anemia due to other infectious diseases	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Severe anemia due to other infectious diseases	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep	0.149
		concentration.	(0.101–0.209)

Appendix Table 6. GBD 2016 sequelae, health states, health state lay descriptions, and disability weights			
Sequela	Health state name	Health state lay description	Disability weight
Controlled phase of mouth cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of mouth cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of mouth cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Terminal phase of mouth cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Terminal phase of nasopharynx cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Controlled phase of nasopharynx cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of nasopharynx cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of nasopharynx cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Controlled phase of other pharynx cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of other pharynx cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of other pharynx cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of other pharynx cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Controlled phase of esophageal cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Terminal phase of esophageal cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Metastatic phase of esophageal cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of esophageal cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Diagnosis and primary therapy phase of stomach cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of stomach cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of stomach cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Controlled phase of stomach cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of colon and rectum cancers	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of colon and rectum cancers	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Stoma due to colon and rectum cancer	Stoma and generic medication	(combined DW)	0.139 (0.094–0.192)
Diagnosis and primary therapy phase of colon and rectum cancers	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Controlled phase of colon and rectum cancers	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Controlled phase of liver cancer due to hepatitis B	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Terminal phase of liver cancer due to hepatitis B	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of liver cancer due to hepatitis B	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of liver cancer due to hepatitis B	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Controlled phase of liver cancer due to hepatitis C	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of liver cancer due to hepatitis C	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of liver cancer due to hepatitis C	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
	Terminal phase, with medication (for cancers, end-	has lost a lot of weight and regularly uses strong medication	0.54
Terminal phase of liver cancer due to hepatitis C	stage kidney/liver disease)	to avoid constant pain. The person has no appetite, feels	(0.377–0.687)
Diagnosis and primary therapy phase of liver cancer due to alcohol		nauseous, and needs to spend most of the day in bed.	0.288
use	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	(0.193-0.399)
	Terminal phase, with medication (for cancers, end-	has lost a lot of weight and regularly uses strong medication	0.54
Terminal phase of liver cancer due to alcohol use	stage kidney/liver disease)	to avoid constant pain. The person has no appetite, feels	(0.377–0.687)
		nauseous, and needs to spend most of the day in bed. has severe pain, extreme fatigue, weight loss and high	0.451
Metastatic phase of liver cancer due to alcohol use	Cancer, metastatic	anxiety.	(0.307–0.6)
	Generic uncomplicated disease: worry and daily	has a chronic disease that requires medication every day and	0.049
Controlled phase of liver cancer due to alcohol use	medication	causes some worry but minimal interference with daily activities.	(0.031-0.072)
		has a chronic disease that requires medication every day and	
Controlled phase of liver cancer due to other causes	Generic uncomplicated disease: worry and daily medication	causes some worry but minimal interference with daily	0.049 (0.031-0.072)
	incurcation	activities.	` '
Metastatic phase of liver cancer due to other causes	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of liver cancer due to other	Concern diagnostic and anima mathematic		0.288
causes	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	(0.193–0.399)
Terminal phase of liver cancer due to other causes	Terminal phase, with medication (for cancers, end-	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels	0.54
reminal phase of inver cancer due to other causes	stage kidney/liver disease)	nauseous, and needs to spend most of the day in bed.	(0.377–0.687)
Diagnosis and primary therapy phase of gallbladder and biliary tract	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288
cancer		has lost a lot of weight and regularly uses strong medication	(0.193–0.399)
Terminal phase of gallbladder and biliary tract cancer	Terminal phase, with medication (for cancers, end-	to avoid constant pain. The person has no appetite, feels	0.54
	stage kidney/liver disease)	nauseous, and needs to spend most of the day in bed.	(0.377-0.687)
Metastatic phase of gallbladder and biliary tract cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high	0.451
		anxiety. has a chronic disease that requires medication every day and	(0.307–0.6)
Controlled phase of gallbladder and biliary tract cancer	Generic uncomplicated disease: worry and daily medication	causes some worry but minimal interference with daily	0.049
	medication	activities.	(0.031-0.072)
Metastatic phase of pancreatic cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
		has lost a lot of weight and regularly uses strong medication	
Terminal phase of pancreatic cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	to avoid constant pain. The person has no appetite, feels	0.54 (0.377–0.687)
		nauseous, and needs to spend most of the day in bed. has a chronic disease that requires medication every day and	× /
Controlled phase of pancreatic cancer	Generic uncomplicated disease: worry and daily	causes some worry but minimal interference with daily	0.049
	medication	activities.	(0.031-0.072)
Diagnosis and primary therapy phase of pancreatic cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
	a	has severe pain, extreme fatigue, weight loss and high	0.451
Metastatic phase of larynx cancer	Cancer, metastatic	anxiety.	(0.307–0.6)
Laryngectomy due to larynx cancer	Speech problems and generic medication	(combined DW)	0.098 (0.063-0.145)
		has a chronic disease that requires medication every day and	````
Controlled phase of larynx cancer	Generic uncomplicated disease: worry and daily medication	causes some worry but minimal interference with daily	0.049 (0.031-0.072)
	incurcation	activities.	0.288
Diagnosis and primary therapy phase of larynx cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	(0.193–0.399)
	Terminal phase, with medication (for cancers, end-	has lost a lot of weight and regularly uses strong medication	0.54
Terminal phase of larynx cancer	stage kidney/liver disease)	to avoid constant pain. The person has no appetite, feels	(0.377-0.687)
		nauseous, and needs to spend most of the day in bed. has severe pain, extreme fatigue, weight loss and high	0.451
Metastatic phase of lung, bronchus, and trachea cancer	Cancer, metastatic	anxiety.	(0.307-0.6)
Diagnosis and primary therapy phase of lung, bronchus, and trachea	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288
cancer		has a chronic disease that requires medication every day and	(0.193–0.399)
Controlled phase of lung, bronchus, and trachea cancer	Generic uncomplicated disease: worry and daily medication	causes some worry but minimal interference with daily	0.049 (0.031-0.072)
	incurcation	activities.	(0.031-0.072)
Terminal phase of lung, bronchus, and trachea cancer	Terminal phase, with medication (for cancers, end-	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels	0.54
remining phase of rang, oronenas, and duened cancer	stage kidney/liver disease)	nauseous, and needs to spend most of the day in bed.	(0.377–0.687)
	Generic uncomplicated disease: worry and daily	has a chronic disease that requires medication every day and	0.049
Controlled phase of malignant skin melanoma	medication	causes some worry but minimal interference with daily activities.	(0.031-0.072)
Matestatic phase of malianent alian malanent-	Cancer metastatic	has severe pain, extreme fatigue, weight loss and high	0.451
Metastatic phase of malignant skin melanoma	Cancer, metastatic	anxiety.	(0.307-0.6)
Terminal phase of malignant skin melanoma	Terminal phase, with medication (for cancers, end-	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels	0.54
standar phase of marginan skin metanoma	stage kidney/liver disease)	nauseous, and needs to spend most of the day in bed.	(0.377–0.687)
Diagnosis and primary therapy phase of malignant skin melanoma	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288
		has an obvious physical deformity that is very painful and	(0.193–0.399)
Severe disfigurement due to squamous cell carcinoma	Disfigurement, level 3, with itch/pain	itchy. The physical deformity makes others uncomfortable,	0.576
service alongurement due to squamous cen catemonia	biological and the state of the	which causes the person to avoid social contact, feel worried, sleep poorly, and think about suicide.	(0.401–0.731)
		sleep poorty, and units about suicide.	

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay de <u>scriptions, and disa</u>	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Moderate disfigurement due to squamous cell carcinoma	Disfigurement, level 2	has a visible physical deformity that causes others to stare and comment. As a result, the person is worried and has trouble sleeping and concentrating.	0.067 (0.044–0.096)
Mild disfigurement due to squamous cell carcinoma	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005–0.021)
Disfigurement due to basal cell carcinoma	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005–0.021)
Diagnosis and primary therapy phase of breast cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Mastectomy due to breast cancer	Mastectomy and generic medication	(combined DW)	0.083 (0.052–0.124)
Controlled phase of breast cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of breast cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of breast cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Terminal phase of cervical cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of cervical cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Controlled phase of cervical cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of cervical cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Controlled phase of uterine cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Terminal phase of uterine cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of uterine cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of uterine cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of ovarian cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Controlled phase of ovarian cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of ovarian cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of ovarian cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of prostate cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Impotence due to prostate cancer	Impotence and generic medication	(combined DW)	0.065 (0.04–0.1)
Terminal phase of prostate cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Controlled phase of prostate cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of prostate cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Incontinence due to prostate cancer	Incontinence and generic medication	(combined DW)	0.181 (0.124–0.248)
Terminal phase of testicular cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Metastatic phase of testicular cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of testicular cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Controlled phase of testicular cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Diagnosis and primary therapy phase of kidney cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of kidney cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of kidney cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)

Appendix Table 6. GBD 2016 sequelae, health states	s, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Controlled phase of kidney cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Controlled phase of bladder cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Urinary incontinence due to bladder cancer	Incontinence and generic medication	(combined DW)	0.181 (0.124–0.248)
Terminal phase of bladder cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of bladder cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of bladder cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of brain and nervous system cancers	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Terminal phase of brain and nervous system cancers	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Metastatic phase of brain and nervous system cancers	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Controlled phase of brain and nervous system cancers	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Terminal phase of thyroid cancer	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Controlled phase of thyroid cancer	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of thyroid cancer	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of thyroid cancer	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Terminal phase of mesothelioma	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Controlled phase of mesothelioma	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Diagnosis and primary therapy phase of mesothelioma	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of mesothelioma	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Controlled phase of Hodgkin disease	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of Hodgkin disease	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of Hodgkin disease	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Terminal phase of Hodgkin disease	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Metastatic phase of non-Hodgkin lymphoma	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of non-Hodgkin lymphoma	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Controlled phase of non-Hodgkin lymphoma	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Diagnosis and primary therapy phase of non-Hodgkin lymphoma	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Terminal phase of multiple myeloma	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of multiple myeloma	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of multiple myeloma	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Controlled phase of multiple myeloma	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Controlled phase of acute lymphoid leukemia	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Diagnosis and primary therapy phase of acute lymphoid leukemia	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)

Appendix Table 6. GBD 2016 sequelae, health states	s, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Metastatic phase of acute lymphoid leukemia	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of acute lymphoid leukemia	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Metastatic phase of chronic lymphoid leukemia	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of chronic lymphoid leukemia	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of chronic lymphoid leukemia	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Controlled phase of chronic lymphoid leukemia	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Diagnosis and primary therapy phase of acute myeloid leukemia	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Controlled phase of acute myeloid leukemia	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Terminal phase of acute myeloid leukemia	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Metastatic phase of acute myeloid leukemia	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Diagnosis and primary therapy phase of chronic myeloid leukemia	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of chronic myeloid leukemia	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Terminal phase of chronic myeloid leukemia	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Controlled phase of chronic myeloid leukemia	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Metastatic phase of other leukemia	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Controlled phase of other leukemia	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Diagnosis and primary therapy phase of other leukemia	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Terminal phase of other leukemia	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Terminal phase of other neoplasms	Terminal phase, with medication (for cancers, end- stage kidney/liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.54 (0.377–0.687)
Diagnosis and primary therapy phase of other neoplasms	Cancer, diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.	0.288 (0.193–0.399)
Metastatic phase of other neoplasms	Cancer, metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.	0.451 (0.307–0.6)
Controlled phase of other neoplasms	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Severe heart failure due to rheumatic heart disease	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251)
Rheumatic heart disease, without heart failure	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Moderate heart failure due to rheumatic heart disease	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103)
Asymptomatic and mild heart failure due to rheumatic heart disease	Heart failure, mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062)
Acute myocardial infarction first 2 days	Acute myocardial infarction, days 1-2	has severe chest pain that becomes worse with any physical activity,. The person feels nauseous, short of breath, and very anxious.	0.432 (0.288–0.579)
Asymptomatic and mild heart failure due to ischemic heart disease	Heart failure, mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062)
Asymptomatic angina due to ischemic heart disease	Asymptomatic		
Severe heart failure due to ischemic heart disease	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251)

Appendix Table 6. GBD 2016 sequelae, health state	es, health state lay descriptions, and disa	ability weights	ļ
Sequela	Health state name	Health state lay description	Disability weight
Acute myocardial infarction 3 to 28 days	Acute myocardial infarction, days 3-28	gets short of breath after heavy physical activity, and tires easily, but has no problems when at rest. The person has to take medication every day and has some anxiety.	0.074 (0.049–0.105)
Moderate angina due to ischemic heart disease	Angina pectoris, moderate	has chest pain that occurs with moderate physical activity, such as walking uphill or more than half a kilometer (around a quarter-mile) on level ground. After a brief rest, the pain goes away.	0.08 (0.052–0.113)
Asymptomatic ischemic heart disease following myocardial	Asymptomatic		
infarction Severe angina due to ischemic heart disease	Angina pectoris, severe	has chest pain that occurs with minimal physical activity, such as walking only a short distance. After a brief rest, the pain goes away. The person avoids most physical activities because of the pain.	0.167 (0.11–0.24)
Moderate heart failure due to ischemic heart disease	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103)
Mild angina due to ischemic heart disease	Angina pectoris, mild	has chest pain that occurs with strenuous physical activity, such as running or lifting heavy objects. After a brief rest, the pain goes away.	0.033 (0.02–0.052)
Acute ischemic stroke severity level 1	Stroke, long-term consequences, mild	has some difficulty in moving around and some weakness in one hand, but is able to walk without help.	0.019 (0.01–0.032)
Chronic ischemic stroke severity level 1	Stroke, long-term consequences, mild	has some difficulty in moving around and some weakness in one hand, but is able to walk without help.	0.019 (0.01–0.032)
Acute ischemic stroke severity level 2	Stroke, long-term consequences, moderate	has some difficulty in moving around, and in using the hands for lifting and holding things, dressing and grooming.	0.07 (0.046–0.099)
Chronic ischemic stroke severity level 5	Stroke, long-term consequences, severe plus cognition problems	is confined to bed or a wheelchair, depends on others for feeding, toileting and dressing, and has difficulty speaking, thinking clearly and remembering things.	0.588 (0.411–0.744)
Chronic ischemic stroke severity level 2	Stroke, long-term consequences, moderate	has some difficulty in moving around, and in using the hands for lifting and holding things, dressing and grooming.	0.07 (0.046–0.099)
Acute ischemic stroke severity level 5	Stroke, long-term consequences, severe plus cognition problems	is confined to bed or a wheelchair, depends on others for feeding, toileting and dressing, and has difficulty speaking, thinking clearly and remembering things.	0.588 (0.411–0.744)
Acute ischemic stroke severity level 3	Stroke, long-term consequences, moderate plus cognition problems	has some difficulty in moving around, in using the hands for lifting and holding things, dressing and grooming, and in speaking. The person is often forgetful and confused.	0.316 (0.206–0.437)
Chronic ischemic stroke severity level 4	Stroke, long-term consequences, severe	is confined to bed or a wheelchair, has difficulty speaking and depends on others for feeding, toileting and dressing.	0.552 (0.377–0.707)
Chronic ischemic stroke severity level 3	Stroke, long-term consequences, moderate plus cognition problems	has some difficulty in moving around, in using the hands for lifting and holding things, dressing and grooming, and in speaking. The person is often forgetful and confused.	0.316 (0.206–0.437)
Acute ischemic stroke severity level 4	Stroke, long-term consequences, severe	is confined to bed or a wheelchair, has difficulty speaking and depends on others for feeding, toileting and dressing.	0.552 (0.377-0.707)
Asymptomatic chronic ischemic stroke	Asymptomatic		
Chronic hemorrhagic stroke severity level 1	Stroke, long-term consequences, mild	has some difficulty in moving around and some weakness in one hand, but is able to walk without help.	0.019 (0.01–0.032)
Acute hemorrhagic stroke severity level 5	Stroke, long-term consequences, severe plus cognition problems	is confined to bed or a wheelchair, depends on others for feeding, toileting and dressing, and has difficulty speaking, thinking clearly and remembering things.	0.588 (0.411–0.744)
Chronic hemorrhagic stroke severity level 5	Stroke, long-term consequences, severe plus cognition problems	is confined to bed or a wheelchair, depends on others for feeding, toileting and dressing, and has difficulty speaking, thinking clearly and remembering things.	0.588 (0.411–0.744)
Acute hemorrhagic stroke severity level 1	Stroke, long-term consequences, mild	has some difficulty in moving around and some weakness in one hand, but is able to walk without help.	0.019 (0.01–0.032)
Acute hemorrhagic stroke severity level 2	Stroke, long-term consequences, moderate	has some difficulty in moving around, and in using the hands for lifting and holding things, dressing and grooming.	(0.046-0.099)
Chronic hemorrhagic stroke severity level 2	Stroke, long-term consequences, moderate	has some difficulty in moving around, and in using the hands for lifting and holding things, dressing and grooming.	(0.046-0.099)
Chronic hemorrhagic stroke severity level 4	Stroke, long-term consequences, severe	is confined to bed or a wheelchair, has difficulty speaking and depends on others for feeding, toileting and dressing.	0.552 (0.377–0.707)
Acute hemorrhagic stroke severity level 3	Stroke, long-term consequences, moderate plus cognition problems	has some difficulty in moving around, in using the hands for lifting and holding things, dressing and grooming, and in speaking. The person is often forgetful and confused.	0.316 (0.206–0.437)
Chronic hemorrhagic stroke severity level 3	Stroke, long-term consequences, moderate plus cognition problems	has some difficulty in moving around, in using the hands for lifting and holding things, dressing and grooming, and in speaking. The person is often forgetful and confused.	0.316 (0.206–0.437)
Acute hemorrhagic stroke severity level 4	Stroke, long-term consequences, severe	is confined to bed or a wheelchair, has difficulty speaking and depends on others for feeding, toileting and dressing.	0.552 (0.377-0.707)
Asymptomatic chronic hemorrhagic stroke	Asymptomatic		
Asymptomatic and mild heart failure due to hypertensive heart disease	Heart failure, mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062)
Severe heart failure due to hypertensive heart disease	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251)
Moderate heart failure due to hypertensive heart disease	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
		is short of breath and easily tires with moderate physical	
Asymptomatic and mild heart failure due to myocarditis	Heart failure, mild	activity, such as walking uphill or more than a quarter-mile	0.041
		on level ground. The person feels comfortable at rest or during activities requiring less effort.	(0.026-0.062)
A auto anna anditis	Infactious disease coute opicade moderate	has a fever and aches, and feels weak, which causes some	0.051
Acute myocarditis	Infectious disease, acute episode, moderate	difficulty with daily activities.	(0.032-0.074)
Severe heart failure due to myocarditis	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the	0.179
severe near randie due to myocardius	ficart failure, severe	breathing problems.	(0.122–0.251)
		is short of breath and easily tires with minimal physical	0.072
Moderate heart failure due to myocarditis	Heart failure, moderate	activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	(0.047-0.103)
		is short of breath and easily tires with moderate physical	
Asymptomatic and mild heart failure due to alcoholic	Heart failure, mild	activity, such as walking uphill or more than a quarter-mile	0.041
cardiomyopathy		on level ground. The person feels comfortable at rest or	(0.026-0.062)
		during activities requiring less effort. is short of breath and easily tires with minimal physical	
Moderate heart failure due to alcoholic cardiomyopathy	Heart failure, moderate	activity, such as walking only a short distance. The person	0.072 (0.047-0.103)
		feels comfortable at rest but avoids moderate activity.	(0.047-0.105)
Severe heart failure due to alcoholic cardiomyopathy	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the	0.179
so tere near tanare due to accorone cardionijopaalj		breathing problems.	(0.122-0.251)
		is short of breath and easily tires with minimal physical	0.072
Moderate heart failure due to other cardiomyopathy	Heart failure, moderate	activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	(0.047-0.103)
		is short of breath and feels tired when at rest. The person	
Severe heart failure due to other cardiomyopathy	Heart failure, severe	avoids any physical activity, for fear of worsening the	0.179 (0.122–0.251)
		breathing problems.	(0.122 0.231)
		is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile	0.041
Asymptomatic and mild heart failure due to other cardiomyopathy	Heart failure, mild	on level ground. The person feels comfortable at rest or	(0.026–0.062)
		during activities requiring less effort.	
Asymptomatic atrial fibrillation and flutter	Asymptomatic		
Symptomatic atrial fibrillation and flutter	Cardiac conduction disorders and cardiac	has periods of rapid and irregular heartbeats and occasional	0.224
Asymptomatic peripheral vascular disease	dysrhythmias Asymptomatic	fainting.	(0.151–0.312)
		has cramping pains in the legs after walking a medium	0.014
Symptomatic claudication due to peripheral vascular disease	Claudication	distance. The pain goes away after a short rest.	(0.007-0.025)
Moderate endocarditis	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some	0.051
	, <b>k</b> ,	difficulty with daily activities. is short of breath and easily tires with moderate physical	(0.032-0.074)
		activity, such as walking uphill or more than a quarter-mile	0.041
Asymptomatic and mild heart failure due to endocarditis	Heart failure, mild	on level ground. The person feels comfortable at rest or	(0.026-0.062)
		during activities requiring less effort.	0.122
Severe endocarditis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)
		is short of breath and feels tired when at rest. The person	0.179
Severe heart failure due to endocarditis	Heart failure, severe	avoids any physical activity, for fear of worsening the	(0.122-0.251)
		breathing problems. is short of breath and easily tires with minimal physical	
Moderate heart failure due to endocarditis	Heart failure, moderate	activity, such as walking only a short distance. The person	0.072
		feels comfortable at rest but avoids moderate activity.	(0.047-0.103)
Moderate other cardiovascular diseases	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person	0.072
Woderate outer cardiovascular diseases	mean failure, moderate	feels comfortable at rest but avoids moderate activity.	(0.047-0.103)
		is short of breath and feels tired when at rest. The person	0.179
Severe heart failure due to other cardiovascular diseases	Heart failure, severe	avoids any physical activity, for fear of worsening the	(0.122-0.251)
Asymptomatic other cardiovascular diseases	Asymptomatic	breathing problems.	
a symptomatic otici cardiovascuidi discases	a Symptomatic	is short of breath and easily tires with moderate physical	
Mild other cardiovescular diseases	Heart failure, mild	activity, such as walking uphill or more than a quarter-mile	0.041
Mild other cardiovascular diseases	incart lallule, illiu	on level ground. The person feels comfortable at rest or	(0.026-0.062)
		during activities requiring less effort. is short of breath and easily tires with moderate physical	
Asymptomatic and mild heart failure due to other cardiovascular		activity, such as walking uphill or more than a quarter-mile	0.041
diseases	Heart failure, mild	on level ground. The person feels comfortable at rest or	(0.026-0.062)
		during activities requiring less effort.	
Severe other cardiovascular diseases	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the	0.179
serve sure en divrasental diseases	inter fundro, severe	breathing problems.	(0.122–0.251)
		is short of breath and easily tires with minimal physical	0.072
Moderate heart failure due to other cardiovascular diseases	Heart failure, moderate	activity, such as walking only a short distance. The person	(0.047-0.103)
Severe heart failure due to severe chronic obstructive pulmonary	Severe COPD and other chronic respiratory, with	feels comfortable at rest but avoids moderate activity.	,
disease	severe heart failure		
Asymptomatic and mild heart failure due to severe chronic	Severe COPD and other chronic respiratory, with		
obstructive pulmonary disease	mild heart failure		

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Moderate chronic obstructive pulmonary disease	COPD and other chronic respiratory problems, moderate	has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only short distances or climb only a few stairs.	0.225 (0.153–0.31)
Moderate heart failure due to severe chronic obstructive pulmonary disease	Severe COPD and other chronic respiratory, with moderate heart failure		
Asymptomatic chronic obstructive pulmonary disease	Asymptomatic		
Mild chronic obstructive pulmonary disease	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011–0.033)
Severe chronic obstructive pulmonary disease without heart failure	COPD and other chronic respiratory problems, severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances or climbing any stairs, feels tired when at rest, and is	0.408 (0.273–0.556)
Moderate heart failure due to severe silicosis	Severe COPD and other chronic respiratory, with moderate heart failure		
Mild silicosis	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011-0.033)
Moderate silicosis	COPD and other chronic respiratory problems, moderate	has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only short distances or climb only a few stairs.	0.225 (0.153–0.31)
Asymptomatic and mild heart failure due to severe silicosis	Severe COPD and other chronic respiratory, with mild heart failure		
Severe silicosis without heart failure	COPD and other chronic respiratory problems, severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances or climbing any stairs, feels tired when at rest, and is	0.408 (0.273–0.556)
Asymptomatic silicosis	Asymptomatic		
Severe heart failure due to severe silicosis	Severe COPD and other chronic respiratory, with severe heart failure Severe COPD and other chronic respiratory, with		
Asymptomatic and mild heart failure due to severe asbestosis	mild heart failure		
Moderate heart failure due to severe asbestosis	Severe COPD and other chronic respiratory, with moderate heart failure		
Mild asbestosis	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011-0.033)
Severe asbestosis without heart failure	COPD and other chronic respiratory problems, severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances or climbing any stairs, feels tired when at rest, and is	0.408 (0.273–0.556)
Severe heart failure due to severe asbestosis	Severe COPD and other chronic respiratory, with severe heart failure		
Moderate asbestosis	COPD and other chronic respiratory problems, moderate	has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only short distances or climb only a few stairs.	0.225 (0.153–0.31)
Asymptomatic asbestosis	Asymptomatic		
Severe coal workers pneumoconiosis without heart failure	COPD and other chronic respiratory problems, severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances or climbing any stairs, feels tired when at rest, and is	0.408 (0.273–0.556)
Mild coal workers pneumoconiosis	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011–0.033)
Severe heart failure due to severe coal workers pneumoconiosis	Severe COPD and other chronic respiratory, with severe heart failure		
Asymptomatic and mild heart failure due to severe coal workers pneumoconiosis	Severe COPD and other chronic respiratory, with mild heart failure		
Asymptomatic coal workers pneumoconiosis	Asymptomatic		
Moderate heart failure due to severe coal workers pneumoconiosis	Severe COPD and other chronic respiratory, with moderate heart failure		
Moderate coal workers pneumoconiosis	COPD and other chronic respiratory problems, moderate	has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only short distances or climb only a few stairs.	0.225 (0.153–0.31)
Moderate other pneumoconiosis	COPD and other chronic respiratory problems, moderate	has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only short distances or climb only a few stairs.	0.225 (0.153–0.31)
Asymptomatic other pneumoconiosis	Asymptomatic	-	
Mild other pneumoconiosis	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011–0.033)
Severe heart failure due to severe other pneumoconiosis	Severe COPD and other chronic respiratory, with severe heart failure		
Severe other pneumoconiosis without heart failure	COPD and other chronic respiratory problems, severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances or climbing any stairs, feels tired when at rest, and is	0.408 (0.273–0.556)
Moderate heart failure due to severe other pneumoconiosis	Severe COPD and other chronic respiratory, with moderate heart failure		
Asymptomatic and mild heart failure due to severe other pneumoconiosis	Severe COPD and other chronic respiratory, with mild heart failure		
Controlled asthma	Asthma, controlled	has wheezing and cough once a month, which does not cause difficulty with daily activities.	(0.007-0.026)
Uncontrolled asthma	Asthma, uncontrolled	has wheezing, cough and shortness of breath more than twice a week, which causes difficulty with daily activities and sometimes wakes the person at night.	0.133 (0.086–0.192)
Asymptomatic asthma	Asymptomatic		

Appendix Table 6. GBD 2016 sequelae, health states	s, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weig
Partially controlled asthma	Asthma, partially controlled	has wheezing and cough once a week, which causes some	0.036
Severe heart failure due to severe interstitial lung disease and	Severe COPD and other chronic respiratory, with	difficulty with daily activities.	(0.022-0.055)
pulmonary sarcoidosis	severe heart failure		
Severe interstitial lung disease and pulmonary sarcoidosis without heart failure	COPD and other chronic respiratory problems, severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances or climbing any stairs, feels tired when at rest, and is	0.408 (0.273–0.556)
Moderate heart failure due to severe interstitial lung disease and pulmonary sarcoidosis	Severe COPD and other chronic respiratory, with moderate heart failure		
Mild interstitial lung disease and pulmonary sarcoidosis	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011-0.033
Moderate interstitial lung disease and pulmonary sarcoidosis	COPD and other chronic respiratory problems, moderate	has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only short distances or climb only a few stairs.	0.225 (0.153-0.31)
Asymptomatic interstitial lung disease and pulmonary sarcoidosis	Asymptomatic		
Asymptomatic and mild heart failure due to severe interstitial lung disease and pulmonary sarcoidosis	Severe COPD and other chronic respiratory, with mild heart failure		
Other chronic respiratory diseases	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Cirrhosis and other chronic liver diseases due to hepatitis B, compensated	Asymptomatic		
Cirrhosis and other chronic liver diseases due to hepatitis B,	Decompensated cirrhosis of the liver	has a swollen belly and swollen legs. The person feels	0.178
decompensated Cirrhosis and other chronic liver diseases due to hepatitis C,	•	weakness, fatigue and loss of appetite. has a swollen belly and swollen legs. The person feels	(0.123–0.25) 0.178
decompensated	Decompensated cirrhosis of the liver	weakness, fatigue and loss of appetite.	(0.123–0.25)
Cirrhosis and other chronic liver diseases due to hepatitis C, compensated	Asymptomatic		
Cirrhosis and other chronic liver diseases due to alcohol, compensated	Asymptomatic	-	
Cirrhosis and other chronic liver diseases due to alcohol, decompensated	Decompensated cirrhosis of the liver	has a swollen belly and swollen legs. The person feels weakness, fatigue and loss of appetite.	0.178 (0.123–0.25)
Cirrhosis and other chronic liver diseases due to other cause, compensated	Asymptomatic	-	
Cirrhosis and other chronic liver diseases due to other cause, decompensated	Decompensated cirrhosis of the liver	has a swollen belly and swollen legs. The person feels weakness, fatigue and loss of appetite.	0.178 (0.123–0.25)
Severe anemia due to peptic ulcer disease	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209
Moderate symptomatic peptic ulcer disease with mild anemia	Moderate abdominal pain with mild anemia	(combined DW)	0.118 (0.081–0.163
Moderate symptomatic peptic ulcer disease with moderate anemia	Moderate abdominal pain with moderate anemia	(combined DW)	0.16 (0.109–0.22)
Moderate symptomatic peptic ulcer disease without anemia	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159
Mild anemia due to peptic ulcer disease	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008
Asymptomatic peptic ulcer disease without anemia	Asymptomatic		
Mild symptomatic peptic ulcer disease with severe anemia	Mild abdominal pain with severe anemia	(combined DW)	
Moderate anemia due to peptic ulcer disease	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076
Moderate symptomatic peptic ulcer disease with severe anemia	Mild abdominal pain with severe anemia	(combined DW)	
Asymptomatic peptic ulcer disease with moderate anemia	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076
Asymptomatic peptic ulcer disease with severe anemia	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209
Mild symptomatic peptic ulcer disease without anemia	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021
Mild symptomatic peptic ulcer disease with moderate anemia	Mild abdominal pain with moderate anemia	(combined DW)	
Asymptomatic peptic ulcer disease with mild anemia	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008
Mild symptomatic peptic ulcer disease with mild anemia	Mild abdominal pain with mild anemia	(combined DW)	
Mild anemia due to gastritis and duodenitis	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008
Mild symptomatic gastritis and duodenitis with moderate anemia	Mild abdominal pain with moderate anemia	(combined DW)	
Asymptomatic gastritis and duodenitis with moderate anemia	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076
Moderate symptomatic gastritis and duodenitis with severe anemia	Moderate abdominal pain with severe anemia	(combined DW)	0.246 (0.171–0.334
Moderate anemia due to gastritis and duodenitis	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076
Asymptomatic gastritis and duodenitis without anemia	Asymptomatic		
Moderate symptomatic gastritis and duodenitis with moderate anemia	Moderate abdominal pain with moderate anemia	(combined DW)	0.16 (0.109–0.22)
Asymptomatic gastritis and duodenitis with mild anemia	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008

Appendix Table 6. GBD 2016 sequelae, health states	s, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Asymptomatic gastritis and duodenitis with severe anemia	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Mild symptomatic gastritis and duodenitis without anemia	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not	0.011 (0.005-0.021)
Mild symptomatic gastritis and duodenitis with severe anemia	Mild abdominal pain with severe anemia	interfere with daily activities. (combined DW)	
Severe anemia due to gastritis and duodenitis	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep	0.149 (0.101–0.209)
Mild symptomatic gastritis and duodenitis with mild anemia	Mild abdominal pain with mild anemia	concentration. (combined DW)	
			0.118
Moderate symptomatic gastritis and duodenitis with mild anemia	Moderate abdominal pain with mild anemia	(combined DW) has pain in the belly and feels nauseous. The person has	(0.081–0.163) 0.114
Moderate symptomatic gastritis and duodenitis without anemia	Abdominopelvic problem, moderate	difficulties with daily activities.	(0.078-0.159)
Appendicitis	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Paralytic ileus and intestinal obstruction	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Asymptomatic inguinal, femoral, and abdominal hernia	Asymptomatic		
Mild symptomatic inguinal, femoral and abdominal hernia	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not	0.011
Moderate symptomatic inguinal, femoral and abdominal hernia	Abdominopelvic problem, moderate	interfere with daily activities. has pain in the belly and feels nauseous. The person has	(0.005–0.021) 0.114
Moderate symptomatic ingunia, remotal and addominal nerma		difficulties with daily activities. has severe pain in the belly and feels nauseous. The person is	(0.078–0.159) 0.324
Severe symptomatic inguinal, femoral and abdominal hernia	Abdominopelvic problem, severe	anxious and unable to carry out daily activities.	(0.22-0.442)
Asymptomatic Crohn's disease	Asymptomatic		
Asymptomatic ulcerative colitis	Asymptomatic	 has cramping abdominal pain, has diarrhea several times a	
Ulcerative colitis	Crohn disease or ulcerative colitis	day, and feels very tired for two months every year. When the person does not have symptoms, there is anxiety about them returning.	0.231 (0.156–0.32)
Crohn's disease	Crohn disease or ulcerative colitis	has cramping abdominal pain, has diarrhea several times a day, and feels very tired for two months every year. When the person does not have symptoms, there is anxiety about them returning.	0.231 (0.156–0.32)
Vascular intestinal disorders	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Asymptomatic gallbladder and biliary diseases	Asymptomatic		
Severe symptomatic episodes gallbladder and biliary diseases	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is	0.324
Mild symptomatic episodes gallbladder and biliary diseases	Abdominopelvic problem, mild	anxious and unable to carry out daily activities. has some pain in the belly that causes nausea but does not interfere with daily activities.	(0.22–0.442) 0.011 (0.005–0.021)
Moderate symptomatic episodes gallbladder and biliary diseases	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Moderate pancreatitis episodes	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has	0.114
		difficulties with daily activities. has some pain in the belly that causes nausea but does not	(0.078-0.159) 0.011
Mild pancreatitis episodes	Abdominopelvic problem, mild	interfere with daily activities.	(0.005-0.021)
Severe pancreatitis episodes	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Other digestive diseases	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Severe Alzheimer disease and other dementias	Dementia, severe	has complete memory loss; no longer recognizes close family	0.449
Mild Alzheimer disease and other dementias	Dementia, mild	members; and requires help with all daily activities. has some trouble remembering recent events, and finds it	(0.304–0.595) 0.069
Moderate Alzheimer disease and other dementias	Dementia, moderate	hard to concentrate and make decisions and plans. has memory problems and confusion, feels disoriented, at times hears voices that are not real, and needs help with	(0.046–0.099) 0.377
Mild Parkinson disease	Parkinson disease, mild	some daily activities. has mild tremors and moves a little slowly, but is able to	(0.252–0.508) 0.01
		walk and do daily activities without assistance. has moderate tremors and moves slowly, which causes some	(0.005-0.019)
Moderate Parkinson disease	Parkinson disease, moderate	difficulty in walking and daily activities. The person has some trouble swallowing, talking, sleeping, and	0.267 (0.181–0.372)
Severe Parkinson disease	Parkinson disease, severe	has severe tremors and moves very slowly, which causes great difficulty in walking and daily activities. The person falls easily and has a lot of difficulty talking, swallowing, sleeping, and remembering things.	0.575 (0.396–0.73)
Severe epilepsy	Epilepsy, seizures >= once a month	has sudden seizures one or more times each month, with violent muscle contractions and stiffness, loss of consciousness, and loss of urine or bowel control. Between seizures the person has memory loss and difficulty concentrating.	0.552 (0.375–0.71)
Less severe epilepsy	Epilepsy, seizures 1-11 per year	has sudden seizures two to five times a year, with violent muscle contractions and stiffness, loss of consciousness, and loss of urine or bowel control.	0.263 (0.173–0.367)

	, health state lay descriptions, and disa Health state name	Health state lay description	Disability weigl
Sequela	incann State name	has a chronic disease that requires medication every day and	Disability weigh
Seizure-free, treated epilepsy	Generic uncomplicated disease: worry and daily medication	causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Mild multiple sclerosis	Multiple sclerosis, mild	has mild loss of feeling in one hand, is a little unsteady while walking, has slight loss of vision in one eye, and often needs to urinate urgently.	0.183 (0.124–0.253)
Severe multiple sclerosis	Multiple sclerosis, severe	has slurred speech and difficulty swallowing. The person has weak arms and hands, very limited and stiff leg movement, has loss of vision in both eyes and cannot control urinating.	0.719 (0.534–0.858)
Moderate multiple sclerosis	Multiple sclerosis, moderate	needs help walking, has difficulty with writing and arm coordination, has loss of vision in one eye and cannot control urinating.	0.463 (0.313–0.613)
Asymptomatic multiple sclerosis	Asymptomatic		
Severe respiratory problems and speech problems due to motor neuron disease	Severe respiratory and speech problems	(combined DW)	0.438 (0.304–0.581)
Moderate respiratory problems and speech problems due to motor neuron disease	Moderate respiratory and speech problems	(combined DW)	0.265 (0.184–0.36)
Mild respiratory problems and speech problems due to motor neuron disease	Mild respiratory and speech problems	(combined DW)	0.069 (0.043–0.106)
Severe motor impairment and speech problems due to motor neuron disease	Severe motor impairment and speech problems	(combined DW)	0.432 (0.306–0.572)
Moderate motor impairment and speech problems due to motor neuron disease	Moderate motor impairment and speech problems	(combined DW)	0.109 (0.071-0.158)
Mild motor impairment and speech problems due to motor neuron disease	Mild motor impairment and speech problems	(combined DW)	0.061 (0.038-0.094)
Severe motor impairment and severe respiratory problems due to motor neuron disease	Severe motor impairment and severe respiratory problems	(combined DW)	0.641 (0.47–0.796)
Severe motor impairment and mild respiratory problems due to motor neuron disease	Severe motor impairment and mild respiratory problems	(combined DW)	0.413 (0.286-0.553)
Moderate motor impairment, severe respiratory problems, and speech problems due to motor neuron disease	Moderate motor impairment with severe respiratory problems and speech problems	(combined DW)	0.472 (0.339–0.611)
Moderate motor impairment and severe respiratory problems due to motor neuron disease	Moderate motor impairment and severe respiratory problems	(combined DW)	0.414 (0.281–0.559)
Moderate motor impairment and moderate respiratory problems due to motor neuron disease	Moderate motor impairment and moderate respiratory problems	(combined DW)	0.233 (0.16-0.322)
Moderate motor impairment and mild respiratory problems due to	Moderate motor impairment and mild respiratory	(combined DW)	0.029 (0.015-0.051)
	problems Mild motor impairment and severe respiratory	(combined DW)	0.443
neuron disease Mild motor impairment and mild respiratory problems due to motor	problems Mild motor impairment and mild respiratory	(combined DW)	(0.311–0.587) 0.079
neuron disease Severe motor impairment, severe respiratory problems, and speech	problems Severe motor impairment with severe respiratory	(combined DW)	(0.05–0.117) 0.659
problems due to motor neuron disease Severe motor impairment, moderate respiratory problems, and	problems and speech problems Severe motor impairment with moderate	(combined DW)	(0.495–0.809) 0.557
speech problems due to motor neuron disease Severe motor impairment and moderate respiratory problems due to	respiratory problems and speech problems Severe motor impairment and moderate respiratory		(0.412–0.705) 0.534
motor neuron disease	problems	(combined DW)	(0.382-0.685)
Moderate motor impairment due to motor neuron disease	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Moderate motor impairment, mild respiratory problems, and speech problems due to motor neuron disease	Moderate motor impairment with mild respiratory problems and speech problems	(combined DW)	0.126 (0.081–0.183)
Mild respiratory problems due to motor neuron disease	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011–0.033)
Severe respiratory problems due to motor neuron disease	COPD and other chronic respiratory problems, severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances	0.408
Moderate respiratory problems due to motor neuron disease	COPD and other chronic respiratory problems, moderate	or climbing any stairs, feels tired when at rest, and is has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only	0.225
Mild motor impairment due to motor neuron disease	Motor impairment, mild	short distances or climb only a few stairs. has some difficulty in moving around but is able to walk	0.01
Mild motor impairment, mild respiratory problems, and speech	Mild motor impairment with mild respiratory	without help. (combined dw)	(0.005-0.019)
problems due to motor neuron disease Mild motor impairment, moderate respiratory problems, and speech	problems and speech problems Mild motor impairment with moderate respiratory	(combined dw)	(0.049–0.123 0.272 (0.101_0.260
problems due to motor neuron disease	problems and speech problems Speech problems	has difficulty speaking, and others find it difficult to understand.	(0.191–0.369) 0.051 (0.032–0.078)
Severe motor impairment due to motor neuron disease	Motor impairment, severe	is unable to move around without help, and is not able to lift	0.402
Diagnosis of motor neuron disease	Generic uncomplicated disease: anxiety about	or hold objects, get dressed or sit upright. has a disease diagnosis that causes some worry but minimal	(0.268-0.545 0.012
Severe motor impairment, mild respiratory problems, and speech	diagnosis Severe motor impairment with mild respiratory	interference with daily activities. (combined DW)	(0.006–0.023 0.443
problems due to motor neuron disease Moderate motor impairment, moderate respiratory problems, and	problems and speech problems Moderate motor impairment with moderate		(0.316–0.58) 0.309
speech problems due to motor neuron disease	respiratory problems and speech problems	(combined DW)	(0.221-0.414
Mild motor impairment, severe respiratory problems and speech problems due to motor neuron disease	Mild motor impairment with severe respiratory problems and speech problems	(combined DW)	0.444 (0.311–0.585)
Asymptomatic medication overuse headache due to migraine	Asymptomatic		

## Appendix Table 6. GBD 2016 sequelae, health states, health state lay descriptions, and disability weights

Appendix Table 6. GBD 2016 sequelae, health states			
Sequela	Health state name	Health state lay description	Disability weight
Symptomatic migraine	Headache, migraine	has severe, throbbing head pain and nausea that cause great difficulty in daily activities and sometimes confine the person to bed. Moving around, light, and noise make it worse.	0.441 (0.294–0.588)
Symptomatic medication overuse headache due to migraine	Headache, medication overuse	has daily headaches, felt as dull pain and often lasting all day, with poor sleep, nausea and fatigue. The person takes medicine for the headaches, which provides little relief but is needed to avoid having worse symptoms.	0.223 (0.146–0.313)
Asymptomatic migraine	Asymptomatic		
Symptomatic medication overuse headache due to tension-type headache	Headache, medication overuse	has daily headaches, felt as dull pain and often lasting all day, with poor sleep, nausea and fatigue. The person takes medicine for the headaches, which provides little relief but is needed to avoid having worse symptoms.	0.223 (0.146–0.313)
Asymptomatic medication overuse headache due to tension-type headache	Asymptomatic		
Asymptomatic tension-type headache	Asymptomatic		
Symptomatic tension-type headache	Headache, tension-type	has a moderate headache that also affects the neck, which causes difficulty in daily activities.	0.037 (0.022–0.057)
Other neurological disorders	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Guillain-Barré syndrome due to other neurological disorders	Spinal cord lesion below neck level (treated)	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. The person uses a wheelchair to move around.	0.296 (0.198–0.414)
Schizophrenia acute state	Schizophrenia, acute state	hears and sees things that are not real and is afraid, confused, and sometimes violent. The person has great difficulty with communication and daily activities, and sometimes wants to harm or kill himself (or herself).	0.778 (0.606–0.9)
Schizophrenia residual state	Schizophrenia, residual state	hears and sees things that are not real and has trouble communicating. The person can be forgetful, has difficulty with daily activities, and thinks about hurting himself (or	0.588 (0.411–0.754)
Very mild alcohol dependence	Alcohol use disorder, very mild	drinks alcohol daily and has difficulty controlling the urge to drink. When sober, the person functions normally.	0.123 (0.082–0.177)
Severe fetal alcohol syndrome	Fetal alcohol syndrome, severe	is very slow in developing physically and mentally, which causes great difficulty in daily activities.	0.179 (0.119–0.257)
Mild alcohol dependence	Alcohol use disorder, mild	drinks a lot of alcohol and sometimes has difficulty controlling the urge to drink. While intoxicated, the person has difficulty performing daily activities.	0.235 (0.16–0.327)
Moderate fetal alcohol syndrome	Fetal alcohol syndrome, moderate	is slow in developing physically and mentally, which causes some difficulty in daily activities.	0.056 (0.035–0.083)
Asymptomatic fetal alcohol syndrome	Asymptomatic		
Asymptomatic alcohol dependence	Asymptomatic		
Mild fetal alcohol syndrome	Fetal alcohol syndrome, mild	is a little slow in developing physically and mentally, which causes some difficulty in learning but no other difficulties in daily activities.	0.016 (0.008–0.03)
Severe alcohol dependence	Alcohol use disorder, severe	gets drunk almost every day and is unable to control the urge to drink. Drinking and recovering replace most daily activities. The person has difficulty thinking, remembering and communicating, and feels constant pain and fatigue.	0.57 (0.396–0.732)
Moderate alcohol dependence	Alcohol use disorder, moderate	drinks a lot, gets drunk almost every week and has great difficulty controlling the urge to drink. Drinking and recovering cause great difficulty in daily activities, sleep loss,	0.373 (0.248–0.508)
Asymptomatic opioid dependence	Asymptomatic		
Severe opioid dependence	Heroin and other opioid dependence	uses heroin daily and has difficulty controlling the habit. When the effects wear off, the person feels severe nausea, agitation, vomiting and fever. The person has a lot of difficulty in daily activities.	0.697 (0.51–0.843)
Mild opioid dependence	Heroin and other opioid dependence, mild	uses heroin (or methadone)Â daily and has difficulty controlling the habit. When not using, the person functions normally.	0.335 (0.221–0.473)
Mild cocaine dependence	Cocaine dependence, mild	uses cocaine at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.	0.116 (0.074–0.165)
Asymptomatic cocaine dependence	Asymptomatic		
Severe cocaine dependence	Cocaine dependence	uses cocaine and has difficulty controlling the habit. The person sometimes has mood swings, anxiety, paranoia, hallucinations and sleep problems, and has some difficulty in daily activities.	0.479 (0.324–0.634)
Severe amphetamine dependence	Amphetamine dependence	uses stimulants (drugs) and has difficulty controlling the habit. The person sometimes has depression, hallucinations and mood swings, and has difficulty in daily activities.	0.486 (0.329–0.637)
Mild amphetamine dependence	Amphetamine dependence, mild	uses stimulants (drugs) at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.	0.079 (0.051–0.114)
Asymptomatic amphetamine dependence	Asymptomatic		
Asymptomatic cannabis dependence	Asymptomatic		
Mild cannabis dependence	Cannabis dependence, mild	uses marijuana at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.	0.039 (0.024–0.06)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Severe cannabis dependence	Cannabis dependence	uses marijuana daily and has difficulty controlling the habit. The person sometimes has mood swings, anxiety and hallucinations, and has some difficulty in daily activities.	0.266 (0.178–0.364)
Other drug use disorders	Cocaine dependence, mild	uses cocaine at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.	0.116 (0.074–0.165)
Severe major depressive disorder	Major depressive disorder, severe episode	has overwhelming, constant sadness and cannot function in daily life. The person sometimes loses touch with reality and wants to harm or kill himself (or herself).	0.658 (0.477–0.807)
Moderate major depressive disorder	Major depressive disorder, moderate episode	has constant sadness and has lost interest in usual activities. The person has some difficulty in daily life, sleeps badly, has trouble concentrating, and sometimes thinks about harming himself (or herself).	0.396 (0.267–0.531)
Major depressive disorder, currently without symptoms	Asymptomatic		
Mild major depressive disorder	Major depressive disorder, mild episode	feels persistent sadness and has lost interest in usual activities. The person sometimes sleeps badly, feels tired, or has trouble concentrating but still manages to function in daily life with extra effort.	0.145 (0.099–0.209)
Dysthymia, currently without symptoms	Asymptomatic		
Symptomatic dysthymia	Major depressive disorder, mild episode	feels persistent sadness and has lost interest in usual activities. The person sometimes sleeps badly, feels tired, or has trouble concentrating but still manages to function in daily life with extra effort.	0.145 (0.099–0.209)
Bipolar disorder manic state	Bipolar disorder, manic episode	is hyperactive, hears and believes things that are not real, and engages in impulsive and aggressive behavior that endanger the person and others.	0.492 (0.341–0.646)
Bipolar disorder residual state	Bipolar disorder, residual state	has mild mood swings, irritability and some difficulty with daily activities.	0.032 (0.018-0.051)
Bipolar disorder depressive state	Major depressive disorder, moderate episode	has constant sadness and has lost interest in usual activities. The person has some difficulty in daily life, sleeps badly, has trouble concentrating, and sometimes thinks about harming himself (or herself).	0.396 (0.267–0.531)
Anxiety disorders, currently without symptoms	Asymptomatic		
Moderate anxiety disorders	Anxiety disorders, moderate	feels anxious and worried, which makes it difficult to concentrate, remember things, and sleep. The person tires easily and finds it difficult to perform daily activities.	0.133 (0.091–0.186)
Severe anxiety disorders	Anxiety disorders, severe	constantly feels very anxious and worried, which makes it difficult to concentrate, remember things and sleep. The person has lost pleasure in life and thinks about suicide.	0.523 (0.362–0.677)
Mild anxiety disorders	Anxiety disorders, mild	feels mildly anxious and worried, which makes it slightly difficult to concentrate, remember things, and sleep. The person tires easily but is able to perform daily activities.	0.03 (0.018–0.046)
Anorexia nervosa	Anorexia nervosa	feels an overwhelming need to starve and exercises excessively to lose weight. The person is very thin, weak and anxious.	0.224 (0.15–0.312)
Bulimia nervosa	Bulimia nervosa	has uncontrolled overeating followed by guilt, starving, and vomiting to lose weight.	0.223 (0.149–0.311)
Autism with profound intellectual disability	Autism with profound intellectual disability	(combined DW)	
Autism with moderate intellectual disability	Autism with moderate intellectual disability	(combined DW)	
Autism with mild intellectual disability	Autism with mild intellectual disability	(combined DW)	
Autism with borderline intellectual disability	Autism with borderline intellectual disability	(combined DW)	
Autism without intellectual disability	Autism without intellectual disability	(combined DW)	
Autism with severe intellectual disability Asperger syndrome and other autistic spectrum disorders	Autism with severe intellectual disability Asperger syndrome	(combined DW) has difficulty interacting with other people, and is slow to understand or respond to questions. The person is often preoccupied with one thing and has some difficulty with basic daily activities.	 0.104 (0.071–0.147)
Symptomatic attention-deficit/hyperactivity disorder	Attention deficit hyperactivity disorder	is hyperactive and has difficulty concentrating, remembering things, and completing tasks.	0.045 (0.028–0.066)
Attention-deficit/hyperactivity disorder, currently without symptoms	Asymptomatic		(0.028-0.000)
Symptomatic conduct disorder	Conduct disorder	has frequent behavior problems, which are sometimes violent. The person often has difficulty interacting with other people and feels irritable.	0.241 (0.159–0.341)
Conduct disorder, currently without symptoms	Asymptomatic		
Mild idiopathic developmental intellectual disability	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Borderline idiopathic developmental intellectual disability	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Profound idiopathic developmental intellectual disability	Intellectual disability / mental retardation, profound	has very low intelligence, has almost no language, and does not understand even the most basic requests or instructions. The person requires constant supervision and help for all activities.	0.2 (0.133–0.283)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Moderate idiopathic developmental intellectual disability	Intellectual disability / mental retardation, moderate	has low intelligence, and is slow in learning to speak and to do even simple tasks. As an adult, the person requires a lot of support to live independently and raise children. The person can only work at the simplest supervised jobs.	0.1 (0.066–0.142)
Severe idiopathic developmental intellectual disability	Intellectual disability / mental retardation, severe	has very low intelligence and cannot speak more than a few words, needs constant supervision and help with most daily activities, and can do only the simplest tasks.	0.16 (0.107–0.226)
Other mental disorders, currently without symptoms	Asymptomatic		
Moderate other mental disorders	Anxiety disorders, moderate	feels anxious and worried, which makes it difficult to concentrate, remember things, and sleep. The person tires easily and finds it difficult to perform daily activities.	0.133 (0.091–0.186)
Severe other mental disorders	Anxiety disorders, severe	constantly feels very anxious and worried, which makes it difficult to concentrate, remember things and sleep. The person has lost pleasure in life and thinks about suicide.	0.523 (0.362–0.677)
Mild other mental disorders	Anxiety disorders, mild	feels mildly anxious and worried, which makes it slightly difficult to concentrate, remember things, and sleep. The person tires easily but is able to perform daily activities.	0.03 (0.018–0.046)
Moderate vision impairment due to diabetes mellitus	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces or objects across a room.	0.031 (0.019–0.049)
Diabetic foot due to neuropathy	Diabetic neuropathy with diabetic foot		
Severe vision impairment due to diabetes mellitus	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Diabetic neuropathy	Diabetic neuropathy	has pain, tingling and numbness in the arms, legs, hands and feet. The person sometimes gets cramps and muscle weakness.	0.133 (0.089–0.187)
Uncomplicated diabetes mellitus	Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.	0.049 (0.031–0.072)
Diabetic neuropathy and amputation with treatment	Diabetic neuropathy with treated amputation		
Diabetic neuropathy and amputation without treatment	Diabetic neuropathy with untreated amputation		
Blindness due to diabetes mellitus	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124–0.26)
Acute glomerulonephritis	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Stage V chronic kidney disease untreated and severe anemia due to diabetes mellitus	Severe anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.631 (0.456–0.782)
End-stage renal disease after transplant due to diabetes mellitus	End-stage renal disease, with kidney transplant	sometimes feels tired and down, and has some difficulty with	0.024
Stage IV chronic kidney disease untreated without anemia due to diabetes mellitus	Chronic kidney disease (stage IV)	daily activities. tires easily, has nausea, reduced appetite and difficulty sleeping.	(0.014-0.039) 0.104 (0.07-0.147)
Stage III chronic kidney disease and severe anemia due to diabetes mellitus	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Stage III chronic kidney disease and mild anemia due to diabetes mellitus	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Stage IV chronic kidney disease untreated and mild anemia due to diabetes mellitus	Mild anemia with Stage IV CKD		
Stage III chronic kidney disease without anemia due to diabetes mellitus	Asymptomatic		
Stage IV chronic kidney disease untreated and moderate anemia due to diabetes mellitus	Moderate anemia with Stage IV CKD		
Stage V chronic kidney disease untreated without anemia due to diabetes mellitus	Terminal phase, without medication (for cancers, end-stage kidney/liver disease)	has lost a lot of weight and has constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.569 (0.389–0.727)
Stage IV chronic kidney disease untreated and severe anemia due to diabetes mellitus	Severe anemia with Stage IV CKD		
Stage V chronic kidney disease untreated and moderate anemia due to diabetes mellitus	Moderate anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.591 (0.414–0.743)
End-stage renal disease on dialysis due to diabetes mellitus	End-stage renal disease, on dialysis	is tired and has itching, cramps, headache, joint pains and shortness of breath. The person needs intensive medical care every other day lasting about half a day.	0.571 (0.398–0.725)
Stage V chronic kidney disease untreated and mild anemia due to diabetes mellitus	Mild anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.57 (0.391–0.727)
Stage III chronic kidney disease and moderate anemia due to diabetes mellitus	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Stage IV chronic kidney disease untreated and moderate anemia due to hypertension	Moderate anemia with Stage IV CKD		
Stage III chronic kidney disease without anemia due to hypertension	Asymptomatic		
Stage V chronic kidney disease untreated and moderate anemia due to hypertension	Moderate anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.591 (0.414–0.743)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Stage V chronic kidney disease untreated and severe anemia due to hypertension	Severe anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.631 (0.456–0.782)
End-stage renal disease on dialysis due to hypertension	End-stage renal disease, on dialysis	is tired and has itching, cramps, headache, joint pains and shortness of breath. The person needs intensive medical care every other day lasting about half a day.	0.571 (0.398–0.725)
Stage V chronic kidney disease untreated and mild anemia due to hypertension	Mild anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.57 (0.391–0.727)
Stage III chronic kidney disease and mild anemia due to hypertension	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Stage IV chronic kidney disease untreated and severe anemia due to hypertension	Severe anemia with Stage IV CKD		
Stage IV chronic kidney disease untreated without anemia due to hypertension	Chronic kidney disease (stage IV)	tires easily, has nausea, reduced appetite and difficulty sleeping.	0.104 (0.07–0.147)
Stage V chronic kidney disease untreated without anemia due to hypertension	Terminal phase, without medication (for cancers, end-stage kidney/liver disease)	has lost a lot of weight and has constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.569 (0.389–0.727)
Stage III chronic kidney disease and severe anemia due to hypertension	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Stage IV chronic kidney disease untreated and mild anemia due to hypertension	Mild anemia with Stage IV CKD		
End-stage renal disease after transplant due to hypertension	End-stage renal disease, with kidney transplant	sometimes feels tired and down, and has some difficulty with daily activities.	0.024 (0.014–0.039)
Stage III chronic kidney disease and moderate anemia due to hypertension	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
End-stage renal disease after transplant due to glomerulonephritis	End-stage renal disease, with kidney transplant	sometimes feels tired and down, and has some difficulty with daily activities.	0.024 (0.014–0.039)
Stage IV chronic kidney disease untreated without anemia due to glomerulonephritis	Chronic kidney disease (stage IV)	tires easily, has nausea, reduced appetite and difficulty sleeping.	0.104 (0.07–0.147)
Stage V chronic kidney disease untreated and moderate anemia due to glomerulonephritis	Moderate anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.591 (0.414–0.743)
Stage III chronic kidney disease and moderate anemia due to glomerulonephritis	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Stage III chronic kidney disease and severe anemia due to glomerulonephritis	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Stage III chronic kidney disease and mild anemia due to glomerulonephritis	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Stage III chronic kidney disease without anemia due to glomerulonephritis	Asymptomatic		
Stage V chronic kidney disease untreated and mild anemia due to glomerulonephritis	Mild anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.57 (0.391–0.727)
Stage IV chronic kidney disease untreated and severe anemia due to glomerulonephritis	Severe anemia with Stage IV CKD		
Stage IV chronic kidney disease untreated and moderate anemia due to glomerulonephritis	Moderate anemia with Stage IV CKD		
Stage V chronic kidney disease untreated and severe anemia due to glomerulonephritis	Severe anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.631 (0.456–0.782)
Stage V chronic kidney disease untreated without anemia due to glomerulonephritis	Terminal phase, without medication (for cancers, end-stage kidney/liver disease)	has lost a lot of weight and has constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.569 (0.389–0.727)
Stage IV chronic kidney disease untreated and mild anemia due to glomerulonephritis	Mild anemia with Stage IV CKD		
End-stage renal disease on dialysis due to glomerulonephritis	End-stage renal disease, on dialysis	is tired and has itching, cramps, headache, joint pains and shortness of breath. The person needs intensive medical care every other day lasting about half a day.	0.571 (0.398–0.725)
Stage V chronic kidney disease untreated without anemia due to other causes	Terminal phase, without medication (for cancers, end-stage kidney/liver disease)	has lost a lot of weight and has constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.	0.569 (0.389–0.727)
Stage III chronic kidney disease without anemia due to other causes	Asymptomatic		
Stage IV chronic kidney disease untreated without anemia due to other causes	Chronic kidney disease (stage IV)	tires easily, has nausea, reduced appetite and difficulty sleeping.	0.104 (0.07–0.147)
Stage III chronic kidney disease and mild anemia due to other causes	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Stage IV chronic kidney disease untreated and mild anemia due to other causes	Mild anemia with Stage IV CKD		
Stage III chronic kidney disease and moderate anemia due to other causes	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Stage IV chronic kidney disease untreated and moderate anemia due to other causes	Moderate anemia with Stage IV CKD		
Stage V chronic kidney disease untreated and moderate anemia due to other causes	Moderate anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.591 (0.414–0.743)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Stage III chronic kidney disease and severe anemia due to other causes	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep	0.149 (0.101–0.209)
Stage IV chronic kidney disease untreated and severe anemia due to other causes	Severe anemia with Stage IV CKD		
End-stage renal disease after transplant due to other causes	End-stage renal disease, with kidney transplant	sometimes feels tired and down, and has some difficulty with daily activities.	0.024 (0.014–0.039)
Stage V chronic kidney disease untreated and severe anemia due to other causes	Severe anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.631 (0.456–0.782)
Stage V chronic kidney disease untreated and mild anemia due to other causes	Mild anemia and terminal phase, without medication (for cancers, end-stage kidney/liver disease)	(combined DW)	0.57 (0.391–0.727)
End-stage renal disease on dialysis due to other causes	End-stage renal disease, on dialysis	is tired and has itching, cramps, headache, joint pains and shortness of breath. The person needs intensive medical care every other day lasting about half a day.	0.571 (0.398–0.725)
Mild interstitial nephritis and urinary tract infections	Infectious disease, acute episode, mild	has a low fever and mild discomfort , but no difficulty with daily activities.	0.006 (0.002–0.012)
Moderate interstitial nephritis and urinary tract infections	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Moderate urolithiasis episodes	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Severe urolithiasis episodes	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is	0.324
		anxious and unable to carry out daily activities. has some pain in the belly that causes nausea but does not	(0.22–0.442) 0.011
Mild urolithiasis episodes	Abdominopelvic problem, mild	interfere with daily activities.	(0.005-0.021)
Symptomatic benign prostatic hyperplasia	Benign prostatic hypertrophy, symptomatic cases	feels the urge to urinate frequently, but when passing urine it comes out slowly and sometimes is painful.	0.067 (0.043–0.097)
Asymptomatic benign prostatic hyperplasia	Asymptomatic		
Primary male infertility	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008 (0.003-0.015)
Secondary male infertility	Infertility, secondary	has at least one child, and wants to have more children. The person has a fertile partner, but the couple cannot conceive.	0.005 (0.002–0.011)
Other urinary diseases	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Asymptomatic uterine fibroids	Asymptomatic		
Mild abdominal pain due to uterine fibroids, with severe anemia	Mild abdominal pain with severe anemia	(combined DW)	
Mild abdominal pain due to uterine fibroids, with moderate anemia	Mild abdominal pain with moderate anemia	(combined DW)	
Mild abdominal pain due to uterine fibroids, without anemia	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Mild abdominal pain due to uterine fibroids, with mild anemia	Mild abdominal pain with mild anemia	(combined DW)	
Secondary infertility due to polycystic ovarian syndrome	Disfigurement level 1 and secondary infertility	(combined DW)	
Hirsutism due to polycystic ovarian syndrome	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005–0.021)
Hirsutism and secondary infertility due to polycystic ovarian syndrome	Infertility, secondary	has at least one child, and wants to have more children. The person has a fertile partner, but the couple cannot conceive.	0.005 (0.002–0.011)
Asymptomatic polycystic ovarian syndrome	Asymptomatic		
Hirsutism and primary infertility due to polycystic ovarian syndrome	Disfigurement level 1 and primary infertility	(combined DW)	
Primary infertility due to polycystic ovarian syndrome	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008 (0.003-0.015)
Idiopathic secondary female infertility	Infertility, secondary	has at least one child, and wants to have more children. The person has a fertile partner, but the couple cannot conceive.	0.005 (0.002–0.011)
Idiopathic primary female infertility	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008
Mild abdominal pain and secondary infertility due to endometriosis	Mild abdominal pain and secondary infertility	(combined DW)	(0.003–0.015)
Moderate abdominal pain and secondary infertility due to	Moderate abdominal pain and secondary infertility	(combined DW)	
endometriosis			
Severe abdominal pain and secondary infertility due to endometriosis		(combined DW) has severe pain in the belly and feels nauseous. The person is	0.324
Severe endometriosis	Abdominopelvic problem, severe	anxious and unable to carry out daily activities.	(0.22-0.442)
Primary infertility due to endometriosis	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008 (0.003–0.015)
Secondary infertility due to endometriosis	Infertility, secondary	has at least one child, and wants to have more children. The person has a fertile partner, but the couple cannot conceive.	0.005 (0.002–0.011)
Moderate abdominal pain due to endometriosis	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Asymptomatic endometriosis	Asymptomatic		/
Severe abdominal pain and primary infertility due to endometriosis	Severe abdominal pain and primary infertility	(combined DW)	
Mild abdominal pain due to endometriosis	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Moderate abdominal pain and primary intertility due to endometricsis	Moderate abdominal pain and primary infertility	(combined DW)	
Mild abdominal pain and primary infertility due to endometriosis	Mild abdominal pain and primary infertility	(combined DW)	
		has some pain in the belly that causes nausea but does not	0.011

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	<b>~ ^</b> /	Health state lay description	Disability weight
Asymptomatic genital prolapse	Asymptomatic		
Abdominal pain and stress incontinence due to genital prolapse	Mild abdominal pain and stress incontinence	(combined DW)	
Stress incontinence due to genital prolapse	Stress incontinence	loses small amounts of urine without meaning to when coughing, sneezing, laughing or during physical exercise.	0.02 (0.011-0.035)
Abdominal pain due to premenstrual syndrome	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not	0.011
Asymptomatic premenstrual syndrome	Asymptomatic	interfere with daily activities.	(0.005-0.021)
Asymptomate premensular syndione	•	feels persistent sadness and has lost interest in usual	
Depression due to premenstrual syndrome	Major depressive disorder, mild episode	activities. The person sometimes sleeps badly, feels tired, or has trouble concentrating but still manages to function in daily life with extra effort.	0.145 (0.099–0.209)
Abdominal pain and depression due to premenstrual syndrome	Mild abdominal pain and mild depression	(combined DW)	
Severe other gynecological disorders	Abdominopelvic problem, severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.	0.324 (0.22–0.442)
Mild other gynecological disorders	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005-0.021)
Moderate anemia due to other gynecological diseases	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Moderate other gynecological disorders	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Severe anemia due to other gynecological diseases	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Asymptomatic other gynecological disorders	Asymptomatic		
Mild anemia due to other gynecological diseases	Anemia mild	feels slightly tired and weak at times, but this does not	0.004
	Anemia, moderate; Generic uncomplicated disease	interfere with normal daily activities.	(0.001-0.008)
Beta-thalassemia major, with moderate anemia	anxiety		
Asymptomatic and mild heart failure due to thalassemias	Heart failure mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062)
Moderate heart failure due to thalassemias	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103)
Hemoglobin E/beta-thalassemia, with moderate anemia	Anemia, moderate; Generic uncomplicated disease anxiety		
Hemoglobin H disease, with moderate anemia	Anemia, moderate; Generic uncomplicated disease anxiety		
Hemoglobin H disease, severe infection with severe anemia	Infectious disease, acute episode, severe; Generic uncomplicated disease anxiety; Anemia, severe		
Beta-thalassemia major, with severe anemia	Anemia, severe; Generic uncomplicated disease anxiety		
Hemoglobin E/beta-thalassemia, with severe anemia	Anemia, severe; Generic uncomplicated disease anxiety		
Beta-thalassemia major, severe infection with severe anemia	Infectious disease, acute episode, severe; Generic uncomplicated disease anxiety; Anemia, severe		
Hemoglobin H disease, with mild anemia	Anemia, mild; Generic uncomplicated disease anxiety		
Hemoglobin E/beta-thalassemia, severe infection with severe anemia	Infectious disease, acute episode, severe; Generic uncomplicated disease anxiety; Anemia, severe		
Hemoglobin E/Beta-thalassemia, without anemia		has a disease diagnosis that causes some worry but minimal interference with daily activities.	0.012 (0.006-0.023)
Hemoglobin E/beta-thalassemia, with mild anemia	Anemia, mild; Generic uncomplicated disease anxiety		
Beta-thalassemia major, with mild anemia	Anemia, mild; Generic uncomplicated disease		
Beta-thalassemia major, without anemia	anxiety Generic uncomplicated disease: anxiety about diagnosis	has a disease diagnosis that causes some worry but minimal interference with daily activities.	0.012 (0.006-0.023)
Hemoglobin H disease, without anemia	Generic uncomplicated disease: anxiety about	has a disease diagnosis that causes some worry but minimal interference with daily activities.	0.006-0.023) 0.012 (0.006-0.023)
Severe heart failure due to thalassemias	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251)
Hemoglobin H disease, with severe anemia	Anemia, severe; Generic uncomplicated disease anxiety		
Moderate anemia due to B-thalassemia trait	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076)
Asymptomatic B-thalassemia trait	Asymptomatic		
Asymptomatic hemoglobin E trait	Asymptomatic		
Moderate anemia due to hemoglobin E trait	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath	0.052
Mild anemia due to B-thalassemia trait	Anemia, mild	after exercise, making daily activities more difficult. feels slightly tired and weak at times, but this does not interfere with normal daily activities	(0.034-0.076) 0.004 (0.001, 0.008)
Mild anemia due to hemoglobin E trait	Anemia, mild	interfere with normal daily activities. feels slightly tired and weak at times, but this does not	(0.001–0.008) 0.004
and alonna due to nemogrouni E trait	, menina, mina	interfere with normal daily activities.	(0.001-0.008)

## Appendix Table 6. GBD 2016 sequelae, health states, health state lay descriptions, and disability weights

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
		feels very weak, tired and short of breath, and has problems	0.149
Severe anemia due to hemoglobin E trait	Anemia, severe	with activities that require physical effort or deep	(0.101-0.209)
		concentration. feels very weak, tired and short of breath, and has problems	
Severe anemia due to B-thalassemia trait	Anemia, severe	with activities that require physical effort or deep	0.149
		concentration.	(0.101-0.209)
Homozygous sickle cell and severe sickle cell/beta-thalassemia,	Generic uncomplicated disease: anxiety about	has a disease diagnosis that causes some worry but minimal	0.012
without anemia	diagnosis	interference with daily activities.	(0.006-0.023)
Hemoglobin SC disease, without anemia	Generic uncomplicated disease: anxiety about diagnosis	has a disease diagnosis that causes some worry but minimal interference with daily activities.	0.012 (0.006-0.023)
	Generic uncomplicated disease: anxiety about	has a disease diagnosis that causes some worry but minimal	0.012
Mild sickle cell/beta-thalassemia, without anemia	diagnosis	interference with daily activities.	(0.006-0.023)
Hemoglobin SC disease, with vaso-occlusive crisis, stroke, and	Generic uncomplicated disease anxiety; long-term		
severe anemia	consequences due to stroke; severe		
	abdominopelvic problem; Anemia, severe Generic uncomplicated disease anxiety; long-term		
Mild sickle cell/beta-thalassemia, with vaso-occlusive crisis, stroke,	consequences due to stroke; severe		
and severe anemia	abdominopelvic problem; Anemia, severe		
Mild sickle cell/beta-thalassemia, with stroke, without anemia	Generic uncomplicated disease anxiety; long-term		
	consequences due to stroke		
Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	Generic uncomplicated disease anxiety; long-term consequences due to stroke; severe		
vaso-occlusive crisis and stroke, without anemia	abdominopelvic problem		
Hemoglobin SC disease, with vaso-occlusive crisis and stroke,	Generic uncomplicated disease anxiety; long-term		
without anemia	consequences due to stroke; severe		
	abdominopelvic problem		
Mild sickle cell/beta-thalassemia, with vaso-occlusive crisis and	Generic uncomplicated disease anxiety; long-term consequences due to stroke; severe		
stroke, without anemia	abdominopelvic problem	_	
Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	Moderate abdominal pain; Anemia, severe;		
vaso-occlusive crisis and severe anemia	Generic uncomplicated disease anxiety		
Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	Anemia, mild; Generic uncomplicated disease		
mild anemia	anxiety Generic uncomplicated disease anxiety; long-term		
Hemoglobin SC disease, with stroke, without anemia	consequences due to stroke		
Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	Generic uncomplicated disease anxiety; long-term		
stroke, without anemia	consequences due to stroke		
Mild sickle cell/beta-thalassemia, with vaso-occlusive crisis, without	Generic uncomplicated disease anxiety and severe		
anemia	abdominopelvic problem Generic uncomplicated disease anxiety and severe		
Hemoglobin SC disease, with vaso-occlusive crisis, without anemia	abdominopelvic problem		
Hemoglobin SC disease, with vaso-occlusive crisis and severe	Moderate abdominal pain; Anemia, severe;		
anemia	Generic uncomplicated disease anxiety		
Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	Anemia, severe; Generic uncomplicated disease		
severe anemia	anxiety Anemia, severe; Generic uncomplicated disease		
Hemoglobin SC disease, with severe anemia	anxiety		
Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	Generic uncomplicated disease anxiety; Long-		
stroke and severe anemia	term consequences due to stroke; Anemia, severe	-	
Hemoglobin SC disease, with stroke and severe anemia	Generic uncomplicated disease anxiety; Long- term consequences due to stroke; Anemia, severe		
	Anemia, mild; Generic uncomplicated disease		
Hemoglobin SC disease, with mild anemia	anxiety		
Mild sickle cell/beta-thalassemia, with vaso-occlusive crisis and	Moderate abdominal pain; Anemia, severe;		
severe anemia	Generic uncomplicated disease anxiety		
Mild sickle cell/beta-thalassemia, with mild anemia	Anemia, mild; Generic uncomplicated disease anxiety		
	Anemia, severe; Generic uncomplicated disease		
Mild sickle cell/beta-thalassemia, with severe anemia	anxiety		
Mild sickle cell/beta-thalassemia, with moderate anemia	Anemia, moderate; Generic uncomplicated disease		
which seekle eens beta uhalassenha, which moderate allenha	anxiety		
Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	Generic uncomplicated disease anxiety; long-term consequences due to stroke; severe		
vaso-occlusive crisis, stroke, and severe anemia	abdominopelvic problem; Anemia, severe		
Hannalshin CC diasaa anith madamta anamia	Anemia, moderate; Generic uncomplicated disease		
Hemoglobin SC disease, with moderate anemia	anxiety		
Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	Anemia, moderate; Generic uncomplicated disease		
moderate anemia Homozygous sickle cell and severe sickle cell/beta-thalassemia, with	anxiety Generic uncomplicated disease anxiety and severa		
vaso-occlusive crisis, without anemia	abdominopelvic problem		
	Generic uncomplicated disease anxiety; Long-		
Mild sickle cell/beta-thalassemia, with stroke and severe anemia	term consequences due to stroke; Anemia, severe		
Asymptomatic sickle cell trait	Asymptomatic		
Moderate anemia due to sickle cell trait	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath	0.052
and the second control of the second se		after exercise, making daily activities more difficult.	(0.034-0.076)
Mild anemia due to sickle cell trait	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
		feels very weak, tired and short of breath, and has problems	
Severe anemia due to sickle cell trait	Anemia, severe	with activities that require physical effort or deep	0.149 (0.101–0.209)
		concentration.	(0.101-0.209)

Appendix Table 6. GBD 2016 sequelae, health states	Health state name		Disability mai-
Sequela	Health state name	Health state lay description	Disability weight
Asymptomatic and mild heart failure due to G6PD deficiency	Heart failure, mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062)
Mild anemia due to G6PD deficiency	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008)
Severe heart failure due to G6PD deficiency	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251)
Severe anemia due to G6PD deficiency	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209)
Asymptomatic G6PD deficiency	Asymptomatic		
Moderate heart failure due to G6PD deficiency	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103)
Moderate anemia due to G6PD deficiency	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076
Mild anemia due to hemizygous G6PD deficiency	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008
Severe anemia due to hemizygous G6PD deficiency	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209
Moderate anemia due to hemizygous G6PD deficiency	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076
Asymptomatic hemizygous G6PD deficiency	Asymptomatic		
Mild anemia due to other hemoglobinopathies and hemolytic anemias	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001-0.008
Other hemoglobinopathies and hemolytic anemias	Post-COMO calculation for residuals (YLL/YLD ratio, other methods)		
Severe heart failure due to other hemoglobinopathies and hemolytic anemias	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251)
Asymptomatic and mild heart failure due to other hemoglobinopathies and hemolytic anemias	Heart failure, mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062
Moderate heart failure due to other hemoglobinopathies and hemolytic anemias	Heart failure, moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103
Moderate anemia due to other hemoglobinopathies and hemolytic anemias	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076
Severe anemia due to other hemoglobinopathies and hemolytic anemias	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209
Severe anemia due to endocrine, metabolic, blood, and immune disorders	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101–0.209
Asymptomatic endocrine, metabolic, blood, and immune disorders	Asymptomatic		
Severe endocrine, metabolic, blood, and immune disorders	Thrombocytopenic purpura	easily bruises and sometimes bleeds from the gums and nose; feels weak and has some difficulty with daily activities. is short of breath and easily tires with minimal physical	0.159 (0.106–0.226
Moderate heart failure due to endocrine, metabolic, blood, and immune disorders	Heart failure, moderate	activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.	0.072 (0.047–0.103
Asymptomatic and mild heart failure due to endocrine, metabolic, blood, and immune disorders	Heart failure, mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.	0.041 (0.026–0.062
Mild anemia due to endocrine, metabolic, blood, and immune disorders	Anemia, mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.	0.004 (0.001–0.008
Mild endocrine, metabolic, blood, and immune disorders	Hypothyroidism	has low energy and feels cold.	0.019 (0.01–0.032)
Moderate anemia due to endocrine, metabolic, blood, and immune disorders	Anemia, moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.	0.052 (0.034–0.076
Severe heart failure due to endocrine, metabolic, blood, and immune disorders	Heart failure, severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.	0.179 (0.122–0.251
Moderate endocrine, metabolic, blood, and immune disorders	Hyperthyroidism	feels nervous, has palpitations, sweats a lot and has difficulty sleeping.	0.145 (0.096–0.202
Moderate rheumatoid arthritis	Musculoskeletal problems, generalized, moderate	has pain and deformity in most joints, causing difficulty moving around, getting up and down, and using the hands for lifting and carrying. The person often feels fatigue.	0.317 (0.216–0.44)
Mild rheumatoid arthritis	Musculoskeletal problems, upper limbs, moderate	has moderate pain and stiffness in the arms and hands, which causes difficulty lifting, carrying, and holding things, and trouble sleeping because of the pain.	0.117 (0.08–0.163)
Severe rheumatoid arthritis	Musculoskeletal problems, generalized, severe	has severe, constant pain and deformity in most joints, causing difficulty moving around, getting up and down, eating, dressing, lifting, carrying and using the hands. The person often feels sadness, anxiety and extreme fatigue.	0.581 (0.403–0.739

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
		has moderate pain in the leg, which makes the person limp,	0.079
Moderate osteoarthritis of the knee	Musculoskeletal problems, lower limbs, moderate	and causes some difficulty walking, standing, lifting and carrying heavy things, getting up and down and sleeping.	(0.054–0.11)
		has severe pain in the leg, which makes the person limp and	0.165
Severe osteoarthritis of the hip	Musculoskeletal problems, lower limbs, severe	causes a lot of difficulty walking, standing, lifting and carrying heavy things, getting up and down, and sleeping.	(0.112-0.232)
		has severe pain in the leg, which makes the person limp and	0.165
Severe osteoarthritis of the knee	Musculoskeletal problems, lower limbs, severe	causes a lot of difficulty walking, standing, lifting and carrying heavy things, getting up and down, and sleeping.	(0.112-0.232)
Mild osteoarthritis of the knee	Musculoskeletal problems, lower limbs, mild	has pain in the leg, which causes some difficulty running,	0.023 (0.013–0.037)
		walking long distances, and getting up and down. has moderate pain in the leg, which makes the person limp,	0.079
Moderate osteoarthritis of the hip	Musculoskeletal problems, lower limbs, moderate	and causes some difficulty walking, standing, lifting and carrying heavy things, getting up and down and sleeping.	(0.054-0.11)
Mild osteoarthritis of the hip	Musculoskeletal problems, lower limbs, mild	has pain in the leg, which causes some difficulty running,	0.023
-	-	walking long distances, and getting up and down. has mild back pain, which causes some difficulty dressing,	(0.013–0.037) 0.02
Mild low back pain without leg pain	Low back pain, mild	standing, and lifting things.	(0.011-0.035)
Moderate low back pain without leg pain	Low back pain, moderate	has moderate back pain, which causes difficulty dressing, sitting, standing, walking, and lifting things.	0.054 (0.035-0.079)
		has constant back and leg pain, which causes difficulty	
Most severe low back pain with leg pain	Back pain, most severe, with leg pain	dressing, sitting, standing, walking, and lifting things. The person sleeps poorly, is worried, and has lost some	0.384 (0.256-0.518)
		enjoyment in life.	(0.250 0.510)
Most severe low back pain without leg pain	Back pain, most severe, without leg pain	has constant back pain, which causes difficulty dressing, sitting, standing, walking, and lifting things. The person	0.372
most se tere is a caan pain maisar ng pain	Daen pain, most severe, winnen reg pain	sleeps poorly, is worried, and has lost some enjoyment in life.	(0.25-0.506)
Severe low back pain with leg pain	Back pain, severe, with leg pain	has severe back and leg pain, which causes difficulty dressing, sitting, standing, walking, and lifting things. The	0.325
	Duck pain, se vere, whit leg pain	person sleeps poorly and feels worried.	(0.219–0.446)
Severe low back pain without leg pain	Back pain, severe, without leg pain	has severe back pain, which causes difficulty dressing, sitting, standing, walking, and lifting things. The person	0.272
servere for ouer pain white a feg pain	Dien pain, se vere, wantour reg pain	sleeps poorly and feels worried.	(0.182–0.373)
Mild low back pain with leg pain	Mild low back pain with leg pain	(combined DW)	0.02 (0.011-0.035)
Moderate low back pain with leg pain	Moderate low back pain with leg pain	(combined DW)	0.054
	I GI	has severe neck pain, and difficulty turning the head and	(0.035-0.079)
Severe neck pain	Neck pain, severe	lifting things. The person gets headaches and arm pain,	0.229 (0.153-0.317)
		sleeps poorly, and feels tired and worried. has constant neck pain and arm pain, and difficulty turning	
Most severe neck pain	Neck pain, most severe	the head, holding arms up, and lifting things. The person gets	0.304 (0.202–0.415)
		headaches, sleeps poorly, and feels tired and worried. has constant neck pain, and has difficulty turning the head,	0.114
Moderate neck pain	Neck pain, moderate	holding arms up, and lifting things	(0.075-0.162)
Mild neck pain	Neck pain, mild	has neck pain, and has difficulty turning the head and lifting things.	0.053 (0.034–0.078)
Asymptomatic gout	Asymptomatic		
		has severe, constant pain and deformity in most joints, causing difficulty moving around, getting up and down,	0.581
Polyarticular gout	Musculoskeletal problems, generalized, severe	eating, dressing, lifting, carrying and using the hands. The	(0.403–0.739)
		person often feels sadness, anxiety and extreme fatigue. has severe pain and swelling in the leg, making it very	
Symptomatic episodes of gout	Gout, acute	difficult to get up and down, stand, walk, lift, and carry	0.295 (0.196-0.409)
		heavy things. The person has trouble sleeping because of the has pain and deformity in most joints, causing difficulty	
Other musculoskeletal disorders severity level 5	Musculoskeletal problems, generalized, moderate	moving around, getting up and down, and using the hands	0.317 (0.216–0.44)
		for lifting and carrying. The person often feels fatigue. has severe pain in the leg, which makes the person limp and	
Other musculoskeletal disorders severity level 4	Musculoskeletal problems, lower limbs, severe	causes a lot of difficulty walking, standing, lifting and	0.165 (0.112-0.232)
		carrying heavy things, getting up and down, and sleeping. has severe, constant pain and deformity in most joints,	(000000)
Other musculoskeletal disorders severity level 6	Musculoskeletal problems, generalized, severe	causing difficulty moving around, getting up and down,	0.581
		eating, dressing, lifting, carrying and using the hands. The person often feels sadness, anxiety and extreme fatigue.	(0.403–0.739)
Asymptomatic other musculoskeletal disorders	Asymptomatic		
Other mucculoskelatal disordars squarity lavel 2	Musculoskalatal problems upper limbs moderate	has moderate pain and stiffness in the arms and hands, which	0.117
Other musculoskeletal disorders severity level 3	Musculoskeletal problems, upper limbs, moderate	causes difficulty lifting, carrying, and holding things, and trouble sleeping because of the pain.	(0.08–0.163)
Other musculoskeletal disorders severity level 2	Musculoskeletal problems, upper limbs, mild	has mild pain and stiffness in the arms and hands. The person	
Other musculoskelatal disordars squarity lavel 1	Musculoskalatal problems lower limbs mild	has some difficulty lifting, carrying and holding things. has pain in the leg, which causes some difficulty running,	(0.017–0.045) 0.023
Other musculoskeletal disorders severity level 1	Musculoskeletal problems, lower limbs, mild	walking long distances, and getting up and down.	(0.013-0.037)
Severe motor impairment, severe intellectual disability and incontinence due to spina bifida	Severe motor impairment with severe intellectual disability and incontinence	(combined DW)	0.564 (0.418–0.71)
Severe motor impairment, moderate intellectual disability and incontinence due to spina bifida	Severe motor impairment with moderate intellectual disability and incontinence	(combined DW)	0.534 (0.391–0.675)
Severe motor impairment, moderate intellectual disability and	Severe motor impairment with moderate	(combined DW)	0.534
incontinence due to encephalocele	intellectual disability and incontinence	(contailed D ii )	(0.391-0.675)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Severe motor impairment, borderline intellectual disability and	Severe motor impairment, borderline intellectual	(combined DW)	0.489
incontinence due to encephalocele	functioning, and urinary incontinence		(0.353-0.632)
Severe motor impairment, profound intellectual disability and incontinence due to encephalocele	Severe motor impairment with severe intellectual disability and incontinence	(combined DW)	0.564 (0.418-0.71)
Severe motor impairment, mild intellectual disability and	Severe motor impairment with mild intellectual	(combined DW)	0.505
incontinence due to encephalocele	disability and incontinence	(combined DW)	(0.367-0.647)
profound motor impairment, profound intellectual disability and	Severe motor impairment with profound	(combined DW)	0.584
incontinence due to spina bifida Severe motor impairment and mild intellectual disability due to spina	intellectual disability and incontinence Severe motor impairment with mild intellectual		(0.435–0.73) 0.427
bifida	disability	(combined DW)	(0.3-0.567)
Severe motor impairment and mild intellectual disability due to	Severe motor impairment with mild intellectual	(combined DW)	0.427
encephalocele	disability		(0.3–0.567)
Severe motor impairment, severe intellectual disability and incontinence due to encephalocele	Severe motor impairment with severe intellectual disability and incontinence	(combined DW)	0.564 (0.418-0.71)
Severe motor impairment, mild intellectual disability and	Severe motor impairment with mild intellectual	(combined DW)	0.505
incontinence due to spina bifida	disability and incontinence	(comonied Dw)	(0.367–0.647)
Mild motor impairment and incontinence due to spina bifida	Mild motor impairment and urinary incontinence	(combined DW)	0.148 (0.1-0.207)
Mild motor impairment, severe intellectual disability and	Mild motor impairment, servere intellectual		0.284
incontinence due to encephalocele	functioning, and urinary incontinence	(combined DW)	(0.201-0.385)
Moderate motor impairment, severe intellectual disability and	Moderate motor impairment, servere intellectual	(combined DW)	0.32
incontinence due to spina bifida Moderate motor impairment, severe intellectual disability and	functioning, and urinary incontinence Moderate motor impairment, servere intellectual		(0.228–0.429) 0.32
incontinence due to encephalocele	functioning, and urinary incontinence	(combined DW)	(0.228–0.429)
Severe motor impairment and moderate intellectual disability due to	Severe motor impairment with moderate	(combined DW)	0.461
spina bifida	intellectual disability	(	(0.324-0.603)
Mild motor impairment and incontinence due to encephalocele	Mild motor impairment and urinary incontinence	(combined DW)	0.148 (0.1-0.207)
Moderate motor impairment and incontinence due to spina bifida	Moderate motor impairment and urinary	(combined DW)	0.191
motor impairment and moontmence due to spina offida	incontinence		(0.132-0.263)
Moderate motor impairment and incontinence due to encephalocele	Moderate motor impairment and urinary incontinence	(combined DW)	0.191 (0.132–0.263)
Mild motor impairment, profound intellectual disability and	Mild motor impairment, profound intellectual		0.318
incontinence due to spina bifida	functioning, and urinary incontinence	(combined DW)	(0.224–0.426)
Moderate motor impairment, profound intellectual disability and	Mild motor impairment, profound intellectual	(combined DW)	0.318
incontinence due to encephalocele Mild motor impairment and profound intellectual disability due to	functioning, and urinary incontinence Mild motor impairment with profound intellectual		(0.224–0.426) 0.208
spina bifida	disability	(combined DW)	(0.142-0.289)
Mild motor impairment, severe intellectual disability and	Mild motor impairment, servere intellectual	(combined DW)	0.284
incontinence due to spina bifida Severe motor impairment and moderate intellectual disability due to	functioning, and urinary incontinence Severe motor impairment with moderate		(0.201–0.385) 0.461
encephalocele	intellectual disability	(combined DW)	(0.324-0.603)
Severe motor impairment and profound intellectual disability due to	Severe motor impairment with profound	(combined DW)	0.519
spina bifida	intellectual disability		(0.37–0.668)
Severe motor impairment and severe intellectual disability due to encephalocele	Severe motor impairment with severe intellectual disability	(combined DW)	0.496 (0.355–0.641)
Severe motor impairment, borderline intellectual disability and	Severe motor impairment, borderline intellectual	(combined DW)	0.489
incontinence due to spina bifida	functioning, and urinary incontinence	(combined Dw)	(0.353–0.632)
Mild motor impairment, mild intellectual disability and incontinence due to encephalocele	Mild motor impairment, mild intellectual functioning, and urinary incontinence	(combined DW)	0.184 (0.128-0.253)
Moderate motor impairment, borderline intellectual disability and	Moderate motor impairment, borderline		0.2
incontinence due to encephalocele	intellectual functioning, and urinary incontinence	(combined DW)	(0.139-0.273)
Moderate motor impairment, borderline intellectual disability and incontinence due to spina bifida	Moderate motor impairment, borderline	(combined DW)	0.2
Mild motor impairment, borderline intellectual disability and	intellectual functioning, and urinary incontinence Mild motor impairment, borderline intellectual		(0.139–0.273) 0.157
incontinence due to encephalocele	functioning, and urinary incontinence	(combined DW)	(0.108–0.218)
Mild motor impairment, borderline intellectual disability and	Mild motor impairment, borderline intellectual	(combined DW)	0.157
incontinence due to spina bifida Moderate motor impairment and severe intellectual disability due to	functioning, and urinary incontinence Moderate motor impairment and severe		(0.108–0.218) 0.211
encephalocele	intellectual functioning	(combined DW)	(0.145-0.293)
Moderate motor impairment and severe intellectual disability due to	Moderate motor impairment and severe	(combined DW)	0.211
spina bifida Mederate motor impoirment, mild intellectual dissbility and	intellectual functioning		(0.145-0.293)
Moderate motor impairment, mild intellectual disability and incontinence due to spina bifida	Moderate motor impairment, mild intellectual functioning, and urinary incontinence	(combined DW)	0.272 (0.191–0.364)
Mild motor impairment and severe intellectual disability due to spina	<u> </u>	(combined DW)	0.169
bifida	functioning	(combined DW)	(0.113–0.237)
Mild motor impairment and moderate intellectual disability due to	Mild motor impairment and moderate intellectual	(combined DW)	0.109
encephalocele Mild motor impairment and moderate intellectual disability due to	functioning Mild motor impairment and moderate intellectual		(0.073–0.154) 0.109
spina bifida	functioning	(combined DW)	(0.073–0.154)
Moderate motor impairment and mild intellectual disability due to	Moderate motor impairment and mild intellectual	(combined DW)	0.101
encephalocele Moderate motor impairment, mild intellectual disability and	functioning Moderate motor impairment, mild intellectual		(0.066–0.146) 0.272
incontinence due to encephalocele	functioning, and urinary incontinence	(combined DW)	(0.191–0.364)
Mild motor impairment, moderate intellectual disability and	Mild motor impairment, moderate intellectual	(combined DW)	0.233
incontinence due to spina bifida	functioning, and urinary incontinence		(0.161-0.314)
Mild motor impairment, moderate intellectual disability and incontinence due to encephalocele	Mild motor impairment, moderate intellectual functioning, and urinary incontinence	(combined DW)	0.233 (0.161–0.314)
Moderate motor impairment and mild intellectual disability due to	Moderate motor impairment and mild intellectual	(combined DW)	0.101
	functioning	(combined DW)	(0.066-0.146)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Mild motor impairment, mild intellectual disability and incontinence	Mild motor impairment, mild intellectual		0.184
due to spina bifida	functioning, and urinary incontinence	(combined DW)	(0.128-0.253)
Borderline intellectual disability and incontinence due to encephalocele	Borderline intellectual functioning and urinary incontinence	(combined DW)	0.148 (0.101–0.206)
Moderate motor impairment, moderate intellectual disability and	Moderate motor impairment, moderate intellectual	(combined DW)	0.272
incontinence due to encephalocele	functioning, and urinary incontinence	(combined DW)	(0.191–0.364)
Moderate motor impairment, moderate intellectual disability and incontinence due to spina bifida	Moderate motor impairment, moderate intellectual functioning, and urinary incontinence	(combined DW)	0.272 (0.191–0.364)
	Mild intellectual disability and urinary	(combined DW)	0.176
Mild intellectual disability and incontinence due to encephalocele	incontinence	(combined DW)	(0.12-0.242)
Moderate intellectual disability and incontinence due to encephalocele	Moderate intellectual disability and urinary incontinence	(combined DW)	0.225 (0.156-0.304)
Severe motor impairment and severe intellectual disability due to	Severe motor impairment with severe intellectual	(combined DW)	0.496
spina bifida	disability	(combined DW)	(0.355-0.641)
Severe intellectual disability and incontinence due to encephalocele	Severe intellectual disability and urinary incontinence	(combined DW)	0.276 (0.194–0.376)
Mild motor impairment and borderline intellectual disability due to	Mild motor impairment and borderline intellectual	(combined DW)	0.021
spina bifida	functioning	(combined D w)	(0.01-0.039)
Mild motor impairment and borderline intellectual disability due to encephalocele	Mild motor impairment and borderline intellectual functioning	(combined DW)	0.021 (0.01-0.039)
Moderate motor impairment and borderline intellectual disability due	Moderate motor impairment and borderline	(combined DW)	0.071
to spina bifida	intellectual functioning	(combined D w)	(0.045-0.106)
Moderate motor impairment and borderline intellectual disability due to encephalocele	Moderate motor impairment and borderline intellectual functioning	(combined DW)	0.071 (0.045–0.106)
Severe motor impairment and borderline intellectual disability due to	Severe motor impairment and borderline	(combined DW)	0.408
spina bifida	intellectual functioning	(combined D w)	(0.279–0.55)
Severe motor impairment and borderline intellectual disability due to encephalocele	Severe motor impairment and borderline intellectual functioning	(combined DW)	0.408 (0.279–0.55)
Profound intellectual disability and incontinence due to	Profound intellectual disability and urinary	(combined DW)	0.311
encephalocele	incontinence		(0.217-0.418)
Mild motor impairment and severe intellectual disability due to encephalocele	Mild motor impairment and severe intellectual functioning	(combined DW)	0.169 (0.113-0.237)
Moderate motor impairment, profound intellectual disability and	Moderate motor impairment with profound	(combined DW)	0.352
incontinence due to spina bifida	intellectual disability and incontinence		(0.254-0.465)
Moderate intellectual disability due to encephalocele	Intellectual disability / mental retardation, moderate	has low intelligence, and is slow in learning to speak and to do even simple tasks. As an adult, the person requires a lot of support to live independently and raise children. The person can only work at the simplest supervised jobs.	0.1 (0.066–0.142)
Incontinence due to encephalocele	Urinary incontinence	cannot control urinating.	0.139 (0.094–0.198)
Moderate motor impairment due to spina bifida	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Moderate motor impairment due to encephalocele	Motor impairment, moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.	0.061 (0.04–0.089)
Borderline intellectual disability due to encephalocele	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Severe motor impairment and incontinence due to spina bifida	Severe motor impairment with incontinence	(combined DW)	
Severe motor impairment and incontinence due to encephalocele	Severe motor impairment with incontinence	(combined DW)	
Mild motor impairment and profound intellectual disability due to	Severe motor impairment with incontinence	(combined DW)	
encephalocele	severe motor impariment with meonunchee		
Moderate motor impairment and profound intellectual disability due to encephalocele	Severe motor impairment with incontinence	(combined DW)	
Severe motor and cognitive impairment due to anencephaly	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374–0.702)
Severe motor impairment and profound intellectual disability due to encephalocele	Severe motor impairment with incontinence	(combined DW)	
Mild intellectual disability due to encephalocele	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Moderate motor impairment and moderate intellectual disability due to encephalocele	Motor plus cognitive impairments, moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.	0.203 (0.134–0.29)
Mild motor impairment and mild intellectual disability due to encephalocele	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Mild motor impairment and mild intellectual disability due to spina bifida	Motor plus cognitive impairments, mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018–0.05)
Severe motor impairment due to encephalocele	Motor impairment, severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.	0.402 (0.268–0.545)

Sequela	Health state name	Health state lay description	Disability weight
Severe motor impairment due to spina bifida	Motor impairment, severe	is unable to move around without help, and is not able to lift	0.402
severe motor impairment due to spina orida	Notor impairment, severe	or hold objects, get dressed or sit upright.	(0.268-0.545)
Profound intellectual disability due to encephalocele	Intellectual disability / mental retardation, profound	has very low intelligence, has almost no language, and does not understand even the most basic requests or instructions. The person requires constant supervision and help for all activities.	0.2 (0.133–0.283)
Moderate motor impairment and profound intellectual disability due to spina bifida	Moderate motor impairment with profound intellectual disability	(combined DW)	0.249 (0.174–0.338)
Severe intellectual disability due to encephalocele	Intellectual disability / mental retardation, severe	has very low intelligence and cannot speak more than a few words, needs constant supervision and help with most daily activities, and can do only the simplest tasks.	0.16 (0.107–0.226)
Mild motor impairment, profound intellectual disability and incontinence due to encephalocele	Severe motor impairment with incontinence	(combined DW)	
Mild motor impairment due to spina bifida	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Asymptomatic encephalocele following treatment	Asymptomatic		
Mild motor impairment due to encephalocele	Motor impairment, mild	has some difficulty in moving around but is able to walk without help.	0.01 (0.005–0.019)
Moderate motor impairment and moderate intellectual disability due to spina bifida	Motor plus cognitive impairments, moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.	0.203 (0.134–0.29)
Congenital heart disease, boderline intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, borderline intellectual functioning, and mild heart failure	(combined DW)	0.052 (0.032–0.081)
Congenital heart disease, boderline intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, borderline intellectual functioning, and mild heart failure	(combined DW)	0.052 (0.032–0.081)
Congenital heart disease, boderline intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, borderline intellectual functioning, and mild heart failure	(combined DW)	0.052 (0.032–0.081)
Congenital heart disease, severe intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, severe intellectual disability, and moderate heart failure	(combined DW)	0.22 (0.151–0.302)
Congenital heart disease, borderline intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, borderline intellectual functioning, and moderate heart failure	(combined DW)	0.082 (0.053–0.12)
Congenital heart disease, borderline intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, borderline intellectual functioning, and moderate heart failure	(combined DW)	0.082 (0.053–0.12)
Congenital heart disease, borderline intellectual disability and moderate heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, borderline intellectual functioning, and moderate heart failure	(combined DW)	0.082 (0.053–0.12)
heart failure due to single ventricle and single ventricle pathway	Congenital heart disease, borderline intellectual functioning, and mild heart failure	(combined DW)	0.052 (0.032–0.081)
Congenital heart disease, borderline intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease,borderline intellectual functioning, and severe heart failure	(combined DW)	0.188 (0.13–0.258)
Congenital heart disease, borderline intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease,borderline intellectual functioning, and severe heart failure	(combined DW)	0.188 (0.13–0.258)
Congenital heart disease, borderline intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease,borderline intellectual functioning, and severe heart failure	(combined DW)	0.188 (0.13–0.258)
failure due to single ventricle and single ventricle pathway heart	Congenital heart disease, mild intellectual disability, and mild heart failure	(combined DW)	0.082 (0.052-0.121)
Congenital heart disease, mild intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single	Congenital heart disease, mild intellectual disability, and mild heart failure	(combined DW)	0.082 (0.052-0.121)
ventricle heart defects Congenital heart disease, borderline intellectual disability and moderate heart failure due to single ventricle and single ventricle	Congenital heart disease, borderline intellectual	(combined DW)	0.082
pathway heart defects Congenital heart disease, borderline intellectual disability and severe heart failure due to single ventricle and single ventricle pathway	functioning, and moderate heart failure Congenital heart disease,borderline intellectual	(combined DW)	(0.053–0.12) 0.188
heart defects Congenital heart disease and severe heart failure without intellectual	functioning, and severe heart failure Congenital heart disease and severe heart failure	(combined DW)	(0.13–0.258) 0.179
disability due to severe congenital heart anomalies excluding single ventricle heart defects Congenital heart disease and severe heart failure without intellectual	congential near cusease and severe near failure		(0.122–0.251)
disability due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease and severe heart failure	(combined DW)	0.179 (0.122–0.251)
Congenital heart disease, severe intellectual disability and moderate heart failure due to single ventricle and single ventricle pathway heart defects	Congenital heart disease, severe intellectual disability, and moderate heart failure	(combined DW)	0.22 (0.151–0.302)
Congenital heart disease, profound intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, profound intellectual disability, and severe heart failure	(combined DW)	0.342 (0.239–0.457)
Congenital heart disease, profound intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, profound intellectual disability, and severe heart failure	(combined DW)	0.342 (0.239–0.457)
Congenital heart disease, profound intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, profound intellectual disability, and severe heart failure	(combined DW)	0.342 (0.239–0.457)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Congenital heart disease, profound intellectual disability and severe heart failure due to single ventricle and single ventricle pathway heart defects	Congenital heart disease, profound intellectual disability, and severe heart failure	(combined DW)	0.342 (0.239–0.457)
moderate heart failure due to ventricular septal defect and atrial	Congenital heart disease, profound intellectual disability, and moderate heart failure	(combined DW)	0.257 (0.181–0.351)
Congenital heart disease, profound intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, profound intellectual disability, and moderate heart failure	(combined DW)	0.257 (0.181–0.351)
Congenital heart disease, profound intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, profound intellectual disability, and moderate heart failure	(combined DW)	0.257 (0.181–0.351)
Congenital heart disease, profound intellectual disability and moderate heart failure due to single ventricle and single ventricle pathway heart defects	Congenital heart disease, profound intellectual disability, and moderate heart failure	(combined DW)	0.257 (0.181–0.351)
Congenital heart disease, profound intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect Congenital heart disease, profound intellectual disability and mild	Congenital heart disease, profound intellectual disability, and mild heart failure	(combined DW)	0.233 (0.162–0.317)
heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, profound intellectual disability, and mild heart failure	(combined DW)	0.233 (0.162–0.317)
Congenital heart disease, profound intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects congentar neart disease, profound menectual disability and mild	Congenital heart disease, profound intellectual disability, and mild heart failure	(combined DW)	0.233 (0.162–0.317)
heart failure due to single ventricle and single ventricle pathway	Congenital heart disease, profound intellectual disability, and mild heart failure	(combined DW)	0.233 (0.162–0.317)
Congenital heart disease, severe intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, severe intellectual disability, and severe heart failure	(combined DW)	0.31 (0.22–0.419)
Congenital heart disease, severe intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, severe intellectual disability, and severe heart failure	(combined DW)	0.31 (0.22–0.419)
Congenital heart disease, severe intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects congentar near unsease, severe memercuar unsaonny and severe	Congenital heart disease, severe intellectual disability, and severe heart failure	(combined DW)	0.31 (0.22–0.419)
heart failure due to single ventricle and single ventricle pathway	Congenital heart disease, severe intellectual disability, and severe heart failure	(combined DW)	0.31 (0.22–0.419)
Congenital heart disease, severe intellectual disability and moderate heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, severe intellectual disability, and moderate heart failure	(combined DW)	0.22 (0.151–0.302)
Congenital heart disease, severe intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, severe intellectual disability, and moderate heart failure	(combined DW)	0.22 (0.151–0.302)
Congenital heart disease and mild heart failure without intellectual disability due to single ventricle and single ventricle pathway heart defects	Congenital heart disease and mild heart failure	(combined DW)	0.041 (0.026–0.062)
Congenital heart disease and mild heart failure without intellectual disability due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease and mild heart failure	(combined DW)	0.041 (0.026–0.062)
Congenital heart disease and mild heart failure without intellectual disability due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease and mild heart failure	(combined DW)	0.041 (0.026–0.062)
Congenital heart disease and mild heart failure without intellectual disability due to ventricular septal defect and atrial septal defect	Congenital heart disease and mild heart failure	(combined DW)	0.041 (0.026–0.062)
Congenital heart disease and moderate heart failure without intellectual disability due to single ventricle and single ventricle pathway heart defects	Congenital heart disease and moderate heart failure	(combined DW)	0.072 (0.047–0.103)
Congenital heart disease and moderate heart failure without intellectual disability due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease and moderate heart failure	(combined DW)	0.072 (0.047–0.103)
Congenital heart disease and moderate heart failure without intellectual disability due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus congenital neart usease and moderate near tanuare without	Congenital heart disease and moderate heart failure	(combined DW)	0.072 (0.047–0.103)
intellectual disability due to ventricular septal defect and atrial septal	Congenital heart disease and moderate heart failure	(combined DW)	0.072 (0.047–0.103)
Congenital heart disease and severe heart failure without intellectual disability due to single ventricle and single ventricle pathway heart defects	Congenital heart disease and severe heart failure	(combined DW)	0.179 (0.122–0.251)
Congenital heart disease, mild intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, mild intellectual disability, and mild heart failure	(combined DW)	0.082 (0.052–0.121)
Congenital heart disease and severe heart without intellectual disability due to ventricular septal defect and atrial septal defect	Congenital heart disease and severe heart failure	(combined DW)	0.179 (0.122–0.251)
Congenital heart disease, mild intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, mild intellectual disability, and mild heart failure	(combined DW)	0.082
Congenital heart disease, mild intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, mild intellectual disability, and moderate heart failure	(combined DW)	0.111 (0.072–0.161)
Congenital heart disease and pitch decess decrosus Congenital heart disease, mild intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, mild intellectual disability, and moderate heart failure	(combined DW)	0.111 (0.072–0.161)
Congenital heart disease, moderate intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, moderate intellectual disability, and severe heart failure	(combined DW)	0.261 (0.182–0.352)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Congenital heart disease and mild intellectual disability without heart		incanti state lay description	
failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease and Intellectual disability / mental retardation, mild	(combined DW)	0.043 (0.026–0.064)
Congenital heart disease and mild intellectual disability without heart failure due to ventricular septal defect and atrial septal defect congenitat incare uncase, ning memocular unsaturity and moderate	Congenital heart disease and Intellectual disability / mental retardation, mild	(combined DW)	0.043 (0.026–0.064)
heart failure due to single ventricle and single ventricle pathway	Congenital heart disease, mild intellectual disability, and moderate heart failure	(combined DW)	0.111 (0.072–0.161)
Congenital heart disease, moderate intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, moderate intellectual disability, and severe heart failure	(combined DW)	0.261 (0.182–0.352)
Congenital heart disease, moderate intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, moderate intellectual disability, and severe heart failure	(combined DW)	0.261 (0.182–0.352)
Congenital heart disease and moderate intellectual disability without heart failure due to single ventricle and single ventricle pathway heart defects	Congenital heart disease and Intellectual disability / mental retardation, moderate	(combined DW)	0.1 (0.066–0.142)
failure due to single ventricle and single ventricle pathway heart	Congenital heart disease, severe intellectual disability, and mild heart failure	(combined DW)	0.195 (0.134–0.269)
Congenital heart disease, severe intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, severe intellectual disability, and mild heart failure	(combined DW)	0.195 (0.134–0.269)
Congenital heart disease, severe intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, severe intellectual disability, and mild heart failure	(combined DW)	0.195 (0.134–0.269)
Congenital heart disease and moderate intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease and Intellectual disability / mental retardation, moderate	(combined DW)	0.1 (0.066–0.142)
Congenital heart disease and moderate intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease and Intellectual disability / mental retardation, moderate	(combined DW)	0.1 (0.066–0.142)
Congenital heart disease and moderate intellectual disability without heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease and Intellectual disability / mental retardation, moderate	(combined DW)	0.1 (0.066–0.142)
Congenital heart disease and severe intellectual disability without heart failure due to other congenital cardiovascular anomalies congenitat neart disease and severe interfectual disability without	Congenital heart disease and Intellectual disability / mental retardation, severe Congenital heart disease and Intellectual disability	(combined DW)	0.16 (0.107–0.226) 0.16
heart failure due to single ventricle and single ventricle pathway	/ mental retardation, severe	(combined DW)	(0.107–0.226)
Congenital heart disease and severe intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease and Intellectual disability / mental retardation, severe	(combined DW)	0.16 (0.107–0.226)
Congenital heart disease and severe intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease and Intellectual disability / mental retardation, severe	(combined DW)	0.16 (0.107–0.226)
Congenital heart disease and severe intellectual disability without heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease and Intellectual disability / mental retardation, severe	(combined DW)	0.16 (0.107–0.226)
Congenital heart disease and profound intellectual disability without heart failure due to other congenital cardiovascular anomalies	Congenital heart disease and Intellectual disability / mental retardation, profound	(combined DW)	0.2 (0.133–0.283)
Congenital heart disease and profound intellectual disability without heart failure due to single ventricle and single ventricle pathway heart defects	Congenital heart disease and Intellectual disability / mental retardation, profound	(combined DW)	0.2 (0.133–0.283)
Congenital heart disease and profound intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease and Intellectual disability / mental retardation, profound	(combined DW)	0.2 (0.133–0.283)
Congenital heart disease and profound intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease and Intellectual disability / mental retardation, profound	(combined DW)	0.2 (0.133–0.283)
Asymptomatic ventricular septal defect and atrial septal defect	Asymptomatic		
Congenital heart disease and profound intellectual disability without heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease and Intellectual disability / mental retardation, profound	(combined DW)	0.2 (0.133–0.283)
Congenital heart disease, severe intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, severe intellectual disability, and mild heart failure	(combined DW)	0.195 (0.134–0.269)
Congenital heart disease, moderate intellectual disability and severe heart failure due to single ventricle and single ventricle pathway heart defects	Congenital heart disease, moderate intellectual disability, and severe heart failure	(combined DW)	0.261 (0.182–0.352)
Congenital heart disease and mild intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease and Intellectual disability / mental retardation, mild	(combined DW)	0.043 (0.026–0.064)
Congenital heart disease and moderate intellectual disability without	Congenital heart disease and Intellectual disability	(combined DW)	0.1
	/ mental retardation, moderate Congenital heart disease and Intellectual disability	(combined DW)	(0.066-0.142) 0.043
failure due to other congenital cardiovascular anomalies Congenital heart disease, mild intellectual disability and moderate	/ mental retardation, mild Congenital heart disease, mild intellectual		(0.026–0.064) 0.111
heart failure due to ventricular septal defect and atrial septal defect congenitar mean unsease, minu interectuar unsaonity and severe near	disability, and moderate heart failure	(combined DW)	(0.072-0.161)
failure due to single ventricle and single ventricle pathway heart	Congenital heart disease, mild intellectual disability, and servere heart failure	(combined DW)	0.214 (0.148–0.291)
Congenital heart disease, mild intellectual disability and severe heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, mild intellectual disability, and servere heart failure	(combined DW)	0.214 (0.148–0.291)
Congenital heart disease, mild intellectual disability and severe heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, mild intellectual disability, and servere heart failure	(combined DW)	0.214 (0.148–0.291)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Congenital heart disease, mild intellectual disability and severe heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, mild intellectual disability, and servere heart failure	(combined DW)	0.214 (0.148-0.291)
Congenital heart disease without intellectual disability or heart failure due to other congenital cardiovascular anomalies congenital neart unsease winnout interjectuar unsaonity or neart	Congenital heart disease	(custom DW from MEPS)	
Congenital near usease without menetual usability of near failure due to single ventricle and single ventricle pathway heart	Congenital heart disease	(custom DW from MEPS)	
Congenital heart disease and mild intellectual disability without heart failure due to single ventricle and single ventricle pathway heart	Congenital heart disease and Intellectual disability / mental retardation, mild	(combined DW)	0.043 (0.026–0.064)
defects Congenital heart disease without heart failure or intellectual disability due to critical malformations of great vessels, congenital	Congenital heart disease	(custom DW from MEPS)	
valvular heart disease and patent ductus arteriosus Congenital heart disease without heart failure or intellectual	Congenital heart disease	(custom DW from MEPS)	
disability due to ventricular septal defect and atrial septal defect congenitar neart unsease, moderate interactual unsability and initia	Congenital heart disease, moderate intellectual		0.137
heart failure due to single ventricle and single ventricle pathway Congenital heart disease and borderline intellectual disability without	disability, and mild heart failure Congenital heart disease and borderline	(combined DW)	(0.093–0.191) 0.011
heart failure due to other congenital cardiovascular anomalies	intellectual functioning	(combined DW)	(0.005-0.02)
Congenital heart disease without intellectual disability or heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease	(custom DW from MEPS)	
Congenital heart disease and borderline intellectual disability without heart failure due to severe congenital heart anomalies excluding single ventricle heart defects congenital meart unsease, inouclast interfectual unsearing and	Congenital heart disease and borderline intellectual functioning	(combined DW)	0.011 (0.005–0.02)
moderate heart failure due to ventricular septal defect and atrial	Congenital heart disease, moderate intellectual disability, and moderate heart failure	(combined DW)	0.164 (0.112–0.225)
Congenital heart disease, moderate intellectual disability and moderate heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, moderate intellectual disability, and moderate heart failure	(combined DW)	0.164 (0.112–0.225)
Congenital heart disease and borderline intellectual disability without heart failure due to single ventricle and single ventricle pathway heart defects	Congenital heart disease and borderline intellectual functioning	(combined DW)	0.011 (0.005–0.02)
Congenital heart disease, moderate intellectual disability and moderate heart failure due to single ventricle and single ventricle pathway heart defects	Congenital heart disease, moderate intellectual disability, and moderate heart failure	(combined DW)	0.164 (0.112–0.225)
Congenital heart disease, moderate intellectual disability and mild heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease, moderate intellectual disability, and mild heart failure	(combined DW)	0.137 (0.093–0.191)
Congenital heart disease, moderate intellectual disability and moderate heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, moderate intellectual disability, and moderate heart failure	(combined DW)	0.164 (0.112–0.225)
Congenital heart disease, moderate intellectual disability and mild heart failure due to severe congenital heart anomalies excluding single ventricle heart defects	Congenital heart disease, moderate intellectual disability, and mild heart failure	(combined DW)	0.137 (0.093–0.191)
Congenital heart disease and borderline intellectual disability without heart failure due to ventricular septal defect and atrial septal defect	Congenital heart disease and borderline intellectual functioning	(combined DW)	0.011 (0.005–0.02)
Congenital heart disease and borderline intellectual disability without heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease and borderline intellectual functioning	(combined DW)	0.011 (0.005–0.02)
Congenital heart disease, moderate intellectual disability and mild heart failure due to critical malformations of great vessels, congenital valvular heart disease and patent ductus arteriosus	Congenital heart disease, moderate intellectual disability, and mild heart failure	(combined DW)	0.137 (0.093–0.191)
Disfigurement level 2 and speech problems due to orofacial clefts	Speech problems with disfigurement level 2	(combined DW)	
Asymptomatic orofacial clefts	Asymptomatic		
Disfigurement level 2 due to orofacial clefts	Disfigurement, level 2	has a visible physical deformity that causes others to stare and comment. As a result, the person is worried and has trouble sleeping and concentrating.	0.067 (0.044–0.096)
Disfigurement level 1 due to orofacial clefts	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005–0.021)
Severe intellectual disability and moderate dementia due to Down syndrome	Moderate dementia, severe intellectual disability	(combined DW)	0.475 (0.34–0.614)
Profound intellectual disability and moderate dementia due to Down syndrome	Moderate dementia, profound intellectual disability	(combined DW)	0.499 (0.358–0.645)
Borderline intellectual disability and severe dementia due to Down syndrome	Severe dementia, borderline intellectual disability	(combined DW)	0.455 (0.316–0.597)
Mild intellectual disability and severe dementia due to Down syndrome	Severe dementia, mild intellectual disability	(combined DW)	0.472 (0.332–0.615)
Moderate intellectual disability and moderate dementia due to Down syndrome	Moderate dementia, moderate intellectual disability	(combined DW)	0.438 (0.311–0.576)
Severe intellectual disability and severe dementia due to Down syndrome	Severe dementia, severe intellectual disability	(combined DW)	0.535 (0.384–0.681)
Profound intellectual disability and severe dementia due to Down syndrome	Severe dementia, profound intellectual disability	(combined DW)	0.557 (0.401–0.703)
Severe intellectual disability due to Down syndrome	Intellectual disability / mental retardation, severe	has very low intelligence and cannot speak more than a few words, needs constant supervision and help with most daily activities, and can do only the simplest tasks.	0.16 (0.107–0.226)
Profound intellectual disability due to Down syndrome	Intellectual disability / mental retardation, profound	has very low intelligence, has almost no language, and does not understand even the most basic requests or instructions. The person requires constant supervision and help for all activities.	0.2 (0.133–0.283)

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Machine method method method method method method0.000Method method method method method method method0.000Method method method method method method0.000Severe method method method method method0.000Method method0.000Severe method method method method0.000Method method0.000Severe method method method method0.000Severe method method method method0.000Severe method method method method method method0.000Severe method method method method method method method method0.000Severe method method method method method method method met	Sequela			Disability weight
Notice system:All set densets, and infection of all set densets, and infection	Moderate intellectual disability and severe dementia due to Down			0.503
spaceModeraModer	•	severe dementia, moderate interfectual disability		(0.355-0.646)
synameKalakani, sowata sing bar, sowata sing bar		Moderate dementia, mild intellectual disability	(combined DW)	(0.281–0.536)
Same and conductions, worker denotes in a solution of a	Borderline intellectual disability and mild dementia due to Down	Mild dementia, borderline intellectual disability	(combined DW)	
abs besides base	Severe intellectual disability, severe dementia, and congenital heart	Congenital heart disease, severe dementia, severe	(combined DW)	
Does spokelend disclend disclend disclend disclend disc	disease due to Down syndrome		(combined Dw)	(0.384-0.681)
Done spaceissueissue issue is a constant of a formation of a f	Down syndrome		(combined DW)	(0.066–0.142)
Makes function of the second seco	Severe intellectual disability with congenital heart disease due to		(combined DW)	
datace dro Down syndomeinclication disabilitycontainal DVM0.11-1.222Down syndomeDown syndomeNormal DVM0.213 <td></td> <td></td> <td></td> <td>· ,</td>				· ,
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Mail and <b< td=""><td>heart disease due to Down syndrome</td><td>moderate intellectual disability</td><td></td><td>(0.355–0.646)</td></b<>	heart disease due to Down syndrome	moderate intellectual disability		(0.355–0.646)
Mederale intellectual disability due to Down syndromeInclicitual disability / mental returchion, nodecateInclicitual disability, / mental returchion, nodecateInclicitual disability, / mental returchion, nodecateInclicitual disability, / mental returchion, nodecateInclicitual disability, / mental returchion, nodecate, and node menta, some dimentia, mini combined DW,Inclicitual disability, / mental returchion, nodecate, and node menta, some dimentia, mini combined DW,Inclicitual disability, / mental returchion, nodecate, and node menta, some dimentia, mini combined DW,Inclicitual disability, / mental returchion, nodecate, and node menta, some dimentia, mini compental heart disease, nearee dementia, mini compental heart disease, nearee dementia	Mild intellectual disability due to Down syndrome	Intellectual disability / mental retardation, mild	с с	
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hear disease due to Down syndromebordefine intellectual disbilitycombined DW(0.316 - 0.577 0.494 - 0.544 0.344 - 0.557Congenital heart disease and severe dementia heart disease due to Down syndromeCongenital heart disease and severe dementia orrofond intellectual disbility, moderate dementia, and congenital heart disease due to Down syndromeCongenital heart disease, moderate dementia, orrofond intellectual disbility, moderate dementia, and congenital heart disease, moderate dementia, and congenital heart disease, moderate dementia, ordefarie intellectual disbility, moderate dementia, and congenital met disease, moderate dementia, moderate intellectual disbility, moderate dementia, and congenital heart disease, the to Down syndromeCongenital heart disease, moderate dementia, moderate intellectual disbility, moderate dementia, and congenital heart disease, the to Down syndromeCongenital heart disease, moderate dementia, moderate intellectual disbility, moderate dementia, and congenital heart disease, the to Down syndromeCongenital heart disease, moderate dementia, moderate dementia, moderate dementia, moderate dementia, and congenital heart disease, the to Down syndromeCongenital heart disease, moderate dementia, moderate dementia, mo	disease due to Down syndrome Borderline intellectual disability, severe dementia, and congenital	•		(0.332-0.615)
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bart disease due to Down syndromesevere intellectual disability(combined DW)(combined DW)(0.314-0.54)Borderline intellectual disability, miderate dementia, and congenital heart disease, mid dementia, hard tesine intellectual disabilityCongenital heart disease, molerate dementia, horderline intellectual disabilityCongenital heart disease, molerate dementia, horderate intellectual disability, moderate dementia, and congenital heart disease due to Down syndromeCongenital heart disease, molerate dementia, horderate intellectual disability, moderate dementia, horderate intellectual disability, moderate dementia, and congenital heart disease, molerate dementia, horderate intellectual disability, moderate intellectual disability, moderate dementia, horderate intellectual disability, moderate dementia, and congenital heart disease, due to Down syndromeCongenital heart disease, molerate dementia, horderline intellectual disability, moderate dementia, and congenital heart disease, due to Down syndromeCongenital heart disease, molerate dementia, horderline intellectual disability, molerate intellectual disability, molerate intellectual disability, molerate intellectual disability, horderline intellectual disability, molerate intellectual disability, molerate intellectual disability, molerate dementia, and congenital heart disease, due to Down syndromeCongenital heart disease, molerate dementia, molerate intellectual disability, molerate intellectu	heart disease due to Down syndrome	*		(0.358-0.645)
disease due to Down syndromeorderine intellectual disability combined DWcombined DW(0.051-0.115 combined DW)(0.051-0.115 combined DW)(0.052-0.021 combined DW)(0.052-0.021 combined DW)(0.051-0.021 combined DW)(0.051-0.021 <td>heart disease due to Down syndrome</td> <td>-</td> <td>(combined DW)</td> <td>(0.34–0.614)</td>	heart disease due to Down syndrome	-	(combined DW)	(0.34–0.614)
Modera inclicual disability moderate dementian in derivation in dementian in de	Borderline intellectual disability, mild dementia, and congenital heart	-	(combined DW)	
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Borderline intellectual disability, moderate dementia, heart disease     Congenital heart disease, moderate dementia, borderline intellectual disability     Combined DW)     0.384       Profoum intellectual disability, mild dementia, and congenital heart disease, mild dementia, profoum disease due to Down syndrome     Mild intellectual disability with congenital heart disease, mild dementia, profoum disease     Combined DW)     0.384       Borderline intellectual disability with congenital heart disease due to Down syndrome     Mild intellectual disability with congenital heart disease, mild dementia, severe     Combined DW)     0.011       Borderline intellectual disability with congenital heart disease     Borderline intellectual disability with congenital heart disease     Combined DW)     0.011       Borderline intellectual disability with congenital heart disease     Borderline intellectual disability with congenital heart disease     Combined DW)     0.011       Borderline intellectual disability and moderate dementia due to Down syndrome     Moderate dementia, borderline intellectual     Combined DW)     0.218       Borderline intellectual disability and mild dementia due to Down     Moderate dementia, profound intellectual disability     Combined DW)     0.218       Borderline intellectual disability and mild dementia due to Down     Moderate dementia, profound intellectual disability     Combined DW)     0.218       Borderline intellectual disability and mild dementia due to Down     Mild dementia, severe     Combined DW)     0.218       Borderline inte	Mild intellectual disability, mild dementia, and congenital heart		(combined DW)	
heart disease due to Down syndromebordertine intellectual disability(combined DW)(0.262-0.517 (combined DW)Profound intellectual disability, mild dementia, and congenital heart disease due to Down syndrome(D.285 (Combined DW)(D.278-0.346 (COMBINED DW)Mild intellectual disability with congenital heart disease due to Down syndromeMild intellectual disability with congenital heart disease(Combined DW)(D.178-0.346 (COMBINED DW)Borderline intellectual disability with congenital heart diseaseMild intellectual disability with congenital heart disease(Combined DW)(D.040- (COMBINED DW)Severe intellectual disability and moderate dementia due to Down syndrome(Combined DW)(D.178-0.346 (COMBINED DW)(D.178-0.346 (COMBINED DW)Borderline intellectual disability and moderate dementia due to Down syndrome(Combined DW)(Combined DW)(D.178-0.346 (COMBINED DW)Borderline intellectual disability and moderate dementia, due congenital heart disability(Combined DW)(Combined DW)(D.178-0.346 (COMBINED DW)Borderline intellectual disability and moderate dementia, due to syndromeModerate dementia, borderline intellectual disability(Combined DW)(C.178-0.346 (COMBINED DW)(D.178-0.346 (COMBINED DW)Profound intellectual disability and mild dementia due to Down syndromeCongenital heart disease, severe dementia, profound intellectual disability and mild dementia due to Down syndrome(Combined DW)(D.178-0.346 (COMBINED DW)Severe intellectual disability and mild dementia due to Down syndromeMild dementia, severe intellectual disability	•			
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syndromediseasedisease(0.022-0.004Borderline intellectual disability with congenital heart disease due to Down syndromeBorderline intellectual disability with congenital heart diseaseCombined DW)(0.001-0.002 (0.005-0.002 	Mild intellectual disability with congenital heart disease due to Down	Mild intellectual disability with congenital heart	(combined DW)	0.043
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syndrome     Mild dementia, profound intellectual disability     (combined DW)     (0.178-0.346       Severe intellectual disability and mild dementia due to Down syndrome     Mild dementia, severe intellectual disability     (combined DW)     0.218       Severe dementia due to Down syndrome     Dementia, severe intellectual disability     (combined DW)     0.218       Mild dementia, severe     Dementia, severe     members; and requires help with all daily activities.     (0.304-0.595       Mild dementia due to Down syndrome     Dementia, mild     has some trouble remembering recent events, and finds it hard to concentrate and make decisions and plans.     0.069       Moderate intellectual disability and mild dementia due to Down syndrome     Mild dementia, moderate intellectual disability     (combined DW)     0.162       0.11-0.222     0.109     0.009     0.009     0.009	heart disease due to Down syndrome	-	(combined DW)	(0.401-0.703)
Severe intellectual disability and mild dementia due to Down syndrome     Mild dementia, severe intellectual disability     combined DW)     0.218 (0.149-0.299       Severe dementia due to Down syndrome     Dementia, severe     has complete memory loss; no longer recognizes close fam members; and requires help with all daily activities.     0.449 (0.304-0.595       Mild dementia due to Down syndrome     Dementia, mild     has some trouble remembering recent events, and finds it hard to concentrate and make decisions and plans.     0.069 (0.046-0.099       Moderate intellectual disability and mild dementia due to Down syndrome     Mild dementia, moderate intellectual disability     combined DW)     0.162 (0.11-0.222)	Profound intellectual disability and mild dementia due to Down syndrome	Mild dementia, profound intellectual disability	(combined DW)	
synarome       Image: Constraint of the synarome       Image: Consynarome       <	Severe intellectual disability and mild dementia due to Down	Mild dementia, severe intellectual disability.	(combined DW)	0.218
Severe dementia due to Down syndrome     Dementia, severe     members; and requires help with all daily activities.     (0.304–0.595       Mild dementia due to Down syndrome     Dementia, mild     has some trouble remembering recent events, and finds it hard to concentrate and make decisions and plans.     0.069       Moderate intellectual disability and mild dementia due to Down syndrome     Mild dementia, moderate intellectual disability     (combined DW)     0.162       0.11-0.222     0.109     0.009	syndrome	and contentia, severe intellectual disability		(0.149–0.299)
Mild dementia due to Down syndrome     Dementia, mild     hard to concentrate and make decisions and plans.     (0.046-0.099       Moderate intellectual disability and mild dementia due to Down syndrome     Mild dementia, moderate intellectual disability     (combined DW)     0.162       0.11-0.2222     0.109	Severe dementia due to Down syndrome	Dementia, severe		(0.304–0.595)
Moderate intellectual disability and mild dementia due to Down syndrome Mild dementia, moderate intellectual disability (combined DW) (0.040-0.099 (0.140-0.099 (0.040-0.099 (0.040-0.099 (0.040-0.099 (0.040-0.099 (0.040-0.099 (0.040-0.099 (0.040-0.099 (0.040-0.099 (0.040-0.099) (0.040-0.099 (0.040-0.099) (0.04	Mild dementia due to Down syndrome	Dementia, mild		
syndrome Mild dementia, moderate intellectual disability (combined Dw) (0.11–0.222 0.109	Moderate intellectual disability and mild dementia due to Down	Mild domentic medenets intelligence discharge		
Mild intellactual disability and mild dementia due to Down syndrome Mild dementia, mild intellactual disability (acmbined DW) 0.109		wind dementia, moderate intellectual disability	(combined Dw)	(0.11-0.222)
Mild intellectual disability and mild dementia due to Down syndrome Mild dementia, mild intellectual disability (combined DW) (0.071-0.159	Mild intellectual disability and mild dementia due to Down syndrome	Mild dementia, mild intellectual disability	(combined DW)	0.109 (0.071–0.159)

Appendix Table 6. GBD 2016 sequelae, health states, health state lay descriptions, and disability weights			
Sequela	Health state name	Health state lay description	Disability weight
Moderate dementia due to Down syndrome	Dementia, moderate	has memory problems and confusion, feels disoriented, at times hears voices that are not real, and needs help with some daily activities.	0.377 (0.252–0.508)
Congenital heart disease due to Turner syndrome	Congenital heart disease	(custom DW from MEPS)	
Congenital heart disease with infertility due to Turner syndrome	Congenital heart disease with primary infertility	(combined DW)	
Primary infertility due to Turner syndrome	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008 (0.003–0.015)
Asymptomatic Turner syndrome	Asymptomatic		
Mild intellectual disability due to Klinefelter syndrome	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Mild intellectual disability with infertility due to Klinefelter syndrome	Mild intellectual disability with primary infertility	(combined DW)	
Asymptomatic Klinefelter syndrome	Asymptomatic		
Borderline intellectual disability due to Klinefelter syndrome	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Primary infertility due to Klinefelter syndrome	Infertility, primary	wants to have a child and has a fertile partner, but the couple	0.008
Borderline intellectual disability with infertility due to Klinefelter syndrome	Borderline intellectual disability with primary infertility	cannot conceive. (combined DW)	(0.003–0.015)
Borderline intellectual disability with congenital heart disease due to	Borderline intellectual disability with congenital	(combined DW)	0.011
other chromosomal abnormalities Mild intellectual disability, mild domentia, and concentral heart	heart disease Congenital heart disease, mild dementia, mild	(combined D w)	(0.005-0.02)
Mild intellectual disability, mild dementia, and congenital heart disease due to other chromosomal abnormalities	intellectual disability	(combined DW)	0.109 (0.071–0.159)
Asymptomatic other chromosomal abnormalities	Asymptomatic		
Mild intellectual disability with congenital heart disease due to other chromosomal abnormalities	Mild intellectual disability with congenital heart	(combined DW)	0.043
Borderline intellectual disability, mild dementia, and congenital heart	disease Congenital heart disease, mild dementia,	(combined DW)	(0.026–0.064) 0.079 (0.051–0.115)
disease due to other chromosomal abnormalities Moderate intellectual disability with congenital heart disease due to other themesoned the neurolitication of the second se	borderline intellectual disability Moderate intellectual disability with congenital heart disease	(combined DW)	0.1
other chromosomal abnormalities Isolated congenital heart disease due to other chromosomal abnormalities	Congenital heart disease	(custom DW from MEPS)	(0.066–0.142)
Severe dementia due to other chromosomal abnormalities	Dementia, severe	has complete memory loss; no longer recognizes close family members; and requires help with all daily activities.	0.449 (0.304-0.595)
Borderline intellectual disability due to other chromosomal abnormalities	Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005–0.02)
Severe intellectual disability with congenital heart disease due to other chromosomal abnormalities	Severe intellectual disability with congenital heart disease	(combined DW)	0.16 (0.107–0.226)
Congenital heart disease and moderate dementia due to other chromosomal abnormalities	Congenital heart disease and moderate dementia	(combined DW)	0.377 (0.252–0.508)
Profound intellectual disability with congenital heart disease due to	Profound intellectual disability with congenital	(combined DW)	0.2
other chromosomal abnormalities	heart disease	has some trouble remembering recent events, and finds it	(0.133–0.283) 0.069
Mild dementia due to other chromosomal abnormalities	Dementia, mild	hard to concentrate and make decisions and plans.	(0.046-0.099)
Congenital heart disease and mild dementia due to other chromosomal abnormalities	Congenital heart disease and mild dementia	(combined DW)	0.069 (0.046-0.099)
Severe motor and cognitive impairment due to Edward Syndrome or Patau Syndrome	Motor plus cognitive impairments, severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374–0.702)
Mild intellectual disability due to other chromosomal abnormalities	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026–0.064)
Moderate dementia due to other chromosomal abnormalities	Dementia, moderate	has memory problems and confusion, feels disoriented, at times hears voices that are not real, and needs help with some daily activities.	0.377 (0.252–0.508)
Congenital heart disease and severe dementia due to other chromosomal abnormalities	Congenital heart disease and severe dementia	(combined DW)	0.449 (0.304–0.595)
Moderate intellectual disability due to other chromosomal abnormalities	Intellectual disability / mental retardation, moderate	has low intelligence, and is slow in learning to speak and to do even simple tasks. As an adult, the person requires a lot of support to live independently and raise children. The person can only work at the simplest supervised jobs.	0.1 (0.066–0.142)
Mild intellectual disability and moderate dementia due to other chromosomal abnormalities	Moderate dementia, mild intellectual disability	(combined DW)	0.403 (0.281–0.536)
Severe intellectual disability, mild dementia, and congenital heart disease due to other chromosomal abnormalities	Congenital heart disease, mild dementia, severe intellectual disability	(combined DW)	0.218 (0.149–0.299)
Severe intellectual disability, severe dementia, and congenital heart disease due to other chromosomal abnormalities	Congenital heart disease, severe dementia, severe intellectual disability	(combined DW)	0.535 (0.384–0.681)
Severe intellectual disability due to other chromosomal abnormalities	Intellectual disability / mental retardation, severe	has very low intelligence and cannot speak more than a few words, needs constant supervision and help with most daily activities, and can do only the simplest tasks.	0.16 (0.107–0.226)
Profound intellectual disability, severe dementia, and congenital heart disease due to other chromosomal abnormalities	Congenital heart disease, severe dementia, profound intellectual disability	(combined DW)	0.557 (0.401–0.703)
Borderline intellectual disability and mild dementia due to other chromosomal abnormalities	Mild dementia, borderline intellectual disability	(combined DW)	0.079 (0.051–0.115)

Profound intellectual disability and severe dementia due to other chromosomal abnormalities Mild intellectual disability and mild dementia due to other		Health state lay description	Disability 1
Profound intellectual disability and severe dementia due to other chromosomal abnormalities Mild intellectual disability and mild dementia due to other			Disability weight
Mild intellectual disability and mild dementia due to other	Severe dementia, profound intellectual disability	(combined DW)	0.557
	servere demondra, protound inclicetual disability		(0.401-0.703) 0.109
chromosomal abnormalities	Mild dementia, mild intellectual disability	(combined DW)	(0.071-0.159)
Severe intellectual disability and severe dementia due to other	Severe dementia, severe intellectual disability	(combined DW)	0.535
chromosomal abnormalities	Congenital heart disease, mild dementia, moderate		(0.384–0.681) 0.162
	intellectual disability	(combined DW)	(0.11–0.222)
Moderate intellectual disability and severe dementia due to other	Severe dementia, moderate intellectual disability	(combined DW)	0.503 (0.355–0.646)
chromosomal abnormalities Mild intellectual disability and severe dementia due to other		(combined DW)	0.472
chromosomal abnormalities	Severe dementia, mild intellectual disability	(combined DW)	(0.332-0.615)
Borderline intellectual disability and severe dementia due to other chromosomal abnormalities	Severe dementia, borderline intellectual disability	(combined DW)	0.455 (0.316–0.597)
Severe intellectual disability and mild dementia due to other	Mild dementia, severe intellectual disability	(combined DW)	0.218
chromosomal abnormalities	Moderate dementia, profound intellectual		(0.149–0.299) 0.499
	disability	(combined DW)	(0.358-0.645)
Severe intellectual disability and moderate dementia due to other	Moderate dementia, severe intellectual disability	(combined DW)	0.475
chromosomal abnormalities Profound intellectual disability and mild dementia due to other			(0.34–0.614) 0.255
chromosomal abnormalities	Mild dementia, profound intellectual disability	(combined DW)	(0.178-0.346)
•	Moderate dementia, moderate intellectual disability	(combined DW)	0.438 (0.311–0.576)
Moderate intellectual disability and mild dementia due to other	Mild dementia, moderate intellectual disability	(combined DW)	0.162
chromosomal abnormalities	· · ·	(combined Dw)	(0.11-0.222)
	Congenital heart disease, severe dementia, moderate intellectual disability	(combined DW)	0.503 (0.355–0.646)
•••	Congenital heart disease, moderate dementia,	(combined DW)	0.384
	borderline intellectual disability Congenital heart disease, mild dementia, profound		(0.262–0.517) 0.255
	intellectual disability	(combined DW)	(0.178–0.346)
-	Moderate dementia, borderline intellectual disability	(combined DW)	0.384 (0.262–0.517)
	Congenital heart disease, moderate dementia, mild	(combined DW)	0.403
	intellectual disability	(combined DW)	(0.281-0.536)
	Congenital heart disease, moderate dementia, moderate intellectual disability	(combined DW)	0.438 (0.311–0.576)
Severe intellectual disability, moderate dementia, and congenital	Congenital heart disease, moderate dementia,	(combined DW)	0.475
	severe intellectual disability Severe motor plus cognitive impairments and	(combined D w)	(0.34–0.614) 0.542
	congenital heart disease	(combined DW)	(0.374–0.702)
	Congenital heart disease, moderate dementia,	(combined DW)	0.499
	profound intellectual disability Congenital heart disease, severe dementia,		(0.358–0.645) 0.455
heart disease due to other chromosomal abnormalities	borderline intellectual disability	(combined DW)	(0.316-0.597)
	Congenital heart disease, severe dementia, mild intellectual disability	(combined DW)	0.472 (0.332–0.615)
		has very low intelligence, has almost no language, and does	(0.002 0.000)
-	•	not understand even the most basic requests or instructions.	0.2 (0.133–0.283)
abnormalities		The person requires constant supervision and help for all activities.	(0.135-0.265)
Disfigurement level 2 with pain due to other congenital		has a visible physical deformity that is sore and itchy. Other	0.188
musculoskeletal anomalies	Disfigurement, level 2, with itch/pain	people stare and comment, which causes the person to worry. The person has trouble sleeping and concentrating.	(0.125–0.267)
	Level 2 disfigurement with mild motor	(combined DW)	0.076
	impairment	has a slight, visible physical deformity that others notice,	(0.051-0.112) 0.011
Disfigurement level 1 due to polydactyly and syndactyly	Disfigurement, level 1	which causes some worry and discomfort.	(0.005-0.021)
	Level 2 disfigurement with moderate motor	(combined DW)	0.124
congenital musculoskeletal anomalies	impairment	has a visible physical deformity that is sore and itchy. Other	(0.083-0.175)
Disfigurement level 2 with pain due to congenital limb deficiency	Disfigurement, level 2, with itch/pain	people stare and comment, which causes the person to worry.	0.188 (0.125-0.267)
		The person has trouble sleeping and concentrating. has a visible physical deformity that causes others to stare	
Disfigurement level 2 due to other congenital musculoskeletal anomalies		and comment. As a result, the person is worried and has	0.067 (0.044–0.096)
		trouble sleeping and concentrating.	(0.044-0.090)
Disfigurement level 2 due to congenital limb deficiency	Disfigurement, level 2	has a visible physical deformity that causes others to stare and comment. As a result, the person is worried and has	0.067
		trouble sleeping and concentrating.	(0.044-0.096)
	Level 2 disfigurement with itch/pain and moderate motor impairment	(combined DW)	0.237 (0.163–0.324)
Disfigurement level 2 with pain and mild motor impairment due to	Level 2 disfigurement with itch/pain and mild	(combined DW)	0.196
	motor impairment	(continued D ff)	(0.132-0.275)
	Level 2 disfigurement with itch/pain and mild motor impairment	(combined DW)	0.196 (0.132–0.275)
Disfigurement level 2 and mild motor impairment due to other	Level 2 disfigurement with mild motor	(combined DW)	0.076
congenital musculoskeletal anomalies	impairment Level 2 disfigurement with itch/pain and moderate		(0.051–0.112) 0.237
Disfigurement level 2 with pain and moderate motor impairment due	a anon-baromont with non-pain and modelate	(combined DW)	(0.163-0.324)

Appendix Table 0. ODD 2010 sequence, nearth states,	health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weigh
	Level 2 disfigurement with moderate motor	(combined DW)	0.124
	impairment		(0.083–0.175) 0.154
urinary tract	urinary incontinence and impotence	(combined DW)	(0.105-0.214)
Atypical gentiana, recurrent urmary tract intections of other	Mild abdominopelvic problem, urinary	(combined DW)	0.158
abdominal issues and incontinence due to congenital anomalies of	incontinence, and level 1 disfigurement	(combined DW)	(0.108-0.218)
Atypical genitalia due to congenital genital anomalies	Disfigurement, level 1	has a slight, visible physical deformity that others notice,	0.011
	Mild abdominopelvic problem, urinary	which causes some worry and discomfort.	(0.005-0.021) 0.158
	incontinence, and level 1 disfigurement	(combined DW)	(0.108-0.218)
	Disfigurement, level 1	has a slight, visible physical deformity that others notice,	0.011
	Distiguiement, level 1	which causes some worry and discomfort.	(0.005-0.021)
Recurrent urinary tract infections or other abdominal issues due to congenital anomalies of the urinary tract	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005-0.021)
Incontinence impotence and recurrent urinary tract infections or		interfere with daily activities.	
other abdominal issues and impotence due to convenital anomalies	Mild abdominopelvic problem, urinary	(combined DW)	0.163
of the urinary tract	incontinence, and impotence		(0.112-0.225)
Recurrent urinary tract infections or other abdominal issues due to	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not	0.011
congenital genital anomalies Incontinence and recurrent urinary tract infections or other	• •	interfere with daily activities.	(0.005–0.021) 0.149
abdominal issues due to congenital anomalies of the urinary tract	Level 1 disfigurement and urinary incontinence	(combined DW)	(0.101-0.206)
	Mild abdominopelvic problem, urinary		0.172
-	incontinence, impotence, and level 1	(combined DW)	(0.118-0.239)
congenital anomalies of the urinary tract Primary infertility and recurrent urinary tract infections or other	disfigurement		. ,
abdominal issues due to congenital genital anomalies	Mild abdominal pain and primary infertility	(combined DW)	
· ·	Asymptomatic		
			0.017
Impotence due to congenital anomalies of the urinary tract	Impotence	has difficulty in obtaining or maintaining an erection.	(0.009–0.03)
Impotence due to congenital genital anomalies	Impotence	has difficulty in obtaining or maintaining an erection.	0.017
			(0.009–0.03) 0.139
Incontinence due to congenital anomalies of the urinary tract	Urinary incontinence	cannot control urinating.	(0.094-0.198)
Asymptomatic congenital anomalies of the urinary tract	Asymptomatic		
Atypical genitalia infertility impotence and recurrent urinary tract	• •		0.046
infections or other andominal issues and impotence due to congenital	Mild abdominopelvic problem, primary infertility, impotence, and level 1 disfigurement	(combined DW)	0.046 (0.023-0.083)
genital anomalies			
	Mild abdominopelvic problem, primary infertility, and impotence	(combined DW)	0.035 (0.018-0.064)
Impotence and recurrent urinary tract infections or other abdominal	•		0.028
issues due to congenital genital anomalies	Mild abdominopelvic problem and impotence	(combined DW)	(0.014-0.05)
Impotence and recurrent urinary tract infections or other abdominal	Mild abdominopelvic problem and impotence	(combined DW)	0.028
issues due to congenital anomalies of the urinary tract	r r r		(0.014–0.05) 0.008
Primary infertility due to congenital genital anomalies	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	(0.003-0.015)
Atypical genitalia, recurrent urinary tract infections or other	Mild abdominopelvic problem, level 1		0.029
	disfigurement and primary infertility	(combined DW)	(0.014-0.055)
	Mild abdominopelvic problem, level 1	(combined DW)	0.029
	disfigurement and primary infertility		(0.014-0.055)
anomalies	Disfigurement level 1 and primary infertility	(combined DW)	
Atypical genitalia and impotence due to congenital anomalies of the	Level 1 disfigurement and impotence	(combined DW)	0.028
urinary tract	о .	(comonica D w)	(0.014-0.05)
	Mild abdominopelvic problem, level 1 disfigurement and impotence	(combined DW)	0.039 (0.02–0.07)
Atypical gennana, recurrent urmary tract infections of other	Mild abdominopelvic problem, level 1		0.039
abdominal issues and impotence due to congenital anomalies of the	disfigurement and impotence	(combined DW)	(0.02-0.07)
Infertility and impotence due to congenital genital anomalies	Primary infertility and impotence	(combined DW)	0.025
			(0.012-0.045)
	Mild abdominopelvic problem and level 1 disfigurement	(combined DW)	0.022 (0.011-0.041)
	Mild abdominopelvic problem and level 1		0.022
	disfigurement	(combined DW)	(0.011-0.041)
	Mild abdominopelvic problem and level 1	(combined DW)	0.022
the urinary tract	disfigurement		(0.011-0.041)
Atypical genitalia and impotence due to congenital genital anomalies	Level 1 disfigurement and impotence	(combined DW)	0.028 (0.014-0.05)
Chronic abdominal pain and mild chronic respiratory problems due	Mild abdominopelvic problem and mild COPD	(combined DW)	0.03
	and other chronic respiratory problems	(combined DW)	(0.016-0.053)
	Level 1 disfigurement with itch/pain and mild	(combined DW)	0.037
Chronic abdominal pain and disfigurement due to congenital			(0.02-0.062)
Chronic abdominal pain and disfigurement due to congenital diaphragmatic hernia Disfigurement from scars following treatment for congenital	abdominopelvic problem	has a slight visible physical deformity that others notice	()()))
Chronic abdominal pain and disfigurement due to congenital diaphragmatic hernia Disfigurement from scars following treatment for congenital	abdominopelvic problem Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005-0.021)
Chronic abdominal pain and disfigurement due to congenital diaphragmatic hernia Disfigurement from scars following treatment for congenital malformations of the abdominal wall Chronic abdominal pain due to congenital atresia and/or stenosis of	Disfigurement, level 1		
Chronic abdominal pain and disfigurement due to congenital diaphragmatic hernia Disfigurement from scars following treatment for congenital malformations of the abdominal wall Chronic abdominal pain due to congenital atresia and/or stenosis of		which causes some worry and discomfort. has pain in the belly and feels nauseous. The person has difficulties with daily activities.	(0.005–0.021) 0.114
Chronic abdominal pain and disfigurement due to congenital diaphragmatic hernia Disfigurement from scars following treatment for congenital malformations of the abdominal wall Chronic abdominal pain due to congenital atresia and/or stenosis of the digestive tract	Disfigurement, level 1	which causes some worry and discomfort. has pain in the belly and feels nauseous. The person has	(0.005-0.021)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Chronic abdominal pain and/or nausea due to other congenital malformations of the digestive tract	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Chronic abdominal pain and/or nausea with acid reflux, dyspahgia, and/or constipation due to other congenital malformations of the digestive tract	Mild abdominopelvic problem and moderate abdominopelvic problem	(combined DW)	0.124 (0.085–0.171)
Disfigurement due to congenital diaphragmatic hernia	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005–0.021)
Constipation due to congenital malformations of the abdominal wall	Abdominopelvic problem, moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.	0.114 (0.078–0.159)
Chronic respiratory problems including difficulty breaking and recurrent upper respiratory infections due to atresia and/or stenosis of the digestive tract	COPD and other chronic respiratory problems, mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.	0.019 (0.011–0.033)
Constipation and chronic abdominal pain due to congenital malformations of the abdominal wall	Mild abdominopelvic problem and moderate abdominopelvic problem	(combined DW)	0.124 (0.085–0.171)
Asymptomatic congenital diaphragmatic hernia	Asymptomatic		
Asymptomatic congenital atresia and/or stenosis of the digestive tract	Asymptomatic		
Asymptomatic congenital malformations of the abdominal wall after treatment	Asymptomatic		
Asymptomatic other congenital malformations of the digestive tract	Asymptomatic		
Chronic respiratory problems and dysphagia or acid reflux due to congenital atresia and/or stenosis of the digestive tract	Mild abdominopelvic problem and mild COPD and other chronic respiratory problems	(combined DW)	0.03 (0.016–0.053)
Acid reflux, dyspahgia, and/or constipation due to other congenital malformations of the digestive tract	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Chronic abdominal pain due to congenital malformations of the abdominal wall	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not interfere with daily activities.	0.011 (0.005–0.021)
Dysphagia or acid reflux due to congenital atresia and/or stenosis of	Abdominopelvic problem, mild	has some pain in the belly that causes nausea but does not	0.011
the digestive tract	riodoninioperrie prosteni, nind	interfere with daily activities. has some pain in the belly that causes nausea but does not	(0.005–0.021) 0.011
Chronic abdominal pain due to congenital diaphragmatic hernia	Abdominopelvic problem, mild	interfere with daily activities.	(0.005-0.021)
Mild chronic respiratory problems and breathlessness due to	COPD and other chronic respiratory problems,	has cough and shortness of breath after heavy physical	0.019
congenital diaphragmatic hernia Chronic respiratory problems and abdominal pain due to congenital	mild Mild abdominopelvic problem and mild COPD	activity, but is able to walk long distances and climb stairs. (combined DW)	(0.011-0.033) 0.03
atresia and/or stenosis of the digestive tract Dysphagia or acid reflux and chronic abdominal pain due to	and other chronic respiratory problems Mild abdominopelvic problem and moderate	(combined DW)	(0.016–0.053) 0.124
congenital atresia and/or stenosis of the digestive tract Chronic abdominal pain and developmental delay due to congenital	abdominopelvic problem Mild abdominopelvic problem and mild	(combined DW)	(0.085–0.171) 0.053
diaphragmatic hernia Constipation and concern about scars due to congenital	intellectual disability Mild abdominopelvic problem and level 1		(0.032–0.083) 0.022
malformations of the abdominal wall	disfigurement	(combined DW)	(0.011-0.041)
Disfigurement and mild chronic respiratory problems due to congenital diaphragmatic hernia	Level 1 disfigurement with itch/pain and mild COPD and other chronic respiratory problems	(combined DW)	0.045 (0.026–0.073)
Chronic abdominal pain, disfigurement, developmental delay and chronic respiratory problems due to congenital diaphragmatic hernia	Mild abdominopelvic problem, mild COPD and other chronic respiratory problems, mild	(combined DW)	0.096 (0.057–0.148)
Disfigurement, chronic respiratory problems and developmental	intellectual disability, and level 1 disfigurement Mild COPD and other chronic respiratory problems, mild intellectual disability, and level 1	(combined DW)	0.086
delay due to congenital diaphragmatic hernia Chronic abdominal pain, disfigurement and developmental delay due	disfigurement with itch/pain Mild abdominopelvic problem, mild intellectual		(0.052–0.131) 0.078
to congenital diaphragmatic hernia	disability, and level 1 disfigurement with itch/pain Mild abdominopelvic problem, mild COPD and	(combined DW)	(0.046-0.12)
Chronic abdominal pain, chronic respiratory problems and developmental delay due to congenital diaphragmatic hernia	other chronic respiratory problems, and level 1 disfigurement with itch/pain	(combined DW)	0.056 (0.031–0.092)
Chronic abdominal pain and concern about scars due to congenital malformations of the abdominal wall	Moderate abdominopelvic problem and level 1 disfigurement	(combined DW)	0.124 (0.085–0.172)
Chronic abdominal pain, disfigurement and chronic respiratory problems due to congenital diaphragmatic hernia	Mild abdominopelvic problem, mild COPD and other chronic respiratory problems, and level 1	(combined DW)	0.056 (0.031–0.092)
Constipation, chronic abdominal pain and concern about scars due to congenital malformations of the abdominal wall	disfigurement with itch/pain wind addominopervic problem, moderate abdominopelvic problem, and level 1	(combined DW)	0.206 (0.143–0.283)
Dysphagia or acid reflux, chronic abdominal pain and chronic respiratory problems due to congenital atresia and/or stenosis of the	Mild abdominopelvic problem, moderate abdominopelvic problem, and mild COPD and	(combined DW)	0.141 (0.096-0.198)
digestive tract Disfigurement and developmental delay due to congenital	other chronic respiratory problems Level 1 disfigurement with itch/pain and mild	(combined DW)	0.068
diaphragmatic hernia Mild chronic respiratory problems and developmental delay due to	intellectual disability Mild intellectual disability and mild COPD and	(combined DW)	(0.041–0.102) 0.061
congenital diaphragmatic hernia Moderate hearing loss with ringing due to other congenital anomalies	other chronic respiratory problem Hearing loss, moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday.	(0.037–0.093) 0.074 (0.049–0.107)
Moderately severe hearing loss due to other congenital anomalies	Hearing loss, moderately severe	(custom DW from hearing loss impairment envelope)	
Mild hearing loss with ringing due to other congenital anomalies	Hearing loss, mild, with ringing	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears.	0.021 (0.012–0.036)

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weigh
Severe hearing loss due to other congenital anomalies	Hearing loss, severe	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.158 (0.105–0.227)
Moderate hearing loss due to other congenital anomalies	Hearing loss, moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.	0.027 (0.015–0.042)
Severe hearing loss with ringing due to other congenital anomalies	Hearing loss, severe, with ringing	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.261 (0.175–0.36)
Mild hearing loss due to other congenital anomalies	Hearing loss, mild	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street).	0.01 (0.004–0.019)
Complete hearing loss with ringing due to other congenital anomalies	Hearing loss, complete, with ringing	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone, and has very annoying ringing in the ears for more than half of the day. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.316 (0.212–0.435)
Complete hearing loss due to other congenital anomalies	Hearing loss, complete	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.215 (0.144–0.307)
Profound hearing loss due to other congenital anomalies	Hearing loss, profound	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has great difficulty hearing anything in any other situation. Difficulties with communicating and relating to othersoften cause worry, depression, and loneliness.	0.204 (0.134–0.288)
Moderately severe hearing loss with ringing due to other congenital anomalies	Hearing loss, moderately severe, with ringing	(custom DW from hearing loss impairment envelope)	
Other congenital birth defects	Post-COMO calculation for residuals (YLL/YLD		
Profound hearing loss with ringing due to other congenital anomalies	ratio, other methods) Hearing loss, profound, with ringing	is unable to hear and understand another person taiking, even in a quiet place, is unable to take part in a phone conversation, has great difficulty hearing anything in any other situation, and has annoying ringing in the ears for more than 5 minutes at a time, several times a day. Difficulties with communicating and relating to others often cause worry,	0.277 (0.182–0.387)
Symptomatic seborrhoeic dermatitis	Disfigurement, level 1 with itch/pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.	0.027 (0.015–0.042)
Asymptomatic contact dermatitis	Asymptomatic		
Asymptomatic seborrhoeic dermatitis	Asymptomatic		
Severe atopic dermatitis	Disfigurement, level 3, with itch/pain	has an obvious physical deformity that is very painful and itchy. The physical deformity makes others uncomfortable, which causes the person to avoid social contact, feel worried, sleep poorly, and think about suicide.	0.576 (0.401–0.731)
Mild contact dermatitis	Disfigurement, level 1 with itch/pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.	0.027 (0.015–0.042)
Moderate contact dermatitis	Disfigurement, level 2, with itch/pain	has a visible physical deformity that is sore and itchy. Other people stare and comment, which causes the person to worry. The person has trouble sleeping and concentrating.	0.188 (0.125–0.267)
Mild atopic dermatitis	Disfigurement, level 1 with itch/pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.	0.027 (0.015–0.042)
Moderate atopic dermatitis	Disfigurement, level 2, with itch/pain	has a visible physical deformity that is sore and itchy. Other people stare and comment, which causes the person to worry. The person has trouble sleeping and concentrating.	0.188 (0.125–0.267)
Mild psoriasis	Disfigurement, level 1 with itch/pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.	0.027 (0.015–0.042)
Moderate psoriasis	Disfigurement, level 2, with itch/pain	has a visible physical deformity that is sore and itchy. Other people stare and comment, which causes the person to worry. The person has trouble sleeping and concentrating.	0.188 (0.125–0.267)
Severe psoriasis	Disfigurement, level 3, with itch/pain	has an obvious physical deformity that is very painful and itchy. The physical deformity makes others uncomfortable, which causes the person to avoid social contact, feel worried, sleep poorly, and think about suicide.	0.576 (0.401–0.731)
Moderate cellulitis	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)
Mild cellulitis	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002–0.012)
Severe cellulitis	Infectious disease, acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.	0.133 (0.088–0.19)

Appendix Table 6. GBD 2016 sequelae, health sta	ates, health state lay descriptions, and disa	ability weights	
Sequela	Health state name	Health state lay description	Disability weigh
- Abscess and other bacterial skin diseases	Infactious discussa aguta anisoda, mild	has a low fever and mild discomfort , but no difficulty with	0.006
Abscess and other bacterial skill diseases	Infectious disease, acute episode, mild	daily activities.	(0.002-0.012)
Impetigo	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with	0.006
	-	daily activities. has a slight, visible physical deformity that is sometimes sore	(0.002-0.012)
Scabies	Disfigurement, level 1 with itch/pain	or itchy. Others notice the deformity, which causes some	0.027
		worry and discomfort.	(0.015–0.042)
Other fungal skin diseases	Infectious disease, acute episode, mild	has a low fever and mild discomfort , but no difficulty with	0.006
Oulei tuligai skili diseases	infectious disease, acute episode, infu	daily activities.	(0.002-0.012)
Tinea capitis	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with	0.006
•	· · · · ·	daily activities. has a low fever and mild discomfort, but no difficulty with	(0.002-0.012) 0.006
Mild viral warts	Infectious disease, acute episode, mild	daily activities.	(0.002-0.012)
		has a visible physical deformity that causes others to stare	
Severe molluscum contagiosum	Disfigurement, level 2	and comment. As a result, the person is worried and has	0.067 (0.044-0.096
		trouble sleeping and concentrating.	(0.044-0.090
		has a visible physical deformity that causes others to stare	0.067
Severe viral warts	Disfigurement, level 2	and comment. As a result, the person is worried and has	(0.044-0.096
		trouble sleeping and concentrating. has a low fever and mild discomfort, but no difficulty with	0.006
Mild molluscum contagiosum	Infectious disease, acute episode, mild	daily activities.	(0.002-0.012
Mild cone vulcouis	Disfigurement, level 1	has a slight, visible physical deformity that others notice,	0.011
Mild acne vulgaris	Distiguiement, level 1	which causes some worry and discomfort.	(0.005-0.021
		has a visible physical deformity that causes others to stare	0.067
Moderate acne vulgaris	Disfigurement, level 2	and comment. As a result, the person is worried and has	(0.044-0.096
		trouble sleeping and concentrating. has an obvious physical deformity that makes others	
Severe acne vulgaris	Disfigurement, level 3	uncomfortable, which causes the person to avoid social	0.405
		contact, feel worried, sleep poorly, and think about suicide.	(0.275-0.546
		has a visible physical deformity that causes others to stare	0.067
Severe alopecia areata	Disfigurement, level 2	and comment. As a result, the person is worried and has	(0.044-0.096
		trouble sleeping and concentrating.	
Mild alopecia areata	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005-0.021
		has a slight, visible physical deformity that others notice,	0.011
Pruritus	Disfigurement, level 1	which causes some worry and discomfort.	(0.005-0.021
		has a visible physical deformity that is sore and itchy. Other	0.188
Severe urticaria	Disfigurement, level 2, with itch/pain	people stare and comment, which causes the person to worry.	(0.125-0.267
		The person has trouble sleeping and concentrating.	(0.125 0.20)
Mild urticaria	Diefieurement level 1 with itch/sein	has a slight, visible physical deformity that is sometimes sore	0.027
Mild urticaria	Disfigurement, level 1 with itch/pain	or itchy. Others notice the deformity, which causes some worry and discomfort.	(0.015-0.042
		has a visible physical deformity that is sore and itchy. Other	
Moderate decubitus ulcer	Disfigurement, level 2, with itch/pain	people stare and comment, which causes the person to worry.	0.188
		The person has trouble sleeping and concentrating.	(0.125-0.267
		has an obvious physical deformity that is very painful and	
Severe decubitus ulcer	Disfigurement, level 3, with itch/pain	itchy. The physical deformity makes others uncomfortable,	0.576
		which causes the person to avoid social contact, feel worried, sleep poorly, and think about suicide.	(0.401-0.731)
		has a slight, visible physical deformity that is sometimes sore	
Mild decubitus ulcer	Disfigurement, level 1 with itch/pain	or itchy. Others notice the deformity, which causes some	0.027
		worry and discomfort.	(0.015-0.042)
Symptomatic other skin and subcutaneous diseases	Disfigurement, level 1	has a slight, visible physical deformity that others notice,	0.011
		which causes some worry and discomfort.	(0.005-0.021)
Asymptomatic other skin and subcutaneous diseases	Asymptomatic		
		is completely blind, which causes great difficulty in some	0.187
Blindness due to glaucoma	Distance vision blindness	daily activities, worry and anxiety, and great difficulty going	(0.124-0.26)
		outside the home without assistance. has severe vision loss, which causes difficulty in daily	
Severe vision impairment due to glaucoma	Distance vision, severe impairment	activities, some emotional impact (for example worry), and	0.184
		some difficulty going outside the home without assistance.	(0.125-0.258
Moderate vision impairment due to glaucoma	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces	0.031
hoderate vision impairment due to gradeonia	Distance vision, moderate impairment	or objects across a room.	(0.019-0.049
		has severe vision loss, which causes difficulty in daily	0.184
Severe vision impairment due to cataract	Distance vision, severe impairment	activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	(0.125-0.258
		is completely blind, which causes great difficulty in some	
Blindness due to cataract	Distance vision blindness	daily activities, worry and anxiety, and great difficulty going	0.187
		outside the home without assistance.	(0.124–0.26)
Moderate vision impairment due to cataract	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces	0.031
mourae vision impairment due to catalact	2 isuaree vision, moderate impairment	or objects across a room.	(0.019-0.049)
Dindnoss due to meauler deconcention	Distance vision blinds	is completely blind, which causes great difficulty in some	0.187
Blindness due to macular degeneration	Distance vision blindness	daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	(0.124-0.26)
		has severe vision loss, which causes difficulty in daily	
Severe vision impairment due to macular degeneration	Distance vision, severe impairment	activities, some emotional impact (for example worry), and	0.184
		some difficulty going outside the home without assistance.	(0.125-0.258
Moderate vision impairment due to macular degeneration	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces	0.031
restant and the machine degeneration		or objects across a room.	(0.019-0.049

## Appendix Table 6. GBD 2016 sequelae, health states, health state lay descriptions, and disability weights

Appendix Table 6. GBD 2016 sequelae, health states	, health state lay descriptions, and disa	bility weights	
Sequela	Health state name	Health state lay description	Disability weight
Near vision impairment	Presbyopia	has difficulty seeing things that are nearer than 3 feet, but has	0.011 (0.005–0.02)
Blindness due to uncorrected refractive error	Distance vision blindness	no difficulty with seeing things at a distance. is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going	0.187
Severe vision impairment due to uncorrected refractive error	Distance vision, severe impairment	outside the home without assistance. has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and	0.184 (0.125–0.258)
Moderate vision impairment due to uncorrected refractive error	Distance vision, moderate impairment	some difficulty going outside the home without assistance. has vision problems that make it difficult to recognize faces	0.031
		or objects across a room. has great difficulty hearing and understanding another person	(0.019–0.049) 0.01
Mild hearing loss due to age-related and other hearing loss	Hearing loss, mild	talking in a noisy place (for example, on an urban street). cannot hear at all in any situation, including even the loudest	(0.004–0.019)
Complete hearing loss due to age-related and other hearing loss	Hearing loss, complete	sounds, and cannot communicate verbally or use a phone. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.215 (0.144–0.307)
Moderate hearing loss due to age-related and other hearing loss	Hearing loss, moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.	0.027 (0.015–0.042)
Moderate hearing loss with ringing due to age-related and other hearing loss	Hearing loss, moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday. is unable to hear and understand another person talking, even	0.074 (0.049–0.107)
Profound hearing loss due to age-related and other hearing loss	Hearing loss, profound	in a quiet place, is unable to take part in a phone conversation, and has great difficulty hearing anything in any other situation. Difficulties with communicating and relating to othersoften cause worry, depression, and loneliness.	0.204 (0.134–0.288)
Severe hearing loss due to age-related and other hearing loss	Hearing loss, severe	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.158 (0.105–0.227)
Severe hearing loss with ringing due to age-related and other hearing loss	Hearing loss, severe, with ringing	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation, and has annoying ringing in the ears for more than 5 minutes at a time, almost everyday. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.261 (0.175–0.36)
Mild hearing loss with ringing due to age-related and other hearing loss	Hearing loss, mild, with ringing	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears. unable to near and understand another person tanking, even	0.021 (0.012–0.036)
Profound hearing loss with ringing due to age-related and other hearing loss	Hearing loss, profound, with ringing	Is unable to hear and ulterstand anomer person taking, even in a quiet place, is unable to take part in a phone conversation, has great difficulty hearing anything in any other situation, and has annoying ringing in the ears for more than 5 minutes at a time, several times a day. Difficulties with communicating and relating to others often cause worry,	0.277 (0.182–0.387)
Moderately severe hearing loss with ringing due to age-related and other hearing loss	Hearing loss, moderately severe, with ringing	(custom DW from hearing loss impairment envelope)	
Moderately severe hearing loss due to age-related and other hearing loss	Hearing loss, moderately severe	(custom DW from hearing loss impairment envelope)	
Complete hearing loss with ringing due to age-related and other hearing loss	Hearing loss, complete, with ringing	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone, and has very annoying ringing in the ears for more than half of the day. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.316 (0.212–0.435)
Blindness due to other vision loss	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124–0.26)
Severe vision impairment due to other vision loss	Distance vision, severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.	0.184 (0.125–0.258)
Moderate vision impairment due to other vision loss	Distance vision, moderate impairment	has vision problems that make it difficult to recognize faces or objects across a room.	0.031 (0.019–0.049)
Asymptomatic acute sense organ diseases	Asymptomatic		
Asymptomatic chronic sense organ diseases	Asymptomatic		
Moderate acute sense organ diseases	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005–0.021)
Severe chronic sense organ diseases	Vertigo		0.113 (0.074–0.158)
Mild acute sense organ diseases	Infectious disease, acute episode, mild	has a low fever and mild discomfort , but no difficulty with daily activities.	0.006 (0.002–0.012)
Moderate chronic sense organ diseases	Disfigurement, level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.	0.011 (0.005–0.021)
Pain due to caries of deciduous teeth	Dental caries, symptomatic	has a toothache, which causes some difficulty in eating.	0.01 (0.005–0.019)

Appendix Table 6. GBD 2016 sequelae, health states, health state lay descriptions, and disability weights			
Sequela	Health state name	Health state lay description	Disability weight
Asymptomatic caries of deciduous teeth	Asymptomatic		
Pain due to caries of permanent teeth	Dental caries, symptomatic	has a toothache, which causes some difficulty in eating.	0.01 (0.005–0.019)
Asymptomatic caries of permanent teeth	Asymptomatic		
Chronic periodontal diseases	Periodontitis	has minor bleeding of the gums from time to time, with mild discomfort.	0.007 (0.003–0.014)
Asymptomatic edentulism and severe tooth loss	Asymptomatic		
Difficulty eating due to edentulism and severe tooth loss	Severe tooth loss	has lost more than 20 teeth including front and back, and has great difficulty in eating meat, fruits, and vegetables.	0.067 (0.045–0.095)
Mild other oral disorders	Infectious disease, acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.	0.006 (0.002-0.012)
Severe other oral disorders	Infectious disease acute episode moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032–0.074)

## Appendix Table 7: GBD 2016 methods of estimating years lived with disability (YLDs) for 35 residual categories

residual categories	
Residual	Method
	Estimation: YLD to YLL ratio method
Other intestinal infectious diseases	YLD to YLL ratio of explicitly estimated intestinal infectious diseases by geography, country, sex applied to YLL from other intestinal infectious diseases by geography, country, sex and age. Causes used for estimation include: Typhoid fever, Paratyphoid fever.
Other neglected tropical diseases	YLD to YLL ratio of explicitly estimated neglected tropical disease causes by geography, country, sex applied to YLL from other neglected tropical diseases by geography, country, sex and age. Causes used for estimation include: Chagas disease, Visceral leishmaniasis, Dengue, Yellow fever, Rabies.
Other maternal disorders	YLD to YLL ratio of explicitly estimated maternal disorder causes by geography, country, sex applied to YLL from other maternal disorders by geography, country, sex and age. Causes used for estimation include: Maternal hemorrhage, Maternal sepsis and other maternal infections, Maternal hypertensive disorders, Maternal obstructed labor and uterine rupture, Maternal abortion, miscarriage, and ectopic pregnancy, Indirect maternal deaths, Late maternal deaths, Maternal deaths aggravated by HIV/AIDS.
Other neonatal disorders	YLD to YLL ratio of explicitly estimated neonatal disorders by geography, country, sex applied to YLL from other neonatal disorders by geography, country, sex and age. Causes used for estimation include: Neonatal preterm birth complications, Neonatal encephalopathy due to birth asphyxia and trauma, Neonatal sepsis and other neonatal infections, Hemolytic disease and other neonatal jaundice.
Other nutritional deficiencies	YLD to YLL ratio of explicitly estimated nutritional deficiencies by geography, country, sex applied to YLL from other nutritional deficiencies by geography, country, sex and age. Causes used for estimation include Protein-energy malnutrition.
Other sexually transmitted diseases	YLD to YLL ratio of gonococcal and chlamydial infection by geography, country, sex applied to YLL from other sexually transmitted diseases by geography, country, sex and age. Causes used for estimation include: Chlamydial infection, Gonococcal infection.
Other infectious diseases	YLD to YLL ratio of HIV/AIDS and tuberculosis, diarrhea, lower respiratory and other common infectious diseases, neglected tropical diseases and malaria, sexually transmitted diseases and hepatitis by geography, country, sex applied to YLL from other infectious diseases by geography, country, sex and age. Causes used for estimation include: Typhoid fever, Paratyphoid fever, Lower respiratory infections, Upper respiratory infections, Varicella and herpes zoster, Malaria, Acute hepatitis A, Hepatitis B, Hepatitis C, Acute hepatitis E, Chlamydial infection, Gonococcal infection, Diphtheria, Whooping cough, Measles, Chagas disease, Visceral leishmaniasis, Dengue, Yellow fever, Maternal sepsis and other maternal infections, Pneumococcal meningitis, H influenzae type B meningitis, Meningococcal meningitis, Other meningitis, Encephalitis, Tetanus, Ascariasis, Neonatal sepsis and other neonatal infections
Other chronic respiratory diseases	YLD to YLL ratio of COPD, pneumoconiosis and interstitial lung disease and pulmonary sarcoidosis by geography, country, sex applied to YLL from other chronic respiratory diseases by geography, country, sex and age. Causes used for estimation include: Chronic obstructive pulmonary disease, Silicosis, Asbestosis, Coal workers pneumoconiosis, Other pneumoconiosis, Interstitial lung disease and pulmonary sarcoidosis
Other digestive disorders	YLD to YLL ratio of explicitly estimated digestive disorders by geography, country, sex applied to YLL from other digestive disorders by geography, country, sex and age. Causes used for estimation include: Gastritis and duodenitis, Appendicitis, Paralytic ileus and intestinal obstruction, Inguinal, femoral, and abdominal hernia, Inflammatory bowel disease, Vascular intestinal disorders, Gallbladder and biliary diseases, Pancreatitis
Other neurological disorders	YLD to YLL ratio of Alzheimer and other dementias, Parkinson disease, multiple sclerosis and motor-neuron disease by geography, country, sex applied to YLL from other neurological disorders by geography, country, sex and age. Causes used for estimation include: Alzheimer disease and other dementias, Parkinson disease, Epilepsy, Multiple sclerosis
Other urinary diseases	YLD to YLL ratio of explicitly estimated urinary diseases by geography, country, sex applied to YLL from other urinary diseases by geography, country, sex and age. Causes used for estimation include: Interstitial nephritis and urinary tract infections, Urolithiasis
Other hemoglobinopathies and hemolytic anemias	YLD to YLL ratio of explicitly estimated hemoglobinopathies and hemolytic anemias by geography, country, sex applied to YLL from other hemoglobinopathies and hemolytic anemias by geography, country, sex and age. Causes used for estimation include: Thalassemias, Sickle cell disorders, G6PD deficiency
Other congenital anomalies	YLD to YLL ratio of explicitly estimated congenital anomalies by geography, country, sex applied to YLL from other congenital anomalies by geography, country, sex and age. Causes used for estimation include: Neural tube defects, Congenital heart anomalies
	Estimation: based on epidemiological data

## Appendix Table 7: GBD 2016 methods of estimating years lived with disability (YLDs) for 35 residual categories

residual categories	
Residual	Method
Meningitis due to other causes	Data on proportion of meningitis due to other causes modelled in DisMod-MR 2.1, forced to sum to 100% at 1,000 draw level for each geography-year-age-sex with the proportions for pneumococcal, H influenza B and meningococcal meningitis, and applied to dismod-MR 2.1 model of all meningitis
Pelvic inflammatory disease due to other causes	DisMod-MR 2.1 model of the proportion of pelvic inflammatory disease due to other causes, constrained to 100% with proportions of pelvic inflammatory disease due to gonococcal and chlamydial infection and applied to the DisMod-MR 2.1 model for all pelvic inflammatory disease
Other neoplasms	Similar to all other cancers: mortality to incidence ratio method applied to cancer registry data for other neoplasms
Liver cancer due to other causes	Data on proportion of liver cancer due to other causes modelled in DisMod-MR 2.1, forced to sum to 100% at 1,000 draw level for each geography, year, age, and sex with the proportions for liver cancer due to hepatitis B, hepatitis C and alcohol, and applied to total liver cancer estimates from cancer analyses using mortality to incidence ratios
Other cardiovascular diseases	Ratio of prevalence of ICD-9 coded other cardiovascular diseases in MEPS and 2005 USA outpatient data to prevalence of heart failure due to other cardiovascular diseases (estimated as part of the heart failure envelope), and applied to prevalence of heart failure due to other CVD estimates for all other locations and years
Cirrhosis and other chronic liver diseases due to other causes	Data on proportion of cirrhosis and other chronic liver diseases due to other causes modelled in DisMod-MR 2.1, forced to sum to 100% at 1,000 draw level for each geography-year-age-sex with the proportions for cirrhosis and other chronic liver diseases due to hepatitis B, hepatitis C and alcohol, and applied to total cirrhosis and other chronic liver diseases estimates from DisMod-MR 2.1 analysis
Other pneumoconiosis	DisMod-MR 2.1 model based on hospital admission and claims data
Other drug use disorders	NESARC prevalence of drug dependence other than cannabis, opioids, amphetamines and cocaine multiplied by ratio of YLD to prevalence for cocaine and amphetamine by geography, year, age, and sex
Other mental and substance use disorders	Prevalence of personality disorders not comorbid with GBD mental and substance use disorder categories and severity distribution from NESARC and Australian National Survey of Mental Health and Wellbeing 1997
Chronic kidney disease due to other causes	Data on proportion of chronic kidney disease due to other causes from renal registries modelled in DisMod-MR 2.1, forced to sum to 100% at 1,000 draw level for each geography-year-age-sex with the proportions of chronic kidney disease due to diabetes, hypertension and glomerulonephritis, and applied to total chronic kidney disease estimates from DisMod-MR 2.1 analyses
Other gynecological disorders	Dismod MR 2.1 using US claims data
Other musculoskeletal disorders	DisMod-MR 2.1 model of survey and US claims data on prevalence of all musculoskeletal symptoms and diseases minus rheumatoid arthritis, osteoarthritis, gout, low back pain and neck pain. Long-term sequelae of fractures, dislocations and contusions due to injuries are subtracted out of other musculoskeletal disorders to avoid double counting
Other skin	Dismod-MR 2.1 model using outpatient and US claims data
Age-related and other hearing loss	Survey data on the proportion of hearing loss due to age-related and other hearing loss modelled in dismod MR 2.1 and forced to sum to total hearing loss by geography, year, age and sex
Other vision loss	Survey data on vision loss due to other causes modelled in DisMod-MR 2.1 and forced to sum to total vision loss by geography, year, age and sex
Other sense organ disorders	DisMod-MR 2.1 model using outpatient and US claims data

	BD 2016 methods of estimating years lived with disability (YLDs) for 35
residual categories	
Residual	Method
Other oral disorders	DisMod-MR 2.1 model using US Medical Expenditure Panel Surveys (MEPS) data
Other transport injuries	DisMod-MR 2.1 model using data from surveys, hospital admission and outpatient/emergency department visits
Other exposure to mechanical forces	DisMod-MR 2.1 model using data from surveys, hospital admission and outpatient/emergency department visits
Foreign body in other part	DisMod-MR 2.1 model using data from surveys, hospital admission and outpatient/emergency department visits
Other unintentional injuries	DisMod-MR 2.1 model using data from surveys, hospital admission and outpatient/emergency department visits
Assault by other means	DisMod-MR 2.1 model using data from surveys, hospital admission and outpatient/emergency department visits

ppendix Table 8. GBD 2016 risk factor hierarchy with level: BD=Global Burden of Disease.			
lisk factor	Level	Model type	Main data source for exposure
Il risk factors	0		
nvironmental/occupational risks	1 2		
Unsafe water, sanitation, and handwashing Unsafe water source	3	Spatiotemporal Gauissian process regression (ST-GPR)	Population surveys and censuses
Unsafe sanitation	3	ST-GPR	Population surveys and consuses
No handwashing with soap	3	ST-GPR	Population surveys, censuses, and epidemiological studies
Air pollution	2		
Ambient particulate matter pollution	3	Regression crosswalk between grid-level fusion of satellite/chemical transport models and ground level monitoring data	Atmospheric chemical transport models, satellite measurements of aerosols in the atmosphere, data from ground-level monitoring sites
Household air pollution from solid fuels	3	ST-GPR	Population surveys and censuses, WHO Energy Database, literature review
Ambient ozone pollution	3	Chemical transport model	Atmospheric chemical transport models
Other environmental risks	2	CT CDD	Tik the state of the
Residential radon Lead exposure	3	ST-GPR ST-GPR	Literature review, government agencies, and monitoring stations Literature review, blood lead surveys
Occupational risks	2	broik	Encludie ferfew, blood feld sulveys
Occupational carcinogens	3		
Occupational exposure to asbestos	4	Asbestos Impact Ratio approach	GBD cause-specific mortality data for mesothelioma, epidemiologic
Occupational exposure to arsenic	4	ST-GPR	studies Labor force surveys, censuses, and international information system
Occupational exposure to benzene	4	ST-GPR	occupational exposure to carcinogens Labor force surveys, censuses, and international information system
Occupational exposure to beryllium	4	ST-GPR	occupational exposure to carcinogens Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to cadmium	4	ST-GPR	occupational exposure to carcinogens Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to chromium	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to diesel engine exhaust	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to second-hand smoke	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to formaldehyde	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to nickel	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to polycyclic aromatic hydrocarbons	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to silica	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to sulfphuric acid	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational exposure to trichloroethylene	4	ST-GPR	Labor force surveys, censuses, and international information system occupational exposure to carcinogens
Occupational asthmagens Occupational particulate matter, gases, and fumes	3	ST-GPR ST-GPR	Labor force surveys and censuses Labor force surveys and censuses
Occupational particulate matter, gases, and fumes	3	ST-GPR	Labor force surveys and censuses Labor force surveys and censuses, industry-based surveys of noise exposure
Occupational injuries	3	ST-GPR	International Labor Organization injury database
Occupational ergonomic factors	3	ST-GPR	Labor force surveys and censuses
havioural risks	1		· · · · · · · · · · · · · · · · · · ·
Child and maternal malnutrition	2		
Suboptimal breastfeeding	3		
Non-exclusive breastfeeding	4	ST-GPR	Population surveys
Discontinued breastfeeding	4	ST-GPR	Population surveys
Child growth failure Childhood underweight	3 4	DisMod-MR 2.1	Population surveys, literature review, and WHO Global Database or
Childhood wasting	4	DisMod-MR 2.1	Child Growth and Malnutrition Population surveys, literature review, and WHO Global Database on
Childhood stunting	4	DisMod-MR 2.1	Child Growth and Malnutrition Population surveys, literature review, and WHO Global Database on Child Content of the content o
Low birth weight and short gestation	3		Child Growth and Malnutrition
Low birth weight and short gestation	4	Joint distribution using Copula optimization	Population surveys and censuses, vital registration
Short gestation for birth weight	4	Joint distribution using Copula optimization	Population surveys and censuses, vital registration
Iron deficiency	3	Mixed effect regression	Population surveys, examination surveys, and epidemiological studi
Vitamin A deficiency	3	DisMod-MR 2.1	Population surveys, examination surveys, and epidemiological studi
Zinc deficiency	3	Mixed effect regression based on stunting prevalence and dietary composition	FAO food balance sheets
Tobacco smoke	2		
Smoking	3	Smoking Impact Ratio (SIR) calculated from lung	SIR input data: mortality and cause of death data including vital
		cancer mortality rates <ul> <li>Smoking prevalence estimated using ST-GPR</li> </ul>	registration and verbal autopsy Smoking prevalence input data: nationally representative survey and report data and WHO InfoBase and International Smoking Statistics Database
Second-hand smoke	3	ST-GPR	Household surveys and national health surveys
		ST-GPR	Nationall representative survey report and report data, literature revi

isk factor	Leve	1 Model type	Main data source for exposure
Alcohol and drug use	2		
Alcohol use	3	and the WHO Global Information System on Alcohol and Health (GISAH) • ST-GPR used to integrate the data and to derive coherent time series for each country • Prevalence of current alcohol drinkers, lifetime abstainers, former drinkers, and binge drinkers estimated using DisMod-MR 2.1 • DisMod-MR 2.1 used to estimate the relative sex- and age-specific pattern of alcohol consumption in current	Population surveys, alcohol sales, production, and other economic statistics
Drug use	3	drinkers DisMod-MR 2.1	Systematic review of published literature, reports from governments and international organizations, which include data from: school surveys, population surveys, registration data, and indirect estimates prevalence
Dietary risks	2		
Diet low in fruits	3	DisMod-MR 2.1	Nutrition and health surveys, FAO food balance sheets
Diet low in vegetables	3	DisMod-MR 2.1	Nutrition and health surveys, FAO food balance sheets
Diet low in legumes	3	DisMod-MR 2.1	Nutrition and health surveys
Diet low in whole grains	3	DisMod-MR 2.1	Nutrition and health surveys
Diet low in nuts and seeds	3	DisMod-MR 2.1	Nutrition and health surveys, FAO food balance sheets
Diet low in milk	3	DisMod-MR 2.1	Nutrition and health surveys, FAO food balance sheets
Diet high in red meat	3	DisMod-MR 2.1	Nutrition and health surveys, FAO food balance sheets
Diet high in processed meat	3	DisMod-MR 2.1	Nutrition and health surveys
Diet high in sugar-sweetened beverages	3	DisMod-MR 2.1	Nutrition and health surveys
Diet low in fibre	3	DisMod-MR 2.1	Nutrition and health surveys, FAO SUA/USDA
Diet suboptimal in calcium	3	DisMod-MR 2.1	Nutrition and health surveys, FAO SUA/USDA
Diet low in seafood omega-3 fatty acids	3	DisMod-MR 2.1	Nutrition and health surveys, FAO SUA/USDA
Diet low in polyunsaturated fatty acids	3	DisMod-MR 2.1	Nutrition and health surveys, FAO SUA/USDA
Diet high in trans fatty acids	3	DisMod-MR 2.1	Nutrition and health surveys, availability of partially hydrogenated vegetable oil in packaged foods
Diet high in sodium	3	DisMod-MR 2.1	Nutrition and health surveys, 24-hour urinary sodium
Sexual abuse and violence	2		
Childhood sexual abuse	3	DisMod-MR 2.1	Systematic review of published literature, national health surveys, violence-specific surveys
Intimate partner violence	3	DisMod-MR 2.1	Systematic review of published literature, national health surveys, violence-specific surveys
Unsafe sex	2	DisMod-MR 2.1	UNAIDS country progress reports, disease surveillance reports
Low physical activity	2	DisMod-MR 2.1	Surveys of the adult population that capture reported frequency, duration and intensity of physical activity undertaken in the past sev days across all domains of life (work, transport, recreation or house/yard work)
letabolic risks	1		
High fasting plasma glucose	2	ST-GPR	Examination surveys and epidemiological studies
High total cholesterol	2	ST-GPR	Examination surveys and epidemiological studies
High systolic blood pressure	2	ST-GPR	Examination surveys and epidemiological studies
High body-mass index	2	ST-GPR	Examination surveys and epidemiological studies
Low bone mineral density	2	DisMod-MR 2.1	Examination surveys and epidemiological studies
Impaired kidney function	2	DisMod-MR 2.1	Examination surveys and epidemiological studies

Appendix Table 9. Types of Comparative Risk Assessments (CRA) based on the time perspective and the nature of the counterfactual level or distribution of exposure. The shaded box represents the type of CRA currently undertaken in GBD 2016. GBD=Global Burden of Disease.

		Counterfactual distr	ibutions of exposure	
	Theoretical minimum	Plausible minimum	Feasible minimum	Cost-effective
	risk: level of risk with	risk: level of risk with	risk: level of risk with	minimum risk: lowest
	the lowest level of	the lowest level of	the lowest level of	level of risk that can
	burden	burden that could be	burden that has been	be achieved cost-
		imagined with current	achieved in any	effectively in a given
		technology and	population	population
Construct		knowledge		
Attributable burden: burden of				
disease today that would be avoided				
if each individual in the past had	Currently in GBD			
been exposed to the counterfactual				
level of exposure				
Avoidable burden: burden of disease				
in the future that would be avoided				
if each individual today was shifted				
to the counterfactual level of				
exposure				

	High body-mass		High fasting	High systolic			High total	Diet low in	Impaired kidney	
	index	Smoking	plasma glucose	blood pressure	Drug use	Alcohol use	cholesterol	whole grains	function	Diet low in fruits
	53.2	-42.8	76.0	-13.3	10.1	6.0	-17.2	-8.0	0.5	-11.1
United States	(41.5 to 67.2)	(-47.1 to -37.2)	(44.4 to 144.2)	(-13.9 to -12.6)	(7.5 to 12.8)	(-24.2 to 42.1)	(-19.4 to -15.4)	(-12.5 to -0.8)	(-0.6 to 2.1)	(-14.5 to -8.7)
	66.7	-24.3	123.2	-12.7	9.1	4.7	-15.9	-8.3	2.9	4.4
Alabama	(48.0 to 94.3)	(-33.0 to -15.2)	(53.3 to 289.8)	(-15.8 to -9.7)	(5.6 to 11.8)	(-51.0 to 99.5)	(-19.2 to -12.8)	(-14.4 to -0.6)	(1.4 to 5.0)	(1.8 to 8.2)
	32.2	-32.0	36.4	-12.0	39.2	12.0	-17.7	-7.8	2.6	-0.8
Alaska	(19.0 to 49.3)	(-41.2 to -22.9)	(7.8 to 101.6)	(-14.8 to -9.1)	(26.5 to 53.5)	(-50.8 to 139.6)	(-21.5 to -14.4)	(-14.4 to -0.5)	(0.7 to 5.4)	(-4.6 to 3.0)
	60.7	-48.4	61.7	-12.6	6.5	7.5	-15.4	-8.3	1.0	-33.5
Arizona	(40.6 to 88.9)	(-54.5 to -40.8)	(22.9 to 164.9)	(-15.4 to -9.6)	(3.2 to 9.3)	(-48.7 to 120.4)	(-19.0 to -12.2)	(-14.7 to -0.7)	(-0.5 to 3.3)	(-41.2 to -28.0)
	56.0	-27.3	78.6	-12.7	-0.9	3.1	-15.6	-8.2	3.9	-5.0
Arkansas	(36.8 to 80.3)	(-34.6 to -19.4)	(30.1 to 205.2)	(-15.7 to -9.7)	(-4.3 to 1.8)	(-49.8 to 103.7)	(-19.3 to -12.4)	(-14.3 to -0.6)	(2.0 to 5.6)	(-8.5 to -2.2)
	54.4	-60.5	42.6	-12.9	11.3	10.6	-16.1	-7.9	0.6	-35.0
California	(36.6 to 75.6)	(-67.2 to -51.3)	(16.3 to 117.8)	(-15.8 to -9.7)	(8.4 to 14.5)	(-43.1 to 124.6)	(-19.6 to -13.1)	(-14.2 to -0.6)	(-0.8 to 1.9)	(-47.9 to -27.6)
	45.4	-48.2	31.2	-13.5	31.2	6.7	-17.2	-7.9	-0.4	-11.0
Colorado	(29.9 to 64.8)	(-54.9 to -40.6)	(10.7 to 78.0)	(-16.3 to -10.6)	(19.1 to 47.5)	(-49.3 to 130.5)	(-20.7 to -13.8)	(-14.1 to -0.5)	(-1.9 to 1.6)	(-17.0 to -7.3)
	53.6	-47.2	83.6	-14.3	4.4	4.6	-18.3	-7.4	-0.5	-9.5
Connecticut	(35.6 to 76.2)	(-54.4 to -38.7)	(25.9 to 235.6)	(-17.2 to -11.3)	(1.5 to 7.5)	(-49.6 to 109.9)	(-21.9 to -15.1)	(-13.5 to -0.5)	(-2.7 to 2.1)	(-16.3 to -5.2)
	40.0	-36.6	96.5	-13.1	7.3	8.8	-17.1	-8.0	-0.8	7.9
Delaware	(25.3 to 57.7)	(-42.8 to -29.9)	(32.8 to 247.9)	(-16.1 to -10.0)	(2.5 to 12.8)	(-48.3 to 119.5)	(-20.8 to -13.8)	(-14.3 to -0.6)	(-3.1 to 1.9)	(4.5 to 12.9)
	46.3	-51.5	41.1	-15.6	9.3	0.4	-18.8	-7.3	-10.3	5.6
District of Columbia	(31.2 to 65.0)	(-59.6 to -40.3)	(7.3 to 120.5)	(-18.6 to -12.5)	(5.8 to 15.9)	(-56.0 to 112.8)	(-22.4 to -15.2)	(-13.2 to -0.4)	(-13.7 to -5.8)	(1.1 to 12.2)
	51.0	-47.6	100.2	-12.3	16.9	5.4	-16.8	-8.1	3.0	-0.0
Florida	(34.9 to 71.4)	(-54.4 to -39.0)	(37.9 to 249.5)	(-15.3 to -9.2)	(12.6 to 21.6)	(-46.1 to 117.0)	(-20.3 to -13.8)	(-14.8 to -0.5)	(1.3 to 5.0)	(-3.5 to 3.9)
	57.5	-43.1	110.5	-13.7	15.2	-8.9	-17.4	-8.3	0.7	-20.5
Georgia	(38.9 to 81.5)	(-50.4 to -34.1)	(47.0 to 273.2)	(-16.7 to -10.2)	(11.7 to 19.8)	(-57.4 to 75.8)	(-20.9 to -14.1)	(-14.8 to -0.7)	(-0.8 to 2.9)	(-28.2 to -15.4)
	47.5	-36.2	64.8	-14.9	29.7	9.7	-15.1	-8.0	2.7	7.7
Hawaii	(30.3 to 67.1)	(-43.4 to -27.3)	(22.8 to 181.6)	(-17.9 to -12.0)	(17.8 to 44.8)	(-47.5 to 114.3)	(-18.6 to -11.9)	(-14.2 to -0.5)	(1.1 to 4.5)	(4.4 to 13.1)
	61.9	-29.5	71.5	-12.8	3.7	2.9	-16.4	-8.3	3.5	4.8
Idaho	(39.7 to 90.2)	(-38.1 to -20.8)	(22.5 to 201.7)	(-15.9 to -9.8)	(-2.1 to 10.8)	(-53.0 to 99.2)	(-20.0 to -13.3)	(-14.7 to -0.7)	(1.7 to 5.4)	(2.5 to 8.2)
	48.6	-47.2	56.0	-13.6	16.9	7.6	-17.2	-7.9	-1.1	7.1
Illinois	(33.2 to 69.5)	(-53.1 to -39.3)	(18.8 to 166.8)	(-16.6 to -10.6)	(12.1 to 22.1)	(-47.7 to 118.1)	(-20.8 to -14.4)	(-14.2 to -0.5)	(-2.8 to 1.0)	(4.3 to 11.3)
	55.4	-25.4	116.7	-12.6	8.5	4.2	-17.4	-8.2	2.9	-2.4
Indiana	(37.6 to 77.3)	(-34.3 to -15.7)	(45.3 to 265.0)	(-15.5 to -9.5)	(4.8 to 11.8)	(-49.4 to 118.6)	(-20.8 to -14.3)	(-15.0 to -0.5)	(1.3 to 5.0)	(-5.5 to 0.1)
	57.2	-26.6	59.4	-13.2	40.8	3.0	-17.7	-7.9	2.4	-8.6
lowa	(37.4 to 82.6)	(-34.2 to -18.3)	(20.2 to 151.8)	(-16.0 to -10.2)	(32.6 to 48.5)	(-52.7 to 116.9)	(-21.0 to -14.4)	(-13.9 to -0.5)	(0.9 to 4.1)	(-13.2 to -5.4)
	51.7	-29.4	81.4	-12.7	32.7	4.3	-17.1	-8.0	3.2	-4.9
Kansas	(34.1 to 73.9)	(-38.2 to -19.2)	(27.2 to 235.4)	(-15.6 to -9.6)	(25.0 to 40.6)	(-52.2 to 111.6)	(-20.6 to -13.6)	(-14.2 to -0.5)	(1.5 to 5.0)	(-8.5 to -2.2)
	57.0	-19.8	115.8	-12.5	11.2	7.9	-16.9	-8.2	4.5	-4.3
Kentucky	(38.0 to 79.2)	(-26.8 to -12.9)	(49.5 to 281.7)	(-15.6 to -9.5)	(5.2 to 18.6)	(-45.9 to 116.6)	(-20.7 to -13.9)	(-14.6 to -0.7)	(2.4 to 6.4)	(-7.5 to -1.7)
	52.0	-31.9	108.0	-12.7	4.5	10.6	-15.3	-8.0	2.6	-5.3
Louisiana	(36.8 to 71.6)	(-38.7 to -24.7)	(40.0 to 277.3)	(-15.5 to -9.5)	(1.2 to 7.3)	(-47.2 to 132.5)	(-18.7 to -11.9)	(-14.2 to -0.5)	(1.1 to 4.5)	(-9.4 to -2.5)
	47.9	-29.1	81.2	-13.1	9.5	10.3	-16.9	-8.2	1.8	-19.7
Maine	(32.1 to 68.4)	(-35.8 to -22.0)	(26.7 to 217.5)	(-16.1 to -10.1)	(5.8 to 12.8)	(-49.5 to 134.0)	(-20.4 to -13.5)	(-14.5 to -0.6)	(0.3 to 3.9)	(-26.4 to -15.2)
	48.1	-51.5	98.9	-13.8	-9.7	6.8	-18.2	-7.7	-3.6	-57.3
Maryland	(32.7 to 66.3)	(-57.2 to -44.7)	(32.4 to 247.8)	(-16.8 to -10.6)	(-15.0 to -5.2)	(-50.4 to 125.4)	(-21.8 to -15.1)	(-13.6 to -0.4)	(-6.5 to -0.4)	(-69.6 to -48.7)

	52.0	-46.0	45.3	-14.1	2.5	9.0	-19.6	-7.6	-0.2	-7.2
Massachusetts	(34.0 to 75.4)	(-52.3 to -38.7)	(16.0 to 129.6)	(-16.9 to -11.1)	(-1.0 to 6.1)	(-49.2 to 123.2)	(-23.1 to -16.7)	(-13.8 to -0.4)	(-1.6 to 1.3)	(-13.1 to -3.0)
	41.9	-37.3	114.8	-13.4	13.7	5.6	-17.5	-8.3	0.9	2.5
Michigan	(28.3 to 60.0)	(-43.9 to -30.0)	(46.6 to 276.7)	(-16.3 to -10.1)	(10.0 to 16.8)	(-49.8 to 112.7)	(-21.4 to -14.4)	(-14.7 to -0.7)	(-0.5 to 2.9)	(-1.2 to 7.0)
	52.9	-37.3	48.0	-14.0	23.5	5.6	-18.3	-7.8	2.2	-4.1
Minnesota	(36.2 to 74.8)	(-44.1 to -28.6)	(19.1 to 140.3)	(-17.0 to -10.9)	(16.2 to 31.9)	(-48.3 to 115.5)	(-21.5 to -15.2)	(-13.9 to -0.4)	(0.7 to 4.1)	(-8.2 to -0.9)
in in coota	54.3	-20.3	127.2	-11.8	7.0	8.8	-14.8	-8.2	4.1	0.1
Mississippi	(37.1 to 77.0)	(-30.3 to -10.3)	(56.6 to 298.8)	(-15.1 to -8.6)	(4.4 to 10.0)	(-45.3 to 115.6)	(-18.3 to -11.8)	(-14.6 to -0.7)	(2.2 to 6.1)	(-2.9 to 2.9)
inicologipp.	54.3	-29.6	111.8	-12.6	42.8	5.4	-16.4	-8.1	2.5	-2.2
Missouri	(35.8 to 78.0)	(-36.7 to -22.2)	(44.2 to 271.5)	(-15.6 to -9.5)	(38.1 to 46.7)	(-50.3 to 122.2)	(-19.7 to -13.1)	(-14.2 to -0.7)	(1.0 to 4.6)	(-5.5 to 0.7)
ivii350 di l	53.6	-26.5	40.6	-12.9	22.0	8.1	-16.8	-8.0	0.0	-5.0
Montana	(36.9 to 77.2)	(-35.5 to -16.0)	(14.9 to 116.1)	(-15.5 to -10.1)	(15.1 to 29.2)	(-50.3 to 127.1)	(-20.3 to -13.4)	(-14.2 to -0.5)	(-1.6 to 2.3)	(-8.9 to -2.1)
Wolltand	57.1	-30.1	88.0	-13.6	25.2	4.0	-17.6	-7.8	2.3	-9.2
Nebraska	(39.5 to 80.5)	(-37.2 to -22.1)	(31.4 to 229.0)	(-16.4 to -10.6)	(17.5 to 33.5)	(-51.2 to 116.2)	(-21.1 to -14.4)	(-13.9 to -0.6)	(0.9 to 4.3)	(-14.2 to -5.8)
The brasha	36.7	-51.2	81.1	-12.2	14.6	5.9	-17.6	-8.2	0.7	6.2
Nevada	(21.5 to 54.2)	(-57.7 to -43.7)	(23.6 to 228.6)	(-15.2 to -9.4)	(11.7 to 17.9)	(-51.6 to 122.6)	(-21.0 to -14.4)	(-14.7 to -0.6)	(-1.0 to 3.1)	(2.7 to 10.9)
Nevada	57.7	-37.0	79.5	-13.0	2.2	14.0	-17.8	-7.8	0.4	-3.5
New Hampshire	(38.1 to 83.6)	(-42.9 to -29.5)	(25.7 to 210.3)	(-16.1 to -10.0)	(-2.0 to 7.1)	(-47.1 to 142.8)	(-21.3 to -14.5)	(-14.0 to -0.5)	(-1.4 to 3.0)	(-7.8 to 0.1)
New Hampshire	48.0	-52.5	75.4	-14.6	9.2	3.5	-18.2	-7.6	-2.4	-2.7
New Jersey	(32.4 to 67.8)	(-59.1 to -44.7)	(24.4 to 198.9)	(-17.5 to -11.6)	(5.5 to 13.5)	(-52.0 to 115.9)	(-22.1 to -15.0)	(-13.8 to -0.4)	(-4.5 to 0.1)	(-6.6 to 0.9)
New Jersey	68.2	-37.5	74.3	-11.7	23.8	10.4	-15.3	-8.2	3.5	-10.2
New Mexico	(45.6 to 99.7)	(-45.6 to -29.3)	(27.3 to 190.2)	(-14.7 to -8.6)	(19.0 to 29.2)	(-46.9 to 121.0)	(-18.8 to -12.0)	(-14.4 to -0.7)	(1.6 to 5.6)	(-15.7 to -6.5)
New Mexico	51.3	-51.4	105.4	-14.0	1.3	4.5	-18.6	-7.8	-2.3	-5.8
New York	(34.6 to 72.4)	(-58.5 to -42.4)	(42.2 to 262.3)	(-17.1 to -11.0)	(-1.3 to 3.9)	(-48.4 to 115.5)	(-22.1 to -15.6)	(-14.1 to -0.5)	(-4.7 to 0.5)	(-10.6 to -2.4)
New TOTK	54.1	-37.1	(42.2 (0 202.3)	-13.9	(-1.3 (0 3.9)	6.9	-17.4	-8.2	1.6	-6.5
North Carolina	(38.2 to 73.7)	(-44.6 to -28.8)	(42.2 to 272.4)	(-17.1 to -10.6)	(9.2 to 19.6)	(-46.7 to 105.5)	(-20.9 to -14.3)	-3.2 (-14.3 to -0.6)	(0.1 to 3.6)	(-10.5 to -3.6)
North Carolina	60.8	-19.4	(42.2 (0 272.4)	-13.8	71.3	7.1	-17.7	-7.5	1.9	-24.8
North Dakota	(41.8 to 87.7)	(-29.4 to -8.6)	(23.9 to 190.9)	(-16.6 to -10.9)	(58.2 to 86.3)	(-49.9 to 118.2)	(-21.6 to -14.4)	(-13.6 to -0.4)	(0.4 to 3.6)	(-33.8 to -19.2)
	49.6	-28.1	118.3	-12.5	12.1	9.2	-17.1	-8.1	2.2	-37.2
Ohio	(34.0 to 70.6)	(-35.0 to -20.5)	(50.1 to 297.7)	(-15.5 to -9.3)	(8.3 to 15.6)	(-49.2 to 118.8)	(-20.8 to -13.9)	(-14.5 to -0.5)	(0.8 to 4.5)	(-50.5 to -29.4)
Onio	69.3	-26.6	118.0	-13.2	12.1	1.8	-15.1	-8.0	3.7	-5.2
Oklahoma	(47.7 to 99.6)	(-33.5 to -19.3)	(50.9 to 292.2)	(-15.9 to -10.0)	(8.2 to 16.6)	(-49.9 to 113.6)	(-18.6 to -12.1)	(-14.0 to -0.6)	(1.8 to 5.6)	(-9.2 to -2.4)
Chanoma	48.1	-44.0	40.9	-13.7	-0.2	5.5	-16.9	-8.1	1.9	-8.1
Oregon	(33.0 to 67.0)	(-50.5 to -36.0)	(14.1 to 110.0)	(-16.8 to -10.5)	(-3.8 to 3.0)	(-47.6 to 119.8)	(-20.4 to -13.7)	(-14.4 to -0.6)	(0.6 to 3.8)	(-12.7 to -4.8)
oregon	46.4	-38.6	1.7	-13.5	12.9	6.9	-17.5	-7.9	-1.2	-7.8
Pennsylvania	(28.9 to 66.0)	(-44.9 to -31.4)	(-36.4 to 50.1)	(-16.6 to -10.4)	(9.4 to 16.5)	(-48.0 to 113.8)	(-21.3 to -14.3)	(-14.2 to -0.6)	(-3.0 to 0.9)	(-13.2 to -4.5)
. cimoji tama	58.2	-37.7	87.5	-13.2	2.9	7.1	-16.9	-7.9	-0.4	0.6
Rhode Island	(40.4 to 78.5)	(-46.2 to -28.8)	(32.7 to 230.9)	(-16.4 to -10.2)	(0.7 to 5.0)	(-49.2 to 123.8)	(-20.6 to -13.7)	(-14.2 to -0.5)	(-2.1 to 1.9)	(-2.8 to 4.5)
	59.7	-32.1	123.2	-13.1	2.1	9.3	-16.4	-8.2	2.3	4.1
South Carolina	(41.9 to 83.9)	(-40.6 to -22.7)	(54.8 to 304.8)	(-16.2 to -10.0)	(-0.8 to 4.6)	(-46.5 to 126.1)	(-19.8 to -13.4)	(-14.4 to -0.6)	(0.8 to 4.6)	(1.5 to 7.4)
	59.0	-21.5	51.1	-13.2	75.4	4.6	-17.3	-7.7	1.9	-38.8
South Dakota	(38.7 to 88.1)	(-31.4 to -10.1)	(21.6 to 129.6)	(-16.1 to -10.1)	(60.2 to 92.0)	(-49.4 to 131.0)	(-20.8 to -14.1)	(-14.0 to -0.4)	(0.6 to 3.9)	(-52.8 to -30.6)
	64.3	-25.1	110.4	-12.8	6.6	5.9	-15.9	-8.0	3.2	-8.1
Tennessee	(46.4 to 88.2)	(-32.5 to -17.6)	(44.7 to 269.2)	(-15.9 to -9.8)	(3.2 to 9.7)	(-47.4 to 105.7)	(-19.3 to -12.8)	(-14.6 to -0.5)	(1.5 to 5.1)	(-12.2 to -5.2)
	62.5	-51.2	(44.7 to 209.2) 95.1	-13.4	19.6	6.9	-18.0	-8.0	3.8	-10.3
Texas	(42.9 to 86.9)	(-57.7 to -42.5)			(12.9 to 27.1)		(-21.7 to -14.9)	(-14.0 to -0.6)	(2.1 to 5.1)	(-15.9 to -7.0)
1 CAUS	(+2.5 (0 00.5)	( 57.7 to -42.5)	(37.3 (0 231.3)	(10.5 (0 -10.5)	(12.5 (0 27.1)	( -5.5 (0 121.1)	(21.7 (0 -14.3)	( 17.0 (0 -0.0)	(2.1 (0 ).1)	(13.3 (0 - 7.0)

	59.4	-34.9	72.4	-12.9	1.4	3.8	-16.8	-8.2	2.1	-5.7
Utah	(40.6 to 84.1)	(-44.5 to -23.2)	(21.3 to 199.0)	(-15.8 to -9.9)	(-1.9 to 4.2)	(-45.6 to 96.4)	(-20.5 to -13.4)	(-14.5 to -0.6)	(0.7 to 3.7)	(-9.8 to -2.7)
	47.8	-29.8	38.6	-12.9	5.3	14.3	-17.2	-7.8	-2.4	-2.3
Vermont	(32.9 to 69.8)	(-37.5 to -21.3)	(15.6 to 103.5)	(-16.0 to -10.0)	(-2.3 to 14.6)	(-46.9 to 146.4)	(-20.6 to -14.0)	(-14.3 to -0.5)	(-5.0 to 0.6)	(-6.1 to 0.7)
	54.3	-44.4	96.8	-14.4	13.9	9.0	-17.9	-7.8	1.0	-6.6
Virginia	(37.1 to 76.3)	(-50.3 to -37.6)	(33.7 to 247.8)	(-17.5 to -11.5)	(9.1 to 19.3)	(-46.6 to 123.0)	(-21.4 to -14.8)	(-13.9 to -0.5)	(-0.6 to 3.3)	(-11.2 to -3.1)
	56.9	-47.9	44.8	-13.6	16.0	5.2	-18.0	-7.9	1.6	-7.7
Washington	(39.5 to 79.7)	(-54.2 to -40.1)	(18.3 to 113.4)	(-16.4 to -10.5)	(13.3 to 18.8)	(-48.7 to 116.7)	(-21.8 to -15.0)	(-14.0 to -0.5)	(0.3 to 3.6)	(-12.6 to -4.4)
	53.7	-11.2	129.2	-13.1	10.3	5.4	-16.7	-8.3	5.2	-7.0
West Virginia	(38.4 to 75.4)	(-18.6 to -2.3)	(51.7 to 301.8)	(-16.2 to -10.1)	(6.5 to 13.7)	(-47.1 to 100.6)	(-20.2 to -13.6)	(-14.6 to -0.7)	(2.8 to 7.2)	(-11.3 to -4.1)
	52.3	-32.6	53.2	-13.1	15.4	5.6	-17.5	-8.0	2.4	-4.8
Wisconsin	(36.7 to 72.8)	(-39.8 to -24.4)	(15.7 to 156.5)	(-16.0 to -9.8)	(10.3 to 21.6)	(-50.3 to 114.4)	(-21.3 to -14.0)	(-14.3 to -0.5)	(0.9 to 4.3)	(-8.9 to -1.5)
	52.3	-31.9	41.1	-13.7	116.0	10.3	-17.7	-7.5	1.2	-3.9
Wyoming	(34.4 to 76.6)	(-39.9 to -22.6)	(16.8 to 109.1)	(-16.6 to -10.8)	(91.2 to 141.9)	(-49.4 to 146.5)	(-21.3 to -14.5)	(-13.8 to -0.4)	(-0.2 to 3.4)	(-7.7 to -0.8)

Appendix Table 11: Socio-Demograp	hic Ind	lex va	lues fo	r all es	stimate	d GBD	0 2016	locatio	ons, 19	80-201	16																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Global	0.526	0.531	0.535	0.54	0.544	0.549	0.554	0.559	0.564	0.569	0.575	0.58	0.586	0.591	0.596	0.6	0.605	0.609	0.614	0.618	0.622	0.626	0.63	0.634	0.639	0.643	0.648	0.652	0.657	0.662	0.666	0.671	0.676	0.681	0.686	0.691	0.696
Southeast Asia, East Asia, and Oceania	0.438	0.445	0.453	0.461	0.47	0.478	0.486	0.495	0.504	0.512	0.521	0.53	0.539	0.548	0.556	0.565	0.573	0.581	0.587	0.594	0.6	0.606	0.612	0.619	0.626	0.633	0.641	0.65	0.658	0.666	0.675	0.683	0.691	0.699	0.706	0.712	0.719
East Asia	0.436	0.443	0.45	0.458	0.467	0.477	0.486	0.496	0.506	0.515	0.524	0.533	0.543	0.552	0.562	0.571	0.58	0.588	0.594	0.601	0.608	0.614	0.621	0.629	0.636	0.644	0.653	0.661	0.67	0.678	0.686	0.694	0.701	0.709	0.715	0.722	0.729
China	0.42	0.428	0.435	0.444	0.453	0.463	0.473	0.483	0.494	0.503	0.512	0.521	0.531	0.542	0.552	0.562	0.57	0.578	0.585	0.592	0.6	0.607	0.614	0.622	0.63	0.638	0.647	0.657	0.665	0.674	0.682	0.691	0.698	0.706	0.713	0.72	0.727
North Korea	0.471	0.476	0.48	0.485	0.488	0.491	0.494	0.497	0.499	0.502	0.505	0.508	0.51	0.511	0.51	0.506	0.501	0.495	0.489	0.483	0.478	0.473	0.47	0.468	0.468	0.469	0.47	0.471	0.473	0.474	0.476	0.478	0.481	0.484	0.488	0.491	0.494
Taiwan (province of China)	0.636	0.645	0.657	0.669	0.681	0.695	0.706	0.71	0.718	0.727	0.734	0.743	0.749	0.756	0.762	0.768	0.775	0.788	0.798	0.8	0.808	0.815	0.82	0.824	0.829	0.833	0.837	0.842	0.845	0.849	0.853	0.857	0.86	0.864	0.868	0.871	0.875
Hong Kong Special Administrative Region of	0.633	0.643	0.652	0.662	0.671	0.677	0.682	0.688	0.694	0.699	0.704	0.708	0.713	0.718	0.723	0.727	0.731	0.734	0.737	0.74	0.743	0.746	0.749	0.752	0.756	0.761	0.765	0.77	0.775	0.779	0.783	0.787	0.791	0.795	0.798	0.801	0.805
China																																					
Macao Special Administrative Region of China	0.638	0.646	0.654	0.66	0.667	0.672	0.678	0.684	0.689	0.695	0.7	0.705	0.711	0.716	0.721	0.725	0.728	0.731	0.732	0.734	0.735	0.738	0.742	0.747	0.754	0.761	0.768	0.776	0.784	0.789	0.793	0.796	0.799	0.802	0.806	0.809	0.811
China (without Hong Kong and Macao)	0.413	0.42	0.428	0.436	0.446	0.456	0.467	0.477	0.487	0.497	0.506	0.515	0.525	0.536	0.546	0.556	0.565	0.574	0.581	0.588	0.596	0.603	0.611	0.619	0.627	0.635	0.645	0.654	0.663	0.672	0.68	0.689	0.697	0.704	0.712	0.718	0.725
Anhui	0.353	0.36	0.367	0.375	0.385	0.396	0.406	0.417	0.427	0.437	0.446	0.455	0.464	0.474	0.483	0.493	0.502	0.51	0.518	0.525	0.532	0.538	0.545	0.552	0.559	0.567	0.576	0.585	0.594	0.603	0.611	0.619	0.626	0.633	0.639	0.645	0.651
Beijing	0.606	0.612	0.618	0.624	0.631	0.638	0.645	0.653	0.659	0.665	0.671	0.676	0.682	0.689	0.695	0.702	0.709	0.715	0.721	0.726	0.732	0.738	0.744	0.75	0.757	0.764	0.772	0.78	0.787	0.795	0.802	0.809	0.816	0.823	0.829	0.835	0.842
Chongqing	0.367	0.375	0.384	0.394	0.407	0.419	0.431	0.443	0.454	0.464		0.485	0.496	0.507	0.519	0.53	0.539	0.549	0.557	0.565	0.574	0.582	0.591	0.599	0.607		0.625	0.635	0.643	0.652	0.66	0.668	0.675	0.682	0.689	0.694	0.7
Fujian	0.372	0.378	0.386	0.396	0.408	0.42	0.433	0.445	0.458	0.469	0.48	0.492	0.504	0.518	0.531	0.544	0.555	0.564	0.573	0.581	0.59	0.598	0.606	0.615	0.623	0.632	0.642	0.652	0.662	0.671	0.68	0.689	0.698	0.706	0.713	0.72	0.727
Gansu	0.353	0.358	0.364	0.372		0.391	0.401	0.411	0.421	0.431		0.447	0.456	0.465	0.473	0.482	0.49	0.498	0.506	0.513	0.52	0.526	0.533	0.539	0.546	0.553	0.56	0.568	0.575	0.583	0.59	0.597	0.604	0.61	0.616	0.622	0.628
Guangdong	0.444	0.451	0.458	0.467	0.476	0.487	0.497	0.507	0.518	0.527	0.536	0.546	0.557	0.567	0.578	0.588	0.598	0.607	0.615	0.623	0.632	0.64	0.648	0.658	0.667	0.678	0.688	0.7	0.71	0.72	0.729	0.737	0.745	0.753	0.761	0.768	0.775
Guangxi	0.361	0.369	0.376	0.385	0.395	0.406	0.417	0.428	0.439	0.449		0.468	0.479	0.49	0.501	0.511	0.521	0.531	0.539	0.547	0.555	0.562	0.569	0.577	0.585		0.603	0.613	0.622	0.632	0.641	0.651	0.661	0.67	0.679	0.686	0.693
Guizhou	0.279	0.287	0.295	0.303	0.314	0.325	0.336	0.347	0.358	0.368		0.385	0.394	0.403	0.413	0.422	0.431	0.439	0.446	0.454	0.462	0.469	0.477	0.485	0.494		0.512		0.531	0.54	0.55	0.559	0.567	0.575	0.581	0.587	0.594
Hainan	0.438	0.443	0.448	0.454	0.462	0.47	0.478	0.486	0.495	0.502	0.511	0.52	0.529	0.539	0.549	0.558	0.566	0.575	0.582	0.59	0.597	0.604	0.611	0.618	0.625	0.632	0.64	0.648	0.656	0.665	0.672	0.68	0.686	0.693	0.699	0.705	0.711
Hebei	0.42	0.427	0.435	0.443	0.452	0.462	0.472	0.482	0.492	0.501	0.509	0.517	0.527	0.537	0.547	0.556	0.565	0.573	0.581	0.588	0.596	0.603	0.611	0.619	0.627	0.635	0.644		0.662	0.671	0.679	0.687	0.695	0.702	0.709	0.716	0.722
Heilongjiang	0.477				0.504	0.513	0.0	0.531	0.54				0.575	0.00-	0.588		0.6	0.606	0.611	0.617	0.623	0.628	0.634		0.644		0.655	0.662	0.668		0.679		0.69			0.704	
Henan Hubei	0.368	0.375	0.384	0.394	0.405	0.417	0.429	0.441	0.453	0.463	0.471	0.481	0.491	0.502	0.513	0.525	0.535	0.545	0.554	0.562	0.57	0.578	0.587	0.595	0.604	0.613	0.623	0.633	0.643	0.652	0.661	0.67	0.678	0.685	0.693	0.699	0.706
		0.415	0.423	0.432		0.452		0.474	0.484	0.494		0.514	0.524	0.535	0.545	0.553	0.561	0.569	0.576	0.583	0.59	0.597	0.604	0.611	0.618	0.626	0.635		0.651	0.659	0.667	0.674	0.681	0.688		0.7	
Hunan	0.383	0.391	0.399	0.409	0.42	0.431	0.442	0.454	0.465	0.476	0.485	0.495	0.505	0.516	0.526	0.536	0.546	0.555	0.562	0.569	0.576	0.582	0.59	0.597	0.605	0.613	0.621	0.63	0.639	0.647	0.655	0.663	0.67	0.678	0.684	0.691	0.697
Inner Mongolia		0.413		0.431		0.456		0.48		0.000	0.512		0.534		0.556			0.584			0.61	0.618	0.627		0.641			0.664	0.672		0.000	0.07.0	0.703		0.716	0.722	
Jiangsu	0.443	0.451	0.459	0.468	0.479	0.489	0.5	0.51	0.521	0.53	0.539	0.548	0.557	0.565	0.573	0.582	0.591	0.599	0.607	0.614	0.621	0.629	0.637	0.646	0.655	0.664	0.674	0.684	0.693	0.702	0.711	0.72	0.728	0.736	0.743	0.75	0.757
Jiangxi Jilin	0.347	0.354	0.362	0.371 0.471	0.382	0.394	0.405	0.416	0.428	0.439		0.458	0.469	0.48	0.49	0.5 0.579	0.509	0.518	0.526	0.534	0.542	0.549	0.557		0.573	0.581	0.59	0.599	0.667	0.615 0.676	0.622 0.683	0.629	0.636	0.643	0.649 0.708	0.655 0.713	0.662 0.719
Liaoning	0.431	0.437	0.464	0.471	0.48	0.555	0.563	0.509	0.579	0.528		0.597	0.602	0.564	0.614	0.621	0.586	0.634	0.639	0.645	0.651	0.656	0.620	0.655	0.639	0.646	0.635	0.693	0.008	0.707	0.713	0.719	0.725	0.702	0.736	0.741	0.746
Ningxia	0.321	0.327	0.333	0.339	0.347	0.333	0.363	0.429	0.379	0.387	0.392	0.397	0.602	0.608	0.498	0.507	0.515	0.634	0.639	0.538	0.545	0.552	0.559	0.566	0.574		0.592	0.693	0.61	0.617	0.713	0.719	0.723	0.73	0.736	0.741	0.746
0	0.354	0.373	0.366	0.39	0.398	0.408	0.418	0.429	0.44	0.43	0.46	0.469	0.479	0.489	0.498	0.501	0.509	0.525	0.531	0.538	0.545	0.532	0.55	0.557	0.564	0.585	0.578	0.586	0.593	0.617	0.607	0.632	0.639	0.643	0.632	0.639	0.645
Qinghai Shaanxi	0.385	0.392	0.300	0.375	0.380	0.43	0.408	0.42	0.462	0.442	0.432	0.402	0.501	0.512	0.492	0.532	0.54	0.549	0.524	0.564	0.571	0.579	0.587	0.594	0.602	0.61	0.619	0.628	0.637	0.645	0.654	0.662	0.62	0.677	0.684	0.69	0.696
Shandong	0.413	0.372	0.431	0.40	0.41)	0.463	0.474	0.485	0.497	0.507	0.516	0.525	0.535	0.544	0.553	0.563	0.572	0.581	0.589	0.596	0.604	0.612	0.62	0.629	0.638		0.657	0.668	0.678	0.687	0.696	0.705	0.713	0.721	0.729	0.736	0.742
Shanghai	0.638	0.643	0.648	0.652	0.656	0.661	0.666	0.67	0.675	0.679	0.684	0.689	0.694	0.699	0.704	0.709	0.714	0.719	0.723	0.727	0.732	0.736	0.741	0.747	0.753		0.765	0.772	0.778	0.785	0.791	0.797	0.803	0.809	0.815	0.82	0.826
Shanxi	0.42	0.426	0.434	0.442	0.452	0.462	0.472	0.482	0.493	0.502	0.511	0.52	0.53	0.54	0.55	0.559	0.568	0.577	0.585	0.593	0.6	0.607	0.614	0.621	0.628	0.635	0.643	0.651	0.659	0.666	0.674	0.681	0.688	0.694	0.7	0.706	0.712
Sichuan	0.349	0.359	0.369	0.38	0.392	0.405	0.418	0.43	0.443	0.454	0.463	0.472	0.482	0.492	0.502	0.511	0.52	0.528	0.535	0.542	0.549	0.556	0.563	0.571	0.58	0.589	0.598	0.608	0.617	0.625	0.634	0.642	0.65	0.657	0.664	0.67	0.677
Tianiin	0.569	0.575	0.582	0.589	0.596	0.604	0.611	0.618	0.625	0.63	0.636	0.641	0.647	0.653	0.66	0.666	0.673	0.679	0.685	0.69	0.696	0.702	0.709	0.715	0.722		0.737	0.745	0.753	0.76	0.768	0.775	0.782	0.789	0.795	0.801	0.807
Tibet	0.344	0.348	0.352	0.357	0.363	0.369	0.376	0.383	0.39	0.398	0.406	0.414	0.422	0.429	0.437	0.444	0.45	0.456	0.462	0.468	0.474	0.48	0.487	0.495	0.503	0.512	0.519	0.526	0.532	0.538	0.544	0.55	0.556	0.561	0.566	0.571	0.577
Xiniiang	0.377	0.383	0.39	0.399	0.41	0.423	0.435	0.448	0.462	0.474	0.486	0.499	0.512	0.524	0.536	0.548	0.558	0.569	0.578	0.588	0.597	0.606	0.614	0.622	0.629	0.636	0.644	0.652	0.66	0.668	0.676	0.683	0.69	0.696	0.702	0.707	0.713
Yunnan	0.311	0.319	0.327	0.336	0.346	0.358	0.369	0.38	0.391	0.402	0.412	0.422	0.432	0.443	0.453	0.464	0.473	0.482	0.491	0.499	0.507	0.515	0.523	0.532	0.541	0.55	0.56	0.57	0.579	0.587	0.596	0.604	0.611	0.618	0.625	0.632	0.639
Zhejiang	0.418	0.426	0.435	0.445	0.457	0.469	0.481	0.493	0.505	0.515	0.524	0.534	0.544	0.552	0.561	0.57	0.579	0.588	0.596	0.604	0.612	0.62	0.629	0.637	0.647	0.656	0.666	0.677	0.686	0.695	0.705	0.714	0.722	0.73	0.738	0.745	0.753
Southeast Asia	0.411	0.421	0.431	0.441	0.45	0.459	0.467	0.475	0.483	0.491	0.499	0.507	0.515	0.523	0.531	0.539	0.547	0.554	0.56	0.566	0.571	0.577	0.582	0.587	0.593	0.598	0.604	0.61	0.616	0.623	0.629	0.636	0.644	0.651	0.659	0.666	0.672
Cambodia	0.258	0.261	0.264	0.267	0.271	0.275	0.279	0.284	0.29	0.296	0.301	0.306	0.312	0.316	0.321	0.326	0.331	0.336	0.342	0.349	0.357	0.365	0.373	0.382	0.391	0.401	0.412	0.423	0.433	0.443	0.452	0.461	0.47	0.479	0.487	0.496	0.503
Indonesia	0.403	0.414	0.425	0.436	0.446	0.457	0.467	0.476	0.485	0.493	0.501	0.51	0.518	0.526	0.534	0.541	0.549	0.557	0.562	0.567	0.572	0.577	0.582	0.586	0.591	0.596	0.601	0.607	0.613	0.62	0.627	0.635	0.643	0.652	0.66	0.669	0.676
Laos	0.239	0.245	0.252	0.259	0.265	0.272	0.279	0.286	0.291	0.297	0.303	0.309	0.315	0.321	0.327	0.335	0.344	0.354	0.363	0.372	0.382	0.391	0.4	0.409	0.418	0.426	0.434	0.441	0.448	0.456	0.463	0.471	0.48	0.488	0.496	0.505	0.512
Malaysia	0.495	0.502	0.51	0.515	0.518	0.523	0.531	0.54	0.549	0.557	0.564	0.569	0.575	0.583	0.593	0.603	0.613	0.625	0.632	0.637	0.648	0.661	0.672	0.679	0.687	0.694	0.701	0.707	0.712	0.718	0.726	0.734	0.742	0.75	0.758	0.766	0.773
Maldives	0.344	0.353	0.362	0.371	0.379	0.389	0.397	0.406	0.415	0.424	0.433	0.442	0.451	0.46	0.469	0.479	0.489	0.5	0.511	0.522	0.534	0.545	0.555	0.565	0.576	0.583	0.592	0.602	0.611	0.621	0.63	0.641	0.651	0.661	0.67	0.68	0.687
Myanmar	0.295	0.301	0.308	0.315	0.321	0.328	0.334	0.339	0.342	0.346	0.349	0.352	0.356	0.36	0.366	0.372	0.379	0.386	0.393	0.401	0.411	0.42	0.43	0.441	0.453	0.465	0.478	0.49	0.502	0.513	0.524	0.536	0.547	0.558	0.569	0.58	0.59
Philippines	0.457	0.465	0.474	0.482	0.489	0.495	0.5	0.505	0.51	0.515	0.52	0.525	0.529	0.534	0.539	0.544	0.549	0.554	0.558	0.562	0.566	0.57	0.573	0.577	0.581	0.585	0.589	0.594	0.598	0.603	0.608	0.613	0.619	0.625	0.631	0.637	0.642
Sri Lanka	0.43	0.437	0.445	0.453	0.463	0.473	0.484	0.492	0.5	0.506	0.512	0.519	0.526	0.533	0.541	0.55	0.559	0.568	0.576	0.581	0.584	0.588	0.592	0.598	0.604	0.609	0.615	0.621	0.628	0.636	0.646	0.656	0.666	0.676	0.685	0.695	0.703
Thailand	0.435	0.449	0.462	0.475	0.486	0.497	0.507	0.517	0.526	0.535	0.544	0.554	0.563	0.572	0.581	0.591	0.6	0.608	0.615	0.621	0.628	0.635	0.642	0.649	0.657	0.664	0.672	0.68	0.686	0.691	0.697	0.703	0.709	0.714	0.719	0.724	0.729
Timor-Leste	0.236	0.245	0.253	0.261	0.269	0.278	0.286	0.295	0.304	0.314	0.323	0.332	0.342	0.351	0.36	0.368	0.376	0.383	0.389	0.39	0.392	0.394	0.396	0.395	0.404	0.416	0.429	0.437	0.444	0.452	0.462	0.475	0.488	0.502	0.514	0.525	0.532
Vietnam	0.354	0.362	0.37	0.378	0.387	0.395	0.403	0.411	0.421	0.43	0.439	0.448	0.458	0.467	0.476	0.486	0.495	0.505	0.514	0.522	0.53	0.538	0.546	0.552	0.559	0.566	0.573	0.579	0.586	0.592	0.599	0.606	0.613	0.619	0.626	0.633	0.639
Mauritius	0.532	0.546	0.559	0.569	0.578	0.587	0.59	0.591	0.595	0.602	0.61	0.616	0.621	0.63	0.639	0.647	0.654	0.662	0.667	0.671	0.678	0.684	0.688	0.693	0.698	0.703	0.71	0.715	0.722	0.726	0.73	0.735	0.739	0.743	0.747	0.752	0.756
Seychelles	0.492	0.51	0.524	0.531	0.538	0.548	0.56	0.574	0.586	0.595	0.603	0.61	0.618	0.625	0.634	0.644	0.654	0.663	0.671	0.677	0.682	0.687	0.691	0.693	0.694	0.696	0.697	0.698	0.7	0.703	0.706	0.708	0.711	0.716	0.723	0.73	0.736
Aceh	0.418	0.43	0.443	0.456	0.469	0.482	0.494	0.505	0.516	0.527	0.537	0.547	0.557	0.566	0.575	0.583	0.591	0.599	0.604	0.609	0.612	0.614	0.616	0.618	0.62	0.622	0.625	0.629	0.633	0.637	0.642	0.647	0.653	0.66	0.667	0.674	0.681
Sumatera Utara	0.407	0.418	0.429	0.439	0.45	0.46	0.47	0.478	0.485	0.492	0.499	0.506	0.513	0.52	0.527	0.533	0.54	0.547	0.552	0.558	0.562	0.567	0.572	0.578	0.583	0.588	0.593	0.6	0.607	0.616	0.625	0.635	0.645	0.654	0.663	0.672	0.68
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Appendix Table 11: Socio-Demograp	hic Ind	lex val	lues fo	r all es	timate	d GBD	2016	locatio	ons, 198	80-201	6																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sumatera Barat	0.387	0.398	0.408	0.418	0.429	0.439	0.448	0.458	0.466	0.475	0.483	0.491	0.498	0.506	0.513	0.519	0.526	0.532	0.536	0.541	0.546	0.551	0.557	0.563	0.568	0.574	0.58	0.587	0.594	0.602	0.611	0.62	0.629	0.638	0.647	0.656	0.663
Riau	0.438	0.451	0.465	0.479	0.494	0.507	0.521	0.533	0.545	0.556	0.567	0.577	0.586	0.595	0.602	0.609	0.616	0.622	0.628	0.632	0.639	0.645	0.652	0.656	0.661	0.665	0.67	0.675	0.682	0.688	0.695	0.702	0.711	0.72	0.728	0.737	0.744
Jambi	0.355	0.366	0.376	0.387	0.398	0.408	0.418	0.428	0.438	0.447	0.456	0.465	0.474	0.483	0.492	0.501	0.51	0.519	0.526	0.532	0.537	0.542	0.549	0.555		0.568	0.575	0.583	0.592	0.6	0.61	0.62	0.63	0.64	0.649	0.659	0.667
Sumatera Selatan	0.416	0.426	0.436	0.446	0.456	0.466	0.476	0.485	0.495	0.503	0.512	0.521	0.53	0.537	0.544	0.55	0.557	0.563	0.569	0.572		0.578	0.581	0.584	0.587	0.592	0.596	0.602	0.608	0.615	0.622	0.629	0.638	0.646	0.655	0.663	0.671
Bengkulu	0.348	0.359	0.430	0.38	0.391	0.400	0.413	0.483	0.433	0.443	0.312	0.462	0.33	0.48	0.489	0.35	0.507	0.505	0.509	0.572	0.575	0.534	0.538	0.543	0.548		0.561	0.567	0.575	0.582	0.589	0.598	0.607	0.616	0.625	0.634	0.641
8	0.348	0.355	0.369	0.38	0.391	0.396			0.433	0.443	0.432	0.462	0.471			0.498		0.313	0.521	0.526		0.527	0.538	0.545	0.548		0.549	0.555		0.582	0.589	0.598	0.603	0.613	0.623	0.633	0.641
Lampung							0.405	0.414						0.46	0.469		0.489												0.562								
Bangka Belitung	0.398	0.408	0.417	0.427	0.437	0.447	0.456	0.466	0.475	0.483	0.492	0.499	0.507	0.514	0.521	0.528	0.535	0.542	0.548	0.553	0.557	0.562	0.567	0.572		0.584	0.589	0.595	0.602	0.608	0.615	0.623	0.631	0.639	0.647	0.656	0.663
Kepulauan Riau	0.439	0.453	0.467	0.482	0.498	0.513	0.528	0.542	0.555	0.568	0.581	0.593	0.606	0.617	0.626	0.635	0.644		0.659	0.665		0.672	0.675	0.678	0.681	0.684	0.688	0.692	0.698	0.704		0.718	0.726	0.734	0.742	0.751	0.758
Kalimantan Utara	0.455	0.469	0.483	0.498	0.513	0.527	0.541	0.554	0.566	0.577	0.588	0.599	0.61	0.62	0.63	0.64	0.649	0.658	0.666	0.673	0.679	0.684	0.689	0.693			0.709	0.713	0.72	0.726	0.731	0.739	0.746	0.754	0.761	0.769	0.775
Jakarta	0.554	0.566	0.576	0.587	0.599	0.609	0.619	0.629	0.638	0.646	0.654	0.663	0.67	0.68	0.689	0.697	0.706	0.714	0.72	0.725	0.73	0.735	0.74	0.745	0.75	0.754	0.759	0.764	0.769	0.775	0.782	0.789	0.795	0.803	0.81	0.818	0.824
Jawa Barat	0.406	0.416	0.426	0.436	0.446	0.456	0.465	0.474	0.481	0.488	0.496	0.504	0.512	0.52	0.529	0.538	0.546	0.554	0.56	0.563	0.566	0.569	0.571	0.575	0.578	0.582	0.587	0.593	0.6	0.608	0.615	0.623	0.631	0.639	0.648	0.656	0.663
Jawa Tengah	0.363	0.374	0.384	0.395	0.405	0.415	0.425	0.433	0.442	0.449	0.457	0.466	0.476	0.483	0.492	0.5	0.508	0.516	0.521	0.526	0.529	0.533	0.536	0.54	0.545	0.549	0.555	0.561	0.568	0.575	0.582	0.591	0.599	0.608	0.616	0.625	0.632
Yogyakarta	0.393	0.405	0.417	0.429	0.44	0.451	0.462	0.472	0.481	0.49	0.499	0.508	0.517	0.53	0.543	0.554	0.563	0.572	0.576	0.58	0.584	0.587	0.591	0.595	0.599	0.603	0.607	0.612	0.618	0.624	0.631	0.639	0.647	0.655	0.663	0.672	0.679
Jawa Timur	0.384	0.395	0.406	0.416	0.427	0.437	0.447	0.456	0.465	0.473	0.482	0.49	0.498	0.506	0.514	0.522	0.53	0.538	0.545	0.55	0.556	0.562	0.567	0.573	0.579	0.584	0.59	0.596	0.603	0.61	0.617	0.625	0.633	0.642	0.651	0.659	0.667
Banten	0.398	0.408	0.418	0.428	0.439	0.449	0.459	0.469	0.478	0.486	0.495	0.504	0.513	0.521	0.529	0.536	0.544	0.553	0.561	0.568	0.573	0.577	0.581	0.586	0.59	0.593	0.598	0.602	0.607	0.612	0.618	0.626	0.635	0.644	0.652	0.661	0.669
Bali	0.394	0.406	0.418	0.43	0.442	0.454	0.466	0.477	0.486	0.496	0.506	0.515	0.524	0.534	0.544	0.552	0.561	0.57	0.575	0.579	0.582	0.585	0.589	0.592	0.596	0.6	0.604	0.609	0.614	0.621	0.628	0.636	0.644	0.653	0.662	0.67	0.678
Nusa Tenggara Barat	0.285	0.297	0.307	0.318	0.328	0.338	0.346	0.354	0.361	0.367	0.374	0.383	0.392	0.403	0.413	0.424	0.434	0.444	0.452	0.458	0.466	0.475	0.483	0.49	0.498	0.505	0.511	0.518	0.524	0.532	0.539	0.547	0.554	0.562	0.569	0.577	0.584
Nusa Tenggara Timur	0.301	0.311	0.319	0.327	0.335	0.343	0.351	0.359	0.366	0.373	0.381	0.388	0.395	0.402	0.409	0.415	0.42	0.426	0.427	0.427		0.432	0.436	0.439	0.443	0.447	0.451	0.457	0.463	0.47	0.479	0.488	0.497	0.507	0.516	0.525	0.534
Kalimantan Barat	0.319	0.33	0.341	0.353	0.365	0.377	0.388	0.398	0.408	0.419	0.429	0.439	0.45	0.461	0.472	0.483	0.494	0.505	0.513	0.52	0.525	0.53	0.534	0.538		0.546	0.55	0.555	0.559	0.565	0.571	0.578	0.586	0.594	0.602	0.61	0.618
Kalimantan Tengah	0.41	0.42	0.429	0.439	0.449	0.459	0.469	0.479	0.488	0.497	0.506	0.515	0.523	0.534	0.545	0.554	0.564		0.579	0.583	0.585	0.586	0.587	0.588		0.591	0.594	0.598	0.603	0.61	0.617	0.625	0.633	0.642	0.65	0.659	0.667
Kalimantan Feligari Kalimantan Selatan	0.399	0.42	0.42)	0.432	0.442	0.453	0.463	0.472	0.48	0.497	0.494	0.515	0.525	0.519	0.527	0.534	0.542	0.549	0.579	0.558	0.561	0.564	0.567	0.57		0.577	0.58	0.584	0.589	0.594	0.601	0.609	0.617	0.625	0.633	0.642	0.649
Kalimantan Selatan Kalimantan Timur	0.399	0.41	0.421	0.432	0.442	0.435	0.465	0.472	0.48	0.487	0.494	0.607	0.617	0.625	0.6327	0.534	0.542	0.654	0.554	0.558	0.673	0.564	0.567	0.691			0.38	0.384	0.389	0.394	0.726	0.733	0.739	0.747	0.755	0.763	0.77
Sulawesi Utara	0.403	0.478	0.492	0.469	0.322	0.330	0.35	0.503	0.575	0.517	0.524	0.532	0.539	0.548	0.556	0.564	0.573	0.581	0.588	0.591	0.593	0.595	0.596	0.597			0.603	0.607	0.612	0.722	0.626	0.733	0.642	0.651	0.659	0.668	0.675
Sulawesi Tengah	0.363	0.373	0.383	0.392	0.402	0.411	0.42	0.429	0.437	0.444	0.452	0.46	0.468	0.476	0.485	0.493	0.502	0.509	0.516	0.523	0.527	0.533	0.538	0.542	0.547	0.551	0.555	0.559	0.565	0.572	0.579	0.588	0.597	0.606	0.616	0.625	0.633
Sulawesi Selatan	0.354	0.366	0.377	0.388	0.399	0.409	0.42	0.429	0.438	0.447	0.456	0.465	0.474	0.482	0.489	0.496	0.504	0.51	0.516	0.52	0.525	0.53	0.535	0.54	0.546	0.55	0.554	0.56	0.566	0.574	0.583	0.593	0.603	0.613	0.623	0.632	0.64
Sulawesi Tenggara	0.327	0.339	0.35	0.361	0.373	0.384	0.395	0.405	0.414	0.423	0.432	0.442	0.45	0.458	0.465	0.473	0.48	0.487	0.494	0.499	0.503	0.508	0.513	0.519	0.525	0.531	0.537	0.544	0.552	0.561	0.57	0.58	0.589	0.599	0.608	0.617	0.625
Gorontalo	0.328	0.338	0.346	0.354	0.362	0.37	0.378	0.385	0.392	0.399	0.407	0.415	0.424	0.43	0.437	0.444	0.45	0.457	0.462	0.466	0.467	0.47	0.473	0.478		0.488	0.493	0.5	0.507	0.517	0.526	0.536	0.546	0.555	0.564	0.573	0.581
Sulawesi Barat	0.318	0.329	0.338	0.348	0.358	0.368	0.378	0.387	0.396	0.405	0.414	0.422	0.43	0.436	0.442	0.447	0.453	0.458	0.462	0.466		0.473	0.477	0.481		0.489	0.493	0.498	0.507	0.516	0.525	0.536	0.547	0.558	0.568	0.579	0.587
Maluku	0.446	0.453	0.46	0.468	0.476	0.483	0.491	0.499	0.506	0.512	0.519	0.526	0.533	0.539	0.545	0.551	0.557	0.562	0.566	0.567	0.564	0.559	0.554	0.548		0.536	0.531	0.527	0.527	0.529	0.534	0.541	0.551	0.561	0.571	0.581	0.59
Maluku Utara	0.364	0.374	0.383	0.393	0.404	0.414	0.423	0.432	0.441	0.449	0.458	0.467	0.476	0.483	0.491	0.498	0.506	0.514	0.518	0.523	0.524	0.524	0.523	0.521	0.518	0.515	0.511	0.508	0.507	0.51	0.515	0.522	0.531	0.541	0.552	0.562	0.571
Papua Barat	0.413	0.425	0.436	0.448	0.461	0.472	0.484	0.495	0.505	0.515	0.525	0.534	0.543	0.55	0.558	0.565	0.572	0.578	0.582	0.585	0.587	0.589	0.59	0.592	0.594	0.596	0.598	0.601	0.607	0.615	0.626	0.643	0.657	0.671	0.683	0.695	0.706
Papua	0.442	0.45	0.457	0.465	0.474	0.481	0.488	0.494	0.5	0.505	0.51	0.516	0.522	0.529	0.534	0.54	0.546	0.552	0.558	0.562	0.565	0.569	0.571	0.573	0.574	0.577	0.58	0.583	0.584	0.585	0.588	0.589	0.591	0.595	0.6	0.605	0.61
Oceania	0.332	0.338	0.343	0.348	0.353	0.358	0.363	0.368	0.373	0.378	0.383	0.388	0.393	0.398	0.403	0.407	0.412	0.416	0.42	0.424	0.428	0.433	0.436	0.44	0.443	0.447	0.45	0.454	0.457	0.461	0.464	0.468	0.472	0.476	0.481	0.485	0.489
Fiji	0.525	0.534	0.542	0.55	0.558	0.565	0.572	0.579	0.585	0.592	0.6	0.607	0.614	0.62	0.627	0.634	0.64	0.646	0.652	0.658	0.663	0.669	0.674	0.679	0.684	0.689	0.694	0.699	0.704	0.708	0.712	0.716	0.721	0.725	0.729	0.733	0.736
Kiribati	0.261	0.267	0.273	0.279	0.284	0.288	0.292	0.295	0.299	0.303	0.307	0.312	0.316	0.32	0.324	0.328	0.333	0.338	0.345	0.35	0.357	0.363	0.37	0.376	0.383	0.389	0.395	0.401	0.406	0.412	0.416	0.421	0.426	0.431	0.437	0.442	0.446
Marshall Islands	0.399	0.406	0.413	0.42	0.427	0.432	0.439	0.446	0.453	0.46	0.466	0.47	0.473	0.474	0.475	0.476	0.477	0.479	0.482	0.487	0.492	0.499	0.504	0.51	0.514	0.518	0.522	0.527	0.531	0.536	0.541	0.547	0.553	0.559	0.565	0.571	0.575
Federated States of Micronesia	0.274	0.292	0.31	0.328	0.346	0.363	0.379	0.394	0.409	0.422	0.434	0.446	0.456	0.466	0.475	0.485	0.495	0.503	0.512	0.521	0.53	0.539	0.547	0.555	0.561	0.568	0.573	0.578	0.582	0.586	0.59	0.595	0.599	0.603	0.607	0.61	0.612
Papua New Guinea	0.256	0.26	0.263	0.267	0.271	0.274	0.278	0.283	0.287	0.292	0.296	0.3	0.304	0.31	0.315	0.32	0.325	0.33	0.334	0.338	0.342	0.345	0.348	0.352	0.355	0.359	0.362	0.367	0.371	0.376	0.382	0.387	0.394	0.4	0.406	0.413	0.418
Samoa	0.372	0.381	0.389	0.397	0.405	0.412	0.42	0.428	0.435	0.443	0.451	0.458	0.465	0.472	0.477	0.482	0.487	0.492	0.498	0.501	0.504	0.507	0.511	0.514			0.525	0.529	0.533	0.537	0.54	0.542	0.545	0.548	0.553	0.558	0.562
Solomon Islands	0.269	0.275	0.28	0.284	0.289	0.294	0.298	0.303	0.308	0.313	0.318	0.323	0.329	0.335	0.34	0.346	0.352	0.357	0.363	0.368		0.373	0.374	0.375	0.377		0.383	0.387	0.393	0.398	0.404	0.411	0.418	0.425	0.432	0.439	0.444
Tonga	0.382	0.389	0.397	0.403	0.412	0.419	0.427	0.435	0.442	0.448	0.454	0.461	0.466	0.471	0.476	0.481	0.352	0.491	0.496	0.501	0.506	0.511	0.516	0.575		0.532	0.537	0.541	0.546	0.551	0.555	0.561	0.566	0.571	0.576	0.582	0.586
Vanuatu	0.382	0.283	0.397	0.403	0.412	0.306	0.427	0.433	0.324	0.329	0.335	0.461	0.466	0.353	0.478	0.364	0.480	0.376	0.496	0.387		0.399	0.316	0.322	0.415	0.332	0.337	0.341	0.346	0.331	0.333	0.361	0.366	0.371	0.378	0.382	0.386
American Samoa	0.551	0.285	0.288	0.294	0.583	0.589	0.595	0.518	0.524	0.529	0.555	0.622	0.626	0.555	0.539	0.564	0.643	0.576	0.582	0.587	0.595	0.599	0.403	0.41	0.682		0.695	0.451	0.437	0.445	0.449	0.434	0.46	0.465	0.735	0.739	0.742
Guam				0.07.0		0.000	0.595		0.606									0.0.0	0.652	0.000																	0.742
Guam Northern Mariana Islands	0.718	0.726	0.733	0.738	0.742	0.743	0.743	0.743	0.746	0.75	0.755	0.761	0.765	0.77	0.774	0.778	0.782	0.785	0.788	0.791	0.794	0.797	0.799	0.801	0.802		0.806	0.807	0.809	0.81	0.812	0.813	0.815	0.817	0.819	0.821	0.822
Normern Mariana Islands	0.61	0.0000	0.033	0.043	0.653	0.062	0.0/1	0.08	0.089	0.097	0.705	0.713	0.72	0.727	0.735	0.739	0.744	0.75	0.755			0.772	0.777	0.782	0.767	0.79	0.792	0.794	0.795	0.795	0.795	0.794	0.793	0.793		0.790	0.797
Central Europe, Eastern Europe, and Central Asia	0.706	0.708	0.71	0.711	0.714	0.716	0.717	0.721	0.727	0.733	0.739	0.746	0.751	0.754	0.755	0.757	0.758	0.758	0.758	0.758	0.759	0.762	0.765	0.769	0.773	0.778	0.782	0.786	0.79	0.793	0.797	0.801	0.804	0.806	0.809	0.812	0.816
Central Asia	0.576	0.582	0.587	0.591	0.594	0.598	0.602	0.607	0.612	0.618	0.624	0.63	0.635	0.638	0.641	0.642	0.643	0.643	0.643	0.643	0.645	0.647	0.65	0.654	0.66	0.666	0.672	0.679	0.685	0.691	0.697	0.703	0.708	0.714	0.719	0.724	0.729
Armenia	0.602	0.606	0.61	0.615	0.619	0.622	0.626	0.631	0.635	0.64	0.644	0.648	0.648	0.647	0.645	0.643	0.642	0.641	0.642	0.643	0.646	0.651	0.659	0.668	0.676	0.686	0.695	0.705	0.714	0.719	0.724	0.73	0.735	0.74	0.745	0.75	0.755
Azerbaijan	0.606	0.614	0.622	0.63	0.637	0.643	0.648	0.654	0.659	0.664	0.668	0.673	0.676	0.678	0.678	0.677	0.674	0.67	0.667	0.664	0.662	0.662	0.664	0.667	0.671		0.688	0.7	0.712	0.722	0.731	0.739	0.747	0.753	0.759	0.763	0.767
Georgia	0.679	0.684	0.688	0.691	0.695	0.698	0.702	0.706	0.71	0.715	0.72	0.723	0.722	0.718	0.713	0.705	0.698	0.689	0.682	0.677		0.676	0.679	0.684	0.69		0.701	0.708	0.714	0.719	0.723	0.727	0.731	0.736	0.741	0.746	0.751
Kazakhstan	0.629	0.636	0.641	0.645	0.649	0.653	0.658	0.663	0.669	0.675	0.681	0.687	0.692	0.696	0.699	0.701	0.703	0.704	0.704	0.704	0.705	0.706	0.708	0.71			0.718	0.721	0.725	0.728	0.731	0.736	0.74	0.744	0.748	0.753	0.757
	0.556	0.562	0.567	0.643	0.575	0.578	0.582	0.587	0.592	0.598	0.604	0.687	0.692	0.698	0.699	0.618	0.617	0.615	0.704	0.609		0.606	0.605	0.605	0.606	0.606	0.606	0.607	0.725	0.728		0.736	0.614	0.744	0.622	0.733	0.632
Kyrgyzstan	0.556			0.571		0.578		0.587	0.592	0.598		0.573	0.586	0.618			0.617		0.612						0.606						0.61	0.612		0.618	0.622		0.632
Mongolia		0.417	0.431		0.458		0.489				0.557			0.577	0.604	0.611		0.619		0.627	0.631	0.635	0.639	0.643			0.653	0.656	0.659	0.66			0.667			0.678	0.005
Tajikistan	0.462	0.469	0.474	0.478	0.481	0.484	0.488	0.494	0.501	0.51	0.519	0.53	0.537	0.542	0.543	0.542	0.537	0.532	0.525	0.519		0.513	0.515	0.52				0.548	0.552	0.556	0.559	0.561	0.564	0.567	0.571	0.574	0.577
Turkmenistan	0.53	0.536	0.541	0.545	0.548	0.552	0.555	0.56	0.565	0.571	0.577	0.584	0.59	0.598	0.605	0.612	0.618	0.623	0.627	0.63	0.636	0.641	0.647	0.653	0.66	0.668	0.676	0.684	0.692	0.701	0.709	0.717	0.726	0.735	0.743	0.752	0.759
Uzbekistan	0.493	0.498	0.503	0.506	0.51	0.513	0.518	0.523	0.53		0.544	0.551	0.558	0.565	0.571	0.577	0.582	0.587	0.591	0.594	0.597	0.6						0.636	0.642	0.649	0.656	0.664	0.671	0.678	0.685	0.692	0.698
Central Europe	0.701	0.705	0.709	0.711	0.713	0.717	0.72	0.724	0.729	0.736	0.741	0.746	0.75	0.753	0.758	0.763	0.766	0.77	0.773	0.777	0.781	0.785	0.79	0.794	0.799	0.803	0.808	0.814	0.819	0.823	0.828	0.832	0.836	0.839	0.842	0.846	0.849

Appendix Table 11: Socio-Demograp	hic Ind	lex val	ues fo	r all es	timate	d <u>GBD</u>	2016	locatio	ons <u>, 19</u> 8	80-201	6																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Albania	0.54	0.545	0.55	0.555	0.56	0.564	0.569	0.573	0.577	0.581	0.584	0.585	0.584	0.585	0.588	0.593	0.601	0.607	0.614	0.623	0.633	0.642	0.651	0.659	0.667	0.674	0.68	0.686	0.692	0.697	0.702	0.706	0.711	0.714	0.718	0.721	0.725
Bosnia and Herzegovina	0.502	0.508	0.514	0.518	0.522	0.527	0.532	0.535	0.539	0.542	0.542	0.542	0.543	0.543	0.546	0.552	0.573	0.597	0.619	0.635	0.648	0.658	0.667	0.675	0.682	0.688	).694	0.699	0.705	0.71	0.714	0.717	0.721	0.724	0.727	0.73	0.733
Bulgaria	0.705	0.71	0.715	0.72	0.724	0.728	0.733	0.738	0.744	0.752	0.76	0.767	0.771	0.771	0.771	0.772	0.771	0.77	0.771	0.771	0.773	0.776	0.779	0.784	0.789	0.794	0.8	0.807	0.813	0.818	0.824	0.828	0.832	0.836	0.839	0.843	0.846
Croatia	0.746	0.751	0.755	0.759	0.763	0.767	0.772	0.775	0.779	0.782	0.786	0.789	0.788	0.785	0.782	0.779	0.779	0.785	0.79	0.793	0.797	0.801	0.806	0.811	0.815	0.819	0.824	0.828	0.833	0.836	0.838	0.841	0.843	0.845	0.846	0.848	0.85
Czech Republic	0.786	0.79	0.793	0.796	0.798	0.8	0.803	0.805	0.807	0.81	0.812	0.816	0.82	0.826	0.829	0.83	0.832	0.834	0.835	0.837	0.839	0.842	0.844	0.847	0.85	0.853	0.856	0.86	0.863	0.866	0.869	0.871	0.873	0.875	0.875	0.878	0.881
Hungary	0.711	0.719	0.727	0.732	0.733	0.735	0.739	0.744	0.748	0.751	0.753	0.756	0.761	0.766	0.77	0.777	0.78	0.783	0.786	0.79	0.794	0.798	0.803	0.807	0.812	0.816	0.821	0.825	0.828	0.831	0.834	0.836	0.838	0.841	0.843	0.846	0.849
Macedonia	0.664	0.669	0.673	0.677	0.681	0.686	0.69	0.695	0.7	0.702	0.7	0.699	0.701	0.701	0.701	0.703	0.708	0.712	0.716	0.718	0.723	0.73	0.737	0.742	0.745	0.749	0.753	0.757	0.762	0.765	0.77	0.775	0.779	0.782	0.786	0.789	0.793
Montenegro	0.725	0.728	0.732	0.734	0.737	0.739	0.742	0.744	0.746	0.748	0.75	0.751	0.75	0.747	0.743	0.74	0.74	0.741	0.743	0.745	0.748	0.753	0.759	0.764	0.769	0.773	0.777	0.781	0.786	0.79	0.795	0.8	0.803	0.806	0.809	0.812	0.815
Poland	0.702	0.702	0.699	0.699	0.703	0.708	0.714	0.719	0.724	0.73	0.735	0.739	0.745	0.751	0.759	0.767	0.773	0.778	0.783	0.789	0.795	0.8	0.805	0.81	0.815	0.82	0.824	0.83	0.835	0.84	0.845	0.85	0.855	0.86	0.864	0.868	0.872
Romania	0.661	0.672	0.684	0.688	0.687	0.688	0.689	0.695	0.703	0.715	0.731	0.738	0.738	0.739	0.74	0.742	0.744	0.747	0.749	0.751	0.755	0.759	0.764	0.769	0.774	0.78	0.786	0.794	0.802	0.808	0.813	0.818	0.822	0.827	0.83	0.833	0.838
Serbia	0.678	0.68	0.682	0.683	0.684	0.686	0.689	0.691	0.694	0.697	0.7	0.703	0.704	0.701	0.699	0.697	0.698	0.702	0.707	0.709	0.712	0.714	0.717	0.722	0.728	0.733 (	0.737	0.742	0.747	0.752	0.755	0.759	0.761	0.764	0.767	0.769	0.771
Slovakia	0.749	0.753	0.756	0.759	0.762	0.766	0.77	0.774	0.778	0.781	0.785	0.788	0.792	0.797	0.805	0.81	0.812	0.814	0.817	0.819	0.822	0.825	0.828	0.831	0.835	0.839	0.843	0.848	0.854	0.858	0.86	0.865	0.868	0.871	0.874	0.877	0.88
Slovenia	0.766	0.774	0.782	0.789	0.793	0.797	0.801	0.803	0.808	0.813	0.813	0.813	0.812	0.812	0.813	0.815	0.817	0.82	0.823	0.827	0.831	0.835	0.839	0.843	0.847	0.851	0.856	0.86	0.863	0.865	0.867	0.869	0.871	0.873	0.874	0.877	0.881
Eastern Europe	0.737	0.738	0.738	0.739	0.742	0.743	0.744	0.747	0.753	0.76	0.767	0.775	0.782	0.782	0.78	0.777	0.774	0.771	0.768	0.766	0.766	0.768	0.77	0.774	0.78	0.786	0.792	0.8	0.806	0.81	0.813	0.817	0.819	0.821	0.823	0.826	0.829
Belarus	0.703	0.706	0.708	0.711	0.713	0.716	0.719	0.723	0.727	0.733	0.738	0.743	0.748	0.751	0.752	0.748	0.744	0.742	0.741	0.74	0.741	0.744	0.747	0.752	0.758	0.765	0.772	0.78	0.788	0.795	0.8	0.805	0.81	0.814	0.818	0.822	0.826
Estonia	0.775	0.776	0.776	0.776	0.779	0.78	0.779	0.778	0.781	0.788	0.799	0.807	0.813	0.814	0.813	0.812	0.812	0.813	0.816	0.818	0.822	0.827	0.832	0.837	0.843	0.847	0.85	0.854	0.859	0.861	0.866	0.872	0.877	0.88	0.883	0.885	0.887
Latvia	0.759	0.759	0.758	0.758	0.759	0.76	0.762	0.765	0.77	0.776	0.783	0.789	0.793	0.794	0.79	0.786	0.783	0.781	0.781	0.783	0.785	0.79	0.795					0.831	0.837	0.841	0.843	0.847	0.85	0.851	0.851	0.851	0.853
Lithuania	0.768	0.771	0.772	0.772	0.774	0.776	0.777	0.781	0.787	0.79	0.792	0.795	0.8	0.805	0.805	0.804	0.801	0.801	0.801	0.803	0.805	0.809	0.814	0.819	0.825	0.832	0.838	0.845	0.851	0.853	0.856	0.858	0.862	0.865	0.869	0.872	0.876
Moldova	0.614	0.617	0.619	0.621	0.623	0.625	0.628	0.632	0.636	0.641	0.647	0.651	0.652	0.654	0.652	0.65	0.647	0.643	0.637	0.631	0.626	0.624	0.625	0.629	0.634	0.64	0.646	0.653	0.66	0.665	0.671	0.678	0.683	0.689	0.695	0.699	0.703
Russia	0.745	0.746	0.745	0.745	0.749	0.749	0.748	0.751	0.758	0.766	0.774	0.782	0.788	0.787	0.786	0.784	0.781	0.778	0.775	0.774	0.774	0.775	0.778	0.782	0.787	0.793	).799	0.806	0.811	0.814	0.818	0.821	0.823	0.824	0.826	0.829	0.832
Ukraine	0.712	0.715	0.717	0.719	0.721	0.724	0.727	0.731	0.737	0.742	0.748	0.753	0.757	0.76	0.758	0.753	0.748	0.742	0.737	0.732	0.729	0.728	0.729	0.733	0.74	0.747	0.755	0.763	0.77	0.774	0.778	0.782	0.785	0.789	0.791	0.792	0.793
High-income	0.773	0.778	0.782	0.787	0.791	0.795	0.799	0.803	0.806	0.809	0.813	0.817	0.822	0.826	0.83	0.834	0.837	0.84	0.843	0.845	0.848	0.852	0.854	0.856	0.859	0.86	0.861	0.863	0.866	0.868	0.871	0.873	0.875	0.877	0.879	0.881	0.882
High-income Asia Pacific	0.745	0.75	0.756	0.763	0.769	0.775	0.781	0.787	0.793	0.799	0.805	0.809	0.816	0.821	0.826	0.831	0.835	0.839	0.841	0.844	0.847	0.849	0.851	0.854	0.856	0.859 (	0.861	0.864	0.867	0.868	0.871	0.873	0.875	0.877	0.879	0.882	0.884
Brunei	0.674	0.681	0.687	0.694	0.7	0.706	0.713	0.721	0.729	0.737	0.744	0.751	0.756	0.761	0.766	0.772	0.777	0.783	0.789	0.796	0.803	0.809	0.815	0.821	0.827	0.833	0.839	0.844	0.849	0.853	0.856	0.858	0.861	0.863	0.866	0.869	0.871
Japan	0.776	0.779	0.781	0.784	0.788	0.793	0.798	0.803	0.81	0.817	0.822	0.828	0.833	0.837	0.84	0.844	0.847	0.85	0.852	0.854	0.856	0.858	0.859	0.861	0.863	0.865	0.867	0.869	0.871	0.872	0.873	0.875	0.877	0.878	0.88	0.882	0.884
South Korea	0.618	0.631	0.649	0.669	0.684	0.693	0.704	0.714	0.723	0.732	0.738	0.744	0.753	0.764	0.772	0.781	0.791	0.8	0.805	0.81	0.816	0.821	0.826	0.831	0.835	0.84	0.845	0.849	0.853	0.857	0.861	0.864	0.868	0.871	0.874	0.878	0.881
Singapore	0.678	0.686	0.695	0.704	0.711	0.717	0.718	0.711	0.719	0.734	0.741	0.748	0.754	0.76	0.768	0.776	0.784	0.795	0.802	0.805		0.818	0.823	0.828	0.834	0.84 (	0.846	0.852	0.858	0.863	0.867	0.869	0.873	0.876	0.879	0.883	0.886
Hokkaidō	0.771	0.775	0.778	0.78	0.784	0.79	0.794	0.799	0.804	0.809	0.813	0.818	0.822	0.826	0.83	0.833	0.836	0.839	0.841	0.843	0.845	0.847	0.848	0.85	0.852	0.853	0.855	0.857	0.859	0.86	0.861	0.862	0.864	0.866	0.867	0.869	0.87
Aomori	0.76	0.764	0.766	0.769	0.773	0.778	0.784	0.789	0.795	0.801	0.805	0.81	0.814	0.818	0.822	0.827	0.831	0.835	0.838	0.84	0.842	0.843	0.845		0.848			0.854	0.855	0.856	0.858	0.859	0.861	0.862	0.864	0.865	0.867
Iwate	0.752	0.756	0.758	0.761	0.766	0.771	0.776	0.78	0.786	0.792	0.797	0.802	0.807	0.811	0.816	0.821	0.826	0.83	0.833	0.835	0.838	0.84	0.842					0.851	0.853	0.854	0.856	0.857	0.859	0.86	0.862	0.864	0.865
Miyagi	0.763	0.767	0.77	0.773	0.778	0.783	0.789	0.794	0.8	0.807	0.813	0.818	0.824	0.828	0.832	0.836	0.839	0.842	0.844	0.846	0.848	0.85	0.851					0.861	0.862	0.863	0.865	0.866	0.868	0.869	0.871	0.873	0.874
Akita	0.759	0.763	0.766	0.769	0.773	0.778	0.782	0.787	0.792	0.798	0.802	0.806	0.811	0.815	0.819	0.823	0.828	0.832	0.834	0.836	0.838	0.84	0.842					0.851	0.852	0.853	0.855	0.856	0.858	0.86	0.861	0.863	0.865
Yamagata	0.75	0.755	0.757	0.76	0.764	0.768	0.772	0.777	0.782	0.788	0.793	0.798	0.803	0.807	0.812	0.817	0.821	0.825	0.829	0.831	0.834	0.837	0.84			0.847 (		0.851	0.853	0.854	0.855	0.857	0.858	0.86	0.862	0.863	0.865
Fukushima	0.755	0.759	0.761	0.763	0.768	0.773	0.778	0.783	0.79	0.796	0.801	0.806	0.811	0.815	0.82	0.825	0.829	0.833	0.836	0.838	0.841	0.844	0.847					0.858	0.86	0.861	0.863	0.864	0.865	0.866	0.868	0.87	0.873
Ibaraki	0.768	0.772	0.775	0.777	0.781	0.787	0.792	0.797	0.804	0.811	0.817	0.822	0.828	0.832	0.837	0.842	0.846	0.849	0.851	0.853	0.855	0.857	0.858					0.867	0.869	0.87	0.872	0.873	0.875	0.876	0.878	0.879	0.881
Tochigi	0.771	0.774	0.776	0.778	0.782	0.787	0.792	0.798	0.805	0.812	0.818	0.823	0.829	0.834	0.839	0.844	0.848	0.851	0.853	0.855	0.857	0.859	0.861					0.87	0.872	0.873	0.874	0.876	0.877	0.879	0.881	0.882	0.884
Gunma	0.767	0.771	0.773	0.775	0.779	0.784	0.789	0.794	0.8	0.807	0.812	0.818	0.823	0.827	0.832	0.837	0.841	0.845	0.847	0.849	0.851	0.853	0.855		0.858	0.86 0		0.864	0.866	0.867	0.868	0.87	0.871	0.873	0.875	0.876	0.878
Saitama	0.763	0.767	0.769	0.772	0.776	0.781	0.786	0.791	0.798	0.804	0.81	0.815	0.82	0.824	0.827	0.831	0.834	0.837	0.839	0.84	0.842	0.844	0.845		0.848			0.853	0.855	0.856	0.857	0.859	0.86	0.862	0.863	0.865	0.866
Chiba	0.766	0.77	0.771	0.774	0.778	0.784	0.79	0.796	0.803	0.81	0.815	0.82	0.824	0.828	0.831	0.835	0.838	0.841	0.843	0.845	0.847	0.848	0.85					0.858	0.86	0.861	0.862	0.863	0.865	0.866	0.868	0.869	0.871
Tōkyō	0.824	0.828	0.832	0.835	0.839	0.842	0.846	0.849	0.853	0.858	0.862	0.867	0.871	0.875	0.878	0.881	0.885	0.887	0.89	0.892	0.893	0.895	0.897					0.906	0.908	0.909	0.911	0.912	0.914	0.915	0.917	0.918	0.92
Kanagawa	0.775	0.779	0.781	0.784	0.788	0.793	0.798	0.803	0.81	0.817	0.821	0.826	0.83	0.834	0.838	0.841	0.844	0.847	0.849	0.851	0.853	0.854	0.856					0.865	0.866	0.867	0.869	0.87	0.871	0.873	0.875	0.876	0.878
Niigata	0.761	0.765	0.768	0.77	0.774	0.778	0.783	0.788	0.794	0.8	0.805	0.811	0.816	0.821	0.825	0.83	0.835	0.839	0.843	0.845	0.847	0.849	0.851					0.86	0.862	0.863	0.865	0.866	0.868	0.87	0.871	0.873	0.875
Toyama	0.771	0.774	0.776	0.778	0.782	0.787	0.792	0.798	0.804	0.811	0.817	0.823	0.828	0.832	0.836	0.84	0.844	0.847	0.849	0.851	0.853	0.855	0.857					0.866	0.868	0.869	0.871	0.872	0.874	0.876	0.877	0.879	0.881
Ishikawa	0.766	0.77	0.773	0.776	0.78	0.786	0.791	0.796	0.802	0.809	0.815	0.82	0.826	0.831	0.836	0.84	0.843	0.846	0.848	0.85	0.852	0.854	0.856					0.865	0.867	0.868	0.869	0.871	0.873	0.874	0.876	0.878	0.88
Fukui	0.765	0.768	0.77	0.772	0.776	0.781	0.786	0.791	0.798	0.804	0.81	0.815	0.821	0.825	0.829	0.834	0.838	0.842	0.846	0.849	0.851	0.854	0.857		0.861	0.863		0.865	0.866	0.866	0.867	0.868	0.869	0.871	0.873	0.876	0.878
Yamanashi	0.763	0.767	0.77		0.775	0.78	0.785	0.79		0.803	0.808	0.813	0.818	0.0000	0.827	0.832	0.837	0.841		0.846	0.848	0.85	0.852					0.861		0.864	0.865	0.867	0.868	0.87	0.872	0.874	0.070
Nagano	0.761	0.765	0.768	0.77	0.774	0.779	0.783	0.788	0.794	0.8	0.805	0.81	0.816	0.82	0.825	0.83	0.834	0.838	0.841	0.844	0.847	0.849	0.852					0.861	0.863	0.864	0.866	0.867	0.868	0.869	0.871	0.874	0.876
Gifu	0.764	0.768	0.77		0.776	0.781	0.787	0.792		0.806	0.811	0.817	0.822	0.826	0.831	0.835	0.838	0.841		0.845	0.847	0.00.05	0.85					0.859		0.000	0.864	0.865	0.867		0.87	0.872	0.070
Shizuoka	0.777	0.78	0.781	0.783	0.787	0.793	0.798	0.803	0.81	0.817	0.823	0.829	0.834	0.839	0.843	0.847	0.851	0.854	0.856	0.858	0.86	0.861	0.863					0.872	0.874	0.874	0.875	0.876	0.877	0.879	0.881	0.883	0.886
Aichi	0.786	0.79	0.792		0.797	0.803		0.813	0.82	0.828	0.833	0.839	0.845	0.0.07	0.852	0.856	0.859	0.862		0.866	0.868	0.87	0.871				_	0.88	0.002	0.883	0.885		0.887		0.89	0.07.0	0107.0
Mie	0.77	0.774	0.776	0.778	0.782 0.781	0.788	0.793	0.798 0.798	0.805	0.812	0.818 0.819	0.824	0.83	0.834	0.839	0.843	0.846	0.849	0.851 0.857	0.853		0.857	0.859					0.868	0.87	0.871	0.873	0.874	0.875	0.877	0.879	0.881	0.883
Shiga	0.77	0.773 0.779	0.775			0.787 0.792			0.000	0.812	0.819	0.825	0.831 0.83		0.84			0.853		0.859 0.852	0.862 0.854	0.864	0.865 0.857							0.877	0.878 0.871	0.879 0.872	0.88 0.874	0.881	0.883 0.877		0.889
Kyōto		0.779	0.781	0.783	0.787	0.792	0.797	0.803	0.81	0.816		0.825		0.834	0.838	0.841	0.845	0.848	0.85			0.855			0.861			0.866	0.868	0.869						0.879	0.881
Ösaka Hužao	0.788			0.795	0.799		0.809	0.814	0.821	0.827	0.832	0.836	0.841		0.848	0.852	0.855	0.858	0.86	0.861	0.863	0.865	0.866					0.875			0.879	0.88	0.882	0.884	0.885	0.887	
Hyōgo	0.765	0.768	0.77	0.773	0.777	0.783	0.788	0.794	0.801	0.808	0.814	0.818	0.823	0.827	0.831	0.834	0.838	0.841	0.843	0.845	0.847	0.848	0.85					0.859	0.861	0.862	0.863	0.865	0.866	0.868	0.869	0.871	0.873
Nara	0.749	0.753	0.754	0.757	0.762	0.768	0.773	0.779	0.786	0.792	0.797	0.802	0.807	0.811	0.814	0.818	0.821	0.824	0.826	0.828	0.83	0.832	0.833					0.842	0.843	0.844	0.846	0.847	0.849	0.85	0.852	0.853	0.855
Wakayama	0.757	0.761	0.763	0.766	0.77	0.775	0.781	0.787	0.793	0.8	0.806	0.812	0.817	0.821	0.820	0.829	0.833	0.836	0.838	0.84	0.842	0.844	0.845	0.847	0.849	0.85 0	0.852	0.854	0.856	0.857	0.859	0.86	0.862	0.864	0.865	0.867	0.809

Appendix Table 11: Socio-Demograp	hic Ind	lex va	ues fo	r all es	stimate	d GBI	0 2016	locatio	ons, 198	80-201	16																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Tottori	0.747	0.751	0.753	0.755	0.759	0.764	0.769	0.774	0.78	0.786	0.791	0.797	0.803	0.807	0.812	0.817	0.822	0.826	0.83	0.832	0.835	0.837	0.84	0.843	0.845	0.847	0.849	0.851	0.853	0.854	0.856	0.857	0.858	0.859	0.861	0.864	0.866
Shimane	0.744	0.748	0.75	0.752	0.756	0.761	0.766	0.771	0.777	0.783	0.788	0.794	0.799	0.803	0.808	0.813	0.818	0.823	0.827	0.83	0.833	0.836	0.839	0.842	0.845	0.847	0.847	0.849	0.85	0.85	0.851	0.852	0.853	0.854	0.856	0.859	0.862
Okayama	0.762	0.765	0.767	0.769	0.773	0.779	0.784	0.79	0.797	0.804	0.809	0.815	0.821	0.825	0.83	0.835	0.839	0.843	0.845	0.847	0.849	0.851	0.853	0.855	0.857	0.859	0.861	0.863	0.865	0.866	0.867	0.869	0.871	0.872	0.874	0.876	0.878
Hiroshima	0.77	0.773	0.775	0.777	0.781	0.787	0.792	0.797	0.804	0.811	0.816	0.822	0.828	0.833	0.837	0.842	0.845	0.848	0.85	0.852	0.854	0.856	0.857	0.859	0.861	0.863	0.865	0.867	0.869	0.869	0.869	0.87	0.871	0.872	0.874	0.877	0.881
Yamaguchi	0.767	0.771	0.773	0.775	0.779	0.784	0.789	0.795	0.801	0.808	0.813	0.818	0.824	0.828	0.832	0.837	0.84	0.843	0.846	0.848	0.85	0.851	0.853	0.855	0.857	0.859	0.861	0.863	0.865	0.866	0.867	0.867	0.868	0.87	0.872	0.875	0.878
Tokushima	0.762	0.765	0.768	0.77	0.774	0.78	0.785	0.79	0.796	0.803	0.808	0.814	0.82	0.824	0.828	0.832	0.835	0.838	0.841	0.843	0.845	0.847	0.849	0.85	0.852	0.854	0.856	0.858	0.86	0.861	0.862	0.864	0.866	0.867	0.869	0.871	0.873
Kagawa	0.764	0.768	0.77	0.772	0.776	0.781	0.786	0.791	0.798	0.805	0.811	0.817	0.822	0.827	0.831	0.835	0.839	0.842	0.844	0.846	0.848	0.85	0.852	0.854	0.855	0.857	0.859	0.861	0.863	0.863	0.864	0.865	0.866	0.867	0.869	0.872	0.875
Ehime	0.757	0.761	0.764	0.767	0.771	0.776	0.781	0.786	0.792	0.799	0.804	0.809	0.815	0.819	0.823	0.828	0.832	0.835	0.837	0.839	0.841	0.843	0.845	0.847	0.849	0.851	0.852	0.855	0.856	0.857	0.859	0.861	0.862	0.864	0.866	0.867	0.869
Kōchi	0.746	0.749	0.751	0.753	0.757	0.763	0.768	0.774	0.78	0.787	0.792	0.796	0.801	0.805	0.81	0.815	0.819	0.823	0.825	0.827	0.829	0.831	0.833	0.835	0.837	0.839	0.84	0.843	0.844	0.845	0.847	0.848	0.85	0.852	0.853	0.855	0.857
Fukuoka	0.769	0.773	0.775	0.777	0.782	0.787	0.792	0.798	0.804	0.811	0.816	0.822	0.826	0.83	0.834	0.837	0.841	0.844	0.846	0.848	0.85	0.852	0.853	0.855	0.857	0.859	0.861	0.863	0.865	0.866	0.867	0.869	0.87	0.872	0.874	0.876	0.877
Saga	0.751	0.755	0.757	0.76	0.764	0.769	0.775	0.78	0.786	0.793	0.798	0.803	0.808	0.812	0.816	0.821	0.825	0.828	0.831	0.834	0.836	0.839	0.843	0.846	0.849	0.85	0.852	0.853	0.854	0.855	0.856	0.857	0.857	0.859	0.861	0.863	0.866
Nagasaki	0.749	0.753	0.755	0.757	0.761	0.767	0.772	0.777	0.783	0.79	0.794	0.799	0.804	0.808	0.813	0.818	0.822	0.826	0.829	0.832	0.834	0.837	0.839	0.841	0.843	0.845	0.847	0.848	0.849	0.849	0.849	0.85	0.851	0.852	0.854	0.857	0.859
Kumamoto	0.75	0.754	0.757	0.759	0.763	0.768	0.773	0.778	0.784	0.791	0.796	0.801	0.806	0.81	0.814	0.819	0.823	0.827	0.83	0.832	0.835	0.837	0.839	0.841	0.843	0.845	0.846	0.846	0.847	0.848	0.849	0.85	0.851	0.852	0.854	0.857	0.86
Ôita	0.761	0.765	0.768	0.771	0.775	0.78	0.785	0.789	0.795	0.802	0.807	0.812	0.817	0.821	0.825	0.83	0.834	0.838	0.841	0.843	0.845	0.847	0.849	0.85	0.852	0.854	0.856	0.858	0.86	0.86	0.861	0.862	0.863	0.865	0.867	0.87	0.872
Miyazaki	0.749	0.752	0.755	0.757	0.762	0.767	0.773	0.778	0.784	0.79	0.795	0.799	0.804	0.808	0.812	0.816	0.821	0.825	0.828	0.831	0.833	0.836	0.839	0.841		0.845	0.845	0.846	0.847	0.847	0.847	0.848	0.849	0.85	0.853	0.855	0.858
Kagoshima	0.744	0.748	0.751	0.754	0.759	0.765	0.77	0.775	0.782	0.788	0.793	0.799	0.804	0.808	0.813	0.818	0.822	0.826	0.83	0.832	0.834	0.837	0.84	0.842	0.844	0.846	0.846	0.847	0.848	0.849	0.85	0.851	0.852	0.853	0.855	0.858	0.861
Okinawa	0.73	0.734	0.736	0.738	0.743	0.75	0.756	0.762	0.769	0.777	0.782	0.787	0.793	0.797	0.802	0.808	0.812	0.816	0.819	0.821	0.823	0.825	0.828	0.832		0.836	0.836	0.837	0.837	0.837	0.837	0.838	0.838	0.84	0.842	0.845	0.848
Australasia	0.787	0.79	0.793	0.796	0.799	0.802	0.805	0.808	0.811	0.813	0.815	0.818	0.821	0.824	0.828	0.832	0.836	0.839	0.843	0.846	0.849	0.853	0.856	0.858	0.86	0.862	0.861	0.861	0.864	0.867	0.87	0.872	0.875	0.88	0.884	0.887	0.889
Australia	0.787	0.789	0.792	0.796	0.799	0.802	0.806	0.81	0.813	0.815	0.818	0.82	0.823	0.826	0.83	0.834	0.838	0.842	0.845	0.849	0.853	0.856	0.859	0.862		0.865	0.865	0.865	0.868	0.872	0.875	0.876	0.879	0.883	0.887	0.89	0.892
New Zealand	0.786	0.79	0.794	0.797	0.799	0.8	0.8	0.8	0.8	0.8	0.803	0.807	0.81	0.813	0.816	0.819	0.822	0.826	0.828	0.828	0.831	0.836	0.839	0.84		0.843	0.84	0.838	0.841	0.844	0.847	0.851	0.856	0.86	0.863	0.865	0.867
Western Europe	0.754	0.759	0.765	0.771	0.775	0.779	0.784	0.788	0.792	0.797	0.801	0.807	0.812	0.817	0.821	0.825	0.828	0.832	0.835	0.838	0.842	0.845	0.848	0.85	0.852		0.856	0.858	0.859	0.861	0.864	0.866	0.869	0.871	0.873	0.874	0.876
Andorra	0.845	0.848	0.85	0.852		0.857	0.859	0.862	0.864	0.866	0.868	0.87	0.872	0.873	0.875	0.876	0.878	0.881	0.884	0.887	0.889	0.891	0.892	0.894			0.899	0.901	0.902	0.904	0.906	0.907	0.909	0.91	0.912	0.913	0.915
Austria	0.801	0.803	0.807	0.812	0.816	0.818	0.82	0.822	0.824	0.827	0.83	0.832	0.836	0.838	0.841	0.844	0.846		0.851	0.854	0.857	0.86	0.862	0.864		0.869	0.871	0.874	0.876	0.878	0.88	0.882	0.885	0.887	0.889	0.89	0.892
Belgium	0.813	0.818	0.823	0.827	0.831	0.833	0.835	0.837	0.84	0.841	0.843	0.846	0.85	0.855	0.859	0.861	0.862	0.865	0.867	0.869	0.871	0.874	0.877	0.877	0.877	0.878	0.879	0.88	0.882	0.883	0.886	0.89	0.893	0.896	0.897	0.898	0.899
Cyprus	0.692	0.696	0.699	0.704	0.712	0.72	0.726	0.73	0.734	0.739	0.745	0.748	0.754	0.765	0.774	0.783	0.79	0.798	0.806	0.812	0.819	0.826	0.831	0.835			0.847	0.852	0.856	0.86	0.863	0.866	0.868	0.869	0.87	0.871	0.872
Denmark	0.866	0.867	0.869	0.871	0.873	0.876	0.879	0.88	0.879	0.879	0.88	0.88	0.88	0.881	0.882	0.885	0.889	0.893	0.895	0.897	0.9	0.903	0.905	0.905	0.906	0.906	0.907	0.908	0.909	0.911		0.919	0.922	0.925	0.925	0.925	0.925
Finland	0.815	0.816	0.818	0.821	0.826	0.832	0.836	0.837	0.838	0.84	0.841	0.841	0.842	0.843	0.845	0.849	0.852	0.856	0.86	0.863		0.871	0.874	0.876	0.878	0.88	0.883	0.886	0.888	0.89	0.892	0.896	0.9	0.904	0.906	0.907	0.907
France	0.743	0.749	0.758	0.765	0.769	0.773	0.777	0.783	0.788	0.793	0.799	0.805	0.812	0.817	0.821	0.823	0.826	0.829	0.832	0.833	0.836	0.84	0.843	0.846	0.848	0.849	0.85	0.853	0.855	0.856	0.858	0.861	0.863	0.865	0.867	0.868	0.869
Germany	0.801	0.804	0.807	0.809	0.812	0.814	0.817	0.82	0.822	0.826	0.829	0.832	0.835	0.838	0.841	0.843	0.845	0.847	0.85	0.852	0.854	0.857	0.859	0.86		0.864	0.866	0.869	0.871	0.873	0.875	0.877	0.88	0.882	0.884	0.886	0.889
Greece	0.699	0.708	0.714	0.722	0.731	0.739	0.745	0.751	0.756	0.761	0.765	0.77	0.775	0.779	0.783	0.787	0.792	0.796	0.801	0.806	0.81	0.815	0.82	0.825	0.829	0.834	0.838	0.843	0.847	0.85	0.852	0.853	0.853	0.852	0.852	0.852	0.853
Iceland	0.808	0.817	0.823	0.83	0.841	0.848	0.847	0.842	0.842	0.844	0.847	0.852	0.852	0.855	0.861	0.862	0.865	0.869	0.873	0.875	0.879	0.886	0.888	0.888		0.892	0.894	0.895	0.894	0.894	0.901	0.906	0.909	0.914	0.918	0.92	0.921
Ireland	0.684	0.694	0.705	0.717	0.727	0.733	0.74	0.75	0.759	0.764	0.768	0.775	0.784	0.792	0.798	0.802	0.806	0.811	0.818	0.826	0.832	0.836	0.842	0.848	0.856	0.861	0.861	0.861	0.863	0.864	0.867	0.871	0.874	0.877	0.879	0.883	0.885
Israel	0.691	0.698	0.7	0.7	0.702	0.708	0.716	0.723	0.727	0.731	0.736	0.743	0.748	0.753	0.757	0.761	0.764	0.766	0.767	0.769	0.772	0.775	0.777	0.777		0.781	0.784	0.786	0.786	0.788	0.791	0.794	0.796	0.797	0.798	0.799	0.801
Italy	0.748	0.755	0.761	0.767	0.772	0.776	0.781	0.785	0.789	0.794	0.798	0.803	0.807	0.81	0.814	0.818	0.821	0.824	0.828	0.831	0.834	0.837	0.84	0.843	0.846	0.848	0.85	0.853	0.855	0.857	0.858	0.86	0.862	0.863	0.864	0.865	0.867
Luxembourg	0.848	0.851	0.853	0.855	0.858	0.861	0.864	0.868	0.871	0.873	0.876	0.88	0.882	0.885	0.888	0.891	0.893	0.898	0.9	0.9	0.904	0.909	0.912	0.912		0.915	0.917	0.919	0.921	0.922	0.924	0.928	0.929	0.932	0.934	0.935	0.936
Malta	0.717	0.723	0.728	0.733	0.738	0.741	0.743	0.743	0.743	0.747	0.752	0.754	0.759	0.768	0.775	0.777	0.778	0.786	0.795	0.803	0.814	0.819	0.822	0.825	0.827	0.829	0.831	0.834	0.836	0.838	0.84	0.842	0.845	0.848	0.85	0.853	0.856
Netherlands	0.825	0.83	0.833	0.835	0.838	0.839	0.84	0.843	0.846	0.848	0.85	0.854	0.859	0.862	0.866	0.871	0.873	0.874	0.876	0.878	0.88	0.884	0.886	0.889		0.896	0.898	0.9	0.901	0.902	0.905	0.909	0.913	0.915	0.917	0.917	0.918
Norway	0.824	0.828	0.833	0.837	0.84	0.843	0.845	0.845	0.845	0.845	0.847	0.851	0.856	0.859	0.862	0.864	0.868	0.874	0.877	0.88	0.885	0.891	0.894	0.894		0.897	0.899	0.9	0.901	0.903	0.907	0.912	0.916	0.92	0.922	0.922	0.922
Portugal	0.61	0.618	0.626	0.634	0.643	0.651	0.658	0.665	0.672	0.68	0.687	0.694	0.701	0.708	0.714	0.719	0.725	0.73	0.735	0.74	0.746	0.751	0.755	0.759	0.763	0.766	0.77	0.773	0.777	0.779	0.782	0.785	0.787	0.789	0.791	0.794	0.796
Spain	0.67	0.68	0.689	0.698	0.705	0.713	0.721	0.727	0.733	0.739	0.746	0.752	0.759	0.764	0.77	0.775	0.78	0.786	0.791	0.796	0.801	0.806	0.811	0.816		0.824	0.828	0.833	0.836	0.838	0.84	0.842	0.843	0.844	0.845	0.847	0.848
Sweden	0.799	0.803	0.806	0.808	0.808	0.808	0.809	0.808	0.807	0.806	0.807	0.81	0.816	0.822	0.829	0.838	0.845	0.849	0.853	0.855	0.857	0.857	0.857	0.857		0.858	0.858	0.859	0.86	0.859	0.86	0.864	0.867	0.869	0.87	0.871	0.872
Switzerland	0.867	0.867	0.868	0.868	0.869	0.869	0.869	0.869	0.869	0.869	0.869	0.87	0.872	0.874	0.874	0.874	0.874	0.874	0.875	0.875	0.876	0.877	0.878	0.879			0.883	0.885	0.887	0.888	0.889	0.891	0.893	0.895	0.896	0.899	0.901
United Kingdom	0.711	0.717	0.722	0.727	0.732	0.737	0.742	0.746	0.753	0.758	0.763	0.769	0.775	0.781	0.787	0.793	0.797	0.802	0.808	0.815	0.822	0.827	0.83	0.831		0.837	0.838	0.84	0.842	0.843	0.846	0.849	0.853	0.857	0.86	0.862	0.863
Sweden except Stockholm	0.774	0.778	0.782	0.784	0.784	0.784	0.785	0.785	0.784		0.784	0.788	0.794	0.801	0.809	0.819	0.826	0.831	0.834	0.837	0.839	0.84	0.839	0.84			0.841	0.843	0.845	0.844	0.846	0.85	0.854	0.856	0.858	0.86	0.861
Stockholm	0.866	0.868	0.87	0.871	0.873	0.875	0.877	0.879	0.88	0.879	0.879	0.882	0.885	0.889	0.891	0.892	0.893	0.895	0.897	0.899	0.901	0.903	0.905	0.906		0.909	0.908	0.907	0.906	0.904	0.904	0.905	0.906	0.906	0.905	0.905	0.905
Northern Ireland	0.718	0.726	0.732	0.737	0.742	0.747	0.752	0.759	0.768	0.775	0.782	0.788	0.795	0.802	0.807	0.811	0.815	0.82	0.826	0.832	0.838	0.842	0.846	0.848			0.852	0.851	0.853	0.855	0.856	0.857	0.859	0.863	0.866	0.87	0.872
Scotland	0.706	0.720	0.732	0.724	0.742	0.732	0.737	0.742	0.748	0.752	0.755	0.759	0.764	0.77	0.775	0.779	0.782	0.786	0.792	0.797	0.801	0.805	0.809	0.811		0.815	0.816	0.816	0.818	0.821	0.823	0.826	0.83	0.832	0.834	0.835	0.837
Wales	0.681	0.686	0.692	0.697	0.702	0.708	0.713	0.718	0.726	0.733	0.737	0.742	0.749	0.755	0.762	0.767	0.772	0.778	0.785	0.792	0.8	0.807	0.811	0.813		0.819	0.821	0.822	0.825	0.827	0.829	0.833	0.837	0.842	0.845	0.847	0.848
England	0.712	0.718	0.723	0.729	0.733	0.738	0.743	0.747	0.753	0.759	0.765	0.771	0.777	0.783	0.789	0.794	0.799	0.804	0.81	0.817	0.824	0.829	0.832	0.834		0.839	0.841	0.842	0.844	0.846	0.848	0.851	0.855	0.86	0.863	0.865	0.866
Darlington	0.695	0.701	0.725	0.714	0.719	0.725	0.731	0.735	0.741	0.744	0.746	0.75	0.756	0.764	0.772	0.779	0.785	0.791	0.796	0.802	0.808	0.812	0.813	0.814	0.817		0.823	0.824	0.824	0.825		0.836	0.841	0.846	0.848	0.848	0.849
Northumberland	0.683	0.689	0.695	0.701	0.707	0.713	0.72	0.726	0.733	0.738	0.742	0.746	0.75	0.756	0.762	0.769	0.775	0.781	0.787	0.792	0.797	0.8	0.802	0.804		0.808	0.81	0.812	0.815	0.817	0.819	0.821	0.825	0.828	0.83	0.831	0.832
Stockton-on-Tees	0.692	0.698	0.703	0.708	0.714	0.721	0.727	0.733	0.74	0.745	0.742	0.753	0.759	0.766	0.774	0.78	0.786		0.798	0.806		0.815	0.817	0.818		_	0.824	0.825	0.827	0.829		0.833	0.835	0.84	0.843	0.846	0.848
Newcastle upon Tyne	0.705	0.711	0.703	0.722	0.726	0.721	0.737	0.743	0.75	0.756	0.763	0.771	0.78	0.787	0.792	0.798	0.802	0.806	0.811	0.800	0.827	0.833	0.84	0.846		0.858	0.861	0.865	0.868	0.871	0.873	0.876	0.879	0.882	0.885	0.887	0.889
North Tyneside	0.682	0.687	0.692	0.697	0.701	0.706	0.711	0.718	0.725	0.731	0.737	0.742	0.749	0.756	0.762	0.768	0.772	0.778	0.784	0.79	0.797	0.802	0.805	0.807		0.816	0.82	0.824	0.827	0.828	0.831	0.834	0.837	0.84	0.842	0.844	0.846
Redcar and Cleveland	0.659	0.665	0.67	0.676	0.68	0.686	0.691	0.697	0.704	0.71	0.714	0.718	0.723	0.727	0.733	0.739	0.744	0.75	0.757	0.766	0.774	0.779	0.782	0.783		0.789	0.791	0.793	0.795	0.795	0.796	0.797	0.802	0.808	0.813	0.816	0.819
County Durham	0.673	0.679	0.685	0.69	0.696	0.702	0.708				0.728	0.733	0.74	0.746	0.753	0.759	0.764	0.771	0.777	0.784		0.796	0.799	0.8			0.807	0.809	0.812	0.813		0.818	0.822	0.827	0.83	0.832	0.833
Gateshead		0.692					0.719					0.749	0.755			0.774								0.814			0.824	0.826	0.828	0.83		0.837	0.84	0.844	0.847		0.851
Catomona	5.007	5.072	0.070	0.705	1	5.715	5.7.5	5.725				5.7.0	5.,55	5.701	5.700	3.77	5.779	5.705				5.000							5.020	3.05	5.055	5.057	0.07	5.014	5.017		

Appendix Table 11: Socio-Demograp	hic Ind	lex val	ues fo	r all es	timate	d <u>GBD</u>	2016	locatio	ons <u>, 198</u>	30– <u>20</u> 1	6																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Middlesbrough	0.668	0.674	0.68	0.686	0.69	0.695	0.699	0.705	0.713	0.72	0.727	0.735	0.741	0.748	0.755	0.761	0.767	0.772	0.778	0.785	0.791	0.794	0.795	0.795	0.8	0.804	0.808	0.813	0.816	0.817	0.818	0.819	0.821	0.824	0.826	0.827	0.829
South Tyneside	0.657	0.662	0.666	0.669	0.672	0.675	0.68	0.686	0.694	0.701	0.707	0.713	0.719	0.725	0.731	0.736	0.741	0.746	0.753	0.761	0.768	0.775	0.78	0.784	0.789	0.793	0.796	0.799	0.802	0.803	0.805	0.807	0.81	0.814	0.817	0.818	0.82
Sunderland	0.676	0.683	0.689	0.694	0.7	0.706	0.712	0.718	0.725	0.731	0.736	0.742	0.748	0.754	0.761	0.767	0.772	0.778	0.785	0.791	0.798	0.804	0.809	0.812	0.816	0.82	0.823	0.826	0.829	0.83	0.831	0.832	0.835	0.838	0.841	0.844	0.845
Hartlepool	0.672	0.678	0.683	0.687	0.691	0.695	0.7	0.704	0.711	0.718	0.723	0.728	0.734	0.74	0.746	0.753	0.759	0.765	0.77	0.777	0.782	0.785	0.787	0.788	0.79	0.793	0.795	0.799	0.802	0.805	0.807	0.81	0.814	0.819	0.82	0.821	0.821
Cheshire East	0.726	0.732	0.737	0.742	0.747	0.753	0.758	0.764	0.769	0.774	0.778	0.783	0.788	0.795	0.802	0.809	0.815	0.821	0.826	0.832	0.837	0.842	0.845	0.845	0.847	0.848	0.848	0.847	0.848	0.851	0.854	0.858	0.863	0.869	0.872	0.873	0.874
Stockport	0.702	0.708	0.714	0.719	0.724	0.73	0.734	0.74	0.747	0.753	0.757	0.763	0.77	0.778	0.784	0.789	0.794	0.8	0.806	0.813	0.82	0.825	0.828				0.835	0.836	0.837	0.838	0.839	0.841	0.844	0.849	0.853	0.855	0.857
Trafford	0.726	0.732	0.737	0.741	0.745	0.75	0.755	0.76	0.767	0.772	0.777	0.784	0.791	0.799	0.806	0.812	0.816	0.821	0.828	0.835	0.841	0.846	0.849	0.851	0.854	0.855	0.855	0.856	0.858	0.86	0.864	0.868	0.872	0.877	0.88	0.882	0.883
Cheshire West and Chester	0.714	0.72	0.726	0.731	0.736	0.741	0.747	0.751	0.756	0.761	0.766	0.773	0.78	0.787	0.792	0.795	0.796	0.799	0.803	0.812	0.822	0.831	0.837			0.843	0.845	0.846	0.847	0.849	0.852	0.857	0.862	0.866	0.868	0.869	0.869
Sefton	0.682	0.688	0.693	0.698	0.704	0.709	0.715	0.72	0.725	0.73	0.734	0.74	0.747	0.754	0.761	0.767	0.771	0.777	0.783	0.789	0.795	0.8	0.803	0.805	0.809	0.811	0.812	0.813	0.813	0.814	0.816	0.818	0.82	0.823	0.824	0.825	0.826
Lancashire	0.694	0.000	0.705	0.711	0.716	0.721	0.715	0.72	0.725	0.744	0.749	0.755	0.761	0.768	0.775	0.781	0.786	0.792	0.798	0.804	0.81	0.815	0.805			0.824	0.826	0.815	0.829	0.83	0.832	0.834	0.838	0.842	0.845	0.847	0.848
Cumbria	0.702	0.707	0.713	0.718	0.723	0.721	0.727	0.741	0.747	0.751	0.754	0.757	0.763	0.77	0.777	0.783	0.789	0.794	0.758	0.804	0.809	0.812	0.814		0.818	0.82	0.821	0.821	0.823	0.825	0.828	0.832	0.837	0.842	0.845	0.846	0.848
Bolton	0.678	0.684	0.69	0.695	0.725	0.707	0.713	0.719	0.725	0.73	0.735	0.741	0.747	0.754	0.761	0.766	0.77	0.774	0.78	0.786	0.791	0.795	0.797	0.798	0.8	0.8	0.8	0.8	0.802	0.804	0.807	0.81	0.814	0.819	0.821	0.823	0.824
Wirral	0.677	0.682	0.687	0.693	0.696	0.707	0.705	0.719	0.716	0.722	0.735	0.741	0.739	0.746	0.753	0.76	0.765	0.771	0.777	0.783	0.791	0.795	0.791	0.177.0		0.797	0.798	0.798	0.799	0.804	0.803	0.808	0.814	0.817	0.819	0.823	0.824
																			0.77			0.797				0.806	0.807		0.799		0.808						0.82
Bury St Helens	0.683	0.688	0.693	0.697	0.7	0.704	0.709	0.714	0.72	0.727	0.733	0.739	0.747	0.754	0.761	0.766	0.77	0.774	0.766	0.787	0.793	0.797	0.799	0.8	0.803	0.806	0.807	0.806	0.806	0.805		0.812	0.818	0.824	0.828	0.83	
	0.67	0.675	0.681		0.691			0.709	0.715	0.72	0.722	0.725	0.731		0.745	0.75	0.755	0.76		0.772	0.78		0.79		0.796			0.804			0.81	0.812	0.816	0.822	0.826	0.828	0.83
Warrington	0.719	0.724	0.73	0.735	0.741	0.747	0.753	0.759	0.766	0.771	0.774	0.777	0.783	0.789	0.796	0.802	0.807	0.812	0.817	0.824	0.83	0.836	0.841	0.844	0.847	0.85	0.852	0.852	0.852	0.854	0.858	0.862	0.867	0.873	0.875	0.877	0.878
Oldham	0.669	0.674	0.679	0.684	0.689	0.694	0.699	0.704	0.71	0.715	0.72	0.725	0.731	0.738	0.743		0.751	0.754	0.758	0.763	0.769	0.773	0.775		0.778	0.78	0.782	0.784	0.787	0.789	0.792	0.796	0.8	0.804	0.806	0.807	
Rochdale	0.668	0.673	0.679	0.684	0.688	0.694	0.7	0.705		0.716	0.72	0.725	0.731	0.737	0.744	0.75	0.755	0.76	0.767	0.773	0.779	0.783	0.784			0.788	0.788	0.788	0.789	0.791	0.795	0.8	0.805	0.81	0.813	0.814	0.815
Wigan	0.671	0.676	0.682	0.687	0.692	0.698	0.704	0.71	0.716	0.722	0.727	0.733	0.739	0.746	0.752	0.758	0.763	0.769	0.774	0.779	0.785	0.789	0.791	0.793	0.795	0.797	0.798	0.799	0.8	0.801	0.804	0.807	0.811	0.816	0.82	0.822	0.824
Halton	0.69	0.695	0.7	0.704	0.707	0.711	0.715	0.72	0.727	0.734	0.739	0.745	0.752	0.759	0.767	0.773	0.778	0.782	0.786	0.792	0.8	0.806	0.81		0.812	0.814	0.816	0.818	0.82	0.822	0.827	0.832	0.836	0.842	0.847	0.85	0.853
Liverpool	0.688	0.693	0.698	0.702	0.705	0.709	0.712	0.716	0.722	0.729	0.738	0.75	0.76	0.767	0.773	0.777	0.781	0.787	0.794	0.803	0.812	0.818	0.824	0.83	0.836	0.839	0.842	0.844	0.848	0.852	0.855	0.859	0.862	0.865	0.867	0.868	0.87
Tameside	0.672	0.678	0.683	0.688	0.692	0.697	0.702	0.707		0.719	0.724	0.73	0.737	0.744	0.751	0.756	0.761	0.766	0.771	0.778	0.786	0.792	0.795	0.797	0.8	0.802	0.801	0.801	0.8	0.8	0.802	0.805	0.809	0.813	0.816	0.818	0.82
Salford	0.691	0.696	0.701	0.706	0.71	0.714	0.719	0.723	0.728	0.732	0.737	0.744	0.752	0.761	0.769	0.775	0.78	0.784	0.791	0.799		0.814	0.818			0.828	0.831	0.832	0.834	0.835	0.839	0.843	0.848	0.853	0.856	0.859	0.861
Blackburn with Darwen	0.669	0.675	0.68	0.685	0.689	0.694	0.698	0.702	0.709	0.715	0.72	0.726	0.733	0.739	0.745	0.75	0.755	0.76	0.765	0.77	0.775	0.779	0.781			0.786	0.786	0.787	0.791	0.794	0.798	0.802	0.807	0.812	0.816	0.818	0.82
Knowsley	0.665	0.672	0.678	0.683	0.689	0.694	0.7	0.704	0.71	0.715	0.72	0.727	0.733	0.739	0.744	0.75	0.755	0.762	0.768	0.774	0.781	0.787	0.791	0.792	0.795	0.799	0.803	0.807	0.811	0.813	0.816	0.819	0.822	0.828	0.832	0.834	0.837
Blackpool	0.667	0.673	0.679	0.685	0.688	0.69	0.691	0.693	0.699	0.704	0.711	0.722	0.732	0.74	0.746	0.751	0.754	0.759	0.766	0.773	0.778	0.782	0.782	0.78	0.782	0.786	0.788	0.788	0.787	0.788	0.792	0.796	0.799	0.801	0.803	0.806	0.809
Manchester	0.715	0.721	0.726	0.731	0.734	0.739	0.744	0.749	0.755	0.761	0.768	0.775	0.781	0.789	0.796	0.801	0.806	0.812	0.819	0.829	0.839	0.847	0.853	0.857	0.862	0.866	0.869	0.872	0.875	0.878	0.882	0.884	0.888	0.892	0.895	0.897	0.899
North Yorkshire	0.707	0.712	0.718	0.724	0.73	0.736	0.742	0.747	0.754	0.759	0.762	0.765	0.769	0.774	0.78	0.785	0.79	0.796	0.802	0.808	0.815	0.819	0.821	0.822	0.826	0.829	0.831	0.833	0.834	0.835	0.838	0.841	0.844	0.848	0.849	0.849	0.85
East Riding of Yorkshire	0.696	0.702	0.708	0.714	0.72	0.724	0.727	0.726	0.73	0.738	0.746	0.752	0.758	0.765	0.771	0.777	0.782	0.788	0.793	0.799	0.804	0.808	0.81	0.811	0.815	0.818	0.819	0.821	0.823	0.825	0.827	0.828	0.831	0.834	0.836	0.837	0.839
York	0.729	0.735	0.74	0.745	0.749	0.753	0.756	0.76	0.766	0.773	0.781	0.79	0.799	0.804	0.81	0.815	0.819	0.824	0.831	0.836	0.842	0.848	0.854	0.86	0.865	0.87	0.873	0.877	0.88	0.881	0.883	0.885	0.886	0.888	0.89	0.892	0.894
North East Lincolnshire	0.693	0.698	0.703	0.706	0.709	0.714	0.721	0.728	0.736	0.74	0.743	0.748	0.755	0.762	0.769	0.773	0.776	0.779	0.784	0.789	0.795	0.801	0.802	0.802	0.803	0.805	0.808	0.813	0.817	0.822	0.825	0.828	0.831	0.833	0.834	0.834	0.834
Calderdale	0.688	0.694	0.699	0.704	0.709	0.716	0.722	0.729	0.736	0.741	0.746	0.75	0.755	0.761	0.767	0.773	0.777	0.783	0.788	0.795	0.801	0.805	0.806	0.807	0.81	0.814	0.816	0.818	0.82	0.821	0.824	0.828	0.833	0.839	0.842	0.845	0.847
North Lincolnshire	0.691	0.696	0.701	0.706	0.71	0.715	0.72	0.724	0.731	0.736	0.741	0.746	0.751	0.757	0.763	0.769	0.775	0.781	0.787	0.792	0.796	0.8	0.802	0.802	0.803	0.804	0.805	0.806	0.809	0.812	0.816	0.821	0.826	0.831	0.833	0.834	0.835
Bradford	0.669	0.675	0.681	0.686	0.69	0.696	0.702	0.707	0.714	0.72	0.726	0.732	0.738	0.744	0.75	0.755	0.759	0.763	0.767	0.773	0.779	0.784	0.786	0.787	0.79	0.792	0.795	0.798	0.802	0.805	0.808	0.81	0.812	0.815	0.817	0.818	0.819
Kirklees	0.676	0.682	0.688	0.694	0.699	0.705	0.711	0.716	0.723	0.729	0.735	0.741	0.747	0.753	0.759	0.763	0.768	0.772	0.778	0.785	0.79	0.795	0.796	0.797	0.8	0.803	0.805	0.807	0.81	0.812	0.814	0.817	0.821	0.825	0.828	0.83	0.832
Leeds	0.707	0.713	0.719	0.724	0.729	0.734	0.739	0.743	0.75	0.756	0.763	0.771	0.778	0.785	0.791	0.796	0.802	0.807	0.814	0.822	0.83	0.836	0.842	0.847	0.852	0.857	0.861	0.865	0.869	0.869	0.869	0.868	0.869	0.872	0.874	0.876	0.878
Sheffield	0.702	0.707	0.713	0.718	0.723	0.727	0.732	0.737	0.743	0.748	0.753	0.759	0.764	0.77	0.776	0.781	0.786	0.792	0.798	0.805	0.812	0.818	0.823	0.826	0.831	0.835	0.838	0.843	0.848	0.851	0.853	0.855	0.857	0.861	0.863	0.865	0.867
Wakefield	0.68	0.685	0.691	0.696	0.701	0.706	0.711	0.716	0.723	0.728	0.733	0.738	0.744	0.75	0.756	0.761	0.766	0.771	0.777	0.784	0.792	0.797	0.8	0.801	0.804	0.806	0.807	0.808	0.809	0.81	0.812	0.815	0.82	0.825	0.828	0.831	0.833
Rotherham	0.667	0.673	0.678	0.684	0.689	0.694	0.699	0.704	0.71	0.715	0.72	0.725	0.731	0.737	0.743	0.749	0.753	0.758	0.763	0.769	0.776	0.781	0.785	0.788	0.791	0.794	0.795	0.797	0.799	0.801	0.804	0.807	0.809	0.813	0.816	0.818	0.82
Doncaster	0.663	0.668	0.674	0.679	0.683	0.689	0.694	0.7	0.707	0.712	0.716	0.721	0.725	0.73	0.736	0.741	0.745	0.75	0.756	0.763	0.769	0.774	0.777	0.779	0.782	0.785	0.787	0.79	0.793	0.796	0.801	0.805	0.809	0.813	0.816	0.818	0.819
Kingston upon Hull, City of	0.675	0.68	0.685	0.688	0.69	0.694	0.7	0.709	0.718	0.721	0.725	0.731	0.74	0.747	0.754	0.759	0.764	0.77	0.776	0.783	0.791	0.797	0.8	0.803	0.808	0.812	0.817	0.821	0.825	0.826	0.825	0.825	0.827	0.831	0.835	0.838	0.84
Barnsley	0.66	0.665	0.671	0.676	0.681	0.687	0.692	0.697	0.703	0.708	0.712	0.718	0.724	0.73	0.737	0.742	0.747	0.753	0.76	0.766	0.772	0.776	0.778	0.78	0.782	0.784	0.786	0.789	0.791	0.792	0.794	0.797	0.801	0.806	0.81	0.812	0.814
Northamptonshire	0.698	0.704	0.71	0.716	0.72	0.725	0.73	0.734	0.74	0.746	0.751	0.757	0.764	0.771	0.777	0.783	0.788	0.793	0.799	0.805	0.811	0.816	0.818	0.819	0.821	0.824	0.825	0.827	0.828	0.83	0.833	0.835	0.839	0.843	0.845	0.845	0.846
Leicestershire	0.705	0.711	0.717	0.723	0.728	0.733	0.739	0.744	0.75	0.756	0.76	0.765	0.77	0.776	0.782	0.787	0.792	0.798	0.804	0.81	0.816	0.821	0.823	0.826	0.829	0.833	0.836	0.839	0.842	0.843	0.845	0.847	0.85	0.854	0.857	0.859	0.861
Lincolnshire	0.687	0.693	0.699	0.705	0.71	0.716	0.722	0.727	0.733	0.738	0.741	0.744	0.749	0.755	0.761	0.768	0.773	0.779	0.784	0.79	0.796	0.802	0.805	0.808	0.81	0.811	0.811	0.811	0.812	0.813	0.816	0.819	0.823	0.828	0.831	0.832	0.833
Rutland	0.703	0.709	0.715	0.721	0.728	0.736	0.744	0.751	0.76	0.765	0.771	0.772	0.776	0.784	0.79	0.796	0.801	0.806	0.811	0.815	0.82	0.814	0.802	0.782	0.776	0.788	0.797	0.804	0.809	0.817	0.831	0.839	0.839	0.839	0.838	0.839	0.84
Derby	0.689	0.696	0.703	0.71	0.716	0.723	0.728	0.733	0.738	0.743	0.748	0.756	0.764	0.773	0.782	0.789	0.794	0.798	0.803	0.81	0.816	0.822	0.826	0.829	0.834	0.837	0.838	0.841	0.844	0.845	0.846	0.846	0.849	0.855	0.858	0.861	0.864
Derbyshire	0.683	0.689	0.695	0.7	0.705	0.711	0.716	0.722	0.728	0.733	0.737	0.742	0.747	0.754	0.76	0.766	0.772	0.777	0.784	0.79	0.796	0.801	0.803	0.805	0.807	0.81	0.812	0.814	0.815	0.816	0.818	0.822	0.826	0.832	0.836	0.839	0.841
Nottinghamshire	0.68	0.686	0.692	0.698	0.703	0.709	0.714	0.719	0.725	0.731	0.735	0.74	0.745	0.751	0.757	0.762	0.766	0.771	0.778	0.786	0.794	0.8	0.805	0.807	0.811	0.814	0.816	0.817	0.819	0.819	0.82	0.821	0.824	0.828	0.831	0.834	0.835
Nottingham	0.705	0.711	0.718	0.724	0.729	0.733	0.737	0.741	0.746	0.753	0.76	0.769	0.777	0.785	0.793	0.801	0.807	0.815	0.822	0.828	0.834	0.84	0.846	0.85	0.855	0.86	0.863	0.867	0.87	0.871	0.871	0.87	0.871	0.873	0.875	0.877	0.878
Leicester	0.674	0.68	0.686	0.692	0.696	0.702	0.707	0.711	0.717	0.724	0.733	0.744	0.753	0.761	0.768	0.774	0.778	0.781	0.786	0.793	0.8	0.807	0.811	0.814	0.818	0.822	0.825	0.828	0.831	0.834	0.836	0.837	0.84	0.843	0.845	0.847	0.849
Warwickshire	0.714	0.72	0.725	0.731	0.735	0.741	0.746	0.75	0.756	0.761	0.766	0.772	0.778	0.784	0.791	0.796	0.801	0.806	0.812	0.819	0.825	0.83	0.833	0.836	0.838	0.84	0.841	0.842	0.844	0.846	0.849	0.852	0.856	0.861	0.863	0.864	0.865
Herefordshire, County of	0.692	0.698	0.704	0.709	0.715	0.72	0.725	0.729	0.733	0.738	0.741	0.746	0.752	0.759	0.765	0.77	0.775	0.78	0.786	0.793	0.801	0.807	0.809		0.813	0.815	0.815	0.814	0.815	0.816	0.821	0.828	0.836	0.842	0.846	0.848	0.85
Solihull	0.723	0.728	0.733	0.738	0.742	0.746	0.751	0.755	0.761	0.765	0.768	0.773	0.779	0.787	0.794	0.801	0.807	0.814	0.82	0.826	0.83	0.834	0.836	0.839	0.842		0.849	0.851	0.852	0.851	0.852	0.853	0.857	0.861	0.863	0.864	0.864
Shropshire	0.694	0.7	0.705	0.71	0.716	0.722	0.727	0.733	0.738	0.743	0.746	0.75	0.755	0.761	0.768	0.773	0.778	0.783	0.79	0.796	0.802	0.805	0.808	0.81	0.814	0.817	0.818	0.818	0.82	0.824	0.829	0.834	0.839	0.843	0.845	0.846	0.847
Worcestershire	0.688	0.694	0.699	0.705	0.71	0.716	0.721	0.727	0.733	0.738	0.742	0.747	0.753	0.759	0.765	0.77	0.775	0.78	0.787	0.796	0.804	0.81	0.813				0.822	0.823	0.824	0.825	0.828	0.832	0.836	0.841	0.844	0.846	0.847
Staffordshire	0.69	0.695	0.701	0.706	0.711			0.727				0.749	0.756	0.762	0.768	0.773	0.778	0.783	0.79	0.796		0.806	0.809					0.821		0.826		0.832	0.835	0.839	0.841	0.842	0.843
				1	1																																

Appendix Table 11: Socio-Demograp	hic Ind	lex val	ues fo	r all es	timate	d GBI	0 2016	locatio	ons, 19	80-201	16																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Dudley	0.677	0.682	0.688	0.693	0.698	0.703	0.708	0.714	0.721	0.726	0.731	0.736	0.741	0.747	0.753	0.757	0.762	0.767	0.772	0.778	0.784	0.789	0.792	0.794	0.797	0.8	0.802	0.804	0.806	0.806	0.807	0.808	0.81	0.814	0.816	0.817	0.818
Coventry	0.697	0.702	0.707	0.711	0.715	0.719	0.724	0.729	0.735	0.742	0.75	0.757	0.764	0.771	0.777	0.782	0.787	0.792	0.797	0.805	0.812	0.819	0.823	0.826	0.83	0.833	0.835	0.836	0.837	0.838	0.84	0.843	0.848	0.855	0.86	0.863	0.866
Telford and Wrekin	0.698	0.704	0.71	0.716	0.721	0.726	0.731	0.736	0.742	0.747	0.752	0.757	0.763	0.769	0.775	0.78	0.785	0.792	0.798	0.804	0.81	0.815	0.817	0.817	0.818	0.818	0.818	0.818	0.821	0.822	0.824	0.828	0.833	0.838	0.842	0.845	0.846
Stoke-on-Trent	0.67	0.676	0.681	0.686	0.691	0.697	0.701	0.705	0.71	0.716	0.724	0.733	0.742	0.749	0.756	0.761	0.766	0.772	0.777	0.783	0.788	0.79	0.789	0.788	0.789	0.791	0.791	0.79	0.793	0.796	0.8	0.804	0.809	0.815	0.819	0.823	0.827
Walsall	0.667	0.672	0.677	0.682	0.686	0.691	0.697	0.702	0.709	0.714	0.718	0.722	0.728	0.735	0.741	0.744	0.746	0.747	0.752	0.759	0.766	0.771	0.773	0.773				0.784	0.786	0.788	0.792	0.796	0.8	0.804	0.807	0.808	0.809
Wolverhampton	0.678	0.684	0.689	0.693	0.698	0.703	0.707	0.712	0.717	0.723	0.728	0.734	0.741	0.747	0.753	0.757	0.761	0.766	0.772	0.78	0.788	0.795	0.799	0.8	0.803	0.806		0.808	0.809	0.81	0.813	0.816	0.821	0.825	0.827	0.829	0.83
Birmingham	0.68	0.686	0.691	0.696	0.7	0.705	0.71	0.714	0.72	0.727	0.733	0.742	0.75	0.757	0.763	0.767	0.771	0.775	0.781	0.788	0.795	0.801	0.805	0.808			0.819	0.822	0.826	0.829	0.832	0.833	0.836	0.84	0.843	0.845	0.847
Sandwell	0.666	0.671	0.677	0.682	0.686	0.691	0.696	0.701	0.708	0.714	0.719	0.725	0.732	0.739	0.745	0.749	0.753	0.758	0.763	0.768		0.778	0.781					0.789	0.79	0.791		0.797	0.803	0.808	0.812	0.813	0.815
Bedford	0.711	0.717	0.723	0.728	0.733	0.739	0.745	0.75	0.757	0.764	0.771	0.776	0.781	0.784	0.788	0.791	0.795	0.801	0.807	0.814	0.822	0.828	0.831	0.833				0.842	0.843	0.844	0.845	0.846	0.848	0.85	0.85	0.851	0.851
Central Bedfordshire	0.709	0.717	0.723	0.728	0.733	0.735	0.743	0.73	0.754	0.759	0.765	0.77	0.775	0.784	0.788	0.791		0.801	0.807	0.814	0.822	0.828	0.831	0.833					0.845	0.844	0.843	0.846	0.848	0.83	0.83	0.851	0.851
																	0.8											0.831									
Suffolk	0.703	0.709	0.715	0.72	0.725	0.731	0.736	0.74	0.746	0.752	0.757	0.763	0.768	0.773	0.78	0.786	0.791	0.797	0.802	0.807	0.811	0.814	0.814	0.814		0.82		0.823	0.824	0.825	0.827	0.83	0.833	0.837	0.838	0.839	0.84
Hertfordshire	0.731	0.737	0.743	0.748	0.753	0.757	0.76	0.764	0.769		0.781	0.788	0.795	0.801	0.806	0.812	0.816		0.828	0.836	0.843	0.848	0.851			0.858		0.859	0.861	0.862	0.864	0.866	0.869	0.874	0.876	0.878	0.879
Essex	0.701	0.706	0.712	0.717	0.722	0.726	0.73	0.734	0.739	0.745	0.75	0.757	0.763	0.768	0.774	0.779	0.784	0.79	0.796	0.802	0.808	0.812	0.814	0.816		0.823		0.828	0.83	0.83	0.831	0.833	0.836	0.84	0.842	0.844	0.845
Cambridgeshire	0.728	0.734	0.74	0.745	0.749	0.755	0.76	0.765	0.771	0.777	0.783	0.789	0.796	0.801	0.807	0.814	0.82	0.827	0.833	0.838	0.844	0.849	0.854	0.856		0.862		0.862	0.862	0.863	0.867	0.87	0.874	0.878	0.88	0.881	0.882
Thurrock	0.702	0.708	0.711	0.715	0.717	0.72	0.723	0.726	0.733	0.741	0.75	0.759	0.765	0.77	0.775	0.78	0.783	0.787	0.793	0.799	0.806	0.811	0.812	0.812	0.813	0.813	0.813	0.814	0.816	0.819	0.821	0.822	0.823	0.825	0.826	0.825	0.824
Norfolk	0.702	0.708	0.714	0.719	0.723	0.728	0.733	0.737	0.743	0.749	0.754	0.759	0.764	0.77	0.775	0.781	0.786	0.792	0.798	0.804	0.81	0.814	0.817	0.818	0.821	0.824	0.826	0.828	0.83	0.831	0.832	0.833	0.836	0.841	0.844	0.846	0.848
Southend-on-Sea	0.683	0.688	0.693	0.696	0.699	0.703	0.709	0.716	0.724	0.731	0.736	0.742	0.749	0.757	0.765	0.772	0.778	0.785	0.79	0.794	0.796	0.797	0.798	0.799	0.802	0.804	0.804	0.806	0.809	0.813	0.817	0.819	0.822	0.825	0.827	0.827	0.828
Peterborough	0.713	0.719	0.724	0.728	0.732	0.737	0.742	0.747	0.753	0.759	0.763	0.767	0.773	0.778	0.785	0.79	0.794	0.798	0.803	0.809	0.815	0.819	0.818	0.816	0.816	0.816	0.816	0.816	0.816	0.818	0.823	0.828	0.831	0.835	0.837	0.838	0.839
Luton	0.692	0.698	0.703	0.707	0.71	0.713	0.715	0.717	0.725	0.733	0.743	0.752	0.759	0.765	0.771	0.775	0.779	0.783	0.787	0.793	0.798	0.803	0.804	0.804	0.806	0.808	0.811	0.816	0.823	0.829	0.834	0.837	0.84	0.843	0.844	0.844	0.845
Richmond upon Thames	0.76	0.766	0.771	0.775	0.779	0.783	0.787	0.791	0.798	0.805	0.813	0.82	0.827	0.833	0.839	0.845	0.85	0.855	0.861	0.868	0.873	0.878	0.882	0.885	0.887	0.888	0.887	0.887	0.888	0.888	0.889	0.891	0.895	0.9	0.905	0.908	0.91
Kensington and Chelsea	0.798	0.804	0.809	0.815	0.82	0.826	0.832	0.837	0.84	0.848	0.855	0.861	0.866	0.871	0.875	0.88	0.884	0.889	0.894	0.9	0.906	0.91	0.914	0.917	0.921	0.924	0.927	0.929	0.932	0.934	0.936	0.938	0.94	0.941	0.942	0.943	0.945
Barnet	0.729	0.735	0.742	0.748	0.753	0.759	0.764	0.769	0.775	0.782	0.787	0.792	0.797	0.803	0.81	0.816	0.823	0.829	0.835	0.841	0.846	0.851	0.853	0.854	0.855	0.855	0.854	0.853	0.855	0.857	0.86	0.865	0.87	0.875	0.878	0.879	0.88
Westminster	0.808	0.812	0.817	0.821	0.825	0.829	0.831	0.832	0.837	0.844	0.853	0.86	0.865	0.869	0.873	0.877	0.882	0.886	0.891	0.896	0.901	0.906	0.91	0.914			0.924	0.927	0.929	0.931	0.933	0.935	0.936	0.938	0.939	0.941	0.943
Bromley	0.73	0.736	0.741	0.746	0.749	0.753	0.757	0.761	0.767	0.774	0.779	0.784	0.789	0.793	0.799	0.804	0.809		0.821	0.829		0.839	0.842	0.844		0.847	0.848	0.85	0.851	0.851		0.851	0.853	0.857	0.86	0.862	0.863
Bexley	0.701	0.707	0.741	0.718	0.722	0.726	0.73	0.733	0.739	0.744	0.749	0.756	0.762	0.768	0.774	0.778	0.781	0.784	0.789	0.795	0.801	0.806	0.809	0.811				0.817	0.819	0.821	0.823	0.824	0.828	0.833	0.836	0.838	0.84
Redbridge	0.701	0.708	0.713	0.718	0.722	0.720	0.734	0.733	0.739	0.752	0.757	0.761	0.767	0.772	0.777	0.7782	0.781	0.792	0.797	0.804	0.801	0.800	0.809	0.82				0.817	0.819	0.821		0.824	0.828	0.833	0.830	0.838	0.843
Merton	0.702	0.708	0.713	0.718	0.723	0.729	0.752	0.74	0.746	0.732	0.737	0.792	0.767	0.772	0.813	0.782	0.787	0.792	0.797	0.804	0.81	0.813	0.818	0.82		0.825	0.824	0.827	0.869	0.85	0.851	0.851	0.834	0.837	0.84	0.841	0.884
Brent	0.724	0.73	0.736	0.741	0.746	0.752	0.759	0.765	0.773	0.779	0.784	0.788	0.792	0.797	0.802	0.807	0.811	0.815	0.82	0.826		0.841	0.845	0.846		0.846		0.836	0.832	0.832	0.84	0.85	0.858	0.864	0.866	0.865	0.865
Hillingdon	0.756	0.762	0.767	0.772	0.776	0.78	0.784	0.788	0.795	0.801	0.807	0.814	0.821	0.827	0.834	0.84	0.844	0.848	0.853	0.859	0.864	0.866	0.868	0.869		0.871	0.87	0.87	0.872	0.874	0.876	0.878	0.882	0.888	0.892	0.895	0.897
Havering	0.703	0.709	0.715	0.72	0.724	0.728	0.732	0.735	0.74	0.745	0.75	0.756	0.762	0.768	0.774	0.778	0.783	0.787	0.792	0.798	0.803	0.808	0.81	0.812		0.818		0.822	0.825	0.827	0.828	0.829	0.83	0.833	0.835	0.836	0.837
Kingston upon Thames	0.746	0.752	0.758	0.762	0.766	0.77	0.774	0.779	0.788	0.796	0.804	0.811	0.818	0.823	0.828	0.832	0.837	0.842	0.85	0.858	0.864	0.869	0.874	0.878		0.884	0.886	0.888	0.891	0.892	0.892	0.892	0.895	0.898	0.9	0.901	0.902
Sutton	0.714	0.72	0.726	0.73	0.734	0.737	0.739	0.743	0.749	0.756	0.762	0.769	0.776	0.783	0.79	0.796	0.802	0.807	0.814	0.821	0.828	0.832	0.834	0.834		0.838	0.84	0.842	0.845	0.846	0.847	0.847	0.85	0.854	0.856	0.857	0.858
Harrow	0.719	0.726	0.732	0.737	0.741	0.745	0.749	0.751	0.757	0.764	0.772	0.781	0.789	0.796	0.802	0.806	0.81	0.814	0.821	0.829	0.836	0.84	0.841	0.842	0.844	0.847	0.847	0.848	0.849	0.849	0.851	0.852	0.854	0.856	0.856	0.856	0.856
Enfield	0.716	0.722	0.728	0.732	0.736	0.741	0.745	0.749	0.755	0.761	0.767	0.773	0.778	0.783	0.787	0.79	0.793	0.798	0.804	0.812	0.82	0.826	0.828	0.828	0.828	0.827	0.826	0.826	0.828	0.831	0.837	0.842	0.847	0.851	0.853	0.853	0.854
Croydon	0.721	0.727	0.732	0.737	0.741	0.745	0.749	0.753	0.759	0.765	0.772	0.78	0.787	0.794	0.801	0.806	0.81	0.815	0.82	0.826	0.832	0.836	0.839	0.841	0.843	0.843	0.841	0.84	0.841	0.841	0.843	0.845	0.848	0.85	0.85	0.849	0.849
Hammersmith and Fulham	0.784	0.789	0.795	0.801	0.807	0.814	0.82	0.826	0.833	0.841	0.849	0.856	0.862	0.867	0.872	0.877	0.883	0.887	0.891	0.897	0.901	0.906	0.909	0.912	0.916	0.919	0.92	0.922	0.924	0.927	0.932	0.936	0.937	0.938	0.94	0.941	0.942
Ealing	0.729	0.736	0.743	0.749	0.757	0.765	0.773	0.779	0.786	0.791	0.795	0.8	0.805	0.81	0.816	0.822	0.827	0.833	0.839	0.847	0.853	0.858	0.86	0.86	0.861	0.86	0.859	0.858	0.857	0.857	0.859	0.863	0.868	0.873	0.876	0.877	0.879
Greenwich	0.701	0.707	0.713	0.719	0.723	0.727	0.732	0.735	0.74	0.746	0.753	0.76	0.768	0.775	0.78	0.784	0.788	0.793	0.798	0.806	0.814	0.821	0.825	0.826	0.826	0.824	0.821	0.82	0.822	0.825	0.83	0.835	0.841	0.846	0.848	0.848	0.848
Wandsworth	0.746	0.752	0.758	0.764	0.77	0.777	0.784	0.791	0.799	0.808	0.816	0.825	0.833	0.839	0.844	0.849	0.854	0.86	0.865	0.872	0.879	0.885	0.89	0.895	0.899	0.902	0.906	0.907	0.909	0.911	0.912	0.915	0.919	0.922	0.924	0.926	0.928
Waltham Forest	0.681	0.687	0.694	0.699	0.705	0.71	0.715	0.72	0.726	0.733	0.739	0.746	0.753	0.76	0.766	0.771	0.774	0.777	0.783	0.79	0.797	0.803	0.806	0.806	0.807	0.805	0.802	0.798	0.798	0.8	0.807	0.814	0.822	0.828	0.832	0.834	0.835
Camden	0.81	0.815	0.819	0.823	0.828	0.833	0.838	0.843	0.848	0.852	0.857	0.862	0.867	0.872	0.876	0.881	0.883	0.884	0.888	0.897		0.909	0.912	0.915			0.924	0.927	0.929	0.931	0.933	0.935	0.937	0.939	0.94	0.942	0.943
Lambeth	0.738	0.745	0.751	0.756	0.761	0.766	0.771	0.773	0.779	0.787	0.798	0.811	0.821	0.828	0.834	0.838	0.842	0.847	0.853	0.86	0.867	0.871	0.872	0.873	0.876	0.881	0.885	0.891	0.898	0.903	0.908	0.914	0.919	0.921	0.922	0.924	0.926
Lambern	0.738	0.743	0.731	0.736	0.701	0.700	0.771	0.775	0.779	0.787	0.755	0.766	0.821	0.828	0.834	0.838	0.842	0.847	0.855	0.80		0.871	0.872	0.873	0.876	0.83	0.885	0.891	0.898	0.903	0.908	0.914	0.919	0.921	0.922	0.924	0.926
Hounslow	0.745		0.714	0.719	0.724	0.728	0.752	0.766	0.741	0.747	0.795	0.805	0.773	0.782	0.818	0.79	0.793	0.796	0.802	0.81	0.819	0.826	0.828	0.864	0.864	0.85	0.852	0.855	0.833	0.836	0.84	0.878	0.883	0.830	0.891	0.865	0.803
		0.75		0.755																							0.867										0.892
Southwark	0.753		0.766		0.778	0.782	0.787	0.791	0.798	0.806	0.816	0.825	0.833	0.838	0.841	0.844	0.845	0.848	0.854	0.864		0.883	0.885	0.885		0.892		0.9	0.904	0.907	0.911	0.916	0.923	0.929	0.933	0.935	
Newham	0.69	0.696	0.701	0.705	0.708	0.712	0.716	0.722	0.728	0.734	0.74	0.747	0.754	0.759	0.76	0.759	0.758	0.76	0.765	0.775	0.79	0.803	0.808	0.808	0.81	0.811	0.809	0.803	0.795	0.795	0.813	0.833	0.844	0.85	0.852	0.853	0.853
Barking and Dagenham	0.692	0.698	0.702	0.705	0.707	0.711	0.715	0.719	0.724	0.728	0.733	0.739	0.745	0.752	0.758	0.763	0.765	0.768	0.775	0.784		0.799	0.801	0.798	0.794	0.79		0.787	0.791	0.794	0.798	0.8	0.804	0.81	0.814	0.815	0.815
Haringey	0.73	0.736	0.741	0.745	0.747	0.748	0.75	0.752	0.758	0.765	0.777	0.79	0.799	0.805	0.809	0.813	0.817	0.821	0.825	0.831		0.843	0.846	0.847		0.851	0.85	0.849	0.848	0.848	0.855	0.865	0.872	0.878	0.88	0.88	0.88
Hackney	0.755	0.761	0.766	0.771	0.777	0.782	0.784	0.787	0.794	0.8	0.806	0.814	0.822	0.828	0.832	0.832	0.829	0.829	0.834	0.844	0.855	0.863	0.866	0.866				0.881	0.887	0.894	0.902	0.91	0.915	0.92	0.923	0.923	0.924
Islington	0.786	0.792	0.797	0.802	0.807	0.813	0.817	0.821	0.827	0.831	0.837	0.844	0.851	0.858	0.864	0.869	0.873	0.877	0.882	0.888	0.894	0.898	0.902	0.905	0.909	0.912	0.915	0.919	0.922	0.925	0.927	0.93	0.932	0.934	0.936	0.938	0.94
Tower Hamlets	0.727	0.732	0.736	0.74	0.747	0.757	0.768	0.777	0.785	0.79	0.794	0.797	0.801	0.805	0.809	0.813	0.819	0.826	0.834	0.847	0.859	0.869	0.876	0.88	0.885	0.891	0.896	0.902	0.907	0.912	0.916	0.919	0.924	0.927	0.929	0.931	0.933
Wokingham	0.758	0.763	0.768	0.773	0.778	0.784	0.79	0.796	0.803	0.806	0.809	0.81	0.812	0.815	0.817	0.82	0.824	0.829	0.836	0.846	0.857	0.865	0.87	0.872	0.875	0.879	0.881	0.883	0.884	0.883	0.882	0.88	0.882	0.887	0.891	0.893	0.895
Buckinghamshire	0.74	0.746	0.752	0.758	0.763	0.768	0.773	0.776	0.781	0.786	0.79	0.795	0.801	0.806	0.812	0.818	0.823	0.828	0.834	0.839	0.845	0.849	0.85	0.851	0.854	0.856	0.856	0.856	0.856	0.856	0.858	0.861	0.865	0.869	0.872	0.873	0.874
Surrey	0.749	0.755	0.76	0.764	0.767	0.77	0.773	0.775	0.781	0.787	0.793	0.8	0.806	0.811	0.816	0.821	0.825	0.831	0.837	0.846	0.854	0.859	0.861	0.863	0.865	0.866	0.867	0.868	0.869	0.87	0.871	0.872	0.875	0.88	0.882	0.884	0.886
Windsor and Maidenhead	0.76	0.766	0.77	0.774	0.776	0.779	0.782	0.783	0.786	0.79	0.799	0.809	0.817	0.824	0.83	0.837	0.841	0.846	0.85	0.856	0.861	0.865	0.868	0.872	0.876	0.879	0.88	0.881	0.883	0.884	0.885	0.888	0.891	0.896	0.9	0.903	0.905
West Berkshire	0.755	0.76	0.765	0.77	0.774	0.78	0.786	0.791	0.798	0.803	0.809	0.814	0.82	0.827	0.833	0.838	0.842	0.846	0.851	0.858	0.865	0.868	0.869	0.869				0.863	0.862	0.863	0.868	0.873	0.878	0.883	0.885	0.886	0.887
Hampshire		0.731	0.737	0.742	0.747	0.752	0.756	0.76	0.766			0.781	0.786	0.791	0.797		0.808		0.819	0.824		0.834						0.842		0.845	0.847	0.85	0.855	0.859	0.862	0.864	0.866
	1			1	1																															1	

Appendix Table 11: Socio-Demograp	hic Ind	lex val	ues fo	r all es	timate	d <u>GBD</u>	2016	locatio	ons <u>, 198</u>	80 <u>-20</u> 1	6																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bracknell Forest	0.733	0.74	0.746	0.753	0.76	0.766	0.771	0.777	0.784	0.791	0.796	0.799	0.804	0.808	0.814	0.82	0.824	0.828	0.833	0.842	0.849	0.855	0.858	0.86	0.863	0.866	0.868	0.87	0.871	0.872	0.873	0.875	0.878	0.882	0.885	0.887	0.888
West Sussex	0.72	0.726	0.731	0.737	0.741	0.746	0.75	0.753	0.759	0.764	0.769	0.774	0.78	0.786	0.792	0.797	0.803	0.808	0.814	0.819	0.824	0.827	0.828	0.829	0.831	0.832	0.834	0.835	0.836	0.838	0.841	0.844	0.847	0.852	0.854	0.855	0.856
Oxfordshire	0.745	0.751	0.757	0.762	0.767	0.773	0.778	0.782	0.786	0.79	0.794	0.799	0.805	0.81	0.816	0.822	0.827	0.832	0.838	0.845	0.851	0.856	0.858	0.86	0.863	0.865	0.866	0.866	0.867	0.868	0.87	0.874	0.879	0.884	0.887	0.889	0.89
Reading	0.753	0.759	0.764	0.769	0.772	0.775	0.779	0.783	0.79	0.798	0.806	0.815	0.822	0.827	0.832	0.837	0.842	0.847	0.853	0.861	0.869	0.876	0.88			0.886	0.884	0.883	0.884	0.886	0.89	0.893	0.897	0.901	0.904	0.905	0.906
Kent	0.71	0.716	0.721	0.726	0.729	0.733	0.736	0.74	0.745	0.75	0.755	0.76	0.765	0.771	0.776	0.781	0.786	0.791	0.797	0.803	0.808	0.812	0.815			0.822	0.823	0.824	0.826	0.827	0.829	0.832	0.835	0.839	0.842	0.844	0.845
Brighton and Hove	0.73	0.735	0.74	0.743	0.745	0.748	0.751	0.755	0.763	0.771	0.781	0.79	0.797	0.803	0.808	0.813	0.819		0.829	0.834	0.839	0.845	0.851				0.872	0.874	0.877	0.88	0.884	0.887	0.889	0.891	0.894	0.896	0.899
Medway	0.686	0.691	0.697	0.701	0.706	0.71	0.715	0.72	0.727	0.733	0.738	0.744	0.749	0.753	0.758	0.763	0.769	0.774	0.78	0.785		0.796	0.799			0.807	0.81	0.811	0.813	0.813	0.815	0.816	0.82	0.824	0.827	0.829	0.831
East Sussex	0.696	0.702	0.708	0.713	0.718	0.723	0.728	0.732	0.737	0.742	0.746	0.75	0.755	0.759	0.765	0.77	0.776	0.781	0.786	0.791	0.796	0.799	0.8				0.807	0.808	0.809	0.81	0.813	0.817	0.821	0.826	0.83	0.832	0.834
Portsmouth	0.728	0.734	0.74	0.744	0.746	0.748	0.751	0.754	0.76	0.768	0.776	0.784	0.791	0.797	0.802	0.806	0.81	0.815	0.821	0.828	0.836	0.843	0.849			0.861	0.864	0.867	0.869	0.87	0.87	0.868	0.869	0.871	0.873	0.876	0.878
Isle of Wight	0.695	0.734	0.706	0.744	0.740	0.719	0.724	0.73	0.737	0.741	0.744	0.746	0.748	0.751	0.756	0.762	0.768	0.774	0.78	0.787	0.795	0.804	0.809				0.814	0.816	0.818	0.819	0.821	0.823	0.826	0.829	0.831	0.833	0.835
Milton Keynes	0.757	0.761	0.762	0.762	0.763	0.768	0.775	0.783	0.79	0.795	0.796	0.799	0.804	0.811	0.818	0.825	0.83	0.835	0.839	0.843	0.847	0.85	0.85			0.855	0.856	0.855	0.855	0.856	0.862	0.868	0.873	0.878	0.88	0.88	0.88
Southampton	0.728	0.734	0.739	0.743	0.746	0.748	0.749	0.75	0.754	0.761	0.771	0.782	0.79	0.798	0.804	0.81	0.814	0.819	0.825	0.832	0.84	0.845	0.849			0.863	0.866	0.868	0.869	0.868	0.867	0.866	0.867	0.871	0.874	0.876	0.878
Slough	0.728	0.753	0.759	0.743	0.740	0.748	0.749	0.771	0.779	0.787	0.795	0.805	0.812	0.818	0.824	0.81	0.836	0.819	0.823	0.832	0.852	0.855	0.854				0.843	0.808	0.85	0.855	0.861	0.866	0.871	0.874	0.874	0.874	0.873
				0.737					0.774	0.779				0.010		0.803					0.832													0.874	0.875		0.873
South Gloucestershire Dorset	0.731	0.737	0.742	0.747	0.751	0.756	0.762	0.767	0.747		0.783	0.787	0.791	0.795	0.799	0.803	0.809	0.816	0.824	0.832 0.807		0.844	0.846				0.858	0.861	0.865	0.866	0.867	0.868 0.827	0.871	0.875	0.878	0.88	0.842
		0.71	0.715		0.726	0.731				0.752	0.754		0.762					0.794					0.814					0.814		0.816			0.833				
Wiltshire	0.713	0.719	0.725	0.731	0.736	0.741	0.746	0.75	0.756	0.761	0.766	0.77	0.775	0.781	0.787	0.793	0.798	0.804	0.81	0.815	0.821	0.825	0.826				0.828	0.826	0.825	0.826	0.83	0.835	0.84	0.844	0.846	0.846	0.847
North Somerset	0.695	0.701	0.708	0.714	0.721	0.727	0.734	0.74	0.746	0.751	0.753	0.756	0.761	0.766	0.771	0.776	0.781	0.787	0.793	0.799	0.805	0.809	0.811					0.825	0.827	0.826	0.827	0.829	0.833	0.000	0.841	0.843	
Devon	0.701	0.707	0.712	0.717	0.721	0.726	0.731	0.736		0.748	0.753	0.757	0.762	0.767	0.772	0.777	0.782	0.788	0.794	0.802	0.809	0.815	0.818				0.831	0.833	0.834	0.835	0.836	0.837	0.84	0.845	0.849	0.851	0.853
Poole	0.708	0.714	0.719	0.724	0.729	0.735	0.741	0.748	0.755	0.761	0.766	0.771	0.776	0.782	0.789	0.796	0.802	0.808	0.814	0.82	0.826	0.83	0.83			0.834	0.835	0.835	0.836	0.836	0.84	0.845	0.851	0.856	0.859	0.861	0.862
Bath and North East Somerset	0.722	0.727	0.732	0.737	0.74	0.745	0.75	0.756	0.762	0.768	0.772	0.777	0.782	0.787	0.793	0.798	0.803	0.808	0.816	0.824	0.83	0.837	0.843			0.86	0.863	0.867	0.87	0.871	0.871	0.872	0.874	0.878	0.882	0.884	0.886
Gloucestershire	0.716	0.722	0.728	0.733	0.738	0.744	0.749	0.754	0.76	0.765	0.77	0.775	0.779	0.785	0.79	0.796	0.801	0.806	0.812	0.819	0.826	0.832	0.835		0.842	0.844	0.844	0.844	0.845	0.846	0.849	0.851	0.855	0.859	0.861	0.862	0.863
Somerset	0.701	0.708	0.714	0.719	0.725	0.73	0.734	0.738	0.743	0.748	0.752	0.756	0.762	0.767	0.774	0.78	0.786	0.791	0.795	0.801	0.807	0.811	0.812				0.819	0.82	0.82	0.821	0.823	0.827	0.83	0.834	0.835	0.835	0.836
Swindon	0.736	0.742	0.748	0.753	0.757	0.761	0.766	0.77	0.777	0.784	0.79	0.796	0.801	0.806	0.81	0.815	0.819	0.824	0.831	0.838	0.844	0.849	0.851			0.852		0.853	0.855	0.856	0.858	0.859	0.861	0.865	0.866	0.866	0.867
Torbay	0.684	0.69	0.696	0.701	0.706	0.711	0.715	0.721	0.728	0.734	0.738	0.743	0.749	0.755	0.761	0.767	0.772	0.777	0.782	0.787	0.793	0.795	0.794				0.798	0.8	0.802	0.802	0.802	0.801	0.803	0.806	0.809	0.811	0.813
Bristol, City of	0.738	0.744	0.749	0.753	0.756	0.759	0.763	0.766	0.772	0.779	0.787	0.796	0.804	0.811	0.817	0.822	0.827	0.832	0.839	0.847	0.854	0.859	0.863	0.865	0.869	0.872	0.875	0.878	0.881	0.882	0.881	0.88	0.882	0.887	0.891	0.895	0.898
Bournemouth	0.705	0.71	0.715	0.72	0.726	0.732	0.737	0.742	0.747	0.752	0.759	0.767	0.775	0.78	0.786	0.791	0.797	0.802	0.808	0.814	0.82	0.826	0.831				0.846	0.846	0.847	0.849	0.853	0.858	0.862	0.866	0.869	0.871	0.872
Cornwall	0.685	0.691	0.697	0.702	0.708	0.713	0.718	0.723	0.729	0.735	0.739	0.743	0.748	0.754	0.76	0.766	0.771	0.776	0.782	0.789	0.796	0.801	0.805				0.818	0.819	0.821	0.821	0.822	0.823	0.826	0.83	0.832	0.833	0.835
Plymouth	0.699	0.705	0.711	0.718	0.723	0.729	0.736	0.741	0.747	0.752	0.757	0.762	0.769	0.776	0.783	0.789	0.793	0.798	0.804	0.81	0.815	0.819	0.822			0.83		0.836	0.839	0.84	0.84	0.841	0.843	0.847	0.85	0.851	0.853
North East England	0.681	0.687	0.692	0.698	0.702	0.708	0.714	0.72	0.727	0.732	0.737	0.743	0.749	0.755	0.762	0.768	0.773	0.779	0.785	0.792	0.798	0.804	0.807					0.822	0.824	0.826	0.828	0.83	0.834	0.838	0.841	0.842	0.844
North West England	0.693	0.699	0.704	0.709	0.714	0.719	0.724	0.729	0.735	0.741	0.746	0.752	0.759	0.766	0.773	0.778	0.783	0.788	0.794	0.801	0.807	0.813	0.816	0.818	0.821	0.823	0.825	0.826	0.828	0.83	0.833	0.836	0.84	0.845	0.848	0.85	0.851
Yorkshire and the Humber	0.69	0.695	0.701	0.706	0.711	0.716	0.721	0.726	0.733	0.738	0.743	0.749	0.755	0.761	0.767	0.773	0.777	0.783	0.789	0.795	0.802	0.808	0.811		0.816	0.82	0.822	0.825	0.828	0.83	0.832	0.834	0.837	0.841	0.843	0.845	0.846
East Midlands	0.691	0.697	0.703	0.709	0.714	0.719	0.725	0.73	0.736	0.741	0.746	0.751	0.758	0.764	0.771	0.777	0.782	0.787	0.793	0.8	0.806	0.811	0.815	0.817	0.82	0.823	0.824	0.826	0.828	0.83	0.832	0.834	0.837	0.841	0.844	0.846	0.848
West Midlands	0.688	0.694	0.699	0.704	0.709	0.714	0.719	0.724	0.73	0.736	0.741	0.747	0.754	0.76	0.766	0.771	0.776	0.781	0.787	0.793	0.8	0.805	0.808	0.81	0.813	0.816	0.817	0.819	0.821	0.823	0.826	0.829	0.833	0.837	0.84	0.842	0.844
East of England	0.711	0.716	0.722	0.727	0.732	0.736	0.741	0.745	0.751	0.757	0.762	0.769	0.775	0.78	0.786	0.791	0.797	0.802	0.808	0.815	0.82	0.824	0.826	0.828	0.831	0.833	0.835	0.836	0.838	0.839	0.841	0.843	0.846	0.85	0.853	0.854	0.855
Greater London	0.751	0.757	0.763	0.768	0.772	0.777	0.782	0.786	0.792	0.799	0.807	0.815	0.821	0.827	0.833	0.837	0.841	0.846	0.852	0.86	0.868	0.875	0.878	0.88	0.883	0.885	0.886	0.886	0.888	0.89	0.894	0.899	0.904	0.909	0.912	0.914	0.915
South East England	0.729	0.735	0.74	0.745	0.749	0.753	0.757	0.761	0.767	0.772	0.777	0.783	0.789	0.794	0.8	0.805	0.81	0.816	0.821	0.828	0.834	0.839	0.841	0.842	0.845	0.847	0.848	0.849	0.85	0.851	0.854	0.856	0.86	0.864	0.867	0.869	0.87
South West England	0.711	0.716	0.722	0.727	0.732	0.737	0.742	0.747	0.753	0.758	0.763	0.768	0.773	0.779	0.785	0.79	0.795	0.801	0.807	0.814	0.82	0.825	0.828	0.829	0.832	0.835	0.836	0.837	0.839	0.84	0.841	0.844	0.847	0.851	0.854	0.856	0.857
Southern Latin America	0.599	0.604	0.607	0.613	0.618	0.621	0.627	0.631	0.634	0.637	0.641	0.647	0.654	0.662	0.671	0.678	0.684	0.688	0.693	0.698	0.702	0.706	0.709	0.712	0.716	0.72	0.725	0.729	0.734	0.738	0.743	0.749	0.754	0.76	0.764	0.768	0.771
Argentina	0.595	0.6	0.602	0.608	0.613	0.617	0.624	0.629	0.634	0.636	0.639	0.645	0.652	0.66	0.67	0.677	0.681	0.684	0.687	0.691	0.695	0.699	0.701	0.703	0.706	0.71	0.714	0.719	0.723	0.727	0.732	0.739	0.745	0.75	0.754	0.758	0.761
Chile	0.603	0.606	0.613	0.619	0.623	0.627	0.63	0.631	0.633	0.638	0.645	0.652	0.66	0.668	0.677	0.685	0.694	0.702	0.71	0.716	0.722	0.727	0.732	0.737	0.744	0.749	0.754	0.759	0.763	0.767	0.772	0.777	0.782	0.787	0.792	0.796	0.8
Uruguay	0.61	0.615	0.619	0.622	0.624	0.626	0.629	0.632	0.635	0.638	0.641	0.642	0.645	0.648	0.652	0.656	0.661	0.667	0.673	0.678	0.682	0.685	0.688	0.69	0.693	0.696	0.7	0.704	0.709	0.714	0.719	0.724	0.729	0.734	0.739	0.743	0.747
High-income North America	0.836	0.839	0.842	0.845	0.847	0.849	0.851	0.852	0.852	0.851	0.852	0.855	0.858	0.86	0.863	0.865	0.867	0.868	0.87	0.871	0.873	0.876	0.878	0.878	0.88	0.88	0.88	0.882	0.885	0.89	0.893	0.895	0.896	0.897	0.898	0.899	0.9
Canada	0.815	0.82	0.823	0.826	0.83	0.834	0.839	0.843	0.845	0.845	0.847	0.849	0.853	0.855	0.858	0.862	0.867	0.87	0.873	0.878	0.881	0.884	0.887	0.889	0.891	0.892	0.892	0.892	0.894	0.897	0.899	0.901	0.903	0.904	0.905	0.907	0.908
United States	0.838	0.841	0.844	0.847	0.849	0.85	0.853	0.853	0.852	0.851	0.852	0.855	0.858	0.86	0.863	0.865	0.867	0.868	0.869	0.87	0.872	0.875	0.876	0.877	0.878	0.879	0.878	0.88	0.884	0.889	0.892	0.894	0.895	0.896	0.897	0.898	0.899
Greenland	0.733	0.739	0.745	0.75	0.752	0.754	0.755	0.755	0.754	0.752	0.75	0.75	0.749	0.749	0.75	0.75	0.75	0.753	0.758	0.762	0.763	0.764	0.766	0.771	0.775	0.779	0.783	0.786	0.788	0.792	0.798	0.804	0.808	0.811	0.813	0.814	0.816
Alabama	0.808	0.812	0.816	0.82	0.823	0.826	0.828	0.829	0.829	0.83	0.832	0.835	0.839	0.842	0.845	0.847	0.849	0.85	0.851	0.853	0.856	0.86	0.862	0.864	0.865	0.865	0.864	0.865	0.869	0.874	0.878	0.88	0.882	0.882	0.883	0.884	0.884
Alaska	0.849	0.844	0.843	0.844	0.843	0.846	0.85	0.851	0.85	0.847	0.845	0.846	0.848	0.852	0.856	0.859	0.861	0.862	0.863	0.863	0.863	0.863	0.863	0.864	0.868	0.871	0.872	0.874	0.878	0.881	0.885	0.887	0.89	0.891	0.894	0.896	0.897
Arizona	0.829	0.832	0.834	0.836	0.836	0.837	0.839	0.84	0.839	0.838	0.837	0.84	0.842	0.844	0.846	0.847	0.848	0.848	0.848	0.848	0.849	0.852	0.853	0.853	0.855	0.855	0.856	0.861	0.868	0.875	0.879	0.88	0.881	0.881	0.881	0.881	0.881
Arkansas	0.799	0.803	0.807	0.811	0.814	0.816	0.819	0.82	0.82	0.82	0.822	0.826	0.83	0.833	0.836	0.837	0.839	0.84	0.842	0.844	0.846	0.849	0.85	0.851	0.853	0.853	0.852	0.854	0.859	0.863	0.867	0.869	0.871	0.872	0.874	0.875	0.876
California	0.851	0.853	0.854	0.856	0.856	0.856	0.856	0.854	0.849	0.844	0.841	0.843	0.846	0.848	0.851	0.854	0.857	0.861	0.863	0.866	0.869	0.872	0.873	0.872	0.873	0.873	0.872	0.875	0.88	0.885	0.889	0.891	0.893	0.894	0.896	0.897	0.898
Colorado	0.859	0.861	0.863	0.865	0.865	0.866	0.869	0.87	0.87	0.869	0.87	0.873	0.875	0.878	0.881	0.883	0.884	0.883	0.883	0.882	0.883	0.885	0.887	0.888	0.891	0.892	0.893	0.895	0.899	0.903	0.906	0.908	0.91	0.912	0.913	0.914	0.915
Connecticut	0.87	0.873	0.875	0.878	0.879	0.881	0.883	0.885	0.886	0.887	0.889	0.892	0.895	0.897	0.899	0.9	0.902	0.903	0.904	0.905	0.907	0.91	0.911	0.911	0.912	0.912	0.912	0.913	0.917	0.921	0.924	0.926	0.928	0.929	0.93	0.93	0.93
Delaware	0.854	0.857	0.859	0.862	0.863	0.865	0.867	0.867	0.866	0.866	0.867	0.871	0.875	0.878	0.88	0.882	0.883	0.882	0.882	0.882	0.884	0.887	0.888	0.889	0.89	0.889	0.887	0.888	0.892	0.897	0.901	0.903	0.905	0.907	0.908	0.909	0.909
District of Columbia	0.881	0.883	0.884	0.886	0.887	0.888	0.889	0.887	0.882	0.876	0.874	0.877	0.883	0.89	0.898	0.905	0.911	0.917	0.921	0.924	0.927	0.929	0.93	0.927	0.926	0.925	0.925	0.925	0.928	0.932	0.935	0.938	0.941	0.944	0.946	0.947	0.947
Florida	0.843	0.846	0.847	0.849	0.85	0.851	0.853	0.853	0.852	0.851	0.854	0.857	0.86	0.863	0.865	0.867	0.869	0.87	0.87	0.871	0.873	0.875	0.876		0.878			0.881	0.886	0.892	0.895	0.897	0.898	0.898	0.898	0.898	0.898
Georgia	0.82	0.825	0.829	0.832	0.835	0.837	0.84	0.841	0.841	0.841	0.843	0.848	0.851	0.855	0.857	0.859	0.86	0.86	0.86	0.86	0.862	0.865	0.867					0.869	0.874	0.88	0.884	0.886	0.887	0.887	0.888	0.888	0.888
Hawaii	0.843	0.844	0.845	0.848	0.85			0.855		0.853		0.857	0.86	0.863	0.866	0.869	0.872		0.875	0.875		0.876						0.877	0.881	0.885		0.891	0.894	0.896	0.898	0.9	0.901

Appendix Table 11: Socio-Demograp	hic Ind	lex va	ues fo	r all es	stimate	d GBI	0 2016	locatio	ons, 198	80-201	16																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Idaho	0.809	0.813	0.816	0.822	0.825	0.829	0.833	0.834	0.834	0.832	0.833	0.835	0.837	0.84	0.842	0.845	0.846	0.847	0.848	0.849	0.851	0.854	0.854	0.854	0.855	0.854	0.853	0.854	0.859	0.864	0.867	0.869	0.87	0.871	0.872	0.872	0.872
Illinois	0.843	0.846	0.849	0.852	0.854	0.856	0.857	0.858	0.856	0.855	0.856	0.858	0.86	0.863	0.866	0.868	0.871	0.872	0.874	0.875	0.878	0.881	0.883	0.884	0.886	0.888	0.888	0.891	0.895	0.899	0.902	0.903	0.905	0.906	0.907	0.908	0.908
Indiana	0.833	0.837	0.84	0.843	0.844	0.846	0.848	0.849	0.848	0.847	0.848	0.85	0.853	0.855	0.858	0.859	0.86	0.86	0.86	0.861	0.863	0.866	0.867	0.867	0.869	0.869	0.868	0.869	0.872	0.875	0.878	0.879	0.88	0.881	0.882	0.883	0.883
Iowa	0.834	0.838	0.842	0.845	0.848	0.85	0.853	0.854	0.854	0.853	0.854	0.856	0.858	0.86	0.862	0.864	0.865	0.866	0.867	0.868	0.87	0.873	0.874	0.875	0.876	0.876	0.874	0.876	0.88	0.884	0.887	0.888	0.89	0.891	0.891	0.892	0.893
Kansas	0.835	0.839	0.842	0.846	0.848	0.851	0.854	0.855	0.856	0.855	0.857	0.859	0.861	0.862	0.864	0.865	0.866	0.866	0.866	0.866	0.868	0.871	0.873	0.874	0.875	0.875	0.874	0.875	0.879	0.883	0.886	0.888	0.89	0.892	0.893	0.895	0.895
Kentucky	0.805	0.81	0.814	0.818	0.821	0.824	0.827	0.828	0.828	0.829	0.83	0.833	0.836	0.839	0.841	0.843	0.845	0.846	0.847	0.849	0.851	0.855	0.856	0.857	0.858	0.858	0.857	0.859	0.862	0.865	0.868	0.869	0.87	0.87	0.871	0.873	0.874
Louisiana	0.796	0.801	0.806	0.811	0.814	0.817	0.82	0.822	0.822	0.822	0.824	0.827	0.83	0.833	0.837	0.84	0.842	0.844	0.846	0.847	0.85	0.854	0.856	0.857	0.86	0.86	0.861	0.864	0.869	0.873	0.876	0.878	0.88	0.882	0.883	0.885	0.885
Maine	0.832	0.834	0.836	0.839	0.841	0.844	0.848	0.85	0.853		0.858	0.862	0.866	0.869	0.872	0.874	0.876	0.877	0.878	0.88	0.882	0.885	0.886		0.889	0.89	0.891	0.893	0.896	0.899	0.901	0.902	0.902	0.903	0.904	0.905	0.906
Maryland	0.865	0.867	0.868	0.87	0.871	0.872	0.875	0.875	0.875	0.875	0.877	0.88	0.883	0.886	0.889	0.891	0.892	0.892	0.892	0.893	0.895	0.897	0.899	0.899				0.903	0.907	0.912	0.915	0.917	0.919	0.92	0.92	0.921	0.92
Massachusetts	0.865	0.868	0.871	0.874	0.877	0.88	0.882	0.884	0.886	0.886	0.889	0.892	0.895	0.897	0.9	0.902	0.904	0.905	0.906	0.907	0.91	0.913	0.915					0.921	0.923	0.926	0.928	0.929	0.931	0.932	0.933	0.935	0.935
Michigan	0.845	0.847	0.849	0.852	0.853	0.855	0.857	0.857	0.856	0.854	0.855	0.858	0.861	0.864	0.867	0.87	0.871	0.872	0.873	0.875	0.877	0.88	0.882	0.883		0.887	0.887	0.888	0.89	0.891	0.892	0.893	0.893	0.894	0.895	0.896	0.897
Minnesota	0.839	0.844	0.848	0.852		0.859	0.863	0.866	0.867	0.868	0.87	0.873	0.875	0.877	0.879	0.88	0.882	0.882	0.883	0.884	0.886	0.889	0.89	0.89		0.891		0.892	0.896	0.9	0.903	0.904	0.905	0.906	0.907	0.909	0.909
	0.839	0.844	0.848	0.832	0.803	0.839	0.805	0.800	0.867	0.808	0.87	0.875	0.875	0.877	0.879	0.88	0.833	0.882	0.885	0.838	0.880	0.845	0.89	0.89				0.892	0.896	0.9	0.903	0.904	0.903	0.906	0.907	0.909	0.909
Mississippi																																					
Missouri	0.826	0.83	0.833	0.837	0.839	0.842	0.845	0.846	0.846	0.846	0.847	0.85	0.853	0.856	0.859	0.86	0.862	0.863	0.864	0.865	0.868	0.871	0.872					0.876	0.879	0.883	0.886	0.887	0.888	0.89	0.891	0.892	0.893
Montana	0.829	0.831	0.834	0.837	0.838	0.84	0.843	0.845	0.844	0.844	0.845	0.847	0.849	0.852	0.855	0.858	0.86	0.862	0.863	0.865	0.866	0.868	0.869	0.869		0.872	0.873	0.875	0.879	0.882	0.885	0.886	0.888	0.889	0.891	0.892	0.893
Nebraska	0.832	0.835	0.838	0.842	0.845	0.848	0.852	0.853	0.854	0.853	0.855	0.858	0.86	0.862	0.863	0.865	0.866	0.867	0.867	0.867	0.868	0.87	0.87			0.873		0.873	0.877	0.881	0.884	0.886	0.888	0.888	0.889	0.89	0.89
Nevada	0.855	0.857	0.858	0.86	0.86	0.86	0.86	0.857	0.854	0.85	0.85	0.853	0.855	0.857	0.858	0.859	0.861	0.862	0.862	0.863	0.865	0.868	0.868	0.868				0.868	0.875	0.882	0.887	0.889	0.889	0.889	0.888	0.887	0.886
New Hampshire	0.852	0.856	0.859	0.862	0.864	0.866	0.869	0.871	0.873		0.879	0.882	0.885	0.887	0.889	0.891	0.893	0.894	0.896	0.897	0.9	0.903	0.904		0.908			0.914	0.916	0.919	0.921	0.922	0.924	0.926	0.928	0.93	0.931
New Jersey	0.858	0.861	0.864	0.867	0.868	0.87	0.872	0.873	0.873	0.873	0.875	0.878	0.881	0.883	0.885	0.887	0.889	0.891	0.891	0.892		0.896	0.896	0.897	0.899	0.9	0.899	0.9	0.904	0.908	0.912	0.914	0.915	0.916	0.917	0.918	0.918
New Mexico	0.809	0.812	0.814	0.818	0.819	0.822	0.825	0.826	0.826	0.824	0.825	0.826	0.829	0.832	0.835	0.838	0.841	0.843	0.844	0.845	0.847	0.85	0.852		0.854	0.855	0.855	0.858	0.862	0.867	0.871	0.873	0.875	0.877	0.879	0.88	0.881
New York	0.854	0.856	0.858	0.861	0.862	0.864	0.866	0.866	0.866	0.866	0.868	0.871	0.874	0.877	0.879	0.882	0.885	0.887	0.888	0.89	0.892	0.895	0.896	0.897	0.899	0.899	0.899	0.901	0.904	0.907	0.91	0.912	0.915	0.916	0.918	0.919	0.92
North Carolina	0.825	0.829	0.832	0.835	0.837	0.84	0.842	0.842	0.842	0.841	0.844	0.848	0.851	0.855	0.858	0.86	0.86	0.86	0.86	0.86	0.861	0.865	0.867	0.868	0.869	0.868	0.866	0.868	0.873	0.878	0.883	0.885	0.886	0.886	0.887	0.887	0.887
North Dakota	0.816	0.818	0.822	0.827	0.83	0.835	0.839	0.842	0.842	0.843	0.846	0.848	0.85	0.852	0.854	0.857	0.86	0.863	0.866	0.869	0.871	0.874	0.874	0.875	0.875	0.874	0.872	0.874	0.879	0.883	0.887	0.888	0.891	0.892	0.893	0.895	0.896
Ohio	0.838	0.841	0.844	0.847	0.848	0.85	0.853	0.853	0.853	0.852	0.854	0.856	0.858	0.86	0.863	0.865	0.866	0.866	0.867	0.868	0.87	0.874	0.875	0.876	0.878	0.879	0.879	0.88	0.883	0.885	0.887	0.888	0.889	0.89	0.891	0.892	0.893
Oklahoma	0.82	0.824	0.828	0.833	0.836	0.84	0.843	0.844	0.843	0.842	0.843	0.844	0.846	0.847	0.848	0.849	0.849	0.849	0.85	0.85	0.853	0.856	0.857	0.858	0.86	0.861	0.861	0.862	0.866	0.869	0.872	0.874	0.877	0.879	0.88	0.882	0.883
Oregon	0.85	0.852	0.854	0.857	0.857	0.858	0.859	0.858	0.857	0.856	0.857	0.86	0.863	0.866	0.868	0.869	0.87	0.871	0.873	0.875	0.878	0.882	0.884	0.885	0.887	0.887	0.886	0.887	0.89	0.894	0.897	0.898	0.899	0.9	0.901	0.903	0.903
Pennsylvania	0.842	0.845	0.847	0.85	0.851	0.853	0.855	0.856	0.856	0.856	0.858	0.861	0.864	0.867	0.87	0.873	0.875	0.877	0.878	0.879	0.881	0.884	0.885	0.885	0.887	0.887	0.887	0.888	0.892	0.896	0.899	0.9	0.902	0.904	0.905	0.907	0.908
Rhode Island	0.847	0.851	0.853	0.857	0.859	0.861	0.863	0.864	0.865	0.865	0.867	0.87	0.873	0.877	0.88	0.883	0.885	0.886	0.887	0.889	0.89	0.893	0.894	0.895	0.898	0.9	0.9	0.902	0.906	0.909	0.912	0.913	0.915	0.916	0.918	0.92	0.921
South Carolina	0.814	0.818	0.821	0.825	0.828	0.83	0.833	0.833	0.832	0.831	0.834	0.839	0.844	0.849	0.853	0.855	0.856	0.857	0.857	0.858	0.86	0.864	0.866	0.866	0.866	0.864	0.862	0.863	0.868	0.874	0.879	0.881	0.883	0.884	0.884	0.885	0.886
South Dakota	0.806	0.81	0.814	0.818	0.822	0.825	0.83	0.832	0.832	0.832	0.834	0.836	0.839	0.842	0.846	0.849	0.852	0.853	0.855	0.857	0.859	0.861	0.861	0.862	0.863	0.862	0.861	0.863	0.868	0.872	0.876	0.877	0.878	0.879	0.88	0.881	0.882
Tennessee	0.818	0.822	0.825	0.829	0.831	0.833	0.836	0.836	0.836	0.835	0.837	0.841	0.844	0.848	0.851	0.853	0.855	0.856	0.857	0.858	0.861	0.864	0.866	0.866	0.867	0.867	0.865	0.867	0.871	0.875	0.879	0.88	0.882	0.882	0.883	0.884	0.885
Texas	0.815	0.819	0.823	0.827	0.829	0.831	0.834	0.834	0.834	0.832	0.832	0.834	0.835	0.837	0.839	0.84	0.842	0.843	0.843	0.844	0.846	0.849	0.85	0.851	0.853	0.853	0.853	0.855	0.86	0.866	0.87	0.873	0.875	0.876	0.877	0.878	0.878
Utah	0.779	0.786	0.794	0.803	0.809	0.814	0.819	0.82	0.82	0.819	0.822	0.827	0.831	0.833	0.834	0.835	0.834	0.834	0.834	0.836	0.839	0.843	0.846	0.847	0.849	0.849	0.848	0.85	0.855	0.859	0.863	0.864	0.866	0.867	0.869	0.87	0.87
Vermont	0.843	0.846	0.848	0.851	0.853	0.855	0.859	0.861	0.863	0.866	0.869	0.872	0.876	0.879	0.882	0.885	0.887	0.889	0.89	0.893	0.895	0.898	0.899	0.9		0.904	0.905	0.907	0.909	0.912	0.913	0.915	0.916	0.917	0.918	0.919	0.92
Virginia	0.849	0.852	0.855	0.858	0.86	0.862	0.864	0.866	0.866	0.867	0.868	0.871	0.874	0.877	0.88	0.882	0.883	0.883	0.884	0.884	0.885	0.888	0.888	0.888		0.891	0.891	0.894	0.899	0.903	0.907	0.909	0.91	0.911	0.912	0.913	0.913
Washington	0.857	0.859	0.862	0.865	0.866	0.867	0.869	0.869	0.868	0.867	0.868	0.87	0.873	0.876	0.878	0.88	0.882	0.883	0.885	0.887	0.891	0.894	0.896	0.896		0.897		0.897	0.899	0.902	0.904	0.906	0.907	0.908	0.91	0.911	0.912
West Virginia	0.809	0.813	0.818	0.822	0.824	0.827	0.83	0.831	0.831	0.83	0.832	0.834	0.837	0.84	0.843	0.845	0.847	0.849	0.85	0.851	0.852	0.854	0.856	0.857	0.859	0.859	0.859	0.859	0.862	0.865	0.867	0.869	0.87	0.872	0.873	0.875	0.876
Wisconsin	0.836	0.839	0.842	0.845	0.847	0.85	0.853	0.855	0.856	0.857	0.859	0.861	0.864	0.867	0.869	0.871	0.873	0.874	0.875	0.876	0.878	0.88	0.881	0.882	0.884	0.884	0.884	0.885	0.888	0.892	0.894	0.895	0.897	0.898	0.899	0.901	0.902
	0.830	0.839	0.83	0.845	0.847	0.842	0.847	0.85	0.851	0.851	0.852	0.854	0.857	0.86	0.863	0.865	0.867	0.868	0.875	0.874	0.876	0.878	0.878	0.878		0.877	0.877	0.879	0.886	0.892	0.898	0.895	0.902	0.903	0.904	0.901	0.902
Wyoming Latin America and Caribbean	0.824	0.827	0.83	0.835	0.837	0.842	0.847	0.85	0.533	0.851	0.852	0.854		0.86	0.863	0.865	0.867	0.868	0.871	0.874	0.876	0.878	0.878	0.632		0.643	0.649	0.879	0.886	0.893	0.898	0.901	0.902	0.903	0.695	0.905	0.905
													0.561																								0.705
Caribbean	0.532	0.538	0.543	0.551	0.557	0.563	0.569	0.573	0.578	0.583	0.588	0.594	0.599	0.602	0.605	0.608	0.61	0.613	0.617	0.621	0.626	0.631	0.635	0.64		0.651	0.656	0.66	0.663	0.667	0.671	0.675	0.679	0.683	0.688	0.692	
Antigua and Barbuda	0.611	0.619	0.627	0.634	0.64	0.647	0.654	0.662	0.67	0.678	0.684	0.691	0.696	0.7	0.704	0.707	0.71	0.713	0.716	0.719		0.723	0.725	0.728		0.735		0.746	0.752	0.756	0.759	0.761	0.765	0.767	0.771	0.774	0.778
The Bahamas	0.659	0.666	0.674	0.681	0.689	0.697	0.704	0.709	0.713	0.716	0.719	0.72	0.721	0.722	0.724	0.728	0.733	0.739	0.745	0.751		0.761	0.765	0.767	0.769			0.773	0.774	0.775	0.775	0.776	0.777	0.779	0.78	0.781	0.783
Barbados	0.662	0.668	0.673	0.679	0.685	0.691	0.699	0.706	0.713		0.726	0.732	0.737	0.741	0.744	0.748	0.751	0.755	0.759	0.762	0.766	0.769	0.771			0.776		0.782	0.784	0.786	0.788	0.789	0.79	0.791	0.793	0.795	0.797
Belize	0.344	0.348	0.353	0.36	0.369	0.379	0.391	0.404	0.419		0.452	0.469	0.487	0.502	0.515	0.525	0.532	0.537	0.542	0.546	0.552	0.557	0.563	0.569	0.574	0.58	0.585	0.589	0.593	0.596	0.6	0.604	0.608	0.612	0.617	0.621	0.625
Cuba	0.631	0.634	0.637	0.645	0.65	0.658	0.666	0.668	0.673	0.679	0.685	0.693	0.698	0.697	0.696	0.695	0.695	0.692	0.693	0.694	0.697	0.701	0.705	0.712				0.739	0.739	0.743	0.747	0.751	0.757	0.761	0.766	0.772	0.778
Dominica	0.529	0.534	0.541	0.548	0.556	0.563	0.57	0.577	0.584	0.59	0.596	0.6	0.605	0.612	0.62	0.629	0.637	0.645	0.653	0.659	0.665	0.67	0.674	0.678		0.686	0.69	0.695	0.701	0.705	0.71	0.714	0.718	0.721	0.725	0.729	0.734
Dominican Republic	0.435	0.449	0.463	0.477	0.49	0.499	0.506	0.513	0.519	0.524	0.527	0.53	0.535	0.54	0.545	0.551	0.558	0.566	0.574	0.582	0.589	0.596	0.603	0.609		0.622	0.629	0.637	0.643	0.649	0.656	0.662	0.668	0.675	0.682	0.69	0.696
Grenada	0.442	0.448	0.453	0.458	0.463	0.468	0.473	0.479	0.485	0.492	0.5	0.51	0.519	0.527	0.536	0.544	0.552	0.561	0.571	0.581	0.591	0.6	0.609	0.618	0.627	0.637	0.646	0.654	0.662	0.668	0.674	0.679	0.684	0.688	0.694	0.699	0.704
Guyana	0.496	0.503	0.509	0.514	0.517	0.518	0.519	0.519	0.519	0.518	0.517	0.518	0.52	0.525	0.53	0.537	0.545	0.552	0.559	0.565	0.569	0.573	0.576	0.579	0.582	0.584	0.587	0.592	0.596	0.601	0.607	0.614	0.621	0.628	0.636	0.643	0.649
Haiti	0.257	0.261	0.264	0.267	0.271	0.275	0.279	0.284	0.29	0.297	0.303	0.31	0.315	0.319	0.321	0.325	0.329	0.334	0.339	0.346	0.352	0.358	0.363	0.368	0.372	0.376	0.381	0.386	0.391	0.397	0.402	0.407	0.413	0.418	0.424	0.428	0.432
Jamaica	0.557	0.563	0.568	0.573	0.578	0.58	0.583	0.587	0.591	0.595	0.599	0.604	0.609	0.615	0.62	0.625	0.629	0.633	0.636	0.64	0.643	0.647	0.651	0.655	0.659	0.664	0.669	0.674	0.679	0.682	0.685	0.688	0.691	0.694	0.696	0.699	0.701
Saint Lucia	0.453	0.464	0.473	0.482	0.492	0.502	0.513	0.523	0.534	0.544	0.555	0.565	0.574	0.583	0.591	0.598	0.606	0.614	0.621	0.629	0.635	0.641	0.647	0.654	0.662	0.668	0.674	0.679	0.684	0.689	0.693	0.697	0.7	0.703	0.707	0.71	0.713
Saint Vincent and the Grenadines	0.418	0.428	0.438	0.449	0.46	0.471	0.48	0.489	0.499	0.508	0.516	0.524	0.533	0.541	0.547	0.555	0.562	0.569	0.576	0.583	0.589	0.595	0.602	0.608	0.615	0.621	0.627	0.633	0.638	0.642	0.645	0.648	0.651	0.655	0.659	0.663	0.667
Suriname	0.51	0.515	0.519	0.524	0.528	0.535	0.541	0.546	0.553	0.56	0.566	0.569	0.572	0.574	0.575	0.577	0.58	0.583	0.587	0.589	0.592	0.597	0.601	0.607	0.614	0.621	0.628	0.636	0.643	0.651	0.659	0.666	0.673	0.68	0.686	0.691	0.696
Trinidad and Tobago	0.592	0.595	0.599	0.603	0.608	0.615	0.624	0.633	0.642	0.649	0.655	0.659	0.663	0.666	0.668	0.669	0.671	0.675	0.68	0.687	0.694	0.7	0.706	0.713	0.719	0.725	0.731	0.738	0.745	0.75	0.755	0.758	0.76	0.762	0.764	0.765	0.766
Bermuda		0.687	0.692	0.698	0.703	0.708	0.713	0.719	0.724			0.737	0.741	0.745	0.749	0.752	0.756	0.76	0.763	0.767		0.774						0.796		0.801	0.803	0.806	0.808	0.811	0.813		0.819
1			•	•	•	•								•		•	•		1	I		•	1			1			. 1				•	•			. 1

100       1	Appendix Table 11: Socio-Demograp	hic <u>In</u> d	ex va	lues fo	r all es	stimate	d <u>GB</u> I	) 20 <u>16</u>	locatio	ons <u>, 19</u>	80 <u>-20</u> 1	16																										
Des         Des         Dis         Dis        Dis        Dis        Dis         Dis         Dis        Dis         Dis         Dis         Dis         Dis        Dis        Dis        Dis        Dis      D		_			-								1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
90      90	Puerto Rico	0.699	0.71	0.719	0.727	0.733	0.739	0.743	0.748	0.753	0.76		0.774	0.781	0.788	0.793	0.799	0.805	0.81	0.817	0.822	0.828	0.834	0.84	0.845	0.85	0.854	0.858	0.86	0.863	0.864	0.866	0.867	0.868	0.87		0.873	0.875
nome      10     10     10	Virgin Islands, U.S.	0.723	0.732	0.738	0.743	0.749	0.755	0.76	0.764	0.767	0.771	0.777	0.782	0.789	0.796	0.802	0.808	0.814	0.82	0.825	0.829	0.833	0.836	0.839	0.842	0.845	0.85	0.855	0.861	0.864	0.868	0.871	0.874	0.875	0.876	0.876	0.877	0.877
Image      Sime      S	Andean Latin America	0.45	0.457	0.465	0.473	0.481	0.488	0.496	0.504	0.511	0.518	0.524	0.53	0.536	0.541	0.548	0.555	0.561	0.568	0.575	0.582	0.588	0.594	0.6	0.605	0.61	0.615	0.62	0.625	0.63	0.635	0.64	0.644	0.649	0.653	0.657	0.662	0.666
Image     Image    Image    <	Bolivia	0.354	0.361	0.368	0.376	0.383	0.39	0.397	0.405	0.412	0.418	0.425	0.432	0.439	0.446	0.453	0.461	0.469	0.477	0.485	0.494	0.502	0.51	0.518	0.525		0.539	0.546	0.553	0.56	0.567	0.573	0.58	0.586	0.593	0.599	0.605	0.61
Image     Image    Image    <	Ecuador	0.45	0.458	0.467	0.475	0.484	0.493	0.501	0.509	0.516	0.523	0.53	0.537	0.543	0.55	0.556	0.563	0.569	0.576	0.583	0.588	0.593	0.598	0.603	0.608	0.613	0.619	0.624	0.629	0.635	0.64	0.645	0.65	0.655	0.66	0.665	0.67	0.674
Channel     Cond																																						
Camele     Camele    Camele <td>Central Latin America</td> <td>0.466</td> <td>0.476</td> <td>0.485</td> <td>0.493</td> <td>0.502</td> <td>0.51</td> <td>0.518</td> <td>0.525</td> <td>0.531</td> <td>0.537</td> <td>0.544</td> <td>0.551</td> <td>0.56</td> <td>0.568</td> <td>0.575</td> <td>0.581</td> <td>0.588</td> <td>0.595</td> <td>0.602</td> <td>0.609</td> <td>0.615</td> <td>0.622</td> <td>0.627</td> <td>0.633</td> <td>0.639</td> <td>0.645</td> <td>0.652</td> <td>0.659</td> <td>0.665</td> <td>0.671</td> <td>0.676</td> <td>0.682</td> <td>0.689</td> <td>0.695</td> <td>0.701</td> <td>0.707</td> <td>0.711</td>	Central Latin America	0.466	0.476	0.485	0.493	0.502	0.51	0.518	0.525	0.531	0.537	0.544	0.551	0.56	0.568	0.575	0.581	0.588	0.595	0.602	0.609	0.615	0.622	0.627	0.633	0.639	0.645	0.652	0.659	0.665	0.671	0.676	0.682	0.689	0.695	0.701	0.707	0.711
Distant     Distant <td>Colombia</td> <td>0.485</td> <td>0.493</td> <td>0.5</td> <td>0.506</td> <td>0.513</td> <td>0.519</td> <td>0.526</td> <td>0.532</td> <td>0.538</td> <td>0.544</td> <td>0.55</td> <td>0.556</td> <td>0.562</td> <td>0.568</td> <td>0.574</td> <td>0.581</td> <td>0.588</td> <td>0.595</td> <td>0.601</td> <td>0.606</td> <td>0.611</td> <td>0.616</td> <td>0.62</td> <td>0.624</td> <td>0.629</td> <td>0.634</td> <td>0.639</td> <td>0.645</td> <td>0.652</td> <td>0.658</td> <td>0.664</td> <td>0.672</td> <td>0.679</td> <td>0.686</td> <td>0.694</td> <td>0.701</td> <td>0.707</td>	Colombia	0.485	0.493	0.5	0.506	0.513	0.519	0.526	0.532	0.538	0.544	0.55	0.556	0.562	0.568	0.574	0.581	0.588	0.595	0.601	0.606	0.611	0.616	0.62	0.624	0.629	0.634	0.639	0.645	0.652	0.658	0.664	0.672	0.679	0.686	0.694	0.701	0.707
Commel     Pic     Pic    Pic     Pic	Costa Rica	0.527	0.532	0.535	0.537	0.539	0.541	0.546	0.552	0.557	0.563	0.57	0.577	0.584	0.591	0.598	0.603	0.608	0.614	0.62	0.627	0.634	0.64	0.646	0.651	0.657	0.662	0.668	0.674	0.679	0.685	0.691	0.697	0.704	0.71	0.716	0.722	0.726
Imame       Sime       Sime      Sime      Sime      Sime      <	El Salvador	0.383	0.392	0.401	0.408	0.414	0.419	0.424	0.429	0.434	0.439	0.444	0.451	0.458	0.465	0.472	0.48	0.488	0.496	0.504	0.513	0.521	0.529	0.537	0.545	0.552	0.56	0.568	0.576	0.584	0.592	0.6	0.609	0.617	0.625	0.632	0.639	0.645
Name	Guatemala	0.325	0.33	0.335	0.338	0.342	0.345	0.348	0.351	0.355	0.36	0.365	0.37	0.376	0.383	0.389	0.396	0.404	0.412	0.42	0.429	0.438	0.446	0.455	0.463	0.472	0.48	0.489	0.498	0.506	0.514	0.522	0.53	0.537	0.543	0.55	0.556	0.561
Sumple      1      <	Honduras	0.295	0.304	0.313	0.321	0.329	0.337	0.345	0.353	0.362	0.372	0.381	0.39	0.4	0.409	0.418	0.427	0.435	0.443	0.451	0.459	0.466	0.474	0.481	0.488	0.495	0.502	0.508	0.515	0.522	0.527	0.533	0.539	0.545	0.551	0.556	0.562	0.567
Dum      Dist      Dist<	Mexico	0.458	0.47	0.481	0.491	0.501	0.511	0.521	0.53	0.538	0.547	0.555	0.564	0.573	0.582	0.591	0.598	0.606	0.614	0.622	0.629	0.637	0.644	0.651	0.657	0.664	0.671	0.678	0.684	0.691	0.695	0.701	0.706	0.712	0.718	0.723	0.729	0.734
1     1 </td <td>Nicaragua</td> <td>0.409</td> <td>0.412</td> <td>0.415</td> <td>0.418</td> <td>0.421</td> <td>0.424</td> <td>0.427</td> <td>0.43</td> <td>0.431</td> <td>0.433</td> <td>0.434</td> <td>0.436</td> <td>0.438</td> <td>0.44</td> <td>0.443</td> <td>0.447</td> <td>0.453</td> <td>0.459</td> <td>0.466</td> <td>0.473</td> <td>0.481</td> <td>0.488</td> <td>0.496</td> <td>0.502</td> <td>0.509</td> <td>0.516</td> <td>0.523</td> <td>0.53</td> <td>0.537</td> <td>0.543</td> <td>0.549</td> <td>0.555</td> <td>0.562</td> <td>0.569</td> <td>0.576</td> <td>0.583</td> <td>0.588</td>	Nicaragua	0.409	0.412	0.415	0.418	0.421	0.424	0.427	0.43	0.431	0.433	0.434	0.436	0.438	0.44	0.443	0.447	0.453	0.459	0.466	0.473	0.481	0.488	0.496	0.502	0.509	0.516	0.523	0.53	0.537	0.543	0.549	0.555	0.562	0.569	0.576	0.583	0.588
Appendix <td>Panama</td> <td>0.542</td> <td>0.552</td> <td>0.56</td> <td>0.568</td> <td>0.574</td> <td>0.581</td> <td>0.588</td> <td>0.594</td> <td>0.597</td> <td>0.6</td> <td>0.603</td> <td>0.607</td> <td>0.611</td> <td>0.615</td> <td>0.62</td> <td>0.624</td> <td>0.628</td> <td>0.633</td> <td>0.64</td> <td>0.647</td> <td>0.653</td> <td>0.66</td> <td>0.666</td> <td>0.67</td> <td>0.674</td> <td>0.679</td> <td>0.683</td> <td>0.688</td> <td>0.693</td> <td>0.698</td> <td>0.704</td> <td>0.71</td> <td>0.718</td> <td>0.726</td> <td>0.735</td> <td>0.744</td> <td>0.752</td>	Panama	0.542	0.552	0.56	0.568	0.574	0.581	0.588	0.594	0.597	0.6	0.603	0.607	0.611	0.615	0.62	0.624	0.628	0.633	0.64	0.647	0.653	0.66	0.666	0.67	0.674	0.679	0.683	0.688	0.693	0.698	0.704	0.71	0.718	0.726	0.735	0.744	0.752
b     b    b </td <td>Venezuela</td> <td>0.533</td> <td>0.54</td> <td>0.547</td> <td>0.557</td> <td>0.568</td> <td>0.577</td> <td>0.583</td> <td>0.588</td> <td>0.594</td> <td>0.592</td> <td>0.59</td> <td>0.602</td> <td>0.619</td> <td>0.628</td> <td>0.629</td> <td>0.632</td> <td>0.637</td> <td>0.642</td> <td>0.647</td> <td>0.65</td> <td>0.654</td> <td>0.657</td> <td>0.66</td> <td>0.662</td> <td>0.667</td> <td>0.673</td> <td>0.681</td> <td>0.688</td> <td>0.696</td> <td>0.702</td> <td>0.708</td> <td>0.714</td> <td>0.721</td> <td>0.728</td> <td>0.734</td> <td>0.738</td> <td>0.742</td>	Venezuela	0.533	0.54	0.547	0.557	0.568	0.577	0.583	0.588	0.594	0.592	0.59	0.602	0.619	0.628	0.629	0.632	0.637	0.642	0.647	0.65	0.654	0.657	0.66	0.662	0.667	0.673	0.681	0.688	0.696	0.702	0.708	0.714	0.721	0.728	0.734	0.738	0.742
Desc	Aguascalientes	0.49	0.502	0.512	0.521	0.53	0.538	0.548	0.558	0.567	0.576	0.586	0.597	0.608	0.617	0.624	0.631	0.639	0.648	0.656	0.663	0.67	0.675	0.681	0.687	0.693	0.699	0.705	0.711	0.715	0.719	0.723	0.728	0.733	0.739	0.744	0.749	0.754
Campa      Bio      Bio Bio      Bio      Bio <td>Baja California</td> <td>0.523</td> <td>0.536</td> <td>0.548</td> <td>0.56</td> <td>0.572</td> <td>0.585</td> <td>0.597</td> <td>0.608</td> <td>0.617</td> <td>0.624</td> <td>0.629</td> <td>0.635</td> <td>0.642</td> <td>0.65</td> <td>0.658</td> <td>0.666</td> <td>0.672</td> <td>0.676</td> <td>0.68</td> <td>0.687</td> <td>0.695</td> <td>0.703</td> <td>0.709</td> <td>0.713</td> <td>0.715</td> <td>0.718</td> <td>0.722</td> <td>0.728</td> <td>0.735</td> <td>0.74</td> <td>0.745</td> <td>0.751</td> <td>0.758</td> <td>0.764</td> <td>0.769</td> <td>0.773</td> <td>0.776</td>	Baja California	0.523	0.536	0.548	0.56	0.572	0.585	0.597	0.608	0.617	0.624	0.629	0.635	0.642	0.65	0.658	0.666	0.672	0.676	0.68	0.687	0.695	0.703	0.709	0.713	0.715	0.718	0.722	0.728	0.735	0.74	0.745	0.751	0.758	0.764	0.769	0.773	0.776
0     0    0 </td <td>Baja California Sur</td> <td>0.535</td> <td>0.547</td> <td>0.559</td> <td>0.571</td> <td>0.584</td> <td>0.596</td> <td>0.605</td> <td>0.615</td> <td>0.627</td> <td>0.635</td> <td>0.644</td> <td>0.654</td> <td>0.663</td> <td>0.669</td> <td>0.674</td> <td>0.679</td> <td>0.686</td> <td>0.691</td> <td>0.692</td> <td>0.689</td> <td>0.689</td> <td>0.694</td> <td>0.698</td> <td>0.701</td> <td>0.707</td> <td>0.712</td> <td>0.711</td> <td>0.707</td> <td>0.706</td> <td>0.71</td> <td>0.718</td> <td>0.729</td> <td>0.738</td> <td>0.744</td> <td>0.748</td> <td>0.753</td> <td>0.757</td>	Baja California Sur	0.535	0.547	0.559	0.571	0.584	0.596	0.605	0.615	0.627	0.635	0.644	0.654	0.663	0.669	0.674	0.679	0.686	0.691	0.692	0.689	0.689	0.694	0.698	0.701	0.707	0.712	0.711	0.707	0.706	0.71	0.718	0.729	0.738	0.744	0.748	0.753	0.757
Colu       Colu    <	Campeche	0.437	0.449	0.459	0.468	0.477	0.485	0.494	0.503	0.511	0.52	0.53	0.541	0.551	0.56	0.567	0.574	0.582	0.593	0.603	0.614	0.625	0.635	0.643	0.651	0.658	0.665	0.671	0.677	0.682	0.685	0.688	0.693	0.7	0.707	0.713	0.72	0.726
O       O      O       O       O	Coahuila	0.499	0.512	0.523	0.533	0.543	0.552	0.562	0.572	0.582	0.593	0.605	0.617	0.63	0.64	0.649	0.656	0.663	0.671	0.679	0.685	0.691	0.697	0.702	0.708	0.714	0.72	0.726	0.733	0.739	0.743	0.747	0.751	0.754	0.758	0.761	0.766	0.77
Channel      O     O     O <td>Colima</td> <td></td> <td>0.485</td> <td>0.496</td> <td>0.506</td> <td>0.517</td> <td>0.528</td> <td>0.54</td> <td>0.553</td> <td>0.565</td> <td>0.579</td> <td>0.591</td> <td>0.604</td> <td>0.616</td> <td>0.625</td> <td>0.632</td> <td>0.638</td> <td>0.645</td> <td>0.652</td> <td>0.659</td> <td>0.666</td> <td>0.672</td> <td>0.678</td> <td>0.683</td> <td>0.689</td> <td></td> <td>0.7</td> <td>0.706</td> <td></td> <td>0.716</td> <td>0.719</td> <td>0.723</td> <td>0.727</td> <td></td> <td>0.737</td> <td>0.742</td> <td>0.748</td> <td>0.753</td>	Colima		0.485	0.496	0.506	0.517	0.528	0.54	0.553	0.565	0.579	0.591	0.604	0.616	0.625	0.632	0.638	0.645	0.652	0.659	0.666	0.672	0.678	0.683	0.689		0.7	0.706		0.716	0.719	0.723	0.727		0.737	0.742	0.748	0.753
	Chiapas	0.3	0.313	0.323	0.332		0.342	0.345		0.342	0.339	0.342	0.355	0.375	0.393	0.41	0.427	0.444	0.459	0.472	0.483	0.491	0.499	0.508	0.517	0.527	0.536	0.546	0.555	0.563	0.57	0.577	0.585		0.6		0.616	0.622
Desc         Desc        Desc         Desc        Desc         Desc        Desc         Desc        Desc        Desc         Desc        Desc        Desc        Desc        Desc        Desc        Desc        Desc        Desc        Desc        Desc        Desc        Desc        Desc       Desc        Desc        Des					0.0000																																	
Omegane         Mais         Mais       Mais       Mais <t< td=""><td>Distrito Federal</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.07-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.000</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Distrito Federal														0.07-															0.000								
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Sinded         Sinde         Sinde <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																																						
See               See               See               See            See         See            See            See            See            See            See            See            See         See         See         See         See         See         See																																						
Image: Description         Image:	Sonora				0.561		0.577																							0.737					0.761		0.772	
Image               Image               Image               Image               Image               Image               Image               Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Image         Im	Tabasco		0.432	0.443	0.452		0.469			0.496	0.506		0.525		0.545			0.572		0.597	0.607		0.624	0.63	0.636		0.648	0.654		0.665	0.669	0.674	0.68		0.691		0.701	0.706
Image: Description       1	Tamaulipas			0.526																												0.738						0.77
Varian         0.66         0.47         0.48         0.49         0.49         0.50         0.51         0.52         0.52         0.52         0.52         0.55<			0.371		0.397	0.413	0.432	0.455		0.499	0.514	0.524	0.533		0.545	0.559	0.573	0.585		0.599	0.605	0.612	0.62		0.635		0.651	_				0.681	0.685		0.701		0.715	0.72
And a	Veracruz de Ignacio de la Llave	0.408	0.42	0.431	0.44	0.449	0.458	0.467	0.477	0.484	0.493	0.501	0.51	0.519	0.526	0.531	0.537	0.545	0.554	0.564	0.573	0.582	0.59	0.597	0.605	0.613	0.621	0.63	0.638	0.646	0.653	0.659	0.665	0.67	0.675	0.68	0.686	0.69
Image: Description of the strate descri	Yucatán	0.466	0.477	0.486	0.493	0.501	0.508	0.515	0.522	0.528	0.536	0.545	0.555	0.566	0.575	0.582	0.59	0.599	0.608	0.617	0.625	0.633	0.641	0.647	0.654	0.661	0.667	0.674	0.68	0.685	0.689	0.693	0.697	0.701	0.706	0.71	0.715	0.719
Brain       0.49	Zacatecas	0.381	0.393	0.405	0.415	0.425	0.435	0.446	0.459	0.471	0.484	0.498	0.512	0.526	0.537	0.546	0.554	0.564	0.574	0.583	0.592	0.601	0.608	0.615	0.622	0.629	0.635	0.641	0.647	0.652	0.656	0.66	0.666	0.672	0.679	0.686	0.693	0.699
Parage       0.47       0.48       0.48       0.48       0.48       0.48       0.49	Tropical Latin America	0.449	0.461	0.471	0.48	0.489	0.498	0.507	0.515	0.524	0.532	0.539	0.546	0.553	0.56	0.568	0.576	0.583	0.591	0.598	0.605	0.613	0.62	0.626	0.631	0.637	0.642	0.648	0.654	0.66	0.666	0.672	0.679	0.684	0.69	0.696	0.702	0.707
Area       0.32       0.34       0.35	Brazil	0.449	0.461	0.471	0.48	0.49	0.499	0.508	0.516	0.525	0.533	0.54	0.548	0.554	0.562	0.569	0.577	0.585	0.592	0.6	0.607	0.614	0.621	0.627	0.633	0.638	0.644	0.65	0.656	0.662	0.667	0.673	0.68	0.686	0.691	0.697	0.703	0.708
Alagoas       0.31       0.32 <th0.32< th="">       0.32       <th0.33< th="">       0.32       0.32</th0.33<></th0.32<>	Paraguay	0.437	0.444	0.448	0.451	0.454	0.456	0.459	0.461	0.465	0.469	0.473	0.478	0.484	0.49	0.496	0.504	0.511	0.519	0.527	0.535	0.543	0.55	0.558	0.565	0.573	0.58	0.588	0.596	0.604	0.611	0.62	0.628	0.636	0.645	0.653	0.661	0.668
Amazona       0.40       0.42       0.40       0.42	Acre	0.332	0.346	0.358	0.369	0.38	0.392	0.404	0.416	0.428	0.439	0.449	0.459	0.467	0.474	0.483	0.492	0.501	0.509	0.517	0.522	0.528	0.534	0.539	0.543	0.548	0.555	0.563	0.57	0.578	0.586	0.595	0.604	0.612	0.621	0.629	0.636	0.642
Ampi 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0	Alagoas	0.314	0.325	0.334	0.342	0.35	0.358	0.368	0.378	0.388	0.397	0.406	0.414	0.422	0.431	0.441	0.452	0.461	0.469	0.477	0.485	0.493	0.501	0.508	0.515	0.522	0.529	0.536	0.544	0.553	0.56	0.569	0.577	0.584	0.592	0.599	0.605	0.61
Bahia 0 36 0 37 0 38 0 38 0 38 0 38 0 38 0 38 0 38	Amazonas	0.367	0.382	0.394	0.405	0.416	0.427	0.439	0.452	0.464	0.475	0.486	0.497	0.506	0.513	0.523	0.534	0.544	0.552	0.56	0.569	0.578	0.586	0.592	0.597	0.603	0.609	0.615	0.622	0.63	0.637	0.645	0.652	0.659	0.666	0.674	0.68	0.686
	Amapá	0.352	0.366	0.38	0.393	0.406	0.419	0.432	0.445	0.457	0.468	0.477	0.486	0.494	0.501	0.509	0.517	0.528	0.54	0.554	0.567	0.577	0.586	0.594	0.603	0.611	0.617			0.638	0.645	0.652	0.66	0.666	0.67	0.675	0.679	0.684
Ceará 0.346 0.355 0.362 0.369 0.376 0.382 0.392 0.406 0.417 0.429 0.439 0.448 0.455 0.463 0.472 0.481 0.492 0.501 0.509 0.516 0.523 0.53 0.53 0.54 0.552 0.558 0.56 0.573 0.58 0.568 0.596 0.604 0.612 0.619 0.626 0.632	Bahia	0.356	0.365	0.373	0.381	0.389	0.397	0.406		0.428			0.456	0.464	0.472		0.49	0.498	0.507	0.517	0.524		0.539	0.545			0.564			0.584	0.591	0.598	0.606	0.613	0.62	0.627	0.633	0.638
	Ceará	0.346	0.355	0.362	0.369	0.376	0.382	0.392	0.406	0.417	0.429	0.439	0.448	0.455	0.463	0.472	0.481	0.492	0.501	0.509	0.516	0.523	0.53	0.538	0.545	0.552	0.558	0.565	0.573	0.581	0.588	0.596	0.604	0.612	0.619	0.626	0.632	0.637

Appendix Table 11: Socio-Demograp	hic Ind	lex va	ues fo	r all es	timate	d GBD	2016	locatio	ons, 19	80-201	6																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Distrito Federal	0.597	0.607	0.617	0.625	0.634	0.643	0.652	0.659	0.666	0.673	0.68	0.686	0.692	0.698	0.704	0.71	0.717	0.723	0.729	0.735	0.741	0.747	0.753	0.758	0.764	0.769	0.775	0.781	0.787	0.793	0.8	0.806	0.812	0.818	0.824	0.829	0.832
Espírito Santo	0.459	0.47	0.481	0.49	0.499	0.509	0.518	0.527	0.536	0.545	0.553	0.561	0.568	0.577	0.584	0.592	0.6	0.607	0.614	0.621	0.628	0.635	0.642	0.648	0.654	0.66	0.665	0.671	0.677	0.682	0.688	0.694	0.699	0.705	0.711	0.717	0.721
Goiás	0.396	0.411	0.425	0.437	0.45	0.462	0.473	0.483	0.493	0.502	0.511	0.52	0.528	0.537	0.546	0.555	0.565	0.574	0.582	0.59	0.597	0.604	0.611	0.617		0.628	0.635	0.641	0.647	0.653	0.659	0.665	0.67	0.676	0.682	0.689	0.693
Maranhão	0.309	0.314	0.319	0.324	0.329	0.333	0.341	0.352	0.361	0.371	0.38	0.387	0.393	0.403	0.413	0.424	0.435	0.446	0.457	0.468	0.479	0.488	0.496	0.503	0.511	0.517	0.525	0.533	0.541	0.549	0.557	0.566	0.574	0.581	0.588	0.595	0.6
Minas Gerais	0.45	0.462	0.473	0.483	0.493	0.503	0.512	0.518	0.525	0.532	0.539	0.546	0.552	0.559	0.566	0.574	0.582	0.589	0.596	0.603		0.615	0.621	0.627		0.638	0.643	0.65	0.656	0.661	0.668	0.674	0.68	0.686	0.692	0.697	0.702
Mato Grosso do Sul	0.401	0.418	0.432	0.445	0.457	0.471	0.481	0.489	0.498	0.506	0.514	0.522	0.53	0.539	0.548	0.558	0.567	0.576	0.584	0.591	0.598	0.604	0.61	0.615		0.626	0.632	0.638	0.644	0.649		0.659	0.664	0.669	0.675	0.681	0.686
Mato Grosso	0.419	0.433	0.445	0.456	0.467	0.48	0.49	0.498	0.507	0.516	0.524	0.532	0.54	0.549	0.559	0.569	0.578	0.587	0.595	0.602		0.615	0.621	0.626		0.636	0.642	0.647	0.653	0.658	0.664	0.67	0.675	0.68	0.687	0.693	0.699
Pará	0.364	0.375	0.385	0.393	0.402	0.411	0.42	0.428	0.436	0.444	0.451	0.458	0.465	0.473	0.483	0.493	0.503		0.519	0.526		0.537	0.541	0.545		0.554	0.56	0.566	0.574	0.581		0.597	0.605	0.612	0.619	0.625	0.63
Paraíba	0.325	0.337	0.347	0.356	0.365	0.372	0.384	0.399	0.412	0.424	0.436	0.444	0.451	0.459	0.467	0.476	0.486	0.495	0.504	0.512	0.519	0.527	0.533	0.54		0.553	0.559	0.567	0.574	0.581	0.589	0.596	0.603	0.61	0.616	0.622	0.627
Paraná	0.443	0.458	0.347	0.483	0.303	0.507	0.517	0.524	0.533	0.424	0.430	0.556	0.564	0.439	0.407	0.589	0.597	0.606	0.614	0.622	0.629	0.636	0.643	0.649	0.654	0.66	0.665	0.671	0.677	0.682	0.589	0.694	0.003	0.706	0.712	0.718	0.722
Pernambuco	0.364	0.438	0.471	0.485	0.494	0.307	0.425	0.324	0.333	0.458	0.468	0.336	0.364	0.372	0.58	0.508	0.597	0.523	0.53	0.536		0.549	0.555	0.561		0.573	0.579	0.585	0.592	0.598	0.605	0.694	0.7	0.623	0.712	0.636	0.64
				0.07.0																		0.00.15												0.020			
Piaui	0.321	0.329	0.337	0.344	0.351	0.358	0.367	0.378	0.388	0.398	0.408	0.415	0.421	0.428	0.436	0.445	0.455	0.464	0.473	0.482	0.49	0.498	0.505			0.526	0.533	0.54	0.548	0.555		0.571	0.578	0.585	0.591	0.598	0.602
Rio de Janeiro	0.531	0.545	0.557	0.567	0.577	0.587	0.595	0.602	0.608	0.615	0.62	0.626	0.631	0.637	0.642	0.648	0.653	0.659	0.665	0.67	0.676	0.682	0.688	0.692	0.07.0	0.701	0.705	0.71	0.714	0.718	0.723	0.727	0.732	0.736	0.74	0.745	0.749
Rio Grande do Norte	0.357	0.369	0.38	0.39	0.4	0.409	0.42	0.431	0.442	0.452	0.461	0.469	0.477	0.485	0.494	0.504	0.515	0.524	0.531	0.539	0.546	0.554	0.562	0.568		0.582	0.589	0.596	0.603	0.61		0.625	0.632	0.639	0.645	0.651	0.656
Rondônia	0.358	0.373	0.386	0.398	0.41	0.422	0.434	0.446	0.457	0.467	0.477	0.486	0.494	0.502	0.511	0.519	0.528	0.536	0.545	0.552	0.56	0.568	0.575	0.582		0.597	0.604	0.612	0.619	0.626	0.633	0.64	0.646	0.653	0.66	0.666	0.671
Roraima	0.401	0.411	0.421	0.43	0.44	0.45	0.461	0.472	0.483	0.493	0.503	0.512	0.52	0.527	0.535	0.542	0.548	0.552	0.554	0.558	0.569	0.581	0.589	0.595		0.612	0.62	0.628	0.636	0.644		0.657	0.661	0.666	0.672	0.678	0.683
Rio Grande do Sul	0.506	0.516	0.525	0.533	0.541	0.549	0.557	0.565	0.572	0.579	0.585	0.592	0.598	0.604	0.61	0.617	0.622	0.628	0.635	0.641	0.647	0.654	0.66	0.665		0.676	0.682	0.688	0.693	0.698	0.703	0.708	0.712	0.717	0.722	0.727	0.732
Santa Catarina	0.477	0.489	0.499	0.508	0.517	0.526	0.536	0.544	0.553	0.561	0.569	0.577	0.584	0.592	0.6	0.609	0.617	0.624	0.632	0.639	0.647	0.654	0.66	0.665	0.671	0.676	0.681	0.687	0.693	0.698	0.704	0.711	0.716	0.722	0.729	0.735	0.74
Sergipe	0.336	0.35	0.361	0.372	0.382	0.391	0.403	0.417	0.43	0.442	0.453	0.463	0.472	0.481	0.49	0.501	0.511	0.52	0.529	0.537	0.546	0.554	0.562	0.569		0.582	0.589	0.596	0.604	0.611	0.619	0.627	0.634	0.641	0.648	0.654	0.659
São Paulo	0.53	0.542	0.552	0.561	0.571	0.581	0.589	0.596	0.602	0.609	0.615	0.621	0.628	0.634	0.64	0.647	0.653	0.659	0.666	0.672	0.679	0.686	0.692	0.697	0.702	0.706	0.711	0.716	0.721	0.726	0.73	0.736	0.74	0.745	0.75	0.756	0.76
Tocantins	0.38	0.389	0.398	0.406	0.415	0.424	0.434	0.443	0.452	0.461	0.469	0.477	0.486	0.494	0.502	0.511	0.521	0.53	0.539	0.547	0.556	0.563	0.571	0.577	0.584	0.591	0.597	0.604	0.612	0.619	0.626	0.634	0.642	0.649	0.656	0.663	0.668
North Africa and Middle East	0.382	0.392	0.401	0.41	0.418	0.427	0.436	0.446	0.455	0.465	0.475	0.485	0.495	0.505	0.513	0.522	0.531	0.539	0.548	0.556	0.564	0.571	0.578	0.586	0.593	0.601	0.608	0.615	0.622	0.628	0.634	0.64	0.647	0.654	0.661	0.669	0.674
North Africa and Middle East	0.382	0.392	0.401	0.41	0.418	0.427	0.436	0.446	0.455	0.465	0.475	0.485	0.495	0.505	0.513	0.522	0.531	0.539	0.548	0.556	0.564	0.571	0.578	0.586	0.593	0.601	0.608	0.615	0.622	0.628	0.634	0.64	0.647	0.654	0.661	0.669	0.674
Algeria	0.356	0.367	0.379	0.39	0.401	0.412	0.423	0.433	0.443	0.453	0.463	0.472	0.479	0.485	0.49	0.495	0.5	0.505	0.51	0.516	0.523	0.53	0.538	0.549	0.559	0.57	0.581	0.591	0.602	0.612	0.622	0.632	0.642	0.651	0.66	0.669	0.676
Bahrain	0.498	0.513	0.526	0.536	0.54	0.542	0.55	0.559	0.565	0.571	0.586	0.599	0.605	0.613	0.623	0.633	0.641	0.644	0.646	0.65	0.663	0.681	0.694	0.699	0.701	0.703	0.707	0.711	0.716	0.719	0.72	0.719	0.718	0.721	0.726	0.732	0.738
Egypt	0.347	0.358	0.369	0.38	0.391	0.402	0.413	0.425	0.435	0.446	0.458	0.469	0.48	0.49	0.499	0.509	0.518	0.527	0.535	0.543	0.551	0.558	0.566	0.573	0.579	0.585	0.591	0.596	0.601	0.607	0.612	0.617	0.623	0.629	0.637	0.645	0.653
Iran	0.379	0.387	0.395	0.404	0.412	0.422	0.434	0.449	0.466	0.487	0.51	0.536	0.562	0.585	0.607	0.625	0.642	0.656	0.667	0.676	0.683	0.689	0.695	0.701		0.713	0.719	0.725	0.731	0.736	0.742	0.748	0.752	0.757	0.762	0.766	0.769
Iraq	0.289	0.299	0.31	0.32	0.331	0.341	0.351	0.361	0.372	0.381	0.391	0.398	0.405	0.412	0.418	0.423	0.429	0.437	0.447	0.459	0.472	0.485	0.495	0.498	0.498	0.492	0.485	0.475	0.461	0.447	0.434	0.429	0.432	0.44	0.45	0.463	0.474
Jordan	0.264	0.294	0.322	0.346	0.369	0.389	0.409	0.428	0.448	0.466	0.483	0.497	0.511	0.524	0.536	0.548	0.558	0.568	0.577	0.586	0.595	0.603	0.61	0.615	0.621	0.626	0.632	0.637	0.643	0.649	0.656	0.663	0.669	0.676	0.683	0.689	0.694
Kuwait	0.46	0.476	0.494	0.515	0.54	0.566	0.59	0.611	0.628	0.642	0.652	0.657	0.66	0.659	0.653	0.649	0.655	0.671	0.689	0.702	0.711	0.717	0.721	0.726		0.738	0.747	0.758	0.77	0.781	0.791	0.8	0.808	0.816	0.823	0.829	0.832
Lebanon	0.51	0.525	0.536	0.547	0.561	0.575	0.588	0.602	0.613	0.621	0.627	0.636	0.645	0.653	0.661	0.669	0.678	0.687	0.697	0.706	0.715	0.723	0.73	0.738		0.751	0.757	0.763	0.77	0.777	0.785	0.792	0.797	0.801	0.804	0.807	0.81
Libva	0.565	0.57	0.575	0.579	0.583	0.588	0.591	0.595	0.598	0.601	0.605	0.611	0.617	0.623	0.63	0.636	0.643	0.651	0.659	0.667	0.675	0.684	0.692	0.702		0.723	0.734	0.746	0.757	0.768		0.785	0.793	0.8	0.804	0.807	0.806
Morocco	0.287	0.295	0.303	0.312	0.321	0.329	0.339	0.349	0.359	0.37	0.381	0.393	0.404	0.415	0.427	0.438	0.449	0.46	0.471	0.481	0.49	0.499	0.507	0.516		0.531	0.54	0.548	0.557	0.565	0.573	0.581	0.589	0.597	0.604	0.611	0.617
Palestine	0.328	0.341	0.351	0.36	0.369	0.376	0.384	0.391	0.397	0.404	0.411	0.417	0.404	0.43	0.437	0.446	0.457	0.467	0.471	0.481	0.497	0.504	0.507	0.513		0.502	0.49	0.472	0.452	0.432		0.413	0.412	0.416	0.425	0.438	0.45
Oman	0.328	0.109	0.331	0.30	0.115	0.135	0.384	0.391	0.194	0.404	0.234	0.256	0.424	0.43	0.437	0.337	0.356	0.407	0.478	0.400	0.437	0.304	0.479	0.499	0.51	0.54	0.49	0.472	0.432	0.432	0.639	0.413	0.412	0.691	0.704	0.438	0.45
Oatar	0.52	0.54	0.558	0.575	0.587	0.596	0.601	0.605	0.609	0.615	0.234	0.230	0.277	0.298	0.659	0.669	0.676	0.684	0.590	0.696		0.708	0.715	0.722		0.735	0.74	0.745	0.002	0.756		0.765	0.769	0.774	0.779	0.784	0.72
Qatar Saudi Arabia	0.32	0.34	0.338	0.373	0.387	0.396	0.308	0.323	0.338	0.353	0.368	0.383	0.398	0.65	0.639	0.669	0.676	0.684	0.69	0.515	0.702	0.551	0.713	0.722		0.623	0.74	0.743	0.75	0.736	0.761	0.765	0.769	0.774	0.775	0.784	0.788
Syria	0.28	0.29	0.301	0.311	0.32	0.33	0.339	0.348	0.357	0.366	0.376	0.386	0.397	0.408	0.419	0.43	0.441	0.451	0.462	0.472	0.483	0.493	0.503	0.514		0.537	0.549	0.56	0.571	0.582		0.603	0.611	0.618	0.625	0.632	0.638
Tunisia	0.353	0.364	0.376	0.388	0.4	0.412	0.425	0.437	0.45	0.462	0.476	0.489	0.502	0.515	0.527	0.539	0.551	0.563	0.573	0.583	0.591	0.599	0.606	0.612		0.623	0.629	0.635	0.64	0.646	0.653	0.659	0.667	0.674	0.682	0.69	0.696
Turkey	0.479	0.489	0.498	0.508	0.517	0.527	0.537	0.547	0.557	0.566	0.576	0.584	0.592	0.599	0.605	0.612	0.619	0.627	0.634	0.641	0.649	0.656	0.663	0.67		0.684	0.691	0.698	0.705	0.711		0.724	0.731	0.738	0.746	0.754	0.762
United Arab Emirates	0.34	0.365	0.389	0.413	0.436	0.458	0.48	0.501	0.521	0.539	0.557	0.574	0.59	0.606	0.62	0.633	0.645	0.656	0.667	0.677	0.686	0.695	0.703	0.71		0.721	0.725	0.729	0.732	0.736	0.74	0.745	0.751	0.756	0.762	0.768	0.772
Yemen	0.155	0.159	0.163	0.166	0.168	0.168	0.168	0.167	0.168	0.17		0.177	0.185	0.195	0.206	0.217	0.229	0.24	0.252	0.264	0.276	0.288	0.302	0.317		0.351	0.362	0.367		0.374		0.386	0.398	0.417	0.434	0.445	0.45
Afghanistan	0.134	0.136	0.139	0.142	0.145	0.147	0.15	0.153	0.154	0.156	0.158	0.16	0.163	0.165	0.165	0.166	0.166	0.167	0.168	0.169		0.171	0.175	0.181		0.195	0.203	0.211	0.22	0.229	0.238	0.247	0.255	0.262	0.269	0.276	0.281
Sudan	0.24	0.245	0.252	0.258	0.263	0.268	0.274	0.279	0.285		0.295	0.3	0.304	0.309	0.313	0.317	0.32		0.332	0.34		0.361	0.372	0.383		0.404	0.415	0.426	0.437	0.448	0.459	0.47	0.48	0.49	0.501	0.51	0.518
Ha'il	0.205	0.22	0.236	0.252	0.267	0.283	0.297	0.312	0.326	0.341	0.355	0.369	0.384	0.399	0.414	0.429	0.446	0.463	0.479	0.496	0.514	0.532	0.549	0.567		0.603	0.621	0.639	0.657	0.674	0.691	0.708	0.724	0.739	0.752	0.765	0.774
Qassim	0.15	0.169	0.19	0.211	0.231	0.251	0.269	0.288	0.306	0.324	0.341	0.357	0.373	0.389	0.405	0.422	0.439	0.458	0.476	0.495	0.515	0.534	0.554	0.573	0.592	0.61	0.629	0.647	0.666	0.684	0.701	0.717	0.733	0.748	0.762	0.776	0.785
Riyadh	0.185	0.203	0.223	0.244	0.264	0.283	0.301	0.319	0.337	0.353	0.369	0.385	0.401	0.417	0.434	0.451	0.468	0.486	0.505	0.523	0.543	0.562	0.58	0.599	0.618	0.637	0.656	0.675	0.693	0.711	0.727	0.742	0.756	0.769	0.783	0.795	0.804
Tabuk	0.194	0.21	0.229	0.248	0.267	0.285	0.301	0.316	0.332	0.347	0.361	0.376	0.391	0.406	0.422	0.438	0.454	0.471	0.489	0.507	0.525	0.543	0.562	0.58	0.598	0.62	0.64	0.659	0.678	0.695	0.712	0.729	0.745	0.76	0.775	0.79	0.8
Madinah	0.199	0.215	0.232	0.251	0.269	0.285	0.3	0.316	0.331	0.347	0.362	0.377	0.392	0.408	0.424	0.44	0.457	0.474	0.492	0.51	0.528	0.547	0.565	0.583	0.601	0.62	0.638	0.656	0.675	0.693	0.71	0.727	0.744	0.76	0.773	0.786	0.795
Makkah	0.231	0.246	0.261	0.277	0.293	0.308	0.323	0.337	0.352	0.367	0.382	0.396	0.411	0.427	0.442	0.458	0.474	0.491	0.508	0.525	0.543	0.56	0.577	0.594	0.611	0.628	0.645	0.662	0.679	0.695	0.71	0.726	0.741	0.755	0.768	0.779	0.788
Bahah	0.219	0.232	0.246	0.26	0.273	0.287	0.299	0.312	0.325	0.338	0.351	0.364	0.378	0.392	0.406	0.42	0.436	0.452	0.468	0.484	0.5	0.516	0.532	0.549	0.565	0.582	0.599	0.616	0.634	0.65	0.666	0.683	0.699	0.714	0.726	0.737	0.746
Northern Borders	0.264	0.278	0.293	0.308	0.323	0.337	0.351	0.364	0.378	0.392	0.406	0.42	0.434	0.45	0.465	0.48	0.497	0.513	0.53	0.546	0.563	0.58	0.596	0.612	0.629	0.647	0.665	0.681	0.698	0.713	0.728	0.742	0.755	0.766	0.779	0.79	0.797
Jawf	0.236	0.253	0.272	0.291	0.311	0.33	0.347	0.364	0.381	0.398	0.414	0.431	0.448	0.465	0.482	0.499	0.517	0.536	0.555	0.573	0.592	0.61	0.628	0.645	0.663	0.681	0.699	0.717	0.735	0.752	0.768	0.784	0.799	0.814	0.826	0.838	0.846
Jizan	0.202	0.212	0.223	0.234	0.245	0.255	0.265	0.275	0.285	0.296	0.306	0.317	0.329	0.341	0.353	0.365	0.379	0.393	0.407	0.421	0.436	0.45	0.465	0.48	0.496	0.513	0.53	0.546	0.564	0.581	0.597	0.614	0.63	0.645	0.658	0.67	0.679
'Asir	0.167	0.181	0.197	0.213	0.229	0.243	0.258	0.272	0.286	0.301	0.314	0.327	0.341	0.355	0.369	0.384	0.401	0.417	0.434	0.451	0.469	0.487	0.504	0.522		0.559	0.578	0.598	0.617	0.636	0.654	0.672	0.69	0.706	0.721	0.735	0.744
Najran	0.187	0.199	0.212	0.224	0.237	0.249	0.261	0.273	0.285		0.309	0.32	0.332	0.345	0.357	0.371	0.385	0.4	0.415	0.431	0.447	0.463		0.496				0.566		0.602		0.637	0.654	0.671	0.685		0.709
Eastern Province		0.225		0.261	0.28		0.313	0.329	0.346			0.393	0.409	0.425		0.458						0.566		0.603			0.658	0.676		0.711		0.745	0.761	0.776	0.79	0.803	0.813
1			1																																		1

Appendix Table 11: Socio-Demograp	hic Ind	ex val	ues for	r all es	timate	d GBD	2016	locatio	ons, 198	80-201	6																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
South Asia	0.288	0.293	0.298	0.303	0.309	0.314	0.32	0.327	0.334	0.341	0.349	0.356	0.364	0.371	0.378	0.386	0.394	0.402	0.409	0.417	0.425	0.432	0.44	0.447 (	0.455	0.464	0.473	0.482	0.491	0.5	0.51	0.519	0.529	0.539	0.549	0.56	0.569
South Asia	0.288	0.293	0.298	0.303	0.309	0.314	0.32	0.327	0.334	0.341	0.349	0.356	0.364	0.371	0.378	0.386	0.394	0.402	0.409	0.417	0.425	0.432	0.44	0.447	0.455	0.464	0.473	0.482	0.491	0.5	0.51	0.519	0.529	0.539	0.549	0.56	0.569
Bangladesh	0.254	0.258	0.263	0.269	0.275	0.281	0.287	0.294	0.3	0.307	0.315	0.323	0.331	0.339	0.347	0.355	0.363	0.37	0.377	0.384	0.39	0.396	0.402				0.427	0.434	0.442	0.45	0.459	0.467	0.476	0.485	0.494	0.503	0.511
Bhutan	0.237	0.242	0.247	0.253	0.259	0.265	0.272	0.279	0.286	0.293	0.301	0.31	0.318	0.327	0.337	0.348	0.359	0.37	0.382	0.394	0.406	0.418	0.431				0.482	0.494	0.506	0.518	0.53	0.541	0.552	0.563	0.572	0.581	0.588
India	0.298	0.303	0.308	0.313	0.318	0.324	0.329	0.336	0.342	0.35	0.357	0.364	0.371	0.378	0.385	0.393	0.401	0.408	0.416	0.424	0.432	0.44	0.447				0.482	0.492	0.502	0.512	0.522	0.533	0.543	0.553	0.564	0.575	0.584
Nepal	0.194	0.198	0.202	0.206	0.21	0.214	0.219	0.224	0.23	0.236	0.242	0.25	0.258	0.266	0.276	0.285	0.293	0.302	0.31	0.319	0.328	0.337	0.345			0.37		0.384	0.391	0.398	0.404	0.411	0.417	0.424	0.433	0.443	0.452
Pakistan	0.216	0.218	0.22	0.223	0.227	0.234	0.243	0.255	0.268	0.282	0.297	0.309	0.32	0.33	0.339	0.349	0.36	0.371	0.383	0.392	0.4	0.408	0.416				0.443	0.448	0.453	0.458	0.464	0.471	0.478	0.488	0.499	0.51	0.519
Andhra Pradesh	0.276	0.281	0.285	0.29	0.294	0.299	0.303	0.309	0.315	0.322	0.329	0.337	0.345	0.354	0.363	0.373	0.383	0.393	0.403	0.414		0.434	0.444				0.481	0.493	0.503	0.514	0.525	0.536	0.546	0.556	0.566	0.577	0.585
Arunachal Pradesh	0.263	0.269	0.274	0.28	0.286	0.292	0.3	0.307	0.315	0.322	0.33	0.338	0.346	0.354	0.362	0.371	0.38	0.389	0.397	0.405	0.413	0.422	0.43					0.477	0.487	0.5	0.513	0.526	0.539	0.552	0.565	0.578	0.589
Assam	0.292	0.298	0.304	0.311	0.318	0.325	0.332	0.339	0.346	0.353	0.361	0.367	0.373	0.378	0.383	0.389	0.394	0.4	0.405	0.413	0.421	0.429	0.437				0.471	0.479	0.487	0.496	0.504	0.514	0.523	0.532	0.542	0.552	0.562
Bihar	0.25	0.255	0.26	0.264	0.27	0.275	0.281	0.287	0.294	0.3	0.306	0.312	0.317	0.318	0.319	0.318	0.318	0.319	0.317	0.317	0.318	0.321	0.325				0.346	0.354	0.363	0.371	0.38	0.39	0.4	0.411	0.421	0.431	0.44
Chhattisgarh	0.256	0.26	0.264	0.269	0.273	0.277	0.282	0.287	0.292	0.298	0.304	0.31	0.316	0.323	0.329	0.336	0.344	0.352	0.36	0.369	0.376	0.386	0.395				0.436	0.449	0.461	0.473	0.485	0.497	0.509	0.521	0.534	0.547	0.558
Delhi	0.471	0.478	0.484	0.49	0.495	0.5	0.505	0.51	0.515	0.52	0.524	0.529	0.533	0.538	0.544	0.55	0.557	0.565	0.573	0.582	0.592	0.602	0.612				0.653	0.664	0.674	0.684	0.694	0.705	0.715	0.724	0.734	0.744	0.752
Goa	0.394	0.401	0.409	0.416	0.424	0.432	0.44	0.448	0.456	0.465	0.473	0.481	0.49	0.5	0.511	0.523	0.535	0.547	0.561	0.573	0.586	0.597	0.608				0.638	0.645	0.654	0.664	0.673	0.686	0.696	0.707	0.718	0.729	0.738
Guiarat	0.319	0.326	0.331	0.338	0.345	0.352	0.359	0.365	0.373	0.38	0.389	0.395	0.403	0.411	0.42	0.429	0.439	0.448	0.457	0.465	0.473	0.48	0.487				0.522	0.532	0.542	0.551	0.561	0.571	0.58	0.589	0.598	0.607	0.615
Haryana	0.317	0.324	0.331	0.338	0.345	0.353	0.361	0.368	0.377	0.386	0.395	0.405	0.403	0.422	0.431	0.439	0.449	0.458	0.467	0.405	0.484	0.494	0.503				0.545	0.552	0.569	0.551	0.591	0.602	0.613	0.624	0.635	0.646	0.655
Himachal Pradesh	0.289	0.296	0.303	0.338	0.345	0.326	0.334	0.343	0.353	0.363	0.375	0.405	0.396	0.407	0.431	0.43	0.443	0.456	0.469	0.483	0.496	0.508	0.505				0.010	0.575	0.587	0.598	0.61	0.622	0.633	0.644	0.654	0.662	0.669
Jammu and Kashmir	0.239	0.290	0.288	0.295	0.301	0.308	0.316	0.343	0.329	0.336	0.343	0.349	0.353	0.407	0.369	0.43	0.384	0.395	0.405	0.417		0.441	0.32					0.575	0.518	0.528	0.539	0.549	0.559	0.569	0.579	0.589	0.598
Jammu and Kashmir	0.276		0.288	0.295		0.308	0.316	0.322	0.329	0.336		0.349		0.361	0.369	0.377	0.334	0.395	0.405	0.417	0.429	0.441	0.452				0.497	0.507	0.518	0.528	0.539	0.549	0.559	0.569	0.379	0.589	0.598
Jharkhand Karnataka	0.259	0.262	0.266	0.269	0.273	0.277	0.281	0.285	0.29	0.295	0.3	0.306	0.311	0.316	0.322	0.329	0.334	0.342	0.35	0.358	0.365	0.373	0.381					0.424	0.433	0.442	0.453	0.464	0.475	0.487	0.499	0.512	0.523
						0.324	0.33				0.00			0.000															0.000						0.07.0		0.683
Kerala	0.369	0.374 0.275	0.379	0.385	0.391	0.396	0.403	0.409	0.415	0.422	0.429	0.436	0.444	0.454	0.464	0.476	0.488	0.5 0.37	0.512	0.524	0.535	0.545	0.553				0.589	0.599	0.608	0.619	0.628 0.459	0.638	0.648	0.657	0.667	0.676	0.532
Madhya Pradesh Maharashtra	0.271 0.339	0.275	0.28	0.286	0.291	0.297	0.303	0.309	0.317	0.324	0.332	0.339	0.345	0.35	0.355	0.36	0.365	0.37	0.375	0.503	0.000	0.519	0.397				0.425	0.433	0.441	0.45	0.459	0.47	0.481	0.494	0.507	0.52 0.658	
		0.346	0.353		0.368	0.375	0.383	0.391		0.408	0.418	0.426	0.435		0.454	0.395	0.475		0.494	0.503	0.512		0.526							0.599	0.549		0.63	0.581	0.591	0.658	0.666
Manipur	0.28			0.302		0.0.00	0.0-0	0.000	0.346				0.00	0.386			0.4	0.406		0		0.444						0.518	0.529		0.0.15	0.56		0.000	0.07.5	0.001	0.61
Meghalaya	0.287	0.291	0.296	0.3	0.305	0.31	0.316	0.323	0.328	0.335	0.342	0.348	0.353	0.358	0.36	0.363	0.367	0.372	0.379	0.389	0.402	0.417	0.431					0.488	0.498	0.508	0.519	0.53	0.541	0.552	0.563	0.575	0.585
Mizoram	0.334	0.34	0.346	0.352	0.359	0.369	0.378	0.39	0.399	0.407	0.414	0.422	0.429	0.436	0.44	0.446	0.453	0.459	0.465	0.473	0.482	0.492	0.502					0.545	0.553	0.562	0.572	0.581	0.591	0.601	0.611	0.621	0.63
Nagaland	0.343	0.348	0.354	0.36	0.366	0.371	0.377	0.383	0.389	0.395	0.401	0.406	0.409	0.413	0.416	0.419	0.422	0.428	0.434	0.442	0.456	0.473	0.49				0.545	0.559	0.572	0.585	0.597	0.61	0.622	0.634	0.645	0.654	0.661
Odisha	0.251	0.255	0.259	0.264	0.269	0.274	0.28	0.285	0.292	0.299	0.305	0.312	0.318	0.324	0.33	0.338		0.351	0.359	0.368	0.376	0.385	0.393				0.433	0.445	0.457	0.468	0.48	0.491	0.503	0.514	0.526	0.537	
Punjab	0.329	0.337	0.344	0.352	0.359	0.367	0.375	0.383	0.392	0.401	0.409	0.418	0.427	0.436	0.445	0.455	0.465	0.474	0.484	0.493	0.503	0.511	0.519				0.555	0.566	0.576	0.587	0.598	0.608	0.618	0.627	0.636	0.643	0.65
Rajasthan	0.254	0.259	0.263	0.27	0.275	0.28	0.286	0.292	0.299	0.306	0.315	0.322	0.329	0.335	0.341	0.348	0.355	0.362	0.368	0.375	0.382	0.39	0.397				0.43	0.44	0.449	0.457	0.468	0.479	0.49	0.5	0.511	0.521	0.53
Sikkim	0.268	0.273	0.279	0.284	0.29	0.297	0.304	0.313	0.321	0.329	0.337	0.346	0.352	0.361	0.369	0.378	0.388	0.398	0.408	0.418	0.43	0.441	0.453				0.501	0.511	0.52	0.536	0.551	0.565	0.579	0.593	0.607	0.62	0.632
Tamil Nadu	0.309	0.315	0.319	0.325	0.33	0.337	0.343	0.351	0.359	0.367	0.376	0.385	0.395	0.405	0.417	0.428	0.44	0.452	0.464	0.476	0.487	0.496	0.505				0.541	0.552	0.563	0.575	0.587	0.599	0.61	0.621	0.632	0.64	0.648
Telangana	0.265	0.269	0.273	0.278	0.282	0.286	0.291	0.296	0.302	0.309	0.317	0.325	0.333	0.342	0.352	0.362	0.373	0.383	0.395	0.406	0.417	0.428	0.438				0.482	0.495	0.509	0.521	0.535	0.549	0.562	0.574	0.587	0.599	0.609
Tripura	0.315	0.319	0.324	0.328	0.331	0.335	0.339	0.343	0.348	0.353	0.358	0.362	0.366	0.372	0.378	0.386	0.395	0.404	0.412	0.425	0.438	0.451	0.462				0.491	0.497	0.504	0.511	0.518	0.527	0.536	0.545	0.554	0.564	0.573
Uttar Pradesh	0.265	0.269	0.273	0.278	0.282	0.287	0.293	0.299	0.306	0.312	0.32	0.326	0.332	0.336	0.34	0.344	0.348	0.351	0.355	0.358	0.362	0.368	0.374				0.407	0.415	0.423	0.432	0.441	0.451	0.462	0.473	0.485	0.498	0.508
Uttarakhand	0.257	0.262	0.267	0.272	0.277	0.283	0.289	0.295	0.302	0.309	0.317	0.324	0.332	0.34	0.349	0.358	0.368	0.379	0.389	0.4	0.412	0.424	0.436				0.491	0.505	0.519	0.535	0.551	0.568	0.583	0.598	0.613	0.628	0.639
West Bengal	0.324	0.328	0.331	0.335	0.339	0.343	0.347	0.352	0.356	0.361	0.366	0.371	0.376	0.382	0.389	0.396	0.404	0.412	0.42	0.429	0.438	0.446	0.454				0.486	0.496	0.506	0.516	0.526	0.536	0.546	0.555	0.565	0.573	0.58
The Six Minor Territories	0.38	0.388	0.397	0.405	0.413	0.42	0.429	0.437	0.445	0.452	0.461	0.468	0.475	0.482	0.49	0.498	0.506	0.516	0.525	0.534	0.543	0.552	0.562				0.602	0.613	0.623	0.634	0.644	0.654	0.663	0.672	0.682	0.691	0.698
Andhra Pradesh, Urban	0.377	0.382	0.387	0.392	0.397	0.403	0.408	0.413	0.42	0.427	0.434	0.441	0.447	0.454	0.462	0.47	0.479	0.488	0.498	0.51	0.521	0.532	0.541				0.576	0.586	0.595	0.604	0.613	0.623	0.632	0.641	0.65	0.66	0.668
Andhra Pradesh, Rural	0.239	0.242	0.246	0.249	0.253	0.257	0.261	0.265	0.271	0.277	0.284	0.291	0.298	0.307	0.317	0.327	0.337	0.347	0.358	0.368	0.379	0.389	0.398				0.435	0.445	0.455	0.465	0.475	0.485	0.495	0.506	0.516	0.528	0.537
Arunachal Pradesh, Urban	0.405	0.411	0.416	0.421	0.427	0.433	0.439	0.445	0.452	0.457	0.463	0.469	0.474	0.481	0.486	0.493	0.499	0.506	0.511	0.516	0.52	0.525	0.528				0.546	0.552	0.557	0.565	0.573	0.582	0.59	0.599	0.61	0.621	0.631
Arunachal Pradesh, Rural	0.251	0.256	0.261	0.265	0.271	0.276	0.283	0.289	0.296	0.302	0.309	0.316	0.323	0.331	0.338	0.346	0.353	0.361	0.369	0.376	0.384	0.392	0.401				0.438	0.45	0.46	0.474	0.488	0.501	0.515	0.528	0.541	0.554	0.565
Assam, Urban	0.443	0.449	0.454	0.46	0.467	0.473	0.478	0.484	0.489	0.494	0.499	0.504	0.508	0.513	0.519	0.525	0.531	0.536	0.541	0.549	0.556	0.564	0.571			0.592	0.599	0.606	0.612	0.618	0.624	0.63	0.636	0.643	0.65	0.657	0.663
Assam, Rural	0.274	0.28	0.286	0.292	0.299	0.306	0.313	0.32	0.327	0.334	0.342	0.348	0.353	0.358	0.363	0.368	0.374	0.379	0.384	0.391	0.399	0.407	0.415				0.449	0.457	0.466	0.474	0.483	0.492	0.501	0.511	0.521	0.532	0.542
Bihar, Urban	0.37	0.377	0.384	0.391	0.399	0.406	0.413	0.42	0.428	0.434	0.441	0.447	0.453	0.456	0.459	0.46	0.463	0.466	0.467	0.468	0.471	0.474	0.479			0.491	0.498	0.505	0.513	0.52	0.529	0.537	0.546	0.554	0.561	0.568	0.575
Bihar, Rural	0.231	0.235	0.239	0.243	0.248	0.253	0.258	0.264	0.27	0.275	0.281	0.287	0.292	0.294	0.294	0.294	0.294	0.296	0.295	0.295	0.297	0.299	0.304					0.333	0.342	0.35	0.359	0.368	0.379	0.389	0.4	0.41	0.419
Chhattisgarh, Urban	0.456	0.462	0.468	0.472	0.477	0.481	0.485	0.489	0.492	0.496	0.5	0.503	0.507	0.51	0.513	0.517	0.521	0.527	0.533	0.539	0.543	0.55	0.557				0.59	0.601	0.611	0.62	0.628	0.637	0.645	0.653	0.661	0.669	0.677
Chhattisgarh, Rural	0.203	0.206	0.21	0.214	0.218	0.223	0.228	0.233	0.238	0.244	0.251	0.257	0.264	0.271	0.278	0.286	0.294	0.302	0.31	0.319	0.328	0.337	0.346				0.387	0.399	0.412	0.424	0.435	0.448	0.461	0.474	0.488	0.502	0.514
Delhi, Urban	0.478	0.485	0.491	0.497	0.502	0.506	0.512	0.517	0.521	0.526	0.53	0.535	0.539	0.543	0.549	0.555	0.561	0.569	0.577	0.586	0.596	0.606	0.616			0.646	0.656	0.666	0.676	0.686	0.696	0.706	0.716	0.726	0.736	0.746	0.753
Delhi, Rural	0.388	0.395	0.402	0.409	0.415	0.422	0.429	0.436	0.443	0.45	0.457	0.464	0.471	0.477	0.483	0.49	0.497	0.505	0.515	0.525	0.536	0.547	0.558					0.614	0.624	0.636	0.647	0.658	0.669	0.681	0.692	0.703	0.713
Goa, Urban	0.459	0.464	0.471	0.476	0.483	0.489	0.495	0.501	0.507	0.514	0.52	0.526	0.533	0.541	0.551	0.561	0.572	0.582	0.595	0.606	0.616	0.626	0.635				0.66	0.665	0.672	0.681	0.69	0.701	0.711	0.721	0.732	0.744	0.753
Goa, Rural	0.365	0.372	0.38	0.386	0.394	0.401	0.409	0.417	0.424	0.433	0.441	0.449	0.458	0.468	0.479	0.491	0.503	0.515	0.529	0.542	0.554	0.566	0.577		0.592		0.608	0.616	0.625	0.636	0.646	0.658	0.669	0.679	0.69	0.701	0.71
Gujarat, Urban	0.408	0.415	0.422	0.431	0.439	0.446	0.454	0.459	0.467	0.474	0.482	0.487	0.494	0.501	0.51	0.519	0.529	0.538	0.547	0.555	0.562	0.569	0.575			0.594	0.602	0.611	0.618	0.627	0.635	0.643	0.65	0.657	0.664	0.671	0.677
Gujarat, Rural	0.273	0.278	0.283	0.289	0.294	0.3	0.306	0.312	0.319	0.326	0.334	0.341	0.349	0.356	0.364	0.373	0.382	0.39	0.399	0.407		0.421	0.428				0.461	0.471	0.48	0.49	0.5	0.51	0.52	0.53	0.541	0.552	0.561
Haryana, Urban	0.428	0.436	0.444	0.452	0.46	0.468	0.476	0.483	0.491	0.498	0.506	0.514	0.521	0.528	0.536	0.543	0.552	0.56	0.567	0.575	0.582	0.59	0.596				0.626	0.635	0.645	0.655	0.665	0.674	0.683	0.691	0.7	0.709	0.717
Haryana, Rural	0.284	0.29	0.296	0.302	0.308	0.315	0.322	0.329	0.337	0.346	0.354	0.364	0.372	0.38	0.389	0.397	0.407	0.416	0.424	0.433	0.441	0.45	0.459					0.511	0.523	0.535	0.547	0.559	0.57	0.581	0.592	0.604	0.614
Himachal Pradesh, Urban	0.433	0.441	0.449	0.457	0.464	0.472	0.48	0.488	0.497	0.505	0.514	0.522	0.531	0.54	0.549	0.558	0.569	0.579	0.59	0.602	0.614	0.624	0.635	0.645 0	0.655	0.665	0.675	0.685	0.692	0.699	0.708	0.715	0.723	0.729	0.736	0.743	0.75

Appendix Table 11: Socio-Demograp	hic Ind	lex va	ues fo	r all <u>es</u>	timate	d GBI	0 2016	locatio	ons, 198	30-201	6																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Himachal Pradesh, Rural	0.275	0.282	0.289	0.297	0.304	0.312	0.32	0.329	0.339	0.349	0.36	0.37	0.381	0.393	0.404	0.416	0.429	0.442	0.455	0.469	0.482	0.495	0.506	0.517	0.528	0.539	0.551	0.563	0.574	0.585	0.598	0.61	0.621	0.632	0.643	0.652	0.659
Jammu and Kashmir, Urban	0.366	0.374	0.383	0.392	0.401	0.411	0.42	0.428	0.437	0.444	0.451	0.457	0.462	0.47	0.478	0.486	0.494	0.506	0.516	0.528	0.54	0.551	0.562	0.572	0.581	0.59	0.599	0.607	0.615	0.623	0.629	0.636	0.643	0.65	0.657	0.664	0.671
Jammu and Kashmir, Rural	0.247	0.252	0.258	0.263	0.269	0.275	0.282	0.287	0.294	0.301	0.307	0.312	0.317	0.324	0.332	0.339	0.346	0.357	0.366	0.378	0.389	0.4	0.412	0.423	0.435	0.446	0.458	0.468	0.479	0.49	0.5	0.511	0.522	0.532	0.543	0.553	0.562
Jharkhand, Urban	0.453	0.457	0.462	0.466	0.469	0.472	0.476	0.479	0.483	0.487	0.492	0.497	0.502	0.508	0.514	0.521	0.527	0.536	0.545	0.554	0.561	0.569	0.577	0.584	0.591	0.599	0.607	0.615	0.622	0.63	0.638	0.646	0.653	0.659	0.666	0.673	0.679
Jharkhand, Rural	0.233	0.236	0.239	0.242	0.245	0.248	0.251	0.255	0.259	0.264	0.269	0.274	0.279	0.285	0.292	0.299	0.305	0.313	0.321	0.33	0.338	0.346	0.354	0.362	0.37	0.379	0.387	0.397	0.405	0.415	0.425	0.436	0.448	0.459	0.472	0.485	0.496
Karnataka, Urban	0.391	0.398	0.404	0.412	0.42	0.427	0.434	0.441	0.449	0.456	0.463	0.471	0.478	0.486	0.495	0.505	0.515	0.525	0.536	0.546	0.557	0.565	0.574	0.581	0.589	0.598	0.607	0.616	0.624	0.631	0.639	0.647	0.655	0.664	0.672	0.681	0.688
Karnataka, Rural	0.251	0.256	0.26	0.264	0.269	0.274	0.28	0.286	0.292	0.299	0.306	0.314	0.322	0.33	0.339	0.348	0.357	0.367	0.377	0.387	0.397	0.406	0.415	0.423	0.432	0.442	0.453	0.464	0.475	0.485	0.496	0.507	0.518	0.529	0.54	0.552	0.561
Kerala, Urban	0.408	0.412	0.417	0.422	0.428	0.432	0.438	0.443	0.448	0.454	0.46	0.466	0.474	0.483	0.494	0.506	0.518	0.53	0.542	0.554	0.565	0.574	0.582	0.589	0.597	0.605	0.613	0.621	0.629	0.638	0.646	0.655	0.664	0.673	0.683	0.692	0.699
Kerala, Rural	0.358	0.363	0.368	0.374	0.38	0.385	0.391	0.397	0.404	0.411	0.418	0.425	0.433	0.442	0.452	0.464	0.476	0.488	0.5	0.513	0.524	0.534	0.543	0.551	0.559	0.568		0.586	0.595	0.605	0.613	0.623	0.632	0.642	0.653	0.662	0.669
Madhya Pradesh, Urban	0.403	0.409	0.415	0.422	0.428	0.435	0.441	0.448	0.455	0.461	0.469	0.476	0.483	0.49	0.497	0.504	0.511	0.517	0.522	0.527	0.531	0.535	0.538	0.541	0.545	0.55	0.557	0.564	0.572	0.581	0.591	0.6	0.609	0.618	0.626	0.635	0.643
Madhya Pradesh, Rural	0.229	0.232	0.236	0.24	0.245	0.249	0.254	0.26	0.266	0.272	0.28	0.286	0.292	0.296	0.3	0.305	0.309	0.314	0.318	0.322	0.325	0.331	0.336	0.342	0.349		0.362	0.37	0.378	0.388	0.399	0.411	0.423	0.436	0.451	0.465	0.478
Maharashtra, Urban	0.421	0.428	0.436	0.444	0.451	0.458	0.465	0.472	0.478	0.486	0.493	0.499	0.506	0.514	0.522	0.531	0.54	0.55	0.558	0.568	0.576	0.584	0.591	0.598	0.606	0.616	0.627	0.638	0.648	0.658	0.669	0.678	0.687	0.695	0.703	0.712	0.719
Maharashtra, Rural	0.288	0.295	0.301	0.308	0.314	0.322	0.329	0.337	0.345		0.364	0.373	0.382	0.391	0.4	0.41	0.421	0.43	0.439	0.449	0.457	0.464	0.472	0.48				0.522	0.533	0.544	0.556	0.567	0.577	0.586	0.596	0.607	0.615
Manipur, Urban	0.346	0.353	0.361	0.369	0.378	0.385	0.393	0.402	0.411			0.434	0.441	0.447	0.453	0.458	0.465	0.472	0.479	0.489	0.498	0.509	0.519	0.53		0.554		0.574	0.582	0.592		0.609	0.618	0.627	0.636	0.643	0.65
Manipur, Rural	0.265	0.272	0.278	0.285	0.292	0.299	0.306	0.315	0.324	0.332	0.341	0.349	0.356	0.362	0.367	0.371	0.375	0.381	0.387	0.397	0.408	0.419	0.43	0.442			0.482	0.494	0.504	0.515	0.525	0.535	0.545	0.555	0.565	0.575	0.585
Meghalaya, Urban	0.456	0.459	0.46	0.462	0.463	0.465	0.466	0.468	0.469	0.471	0.473	0.474	0.474	0.476	0.479	0.484	0.49	0.498	0.506	0.516	0.529	0.545	0.559			0.595		0.613	0.621	0.63	0.638	0.648	0.657	0.667	0.677	0.687	0.696
Meghalaya, Rural	0.25	0.254	0.258	0.263	0.268	0.273	0.279	0.286	0.292	0.299	0.307	0.313	0.319	0.323	0.325	0.328	0.331	0.336	0.342	0.352	0.365	0.379	0.393	0.406				0.451	0.461	0.472	0.483	0.495	0.505	0.516	0.528	0.54	0.55
Mizoram, Urban	0.383	0.389	0.395	0.401	0.408	0.417	0.426	0.437	0.446		0.459	0.466	0.472	0.479	0.485	0.492	0.5	0.508	0.542	0.552	0.531	0.54	0.548					0.581	0.587	0.593		0.608	0.616	0.625	0.633	0.643	0.651
Mizoram, Bural	0.292	0.298	0.303	0.309	0.315	0.325	0.334	0.346	0.355	0.363	0.37	0.378	0.385	0.392	0.395	0.398	0.404	0.408	0.413	0.42	0.43	0.44	0.451	0.461			0.491	0.502	0.512	0.523	0.535	0.546	0.557	0.568	0.58	0.591	0.6
Nagaland, Urban	0.446	0.451	0.458	0.466	0.473	0.48	0.486	0.494	0.501	0.0.00		0.517	0.521	0.525	0.527	0.53	0.532	0.536	0.54	0.544	0.553	0.564	0.576					0.622	0.632	0.641	0.65	0.66	0.67	0.68	0.691	0.702	0.711
Nagaland, Rural	0.328	0.333	0.338	0.343	0.348	0.353	0.480	0.363	0.368	0.374	0.379	0.383	0.321	0.32	0.327	0.395	0.399	0.330	0.412	0.42	0.333	0.452	0.469	0.484				0.537	0.55	0.563	0.575	0.588	0.6	0.611	0.622	0.629	0.637
Odisha. Urban	0.320	0.376	0.382	0.389	0.396	0.403	0.411	0.417	0.424		0.438	0.444	0.45	0.455	0.461	0.469	0.474	0.481	0.412	0.496		0.512	0.519					0.561	0.569	0.575		0.591	0.599	0.608	0.617	0.627	0.635
Odisha, Rural	0.233	0.237	0.332	0.245	0.248	0.253	0.259	0.263	0.269	0.276	0.281	0.287	0.293	0.299	0.305	0.312	0.318	0.325	0.333	0.341	0.35	0.358	0.366	0.376			0.408	0.42	0.432	0.443	0.455	0.467	0.479	0.49	0.502	0.514	0.524
Puniab. Urban	0.441	0.449	0.456	0.463	0.47	0.477	0.484	0.491	0.498			0.519	0.526	0.533	0.541	0.548	0.556	0.564	0.555	0.578	0.585	0.592	0.598	0.605				0.636	0.645	0.654		0.671	0.679	0.688	0.696	0.703	0.709
Punjab, Rural	0.286	0.293	0.3	0.307	0.314	0.322	0.33	0.338	0.346	0.355	0.364	0.373	0.381	0.39	0.399	0.408	0.418	0.427	0.437	0.447	0.457	0.466	0.474	0.483				0.524	0.535	0.546	0.556	0.566	0.577	0.587	0.596	0.604	0.611
Rajasthan, Urban	0.374	0.379	0.384	0.39	0.396	0.401	0.407	0.412	0.419		0.433	0.44	0.446	0.452	0.459	0.465	0.473	0.481	0.489	0.499		0.516	0.523					0.561	0.569	0.576		0.594	0.602	0.61	0.618	0.626	0.632
Rajasthan, Rural	0.218	0.222	0.226	0.232	0.236	0.241	0.407	0.412	0.258	0.265	0.433	0.44	0.286	0.432	0.299	0.305	0.312	0.318	0.324	0.331	0.337	0.345	0.352	0.36				0.395	0.404	0.412	0.385	0.394	0.445	0.456	0.467	0.478	0.487
Sikkim, Urban	0.218	0.222	0.220	0.232	0.230	0.414	0.426	0.437	0.238		0.273	0.28	0.280	0.292	0.498	0.504	0.511	0.518	0.524	0.531		0.551	0.552			0.588		0.601	0.605	0.412		0.639	0.649	0.450	0.672	0.685	0.695
Sikkim, Bural	0.257	0.261	0.266	0.271	0.276	0.283	0.29	0.297	0.305	0.313	0.321	0.329	0.335	0.343	0.352	0.36	0.37	0.38	0.325	0.555	0.411	0.422	0.434	0.445				0.489	0.496	0.513	0.527	0.542	0.555	0.569	0.584	0.598	0.61
Tamil Nadu. Urban	0.391	0.398	0.200	0.271	0.270	0.283	0.29	0.432	0.439	0.446	0.321	0.329	0.335	0.343	0.332	0.495	0.505	0.515	0.526	0.537	0.547	0.557	0.565		0.581			0.609	0.490	0.627	0.636	0.646	0.656	0.667	0.584	0.686	0.693
Tamil Nadu, Biral	0.391	0.398	0.403	0.408	0.285	0.292	0.425	0.432	0.439	0.324	0.433	0.341	0.407	0.359	0.369	0.379	0.389	0.399	0.320	0.422	0.433	0.337	0.453	0.462			0.399	0.506	0.516	0.528	0.539	0.551	0.562	0.574	0.586	0.595	0.603
Telangana, Urban	0.264	0.27	0.274	0.279	0.285	0.292	0.299	0.416	0.313	0.324	0.333	0.341	0.33	0.339	0.369	0.379	0.389	0.503	0.411	0.422	0.433	0.445	0.455	0.462		0.485		0.508	0.618	0.528		0.551	0.562	0.668	0.586	0.595	0.698
Telangana, Rural	0.225	0.228	0.382	0.234	0.237	0.402	0.409	0.410	0.424	0.452	0.265	0.449	0.437	0.405	0.298	0.485	0.494	0.303	0.342	0.320	0.364	0.375	0.385	0.396				0.007	0.454	0.466	0.037	0.493	0.506	0.519	0.533	0.547	0.558
Tripura, Urban	0.225	0.228	0.251	0.455	0.456	0.24	0.459	0.248	0.463	0.465	0.265	0.272	0.28	0.239	0.298	0.485	0.32	0.501	0.542	0.535	0.53	0.542	0.549	0.555				0.57	0.574	0.400		0.592	0.599	0.608	0.617	0.627	0.635
Tripura, Rural	0.447	0.45	0.433	0.455	0.430	0.438	0.439	0.40	0.403	0.405	0.336	0.409	0.344	0.351	0.357	0.465	0.493	0.382	0.307	0.403	0.33	0.342	0.439	0.448		0.461		0.37	0.374	0.486	0.384	0.592	0.509	0.518	0.528	0.538	0.546
Uttar Pradesh, Urban	0.367	0.298	0.302	0.382	0.31	0.313	0.399	0.321	0.320		0.330	0.43	0.435	0.331	0.446	0.303	0.457	0.382	0.468	0.403	0.478	0.429	0.439	0.448				0.524	0.531	0.538		0.554	0.562	0.518	0.528	0.587	0.594
Uttar Pradesh, Rural	0.367	0.243	0.377	0.382	0.255	0.393	0.399	0.404	0.41	0.417	0.423	0.43	0.435	0.44	0.446	0.431	0.437	0.465	0.468	0.473	0.478	0.484	0.49	0.347				0.324	0.331	0.338	0.346	0.334	0.362	0.37	0.378	0.387	0.394
Uttarakhand, Urban	0.24	0.406	0.412	0.231	0.422	0.427	0.432	0.27	0.442	0.282	0.289	0.459	0.464	0.304	0.308	0.482	0.489	0.496	0.503	0.525	0.519	0.528	0.537	0.547				0.581	0.389	0.615	0.628	0.642	0.656	0.669	0.682	0.695	0.706
Uttarakhand, Rural	0.401	0.400	0.412	0.235	0.422	0.427	0.432	0.437	0.263	0.269	0.434	0.439	0.404	0.409	0.309	0.482	0.328	0.338	0.349	0.36	0.372	0.385	0.397	0.411			0.453	0.468	0.482	0.499	0.515	0.531	0.547	0.562	0.577	0.592	0.604
West Bengal, Urban	0.225	0.227	0.251	0.255	0.24	0.243	0.23	0.236	0.265	0.269	0.277	0.284	0.292	0.507	0.509	0.518	0.528	0.535	0.549	0.552	0.572	0.568	0.597	0.58		0.591		0.604	0.482	0.499	0.515	0.632	0.638	0.644	0.651	0.592	0.665
West Bengal, Rural	0.275	0.279	0.45	0.435	0.401	0.400	0.295	0.470	0.303	0.480	0.491	0.490	0.323	0.329	0.335	0.343	0.351	0.358	0.343	0.376	0.384	0.392	0.374	0.38				0.004	0.012	0.462	0.023	0.032	0.493	0.504	0.514	0.525	0.533
The Six Minor Territories, Rural	0.273	0.279	0.281	0.284	0.288	0.326	0.295	0.299	0.303		0.312	0.371	0.323	0.329	0.335	0.343	0.331	0.338	0.367	0.376	0.384	0.392	0.487	0.407				0.552	0.451	0.462		0.485	0.495	0.617	0.623	0.525	0.555
The Six Minor Territories, Rural	0.293	0.299	0.306	0.312	0.319	0.326	0.333	0.54	0.548	0.555		0.528	0.533	0.5387	0.397	0.406	0.416	0.428	0.439	0.451	0.462	0.474	0.487	0.499			0.538	0.552	0.565	0.579	0.591	0.603	0.61	0.617	0.623	0.63	0.637
Sub-Saharan Africa	0.263	0.483	0.488	0.493	0.497	0.287	0.308	0.31	0.298	0.319	0.323	0.328	0.335	0.338	0.344	0.329	0.334	0.339	0.372	0.346	0.380	0.354	0.358	0.362	_			0.383	0.389	0.395	0.401	0.408	0.416	0.685	0.695	0.437	0.442
Central Sub-Saharan Africa	0.265	0.268	0.272	0.277	0.282	0.287	0.291	0.293	0.298	0.302		0.302	0.316	0.321	0.323	0.329	0.334	0.339	0.343	0.346		0.334	0.338	0.382				0.345	0.352	0.395	0.401	0.408	0.410	0.425	0.45	0.437	0.442
Angola	0.239	0.262	0.200	0.271	0.273	0.232	0.285	0.287	0.291	0.295	0.298	0.302	0.303	0.308	0.265	0.308	0.272	0.312	0.281	0.286	0.289	0.294	0.32	0.305	0.312			0.345	0.349	0.359	0.366	0.374	0.382	0.388	0.394	0.401	0.408
Central African Republic	0.218	0.22	0.223	0.225	0.229	0.232	0.235	0.239	0.243	0.248	0.252	0.256	0.26	0.262	0.265	0.268	0.272	0.276	0.281	0.286		0.294	0.299	0.305			0.329	0.339	0.349	0.357	0.366	0.377	0.388	0.4	0.411	0.422	0.431
Congo (Brazzaville)	0.212	0.216	0.22	0.222	0.226	0.23	0.233	0.236	0.24	0.243	0.247	0.25	0.252	0.254	0.258	0.261	0.263	0.266	0.269	0.273		0.279	0.283	0.285		0.291	0.295	0.299	0.303	0.307	0.311	0.316	0.503	0.32	0.519	0.526	0.531
Democratic Republic of the Congo	0.3	0.308	0.253	0.326	0.333	0.344	0.331	0.338	0.363	0.372	0.283	0.386	0.393	0.399	0.404	0.41	0.413	0.421	0.426	0.45		0.439	0.444	0.43				0.241	0.473	0.48	0.487	0.495	0.303	0.282	0.292	0.326	0.312
Equatorial Guinea	0.246	0.249	0.253	0.257	0.262	0.267	0.271	0.274	0.277	0.281	0.283	0.284	0.285	0.284	0.282	0.28	0.277	0.273	0.268	0.264	0.257	0.251	0.246	0.243				0.241	0.242	0.244		0.26	0.27	0.282	0.292	0.304	0.312
Gabon	0.242	0.252	0.26	0.268	0.275	0.279	0.282	0.284	0.286	0.289	0.29	0.292	0.297	0.303	0.311	0.321	0.506	0.382	0.409	0.433	0.459	0.486	0.509	0.528		0.555	0.579	0.592	0.605	0.581	0.624	0.633	0.643	0.651	0.658	0.665	0.669
Eastern Sub-Saharan Africa	0.38	0.389	0.397	0.406	0.414	0.422	0.429	0.435	0.442	0.45	0.458	0.466	0.474	0.482	0.249	0.498	0.259	0.514	0.521	0.527		0.534	0.539	0.545		0.302		0.314	0.321	0.329		0.345	0.354	0.363	0.371	0.617	0.622
Eastern Sub-Sanaran Africa Burundi	0.176	0.181	0.185	0.19	0.196	0.201	0.207	0.212	0.217			0.234	0.239	0.244	0.249	0.254	0.259	0.264	0.268	0.273		0.282	0.286	0.291				0.314	0.321	0.329	0.337	0.345	0.354	0.363	0.371	0.38	0.387
Comoros	0.131	0.137	0.142	0.148	0.134	0.16	0.166	0.172	0.178		0.188	0.193	0.197	0.2	0.202	0.202	0.202	0.201	0.202	0.202	0.204	0.205	0.208	0.21	_			0.224	0.229	0.234	0.24	0.246	0.252	0.259	0.266	0.272	0.277
Djibouti	0.208	0.213	0.219	0.225	0.232	0.239	0.246	0.253	0.26			0.282	0.289	0.297	0.303	0.309	0.315	0.321	0.325	0.33	0.335	0.34	0.346	0.352				0.381	0.388	0.395	0.403	0.41	0.419	0.427	0.436	0.443	0.449
Eritrea	0.089	0.146	0.11	0.121	0.135	0.148	0.16	0.171	0.181			0.207	0.215	0.223	0.23	0.237	0.244	0.252	0.258	0.265	0.272	0.28	0.288	0.296	_			0.331	0.34	0.35	0.359	0.359	0.379	0.389	0.399	0.409	0.416
Ethiopia		0.146	0.15	0.154	0.158	0.163		0.172	0.177			0.193	0.2	0.208	0.218	0.229	0.241			0.279		0.3	0.309	0.315				0.335	0.338	0.342	0.346	0.352	0.359	0.367	0.375		0.389
Lanopia	0.122	0.123	0.120	0.152	0.150	0.139	0.142	0.143	0.140	0.13	5.133	0.100	5.130	0.101	0.105	0.100	0.171	0.175	3.1/7	0.102	0.10/	0.172	0.170	0.2	0.200	9.212	3.22	5.227	0.237	0.23	0.20	3.212	0.2.04	0.295	0.500	5.517	3.520

Location 1980 1981 1982 1														
Location 1980 1981 1982 1	983 1984 1985 198	86 1987 1988 1989 1	990 1991 1992	1993 1994 1995	1996 1997	1998 1999 2000	2001 2002	2003 2004	2005 2006 2007	2008 2009	2010 201	1 2012 2	2013 2014 2015	5 2016
Kenya 0.22 0.232 0.245 0.	.257 0.269 0.28 0.29	91 0.302 0.313 0.323 0	335 0.346 0.357	0.367 0.376 0.384	0.393 0.4 0	0.405 0.41 0.415	5 0.42 0.425	0.429 0.434	0.44 0.446 0.452	0.459 0.465	0.473 0.48	1 0.489 0	0.498 0.506 0.514	4 0.52
Madagascar 0.195 0.201 0.207 0.	.213 0.219 0.226 0.23	32 0.238 0.244 0.249 0	255 0.26 0.264	0.267 0.269 0.272	0.275 0.278	0.282 0.286 0.289	0.294 0.297	0.302 0.306 0	0.311 0.315 0.319	0.323 0.327	0.331 0.33	8 0.344	0.35 0.355 0.361	1 0.365
Malawi 0.143 0.149 0.155 0.	.161 0.167 0.175 0.18	82 0.188 0.194 0.199 0.	205 0.21 0.215	0.219 0.223 0.227	0.232 0.238	0.243 0.249 0.254	0.258 0.263	0.268 0.273 0	0.279 0.284 0.29	0.296 0.302	0.308 0.3	4 0.32 0	0.326 0.334 0.342	2 0.348
Mozambique 0.131 0.133 0.135 0.	.136 0.137 0.138 0.13	38 0.139 0.14 0.142 0.	145 0.149 0.151	0.153 0.157 0.158	0.165 0.172	0.18 0.186 0.193	0.2 0.207	0.214 0.22 0	0.226 0.231 0.236	0.242 0.247	0.253 0.2	5 0.268 0	0.277 0.287 0.297	7 0.306
Rwanda 0.065 0.067 0.068 0.	.069 0.07 0.071 0.08	89 0.12 0.144 0.164 0.	181 0.197 0.208	0.217 0.22 0.223	0.226 0.23	0.234 0.237 0.24	0.244 0.25	0.256 0.263 0	0.272 0.282 0.293	0.305 0.318	0.33 0.34	2 0.354 0	0.365 0.374 0.383	3 0.39
Somalia 0.161 0.162 0.164 0.	.166 0.168 0.171 0.17	73 0.176 0.18 0.183 0.	187 0.19 0.192	0.194 0.195 0.196	0.197 0.198	0.199 0.2 0.201	0.203 0.205	0.208 0.212 0	0.216 0.22 0.225	0.23 0.235	0.24 0.24	5 0.251 0	0.256 0.26 0.265	5 0.268
Tanzania 0.176 0.183 0.19 0.	.197 0.205 0.213 0.2	22 0.226 0.233 0.239 0.	245 0.251 0.256	0.259 0.263 0.271	0.279 0.288	0.295 0.302 0.308	0.314 0.32	0.326 0.332 0	0.339 0.345 0.352	0.359 0.367	0.375 0.38	4 0.392 0	0.402 0.411 0.421	1 0.428
Uganda 0.101 0.11 0.117 0.	.125 0.134 0.142 0.14	49 0.156 0.163 0.17 0.	177 0.184 0.19	0.196 0.203 0.209	0.215 0.22	0.226 0.232 0.238	3 0.244 0.251	0.257 0.265 0	0.272 0.28 0.289	0.298 0.308	0.317 0.32	8 0.338 0	0.348 0.359 0.37	7 0.377
Zambia 0.193 0.205 0.216 0.	.228 0.239 0.251 0.26	61 0.271 0.281 0.291 0	299 0.307 0.315	0.321 0.326 0.331	0.336 0.34	0.343 0.346 0.35	0.354 0.357	0.362 0.366 0	0.371 0.377 0.385	0.393 0.401	0.41 0.41	9 0.428 0	0.437 0.446 0.454	4 0.46
South Sudan 0.053 0.054 0.054 0.	.055 0.056 0.056 0.05		082 0.088 0.092	0.095 0.098 0.102	0.105 0.108	0.111 0.114 0.117		0.127 0.13	0.134 0.138 0.143	0.148 0.152	0.158 0.10	4 0.17 0	0.176 0.182 0.188	8 0.192
Central 0.292 0.305 0.318 0	0.33 0.343 0.356 0.36	68 0.379 0.39 0.401 0	413 0.425 0.435	0.444 0.453 0.462	0.47 0.476	0.482 0.487 0.492	0.497 0.501	0.505 0.51 0	0.515 0.521 0.527	0.533 0.54	0.546 0.55	3 0.56 0	0.566 0.573 0.58	3 0.585
	.185 0.196 0.205 0.21		252 0.264 0.275	0.286 0.296 0.305		0.327 0.332 0.337			0.368 0.376 0.385	0.394 0.403	0.413 0.43		0.444 0.455 0.465	
	.233 0.245 0.256 0.26		.31 0.322 0.333	0.344 0.353 0.362		0.385 0.391 0.396		0.412 0.418 0	0.424 0.431 0.438	0.445 0.452	0.46 0.46		0.483 0.49 0.498	8 0.503
	.453 0.464 0.475 0.48		526 0.536 0.545	0.553 0.56 0.567		0.585 0.589 0.593			0.617 0.623 0.63	0.637 0.644	0.652 0.6		0.677 0.685 0.694	
	.052 0.053 0.053 0.05		058 0.059 0.061	0.062 0.067 0.075		0.076 0.068 0.069			0.074 0.075 0.077	0.078 0.079	0.08 0.08		0.084 0.092 0.112	
	.241 0.253 0.264 0.27		318 0.331 0.343	0.353 0.364 0.373		0.398 0.404 0.411	0.417 0.423		0.443 0.45 0.458	0.466 0.475	0.483 0.49		0.508 0.516 0.524	
	.216 0.228 0.239 0.24		292         0.305         0.316	0.327 0.337 0.347		0.37 0.375 0.381			0.41 0.417 0.424	0.432 0.44	0.485 0.45		0.308 0.318 0.324	
	.216 0.228 0.239 0.24 .263 0.274 0.284 0.29		292         0.305         0.316           332         0.343         0.353	0.327 0.337 0.347 0.362 0.37 0.378		0.37 0.375 0.381			0.41 0.417 0.424	0.432 0.44	0.448 0.43		0.474 0.482 0.491 0.477 0.484 0.491	
	.355 0.368 0.382 0.39		441 0.452 0.462	0.47 0.478 0.486		0.503 0.507 0.511			0.531 0.536 0.541	0.547 0.553	0.559 0.50		0.581 0.588 0.596	
,	.314 0.326 0.337 0.34		389 0.399 0.408	0.417 0.427 0.437		0.461 0.467 0.473			0.501 0.508 0.514	0.521 0.527	0.533 0.5		0.552 0.558 0.564	_
_	.315 0.328 0.34 0.35		395 0.406 0.415	0.424 0.432 0.44		0.461 0.466 0.472			0.497 0.503 0.509	0.515 0.52	0.526 0.53		0.542 0.547 0.552	
	0.3 0.312 0.325 0.33		383 0.395 0.405	0.415 0.423 0.431		0.452 0.457 0.462			0.484 0.489 0.496	0.503 0.51	0.518 0.52		0.542 0.55 0.558	
	.332 0.345 0.358 0.3		419 0.432 0.443	0.453 0.462 0.47		0.488 0.492 0.496			0.517 0.524 0.531	0.538 0.546	0.553 0.5		0.572 0.577 0.583	
	.088 0.089 0.09 0.09		.15 0.166 0.182	0.197 0.212 0.226		0.258 0.266 0.273			0.301 0.306 0.313	0.321 0.33	0.341 0.35		0.375 0.387 0.398	
	.161 0.17 0.177 0.18		221 0.234 0.246	0.255 0.261 0.266		0.278 0.28 0.281			0.3 0.306 0.314	0.324 0.334	0.346 0.35		0.381 0.393 0.404	
	.205 0.215 0.224 0.23		262 0.269 0.276	0.283 0.292 0.3		0.325 0.332 0.338			0.365 0.371 0.376	0.381 0.388	0.397 0.40		0.425 0.434 0.444	
	.283 0.294 0.305 0.31		.36 0.372 0.384	0.394 0.404 0.413		0.435 0.44 0.444			0.47 0.477 0.484	0.491 0.499	0.508 0.5		0.539 0.549 0.56	
TaitaTaveta 0.156 0.172 0.186	0.2 0.212 0.223 0.23	33 0.242 0.252 0.263 0.	276 0.29 0.303	0.315 0.327 0.339	0.349 0.359 0	0.367 0.374 0.38	0.386 0.392	0.399 0.408 0	0.417 0.426 0.435	0.444 0.453	0.464 0.47	4 0.484 0	0.494 0.504 0.513	3 0.52
TanaRiver 0.064 0.065 0.066 0.	.077 0.084 0.088 0.0	09 0.092 0.093 0.097 0	107 0.12 0.132	0.145 0.157 0.167	0.176 0.183 0	0.188 0.189 0.187	0.185 0.182	0.179 0.175 0	0.172 0.169 0.168	0.171 0.178	0.191 0.20	4 0.219 0	0.234 0.248 0.261	1 0.271
Embu 0.237 0.25 0.262 0.	.274 0.287 0.298 0.3	31 0.32 0.331 0.342 0	353 0.365 0.375	0.386 0.396 0.407	0.417 0.426	0.434 0.441 0.449	0.456 0.463	0.469 0.474	0.48 0.486 0.493	0.499 0.506	0.514 0.52	1 0.529 0	0.536 0.543 0.55	5 0.555
Isiolo 0.205 0.212 0.219 0.	.226 0.233 0.24 0.24	46 0.252 0.258 0.264 0	.27 0.277 0.284	0.289 0.295 0.3	0.306 0.311 0	0.315 0.32 0.325	5 0.33 0.334	0.336 0.336 0	0.335 0.334 0.334	0.336 0.339	0.343 0.34	8 0.354	0.36 0.366 0.372	2 0.377
Kitui 0.145 0.158 0.171 0.	.183 0.195 0.207 0.21	17 0.227 0.237 0.246 0	255 0.265 0.274	0.283 0.293 0.302	0.311 0.319	0.327 0.333 0.339	0.345 0.351	0.357 0.364 0	0.371 0.378 0.386	0.394 0.402	0.411 0.4	2 0.429 0	0.438 0.447 0.455	5 0.461
Machakos 0.194 0.21 0.225 0	0.24 0.253 0.266 0.27	78 0.29 0.302 0.315 0	.33 0.345 0.358	0.371 0.382 0.393	0.403 0.412	0.42 0.426 0.432	2 0.437 0.442	0.447 0.453 0	0.459 0.466 0.474	0.482 0.49	0.497 0.50	5 0.512 0	0.519 0.526 0.533	3 0.538
Makueni 0.154 0.175 0.193 0	0.21 0.225 0.239 0.25	52 0.264 0.276 0.288 0	301 0.314 0.325	0.336 0.344 0.351	0.358 0.363	0.367 0.369 0.369	0.369 0.37	0.373 0.378 0	0.385 0.393 0.402	0.411 0.422	0.432 0.44	2 0.451	0.46 0.468 0.475	5 0.48
Marsabit 0.184 0.189 0.193 0.	.198 0.203 0.207 0.21	12 0.216 0.22 0.224 0.	229 0.234 0.238	0.242 0.246 0.25	0.254 0.257 0	0.261 0.264 0.268	0.272 0.277	0.282 0.288 0	0.293 0.299 0.304	0.308 0.312	0.315 0.31	8 0.322 0	0.326 0.33 0.335	5 0.339
Meru 0.209 0.221 0.232 0.	.243 0.254 0.264 0.27	74 0.284 0.294 0.305 0.	318 0.332 0.345	0.356 0.367 0.377	0.386 0.395	0.402 0.408 0.413	8 0.419 0.425	0.43 0.435	0.44 0.445 0.451	0.455 0.461	0.467 0.43	5 0.482	0.49 0.498 0.505	5 0.512
TharakaNithi 0.204 0.216 0.227 0.	.238 0.25 0.26 0.27	71 0.282 0.293 0.303 0.	315 0.327 0.338	0.349 0.359 0.368	0.377 0.386	0.393 0.4 0.407	0.413 0.42	0.428 0.435 0	0.444 0.452 0.462	0.471 0.48	0.489 0.49	7 0.506 0	0.514 0.522 0.53	0.536
Nairobi 0.42 0.431 0.442 0.	.453 0.464 0.475 0.48	86 0.496 0.506 0.516 0.	526 0.536 0.545	0.553 0.56 0.567	0.574 0.58 0	0.585 0.589 0.593	0.598 0.602	0.607 0.611 0	0.617 0.623 0.63	0.637 0.644	0.652 0.6	5 0.669 0	0.677 0.685 0.694	4 0.701
Garissa 0.052 0.053 0.054 0.	.055 0.056 0.057 0.05	58 0.059 0.06 0.061 0.	062 0.064 0.065	0.069 0.075 0.077	0.077 0.074	0.073 0.074 0.075	5 0.077 0.078	0.079 0.08 0	0.081 0.083 0.084	0.106 0.127	0.141 0.15	4 0.166 0	0.178 0.19 0.202	2 0.21
	.048 0.049 0.05 0.05		055 0.057 0.065	0.079 0.088 0.095		0.102 0.095 0.086			0.074 0.075 0.076	0.077 0.077	0.079 0.0		0.083 0.085 0.087	
	0.05 0.051 0.052 0.05		056 0.057 0.058	0.059 0.06 0.061		0.063 0.064 0.065			0.068 0.069 0.07	0.071 0.072	0.073 0.07		0.083 0.101 0.115	
	.216 0.229 0.24 0.25		291 0.301 0.311	0.32 0.329 0.338		0.361 0.368 0.374			0.401 0.408 0.416	0.425 0.435	0.445 0.45		0.473 0.481 0.488	
	.242 0.254 0.264 0.27		322 0.336 0.349	0.362 0.375 0.387		0.417 0.425 0.432			0.47 0.478 0.487	0.495 0.502	0.51 0.5		0.534 0.542 0.55	
	.254 0.266 0.278 0.2		341 0.355 0.369	0.38 0.388 0.396		0.413 0.417 0.421			0.448 0.456 0.465	0.475 0.485	0.495 0.50		0.521 0.529 0.536	
	0.22 0.233 0.244 0.25		294 0.304 0.314	0.324 0.334 0.343		0.37 0.378 0.386			0.422 0.428 0.435	0.44 0.445	0.451 0.45		0.473 0.48 0.488	
	.304 0.316 0.328 0.3		385 0.397 0.409	0.419 0.43 0.44		0.464 0.47 0.476			0.507 0.514 0.521	0.528 0.537	0.545 0.55		0.572 0.58 0.588	
	.196 0.206 0.215 0.22		264 0.275 0.285	0.295 0.305 0.314		0.34 0.347 0.355			0.401 0.411 0.422	0.432 0.442	0.451 0.4		0.479 0.489 0.498	
	0.2 0.213 0.225 0.23		28 0.292 0.304	0.313 0.322 0.329		0.351 0.358 0.366			0.387 0.39 0.393	0.398 0.406	0.414 0.43		0.441 0.45 0.458	
	.169 0.189 0.204 0.21		268 0.292 0.304 268 0.281 0.293	0.305 0.316 0.327		0.357 0.366 0.377			0.427 0.436 0.446	0.454 0.462	0.414 0.42		0.497 0.506 0.514	
	.198 0.211 0.223 0.23		208 0.281 0.293 278 0.291 0.303	0.313 0.322 0.331		0.357 0.366 0.371			0.427 0.436 0.446	0.434 0.462	0.47 0.4		0.497 0.306 0.314 0.483 0.492 0.501	
			325 0.338 0.35	0.36 0.368 0.376									0.515 0.524 0.533	
										0.471 0.48 0.455 0.466	0.489 0.49			
	.135 0.154 0.169 0.18		242 0.261 0.278	0.295 0.313 0.328		0.368 0.378 0.388								
	.265 0.276 0.287 0.29		338 0.349 0.36	0.372 0.386 0.398		0.428 0.435 0.442			0.478 0.487 0.496	0.507 0.518	0.527 0.53		0.556 0.566 0.575	
	.244 0.255 0.266 0.27		321 0.333 0.345	0.355 0.365 0.373		0.394 0.398 0.403			0.441 0.453 0.466	0.479 0.492	0.503 0.5		0.537 0.546 0.556	
	.173 0.191 0.206 0.21		.27 0.285 0.299	0.313 0.327 0.339		0.368 0.374 0.382			0.427 0.436 0.446	0.455 0.465	0.474 0.48		0.5 0.508 0.516	
	.155 0.168 0.178 0.18		231 0.244 0.257	0.269 0.282 0.293		0.323 0.328 0.332			0.361 0.368 0.375	0.381 0.387	0.394 0.40		0.418 0.427 0.435	
Samburu 0.169 0.175 0.181 0.	.187 0.192 0.196 0.20	01 0.205 0.209 0.212 0.	216 0.22 0.224	0.227 0.229 0.231	0.233 0.235 0	0.235 0.235 0.236	5 0.238 0.241	0.245 0.251 0	0.257 0.264 0.27	0.275 0.281	0.286 0.29	2 0.297 0	0.302 0.308 0.313	3 0.316

Appendix Table 11: Socio-Demograph	hic Ind	ex val	lues for	r all es	timate	d GBD	2016	locatio	ons, 19	80-201	16																										
Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
TransNzoia	0.103	0.137	0.161	0.18	0.197	0.21	0.222	0.234	0.246	0.26	0.278	0.296	0.313	0.328	0.341	0.353	0.364	0.374	0.382	0.39	0.398	0.405	0.412	0.418	0.422	0.427	0.432	0.438	0.445	0.453	0.462	0.471	0.48	0.489	0.498	0.506	0.513
Turkana	0.185	0.19	0.195	0.2	0.205	0.209	0.213	0.217	0.22	0.223	0.227	0.231	0.235	0.238	0.241	0.244	0.247	0.249	0.251	0.25	0.249	0.248	0.248	0.249	0.251	0.253	0.256	0.26	0.265	0.268	0.271	0.273	0.276	0.279	0.283	0.287	0.289
UasinGishu	0.183	0.202	0.22	0.237	0.252	0.266	0.279	0.291	0.303	0.316	0.329	0.342	0.355	0.366	0.376	0.386	0.395	0.404	0.413	0.422	0.432	0.443	0.453	0.462	0.47	0.478	0.486	0.495	0.504	0.513	0.522	0.53	0.539	0.548	0.556	0.564	0.57
WestPokot	0.153	0.16	0.168	0.176	0.183	0.19	0.196	0.203	0.211	0.219	0.23	0.24	0.25	0.258	0.264	0.27	0.275	0.279	0.28	0.281	0.283	0.284	0.286	0.289	0.292	0.296	0.301	0.308	0.314	0.321	0.328	0.335	0.343	0.351	0.359	0.367	0.373
Bungoma	0.199	0.214	0.228	0.242	0.254	0.266	0.277	0.287	0.296	0.305	0.316	0.327	0.336	0.345	0.354	0.362	0.37	0.378	0.385	0.392	0.399	0.406	0.413	0.42	0.426	0.432	0.438	0.444	0.45	0.456	0.462	0.469	0.477	0.484	0.492	0.499	0.505
Busia	0.235	0.246	0.256	0.266	0.276	0.285	0.294	0.303	0.312	0.321	0.331	0.341	0.35	0.359	0.365	0.371	0.377	0.382	0.385	0.387	0.39	0.393	0.396	0.399	0.402	0.406	0.41	0.415	0.421	0.427	0.433	0.44	0.447	0.454	0.461	0.468	0.473
Kakamega	0.23	0.241	0.252	0.263	0.273	0.283	0.292	0.302	0.311	0.321	0.332	0.344	0.355	0.365	0.374	0.383	0.39	0.397	0.402	0.405	0.408	0.411	0.414	0.417	0.421	0.426	0.431	0.438	0.444	0.45	0.457	0.463	0.47	0.477	0.484	0.491	0.496
Vihiga	0.258	0.27	0.281	0.293	0.304	0.315	0.325	0.334	0.344	0.352	0.361	0.37	0.378	0.385	0.391	0.397	0.401	0.405	0.408	0.409	0.41	0.412	0.415	0.418	0.422	0.428	0.436	0.446	0.456	0.467	0.476	0.485	0.493	0.5	0.507	0.513	0.517
Southern Sub-Saharan Africa		0.511	0.516	0.521	0.527	0.531	0.536	0.541	0.546	0.552		0.564	0.57	0.577	0.583	0.589	0.595	0.601	0.606	0.611	0.615	0.62	0.625	0.63	0.635	0.64	0.646	0.651	0.656	0.661	0.666	0.672	0.677	0.681	0.685	0.689	0.691
Botswana	0.404	0.414	0.423	0.432	0.441	0.451	0.461	0.471	0.484	0.497		0.518	0.527	0.536	0.544	0.552	0.56	0.569	0.578	0.587	0.595	0.602	0.609	0.616	0.623	0.631	0.638	0.645	0.65	0.656	0.662	0.669	0.675	0.682	0.689	0.695	0.701
Lesotho	0.323	0.328	0.333	0.337	0.341	0.345	0.349	0.353	0.358	0.364	0.37	0.376	0.383	0.39	0.397	0.403	0.41	0.417	0.423	0.429	0.435	0.442	0.448	0.455	0.462	0.469	0.475	0.482	0.489	0.496	0.504	0.513	0.521	0.529	0.538	0.545	0.552
Namibia	0.374	0.38	0.385	0.39	0.395	0.399	0.404	0.41	0.416	0.422		0.433	0.441	0.45	0.459	0.469	0.478	0.488	0.497	0.505		0.522	0.531	0.539	0.547	0.555	0.563		0.575	0.58		0.591	0.597	0.604	0.611	0.618	0.624
South Africa	0.542	0.548	0.554	0.559	0.564	0.569	0.574	0.579	0.584	0.59	0.596	0.601	0.606	0.613	0.619	0.624	0.63	0.636	0.64	0.645	0.649	0.653	0.658	0.663	0.669	0.675	0.682	0.688	0.695	0.701	0.707	0.714	0.719	0.724	0.727	0.73	0.734
Swaziland	0.384	0.391	0.398	0.404	0.41	0.415	0.421	0.429	0.437	0.446		0.462	0.47	0.477	0.484	0.491	0.498	0.504	0.509	0.514	0.518	0.522	0.525	0.528	0.531	0.534	0.537	0.538	0.538	0.539	0.544	0.553	0.562	0.571	0.578	0.584	0.589
Zimbabwe	0.357	0.364	0.37	0.377	0.384	0.39	0.397	0.403	0.412	0.422		0.443	0.452	0.461	0.47	0.477	0.486	0.493	0.498	0.502	0.505	0.507	0.508	0.506	0.503	0.498	0.492		0.477	0.472	0.469	0.47	0.474	0.479	0.485	0.491	0.497
Eastern Cape	0.495	0.501	0.506	0.511	0.516	0.521	0.524	0.528	0.533	0.538		0.547	0.551	0.557	0.562	0.567	0.573	0.578	0.583	0.587	0.591	0.596	0.601	0.606	0.612	0.618	0.626	0.633	0.64	0.647	0.653	0.66	0.665	0.67	0.673	0.676	0.679
Free State	0.546	0.551	0.556	0.56	0.564	0.568	0.572	0.576	0.581	0.586		0.597	0.602	0.609	0.617	0.624	0.631	0.637	0.641	0.645	0.649	0.652	0.656	0.661	0.666	0.672	0.678	0.684	0.69	0.696	0.702	0.708	0.714	0.718	0.721	0.724	0.727
Gauteng	0.656	0.66	0.664	0.667	0.671	0.674	0.677	0.681	0.684	0.688		0.695	0.698	0.702	0.705	0.707	0.709	0.712	0.715	0.718	0.721	0.724	0.728	0.731	0.735	0.74	0.744	0.749	0.754	0.759		0.768	0.773	0.775	0.778	0.78	0.782
KwaZulu-Natal	0.521	0.527	0.532	0.537	0.542	0.546	0.551	0.555	0.56	0.566		0.576	0.581	0.588	0.594	0.599	0.605	0.61	0.615	0.619	0.624	0.629	0.634	0.639	0.645	0.651	0.658	0.665	0.672	0.679	0.685	0.692	0.698	0.702	0.706	0.71	0.713
Limpopo	0.447	0.454	0.461	0.467	0.473	0.479	0.484	0.49	0.497	0.504		0.518	0.524	0.532	0.54	0.547	0.554	0.562	0.568	0.572		0.582	0.588	0.594	0.602	0.61	0.618		0.636	0.643		0.659	0.665	0.671	0.675	0.679	0.682
Mpumalanga	0.495	0.502	0.508	0.514	0.52	0.525	0.531	0.537	0.543	0.55	0.557	0.563	0.57	0.577	0.584	0.589	0.595	0.601	0.606	0.61	0.615	0.62	0.625	0.631	0.637	0.644	0.652	0.659	0.667	0.674	0.681	0.688	0.695	0.7	0.703	0.707	0.71
North-West Northern Cape	0.523	0.529	0.534	0.539	0.545 0.564	0.55 0.568	0.555	0.56 0.576	0.565	0.571 0.585	0.576	0.58 0.594	0.585 0.598	0.59 0.603	0.594 0.607	0.597	0.6 0.614	0.604	0.608	0.613	0.618	0.623	0.628	0.633 0.641	0.639 0.646	0.645 0.652	0.651 0.658	0.658 0.664	0.664	0.671 0.675	0.677 0.681	0.683 0.688	0.689 0.693	0.693	0.696	0.699	0.702
•	0.653		0.555	0.559	0.665	0.568	0.372	0.576	0.58	0.585		0.594	0.598		0.695	0.698	0.703	0.708		0.713		0.033	0.637	0.722			0.038	0.736	0.74	0.744	0.748		0.756	0.758	0.76	0.762	0.764
Western Cape Western Sub-Saharan Africa	0.033	0.657 0.259	0.00	0.062	0.005	0.008	0.87	0.872	0.873	0.078	0.081	0.084	0.087	0.691 0.297	0.301	0.305	0.703	0.314	0.711	0.713	0.326	0.33	0.72	0.339	0.725 0.345	0.728 0.351	0.752	0.756	0.74	0.744	0.383	0.752 0.391	0.399	0.738	0.76	0.762	0.428
Benin		0.239	0.203	0.182	0.187	0.192	0.197	0.202	0.207	0.285		0.29	0.293	0.237	0.237	0.242	0.247	0.252	0.257	0.262		0.273	0.278	0.283	0.288	0.293	0.298	0.304	0.37	0.315	0.32	0.326	0.339	0.335	0.415	0.346	0.428
Burkina Faso	0.103	0.106	0.178	0.102	0.111	0.132	0.137	0.202	0.12	0.123	0.125	0.13	0.136	0.233	0.146	0.242	0.155	0.232	0.257	0.169	0.173	0.178	0.182	0.285	0.288	0.295	0.298	0.206	0.212	0.217	0.32	0.234	0.244	0.253	0.262	0.269	0.274
Cameroon	0.283	0.289	0.296	0.302	0.309	0.316	0.322	0.327	0.332	0.337		0.345	0.349	0.353	0.356	0.36	0.364	0.369	0.374	0.379	0.383	0.388	0.392	0.396	0.171	0.403	0.406	0.409	0.412	0.415	0.419	0.423	0.428	0.433	0.439	0.445	0.451
Cape Verde	0.241	0.248	0.256	0.263	0.271	0.279	0.287	0.294	0.302	0.31	0.317	0.325	0.332	0.34	0.349	0.358	0.367	0.377	0.387	0.399	0.41	0.421	0.431	0.442	0.452	0.462	0.473	0.484	0.495	0.505	0.514	0.524	0.534	0.542	0.551	0.559	0.566
Chad	0.158	0.159	0.159	0.161	0.163	0.166	0.169	0.172	0.175	0.179		0.187	0.191	0.194	0.197	0.2	0.203	0.206	0.209	0.212		0.217	0.219	0.222	0.228	0.235	0.241	0.247	0.252	0.257	0.262	0.268	0.274	0.28	0.285	0.29	0.295
Cote d'Ivoire	0.225	0.226	0.227	0.228	0.23	0.234	0.241	0.249	0.258	0.267		0.287	0.297	0.306	0.313	0.32	0.327	0.332	0.337	0.341	0.345	0.348	0.351	0.353	0.355	0.358	0.36		0.366	0.369	0.373	0.377	0.382	0.388	0.394	0.401	0.407
The Gambia	0.205	0.21	0.215	0.221	0.226	0.232	0.237	0.242	0.247	0.251	0.254	0.255	0.255	0.255	0.254	0.254	0.255	0.259	0.264	0.269	0.274	0.28	0.285	0.29	0.295	0.3	0.305	0.31	0.315	0.32	0.325	0.329	0.334	0.339	0.344	0.349	0.352
Ghana	0.309	0.313	0.315	0.317	0.32	0.323	0.326	0.33	0.338	0.347	0.356	0.366	0.375	0.384	0.392	0.401	0.409	0.416	0.421	0.426	0.429	0.431	0.433	0.436	0.438	0.44	0.443	0.446	0.448	0.449	0.451	0.457	0.466	0.477	0.486	0.494	0.499
Guinea	0.181	0.184	0.188	0.191	0.194	0.197	0.2	0.203	0.207	0.21	0.213	0.217	0.22	0.223	0.226	0.23	0.233	0.237	0.24	0.243	0.246	0.249	0.251	0.254	0.257	0.26	0.264	0.268	0.273	0.277	0.282	0.288	0.293	0.299	0.305	0.311	0.316
Guinea-Bissau	0.176	0.179	0.182	0.184	0.187	0.19	0.193	0.197	0.2	0.204	0.208	0.213	0.217	0.222	0.226	0.231	0.236	0.242	0.246	0.25	0.254	0.258	0.262	0.266	0.27	0.274	0.279	0.283	0.288	0.293	0.298	0.305	0.31	0.316	0.322	0.328	0.333
Liberia	0.198	0.201	0.203	0.205	0.207	0.209	0.211	0.213	0.216	0.219	0.218	0.218	0.215	0.211	0.204	0.196	0.186	0.183	0.184	0.19	0.204	0.218	0.234	0.241	0.247	0.253	0.258	0.264	0.27	0.276	0.282	0.289	0.298	0.307	0.314	0.321	0.327
Mali	0.114	0.117	0.118	0.12	0.122	0.124	0.127	0.129	0.131	0.135	0.138	0.142	0.146	0.15	0.153	0.157	0.161	0.164	0.168	0.172	0.176	0.18	0.185	0.19	0.195	0.2	0.205	0.211	0.217	0.223	0.23	0.237	0.243	0.249	0.256	0.262	0.267
Mauritania	0.273	0.279	0.283	0.288	0.293	0.297	0.302	0.307	0.312	0.317	0.322	0.327	0.332	0.338	0.344	0.349	0.356	0.361	0.366	0.372	0.376	0.381	0.386	0.391	0.396	0.402	0.41	0.417	0.424	0.431	0.438	0.445	0.452	0.46	0.468	0.475	0.482
Niger	0.119	0.121	0.123	0.126	0.127	0.129	0.131	0.133	0.135	0.136	0.138	0.139	0.14	0.141	0.141	0.141	0.142	0.143	0.145	0.146	0.148	0.149	0.152	0.154	0.156	0.158	0.161	0.163	0.166	0.169	0.172	0.175	0.179	0.183	0.188	0.192	0.195
Nigeria	0.289	0.296	0.303	0.309	0.314	0.32	0.323	0.323	0.323	0.322	0.322	0.322	0.324	0.327	0.33	0.333	0.337	0.341	0.345	0.349	0.353	0.358	0.364	0.369	0.377	0.385	0.392	0.4	0.407	0.414	0.423	0.433	0.443	0.454	0.464	0.473	0.479
Sao Tome and Principe	0.237	0.243	0.248	0.254	0.259	0.265	0.27	0.275	0.279	0.284	0.289	0.294	0.299	0.304	0.31	0.315	0.32	0.326	0.331	0.336	0.34	0.346	0.351	0.357	0.363	0.369	0.376	0.382	0.388	0.393	0.398	0.403	0.408	0.413	0.42	0.427	0.434
Senegal	0.197	0.2	0.204	0.208	0.211	0.216	0.22	0.225	0.23	0.235	0.24	0.245	0.251	0.257	0.263	0.27	0.276	0.283	0.29	0.295	0.299	0.302	0.304	0.307	0.309	0.312	0.314	0.317	0.32	0.324	0.327	0.331	0.336	0.34	0.345	0.35	0.354
Sierra Leone	0.186	0.189	0.192	0.195	0.198	0.201	0.204	0.207	0.21	0.214	0.217	0.222	0.225	0.229	0.233	0.237	0.241	0.243	0.246	0.247	0.249	0.252	0.257	0.262	0.268	0.273	0.279	0.286	0.292	0.299	0.306	0.313	0.322	0.332	0.341	0.348	0.352
Togo	0.208	0.212	0.215	0.218	0.222	0.225	0.228	0.232	0.236	0.242	0.248	0.255	0.261	0.267	0.273	0.28	0.288	0.296	0.301	0.307	0.312	0.317	0.321	0.326	0.331	0.336	0.341	0.346	0.351	0.356	0.361	0.367	0.373	0.379	0.385	0.392	0.397

Officed States, 50 states,		0 10 2010	
Location	1990, 20q0 20	016, 20q0	
Alabama	2.18	1.54	
Alaska	2.09	1.21	
Arizona	1.81	1.10	
Arkansas	2.08	1.41	
California	1.62	0.80	
Colorado	1.61	0.97	
Connecticut	1.44	0.80	
Delaware	1.82	1.18	
District of Columbia	3.70	1.14	
Florida	1.86	1.10	
Georgia	2.10	1.22	
Hawaii	1.35	0.91	
Idaho	1.79	1.05	
Illinois	1.92	1.08	
Indiana	1.79	1.24	
lowa	1.53	0.89	
Kansas	1.70	1.16	
Kentucky	1.76	1.21	
Louisiana	2.13	1.52	
Maine	1.41	1.09	
Maryland	1.82	1.07	
Massachusetts	1.27	0.72	
Michigan	1.92	1.14	
Minnesota	1.41	0.89	
Mississippi	2.36	1.63	
Missouri	1.88	1.19	
Montana	1.83	1.16	

Table 12. The probability of death from birth to 20 years in the United States, 50 states, and DC from 1990 to 2016

Nebraska	1.67	1.02
Nevada	1.79	1.00
New Hampshire	1.33	0.80
New Jersey	1.54	0.79
New Mexico	1.97	1.17
New York	1.70	0.81
North Carolina	1.95	1.21
North Dakota	1.59	1.05
Ohio	1.71	1.16
Oklahoma	1.87	1.45
Oregon	1.62	0.91
Pennsylvania	1.67	1.04
Rhode Island	1.34	0.87
South Carolina	2.10	1.25
South Dakota	2.01	1.32
Tennessee	1.92	1.27
Texas	1.71	1.07
United States	1.76	1.05
Utah	1.46	1.00
Vermont	1.39	0.84
Virginia	1.78	1.03
Washington	1.56	0.84
West Virginia	1.77	1.37
Wisconsin	1.60	1.01
Wyoming	1.76	1.20

Officed States, 50 states			
Location	1990 <i>,</i> 35q20	2016, 35q20	
Alabama	9.96	10.21	
Alaska	8.11	8.32	
Arizona	8	7.42	
Arkansas	9.26	9.86	
California	7.64	5.52	
Colorado	6.37	6.16	
Connecticut	6.57	5.61	
Delaware	7.77	7.6	
District of Columbia	20.1	8.38	
Florida	8.51	7.09	
Georgia	9.35	7.7	
Hawaii	6.46	6.13	
Idaho	6.57	6.68	
Illinois	8.35	6.36	
Indiana	7.44	8.15	
lowa	6.15	6.23	
Kansas	6.62	7.08	
Kentucky	8.68	9.92	
Louisiana	10.13	9.85	
Maine	6.65	6.71	
Maryland	7.97	6.61	
Massachusetts	6.66	5.85	
Michigan	8.06	7.67	
Minnesota	5.77	5.2	
Mississippi	10.61	10.82	
Missouri	7.9	8.29	
Montana	7.37	7.58	

Table 13. The probability of death from 20 to 55 years in the United States, 50 states, and DC from 1990 to 2016

Nebraska	6.47	6.27
Nevada	8.98	7.51
New Hampshire	6.17	6.1
New Jersey	7.43	5.82
New Mexico	8.48	9.86
New York	8.66	5.52
North Carolina	8.84	7.54
North Dakota	6.26	6.82
Ohio	7.53	8.08
Oklahoma	8.31	9.93
Oregon	6.92	6.38
Pennsylvania	7.74	7.26
Rhode Island	6.84	6.38
South Carolina	10.08	9
South Dakota	6.91	7.48
Tennessee	9	9.53
Texas	8.2	6.9
United States	7.96	6.99
Utah	6.05	6.45
Vermont	6.54	6.07
Virginia	7.4	6.27
Washington	6.62	5.82
West Virginia	8.81	10.92
Wisconsin	6.31	6.23
Wyoming	7.38	8.22
Wyoming	1.76	1.20

Officed States, 50 states,			
Location	1990, 35q55 2016	5, 35q55	
Alabama	83.32	79.59	
Alaska	81.69	73.71	
Arizona	78.56	68.65	
Arkansas	82.54	78.52	
California	80.07	67.44	
Colorado	79.01	70.29	
Connecticut	78.66	69.08	
Delaware	82.97	72.52	
District of Columbia	83.26	71.18	
Florida	76.96	67.63	
Georgia	83.43	77.12	
Hawaii	73.76	63.27	
Idaho	79.03	73.88	
Illinois	82.01	73.09	
Indiana	82.51	77.01	
lowa	78.6	72.89	
Kansas	78.96	74.14	
Kentucky	83.83	79.43	
Louisiana	83.92	78.71	
Maine	81.42	74.06	
Maryland	83.11	71.42	
Massachusetts	80.1	70.92	
Michigan	81.9	75.21	
Minnesota	78.22	70.15	
Mississippi	83.75	80.21	
Missouri	81.35	75.55	
Montana	79.73	72.61	

Table 14. The probability of death from 55 to 90 years in the United States, 50 states, and DC from 1990 to 2016

Nebraska	79.17	72.94
Nevada	83.43	74.81
New Hampshire	81.17	72.07
New Jersey	81.93	70.99
New Mexico	79.12	71.25
New York	81.18	69.25
North Carolina	81.98	75.18
North Dakota	77.17	69.68
Ohio	82.61	76.21
Oklahoma	82.27	78.44
Oregon	80.71	72.18
Pennsylvania	82.33	74.1
Rhode Island	80.47	71.97
South Carolina	82.92	76.81
South Dakota	77.84	70.65
Tennessee	83.38	78.41
Texas	81.3	74.21
United States	81.1	72.77
Utah	78.58	73.46
Vermont	81.2	72.25
Virginia	82.53	73.61
Washington	79.54	70.9
West Virginia	84.03	79.69
Wisconsin	80.08	73.1
Wyoming	80.08	72.33
Wyoming	7.38	8.22
Wyoming	1.76	1.20

Table 15. Probability of Death between 20 and 50 years from 1990 to 2016 for GBD locations, including the United States, DC and 50 states

				Cause of dea	th or	
Location	Year	Age	Sex	injury	Measure	Value
Lesotho	2016	20-55	Both	All causes	Probability of death	50.09%
Central African Republic	2016	20-55	Both	All causes	Probability of death	38.55%
Swaziland	2016	20-55	Both	All causes	Probability of death	37.05%
Zimbabwe	2016	20-55	Both	All causes	Probability of death	29.90%
Zambia	2016	20-55	Both	All causes	Probability of death	29.84%
South Africa	2016	20-55	Both	All causes	Probability of death	29.11%
Afghanistan	2016	20-55	Both	All causes	Probability of death	27.62%
Guinea-Bissau	2016	20-55	Both	All causes	Probability of death	27.09%
Botswana	2016	20-55	Both	All causes	Probability of death	27.00%
Malawi	2016	20-55	Both	All causes	Probability of death	26.56%
Mozambique	2016	20-55	Both	All causes	Probability of death	26.35%
Somalia	2016	20-55	Both	All causes	Probability of death	25.63%
Namibia	2016	20-55	Both	All causes	Probability of death	24.77%
Papua New Guinea	2016	20-55	Both	All causes	Probability of death	24.61%
Solomon Islands	2016	20-55	Both	All causes	Probability of death	23.98%
Cameroon	2016	20-55	Both	All causes	Probability of death	23.87%
Cote d'Ivoire	2016	20-55	Both	All causes	Probability of death	23.46%
Kiribati	2016	20-55	Both	All causes	Probability of death	23.36%
South Sudan	2016	20-55	Both	All causes	Probability of death	22.61%
Uganda	2016	20-55	Both	All causes	Probability of death	22.26%
Congo	2016	20-55	Both	All causes	Probability of death	22.25%
Burundi	2016	20-55	Both	All causes	Probability of death	21.70%
Vanuatu	2016	20-55	Both	All causes	Probability of death	21.39%
Marshall Islands	2016	20-55	Both	All causes	Probability of death	21.34%
Federated States of Micro	2016	20-55	Both	All causes	Probability of death	20.95%
Тодо	2016	20-55	Both	All causes	Probability of death	20.46%
Chad	2016	20-55	Both	All causes	Probability of death	20.33%
Equatorial Guinea	2016	20-55	Both	All causes	Probability of death	19.99%
Democratic Republic of the	2016	20-55	Both	All causes	Probability of death	19.94%
Sierra Leone	2016	20-55	Both	All causes	Probability of death	19.79%
Tanzania	2016	20-55	Both	All causes	Probability of death	19.75%
Eritrea	2016	20-55	Both	All causes	Probability of death	19.61%
Guinea	2016	20-55	Both	All causes	Probability of death	19.51%
Haiti	2016	20-55	Both	All causes	Probability of death	19.16%
Angola	2016	20-55	Both	All causes	Probability of death	18.33%
Kenya	2016	20-55	Both	All causes	Probability of death	17.70%
Madagascar	2016	20-55	Both	All causes	Probability of death	17.62%
Gabon	2016	20-55	Both	All causes	Probability of death	17.61%
Ethiopia	2016	20-55	Both	All causes	Probability of death	17.41%
Fiji	2016	20-55	Both	All causes	Probability of death	17.26%
Burkina Faso	2016	20-55	Both	All causes	Probability of death	17.25%
Liberia		20-55	Both	All causes	Probability of death	17.14%
Syria		20-55	Both	All causes	Probability of death	17.10%
, Mongolia		20-55	Both	All causes	Probability of death	17.00%
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Djibouti	2016 20-55	Both	All causes	Probability of death	16.99%
Guyana	2016 20-55	Both	All causes	Probability of death	16.73%
Ghana	2016 20-55	Both	All causes	Probability of death	16.68%
Niger	2016 20-55	Both	All causes	Probability of death	16.34%
Russian Federation	2016 20-55	Both	All causes	Probability of death	16.23%
Benin	2016 20-55	Both	All causes	Probability of death	16.15%
Iraq	2016 20-55	Both	All causes	Probability of death	15.92%
Senegal	2016 20-55	Both	All causes	Probability of death	15.88%
Mali	2016 20-55	Both	All causes	Probability of death	15.72%
Yemen	2016 20-55	Both	All causes	Probability of death	15.69%
The Gambia	2016 20-55	Both	All causes	Probability of death	15.46%
Rwanda	2016 20-55	Both	All causes	Probability of death	14.04%
Cambodia	2016 20-55	Both	All causes	Probability of death	13.95%
Nigeria	2016 20-55	Both	All causes	Probability of death	13.93%
Ukraine	2016 20-55	Both	All causes	Probability of death	13.62%
Tonga	2016 20-55	Both	All causes	Probability of death	13.28%
Laos	2016 20-55	Both	All causes	Probability of death	13.16%
India	2016 20-55	Both	All causes	Probability of death	13.13%
Comoros	2016 20-55	Both	All causes	Probability of death	13.08%
Kazakhstan	2016 20-55	Both	All causes	Probability of death	12.89%
Pakistan	2016 20-55	Both	All causes	Probability of death	12.82%
Guatemala	2016 20-55	Both	All causes	Probability of death	12.77%
Myanmar	2016 20-55	Both	All causes	Probability of death	12.66%
Uzbekistan	2016 20-55	Both	All causes	Probability of death	12.43%
Grenada	2016 20-55	Both	All causes	Probability of death	12.42%
Samoa	2016 20-55	Both	All causes	Probability of death	12.36%
Philippines	2016 20-55	Both	All causes	Probability of death	12.15%
Saint Vincent and the Gre	2016 20-55	Both	All causes	Probability of death	11.94%
Turkmenistan	2016 20-55	Both	All causes	Probability of death	11.92%
The Bahamas	2016 20-55	Both	All causes	Probability of death	11.88%
Belize	2016 20-55	Both	All causes	Probability of death	11.86%
American Samoa	2016 20-55	Both	All causes	Probability of death	11.84%
Sudan	2016 20-55	Both	All causes	Probability of death	11.84%
Belarus	2016 20-55	Both	All causes	Probability of death	11.68%
North Korea	2016 20-55	Both	All causes	Probability of death	11.55%
Moldova	2016 20-55	Both	All causes	Probability of death	11.54%
Sao Tome and Principe	2016 20-55	Both	All causes	Probability of death	11.46%
Guam	2016 20-55	Both	All causes	Probability of death	11.37%
El Salvador	2016 20-55	Both	All causes	Probability of death	11.34%
Kyrgyzstan	2016 20-55	Both	All causes	Probability of death	11.29%
Lithuania	2016 20-55	Both	All causes	Probability of death	11.18%
Nepal	2016 20-55	Both	All causes	Probability of death	11.01%
West Virginia	2016 20-55	Both	All causes	Probability of death	10.92%
Trinidad and Tobago	2016 20-55	Both	All causes	Probability of death	10.88%
Suriname	2016 20-55	Both	All causes	Probability of death	10.83%
Mississippi	2016 20-55	Both	All causes	Probability of death	10.82%
Greenland	2016 20-55	Both	All causes	Probability of death	10.64%
Latvia	2016 20-55	Both	All causes	Probability of death	10.59%

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Indonesia	2016 20-55	Both	All causes	Probability of death	10.51%
Cape Verde	2016 20-55	Both	All causes	Probability of death	10.39%
Honduras	2016 20-55	Both	All causes	Probability of death	10.33%
Seychelles	2016 20-55	Both	All causes	Probability of death	10.31%
Alabama	2016 20-55	Both	All causes	Probability of death	10.20%
Mauritania	2016 20-55	Both	All causes	Probability of death	10.11%
Oklahoma	2016 20-55	Both	All causes	Probability of death	9.93%
Kentucky	2016 20-55	Both	All causes	Probability of death	9.91%
Arkansas	2016 20-55	Both	All causes	Probability of death	9.86%
New Mexico	2016 20-55	Both	All causes	Probability of death	9.86%
Louisiana	2016 20-55	Both	All causes	Probability of death	9.84%
Egypt	2016 20-55	Both	All causes	Probability of death	9.73%
Dominica	2016 20-55	Both	All causes	Probability of death	9.71%
Venezuela	2016 20-55	Both	All causes	Probability of death	9.64%
Georgia	2016 20-55	Both	All causes	Probability of death	9.63%
Virgin Islands, U.S.	2016 20-55	Both	All causes	Probability of death	9.58%
Tennessee	2016 20-55	Both	All causes	Probability of death	9.54%
Tajikistan	2016 20-55	Both	All causes	Probability of death	9.40%
Northern Mariana Islands	2016 20-55	Both	All causes	Probability of death	9.40%
Azerbaijan	2016 20-55	Both	All causes	Probability of death	9.35%
Thailand	2016 20-55	Both	All causes	Probability of death	9.30%
Bangladesh	2016 20-55	Both	All causes	Probability of death	9.24%
Brazil	2016 20-55	Both	All causes	Probability of death	9.16%
Saint Lucia	2016 20-55	Both	All causes	Probability of death	9.03%
South Carolina	2016 20-55	Both	All causes	Probability of death	9.00%
Mauritius	2016 20-55	Both	All causes	Probability of death	8.99%
Timor-Leste	2016 20-55	Both	All causes	Probability of death	8.85%
Vietnam	2016 20-55	Both	All causes	Probability of death	8.84%
Bolivia	2016 20-55	Both	All causes	Probability of death	8.76%
Paraguay	2016 20-55	Both	All causes	Probability of death	8.70%
United Arab Emirates	2016 20-55	Both	All causes	Probability of death	8.67%
Romania	2016 20-55	Both	All causes	Probability of death	8.57%
Dominican Republic	2016 20-55	Both	All causes	Probability of death	8.48%
Alaska	2016 20-55	Both	All causes	Probability of death	8.32%
Mexico	2016 20-55	Both	All causes	Probability of death	8.29%
Bulgaria	2016 20-55	Both	All causes	Probability of death	8.28%
Missouri	2016 20-55	Both	All causes	Probability of death	8.28%
Bhutan	2016 20-55	Both	All causes	Probability of death	8.28%
Hungary	2016 20-55	Both	All causes	Probability of death	8.27%
Jamaica	2016 20-55	Both	All causes	Probability of death	8.23%
Wyoming	2016 20-55	Both	All causes	Probability of death	8.22%
Indiana	2016 20-55	Both	All causes	Probability of death	8.15%
Estonia	2016 20-55	Both	All causes	Probability of death	8.12%
Ohio	2016 20-55	Both	All causes	Probability of death	8.08%
Libya	2016 20-55	Both	All causes	Probability of death	8.06%
Barbados	2016 20-55	Both	All causes	Probability of death	8.00%
Palestine	2016 20-55	Both	All causes	Probability of death	7.93%
Ecuador	2016 20-55	Both	All causes	Probability of death	7.69%
	2010 20-00	DOUI		Frobability of death	1.05/0

Georgia	2016 20-55	Both	All causes	Probability of death	7.69%
Michigan	2016 20-55	Both	All causes	Probability of death	7.67%
Morocco	2016 20-55	Both	All causes	Probability of death	7.61%
Nevada	2016 20-55	Both	All causes	Probability of death	7.61%
Delaware	2016 20-55	Both	All causes	Probability of death	7.60%
Montana	2016 20-55	Both	All causes	Probability of death	7.58%
North Carolina	2016 20-55	Both	All causes	Probability of death	7.54%
Sri Lanka	2016 20-55	Both	All causes	Probability of death	7.49%
South Dakota	2016 20-55	Both	All causes	Probability of death	7.48%
Malaysia	2016 20-55	Both	All causes	Probability of death	7.47%
Arizona	2016 20-55	Both	All causes	Probability of death	7.42%
Serbia	2016 20-55	Both	All causes	Probability of death	7.40%
Puerto Rico	2016 20-55	Both	All causes	Probability of death	7.36%
Pennsylvania	2016 20-55	Both	All causes	Probability of death	7.27%
Nicaragua	2016 20-55	Both	All causes	Probability of death	7.26%
Uruguay	2016 20-55	Both	All causes	Probability of death	7.13%
Argentina	2016 20-55	Both	All causes	Probability of death	7.10%
Florida	2016 20-55	Both	All causes	Probability of death	7.09%
Kansas	2016 20-55	Both	All causes	Probability of death	7.08%
Armenia	2016 20-55	Both	All causes	Probability of death	7.08%
Poland	2016 20-55	Both	All causes	Probability of death	7.02%
Antigua and Barbuda	2016 20-55	Both	All causes	Probability of death	7.02%
United States	2016 20-55	Both	All causes	Probability of death	6.99%
Texas	2016 20-55	Both	All causes	Probability of death	6.90%
Montenegro	2016 20-55	Both	All causes	Probability of death	6.88%
Jordan	2016 20-55	Both	All causes	Probability of death	6.83%
North Dakota	2016 20-55	Both	All causes	Probability of death	6.82%
Brunei	2016 20-55	Both	All causes	Probability of death	6.73%
Iran	2016 20-55	Both	All causes	Probability of death	6.71%
Maine	2016 20-55	Both	All causes	Probability of death	6.71%
Panama	2016 20-55	Both	All causes	Probability of death	6.69%
Idaho	2016 20-55	Both	All causes	Probability of death	6.68%
Slovakia	2016 20-55	Both	All causes	Probability of death	6.65%
Maryland	2016 20-55	Both	All causes	Probability of death	6.61%
China	2016 20-55	Both	All causes	Probability of death	6.55%
Macedonia	2016 20-55	Both	All causes	Probability of death	6.54%
Oman	2016 20-55	Both	All causes	Probability of death	6.51%
Utah	2016 20-55	Both	All causes	Probability of death	6.45%
Taiwan	2016 20-55	Both	All causes	Probability of death	6.40%
Rhode Island	2016 20-55	Both	All causes	Probability of death	6.38%
Oregon	2016 20-55	Both	All causes	Probability of death	6.38%
Illinois	2016 20-55	Both	All causes	Probability of death	6.36%
Virginia	2016 20-55	Both	All causes	Probability of death	6.27%
Nebraska	2016 20-55	Both	All causes	Probability of death	6.27%
Wisconsin	2016 20-55	Both	All causes	Probability of death	6.23%
Iowa	2016 20-55	Both	All causes	Probability of death	6.23%
Colorado	2016 20-55	Both	All causes	Probability of death	6.16%
Hawaii	2016 20-55	Both	All causes	Probability of death	6.13%

Colombia	2016 20-55	Both	All causes	Drobability of death	6.11%
Croatia	2016 20-55	Both	All causes	Probability of death Probability of death	6.11%
New Hampshire	2016 20-55	Both	All causes	Probability of death	6.10%
Vermont	2016 20-55	Both	All causes	Probability of death	6.07%
Massachusetts	2016 20-55	Both	All causes	Probability of death	5.85%
Bosnia and Herzegovina	2016 20-55	Both	All causes	Probability of death	5.85%
Algeria	2016 20-55	Both	All causes	Probability of death	5.83%
Washington	2016 20-55	Both	All causes	Probability of death	5.83%
New Jersey	2016 20-55	Both	All causes	Probability of death	5.82%
Tunisia	2016 20-55	Both	All causes	Probability of death	5.81%
Cuba	2016 20-55	Both	All causes	Probability of death	5.75%
Connecticut	2016 20-55	Both	All causes	Probability of death	5.61%
Albania	2016 20-55	Both	All causes	Probability of death	5.56%
New York	2016 20-55	Both	All causes	Probability of death	5.52%
California	2016 20-55	Both	All causes	Probability of death	5.52%
Bermuda	2016 20-55	Both	All causes	Probability of death	5.49%
Costa Rica	2016 20-55	Both	All causes	Probability of death	5.38%
Chile	2016 20-55	Both	All causes	Probability of death	5.28%
Minnesota	2016 20-55	Both	All causes	Probability of death	5.20%
Peru	2016 20-55	Both	All causes	Probability of death	5.09%
Portugal	2016 20-55	Both	All causes	Probability of death	5.08%
South Korea	2016 20-55	Both	All causes	Probability of death	4.99%
Turkey	2016 20-55	Both	All causes	Probability of death	4.97%
Czech Republic	2016 20-55	Both	All causes	Probability of death	4.92%
Saudi Arabia	2016 20-55	Both	All causes	Probability of death	4.92%
Bahrain	2016 20-55	Both	All causes	Probability of death	4.81%
France	2016 20-55	Both	All causes	Probability of death	4.80%
Qatar	2016 20-55	Both	All causes	Probability of death	4.60%
Greece	2016 20-55	Both	All causes	Probability of death	4.54%
Lebanon	2016 20-55	Both	All causes	Probability of death	4.52%
Belgium	2016 20-55	Both	All causes	Probability of death	4.47%
Slovenia	2016 20-55	Both	All causes	Probability of death	4.46%
United Kingdom	2016 20-55	Both	All causes	Probability of death	4.40%
Finland	2016 20-55	Both	All causes	Probability of death	4.35%
Germany	2016 20-55	Both	All causes	Probability of death	4.25%
New Zealand	2016 20-55	Both	All causes	Probability of death	4.22%
Canada	2016 20-55	Both	All causes	Probability of death	4.20%
Denmark	2016 20-55	Both	All causes	Probability of death	4.12%
Ireland	2016 20-55	Both	All causes	Probability of death	4.05%
Cyprus	2016 20-55	Both	All causes	Probability of death	4.03%
Maldives	2016 20-55	Both	All causes	Probability of death	3.96%
Australia	2016 20-55	Both	All causes	Probability of death	3.94%
Austria	2016 20-55	Both	All causes	Probability of death	3.93%
Andorra	2016 20-55	Both	All causes	Probability of death	3.84%
Luxembourg	2016 20-55	Both	All causes	Probability of death	3.75%
Kuwait	2016 20-55	Both	All causes	Probability of death	3.69%
Israel	2016 20-55	Both	All causes	Probability of death	3.62%
Norway	2016 20-55	Both	All causes	Probability of death	3.57%

Spain	2016 20-55	Both	All causes	Probability of death	3.54%
Japan	2016 20-55	Both	All causes	Probability of death	3.51%
Netherlands	2016 20-55	Both	All causes	Probability of death	3.51%
Sweden	2016 20-55	Both	All causes	Probability of death	3.44%
Italy	2016 20-55	Both	All causes	Probability of death	3.42%
Malta	2016 20-55	Both	All causes	Probability of death	3.40%
Iceland	2016 20-55	Both	All causes	Probability of death	3.37%
Switzerland	2016 20-55	Both	All causes	Probability of death	3.05%
Singapore	2016 20-55	Both	All causes	Probability of death	3.05%