

**Supplementary Table 1: The data sources for the prevalence of risk factors.**

<b>Risk factors</b>	<b>Measurement</b>	<b>Link</b>	<b>Year</b>
Smoking	Current smoking of any tobacco product (ASR)	<a href="https://www.who.int/data/gho/indicator-metadata-registry/imr-details/346">https://www.who.int/data/gho/indicator-metadata-registry/imr-details/346</a>	2015
Alcohol	Total (recorded + unrecorded) per capita (15+) consumption	<a href="https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4759">https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4759</a>	2015
UHC	UHC service coverage index	<a href="https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4834">https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4834</a>	2015
High cholesterol	Raised total cholesterol ( $\geq 6.2$ mmol/L, age-standardized)	<a href="https://www.who.int/data/gho/indicator-metadata-registry/imr-details/2383">https://www.who.int/data/gho/indicator-metadata-registry/imr-details/2383</a>	2008*
Physical inactivity	Prevalence of insufficient physical activity (ASR)	<a href="https://www.who.int/data/gho/indicator-metadata-registry/imr-details/2381">https://www.who.int/data/gho/indicator-metadata-registry/imr-details/2381</a>	2016*
GDP	GDP per capita growth (annual %)	<a href="https://databank.worldbank.org/source/world-development-indicators">https://databank.worldbank.org/source/world-development-indicators</a>	2015
Out-of-pocket	Out-of-pocket expenditure (% of current health expenditure)	<a href="https://databank.worldbank.org/source/world-development-indicators">https://databank.worldbank.org/source/world-development-indicators</a>	2015
Unemployment	Unemployment, total (% of the total labor force)	<a href="https://databank.worldbank.org/source/world-development-indicators">https://databank.worldbank.org/source/world-development-indicators</a>	2015
Health expenditure	Current health expenditure (% of GDP)	<a href="https://databank.worldbank.org/source/world-development-indicators">https://databank.worldbank.org/source/world-development-indicators</a>	2015
Health system	Physicians (per 1000 people)	<a href="https://databank.worldbank.org/source/world-development-indicators">https://databank.worldbank.org/source/world-development-indicators</a>	*
Education	Gross enrolment ratio, primary (%)	<a href="https://databank.worldbank.org/source/world-development-indicators">https://databank.worldbank.org/source/world-development-indicators</a>	*

\*Selected year of these factors were between 2010 and 2019 as they were not available for 2015 in some countries. ASR: Age-standardized rates; GDP: Gross national income; UHC: Universal health coverage.

**Supplementary Table 2: Estimated incidence and mortality of CRC in 2020, worldwide, both sexes, all ages.\***

Population	Continent	Incidence			Mortality			HDI in 2019
		New cases	Crude rate (1/10 <sup>5</sup> )	ASR (1/10 <sup>5</sup> )	Deaths	Crude rate (1/10 <sup>5</sup> )	ASR (1/10 <sup>5</sup> )	
Algeria	Africa	6526	14.9	15.3	3613	8.2	8.3	0.748
Angola	Africa	975	3	7.2	670	2	5.2	0.581
Benin	Africa	500	4.1	7.7	362	3	5.7	0.545
Botswana	Africa	81	3.4	4.5	47	2	2.6	0.735
Burkina Faso	Africa	412	2	3.8	324	1.5	3.1	0.452
Burundi	Africa	353	3	6.9	276	2.3	5.6	0.433
Cabo Verde	Africa	41	7.4	8.8	17	3.1	3.5	0.665
Cameroon	Africa	915	3.4	7.1	635	2.4	5.2	0.563
Comoros	Africa	20	2.3	4.5	13	1.5	3	0.554
Republic of Congo	Africa	167	3	6.3	111	2	4.4	0.574
Cyprus	Africa	541	44.8	24.3	268	22.2	10.7	0.887
Djibouti	Africa	58	5.9	6.9	44	4.5	5.3	0.524
Egypt	Africa	5231	5.1	6.1	2852	2.8	3.4	0.707
Equatorial Guinea	Africa	52	3.7	6.9	35	2.5	4.8	0.592
Eritrea	Africa	171	4.8	7.5	132	3.7	5.8	0.459
Eswatini	Africa	30	2.6	4.1	21	1.8	3	0.611
Gabon	Africa	113	5.1	7.3	67	3	4.2	0.703
Ghana	Africa	800	2.6	3.9	539	1.7	2.8	0.611
Guinea	Africa	202	1.5	3.3	154	1.2	2.6	0.477
Guinea-Bissau	Africa	45	2.3	4.7	35	1.8	3.8	0.480
Kenya	Africa	2724	5.1	10.5	1862	3.5	7.5	0.601
Lesotho	Africa	87	4.1	5.3	62	2.9	3.8	0.527
Liberia	Africa	131	2.6	4.9	101	2	3.9	0.480
Libya	Africa	904	13.2	15.7	551	8	10.2	0.724
Madagascar	Africa	923	3.3	6.2	671	2.4	4.7	0.528

Malawi	Africa	513	2.7	4.9	385	2	3.9	0.483
Mali	Africa	881	4.4	9.2	683	3.4	7.5	0.434
Mauritania	Africa	189	4.1	7.2	137	2.9	5.4	0.546
Mauritius	Africa	372	29.3	17.8	169	13.3	7.9	0.804
Morocco	Africa	4558	12.3	11.3	2499	6.8	6.2	0.686
Mozambique	Africa	625	2	4.1	477	1.5	3.2	0.456
Namibia	Africa	132	5.2	8.2	85	3.3	5.8	0.646
Nigeria	Africa	7478	3.6	7.3	5399	2.6	5.5	0.539
Rwanda	Africa	394	3	5.3	284	2.2	4	0.543
Sao Tome and Principe	Africa	8	3.7	7.6	5	2.3	5	0.625
Senegal	Africa	594	3.5	6.7	431	2.6	5.1	0.512
South Africa	Africa	7354	12.4	14.6	3728	6.3	7.5	0.709
Sudan	Africa	1735	4	6.3	1036	2.4	3.9	0.510
United Republic of Tanzania	Africa	2354	3.9	8.5	1671	2.8	6.3	0.529
The Republic of the Gambia	Africa	38	1.6	3.7	29	1.2	3.2	0.496
Togo	Africa	351	4.2	8.2	255	3.1	6.3	0.515
Tunisia	Africa	1865	15.8	12.7	965	8.2	6.4	0.740
Uganda	Africa	1185	2.6	6.7	859	1.9	5	0.544
Zambia	Africa	449	2.4	5.6	311	1.7	4	0.584
Zimbabwe	Africa	651	4.4	8.9	459	3.1	6.4	0.571
Armenia	Asia	1002	33.8	20.1	585	19.7	11.3	0.776
Azerbaijan	Asia	1643	16.2	14.2	991	9.8	8.6	0.756
Bahrain	Asia	147	8.6	13.9	65	3.8	7.1	0.852
Bangladesh	Asia	5664	3.4	3.8	3435	2.1	2.3	0.632
Bhutan	Asia	28	3.6	3.8	18	2.3	2.5	0.654
Brunei Darussalam	Asia	151	34.5	34.9	57	13	14.6	0.838
Cambodia	Asia	1590	9.5	12.3	925	5.5	7.4	0.594
China	Asia	555,477	38.4	23.9	286,162	19.8	12	0.761
Georgia	Asia	1162	29.1	15.6	654	16.4	8.3	0.812

India	Asia	65,358	4.7	4.8	38,161	2.8	2.8	0.645
Indonesia	Asia	34,189	12.5	12.4	18,152	6.6	6.7	0.718
Islamic Republic of Iran	Asia	11,942	14.2	13.9	6220	7.4	7.3	0.783
Iraq	Asia	2096	5.2	8.7	1283	3.2	5.4	0.674
Israel	Asia	2882	33.3	21.9	1385	16	9	0.919
Japan	Asia	148,505	117.4	38.5	59,912	47.4	11.6	0.919
Jordan	Asia	1260	12.3	17.7	668	6.5	9.6	0.729
Kazakhstan	Asia	3337	17.8	15.6	1973	10.5	9.2	0.825
Republic of Korea	Asia	28,941	56.4	27.2	9888	19.3	7.8	0.916
Kuwait	Asia	411	9.6	12.5	188	4.4	6.6	0.806
Kyrgyzstan	Asia	402	6.2	7.8	274	4.2	5.4	0.697
Lao People's Democratic Republic	Asia	779	10.7	15	440	6	8.9	0.613
Lebanon	Asia	906	13.3	12.2	511	7.5	6.7	0.744
Malaysia	Asia	6597	20.4	19.6	3462	10.7	10.2	0.81
Maldives	Asia	48	8.9	13	24	4.4	7.4	0.74
Mongolia	Asia	160	4.9	6.3	100	3.1	4	0.737
Myanmar	Asia	5162	9.5	9.7	3007	5.5	5.8	0.583
Nepal	Asia	1090	3.7	4.3	633	2.2	2.5	0.602
Oman	Asia	385	7.5	9.9	213	4.2	5.7	0.813
Pakistan	Asia	8602	3.9	5.3	4813	2.2	3	0.557
Philippines	Asia	17,364	15.8	18.8	9183	8.4	10.1	0.718
Qatar	Asia	174	6	15.7	80	2.8	9	0.848
Saudi Arabia	Asia	4007	11.5	13.9	1996	5.7	7.3	0.854
Singapore	Asia	3558	60.8	33	1808	30.9	16.2	0.938
Sri Lanka	Asia	2302	10.8	7.8	1122	5.2	3.7	0.782
Syrian Arab Republic	Asia	1761	10.1	12.9	1106	6.3	8.2	0.567
Tajikistan	Asia	291	3.1	4.7	186	2	3.2	0.668
Thailand	Asia	21,103	30.2	16.9	11,464	16.4	8.4	0.777
Timor-Leste	Asia	76	5.8	8.9	42	3.2	5	0.606
Turkey	Asia	21,191	25.1	20.6	10,798	12.8	10.1	0.820

Turkmenistan	Asia	317	5.3	6.2	188	3.1	3.8	0.715
United Arab Emirates	Asia	510	5.2	13.1	218	2.2	6.9	0.890
Uzbekistan	Asia	2522	7.5	8.9	1456	4.4	5.2	0.720
Viet Nam	Asia	16,426	16.9	14.1	8524	8.8	7	0.704
Yemen	Asia	1512	5.1	10.7	1063	3.6	7.7	0.470
Albania	Europe	387	13.4	7.7	212	7.4	3.8	0.795
Austria	Europe	4499	50	21	2299	25.5	8.7	0.922
Belarus	Europe	5516	58.4	30.2	2783	29.5	14.1	0.823
Belgium	Europe	9585	82.7	35.3	3349	28.9	10	0.931
Bosnia and Herzegovina	Europe	1865	56.8	27	1106	33.7	14.5	0.780
Bulgaria	Europe	4648	66.9	27.4	2768	39.8	14.7	0.816
Croatia	Europe	3706	90.3	36.3	2320	56.5	19.6	0.851
Czechia	Europe	8534	79.7	33.7	3443	32.2	12.3	0.900
Denmark	Europe	5769	99.6	40.9	1986	34.3	11.8	0.940
Estonia	Europe	960	72.4	28.3	557	42	13.8	0.892
Ethiopia	Europe	6048	5.3	8.9	4566	4	6.8	0.485
Finland	Europe	3780	68.2	25.7	1489	26.9	8.8	0.938
France	Europe	48,061	73.6	30.1	20,953	32.1	10.4	0.901
Germany	Europe	57,528	68.7	25.8	27,077	32.3	9.9	0.947
Greece	Europe	7895	75.7	26.9	3970	38.1	10.7	0.888
Hungary	Europe	9793	101.4	45.3	4880	50.5	20.2	0.854
Iceland	Europe	194	56.8	28.5	71	20.8	9.5	0.949
Ireland	Europe	3178	64.4	34.9	1282	26	12.4	0.955
Italy	Europe	48,576	80.3	29.3	21,789	36	10.1	0.892
Latvia	Europe	1745	92.5	36.8	681	36.1	12.3	0.866
Lithuania	Europe	1892	69.5	27.6	902	33.1	11.7	0.882
Luxembourg	Europe	330	52.7	26.3	125	20	8.7	0.916
Malta	Europe	289	65.5	25.7	127	28.8	10.1	0.895
Norway	Europe	4976	91.8	41.9	1862	34.3	13.5	0.957
Poland	Europe	25,597	67.6	30.5	15,088	39.9	16.1	0.880
Portugal	Europe	10,501	103	39.4	4320	42.4	13	0.864

Republic of Moldova	Europe	1991	49.4	30	1187	29.4	17.6	0.750
Romania	Europe	12,938	67.3	30.9	6903	35.9	14.8	0.828
Russian Federation	Europe	77,213	52.9	27.8	42,079	28.8	13.9	0.824
Serbia	Europe	5989	68.5	33.6	3356	38.4	16.7	0.806
Sierra Leone	Europe	222	2.8	5	174	2.2	4.1	0.452
Slovakia	Europe	4821	88.3	43.9	2584	47.3	21	0.860
Slovenia	Europe	2018	97.1	39.6	736	35.4	11.7	0.917
Spain	Europe	40,441	86.5	35.8	16,470	35.2	11.5	0.904
Sweden	Europe	6779	67.1	27.8	3160	31.3	10.8	0.945
Switzerland	Europe	4569	52.8	22.3	1861	21.5	7.5	0.955
The Netherlands	Europe	17,015	99.3	41	6579	38.4	13.5	0.944
Ukraine	Europe	21,899	50.1	25.5	11,669	26.7	12.9	0.779
United Kingdom	Europe	52,128	76.8	34.1	21,682	31.9	11.4	0.932
Bahamas	Northern America	73	18.6	16	49	12.5	10.7	0.814
Barbados	Northern America	147	51.2	25.1	101	35.1	16.1	0.814
Belize	Northern America	20	5	6.2	19	4.8	6	0.716
Canada	Northern America	25,510	67.6	31.2	9523	25.2	9.9	0.929
Costa Rica	Northern America	1257	24.7	17.2	726	14.3	9.5	0.810
Cuba	Northern America	4867	43	20.1	3002	26.5	11.3	0.783
Dominican Republic	Northern America	1512	13.9	12.9	924	8.5	7.5	0.756
El Salvador	Northern America	639	9.9	8.5	352	5.4	4.5	0.673
Guatemala	Northern America	769	4.3	5.7	495	2.8	3.6	0.663
Haiti	Northern America	1109	9.7	12.5	773	6.8	8.7	0.510
Honduras	Northern America	609	6.1	8	347	3.5	4.2	0.634
Jamaica	Northern America	796	26.9	21.1	512	17.3	13.4	0.734
Mexico	Northern America	14,901	11.6	10.6	7755	6	5.4	0.779
Montenegro	Northern America	330	52.5	27.4	186	29.6	13.7	0.829
Nicaragua	Northern America	614	9.3	10.5	347	5.2	6	0.660
Panama	Northern America	726	16.8	13.9	398	9.2	7.3	0.815
Saint Lucia	Northern America	35	19.1	12.8	21	11.4	7.4	0.759
Samoa	Northern America	39	19.7	24.8	21	10.6	14.2	0.715

Trinidad and Tobago	Northern America	396	28.3	18.5	246	17.6	11	0.796
United States of America	Northern America	155,008	46.8	25.6	54,443	16.4	8	0.926
Argentina	Southern America	15,895	35.2	25.1	8756	19.4	12.6	0.845
Plurinational State of Bolivia	Southern America	627	5.4	5.7	387	3.3	3.4	0.718
Brazil	Southern America	55,102	25.9	19.4	26,170	12.3	9	0.765
Chile	Southern America	6219	32.5	19.9	3179	16.6	9.4	0.851
Colombia	Southern America	10,783	21.2	16.9	5417	10.6	8.2	0.767
Ecuador	Southern America	2481	14.1	12.9	1283	7.3	6.4	0.759
Guyana	Southern America	71	9	8.5	43	5.5	5	0.682
Paraguay	Southern America	1257	17.6	18.6	650	9.1	9.3	0.728
Peru	Southern America	4636	14.1	11.4	2365	7.2	5.6	0.777
Suriname	Southern America	115	19.6	18.1	73	12.4	11.3	0.738
Uruguay	Southern America	2123	61.1	32	1080	31.1	14.3	0.817
Bolivarian Republic of Venezuela	Southern America	4602	16.2	14.2	2589	9.1	7.8	0.711
Australia	Oceania	16,240	63.7	33.1	5603	22	8.9	0.944
Fiji	Oceania	85	9.5	10.9	49	5.5	6.8	0.743
New Zealand	Oceania	3404	70.6	33.8	1435	29.8	12.3	0.931
North Macedonia	Oceania	948	45.5	26.1	503	24.1	13	0.774
Papua New Guinea	Oceania	596	6.7	11.3	346	3.9	6.9	0.555
Solomon Islands	Oceania	27	3.9	6.7	16	2.3	4.2	0.567
Vanuatu	Oceania	10	3.3	5.2	9	2.9	4.8	0.609

\*Data are all from GLOBOCAN 2020 (<https://gco.iarc.fr/today/home>). ASR: Age-standardized rates; CRC: Colorectal cancer; HDI: Human development index.

**Supplementary Table 3: Joinpoint analysis for CRC, age-standardized incidence in 2000–2019 for both genders, all ages.**

Country	Trend 1			Trend 2			Trend 3			Trend 4			Year	AAPC Range	
	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range			
Antigua and Barbuda	2000-2004	0.09	-1.64 to 1.84	2004-2007	5.00	-0.20 to 10.48	2007-2019	0.99	0.74 to 1.24	NA	NA	NA	2000-2019	1.42	0.61 to 2.24
Argenti	2000-2014	0.22	0.01 to 0.43	2014-2019	1.91	1.00 to 2.82	NA	NA	NA	NA	NA	NA	2000-2019	0.66	0.40 to 0.92
Australia	2000-2009	-0.71	-1.14 to -0.28	2009-2012	-3.21	-7.47 to 1.25	2012-2019	0.19	-0.39 to 0.77	NA	NA	NA	2000-2019	-0.78	-1.46 to -0.09
Austria	2000-2008	-3.53	-3.92 to -3.13	2008-2019	-1.20	-1.46 to -0.94	NA	NA	NA	NA	NA	NA	2000-2019	-2.19	-2.39 to -1.98
Barbados	2000-2004	4.65	3.41 to 5.91	2004-2013	0.63	0.28 to 0.99	2013-2017	-0.10	-1.55 to 1.37	2017-2019	2.65	-0.13 to 5.50	2000-2019	1.52	1.07 to 1.98
Belgium	2000-2019	-0.46	-0.57 to -0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.46	-0.57 to -0.34
Brazil	2000-2003	2.41	1.15 to 3.68	2003-2011	0.87	0.58 to 1.16	2011-2019	0.01	-0.19 to 0.21	NA	NA	NA	2000-2019	0.75	0.53 to 0.97
Cada	2000-2008	0.41	0.01 to 0.80	2008-2013	-1.20	-2.21 to -0.17	2013-2019	0.64	0.11 to 1.16	NA	NA	NA	2000-2019	0.05	-0.27 to 0.38
Chile	2000-2008	1.98	1.46 to 2.50	2008-2013	3.82	2.57 to 5.08	2013-2019	0.54	-0.03 to 1.10	NA	NA	NA	2000-2019	2.00	1.61 to 2.39
Chi	2000-2004	7.76	6.93 to 8.59	2004-2011	4.20	3.87 to 4.53	2011-2016	0.33	-0.18 to 0.84	2016-2019	3.68	2.93 to 4.43	2000-2019	3.82	3.58 to 4.06
Colombia	2000-2019	1.08	0.90 to 1.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.08	0.90 to 1.27
Costa Rica	2000-2019	2.64	2.34 to 2.95	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.64	2.34 to 2.95
Croatia	2000-2010	2.95	2.33 to 3.58	2010-2019	-0.01	-0.64 to 0.64	NA	NA	NA	NA	NA	NA	2000-2019	1.54	1.13 to 1.95
Cuba	2000-2012	1.12	0.71 to 1.53	2012-2019	2.71	1.93 to 3.49	NA	NA	NA	NA	NA	NA	2000-2019	1.70	1.35 to 2.06
Denmark	2000-2009	0.86	0.48 to 1.25	2009-2014	-1.83	-3.04 to -0.61	2014-2019	0.51	-0.35 to 1.39	NA	NA	NA	2000-2019	0.06	-0.34 to 0.45
Ecuador	2000-2006	6.27	4.98 to 7.58	2006-2019	1.56	1.28 to 1.83	NA	NA	NA	NA	NA	NA	2000-2019	3.02	2.62 to 3.43
Estonia	2000-2007	3.20	2.44 to 3.96	2007-2019	0.37	0.08 to 0.67	NA	NA	NA	NA	NA	NA	2000-2019	1.40	1.10 to 1.71
Fiji	2000-2002	-2.81	-5.43 to -0.12	2002-2012	2.34	2.12 to 2.57	2012-2019	1.24	0.98 to 1.50	NA	NA	NA	2000-2019	1.38	1.09 to 1.68
Finland	2000-2019	0.48	0.36 to 0.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.48	0.36 to 0.60
France	2000-2019	-0.44	-0.57 to -0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.44	-0.57 to -0.32
Germany	2000-2003	0.70	-1.11 to 2.54	2003-2008	-2.62	-3.74 to -1.49	2008-2014	-4.05	-4.91 to -3.18	2014-2019	1.35	0.41 to 2.30	2000-2019	-1.53	-2.01 to -1.05
Greece	2000-2019	0.09	-0.03 to 0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.09	-0.03 to 0.21
Greda	2000-2010	1.71	1.44 to 1.97	2010-2014	0.59	-0.85 to 2.05	2014-2017	4.91	2.13 to 7.76	2017-2019	-0.16	-2.64 to	2000-2019	1.77	1.24 to 2.30



												2.38			
Guatemala	2000-2005	3.61	2.82 to 4.40	2005-2008	0.39	-2.48 to 3.35	2008-2011	3.54	0.79 to 6.36	2011-2019	0.20	-0.05 to 0.46	2000-2019	1.64	1.06 to 2.23
Guya	2000-2006	-1.54	-1.91 to -1.16	2006-2009	-0.34	-2.51 to 1.88	2009-2019	1.58	1.42 to 1.73	NA	NA	NA	2000-2019	0.28	-0.06 to 0.62
Hungary	2000-2007	0.64	0.12 to 1.16	2007-2013	-1.00	-1.83 to -0.16	2013-2019	0.51	-0.12 to 1.14	NA	NA	NA	2000-2019	0.08	-0.27 to 0.42
Iceland	2000-2002	1.62	-0.74 to 4.03	2002-2017	-1.22	-1.32 to -1.12	2017-2019	0.71	-1.31 to 2.78	NA	NA	NA	2000-2019	-0.72	-1.02 to -0.42
Israel	2000-2007	-1.14	-1.52 to -0.75	2007-2015	-2.60	-2.96 to -2.23	2015-2019	1.27	0.43 to 2.12	NA	NA	NA	2000-2019	-1.25	-1.50 to -1.01
Italy	2000-2003	2.92	0.66 to 5.24	2003-2019	-1.04	-1.20 to -0.88	NA	NA	NA	NA	NA	NA	2000-2019	-0.42	-0.77 to -0.08
Japan	2000-2014	0.36	0.21 to 0.51	2014-2019	-0.67	-1.37 to 0.02	NA	NA	NA	NA	NA	NA	2000-2019	0.09	-0.11 to 0.28
Kuwait	2000-2004	0.32	-1.59 to 2.27	2004-2008	8.54	5.72 to 11.43	2008-2011	-5.79	-10.00 to -1.38	2011-2019	1.82	1.40 to 2.25	2000-2019	1.62	0.74 to 2.52
Kyrgyzstan	2000-2006	-0.13	-0.67 to 0.42	2006-2009	-2.31	-5.47 to 0.96	2009-2019	0.10	-0.14 to 0.33	NA	NA	NA	2000-2019	-0.36	-0.86 to 0.15
Latvia	2000-2007	3.03	2.24 to 3.84	2007-2019	-0.72	-1.05 to -0.38	NA	NA	NA	NA	NA	NA	2000-2019	0.65	0.32 to 0.98
Lithuania	2000-2008	1.93	1.05 to 2.82	2008-2019	-0.86	-1.39 to -0.33	NA	NA	NA	NA	NA	NA	2000-2019	0.31	-0.13 to 0.75
Luxembourg	2000-2005	0.43	-0.10 to 0.96	2005-2013	-1.99	-2.29 to -1.69	2013-2016	-5.34	-7.51 to -3.13	2016-2019	-0.07	-1.20 to 1.08	2000-2019	-1.60	-1.98 to -1.21
Malta	2000-2002	2.48	0.82 to 4.18	2002-2008	0.19	-0.15 to 0.54	2008-2015	-0.70	-0.94 to -0.46	2015-2019	0.87	0.44 to 1.31	2000-2019	0.24	0.04 to 0.45
Mauritius	2000-2005	3.11	2.00 to 4.24	2005-2012	0.53	-0.18 to 1.23	2012-2019	2.12	1.64 to 2.59	NA	NA	NA	2000-2019	1.79	1.40 to 2.17
Mexico	2000-2011	1.93	1.61 to 2.25	2011-2019	2.75	2.36 to 3.15	NA	NA	NA	NA	NA	NA	2000-2019	2.28	2.05 to 2.51
Netherlands	2000-2003	-0.70	-2.72 to 1.36	2003-2009	2.36	1.50 to 3.23	2009-2019	-0.17	-0.43 to 0.10	NA	NA	NA	2000-2019	0.54	0.14 to 0.94
New Zealand	2000-2014	-0.92	-1.14 to -0.71	2014-2019	1.02	0.09 to 1.97	NA	NA	NA	NA	NA	NA	2000-2019	-0.42	-0.68 to -0.15
Norway	2000-2011	0.82	0.57 to 1.08	2011-2019	-1.69	-2.06 to -1.32	NA	NA	NA	NA	NA	NA	2000-2019	-0.24	-0.44 to -0.05
Pama	2000-2003	2.68	0.46 to 4.94	2003-2007	0.32	-1.64 to 2.32	2007-2019	1.93	1.73 to 2.12	NA	NA	NA	2000-2019	1.70	1.20 to 2.21
Philippines	2000-2006	-0.65	-0.96 to -0.33	2006-2010	2.36	1.50 to 3.23	2010-2013	3.77	2.22 to 5.35	2013-2019	1.27	1.05 to 1.50	2000-2019	1.28	1.00 to 1.56
Poland	2000-2009	1.16	0.93 to 1.38	2009-2019	0.20	0.03 to 0.37	NA	NA	NA	NA	NA	NA	2000-2019	0.65	0.53 to 0.78
Puerto Rico	2000-2008	1.94	1.02 to 2.87	2008-2019	0.09	-0.40 to 0.59	NA	NA	NA	NA	NA	NA	2000-2019	0.87	0.43 to 1.31
Republic of	2000-2004	4.86	4.01 to 5.72	2004-2010	3.08	2.59 to 3.56	2010-2016	-2.41	-2.82 to -2.00	2016-2019	1.24	0.37 to	2000-2019	1.39	1.13 to 1.65

Korea													2.12		
Republic of Moldova	2000-2009	5.56	4.75 to 6.38	2009-2012	-1.18	-8.16 to 6.32	2012-2015	4.39	-2.87 to 12.19	2015-2019	-3.37	-5.46 to -1.23	2000-2019	2.36	0.84 to 3.90
Romania	2000-2019	2.47	2.28 to 2.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.47	2.28 to 2.65
Saint Lucia	2000-2011	-0.24	-0.51 to 0.03	2011-2019	3.05	2.70 to 3.41	NA	NA	NA	NA	NA	NA	2000-2019	1.13	0.94 to 1.33
Serbia	2000-2009	2.95	2.56 to 3.34	2009-2019	0.42	0.13 to 0.71	NA	NA	NA	NA	NA	NA	2000-2019	1.61	1.39 to 1.83
Singapore	2000-2019	-0.85	-0.99 to -0.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.85	-0.99 to -0.71
Slovakia	2000-2004	-2.41	-3.73 to -1.06	2004-2011	3.09	2.39 to 3.80	2011-2019	0.50	0.12 to 0.89	NA	NA	NA	2000-2019	0.82	0.45 to 1.20
Slovenia	2000-2010	0.88	0.47 to 1.30	2010-2014	-3.36	-5.77 to -0.89	2014-2019	0.51	-0.60 to 1.64	NA	NA	NA	2000-2019	-0.12	-0.70 to 0.46
Spain	2000-2011	1.75	1.52 to 1.97	2011-2019	-0.03	-0.35 to 0.28	NA	NA	NA	NA	NA	NA	2000-2019	0.99	0.82 to 1.17
Sweden	2000-2007	0.76	0.30 to 1.23	2007-2014	-1.80	-2.34 to -1.25	2014-2019	0.04	-0.69 to 0.78	NA	NA	NA	2000-2019	-0.38	-0.67 to -0.08
Switzerland	2000-2019	-1.13	-1.21 to -1.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-1.13	-1.21 to -1.04
Trinidad and Tobago	2000-2008	1.51	0.82 to 2.21	2008-2012	-2.33	-5.02 to 0.44	2012-2019	1.14	0.44 to 1.83	NA	NA	NA	2000-2019	0.55	-0.08 to 1.19
United Kingdom	2000-2009	-0.03	-0.29 to 0.23	2009-2012	-1.33	-3.99 to 1.41	2012-2019	0.89	0.54 to 1.25	NA	NA	NA	2000-2019	0.10	-0.32 to 0.52
United States of America	2000-2002	-0.64	-3.01 to 1.78	2002-2006	-2.65	-3.81 to -1.48	2006-2015	-0.28	-0.53 to -0.03	2015-2019	0.34	-0.34 to 1.03	2000-2019	-0.69	-1.04 to -0.34
Uruguay	2000-2019	0.05	-0.10 to 0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.05	-0.10 to 0.20

AAPC: Average annual percent change; CRC: Colorectal cancer;EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 4: Joinpoint analysis for CRC, age-standardized mortality in 2000–2019 for both genders, all ages.**

Country	Trend 1		Trend 2			Trend 3			Trend 4			Year	AAPC Range		
	Year	EAPC Range	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC Range					
Antigua and Barbuda	2000-2004	-0.85	-2.78 to 1.13	2004-2007	3.93	-2.01 to 10.23	2007-2019	0.52	0.23 to 0.81	NA	NA	NA	2000-2019	0.76	-0.17 to 1.70
Argenti	2000-2003	0.61	-0.69 to 1.93	2003-2014	-0.51	-0.70 to -0.32	2014-2017	1.87	-0.47 to 4.26	2017-2019	-0.25	-2.45 to 1.99	2000-2019	0.06	-0.36 to 0.49

Australia	2000-2003	-4.26	-5.98 to -2.52	2003-2014	-1.84	-2.11 to -1.56	2014-2019	0.64	-0.10 to 1.39	NA	NA	NA	2000-2019	-1.58	-1.92 to -1.24
Austria	2000-2008	-4.20	-4.42 to -3.97	2008-2017	-1.98	-2.22 to -1.73	2017-2019	-0.22	-2.50 to 2.12	NA	NA	NA	2000-2019	-2.74	-2.99 to -2.48
Barbados	2000-2004	3.83	2.77 to 4.90	2004-2017	-0.18	-0.35 to -0.02	2017-2019	2.55	0.04 to 5.13	NA	NA	NA	2000-2019	0.94	0.61 to 1.26
Belgium	2000-2008	-2.17	-2.46 to -1.88	2008-2011	0.14	-2.55 to 2.90	2011-2016	-1.68	-2.51 to -0.85	2016-2019	0.60	-0.71 to 1.93	2000-2019	-1.25	-1.71 to -0.78
Brazil	2000-2010	0.42	0.20 to 0.65	2010-2019	-0.49	-0.71 to -0.28	NA	NA	NA	NA	NA	NA	2000-2019	-0.01	-0.16 to 0.13
Cada	2000-2008	-0.66	-0.87 to -0.45	2008-2011	-1.78	-3.52 to -0.00	2011-2017	-0.48	-0.86 to -0.10	2017-2019	1.51	-0.13 to 3.17	2000-2019	-0.56	-0.87 to -0.24
Chile	2000-2008	0.61	0.30 to 0.92	2008-2013	2.11	1.33 to 2.89	2013-2019	-0.11	-0.47 to 0.26	NA	NA	NA	2000-2019	0.77	0.53 to 1.01
Chi	2000-2004	4.90	4.28 to 5.53	2004-2011	0.94	0.67 to 1.21	2011-2016	-1.49	-1.94 to -1.04	2016-2019	1.38	0.70 to 2.06	2000-2019	1.18	0.98 to 1.38
Colombia	2000-2019	-0.09	-0.28 to 0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.09	-0.28 to 0.10
Costa Rica	2000-2019	1.82	1.53 to 2.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.82	1.53 to 2.11
Croatia	2000-2010	1.99	1.44 to 2.54	2010-2019	-0.92	-1.50 to -0.34	NA	NA	NA	NA	NA	NA	2000-2019	0.60	0.23 to 0.96
Cuba	2000-2012	0.27	-0.11 to 0.66	2012-2019	1.97	1.21 to 2.73	NA	NA	NA	NA	NA	NA	2000-2019	0.89	0.55 to 1.24
Denmark	2000-2010	-1.35	-1.46 to -1.24	2010-2014	-2.82	-3.53 to -2.10	2014-2019	-0.09	-0.42 to 0.23	NA	NA	NA	2000-2019	-1.33	-1.50 to -1.17
Ecuador	2000-2006	5.54	4.54 to 6.56	2006-2019	0.73	0.51 to 0.95	NA	NA	NA	NA	NA	NA	2000-2019	2.22	1.91 to 2.54
Estonia	2000-2007	0.88	0.13 to 1.63	2007-2019	-1.19	-1.50 to -0.87	NA	NA	NA	NA	NA	NA	2000-2019	-0.43	-0.74 to -0.12
Fiji	2000-2002	-2.80	-5.38 to -0.15	2002-2012	2.11	1.89 to 2.34	2012-2019	0.90	0.64 to 1.15	NA	NA	NA	2000-2019	1.14	0.85 to 1.43
Finland	2000-2008	-0.88	-1.05 to -0.71	2008-2019	-0.33	-0.43 to -0.23	NA	NA	NA	NA	NA	NA	2000-2019	-0.56	-0.64 to -0.48
France	2000-2002	-0.92	-3.65 to 1.89	2002-2006	-2.79	-4.15 to -1.40	2006-2016	-1.36	-1.62 to -1.11	2016-2019	0.48	-0.89 to 1.86	2000-2019	-1.33	-1.75 to -0.91
Germany	2000-2003	0.38	-1.28 to 2.07	2003-2007	-3.44	-5.05 to -1.81	2007-2014	-5.39	-6.00 to -4.78	2014-2019	0.68	-0.24 to 1.61	2000-2019	-2.51	-2.98 to -2.04
Greece	2000-2010	-1.59	-1.80 to -1.38	2010-2019	0.57	0.32 to 0.83	NA	NA	NA	NA	NA	NA	2000-2019	-0.57	-0.72 to -0.42
Greda	2000-2010	1.45	1.13 to 1.76	2010-2013	-0.61	-4.09 to 2.99	2013-2017	3.74	2.03 to 5.48	2017-2019	-1.21	-4.25 to 1.94	2000-2019	1.31	0.65 to 1.98
Guatemala	2000-2005	2.62	2.03 to 3.22	2005-2008	0.23	-1.99 to 2.51	2008-2013	1.79	1.14 to 2.45	2013-2019	-0.40	-0.71 to -0.10	2000-2019	1.06	0.69 to 1.44
Guya	2000-2008	-1.33	-1.60 to -1.05	2008-2019	1.07	0.91 to 1.22	NA	NA	NA	NA	NA	NA	2000-2019	0.05	-0.08 to 0.19

Hungary	2000-2005	-0.19	-1.16 to 0.80	2005-2019	-0.98	-1.18 to -0.77	NA	NA	NA	NA	NA	NA	2000-2019	-0.77	-1.04 to -0.50
Iceland	2000-2002	-0.14	-2.94 to 2.75	2002-2017	-1.55	-1.67 to -1.42	2017-2019	0.14	-2.37 to 2.72	NA	NA	NA	2000-2019	-1.22	-1.59 to -0.86
Israel	2000-2016	-2.98	-3.08 to -2.88	2016-2019	1.93	0.65 to 3.23	NA	NA	NA	NA	NA	NA	2000-2019	-2.22	-2.41 to -2.02
Italy	2000-2003	-0.36	-1.52 to 0.81	2003-2016	-1.61	-1.74 to -1.47	2016-2019	0.28	-0.89 to 1.47	NA	NA	NA	2000-2019	-1.11	-1.36 to -0.87
Japan	2000-2009	-0.95	-1.13 to -0.76	2009-2012	0.26	-1.72 to 2.27	2012-2019	-0.92	-1.18 to -0.65	NA	NA	NA	2000-2019	-0.75	-1.05 to -0.44
Kuwait	2000-2005	1.31	-0.34 to 2.99	2005-2008	7.61	0.95 to 14.71	2008-2011	-6.73	-11.98 to -1.16	2011-2019	0.40	-0.15 to 0.96	2000-2019	0.57	-0.68 to 1.84
Kyrgyzstan	2000-2006	-0.28	-0.85 to 0.28	2006-2009	-3.10	-6.39 to 0.29	2009-2019	-0.49	-0.74 to -0.23	NA	NA	NA	2000-2019	-0.84	-1.37 to -0.32
Latvia	2000-2007	1.93	1.16 to 2.70	2007-2019	-1.65	-1.98 to -1.31	NA	NA	NA	NA	NA	NA	2000-2019	-0.34	-0.67 to -0.02
Lithuania	2000-2007	1.66	0.78 to 2.56	2007-2019	-1.36	-1.74 to -0.98	NA	NA	NA	NA	NA	NA	2000-2019	-0.26	-0.63 to 0.12
Luxembourg	2000-2006	-1.84	-2.10 to -1.58	2006-2013	-2.80	-3.06 to -2.53	2013-2016	-4.61	-6.13 to -3.07	2016-2019	0.12	-0.66 to 0.91	2000-2019	-2.33	-2.59 to -2.07
Malta	2000-2002	1.03	-0.95 to 3.06	2002-2012	-0.98	-1.15 to -0.82	2012-2015	-1.98	-3.70 to -0.24	2015-2019	-0.26	-0.81 to 0.29	2000-2019	-0.78	-1.10 to -0.45
Mauritius	2000-2005	3.21	1.98 to 4.46	2005-2012	-0.15	-0.93 to 0.64	2012-2017	1.97	0.67 to 3.29	2017-2019	-0.15	-3.79 to 3.63	2000-2019	1.28	0.70 to 1.87
Mexico	2000-2019	1.68	1.55 to 1.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.68	1.55 to 1.81
Netherlands	2000-2003	-3.00	-4.39 to -1.59	2003-2008	1.36	0.47 to 2.26	2008-2019	-0.59	-0.76 to -0.42	NA	NA	NA	2000-2019	-0.46	-0.77 to -0.16
New Zealand	2000-2016	-1.66	-1.83 to -1.50	2016-2019	1.18	-0.88 to 3.29	NA	NA	NA	NA	NA	NA	2000-2019	-1.22	-1.54 to -0.90
Norway	2000-2012	-0.70	-0.88 to -0.51	2012-2019	-1.77	-2.16 to -1.39	NA	NA	NA	NA	NA	NA	2000-2019	-1.10	-1.26 to -0.93
Pama	2000-2003	2.83	1.58 to 4.10	2003-2007	0.35	-0.75 to 1.46	2007-2014	1.47	1.13 to 1.80	2014-2019	-0.21	-0.58 to 0.17	2000-2019	1.00	0.70 to 1.30
Philippines	2000-2004	-1.02	-1.56 to -0.47	2004-2007	0.42	-1.22 to 2.08	2007-2015	2.34	2.15 to 2.54	2015-2019	0.61	0.23 to 0.99	2000-2019	0.96	0.69 to 1.23
Poland	2000-2019	-0.23	-0.31 to -0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.23	-0.31 to -0.15
Puerto Rico	2000-2019	-0.34	-0.57 to -0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.34	-0.57 to -0.11
Republic of Korea	2000-2010	0.62	0.50 to 0.74	2010-2016	-3.00	-3.28 to -2.72	2016-2019	0.62	0.01 to 1.23	NA	NA	NA	2000-2019	-0.54	-0.67 to -0.41
Republic of	2000-2009	5.04	4.36 to 5.72	2009-2012	-2.05	-7.96 to 4.24	2012-2015	2.93	-3.30 to 9.56	2015-2019	-4.26	-6.09 to	2000-2019	1.55	0.26 to 2.86



Barbados	2000-2005	4.62	3.27 to 6.00	2005-2010	-1.07	-2.67 to 0.56	2010-2017	0.41	-0.40 to 1.22	2017-2019	5.07	0.71 to 9.62	2000-2019	1.59	0.91 to 2.27
Belgium	2000-2019	-0.49	-0.61 to -0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.49	-0.61 to -0.36
Brazil	2000-2003	2.82	1.23 to 4.43	2003-2011	1.25	0.89 to 1.62	2011-2019	0.28	0.03 to 0.52	NA	NA	NA	2000-2019	1.09	0.81 to 1.36
Cada	2000-2008	0.68	0.20 to 1.16	2008-2011	-2.38	-6.17 to 1.56	2011-2019	0.21	-0.20 to 0.61	NA	NA	NA	2000-2019	-0.01	-0.62 to 0.60
Chile	2000-2007	2.33	1.45 to 3.21	2007-2014	3.75	2.86 to 4.65	2014-2019	0.24	-0.72 to 1.20	NA	NA	NA	2000-2019	2.29	1.82 to 2.77
Chi	2000-2004	9.16	8.08 to 10.26	2004-2011	5.06	4.65 to 5.49	2011-2016	0.81	0.19 to 1.44	2016-2019	3.62	2.71 to 4.53	2000-2019	4.54	4.24 to 4.84
Colombia	2000-2019	1.28	0.93 to 1.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.28	0.93 to 1.63
Costa Rica	2000-2019	3.40	3.05 to 3.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	3.40	3.05 to 3.74
Croatia	2000-2008	3.66	2.83 to 4.50	2008-2019	0.20	-0.23 to 0.63	NA	NA	NA	NA	NA	NA	2000-2019	1.64	1.25 to 2.04
Cuba	2000-2012	1.25	0.75 to 1.75	2012-2019	3.70	2.76 to 4.64	NA	NA	NA	NA	NA	NA	2000-2019	2.15	1.72 to 2.58
Denmark	2000-2007	1.36	0.51 to 2.21	2007-2015	-1.19	-1.95 to -0.43	2015-2019	0.62	-1.13 to 2.41	NA	NA	NA	2000-2019	0.12	-0.40 to 0.65
Ecuador	2000-2006	6.33	5.25 to 7.42	2006-2019	1.66	1.43 to 1.89	NA	NA	NA	NA	NA	NA	2000-2019	3.11	2.77 to 3.45
Estonia	2000-2008	3.91	2.99 to 4.84	2008-2019	-0.68	-1.17 to -0.19	NA	NA	NA	NA	NA	NA	2000-2019	1.23	0.79 to 1.67
Fiji	2000-2002	-2.37	-7.12 to 2.63	2002-2019	1.94	1.79 to 2.08	NA	NA	NA	NA	NA	NA	2000-2019	1.47	0.97 to 1.98
Finland	2000-2008	1.13	0.73 to 1.54	2008-2019	0.24	0.03 to 0.46	NA	NA	NA	NA	NA	NA	2000-2019	0.62	0.42 to 0.81
France	2000-2019	-0.58	-0.70 to -0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.58	-0.70 to -0.46
Germany	2000-2003	0.89	-1.01 to 2.83	2003-2008	-1.80	-2.95 to -0.64	2008-2014	-4.02	-4.87 to -3.16	2014-2019	1.07	0.15 to 1.99	2000-2019	-1.35	-1.83 to -0.86
Greece	2000-2019	0.46	0.33 to 0.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.46	0.33 to 0.59
Greda	2000-2010	1.30	0.77 to 1.83	2010-2013	-5.31	-11.02 to 0.77	2013-2017	4.81	1.91 to 7.80	2017-2019	-0.10	-5.05 to 5.10	2000-2019	0.80	-0.33 to 1.94
Guatemala	2000-2012	2.52	2.15 to 2.90	2012-2019	-0.10	-0.74 to 0.53	NA	NA	NA	NA	NA	NA	2000-2019	1.55	1.24 to 1.86
Guya	2000-2007	-1.81	-2.09 to -1.52	2007-2019	1.65	1.54 to 1.77	NA	NA	NA	NA	NA	NA	2000-2019	0.36	0.24 to 0.48
Hungary	2000-2005	1.28	0.16 to 2.41	2005-2019	-0.08	-0.30 to 0.13	NA	NA	NA	NA	NA	NA	2000-2019	0.27	-0.03 to 0.58
Iceland	2000-2009	0.91	0.40 to 1.43	2009-2019	-0.74	-1.11 to -0.36	NA	NA	NA	NA	NA	NA	2000-2019	0.04	-0.25 to 0.33
Israel	2000-2008	-0.92	-1.41 to -0.43	2008-2014	-2.73	-3.66 to -1.80	2014-2019	0.47	-0.43 to 1.37	NA	NA	NA	2000-2019	-1.14	-1.52 to -0.75
Italy	2000-2003	2.97	1.42 to 4.53	2003-2008	-0.48	-1.38 to 0.43	2008-2014	-1.80	-2.42 to -1.17	2014-2019	-0.49	-1.12 to	2000-2019	-0.37	-0.74 to 0.00

												0.14			
Japan	2000-2008	-0.01	-0.32 to 0.29	2008-2012	1.09	-0.24 to 2.43	2012-2019	-0.60	-0.94 to -0.25	NA	NA	NA	2000-2019	0.00	-0.30 to 0.30
Kuwait	2000-2003	-0.72	-6.00 to 4.85	2003-2008	9.23	6.02 to 12.54	2008-2011	-5.50	-12.74 to 2.34	2011-2019	3.58	2.85 to 4.31	2000-2019	2.83	1.29 to 4.40
Kyrgyzstan	2000-2007	-0.66	-1.14 to -0.17	2007-2010	-3.18	-6.76 to 0.54	2010-2013	1.92	-1.80 to 5.78	2013-2019	0.05	-0.51 to 0.62	2000-2019	-0.43	-1.18 to 0.32
Latvia	2000-2007	3.75	2.53 to 4.98	2007-2019	-1.09	-1.58 to -0.58	NA	NA	NA	NA	NA	NA	2000-2019	0.67	0.17 to 1.17
Lithuania	2000-2007	2.56	1.37 to 3.75	2007-2015	0.00	-1.10 to 1.11	2015-2019	-2.79	-5.32 to -0.19	NA	NA	NA	2000-2019	0.33	-0.42 to 1.10
Luxembourg	2000-2004	1.97	1.07 to 2.87	2004-2013	-2.77	-3.06 to -2.49	2013-2016	-4.24	-6.79 to -1.62	2016-2019	-0.01	-1.31 to 1.31	2000-2019	-1.59	-2.04 to -1.14
Malta	2000-2009	1.32	1.02 to 1.62	2009-2016	-0.89	-1.37 to -0.42	2016-2019	0.83	-0.53 to 2.21	NA	NA	NA	2000-2019	0.42	0.14 to 0.70
Mauritius	2000-2004	4.27	1.97 to 6.62	2004-2019	1.09	0.86 to 1.32	NA	NA	NA	NA	NA	NA	2000-2019	1.75	1.28 to 2.22
Mexico	2000-2012	2.59	2.25 to 2.92	2012-2019	3.51	2.96 to 4.06	NA	NA	NA	NA	NA	NA	2000-2019	2.93	2.66 to 3.19
Netherlands	2000-2003	-1.25	-3.16 to 0.69	2003-2009	2.68	1.87 to 3.51	2009-2019	-0.45	-0.70 to -0.20	NA	NA	NA	2000-2019	0.40	0.02 to 0.78
New Zealand	2000-2015	-0.67	-0.86 to -0.48	2015-2019	1.74	0.47 to 3.03	NA	NA	NA	NA	NA	NA	2000-2019	-0.17	-0.45 to 0.11
Norway	2000-2012	0.76	0.48 to 1.05	2012-2019	-2.33	-2.90 to -1.76	NA	NA	NA	NA	NA	NA	2000-2019	-0.39	-0.65 to -0.13
Pama	2000-2019	1.84	1.71 to 1.98	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.84	1.71 to 1.98
Philippines	2000-2007	-0.18	-0.51 to 0.14	2007-2014	3.37	3.01 to 3.73	2014-2019	1.09	0.70 to 1.48	NA	NA	NA	2000-2019	1.45	1.27 to 1.63
Poland	2000-2008	1.81	1.51 to 2.10	2008-2019	0.33	0.18 to 0.49	NA	NA	NA	NA	NA	NA	2000-2019	0.95	0.81 to 1.09
Puerto Rico	2000-2009	2.13	1.46 to 2.80	2009-2019	-0.05	-0.54 to 0.45	NA	NA	NA	NA	NA	NA	2000-2019	0.98	0.60 to 1.35
Republic of Korea	2000-2004	5.84	4.88 to 6.81	2004-2010	3.55	3.03 to 4.07	2010-2016	-2.80	-3.22 to -2.37	2016-2019	0.19	-0.71 to 1.10	2000-2019	1.44	1.16 to 1.72
Republic of Moldova	2000-2009	6.10	5.21 to 7.00	2009-2012	-0.81	-8.23 to 7.21	2012-2015	5.72	-2.04 to 14.10	2015-2019	-2.99	-5.16 to -0.76	2000-2019	2.96	1.34 to 4.61
Romania	2000-2019	3.00	2.76 to 3.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	3.00	2.76 to 3.23
Saint Lucia	2000-2011	0.14	-0.18 to 0.46	2011-2019	3.05	2.63 to 3.47	NA	NA	NA	NA	NA	NA	2000-2019	1.35	1.12 to 1.59
Serbia	2000-2008	3.55	3.17 to 3.93	2008-2015	1.39	0.88 to 1.89	2015-2019	-0.55	-1.44 to 0.34	NA	NA	NA	2000-2019	1.88	1.60 to 2.16
Singapore	2000-2002	1.29	-3.65 to 6.47	2002-2006	-2.10	-4.41 to 0.26	2006-2009	1.28	-3.06 to 5.82	2009-2019	-1.44	-1.73 to -1.16	2000-2019	-0.87	-1.74 to 0.00

Slovakia	2000-2004	-2.78	-4.28 to -1.25	2004-2011	3.35	2.55 to 4.16	2011-2019	-0.03	-0.46 to 0.40	NA	NA	NA	2000-2019	0.61	0.19 to 1.04
Slovenia	2000-2008	1.02	-0.19 to 2.24	2008-2019	-1.16	-1.82 to -0.50	NA	NA	NA	NA	NA	NA	2000-2019	-0.25	-0.83 to 0.34
Spain	2000-2011	2.11	1.90 to 2.32	2011-2019	-0.22	-0.51 to 0.06	NA	NA	NA	NA	NA	NA	2000-2019	1.12	0.96 to 1.28
Sweden	2000-2004	1.78	0.92 to 2.65	2004-2009	-0.50	-1.29 to 0.30	2009-2013	-2.64	-3.86 to -1.40	2013-2019	-0.19	-0.62 to 0.23	2000-2019	-0.38	-0.73 to -0.03
Switzerland	2000-2009	-0.97	-1.22 to -0.72	2009-2016	-2.01	-2.45 to -1.57	2016-2019	-0.63	-1.93 to 0.68	NA	NA	NA	2000-2019	-1.30	-1.56 to -1.05
Trinidad and Tobago	2000-2008	2.05	0.94 to 3.17	2008-2012	-3.38	-7.55 to 0.98	2012-2019	1.37	0.27 to 2.49	NA	NA	NA	2000-2019	0.63	-0.37 to 1.65
United Kingdom	2000-2009	-0.07	-0.35 to 0.21	2009-2012	-1.86	-4.73 to 1.11	2012-2019	0.77	0.39 to 1.16	NA	NA	NA	2000-2019	-0.04	-0.50 to 0.41
United States of America	2000-2002	-0.75	-3.45 to 2.03	2002-2006	-2.85	-4.17 to -1.50	2006-2015	-0.21	-0.50 to 0.07	2015-2019	0.61	-0.16 to 1.38	2000-2019	-0.66	-1.05 to -0.26
Uruguay	2000-2011	0.65	0.25 to 1.06	2011-2016	-1.27	-3.04 to 0.53	2016-2019	2.27	-0.52 to 5.14	NA	NA	NA	2000-2019	0.39	-0.22 to 1.02

AAPC: Average annual percent change; CRC: Colorectal cancer;EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 6: Joinpoint analysis for CRC, age-standardized mortality in 2000–2019 for males, all ages.**

Country	Year	Trend 1		Year	Trend 2		Year	Trend 3		Year	Trend 4		Year	AAPC	Range
		EAPC	Range		EAPC	Range		EAPC	Range		EAPC	Range			
Antigua and Barbuda	2000-2005	-0.26	-1.14 to 0.62	2005-2008	10.06	6.34 to 13.92	2008-2011	-5.55	-8.60 to -2.40	2011-2019	0.05	-0.28 to 0.38	2000-2019	0.56	-0.13 to 1.26
Argentina	2000-2003	1.04	-0.96 to 3.08	2003-2014	-0.48	-0.77 to -0.19	2014-2019	1.04	0.26 to 1.83	NA	NA	NA	2000-2019	0.16	-0.22 to 0.53
Australia	2000-2003	-5.61	-7.24 to -3.96	2003-2008	-0.82	-1.90 to 0.28	2008-2013	-2.58	-3.61 to -1.54	2013-2019	0.38	-0.15 to 0.93	2000-2019	-1.68	-2.12 to -1.24
Austria	2000-2003	-3.59	-4.55 to -2.62	2003-2007	-4.87	-5.86 to -3.87	2007-2013	-2.77	-3.24 to -2.30	2013-2019	-1.31	-1.67 to -0.95	2000-2019	-2.89	-3.17 to -2.61
Barbados	2000-2005	4.28	2.96 to 5.62	2005-2011	-2.14	-3.26 to -1.00	2011-2017	0.46	-0.62 to 1.55	2017-2019	4.94	0.50 to 9.58	2000-2019	1.08	0.42 to 1.74
Belgium	2000-2008	-2.14	-2.43 to -1.84	2008-2012	-0.11	-1.48 to 1.28	2012-2016	-2.23	-3.55 to -0.90	2016-2019	0.59	-0.74 to	2000-2019	-1.31	-1.71 to -0.90



												1.94			
Brazil	2000-2010	0.84	0.57 to 1.11	2010-2019	-0.22	-0.48 to 0.03	NA	NA	NA	NA	NA	NA	2000-2019	0.33	0.16 to 0.51
Cada	2000-2008	-0.58	-0.80 to -0.37	2008-2011	-2.22	-4.04 to -0.38	2011-2017	-0.72	-1.12 to -0.32	2017-2019	1.78	0.07 to 3.51	2000-2019	-0.64	-0.97 to -0.32
Chile	2000-2004	1.97	0.66 to 3.31	2004-2007	0.09	-3.62 to 3.93	2007-2014	2.28	1.70 to 2.86	2014-2019	-0.40	-1.04 to 0.25	2000-2019	1.16	0.54 to 1.78
Chi	2000-2004	6.19	5.29 to 7.09	2004-2011	1.77	1.40 to 2.14	2011-2016	-1.05	-1.66 to -0.45	2016-2019	1.28	0.37 to 2.20	2000-2019	1.85	1.57 to 2.12
Colombia	2000-2019	0.13	-0.22 to 0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.13	-0.22 to 0.48
Costa Rica	2000-2019	2.50	2.17 to 2.84	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.50	2.17 to 2.84
Croatia	2000-2008	2.75	2.00 to 3.52	2008-2019	-0.74	-1.15 to -0.34	NA	NA	NA	NA	NA	NA	2000-2019	0.71	0.35 to 1.08
Cuba	2000-2011	0.27	-0.22 to 0.75	2011-2019	2.72	2.03 to 3.40	NA	NA	NA	NA	NA	NA	2000-2019	1.29	0.92 to 1.66
Denmark	2000-2002	0.20	-2.26 to 2.72	2002-2009	-1.57	-1.98 to -1.17	2009-2015	-2.31	-2.83 to -1.78	2015-2019	0.28	-0.48 to 1.03	2000-2019	-1.23	-1.56 to -0.91
Ecuador	2000-2006	5.77	5.12 to 6.41	2006-2019	0.85	0.71 to 0.99	NA	NA	NA	NA	NA	NA	2000-2019	2.38	2.17 to 2.58
Estonia	2000-2007	1.88	0.99 to 2.78	2007-2019	-1.78	-2.14 to -1.41	NA	NA	NA	NA	NA	NA	2000-2019	-0.45	-0.81 to -0.08
Fiji	2000-2002	-2.23	-7.07 to 2.86	2002-2019	1.65	1.50 to 1.80	NA	NA	NA	NA	NA	NA	2000-2019	1.23	0.72 to 1.75
Finland	2000-2012	-0.65	-0.72 to -0.57	2012-2019	-0.27	-0.43 to -0.12	NA	NA	NA	NA	NA	NA	2000-2019	-0.51	-0.58 to -0.44
France	2000-2002	-1.27	-4.35 to 1.91	2002-2006	-3.01	-4.55 to -1.45	2006-2016	-1.39	-1.67 to -1.10	2016-2019	0.11	-1.42 to 1.66	2000-2019	-1.49	-1.96 to -1.01
Germany	2000-2002	1.46	-1.97 to 5.00	2002-2007	-2.26	-3.29 to -1.22	2007-2014	-5.28	-5.86 to -4.69	2014-2019	0.34	-0.52 to 1.21	2000-2019	-2.33	-2.80 to -1.86
Greece	2000-2010	-0.83	-1.01 to -0.66	2010-2019	0.82	0.61 to 1.02	NA	NA	NA	NA	NA	NA	2000-2019	-0.05	-0.18 to 0.07
Greda	2000-2010	1.09	0.58 to 1.61	2010-2013	-7.11	-12.79 to -1.06	2013-2017	4.61	1.66 to 7.65	2017-2019	-1.47	-6.44 to 3.77	2000-2019	0.20	-0.93 to 1.35
Guatemala	2000-2002	4.35	-1.24 to 10.26	2002-2014	1.45	1.15 to 1.75	2014-2019	-0.74	-1.54 to 0.07	NA	NA	NA	2000-2019	1.17	0.58 to 1.76
Guya	2000-2007	-1.64	-1.96 to -1.31	2007-2019	1.21	1.08 to 1.34	NA	NA	NA	NA	NA	NA	2000-2019	0.15	0.02 to 0.28
Hungary	2000-2005	0.40	-0.50 to 1.31	2005-2019	-0.74	-0.92 to -0.56	NA	NA	NA	NA	NA	NA	2000-2019	-0.44	-0.69 to -0.19
Iceland	2000-2012	0.00	-0.25 to 0.24	2012-2015	-3.34	-7.01 to 0.47	2015-2019	0.11	-1.05 to 1.29	NA	NA	NA	2000-2019	-0.51	-1.12 to 0.10
Israel	2000-2016	-2.77	-2.88 to -2.67	2016-2019	1.49	0.16 to 2.84	NA	NA	NA	NA	NA	NA	2000-2019	-2.11	-2.32 to -1.91

Italy	2000-2003	0.25	-0.88 to 1.40	2003-2016	-1.70	-1.83 to -1.57	2016-2019	-0.03	-1.14 to 1.09	NA	NA	NA	2000-2019	-1.13	-1.37 to -0.89
Japan	2000-2009	-1.03	-1.21 to -0.85	2009-2012	0.13	-1.78 to 2.07	2012-2019	-1.10	-1.36 to -0.85	NA	NA	NA	2000-2019	-0.88	-1.17 to -0.58
Kuwait	2000-2003	-0.09	-4.81 to 4.86	2003-2008	7.06	4.25 to 9.95	2008-2011	-6.60	-13.25 to 0.55	2011-2019	2.21	1.52 to 2.91	2000-2019	1.64	0.25 to 3.04
Kyrgyzstan	2000-2007	-0.94	-1.39 to -0.49	2007-2010	-4.08	-7.41 to -0.64	2010-2015	0.77	-0.33 to 1.88	2015-2019	-0.87	-1.88 to 0.14	2000-2019	-0.98	-1.57 to -0.40
Latvia	2000-2007	2.79	1.62 to 3.97	2007-2019	-2.00	-2.49 to -1.50	NA	NA	NA	NA	NA	NA	2000-2019	-0.26	-0.74 to 0.22
Lithuania	2000-2007	2.31	1.02 to 3.63	2007-2019	-1.32	-1.87 to -0.77	NA	NA	NA	NA	NA	NA	2000-2019	0.00	-0.53 to 0.54
Luxembourg	2000-2004	-0.83	-1.52 to -0.13	2004-2013	-3.40	-3.64 to -3.17	2013-2016	-4.29	-6.43 to -2.11	2016-2019	0.19	-0.90 to 1.29	2000-2019	-2.45	-2.82 to -2.08
Malta	2000-2002	1.77	-1.08 to 4.70	2002-2012	-0.10	-0.33 to 0.14	2012-2015	-3.33	-5.58 to -1.04	2015-2019	-0.52	-1.25 to 0.22	2000-2019	-0.51	-0.95 to -0.06
Mauritius	2000-2004	4.42	2.06 to 6.83	2004-2019	0.50	0.26 to 0.74	NA	NA	NA	NA	NA	NA	2000-2019	1.31	0.83 to 1.80
Mexico	2000-2019	2.29	2.14 to 2.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.29	2.14 to 2.44
Netherlands	2000-2003	-3.45	-4.85 to -2.04	2003-2008	1.63	0.74 to 2.53	2008-2019	-0.89	-1.06 to -0.72	NA	NA	NA	2000-2019	-0.64	-0.95 to -0.34
New Zealand	2000-2017	-1.57	-1.73 to -1.40	2017-2019	3.11	-1.26 to 7.66	NA	NA	NA	NA	NA	NA	2000-2019	-1.09	-1.52 to -0.65
Norway	2000-2005	-1.39	-2.15 to -0.62	2005-2012	-0.44	-1.00 to 0.12	2012-2019	-2.28	-2.69 to -1.86	NA	NA	NA	2000-2019	-1.37	-1.66 to -1.07
Pama	2000-2014	1.45	1.23 to 1.68	2014-2019	-0.15	-0.97 to 0.68	NA	NA	NA	NA	NA	NA	2000-2019	1.03	0.78 to 1.28
Philippines	2000-2004	-0.65	-1.29 to -0.01	2004-2007	0.51	-1.41 to 2.47	2007-2015	2.64	2.41 to 2.87	2015-2019	0.50	0.05 to 0.95	2000-2019	1.15	0.84 to 1.47
Poland	2000-2007	0.90	0.55 to 1.26	2007-2019	-0.28	-0.41 to -0.14	NA	NA	NA	NA	NA	NA	2000-2019	0.16	0.01 to 0.30
Puerto Rico	2000-2009	0.56	-0.08 to 1.20	2009-2019	-0.86	-1.36 to -0.36	NA	NA	NA	NA	NA	NA	2000-2019	-0.19	-0.56 to 0.18
Republic of Korea	2000-2008	1.33	1.11 to 1.55	2008-2011	-0.25	-1.91 to 1.44	2011-2016	-3.90	-4.38 to -3.41	2016-2019	-0.20	-0.94 to 0.56	2000-2019	-0.56	-0.85 to -0.27
Republic of Moldova	2000-2008	5.56	4.07 to 7.08	2008-2016	1.25	-0.21 to 2.73	2016-2019	-4.66	-9.68 to 0.65	NA	NA	NA	2000-2019	2.07	0.97 to 3.19
Romania	2000-2019	2.01	1.80 to 2.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.01	1.80 to 2.22
Saint Lucia	2000-2011	-0.69	-1.13 to -0.25	2011-2019	2.98	2.40 to 3.57	NA	NA	NA	NA	NA	NA	2000-2019	0.84	0.51 to 1.16
Serbia	2000-2007	2.51	1.93 to 3.10	2007-2019	-0.12	-0.35 to 0.11	NA	NA	NA	NA	NA	NA	2000-2019	0.84	0.61 to 1.08

Singapore	2000-2006	-3.20	-3.72 to -2.68	2006-2010	-1.66	-3.12 to -0.18	2010-2016	-2.78	-3.37 to -2.19	2016-2019	-0.84	-2.06 to 0.39	2000-2019	-2.38	-2.76 to -2.00
Slovakia	2000-2004	-3.57	-4.82 to -2.30	2004-2012	1.65	1.11 to 2.19	2012-2019	-1.28	-1.74 to -0.81	NA	NA	NA	2000-2019	-0.55	-0.90 to -0.19
Slovenia	2000-2003	1.47	-3.78 to 7.01	2003-2019	-1.92	-2.29 to -1.54	NA	NA	NA	NA	NA	NA	2000-2019	-1.39	-2.20 to -0.57
Spain	2000-2012	0.63	0.52 to 0.75	2012-2019	-0.77	-1.00 to -0.53	NA	NA	NA	NA	NA	NA	2000-2019	0.11	0.01 to 0.22
Sweden	2000-2004	0.62	0.17 to 1.08	2004-2008	-0.84	-1.51 to -0.16	2008-2014	-2.51	-2.81 to -2.21	2014-2019	-0.36	-0.67 to -0.06	2000-2019	-0.94	-1.12 to -0.76
Switzerland	2000-2002	-2.73	-4.57 to -0.87	2002-2017	-1.79	-1.88 to -1.71	2017-2019	-0.61	-2.39 to 1.21	NA	NA	NA	2000-2019	-1.77	-2.02 to -1.52
Trinidad and Tobago	2000-2008	0.97	-0.15 to 2.11	2008-2012	-3.62	-7.99 to 0.95	2012-2019	1.06	-0.10 to 2.23	NA	NA	NA	2000-2019	0.02	-1.02 to 1.07
United Kingdom	2000-2012	-1.84	-1.95 to -1.72	2012-2017	-0.31	-0.92 to 0.30	2017-2019	1.57	-0.30 to 3.49	NA	NA	NA	2000-2019	-1.08	-1.32 to -0.85
United States of America	2000-2002	-1.37	-3.02 to 0.31	2002-2006	-2.95	-3.77 to -2.13	2006-2014	-0.91	-1.12 to -0.69	2014-2019	0.69	0.35 to 1.04	2000-2019	-0.97	-1.21 to -0.73
Uruguay	2000-2011	-0.01	-0.30 to 0.29	2011-2016	-1.48	-2.80 to -0.13	2016-2019	1.48	-0.62 to 3.62	NA	NA	NA	2000-2019	-0.16	-0.63 to 0.30

AAPC: Average annual percent change; CRC: Colorectal cancer;EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 7: Joinpoint analysis for CRC, age-standardized incidence in 2000–2019 for females, all ages.**

Country	Trend 1			Trend 2			Trend 3			Trend 4			Year	AAPC	Range
	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range			
Antigua and Barbuda	2000-2005	1.01	0.66 to 1.36	2005-2010	2.19	1.75 to 2.63	2010-2016	2.64	2.37 to 2.91	2016-2019	0.51	-0.02 to 1.04	2000-2019	1.75	1.59 to 1.92
Argenti	2000-2014	0.20	0.00 to 0.40	2014-2019	2.12	1.27 to 2.98	NA	NA	NA	NA	NA	NA	2000-2019	0.70	0.46 to 0.95
Australia	2000-2009	-1.11	-1.49 to -0.72	2009-2012	-3.12	-7.04 to 0.97	2012-2019	0.30	-0.23 to 0.83	NA	NA	NA	2000-2019	-0.91	-1.54 to -0.28
Austria	2000-2006	-3.81	-4.55 to -3.06	2006-2019	-1.35	-1.60 to -1.10	NA	NA	NA	NA	NA	NA	2000-2019	-2.14	-2.41 to -1.87
Barbados	2000-2003	5.51	3.62 to 7.43	2003-2007	0.81	-0.82 to 2.45	2007-2010	2.92	-0.16 to 6.09	2010-2019	0.00	-0.25 to 0.24	2000-2019	1.48	0.90 to 2.06
Belgium	2000-2019	-0.54	-0.67 to -0.41	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.54	-0.67 to -0.41
Brazil	2000-2003	2.05	1.01 to 3.11	2003-2011	0.52	0.28 to 0.76	2011-2019	-0.25	-0.42 to -0.08	NA	NA	NA	2000-2019	0.44	0.25 to 0.62
Cada	2000-2003	0.97	-0.81 to 2.77	2003-2014	-0.42	-0.67 to -0.17	2014-2019	0.78	0.12 to 1.44	NA	NA	NA	2000-2019	0.11	-0.21 to 0.44

Chile	2000-2008	1.59	1.10 to 2.09	2008-2013	3.33	2.12 to 4.55	2013-2019	0.38	-0.17 to 0.93	NA	NA	NA	2000-2019	1.66	1.29 to 2.04
Chi	2000-2004	5.43	4.74 to 6.12	2004-2010	3.19	2.80 to 3.59	2010-2016	-0.10	-0.43 to 0.24	2016-2019	3.68	2.98 to 4.37	2000-2019	2.68	2.47 to 2.89
Colombia	2000-2013	0.66	0.46 to 0.86	2013-2019	1.53	1.01 to 2.05	NA	NA	NA	NA	NA	NA	2000-2019	0.93	0.74 to 1.13
Costa Rica	2000-2019	1.90	1.58 to 2.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.90	1.58 to 2.23
Croatia	2000-2015	2.08	1.75 to 2.42	2015-2019	-2.87	-5.05 to -0.64	NA	NA	NA	NA	NA	NA	2000-2019	1.02	0.52 to 1.53
Cuba	2000-2008	1.47	0.81 to 2.13	2008-2011	-0.28	-5.46 to 5.19	2011-2019	2.08	1.54 to 2.63	NA	NA	NA	2000-2019	1.45	0.62 to 2.28
Denmark	2000-2010	0.54	0.29 to 0.80	2010-2014	-2.31	-3.83 to -0.77	2014-2019	0.63	-0.07 to 1.33	NA	NA	NA	2000-2019	-0.04	-0.40 to 0.32
Ecuador	2000-2007	5.48	4.09 to 6.89	2007-2019	1.30	0.88 to 1.73	NA	NA	NA	NA	NA	NA	2000-2019	2.82	2.30 to 3.35
Estonia	2000-2019	1.36	1.17 to 1.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.36	1.17 to 1.55
Fiji	2000-2004	-0.31	-1.42 to 0.81	2004-2011	3.13	2.59 to 3.67	2011-2019	0.78	0.50 to 1.06	NA	NA	NA	2000-2019	1.41	1.11 to 1.70
Finland	2000-2019	0.25	0.10 to 0.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.25	0.10 to 0.39
France	2000-2003	1.35	-0.49 to 3.22	2003-2019	-0.49	-0.62 to -0.35	NA	NA	NA	NA	NA	NA	2000-2019	-0.20	-0.48 to 0.09
Germany	2000-2003	0.39	-1.63 to 2.44	2003-2014	-3.97	-4.31 to -3.63	2014-2019	1.51	0.38 to 2.65	NA	NA	NA	2000-2019	-1.87	-2.29 to -1.45
Greece	2000-2015	-0.64	-0.83 to -0.46	2015-2019	1.45	0.05 to 2.87	NA	NA	NA	NA	NA	NA	2000-2019	-0.21	-0.51 to 0.09
Greda	2000-2019	2.66	2.50 to 2.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.66	2.50 to 2.81
Guatemala	2000-2005	3.34	2.79 to 3.90	2005-2008	0.32	-1.71 to 2.39	2008-2011	3.23	1.30 to 5.20	2011-2019	0.35	0.17 to 0.53	2000-2019	1.58	1.17 to 1.99
Guya	2000-2009	-1.13	-1.41 to -0.84	2009-2019	1.41	1.20 to 1.63	NA	NA	NA	NA	NA	NA	2000-2019	0.20	0.04 to 0.37
Hungary	2000-2007	0.01	-0.66 to 0.69	2007-2014	-1.42	-2.27 to -0.56	2014-2019	0.49	-0.66 to 1.64	NA	NA	NA	2000-2019	-0.39	-0.85 to 0.06
Iceland	2000-2004	-0.19	-0.79 to 0.42	2004-2009	-4.76	-5.34 to -4.17	2009-2017	-1.94	-2.20 to -1.68	2017-2019	0.33	-1.59 to 2.28	2000-2019	-2.09	-2.35 to -1.83
Israel	2000-2007	-1.50	-2.14 to -0.86	2007-2015	-2.97	-3.58 to -2.36	2015-2019	1.61	0.19 to 3.06	NA	NA	NA	2000-2019	-1.48	-1.89 to -1.07
Italy	2000-2003	1.95	-0.47 to 4.43	2003-2019	-1.00	-1.18 to -0.82	NA	NA	NA	NA	NA	NA	2000-2019	-0.54	-0.91 to -0.16
Japan	2000-2014	0.28	0.10 to 0.46	2014-2019	-0.75	-1.59 to 0.10	NA	NA	NA	NA	NA	NA	2000-2019	0.01	-0.23 to 0.25
Kuwait	2000-2005	-0.56	-2.54 to 1.46	2005-2009	4.22	0.21 to 8.39	2009-2015	-5.09	-6.56 to -3.60	2015-2019	0.65	-1.30 to 2.64	2000-2019	-0.79	-1.79 to 0.23
Kyrgyzstan	2000-2004	0.81	-0.53 to 2.15	2004-2009	-1.29	-2.60 to 0.04	2009-2019	-0.23	-0.53 to 0.08	NA	NA	NA	2000-2019	-0.29	-0.72 to 0.14
Latvia	2000-2006	3.41	2.37 to 4.45	2006-2015	-0.85	-1.47 to -0.23	2015-2019	1.19	-0.69 to 3.10	NA	NA	NA	2000-2019	0.91	0.37 to 1.44
Lithuania	2000-2008	1.26	0.52 to 2.00	2008-2019	-0.84	-1.29 to -0.38	NA	NA	NA	NA	NA	NA	2000-2019	0.04	-0.33 to 0.41
Luxembourg	2000-2010	-0.40	-0.76 to -0.03	2010-2013	-2.31	-6.69 to 2.26	2013-2016	-6.33	-10.62 to	2016-2019	-0.48	-2.79 to 1.89	2000-2019	-1.67	-2.62 to -0.72
									-1.83						
Malta	2000-2003	2.07	0.34 to 3.83	2003-2013	-1.49	-1.78 to -1.20	2013-2019	0.93	0.39 to 1.46	NA	NA	NA	2000-2019	-0.18	-0.49 to 0.14
Mauritius	2000-2006	2.07	0.91 to 3.24	2006-2011	-0.41	-2.27 to 1.49	2011-2019	2.80	2.24 to 3.37	NA	NA	NA	2000-2019	1.72	1.12 to 2.32

Mexico	2000-2019	1.64	1.49 to 1.78	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.64	1.49 to 1.78
Netherlands	2000-2003	-0.06	-1.99 to 1.90	2003-2011	1.68	1.20 to 2.17	2011-2014	-1.68	-4.89 to 1.65	2014-2019	0.87	0.14 to 1.60	2000-2019	0.66	0.07 to 1.24
New Zealand	2000-2004	0.37	-1.00 to 1.75	2004-2013	-1.68	-2.11 to -1.24	2013-2019	0.73	0.09 to 1.37	NA	NA	NA	2000-2019	-0.49	-0.86 to -0.13
Norway	2000-2011	0.59	0.33 to 0.85	2011-2019	-1.44	-1.81 to -1.06	NA	NA	NA	NA	NA	NA	2000-2019	-0.27	-0.47 to -0.07
Pama	2000-2003	2.53	0.29 to 4.82	2003-2010	0.15	-0.50 to 0.81	2010-2013	3.61	0.06 to 7.29	2013-2019	1.38	0.87 to 1.90	2000-2019	1.45	0.83 to 2.08
Philippines	2000-2006	-0.84	-1.18 to -0.51	2006-2010	2.39	1.48 to 3.31	2010-2013	3.34	1.70 to 5.02	2013-2019	1.16	0.92 to 1.40	2000-2019	1.12	0.82 to 1.42
Poland	2000-2012	0.37	0.21 to 0.54	2012-2019	-0.21	-0.55 to 0.14	NA	NA	NA	NA	NA	NA	2000-2019	0.16	0.01 to 0.31
Puerto Rico	2000-2004	3.29	0.12 to 6.55	2004-2019	0.23	-0.14 to 0.60	NA	NA	NA	NA	NA	NA	2000-2019	0.87	0.21 to 1.53
Republic of Korea	2000-2009	2.60	2.36 to 2.83	2009-2016	-1.73	-2.08 to -1.38	2016-2019	2.24	1.26 to 3.24	NA	NA	NA	2000-2019	0.93	0.72 to 1.13
Republic of Moldova	2000-2008	4.95	3.81 to 6.11	2008-2015	0.79	-0.69 to 2.30	2015-2019	-3.38	-5.97 to -0.72	NA	NA	NA	2000-2019	1.61	0.78 to 2.45
Romania	2000-2019	1.76	1.62 to 1.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.76	1.62 to 1.90
Saint Lucia	2000-2010	-1.04	-1.46 to -0.61	2010-2019	2.76	2.33 to 3.18	NA	NA	NA	NA	NA	NA	2000-2019	0.74	0.47 to 1.02
Serbia	2000-2009	1.95	1.64 to 2.26	2009-2019	-0.09	-0.34 to 0.15	NA	NA	NA	NA	NA	NA	2000-2019	0.87	0.69 to 1.05
Singapore	2000-2019	-0.86	-1.03 to -0.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.86	-1.03 to -0.68
Slovakia	2000-2005	-1.24	-2.21 to -0.26	2005-2009	3.86	1.70 to 6.07	2009-2019	1.15	0.86 to 1.44	NA	NA	NA	2000-2019	1.08	0.59 to 1.56
Slovenia	2000-2011	0.26	-0.20 to 0.71	2011-2014	-5.22	-11.34 to 1.31	2014-2019	0.30	-1.20 to 1.83	NA	NA	NA	2000-2019	-0.62	-1.65 to 0.42
Spain	2000-2006	0.32	-0.32 to 0.95	2006-2009	2.61	-0.92 to 6.28	2009-2019	0.21	-0.04 to 0.47	NA	NA	NA	2000-2019	0.62	0.08 to 1.17
Sweden	2000-2008	0.46	0.03 to 0.90	2008-2011	-2.89	-6.57 to 0.92	2011-2019	-0.39	-0.80 to 0.03	NA	NA	NA	2000-2019	-0.43	-1.02 to 0.16
Switzerland	2000-2014	-1.14	-1.36 to -0.93	2014-2019	0.29	-0.70 to 1.30	NA	NA	NA	NA	NA	NA	2000-2019	-0.77	-1.05 to -0.49
Trinidad and Tobago	2000-2019	0.29	0.09 to 0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.29	0.09 to 0.48
United Kingdom	2000-2013	-0.19	-0.35 to -0.03	2013-2019	1.02	0.53 to 1.51	NA	NA	NA	NA	NA	NA	2000-2019	0.19	0.02 to 0.36
United States of America	2000-2007	-1.98	-2.36 to -1.61	2007-2019	-0.29	-0.45 to -0.13	NA	NA	NA	NA	NA	NA	2000-2019	-0.92	-1.08 to -0.76
Uruguay	2000-2016	-0.21	-0.37 to -0.05	2016-2019	1.35	-0.61 to 3.35	NA	NA	NA	NA	NA	NA	2000-2019	0.03	-0.28 to 0.34

AAPC: Average annual percent change; CRC: Colorectal cancer;EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 8: Joinpoint analysis for CRC, age-standardized mortality in 2000–2019 for females, all ages.**

Country	Trend 1			Trend 2			Trend 3			Trend 4			Year	AAPC	Range
	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range			
Antigua and Barbuda	2000-2005	-0.08	-0.48 to 0.33	2005-2010	1.19	0.66 to 1.72	2010-2016	2.39	2.06 to 2.73	2016-2019	-0.51	-1.16 to 0.15	2000-2019	0.96	0.76 to 1.26
Argenti	2000-2014	-0.44	-0.56 to -0.33	2014-2017	2.08	-0.29 to 4.51	2017-2019	-0.44	-2.67 to 1.83	NA	NA	NA	2000-2019	-0.05	-0.45 to 0.53
Australia	2000-2005	-3.17	-3.89 to -2.44	2005-2013	-2.02	-2.45 to -1.58	2013-2019	0.45	-0.07 to 0.97	NA	NA	NA	2000-2019	-1.55	-1.83 to -1.24
Austria	2000-2007	-4.48	-4.78 to -4.17	2007-2014	-1.72	-2.14 to -1.29	2014-2017	-2.82	-5.34 to -0.23	2017-2019	0.28	-2.32 to 2.96	2000-2019	-2.71	-3.16 to -2.61
Barbados	2000-2003	4.37	2.71 to 6.05	2003-2007	-0.03	-1.50 to 1.46	2007-2010	1.62	-1.21 to 4.53	2010-2019	-0.21	-0.44 to 0.03	2000-2019	0.83	0.30 to 1.74
Belgium	2000-2008	-2.16	-2.45 to -1.88	2008-2017	-0.96	-1.25 to -0.67	2017-2019	0.98	-1.64 to 3.68	NA	NA	NA	2000-2019	-1.27	-1.56 to -0.9
Brazil	2000-2003	0.87	-0.26 to 2.00	2003-2011	-0.17	-0.43 to 0.10	2011-2019	-0.76	-0.95 to -0.57	NA	NA	NA	2000-2019	-0.26	-0.46 to 0.51
Cada	2000-2003	-0.39	-1.34 to 0.57	2003-2011	-1.11	-1.35 to -0.87	2011-2017	-0.26	-0.64 to 0.11	2017-2019	1.20	-0.41 to 2.83	2000-2019	-0.49	-0.73 to -0.32
Chile	2000-2008	0.14	-0.13 to 0.40	2008-2012	2.00	0.92 to 3.10	2012-2019	-0.04	-0.30 to 0.22	NA	NA	NA	2000-2019	0.46	0.22 to 1.78
Chi	2000-2004	2.96	2.57 to 3.36	2004-2011	-0.28	-0.46 to -0.10	2011-2015	-2.59	-3.08 to -2.10	2015-2019	0.89	0.59 to 1.20	2000-2019	0.15	0.01 to 2.12
Colombia	2000-2009	-0.08	-0.40 to 0.24	2009-2012	-1.75	-4.78 to 1.38	2012-2019	0.44	0.05 to 0.83	NA	NA	NA	2000-2019	-0.16	-0.64 to 0.48
Costa Rica	2000-2019	1.16	0.87 to 1.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.16	0.87 to 2.84
Croatia	2000-2012	1.38	0.87 to 1.90	2012-2019	-1.61	-2.69 to -0.52	NA	NA	NA	NA	NA	NA	2000-2019	0.27	-0.21 to 1.08
Cuba	2000-2012	0.15	-0.21 to 0.51	2012-2019	1.18	0.47 to 1.90	NA	NA	NA	NA	NA	NA	2000-2019	0.53	0.21 to 1.66
Denmark	2000-2004	-1.83	-2.25 to -1.40	2004-2010	-1.22	-1.52 to -0.91	2010-2014	-2.92	-3.59 to -2.25	2014-2019	-0.13	-0.44 to 0.18	2000-2019	-1.42	-1.60 to -0.91
Ecuador	2000-2007	4.64	3.45 to 5.84	2007-2019	0.45	0.07 to 0.83	NA	NA	NA	NA	NA	NA	2000-2019	1.97	1.52 to 2.58
Estonia	2000-2019	-0.50	-0.70 to -0.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.50	-0.70 to -0.08
Fiji	2000-2004	-0.45	-1.54 to 0.65	2004-2011	2.98	2.45 to 3.51	2011-2019	0.40	0.13 to 0.68	NA	NA	NA	2000-2019	1.16	0.87 to 1.75
Finland	2000-2007	-1.40	-1.71 to -1.10	2007-2019	-0.37	-0.51 to -0.24	NA	NA	NA	NA	NA	NA	2000-2019	-0.75	-0.88 to -0.44
France	2000-2003	-1.21	-2.34 to -0.07	2003-2006	-2.91	-5.17 to -0.60	2006-2016	-1.38	-1.59 to -1.17	2016-2019	0.89	-0.25 to 2.05	2000-2019	-1.24	-1.64 to -1.01
Germany	2000-2003	0.67	-1.61 to 3.00	2003-2014	-5.34	-5.73 to -4.95	2014-2019	0.76	-0.60 to 2.14	NA	NA	NA	2000-2019	-2.83	-3.32 to -1.86
Greece	2000-2010	-2.32	-2.57 to -2.07	2010-2015	-0.59	-1.70 to 0.54	2015-2019	1.68	0.57 to 2.81	NA	NA	NA	2000-2019	-1.03	-1.39 to 0.07
Greda	2000-2004	1.02	-0.59 to 2.65	2004-2017	2.72	2.46 to 2.97	2017-2019	-0.92	-4.46 to 2.76	NA	NA	NA	2000-2019	1.97	1.48 to 1.35
Guatemala	2000-2005	2.40	1.85 to 2.95	2005-2008	0.29	-1.75 to 2.38	2008-2013	1.61	1.01 to 2.21	2013-2019	-0.25	-0.53 to 0.03	2000-2019	1.02	0.67 to 1.76

Guya	2000-2009	-1.16	-1.45 to -0.87	2009-2019	0.95	0.73 to 1.17	NA	NA	NA	NA	NA	NA	2000-2019	-0.06	-0.22 to 0.28
Hungary	2000-2019	-1.34	-1.50 to -1.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-1.34	-1.50 to -0.19
Iceland	2000-2004	-1.90	-2.42 to -1.37	2004-2009	-4.25	-4.77 to -3.73	2009-2017	-2.04	-2.27 to -1.81	2017-2019	-0.18	-1.85 to 1.51	2000-2019	-2.41	-2.64 to 0.1
Israel	2000-2015	-3.38	-3.50 to -3.25	2015-2019	0.93	-0.00 to 1.87	NA	NA	NA	NA	NA	NA	2000-2019	-2.49	-2.68 to -1.91
Italy	2000-2016	-1.58	-1.69 to -1.46	2016-2019	0.47	-1.04 to 2.00	NA	NA	NA	NA	NA	NA	2000-2019	-1.26	-1.49 to -0.89
Japan	2000-2008	-0.95	-1.30 to -0.60	2008-2019	-0.48	-0.69 to -0.26	NA	NA	NA	NA	NA	NA	2000-2019	-0.68	-0.85 to -0.58
Kuwait	2000-2005	-0.53	-2.34 to 1.31	2005-2009	3.70	0.04 to 7.50	2009-2015	-6.08	-7.43 to -4.70	2015-2019	0.21	-1.66 to 2.11	2000-2019	-1.30	-2.23 to 3.04
Kyrgyzstan	2000-2003	0.69	-1.60 to 3.04	2003-2019	-1.06	-1.23 to -0.89	NA	NA	NA	NA	NA	NA	2000-2019	-0.79	-1.14 to -0.4
Latvia	2000-2006	1.79	0.71 to 2.88	2006-2019	-1.38	-1.71 to -1.04	NA	NA	NA	NA	NA	NA	2000-2019	-0.39	-0.76 to 0.22
Lithuania	2000-2008	0.71	0.08 to 1.34	2008-2019	-1.49	-1.88 to -1.10	NA	NA	NA	NA	NA	NA	2000-2019	-0.57	-0.89 to 0.54
Luxembourg	2000-2003	-3.29	-4.67 to -1.89	2003-2012	-1.70	-2.01 to -1.38	2012-2016	-4.84	-6.26 to -3.41	2016-2019	-0.26	-1.73 to 1.24	2000-2019	-2.40	-2.80 to -2.08
g															
Malta	2000-2002	0.41	-3.26 to 4.22	2002-2013	-2.21	-2.48 to -1.93	2013-2019	-0.12	-0.72 to 0.48	NA	NA	NA	2000-2019	-1.28	-1.69 to -0.06
Mauritius	2000-2006	2.09	0.88 to 3.31	2006-2011	-0.92	-2.87 to 1.06	2011-2019	2.22	1.62 to 2.82	NA	NA	NA	2000-2019	1.34	0.72 to 1.8
Mexico	2000-2019	1.05	0.92 to 1.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.05	0.92 to 2.44
Netherlands	2000-2003	-2.38	-3.33 to -1.42	2003-2011	0.58	0.33 to 0.83	2011-2014	-1.65	-3.36 to 0.10	2014-2019	0.19	-0.20 to 0.57	2000-2019	-0.35	-0.65 to -0.34
New Zealand	2000-2002	-3.59	-6.20 to -0.91	2002-2005	0.09	-2.56 to 2.81	2005-2014	-2.26	-2.54 to -1.98	2014-2019	0.09	-0.45 to 0.64	2000-2019	-1.42	-1.89 to -0.65
Norway	2000-2012	-0.77	-0.94 to -0.60	2012-2019	-1.48	-1.85 to -1.12	NA	NA	NA	NA	NA	NA	2000-2019	-1.03	-1.19 to -1.07
Pama	2000-2004	2.31	1.13 to 3.50	2004-2010	-0.08	-0.79 to 0.64	2010-2013	2.99	0.03 to 6.03	2013-2019	-0.27	-0.71 to 0.17	2000-2019	0.84	0.33 to 1.28
Philippines	2000-2004	-1.42	-1.92 to -0.93	2004-2007	0.51	-0.99 to 2.03	2007-2015	2.05	1.87 to 2.23	2015-2019	0.62	0.27 to 0.97	2000-2019	0.76	0.52 to 1.47
Poland	2000-2016	-0.78	-0.89 to -0.68	2016-2019	0.19	-1.12 to 1.52	NA	NA	NA	NA	NA	NA	2000-2019	-0.63	-0.84 to 0.3
Puerto Rico	2000-2019	-0.51	-0.75 to -0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.51	-0.75 to 0.18
Republic of Korea	2000-2005	-1.01	-1.27 to -0.74	2005-2009	0.14	-0.41 to 0.69	2009-2016	-2.30	-2.47 to -2.14	2016-2019	1.48	1.00 to 1.96	2000-2019	-0.86	-1.00 to -0.27
Republic of Moldova	2000-2009	4.37	3.68 to 5.07	2009-2012	-2.50	-8.66 to 4.08	2012-2015	1.21	-5.24 to 8.11	2015-2019	-4.71	-6.67 to -2.70	2000-2019	0.81	-0.55 to 3.19
Romania	2000-2019	0.61	0.49 to 0.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.61	0.49 to 2.22
Saint Lucia	2000-2005	-0.88	-2.14 to 0.39	2005-2010	-2.85	-4.51 to -1.16	2010-2017	3.19	2.35 to 4.04	2017-2019	0.80	-3.38 to 5.17	2000-2019	0.25	-0.43 to 1.16
Serbia	2000-2006	1.63	0.91 to 2.36	2006-2019	-0.90	-1.11 to -0.69	NA	NA	NA	NA	NA	NA	2000-2019	-0.11	-0.35 to 1.08

Singapore	2000-2017	-2.48	-2.64 to -2.31	2017-2019	0.83	-3.26 to 5.10	NA	NA	NA	NA	NA	NA	2000-2019	-2.13	-2.55 to -2
Slovakia	2000-2005	-2.43	-3.24 to -1.61	2005-2009	2.25	0.39 to 4.14	2009-2019	0.07	-0.19 to 0.33	NA	NA	NA	2000-2019	-0.14	-0.56 to -0.19
Slovenia	2000-2011	-1.40	-1.80 to -1.00	2011-2014	-5.92	-11.56 to 0.08	2014-2019	-0.35	-1.76 to 1.07	NA	NA	NA	2000-2019	-1.85	-2.79 to -0.57
Spain	2000-2006	-1.19	-1.58 to -0.80	2006-2009	0.65	-1.62 to 2.97	2009-2017	-0.41	-0.70 to -0.11	2017-2019	1.13	-0.96 to 3.27	2000-2019	-0.33	-0.72 to 0.22
Sweden	2000-2007	-0.11	-0.33 to 0.11	2007-2014	-1.95	-2.23 to -1.68	2014-2019	-0.03	-0.40 to 0.34	NA	NA	NA	2000-2019	-0.77	-0.92 to -0.76
Switzerland	2000-2005	-2.85	-3.29 to -2.41	2005-2011	-1.20	-1.65 to -0.74	2011-2019	-0.21	-0.43 to 0.00	NA	NA	NA	2000-2019	-1.22	-1.41 to -1.52
Trinidad and Tobago	2000-2012	-0.85	-1.25 to -0.45	2012-2019	0.38	-0.42 to 1.18	NA	NA	NA	NA	NA	NA	2000-2019	-0.40	-0.76 to 1.07
United Kingdom	2000-2011	-1.64	-1.78 to -1.50	2011-2019	0.25	0.02 to 0.47	NA	NA	NA	NA	NA	NA	2000-2019	-0.85	-0.96 to -0.85
United States of America	2000-2007	-2.23	-2.49 to -1.96	2007-2013	-1.11	-1.55 to -0.67	2013-2019	0.00	-0.32 to 0.33	NA	NA	NA	2000-2019	-1.18	-1.35 to -0.73
Uruguay	2000-2014	-0.80	-0.95 to -0.65	2014-2019	0.29	-0.41 to 0.98	NA	NA	NA	NA	NA	NA	2000-2019	-0.52	-0.71 to 0.3

AAPC: Average annual percent change; CRC: Colorectal cancer;EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 9: Joinpoint analysis for CRC, age-standardized incidence in 2000–2019 for both genders, 50 years or older.**

Country	Trend 1			Trend 2			Trend 3			Trend 4			Year	AAPC	Range
	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range			
Antigua and Barbuda	2000-2004	0.01	-1.94 to 2.00	2004-2007	5.31	-0.58 to 11.54	2007-2019	1.00	0.73 to 1.28	NA	NA	NA	2000-2019	1.46	0.54 to 2.39
Argenti	2000-2014	0.16	-0.06 to 0.38	2014-2019	1.97	1.02 to 2.93	NA	NA	NA	NA	NA	NA	2000-2019	0.63	0.36 to 0.91
Australia	2000-2009	-0.89	-1.35 to -0.43	2009-2013	-3.08	-5.38 to -0.73	2013-2019	0.42	-0.34 to 1.19	NA	NA	NA	2000-2019	-0.94	-1.48 to -0.41
Austria	2000-2008	-3.28	-3.66 to -2.90	2008-2019	-1.22	-1.47 to -0.97	NA	NA	NA	NA	NA	NA	2000-2019	-2.09	-2.29 to -1.90
Barbados	2000-2004	4.83	3.62 to 6.05	2004-2013	0.68	0.34 to 1.02	2013-2017	-0.05	-1.41 to 1.34	2017-2019	2.99	0.40 to 5.65	2000-2019	1.63	1.20 to 2.06
Belgium	2000-2019	-0.41	-0.53 to -0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.41	-0.53 to -0.29
Brazil	2000-2003	2.51	1.24 to 3.80	2003-2011	0.80	0.50 to 1.09	2011-2019	0.03	-0.17 to 0.23	NA	NA	NA	2000-2019	0.74	0.52 to 0.97
Cada	2000-2004	1.02	-0.28 to 2.34	2004-2015	-0.68	-0.96 to -0.39	2015-2019	1.04	0.00 to 2.08	NA	NA	NA	2000-2019	0.04	-0.31 to 0.38
Chile	2000-2008	1.89	1.39 to 2.41	2008-2013	3.63	2.42 to 4.86	2013-2019	0.50	-0.04 to 1.05	NA	NA	NA	2000-2019	1.90	1.53 to 2.28
Chi	2000-2004	8.60	7.87 to 9.34	2004-2011	4.08	3.79 to 4.37	2011-2016	0.15	-0.28 to 0.59	2016-2019	3.44	2.81 to 4.07	2000-2019	3.86	3.65 to 4.07



Colombia	2000-2019	0.89	0.71 to 1.08	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.89	0.71 to 1.08
Costa Rica	2000-2019	2.52	2.22 to 2.83	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.52	2.22 to 2.83
Croatia	2000-2010	3.18	2.53 to 3.84	2010-2019	0.06	-0.59 to 0.72	NA	NA	NA	NA	NA	NA	2000-2019	1.69	1.27 to 2.12
Cuba	2000-2012	1.24	0.80 to 1.69	2012-2019	2.68	1.85 to 3.50	NA	NA	NA	NA	NA	NA	2000-2019	1.77	1.39 to 2.15
Denmark	2000-2009	0.90	0.53 to 1.27	2009-2014	-1.65	-2.82 to -0.48	2014-2019	0.44	-0.38 to 1.28	NA	NA	NA	2000-2019	0.10	-0.28 to 0.48
Ecuador	2000-2006	6.22	4.84 to 7.62	2006-2019	1.71	1.42 to 2.00	NA	NA	NA	NA	NA	NA	2000-2019	3.11	2.68 to 3.55
Estonia	2000-2008	3.13	2.47 to 3.80	2008-2019	0.30	-0.06 to 0.66	NA	NA	NA	NA	NA	NA	2000-2019	1.48	1.16 to 1.80
Fiji	2000-2004	-0.33	-1.14 to 0.50	2004-2011	2.73	2.33 to 3.12	2011-2019	1.19	0.99 to 1.39	NA	NA	NA	2000-2019	1.43	1.21 to 1.65
Finland	2000-2019	0.58	0.49 to 0.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.58	0.49 to 0.68
France	2000-2019	-0.45	-0.57 to -0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.45	-0.57 to -0.33
Germany	2000-2003	0.92	-1.34 to 3.24	2003-2014	-3.38	-3.75 to -3.02	2014-2019	0.99	-0.16 to 2.15	NA	NA	NA	2000-2019	-1.58	-2.03 to -1.12
Greece	2000-2019	0.05	-0.08 to 0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.05	-0.08 to 0.18
Greda	2000-2010	1.78	1.49 to 2.06	2010-2014	0.73	-0.80 to 2.28	2014-2017	5.26	2.34 to 8.28	2017-2019	-0.21	-2.80 to 2.45	2000-2019	1.89	1.33 to 2.45
Guatemala	2000-2005	3.42	2.64 to 4.21	2005-2008	0.84	-2.03 to 3.79	2008-2013	2.49	1.66 to 3.34	2013-2019	-0.16	-0.54 to 0.23	2000-2019	1.63	1.14 to 2.12
Guya	2000-2002	-0.29	-2.07 to 1.53	2002-2006	-2.31	-3.18 to -1.43	2006-2010	0.07	-0.80 to 0.95	2010-2019	1.62	1.48 to 1.76	2000-2019	0.25	-0.03 to 0.54
Hungary	2000-2019	0.08	-0.06 to 0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.08	-0.06 to 0.21
Iceland	2000-2003	0.83	-0.46 to 2.14	2003-2017	-1.30	-1.42 to -1.18	2017-2019	0.75	-1.44 to 2.98	NA	NA	NA	2000-2019	-0.75	-1.04 to -0.46
Israel	2000-2007	-1.36	-1.82 to -0.89	2007-2016	-2.46	-2.82 to -2.11	2016-2019	2.27	0.69 to 3.88	NA	NA	NA	2000-2019	-1.32	-1.63 to -1.01
Italy	2000-2003	2.78	1.19 to 4.39	2003-2009	-0.59	-1.25 to 0.08	2009-2014	-1.77	-2.70 to -0.83	2014-2019	-0.32	-0.98 to 0.34	2000-2019	-0.31	-0.69 to 0.08
Japan	2000-2014	0.40	0.24 to 0.56	2014-2019	-0.62	-1.35 to 0.11	NA	NA	NA	NA	NA	NA	2000-2019	0.13	-0.08 to 0.34
Kuwait	2000-2004	0.65	-1.33 to 2.67	2004-2008	8.67	5.76 to 11.65	2008-2011	-5.59	-9.91 to -1.05	2011-2019	1.82	1.38 to 2.25	2000-2019	1.75	0.84 to 2.67
Kyrgyzstan	2000-2006	0.02	-0.58 to 0.62	2006-2009	-1.97	-5.45 to 1.64	2009-2019	0.25	-0.01 to 0.50	NA	NA	NA	2000-2019	-0.18	-0.73 to 0.38
Latvia	2000-2007	3.16	2.39 to 3.93	2007-2019	-0.59	-0.91 to -0.27	NA	NA	NA	NA	NA	NA	2000-2019	0.77	0.46 to 1.09
Lithuania	2000-2008	1.96	1.08 to 2.84	2008-2019	-0.73	-1.25 to -0.22	NA	NA	NA	NA	NA	NA	2000-2019	0.39	-0.04 to 0.82
Luxembourg	2000-2005	0.60	0.03 to 1.17	2005-2013	-1.96	-2.29 to -1.64	2013-2016	-5.62	-7.95 to -3.23	2016-2019	-0.07	-1.29 to 1.16	2000-2019	-1.59	-2.00 to -1.18
g															
Malta	2000-2003	1.97	0.91 to 3.05	2003-2009	-0.14	-0.57 to 0.29	2009-2015	-0.80	-1.19 to -0.40	2015-2019	0.69	0.14 to 1.23	2000-2019	0.15	-0.08 to 0.39
Mauritius	2000-2005	3.08	2.03 to 4.14	2005-2011	0.15	-0.72 to 1.03	2011-2019	2.04	1.68 to 2.40	NA	NA	NA	2000-2019	1.71	1.33 to 2.09
Mexico	2000-2019	2.21	2.07 to 2.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.21	2.07 to 2.35
Netherlands	2000-2003	-0.82	-2.72 to 1.11	2003-2009	2.54	1.73 to 3.36	2009-2019	-0.20	-0.44 to 0.04	NA	NA	NA	2000-2019	0.56	0.18 to 0.94

New Zealand	2000-2014	-1.09	-1.32 to -0.86	2014-2019	1.01	0.02 to 2.00	NA	NA	NA	NA	NA	NA	2000-2019	-0.54	-0.83 to -0.26
Norway	2000-2011	0.90	0.64 to 1.15	2011-2019	-1.61	-1.97 to -1.26	NA	NA	NA	NA	NA	NA	2000-2019	-0.17	-0.36 to 0.02
Pama	2000-2003	2.50	0.06 to 5.00	2003-2007	-0.19	-2.36 to 2.02	2007-2019	1.94	1.73 to 2.15	NA	NA	NA	2000-2019	1.58	1.02 to 2.14
Philippines	2000-2006	-0.66	-1.06 to -0.26	2006-2014	3.02	2.74 to 3.29	2014-2019	1.00	0.63 to 1.37	NA	NA	NA	2000-2019	1.31	1.13 to 1.49
Poland	2000-2009	1.18	0.95 to 1.41	2009-2019	0.29	0.13 to 0.46	NA	NA	NA	NA	NA	NA	2000-2019	0.71	0.58 to 0.84
Puerto Rico	2000-2005	2.98	1.04 to 4.95	2005-2019	0.27	-0.07 to 0.62	NA	NA	NA	NA	NA	NA	2000-2019	0.98	0.46 to 1.50
Republic of Korea	2000-2005	4.73	4.14 to 5.31	2005-2010	2.91	2.25 to 3.57	2010-2016	-2.23	-2.61 to -1.83	2016-2019	1.14	0.32 to 1.97	2000-2019	1.45	1.20 to 1.70
Republic of Moldova	2000-2009	5.92	5.13 to 6.72	2009-2012	-0.80	-7.44 to 6.30	2012-2015	4.39	-2.43 to 11.69	2015-2019	-3.36	-5.31 to -1.37	2000-2019	2.59	1.15 to 4.04
Romania	2000-2019	2.66	2.47 to 2.85	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.66	2.47 to 2.85
Saint Lucia	2000-2004	0.43	-1.15 to 2.04	2004-2011	-1.13	-1.90 to -0.36	2011-2017	4.02	3.11 to 4.93	2017-2019	1.61	-1.77 to 5.10	2000-2019	1.09	0.54 to 1.64
Serbia	2000-2009	3.28	2.88 to 3.69	2009-2019	0.43	0.13 to 0.72	NA	NA	NA	NA	NA	NA	2000-2019	1.77	1.54 to 1.99
Singapore	2000-2012	-0.56	-0.86 to -0.26	2012-2019	-1.25	-1.78 to -0.71	NA	NA	NA	NA	NA	NA	2000-2019	-0.81	-1.07 to -0.56
Slovakia	2000-2004	-2.52	-3.85 to -1.16	2004-2011	3.27	2.57 to 3.98	2011-2019	0.52	0.14 to 0.90	NA	NA	NA	2000-2019	0.87	0.49 to 1.25
Slovenia	2000-2009	1.21	0.74 to 1.68	2009-2014	-2.66	-4.10 to -1.20	2014-2019	0.29	-0.74 to 1.34	NA	NA	NA	2000-2019	-0.06	-0.54 to 0.41
Spain	2000-2011	2.04	1.80 to 2.28	2011-2019	-0.01	-0.34 to 0.32	NA	NA	NA	NA	NA	NA	2000-2019	1.17	0.99 to 1.35
Sweden	2000-2004	1.53	0.76 to 2.30	2004-2008	-0.20	-1.33 to 0.94	2008-2014	-2.10	-2.60 to -1.61	2014-2019	0.06	-0.44 to 0.56	2000-2019	-0.38	-0.69 to -0.07
Switzerland	2000-2019	-1.11	-1.19 to -1.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-1.11	-1.19 to -1.02
Trinidad and Tobago	2000-2008	1.13	0.45 to 1.81	2008-2012	-2.02	-4.65 to 0.69	2012-2019	1.19	0.53 to 1.86	NA	NA	NA	2000-2019	0.48	-0.13 to 1.10
United Kingdom	2000-2014	-0.41	-0.56 to -0.27	2014-2019	0.96	0.30 to 1.61	NA	NA	NA	NA	NA	NA	2000-2019	-0.05	-0.24 to 0.13
United States of America	2000-2002	-0.98	-3.27 to 1.36	2002-2006	-3.00	-4.12 to -1.86	2006-2015	-0.54	-0.78 to -0.29	2015-2019	0.56	-0.08 to 1.21	2000-2019	-0.88	-1.21 to -0.54
Uruguay	2000-2019	0.03	-0.12 to 0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.03	-0.12 to 0.18

AAPC: Average annual percent change; CRC: Colorectal cancer;EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 10: Joinpoint analysis for CRC, age-standardized mortality in 2000–2019 for both genders, 50 years or older.**

Country	Trend 1			Trend 2			Trend 3			Trend 4			Year	AAPC	Range
	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range			
Antigua and Barbuda	2000-2019	0.98	0.72 to 1.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.98	0.72 to 1.23
Argenti	2000-2003	0.68	-0.64 to 2.02	2003-2014	-0.56	-0.76 to -0.37	2014-2017	2.04	-0.33 to 4.46	2017-2019	-0.38	-2.60 to 1.89	2000-2019	0.06	-0.37 to 0.49
Australia	2000-2003	-4.19	-5.83 to -2.52	2003-2013	-2.05	-2.35 to -1.74	2013-2017	-0.40	-2.00 to 1.22	2017-2019	2.19	-0.87 to 5.34	2000-2019	-1.61	-2.09 to -1.12
Austria	2000-2008	-4.02	-4.25 to -3.80	2008-2017	-1.96	-2.21 to -1.72	2017-2019	-0.37	-2.59 to 1.91	NA	NA	NA	2000-2019	-2.67	-2.92 to -2.42
Barbados	2000-2004	3.93	2.85 to 5.03	2004-2017	-0.16	-0.32 to 0.01	2017-2019	2.87	0.38 to 5.43	NA	NA	NA	2000-2019	1.01	0.68 to 1.34
Belgium	2000-2008	-2.18	-2.48 to -1.88	2008-2012	0.03	-1.36 to 1.44	2012-2016	-1.90	-3.24 to -0.55	2016-2019	0.68	-0.66 to 2.04	2000-2019	-1.21	-1.62 to -0.80
Brazil	2000-2004	1.17	0.42 to 1.93	2004-2016	-0.08	-0.21 to 0.06	2016-2019	-1.12	-1.98 to -0.25	NA	NA	NA	2000-2019	0.02	-0.18 to 0.22
Cada	2000-2016	-0.99	-1.09 to -0.89	2016-2019	1.18	0.00 to 2.38	NA	NA	NA	NA	NA	NA	2000-2019	-0.65	-0.84 to -0.46
Chile	2000-2008	0.57	0.25 to 0.89	2008-2013	1.97	1.17 to 2.78	2013-2019	-0.11	-0.48 to 0.26	NA	NA	NA	2000-2019	0.72	0.47 to 0.97
Chi	2000-2004	5.59	5.05 to 6.15	2004-2011	0.95	0.71 to 1.18	2011-2016	-1.56	-1.94 to -1.17	2016-2019	1.30	0.73 to 1.88	2000-2019	1.29	1.12 to 1.46
Colombia	2000-2019	-0.21	-0.40 to -0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.21	-0.40 to -0.02
Costa Rica	2000-2019	1.75	1.47 to 2.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.75	1.47 to 2.03
Croatia	2000-2010	2.18	1.61 to 2.75	2010-2019	-0.86	-1.45 to -0.27	NA	NA	NA	NA	NA	NA	2000-2019	0.73	0.35 to 1.10
Cuba	2000-2012	0.37	-0.03 to 0.78	2012-2019	1.95	1.16 to 2.74	NA	NA	NA	NA	NA	NA	2000-2019	0.95	0.60 to 1.30
Denmark	2000-2010	-1.30	-1.41 to -1.19	2010-2014	-2.68	-3.35 to -2.00	2014-2019	-0.13	-0.44 to 0.17	NA	NA	NA	2000-2019	-1.29	-1.44 to -1.13
Ecuador	2000-2006	5.18	4.24 to 6.13	2006-2014	1.28	0.73 to 1.84	2014-2019	0.10	-0.70 to 0.90	NA	NA	NA	2000-2019	2.18	1.79 to 2.57
Estonia	2000-2007	1.16	0.46 to 1.86	2007-2019	-1.11	-1.40 to -0.82	NA	NA	NA	NA	NA	NA	2000-2019	-0.28	-0.57 to 0.01
Fiji	2000-2004	-0.36	-1.19 to 0.48	2004-2012	2.34	2.02 to 2.65	2012-2019	0.77	0.51 to 1.02	NA	NA	NA	2000-2019	1.19	0.97 to 1.40
Finland	2000-2008	-0.93	-1.08 to -0.79	2008-2019	-0.18	-0.26 to -0.10	NA	NA	NA	NA	NA	NA	2000-2019	-0.50	-0.57 to -0.43
France	2000-2002	-0.85	-2.96 to 1.31	2002-2005	-3.00	-5.08 to -0.88	2005-2014	-1.55	-1.78 to -1.31	2014-2019	-0.19	-0.65 to 0.28	2000-2019	-1.35	-1.73 to -0.97
Germany	2000-2003	0.30	-1.40 to 2.03	2003-2007	-3.55	-5.19 to -1.88	2007-2014	-5.33	-5.95 to -4.70	2014-2019	0.65	-0.28 to 1.59	2000-2019	-2.53	-3.00 to -2.04
Greece	2000-2010	-1.71	-1.92 to -1.50	2010-2019	0.63	0.38 to 0.88	NA	NA	NA	NA	NA	NA	2000-2019	-0.61	-0.76 to -0.46

Greda	2000-2010	1.46	1.13 to 1.78	2010-2014	0.16	-1.62 to 1.97	2014-2017	4.87	1.43 to 8.42	2017-2019	-1.57	-4.61 to 1.57	2000-2019	1.39	0.74 to 2.05
Guatemala	2000-2005	2.52	1.92 to 3.11	2005-2008	0.38	-1.82 to 2.64	2008-2014	1.69	1.24 to 2.14	2014-2019	-0.69	-1.08 to -0.30	2000-2019	1.07	0.70 to 1.44
Guya	2000-2008	-1.53	-1.82 to -1.23	2008-2019	1.06	0.90 to 1.22	NA	NA	NA	NA	NA	NA	2000-2019	-0.04	-0.18 to 0.10
Hungary	2000-2019	-0.68	-0.80 to -0.57	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.68	-0.80 to -0.57
Iceland	2000-2002	0.17	-2.92 to 3.36	2002-2017	-1.57	-1.71 to -1.44	2017-2019	0.08	-2.63 to 2.86	NA	NA	NA	2000-2019	-1.22	-1.62 to -0.82
Israel	2000-2016	-3.02	-3.12 to -2.93	2016-2019	1.93	0.70 to 3.17	NA	NA	NA	NA	NA	NA	2000-2019	-2.26	-2.44 to -2.07
Italy	2000-2003	-0.24	-1.42 to 0.96	2003-2016	-1.57	-1.71 to -1.42	2016-2019	0.26	-0.92 to 1.46	NA	NA	NA	2000-2019	-1.07	-1.32 to -0.82
Japan	2000-2009	-0.88	-1.07 to -0.70	2009-2012	0.37	-1.59 to 2.37	2012-2019	-0.87	-1.14 to	NA	NA	NA	2000-2019	-0.68	-0.98 to -0.38
									-0.61						
Kuwait	2000-2005	1.52	-0.13 to 3.21	2005-2008	7.73	1.11 to 14.79	2008-2011	-6.53	-11.75 to	2011-2019	0.45	-0.10 to 1.00	2000-2019	0.70	-0.55 to 1.96
									-1.01						
Kyrgyzstan	2000-2006	-0.14	-0.80 to 0.53	2006-2009	-2.76	-6.61 to 1.24	2009-2019	-0.32	-0.62 to	NA	NA	NA	2000-2019	-0.65	-1.27 to -0.04
									-0.03						
Latvia	2000-2007	2.06	1.30 to 2.83	2007-2019	-1.52	-1.85 to -1.19	NA	NA	NA	NA	NA	NA	2000-2019	-0.22	-0.54 to 0.10
Lithuania	2000-2008	1.34	0.61 to 2.07	2008-2019	-1.38	-1.83 to -0.94	NA	NA	NA	NA	NA	NA	2000-2019	-0.25	-0.61 to 0.12
Luxembourg	2000-2006	-1.73	-2.01 to -1.46	2006-2013	-2.77	-3.05 to -2.49	2013-2016	-4.76	-6.38 to -3.11	2016-2019	0.13	-0.71 to 0.97	2000-2019	-2.31	-2.59 to -2.03
g															
Malta	2000-2002	1.21	-0.95 to 3.41	2002-2012	-1.00	-1.18 to -0.82	2012-2015	-2.08	-3.90 to	2015-2019	-0.36	-0.93 to 0.22	2000-2019	-0.81	-1.15 to -0.46
									-0.24						
Mauritius	2000-2005	3.14	1.92 to 4.37	2005-2011	-0.32	-1.34 to 0.71	2011-2019	1.47	1.04 to 1.90	NA	NA	NA	2000-2019	1.33	0.89 to 1.78
Mexico	2000-2019	1.61	1.49 to 1.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.61	1.49 to 1.73
Netherlands	2000-2003	-3.08	-4.44 to -1.71	2003-2008	1.56	0.69 to 2.44	2008-2019	-0.59	-0.75 to	NA	NA	NA	2000-2019	-0.43	-0.72 to -0.13
									-0.42						
New Zealand	2000-2016	-1.76	-1.94 to -1.58	2016-2019	1.30	-0.86 to 3.50	NA	NA	NA	NA	NA	NA	2000-2019	-1.28	-1.62 to -0.94
Norway	2000-2012	-0.62	-0.80 to -0.44	2012-2019	-1.70	-2.07 to -1.32	NA	NA	NA	NA	NA	NA	2000-2019	-1.02	-1.19 to -0.85
Pama	2000-2003	2.62	1.13 to 4.13	2003-2008	0.20	-0.63 to 1.03	2008-2014	1.61	1.09 to 2.13	2014-2019	-0.21	-0.66 to 0.24	2000-2019	0.91	0.59 to 1.24
Philippines	2000-2004	-1.05	-1.58 to -0.51	2004-2007	0.80	-0.81 to 2.44	2007-2015	2.40	2.22 to 2.59	2015-2019	0.45	0.08 to 0.82	2000-2019	1.00	0.74 to 1.27
Poland	2000-2019	-0.15	-0.22 to -0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.15	-0.22 to -0.09
Puerto Rico	2000-2019	-0.37	-0.61 to -0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.37	-0.61 to -0.14

Republic of Korea	2000-2008	0.80	0.63 to 0.97	2008-2011	-0.40	-1.71 to 0.93	2011-2016	-3.03	-3.41 to -2.64	2016-2019	0.70	0.12 to 1.29	2000-2019	-0.42	-0.65 to -0.20
Republic of Moldova	2000-2009	5.05	4.02 to 6.10	2009-2016	0.26	-1.26 to 1.80	2016-2019	-4.64	-8.91 to -0.18	NA	NA	NA	2000-2019	1.69	0.76 to 2.64
Romania	2000-2019	1.59	1.42 to 1.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	1.59	1.42 to 1.75
Saint Lucia	2000-2004	-0.07	-1.60 to 1.49	2004-2011	-1.99	-2.75 to -1.22	2011-2017	4.09	3.17 to 5.02	2017-2019	0.70	-2.72 to 4.24	2000-2019	0.59	0.04 to 1.14
Serbia	2000-2002	1.02	-2.13 to 4.27	2002-2005	3.39	0.33 to 6.54	2005-2009	0.66	-0.77 to 2.10	2009-2019	-0.49	-0.70 to -0.27	2000-2019	0.51	-0.06 to 1.09
Singapore	2000-2005	-3.04	-3.62 to -2.45	2005-2017	-2.23	-2.39 to -2.07	2017-2019	-0.06	-2.11 to 2.03	NA	NA	NA	2000-2019	-2.22	-2.47 to -1.96
Slovakia	2000-2004	-3.40	-4.50 to -2.29	2004-2012	1.59	1.12 to 2.05	2012-2019	-0.69	-1.09 to -0.28	NA	NA	NA	2000-2019	-0.32	-0.63 to -0.01
Slovenia	2000-2010	-0.76	-1.12 to -0.40	2010-2014	-4.22	-6.38 to -2.02	2014-2019	-0.22	-1.22 to 0.79	NA	NA	NA	2000-2019	-1.36	-1.87 to -0.84
Spain	2000-2006	0.09	-0.21 to 0.39	2006-2011	0.87	0.33 to 1.41	2011-2019	-0.43	-0.61 to -0.26	NA	NA	NA	2000-2019	0.07	-0.09 to 0.24
Sweden	2000-2006	0.20	0.03 to 0.36	2006-2009	-1.47	-2.40 to -0.53	2009-2014	-2.47	-2.77 to -2.18	2014-2019	-0.12	-0.33 to 0.09	2000-2019	-0.86	-1.02 to -0.70
Switzerland	2000-2005	-2.47	-2.78 to -2.15	2005-2014	-1.27	-1.42 to -1.12	2014-2019	-0.73	-1.03 to -0.43	NA	NA	NA	2000-2019	-1.45	-1.57 to -1.32
Trinidad and Tobago	2000-2008	0.04	-0.65 to 0.73	2008-2012	-2.39	-5.18 to 0.48	2012-2019	0.88	0.18 to 1.59	NA	NA	NA	2000-2019	-0.17	-0.82 to 0.48
United Kingdom	2000-2011	-1.78	-1.90 to -1.66	2011-2017	-0.32	-0.71 to 0.08	2017-2019	1.58	-0.13 to 3.32	NA	NA	NA	2000-2019	-0.97	-1.17 to -0.77
United States of America	2000-2007	-2.50	-2.76 to -2.23	2007-2014	-1.05	-1.38 to -0.73	2014-2019	0.49	0.08 to 0.89	NA	NA	NA	2000-2019	-1.19	-1.35 to -1.02
Uruguay	2000-2019	-0.48	-0.61 to -0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.48	-0.61 to -0.35

AAPC: Average annual percent change; CRC: Colorectal cancer;EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 11: Joinpoint analysis for CRC, age-standardized incidence in 2000–2019 for both genders, younger than 50 years.**

Country	Trend 1		Trend 2		Trend 3		Trend 4		Year	AAPC Range
	Year	EAPC Range	Year	EAPC Range	Year	EAPC Range	Year	EAPC Range		

Antigua and Barbuda	2000-2002	0.03	-1.44 to 1.51	2002-2010	1.69	1.51 to 1.87	2010-2015	0.20	-0.19 to 0.59	2015-2019	1.60	1.22 to 1.98	2000-2019	1.10	0.91 to 1.29
Argentina	2000-2019	0.83	0.66 to 1.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.83	0.66 to 1.01
Australia	2000-2003	-1.34	-5.12 to 2.59	2003-2019	0.91	0.63 to 1.19	NA	NA	NA	NA	NA	NA	2000-2019	0.55	-0.06 to 1.16
Austria	2000-2007	-5.73	-6.33 to -5.13	2007-2013	-2.37	-3.53 to -1.20	2013-2019	0.05	-0.89 to 1.00	NA	NA	NA	2000-2019	-2.88	-3.34 to -2.41
Barbados	2000-2007	2.26	1.67 to 2.85	2007-2019	-0.24	-0.48 to -0.00	NA	NA	NA	NA	NA	NA	2000-2019	0.67	0.43 to 0.91
Belgium	2000-2007	0.16	-0.41 to 0.74	2007-2014	-2.08	-2.80 to -1.35	2014-2019	0.42	-0.59 to 1.44	NA	NA	NA	2000-2019	-0.60	-0.99 to -0.21
Brazil	2000-2011	1.36	1.17 to 1.56	2011-2019	-0.14	-0.41 to 0.13	NA	NA	NA	NA	NA	NA	2000-2019	0.73	0.58 to 0.88
Cada	2000-2008	2.01	1.65 to 2.36	2008-2011	-1.41	-4.38 to 1.64	2011-2017	1.41	0.71 to 2.11	2017-2019	-2.01	-4.99 to 1.07	2000-2019	0.84	0.29 to 1.40
Chile	2000-2006	2.34	1.09 to 3.61	2006-2015	4.29	3.62 to 4.97	2015-2019	-0.68	-2.35 to 1.03	NA	NA	NA	2000-2019	2.61	2.05 to 3.18
Chi	2000-2007	4.07	3.59 to 4.55	2007-2010	6.21	3.17 to 9.34	2010-2016	1.34	0.75 to 1.94	2016-2019	4.65	3.33 to 5.99	2000-2019	3.62	3.12 to 4.13
Colombia	2000-2010	2.78	2.15 to 3.41	2010-2019	1.44	0.83 to 2.06	NA	NA	NA	NA	NA	NA	2000-2019	2.14	1.74 to 2.55
Costa Rica	2000-2019	3.33	2.93 to 3.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	3.33	2.93 to 3.73
Croatia	2000-2008	1.47	0.69 to 2.26	2008-2019	-0.47	-0.96 to 0.02	NA	NA	NA	NA	NA	NA	2000-2019	0.34	-0.05 to 0.74
Cuba	2000-2011	-0.16	-0.47 to 0.16	2011-2019	2.79	2.30 to 3.29	NA	NA	NA	NA	NA	NA	2000-2019	1.08	0.82 to 1.33
Denmark	2000-2009	0.51	-0.07 to 1.10	2009-2014	-3.73	-5.67 to -1.75	2014-2019	1.29	-0.23 to 2.84	NA	NA	NA	2000-2019	-0.42	-1.06 to 0.23
Ecuador	2000-2005	7.93	5.93 to 9.96	2005-2019	0.88	0.58 to 1.18	NA	NA	NA	NA	NA	NA	2000-2019	2.69	2.18 to 3.19
Estonia	2000-2019	0.14	-0.19 to 0.47	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.14	-0.19 to 0.47
Fiji	2000-2003	-2.37	-3.83 to -0.89	2003-2006	4.62	1.65 to 7.68	2006-2019	1.91	1.77 to 2.04	NA	NA	NA	2000-2019	1.64	1.16 to 2.12
Finland	2000-2008	1.38	0.36 to 2.40	2008-2019	-1.40	-2.03 to -0.77	NA	NA	NA	NA	NA	NA	2000-2019	-0.24	-0.76 to 0.28
France	2000-2019	-0.36	-0.54 to -0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.36	-0.54 to -0.17
Germany	2000-2003	3.36	1.43 to 5.32	2003-2008	-0.80	-1.94 to 0.34	2008-2014	-5.91	-6.76 to -5.04	2014-2019	1.78	0.75 to 2.82	2000-2019	-1.14	-1.64 to -0.65
Greece	2000-2009	1.64	1.17 to 2.11	2009-2015	-1.20	-2.29 to -0.10	2015-2019	1.29	-0.32 to 2.93	NA	NA	NA	2000-2019	0.66	0.18 to 1.15
Greda	2000-2004	3.31	2.15 to 4.48	2004-2013	0.27	-0.08 to 0.62	2013-2019	1.26	0.73 to 1.78	NA	NA	NA	2000-2019	1.21	0.91 to 1.52
Guatemala	2000-2010	2.51	1.77 to 3.25	2010-2019	-0.02	-0.66 to 0.63	NA	NA	NA	NA	NA	NA	2000-2019	1.30	0.85 to 1.76
Guya	2000-2007	-0.36	-1.04 to 0.33	2007-2019	1.64	1.35 to 1.93	NA	NA	NA	NA	NA	NA	2000-2019	0.90	0.61 to 1.19

Hungary	2000-2007	0.61	0.00 to 1.21	2007-2013	-4.27	-5.33 to -3.20	2013-2017	-1.26	-3.80 to 1.35	2017-2019	4.42	-0.71 to 9.83	2000-2019	-0.96	-1.71 to -0.21
Iceland	2000-2008	-1.15	-1.31 to -0.99	2008-2017	-0.67	-0.83 to -0.50	2017-2019	1.02	-0.49 to 2.55	NA	NA	NA	2000-2019	-0.69	-0.86 to -0.53
Israel	2000-2008	0.31	-0.19 to 0.82	2008-2012	-4.27	-6.40 to -2.09	2012-2019	1.11	0.53 to 1.70	NA	NA	NA	2000-2019	-0.38	-0.88 to 0.12
Italy	2000-2003	1.02	-0.97 to 3.06	2003-2016	-1.33	-1.56 to -1.10	2016-2019	0.43	-1.61 to 2.50	NA	NA	NA	2000-2019	-0.69	-1.11 to -0.26
Japan	2000-2011	0.26	0.07 to 0.45	2011-2019	-0.77	-1.07 to -0.46	NA	NA	NA	NA	NA	NA	2000-2019	-0.17	-0.33 to -0.02
Kuwait	2000-2004	-2.24	-4.27 to -0.18	2004-2008	7.40	4.41 to 10.48	2008-2011	-7.58	-12.01 to -2.93	2011-2019	1.85	1.39 to 2.31	2000-2019	0.55	-0.39 to 1.51
Kyrgyzstan	2000-2006	-0.97	-1.76 to -0.18	2006-2009	-3.65	-8.00 to 0.91	2009-2017	-1.42	-2.05 to -0.79	2017-2019	3.11	-1.57 to 8.01	2000-2019	-1.17	-1.98 to -0.35
Latvia	2000-2007	3.23	2.00 to 4.47	2007-2011	-5.23	-9.53 to -0.73	2011-2019	-0.04	-1.17 to 1.09	NA	NA	NA	2000-2019	0.02	-1.03 to 1.08
Lithuania	2000-2007	3.41	2.13 to 4.71	2007-2010	-5.08	-13.56 to 4.24	2010-2019	-0.82	-1.78 to 0.15	NA	NA	NA	2000-2019	0.02	-1.42 to 1.49
Luxembourg	2000-2006	-1.35	-1.69 to -1.01	2006-2016	-2.34	-2.52 to -2.16	2016-2019	-0.08	-1.09 to 0.95	NA	NA	NA	2000-2019	-1.67	-1.86 to -1.48
Malta	2000-2004	-0.07	-0.93 to 0.79	2004-2007	2.86	0.13 to 5.66	2007-2013	-0.82	-1.42 to -0.22	2013-2019	2.23	1.78 to 2.69	2000-2019	0.87	0.42 to 1.33
Mauritius	2000-2004	4.49	2.12 to 6.92	2004-2019	1.64	1.37 to 1.92	NA	NA	NA	NA	NA	NA	2000-2019	2.24	1.74 to 2.74
Mexico	2000-2012	2.17	1.69 to 2.64	2012-2019	3.84	2.99 to 4.68	NA	NA	NA	NA	NA	NA	2000-2019	2.78	2.38 to 3.18
Netherlands	2000-2019	0.33	0.16 to 0.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.33	0.16 to 0.50
New Zealand	2000-2019	0.77	0.60 to 0.94	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.77	0.60 to 0.94
Norway	2000-2011	0.17	-0.20 to 0.54	2011-2019	-2.46	-3.05 to -1.87	NA	NA	NA	NA	NA	NA	2000-2019	-0.95	-1.25 to -0.64
Pama	2000-2009	3.47	2.79 to 4.15	2009-2019	1.59	1.15 to 2.03	NA	NA	NA	NA	NA	NA	2000-2019	2.47	2.11 to 2.84
Philippines	2000-2007	-0.89	-1.17 to -0.60	2007-2010	1.71	-0.32 to 3.78	2010-2013	3.42	1.49 to 5.39	2013-2019	1.86	1.57 to 2.15	2000-2019	1.06	0.66 to 1.46
Poland	2000-2002	-0.72	-3.57 to 2.22	2002-2007	2.39	1.45 to 3.34	2007-2016	-1.14	-1.47 to -0.82	2016-2019	2.00	0.48 to 3.54	2000-2019	0.31	-0.10 to 0.74
Puerto Rico	2000-2009	2.04	1.25 to 2.84	2009-2019	0.26	-0.38 to 0.91	NA	NA	NA	NA	NA	NA	2000-2019	1.10	0.64 to 1.57
Republic of	2000-2010	3.15	2.77 to 3.53	2010-2016	-3.54	-4.50 to -2.58	2016-2019	1.82	-0.50 to 4.20	NA	NA	NA	2000-2019	0.78	0.31 to 1.25

Korea															
Republic of	2000-2009	3.31	2.31 to 4.31	2009-2012	-4.09	-13.67 to 6.56	2012-2015	4.37	-6.49 to	2015-2019	-3.44	-6.73 to -0.03	2000-2019	0.82	-1.38 to 3.08
Moldova									16.48						
Romania	2000-2010	1.82	1.29 to 2.36	2010-2013	-2.26	-8.76 to 4.72	2013-2019	2.88	1.77 to 4.00	NA	NA	NA	2000-2019	1.50	0.43 to 2.57
Saint Lucia	2000-2005	-1.16	-2.13 to -0.18	2005-2012	3.60	2.93 to 4.27	2012-2019	-0.07	-0.53 to 0.38	NA	NA	NA	2000-2019	0.97	0.62 to 1.33
Serbia	2000-2019	0.52	0.39 to 0.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.52	0.39 to 0.66
Singapore	2000-2008	-0.71	-1.10 to -0.31	2008-2017	-1.78	-2.16 to -1.41	2017-2019	1.34	-2.17 to 4.97	NA	NA	NA	2000-2019	-1.01	-1.40 to -0.61
Slovakia	2000-2004	-1.96	-3.30 to -0.60	2004-2008	2.47	0.23 to 4.76	2008-2019	0.48	0.19 to 0.77	NA	NA	NA	2000-2019	0.38	-0.14 to 0.89
Slovenia	2000-2011	-0.06	-0.62 to 0.51	2011-2014	-4.18	-12.17 to 4.52	2014-2019	1.04	-0.98 to 3.09	NA	NA	NA	2000-2019	-0.43	-1.78 to 0.93
Spain	2000-2017	-0.79	-0.97 to -0.61	2017-2019	3.56	-1.51 to 8.89	NA	NA	NA	NA	NA	NA	2000-2019	-0.34	-0.84 to 0.17
Sweden	2000-2019	0.28	0.11 to 0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	0.28	0.11 to 0.46
Switzerland	2000-2004	0.72	-0.55 to 2.00	2004-2012	-1.39	-1.90 to -0.88	2012-2015	-3.51	-7.30 to 0.44	2015-2019	0.66	-0.65 to 1.98	2000-2019	-0.86	-1.52 to -0.19
Trinidad and Tobago	2000-2008	3.84	2.73 to 4.96	2008-2012	-4.10	-8.36 to 0.36	2012-2019	0.78	-0.49 to 2.06	NA	NA	NA	2000-2019	1.00	-0.05 to 2.05
United Kingdom	2000-2009	1.26	0.74 to 1.78	2009-2012	-0.67	-5.79 to 4.72	2012-2017	2.92	1.27 to 4.60	2017-2019	-1.71	-6.58 to 3.42	2000-2019	1.07	0.10 to 2.04
United States of America	2000-2002	2.39	-1.59 to 6.53	2002-2005	-0.64	-4.42 to 3.28	2005-2016	1.23	0.93 to 1.52	2016-2019	-1.87	-3.69 to -0.00	2000-2019	0.56	-0.15 to 1.27
Uruguay	2000-2006	-0.37	-1.01 to 0.27	2006-2010	1.97	0.10 to 3.86	2010-2016	-1.02	-1.82 to -0.20	2016-2019	1.81	-0.01 to 3.66	2000-2019	0.25	-0.25 to 0.76

AAPC: Average annual percent change; CRC: Colorectal cancer; EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 12: Joinpoint analysis for CRC, age-standardized mortality in 2000–2019 for both genders, younger than 50 years.**

Country	Trend 1			Trend 2			Trend 3			Trend 4			Year	AAPC	Range
	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range	Year	EAPC	Range			
Antigua and Barbuda	2000-2002	-0.90	-2.66 to 0.90	2002-2009	0.66	0.38 to 0.94	2009-2019	0.29	0.17 to 0.41	NA	NA	NA	2000-2019	0.30	0.10 to 0.50
Argenti	2000-2005	-0.51	-1.22 to 0.21	2005-2008	1.54	-1.55 to 4.73	2008-2015	-0.61	-1.11 to -0.11	2015-2019	1.13	0.24 to 2.02	2000-2019	0.12	-0.39 to 0.63



Australia	2000-2005	-2.59	-3.24 to -1.94	2005-2012	0.09	-0.42 to 0.60	2012-2015	2.04	-0.88 to 5.05	2015-2019	-0.82	-1.70 to 0.07	2000-2019	-0.51	-0.99 to -0.03
Austria	2000-2007	-6.78	-7.24 to -6.31	2007-2013	-3.37	-4.31 to -2.43	2013-2019	-0.59	-1.38 to 0.20	NA	NA	NA	2000-2019	-3.78	-4.16 to -3.40
Barbados	2000-2006	1.84	1.02 to 2.67	2006-2019	-0.66	-0.90 to -0.42	NA	NA	NA	NA	NA	NA	2000-2019	0.13	-0.15 to 0.41
Belgium	2000-2007	-1.41	-1.86 to -0.97	2007-2014	-3.12	-3.72 to -2.53	2014-2019	-0.10	-0.96 to 0.76	NA	NA	NA	2000-2019	-1.71	-2.02 to -1.39
Brazil	2000-2011	0.50	0.32 to 0.69	2011-2019	-0.76	-1.02 to -0.49	NA	NA	NA	NA	NA	NA	2000-2019	-0.03	-0.17 to 0.11
Cada	2000-2006	0.83	0.44 to 1.23	2006-2011	-1.17	-1.87 to -0.45	2011-2017	0.56	0.04 to 1.08	2017-2019	-1.89	-4.19 to 0.46	2000-2019	-0.07	-0.40 to 0.25
Chile	2000-2006	0.62	-0.18 to 1.43	2006-2015	2.75	2.29 to 3.22	2015-2019	-1.25	-2.45 to -0.02	NA	NA	NA	2000-2019	1.23	0.84 to 1.61
Chi	2000-2007	0.55	0.20 to 0.90	2007-2010	1.85	-0.60 to 4.35	2010-2016	-1.01	-1.52 to -0.49	2016-2019	1.86	0.64 to 3.09	2000-2019	0.46	0.05 to 0.88
Colombia	2000-2010	1.59	1.01 to 2.18	2010-2019	-0.02	-0.63 to 0.59	NA	NA	NA	NA	NA	NA	2000-2019	0.82	0.44 to 1.21
Costa Rica	2000-2019	2.36	1.99 to 2.74	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	2.36	1.99 to 2.74
Croatia	2000-2008	0.06	-0.64 to 0.75	2008-2019	-1.68	-2.15 to -1.21	NA	NA	NA	NA	NA	NA	2000-2019	-0.95	-1.32 to -0.59
Cuba	2000-2009	-1.57	-2.16 to -0.98	2009-2019	1.51	1.01 to 2.02	NA	NA	NA	NA	NA	NA	2000-2019	0.04	-0.31 to 0.39
Denmark	2000-2008	-1.91	-2.33 to -1.48	2008-2015	-3.98	-4.68 to -3.27	2015-2019	1.29	-0.20 to 2.80	NA	NA	NA	2000-2019	-2.02	-2.41 to -1.62
Ecuador	2000-2006	5.76	4.54 to 6.99	2006-2019	-0.32	-0.61 to -0.03	NA	NA	NA	NA	NA	NA	2000-2019	1.56	1.17 to 1.95
Estonia	2000-2019	-2.20	-2.55 to -1.85	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-2.20	-2.55 to -1.85
Fiji	2000-2002	-4.59	-7.56 to -1.52	2002-2007	3.30	2.31 to 4.29	2007-2019	1.46	1.30 to 1.63	NA	NA	NA	2000-2019	1.29	0.90 to 1.68
Finland	2000-2009	-0.21	-0.74 to 0.34	2009-2016	-2.95	-4.01 to -1.88	2016-2019	0.42	-3.01 to 3.97	NA	NA	NA	2000-2019	-1.13	-1.77 to -0.48
France	2000-2002	-0.09	-4.19 to 4.19	2002-2006	-3.30	-5.36 to -1.19	2006-2017	-1.48	-1.83 to -1.12	2017-2019	1.22	-3.56 to 6.24	2000-2019	-1.44	-2.15 to -0.72
Germany	2000-2003	1.79	0.32 to 3.28	2003-2008	-2.65	-3.54 to -1.75	2008-2014	-6.72	-7.42 to -6.01	2014-2019	1.29	0.41 to 2.17	2000-2019	-2.26	-2.66 to -1.86
Greece	2000-2005	-0.22	-0.71 to 0.28	2005-2008	1.13	-1.05 to 3.35	2008-2015	-0.86	-1.23 to -0.49	2015-2019	1.19	0.47 to 1.91	2000-2019	0.05	-0.31 to 0.41
Greda	2000-2004	2.38	1.17 to 3.62	2004-2019	0.22	0.08 to 0.37	NA	NA	NA	NA	NA	NA	2000-2019	0.68	0.42 to 0.93
Guatemala	2000-2006	2.85	1.52 to 4.20	2006-2019	0.08	-0.24 to 0.41	NA	NA	NA	NA	NA	NA	2000-2019	0.95	0.52 to 1.38
Guya	2000-2005	-0.64	-1.89 to 0.64	2005-2019	1.01	0.75 to 1.26	NA	NA	NA	NA	NA	NA	2000-2019	0.57	0.22 to 0.93
Hungary	2000-2006	-0.07	-0.81 to 0.68	2006-2016	-4.24	-4.69 to -3.80	2016-2019	2.38	-0.34 to 5.17	NA	NA	NA	2000-2019	-1.92	-2.39 to -1.43
Iceland	2000-2003	-3.01	-3.86 to -2.16	2003-2008	-1.61	-2.16 to -1.06	2008-2017	-0.92	-1.12 to -0.72	2017-2019	0.50	-1.34 to 2.37	2000-2019	-1.29	-1.54 to -1.03
Israel	2000-2008	-1.43	-1.85 to -1.01	2008-2012	-5.15	-7.05 to -3.22	2012-2019	0.15	-0.38 to 0.68	NA	NA	NA	2000-2019	-1.65	-2.09 to -1.21
Italy	2000-2016	-2.13	-2.24 to -2.02	2016-2019	0.45	-1.08 to 2.00	NA	NA	NA	NA	NA	NA	2000-2019	-1.73	-1.96 to -1.49
Japan	2000-2008	-1.76	-1.96 to -1.55	2008-2011	-0.60	-2.60 to 1.43	2011-2017	-1.82	-2.27 to -1.37	2017-2019	0.38	-1.71 to 2.52	2000-2019	-1.37	-1.73 to -1.01
Kuwait	2000-2004	-2.10	-4.34 to 0.20	2004-2008	4.39	1.10 to 7.80	2008-2012	-7.27	-9.90 to -4.56	2012-2019	0.25	-0.42 to 0.94	2000-2019	-1.03	-1.94 to -0.12
Kyrgyzstan	2000-2006	-1.33	-2.11 to -0.54	2006-2009	-5.11	-9.44 to -0.57	2009-2017	-2.43	-3.08 to -1.77	2017-2019	1.89	-3.09 to 7.11	2000-2019	-2.07	-2.90 to -1.23

Latvia	2000-2007	1.73	0.46 to 3.01	2007-2010	-7.41	-16.18 to 2.28	2010-2019	-1.81	-2.85 to -0.76	NA	NA	NA	2000-2019	-1.44	-2.95 to 0.09
Lithuania	2000-2007	2.90	1.79 to 4.03	2007-2010	-6.61	-14.08 to 1.50	2010-2019	-1.50	-2.37 to -0.62	NA	NA	NA	2000-2019	-0.74	-2.02 to 0.55
Luxembourg	2000-2009	-3.51	-3.74 to -3.29	2009-2016	-2.72	-3.17 to -2.28	2016-2019	0.16	-1.18 to 1.52	NA	NA	NA	2000-2019	-2.65	-2.91 to -2.39
g															
Malta	2000-2004	-1.87	-2.41 to -1.34	2004-2007	1.24	-0.52 to 3.02	2007-2013	-1.61	-2.01 to -1.21	2013-2019	0.98	0.67 to 1.29	2000-2019	-0.41	-0.70 to -0.12
Mauritius	2000-2005	4.06	2.20 to 5.95	2005-2019	0.77	0.43 to 1.12	NA	NA	NA	NA	NA	NA	2000-2019	1.63	1.13 to 2.13
Mexico	2000-2012	1.59	1.12 to 2.06	2012-2019	3.07	2.21 to 3.93	NA	NA	NA	NA	NA	NA	2000-2019	2.13	1.74 to 2.53
Netherlands	2000-2007	-1.79	-2.15 to -1.43	2007-2011	0.03	-1.35 to 1.42	2011-2014	-2.44	-5.18 to 0.38	2014-2019	0.38	-0.29 to 1.04	2000-2019	-0.95	-1.44 to -0.45
New Zealand	2000-2019	-0.45	-0.58 to -0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.45	-0.58 to -0.32
Norway	2000-2006	-2.23	-2.58 to -1.87	2006-2011	-0.78	-1.47 to -0.08	2011-2017	-3.58	-4.07 to -3.09	2017-2019	-0.16	-2.50 to 2.24	2000-2019	-2.06	-2.38 to -1.75
Pama	2000-2009	3.66	2.89 to 4.43	2009-2019	0.16	-0.35 to 0.67	NA	NA	NA	NA	NA	NA	2000-2019	1.80	1.38 to 2.22
Philippines	2000-2007	-1.04	-1.19 to -0.89	2007-2011	1.19	0.65 to 1.73	2011-2015	2.65	2.14 to 3.16	2015-2019	1.23	0.94 to 1.52	2000-2019	0.67	0.52 to 0.82
Poland	2000-2002	-2.14	-4.77 to 0.57	2002-2007	1.20	0.31 to 2.10	2007-2015	-2.78	-3.18 to -2.38	2015-2019	0.77	-0.23 to 1.78	2000-2019	-0.93	-1.33 to -0.54
Puerto Rico	2000-2019	-0.10	-0.36 to 0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-0.10	-0.36 to 0.17
Republic of Korea	2000-2006	-0.87	-1.30 to -0.44	2006-2010	0.70	-0.55 to 1.96	2010-2016	-5.13	-5.70 to -4.56	2016-2019	1.14	-0.30 to 2.59	2000-2019	-1.60	-1.96 to -1.24
Republic of Moldova	2000-2009	2.61	1.72 to 3.51	2009-2012	-5.30	-14.09 to 4.40	2012-2015	2.63	-7.53 to 13.90	2015-2019	-4.68	-7.85 to -1.40	2000-2019	-0.24	-2.29 to 1.86
Romania	2000-2010	0.47	-0.05 to 0.99	2010-2013	-3.82	-10.43 to 3.28	2013-2019	1.87	0.72 to 3.04	NA	NA	NA	2000-2019	0.22	-0.87 to 1.32
Saint Lucia	2000-2002	-3.91	-7.12 to -0.58	2002-2006	-0.48	-2.09 to 1.16	2006-2012	3.12	2.46 to 3.79	2012-2019	-0.40	-0.76 to -0.05	2000-2019	0.30	-0.18 to 0.78
Serbia	2000-2005	-0.58	-1.42 to 0.27	2005-2013	-2.05	-2.60 to -1.49	2013-2019	-0.16	-0.91 to 0.60	NA	NA	NA	2000-2019	-1.07	-1.43 to -0.71
Singapore	2000-2017	-3.34	-3.46 to -3.22	2017-2019	1.78	-1.92 to 5.63	NA	NA	NA	NA	NA	NA	2000-2019	-2.81	-3.17 to -2.45
Slovakia	2000-2004	-2.66	-4.09 to -1.21	2004-2019	-0.64	-0.85 to -0.43	NA	NA	NA	NA	NA	NA	2000-2019	-1.07	-1.39 to -0.75
Slovenia	2000-2019	-2.71	-3.01 to -2.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000-2019	-2.71	-3.01 to -2.40
Spain	2000-2006	-2.68	-3.13 to -2.24	2006-2012	-1.66	-2.24 to -1.07	2012-2016	-3.05	-4.38 to -1.70	2016-2019	2.67	1.23 to 4.13	2000-2019	-1.61	-1.98 to -1.24
Sweden	2000-2010	-0.75	-1.09 to -0.41	2010-2019	0.08	-0.32 to 0.48	NA	NA	NA	NA	NA	NA	2000-2019	-0.36	-0.60 to -0.12
Switzerland	2000-2012	-1.64	-1.89 to -1.39	2012-2015	-4.03	-8.24 to 0.37	2015-2019	0.18	-1.28 to 1.67	NA	NA	NA	2000-2019	-1.64	-2.34 to -0.94
Trinidad and Tobago	2000-2008	2.31	1.20 to 3.43	2008-2012	-4.61	-9.07 to 0.07	2012-2019	0.47	-0.87 to 1.83	NA	NA	NA	2000-2019	0.14	-0.95 to 1.24

United Kingdom	2000-2013	-0.84	-1.07 to -0.60	2013-2016	2.57	-1.82 to 7.16	2016-2019	-0.64	-2.78 to 1.54	NA	NA	NA	2000-2019	-0.28	-0.98 to 0.43
United States of America	2000-2002	1.37	-1.70 to 4.55	2002-2005	-0.94	-3.90 to 2.11	2005-2017	0.64	0.43 to 0.84	2017-2019	-2.43	-5.36 to 0.58	2000-2019	0.14	-0.45 to 0.72
Uruguay	2000-2006	-1.11	-1.52 to -0.69	2006-2010	1.00	-0.24 to 2.25	2010-2016	-1.54	-2.09 to -0.99	2016-2019	1.04	-0.21 to 2.31	2000-2019	-0.47	-0.81 to -0.13

AAPC: Average annual percent change; CRC: Colorectal cancer;EAPC: Estimated annual percentage change; NA: Not available.

**Supplementary Table 13: Analysis of risk factors associated with CRC incidence in males.**

Risk factor	2015				2016				2017				2018				2019			
	$\beta$	95% CI	<i>P</i> -value		$\beta$	95% CI	<i>P</i> -value		$\beta$	95% CI	<i>P</i> -value		$\beta$	95% CI	<i>P</i> -value		$\beta$	95% CI	<i>P</i> -value	
Smoking	-0.039	-0.171	0.092	0.555	-0.037	-0.167	0.093	0.576	-0.033	-0.164	0.097	0.615	-0.029	-0.161	0.103	0.662	-0.027	-0.158	0.104	0.687
Alcohol	<b>0.436</b>	<b>0.097</b>	<b>0.775</b>	<b>0.012*</b>	<b>0.434</b>	<b>0.099</b>	<b>0.769</b>	<b>0.012*</b>	<b>0.417</b>	<b>0.081</b>	<b>0.753</b>	<b>0.015*</b>	<b>0.423</b>	<b>0.083</b>	<b>0.762</b>	<b>0.015*</b>	<b>0.420</b>	<b>0.083</b>	<b>0.758</b>	<b>0.015*</b>
UHC	0.108	-0.102	0.318	0.309	0.127	-0.081	0.334	0.228	0.133	-0.075	0.340	0.208	0.150	-0.060	0.361	0.159	0.161	-0.048	0.370	0.130
High cholesterol	<b>0.975</b>	<b>0.508</b>	<b>1.441</b>	<b>&lt;0.0001*</b>	<b>0.900</b>	<b>0.439</b>	<b>1.361</b>	<b>&lt;0.0001*</b>	<b>0.859</b>	<b>0.397</b>	<b>1.321</b>	<b>&lt;0.0001*</b>	<b>0.825</b>	<b>0.357</b>	<b>1.292</b>	<b>0.001*</b>	<b>0.814</b>	<b>0.349</b>	<b>1.278</b>	<b>&lt;0.0001*</b>
Physical inactivity	-0.017	-0.227	0.192	0.870	-0.002	-0.209	0.205	0.984	-0.001	-0.208	0.206	0.993	0.004	-0.206	0.213	0.972	0.003	-0.206	0.211	0.978
GDP	0.105	-0.345	0.554	0.645	0.116	-0.328	0.561	0.605	0.146	-0.300	0.591	0.518	0.149	-0.301	0.600	0.513	0.152	-0.295	0.600	0.501
Out-of-pocket	-0.031	-0.136	0.074	0.561	-0.032	-0.137	0.072	0.537	-0.036	-0.141	0.068	0.491	-0.036	-0.141	0.070	0.504	-0.033	-0.138	0.072	0.539
Unemployment	<b>0.455</b>	<b>0.080</b>	<b>0.830</b>	<b>0.018*</b>	<b>0.413</b>	<b>0.042</b>	<b>0.783</b>	<b>0.029*</b>	<b>0.401</b>	<b>0.030</b>	<b>0.772</b>	<b>0.034*</b>	<b>0.375</b>	<b>&lt;0.0001*</b>	<b>0.751</b>	<b>0.050*</b>	<b>0.376</b>	<b>0.002</b>	<b>0.749</b>	<b>0.049*</b>
Health expenditure	0.059	-0.732	0.851	0.882	0.063	-0.719	0.845	0.874	0.105	-0.678	0.888	0.790	0.119	-0.674	0.911	0.767	0.122	-0.666	0.911	0.758
Health system	<b>1.960</b>	<b>0.120</b>	<b>3.800</b>	<b>0.037*</b>	<b>1.946</b>	<b>0.128</b>	<b>3.764</b>	<b>0.036*</b>	<b>2.013</b>	<b>0.192</b>	<b>3.834</b>	<b>0.031*</b>	<b>1.959</b>	<b>0.116</b>	<b>3.802</b>	<b>0.037*</b>	<b>1.896</b>	<b>0.064</b>	<b>3.729</b>	<b>0.043*</b>
Education	-0.128	-0.279	0.022	0.094	-0.127	-0.276	0.022	0.093	-0.130	-0.279	0.019	0.087	-0.134	-0.285	0.017	0.082	-0.135	-0.286	0.015	0.077

The  $\beta$  can be interpreted as the change in ASR of incidence or mortality associated with a 1% increase of a certain risk factor. \**P* values <0.05.  $\beta$ : Beta coefficient; ASR: Age-standardized rates; CI: Confidence interval; CRC: Colorectal cancer; GDP: Gross domestic product.

**Supplementary Table 14: Analysis of risk factors associated with CRC mortality in males.**

Risk factor	2015			2016			2017			2018			2019		
	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value
Smoking	0.018	-0.074 0.110	0.695	0.020	-0.071 0.110	0.669	0.021	-0.070 0.112	0.651	0.022	-0.069 0.114	0.630	0.022	-0.069 0.113	0.627
Alcohol	<b>0.410</b>	<b>0.173 0.647</b>	<b>0.001*</b>	<b>0.406</b>	<b>0.173 0.640</b>	<b>0.001*</b>	<b>0.389</b>	<b>0.155 0.624</b>	<b>0.001*</b>	<b>0.393</b>	<b>0.157 0.629</b>	<b>0.001*</b>	<b>0.390</b>	<b>0.156 0.624</b>	<b>0.001*</b>
UHC	0.011	-0.136 0.157	0.887	0.022	-0.123 0.166	0.767	0.025	-0.120 0.170	0.733	0.032	-0.115 0.178	0.668	0.038	-0.107 0.183	0.605
High cholesterol	0.236	-0.090 0.562	0.154	0.190	-0.131 0.512	0.242	0.169	-0.154 0.491	0.301	0.156	-0.169 0.481	0.342	0.154	-0.167 0.476	0.343
Physical inactivity	0.016	-0.130 0.162	0.832	0.023	-0.121 0.167	0.754	0.022	-0.123 0.166	0.765	0.022	-0.123 0.168	0.760	0.020	-0.124 0.164	0.784
GDP	-0.091	-0.405 0.223	0.566	-0.083	-0.392 0.227	0.597	-0.067	-0.378 0.243	0.668	-0.062	-0.375 0.251	0.693	-0.059	-0.369 0.251	0.708
Out-of-pocket	-0.039	-0.112 0.035	0.299	-0.039	-0.112 0.033	0.286	-0.041	-0.114 0.032	0.266	-0.039	-0.113 0.034	0.290	-0.036	-0.109 0.036	0.324
Unemployment	<b>0.307</b>	<b>0.046 0.569</b>	<b>0.022*</b>	<b>0.282</b>	<b>0.024 0.540</b>	<b>0.032*</b>	<b>0.275</b>	<b>0.016 0.534</b>	<b>0.037*</b>	<b>0.261</b>	<b>0.000 0.522</b>	<b>0.050*</b>	<b>0.262</b>	<b>0.003 0.520</b>	<b>0.047*</b>
Health expenditure	<b>-0.581</b>	<b>-1.133 -0.029</b>	<b>0.039*</b>	<b>-0.575</b>	<b>-1.120 -0.030</b>	<b>0.039*</b>	-0.540	-1.087 0.007	0.053	-0.521	-1.071 0.030	0.064	-0.506	-1.052 0.039	0.069
Health system	1.186	-0.099 2.470	0.070	1.161	-0.105 2.428	0.072	1.173	-0.098 2.444	0.070	1.130	-0.151 2.410	0.083	1.069	-0.200 2.338	0.098
Education	-0.051	-0.156 0.054	0.337	-0.050	-0.154 0.054	0.342	-0.052	-0.156 0.052	0.326	-0.053	-0.158 0.052	0.315	-0.054	-0.158 0.050	0.307

The  $\beta$  can be interpreted as the change in ASR of incidence or mortality associated with a 1% increase of a certain risk factor. \**P* values <0.05.  $\beta$ : Beta coefficient; ASR: Age-standardized rates; CI: confidence interval; CRC: Colorectal cancer; GDP: Gross domestic product.

**Supplementary Table 15: Analysis of risk factors associated with CRC incidence in females.**

Risk factor	2015				2016				2017				2018				2019			
	$\beta$	95% CI	<i>P</i> -value		$\beta$	95% CI	<i>P</i> -value		$\beta$	95% CI	<i>P</i> -value		$\beta$	95% CI	<i>P</i> -value		$\beta$	95% CI	<i>P</i> -value	
Smoking	0.132	-0.005 0.268	0.058		0.120	-0.014 0.255	0.080		0.117	-0.016 0.251	0.084		0.117	-0.018 0.252	0.090		0.115	-0.019 0.250	0.092	
Alcohol	0.320	-0.381 1.021	0.367		0.298	-0.393 0.990	0.394		0.293	-0.393 0.980	0.398		0.304	-0.390 0.998	0.387		0.327	-0.365 1.018	0.351	
UHC	<b>0.160</b>	<b>0.021 0.298</b>	<b>0.025*</b>		<b>0.171</b>	<b>0.035 0.308</b>	<b>0.015*</b>		<b>0.172</b>	<b>0.036 0.308</b>	<b>0.014*</b>		<b>0.177</b>	<b>0.039 0.314</b>	<b>0.012*</b>		<b>0.178</b>	<b>0.041 0.315</b>	<b>0.011*</b>	
High cholesterol	<b>0.521</b>	<b>0.172 0.870</b>	<b>0.004*</b>		<b>0.487</b>	<b>0.143 0.831</b>	<b>0.006*</b>		<b>0.468</b>	<b>0.127 0.810</b>	<b>0.008*</b>		<b>0.457</b>	<b>0.112 0.803</b>	<b>0.010</b>		<b>0.461</b>	<b>0.117 0.806</b>	<b>0.009*</b>	
Physical inactivity	-0.009	-0.099 0.080	0.837		-0.010	-0.098 0.079	0.830		-0.009	-0.097 0.079	0.839		-0.011	-0.099 0.078	0.814		-0.012	-0.101 0.076	0.786	
GDP	0.047	-0.219 0.313	0.725		0.058	-0.204 0.321	0.661		0.078	-0.182 0.339	0.552		0.084	-0.180 0.348	0.528		0.080	-0.183 0.342	0.549	
Out-of-pocket	-0.038	-0.097 0.021	0.205		-0.036	-0.094 0.022	0.225		-0.036	-0.094 0.022	0.223		-0.035	-0.094 0.024	0.238		-0.033	-0.091 0.026	0.270	
Unemployment	-0.072	-0.235 0.091	0.381		-0.087	-0.248 0.073	0.282		-0.093	-0.253 0.066	0.248		-0.100	-0.262 0.061	0.219		-0.097	-0.258 0.064	0.233	
Health expenditure	0.308	-0.151 0.768	0.186		0.339	-0.114 0.793	0.141		0.355	-0.095 0.805	0.121		0.359	-0.096 0.815	0.120		0.337	-0.116 0.791	0.143	
Health system	0.861	-0.211 1.933	0.114		0.892	-0.166 1.949	0.097		0.949	-0.101 1.999	0.076		0.978	-0.084 2.040	0.071		0.954	-0.104 2.012	0.077	
Education	<b>-0.096</b>	<b>-0.176 -0.015</b>	<b>0.021*</b>		<b>-0.094</b>	<b>-0.173 -0.014</b>	<b>0.021*</b>		<b>-0.094</b>	<b>-0.173 -0.015</b>	<b>0.020*</b>		0.117	-0.018 0.252	0.090		<b>-0.095</b>	<b>-0.174 -0.015</b>	<b>0.020*</b>	

The  $\beta$  can be interpreted as the change in ASR of incidence or mortality associated with a 1% increase of a certain risk factor. \**P* values <0.05.  $\beta$ : Beta coefficient; ASR: Age-standardized rates; CI: Confidence interval; CRC: Colorectal cancer; GDP: Gross domestic product.

**Supplementary Table 16: Analysis of risk factors associated with CRC mortality in females.**

Risk factor	2015			2016			2017			2018			2019		
	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value
Smoking	0.047	-0.049 0.143	0.337	0.040	-0.054 0.134	0.401	0.041	-0.053 0.135	0.391	0.042	-0.052 0.136	0.374	0.042	-0.052 0.136	0.374
Alcohol	0.067	-0.426 0.560	0.788	0.061	-0.423 0.545	0.802	0.055	-0.428 0.538	0.820	0.067	-0.416 0.549	0.785	0.067	-0.416 0.549	0.785
UHC	0.052	-0.046 0.149	0.295	0.058	-0.038 0.154	0.233	0.057	-0.038 0.153	0.236	0.057	-0.038 0.153	0.237	0.057	-0.038 0.153	0.237
High cholesterol	0.154	-0.092 0.399	0.217	0.135	-0.106 0.375	0.270	0.122	-0.118 0.363	0.314	0.119	-0.122 0.359	0.329	0.119	-0.122 0.359	0.329
Physical inactivity	0.012	-0.051 0.075	0.708	0.012	-0.050 0.074	0.698	0.012	-0.050 0.074	0.694	0.011	-0.051 0.073	0.725	0.011	-0.051 0.073	0.725
GDP	-0.085	-0.272 0.102	0.369	-0.078	-0.262 0.106	0.403	-0.066	-0.250 0.117	0.475	0.042	-0.052 0.136	0.374	0.042	-0.052 0.136	0.374
Out-of-pocket	-0.028	-0.070 0.014	0.186	-0.026	-0.067 0.015	0.205	-0.026	-0.067 0.015	0.207	0.067	-0.416 0.549	0.785	0.067	-0.416 0.549	0.785
Unemployment	-0.004	-0.118 0.111	0.949	-0.011	-0.123 0.101	0.846	-0.016	-0.128 0.096	0.783	0.057	-0.038 0.153	0.237	0.057	-0.038 0.153	0.237
Health expenditure	-0.225	-0.549 0.098	0.170	-0.208	-0.525 0.110	0.197	-0.193	-0.510 0.124	0.229	0.119	-0.122 0.359	0.329	0.119	-0.122 0.359	0.329
Health system	0.543	-0.211 1.297	0.156	0.529	-0.212 1.269	0.160	0.546	-0.192 1.285	0.145	0.011	-0.051 0.073	0.725	0.011	-0.051 0.073	0.725
Education	-0.031	-0.088 0.026	0.282	-0.029	-0.085 0.026	0.297	-0.030	-0.085 0.026	0.288	0.042	-0.052 0.136	0.374	0.042	-0.052 0.136	0.374

The  $\beta$  can be interpreted as the change in ASR of incidence or mortality associated with a 1% increase of a certain risk factor. \**P* values <0.05.  $\beta$ : Beta coefficient; ASR: Age-standardized rates; CI: Confidence interval; CRC: Colorectal cancer; GDP: Gross domestic product.

**Supplementary Table 17: Analysis of risk factors associated with CRC incidence in both genders.**

Risk factor	2015			2016			2017			2018			2019		
	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value
Smoking	0.037	-0.108 0.183	0.613	0.034	-0.109 0.177	0.639	0.039	-0.104 0.182	0.590	0.042	-0.103 0.187	0.567	0.044	-0.101 0.189	0.551
Alcohol	<b>0.412</b>	<b>0.017 0.807</b>	<b>0.041*</b>	<b>0.403</b>	<b>0.016 0.791</b>	<b>0.042*</b>	<b>0.393</b>	<b>0.006 0.780</b>	<b>0.046*</b>	<b>0.401</b>	<b>0.009 0.793</b>	<b>0.045*</b>	<b>0.405</b>	<b>0.012 0.797</b>	<b>0.043*</b>
UHC	0.121	-0.044 0.285	0.148	0.137	-0.024 0.299	0.094	0.142	-0.019 0.303	0.083	0.154	-0.010 0.317	0.065	0.160	-0.003 0.323	0.055
High cholesterol	<b>0.785</b>	<b>0.383 1.186</b>	<b>&lt;0.0001</b>	<b>0.729</b>	<b>0.335 1.124</b>	<b>&lt;0.0001</b>	<b>0.694</b>	<b>0.300 1.087</b>	<b>0.001*</b>	<b>0.669</b>	<b>0.270 1.068</b>	<b>0.001*</b>	<b>0.664</b>	<b>0.265 1.063</b>	<b>0.001*</b>
Physical inactivity	-0.005	-0.140 0.130	0.941	0.000	-0.132 0.133	0.999	0.002	-0.130 0.134	0.976	0.003	-0.131 0.137	0.968	0.002	-0.132 0.136	0.972
GDP	0.138	-0.190 0.465	0.406	0.145	-0.177 0.466	0.375	0.167	-0.154 0.488	0.304	0.170	-0.155 0.496	0.302	0.168	-0.158 0.493	0.309
Out-of-pocket	-0.035	-0.112 0.042	0.367	-0.034	-0.109 0.041	0.369	-0.036	-0.111 0.039	0.339	-0.036	-0.112 0.040	0.354	-0.033	-0.109 0.043	0.389
Unemployment	0.148	-0.103 0.399	0.244	0.121	-0.125 0.367	0.332	0.110	-0.136 0.356	0.376	0.094	-0.155 0.344	0.455	0.095	-0.154 0.345	0.450
Health expenditure	0.377	-0.187 0.942	0.188	0.386	-0.169 0.941	0.170	0.409	-0.144 0.963	0.145	0.414	-0.147 0.976	0.146	0.399	-0.162 0.960	0.162
Health system	1.282	-0.087 2.650	0.066	1.287	-0.057 2.631	0.060	<b>1.342</b>	<b>0.001 2.683</b>	<b>0.050*</b>	1.331	-0.029 2.692	0.055	1.292	-0.067 2.652	0.062
Education	<b>-0.116</b>	<b>-0.226 -0.007</b>	<b>0.038*</b>	<b>-0.115</b>	<b>-0.223 -0.008</b>	<b>0.036*</b>	<b>-0.117</b>	<b>-0.225 -0.010</b>	<b>0.032*</b>	<b>-0.120</b>	<b>-0.229 -0.011</b>	<b>0.031*</b>	<b>-0.121</b>	<b>-0.230 -0.012</b>	<b>0.030*</b>

The  $\beta$  can be interpreted as the change in ASR of incidence or mortality associated with a 1% increase of a certain risk factor. \**P* values <0.05.  $\beta$ : Beta coefficient;

ASR: Age-standardized rates; CI: Confidence interval; CRC: Colorectal cancer; GDP: Gross domestic product.



**Supplementary Table 18: Analysis of risk factors associated with CRC mortality in both genders.**

Risk factor	2015			2016			2017			2018			2019		
	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value	$\beta$	95% CI	<i>P</i> -value
Smoking	0.055	-0.042 0.153	0.262	0.054	-0.042 0.150	0.270	0.057	-0.040 0.153	0.246	0.058	-0.039 0.155	0.237	0.058	-0.039 0.155	0.238
Alcohol	<b>0.315</b>	<b>0.051 0.579</b>	<b>0.020*</b>	<b>0.310</b>	<b>0.050 0.569</b>	<b>0.020*</b>	<b>0.299</b>	<b>0.039 0.560</b>	<b>0.025*</b>	<b>0.306</b>	<b>0.043 0.569</b>	<b>0.023*</b>	<b>0.309</b>	<b>0.046 0.571</b>	<b>0.022*</b>
UHC	0.044	-0.066 0.154	0.433	0.053	-0.055 0.161	0.334	0.055	-0.054 0.163	0.321	0.058	-0.052 0.167	0.300	0.060	-0.049 0.169	0.280
High cholesterol	0.160	-0.109 0.429	0.239	0.128	-0.136 0.392	0.339	0.109	-0.156 0.374	0.416	0.101	-0.167 0.368	0.456	0.103	-0.164 0.370	0.446
Physical inactivity	0.016	-0.074 0.106	0.726	0.019	-0.070 0.107	0.679	0.019	-0.070 0.108	0.672	0.019	-0.071 0.109	0.680	0.018	-0.072 0.107	0.696
GDP	-0.064	-0.283 0.156	0.565	-0.059	-0.274 0.157	0.591	-0.046	-0.262 0.170	0.674	-0.042	-0.260 0.177	0.707	-0.041	-0.259 0.177	0.709
Out-of-pocket	-0.033	-0.084 0.018	0.206	-0.032	-0.082 0.018	0.211	-0.033	-0.084 0.018	0.199	-0.032	-0.083 0.019	0.220	-0.030	-0.081 0.021	0.251
Unemployment	0.120	-0.048 0.288	0.160	0.106	-0.059 0.271	0.207	0.099	-0.067 0.264	0.240	0.090	-0.077 0.257	0.286	0.091	-0.076 0.258	0.280
Health expenditure	-0.301	-0.680 0.077	0.117	-0.295	-0.667 0.076	0.118	-0.274	-0.647 0.100	0.149	-0.261	-0.637 0.116	0.173	-0.260	-0.636 0.115	0.172
Health system	0.682	-0.234 1.598	0.143	0.662	-0.238 1.563	0.148	0.676	-0.228 1.580	0.141	0.662	-0.250 1.573	0.153	0.623	-0.287 1.534	0.177
Education	-0.048	-0.122 0.025	0.193	-0.047	-0.119 0.025	0.196	-0.049	-0.121 0.023	0.183	-0.050	-0.123 0.023	0.177	-0.050	-0.123 0.023	0.179

The  $\beta$  can be interpreted as the change in ASR of incidence or mortality associated with a 1% increase of a certain risk factor. \**P* values <0.05.  $\beta$ : Beta coefficient;

ASR: Age-standardized rates; CI: Confidence interval; CRC: Colorectal cancer; GDP: Gross domestic product.