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Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

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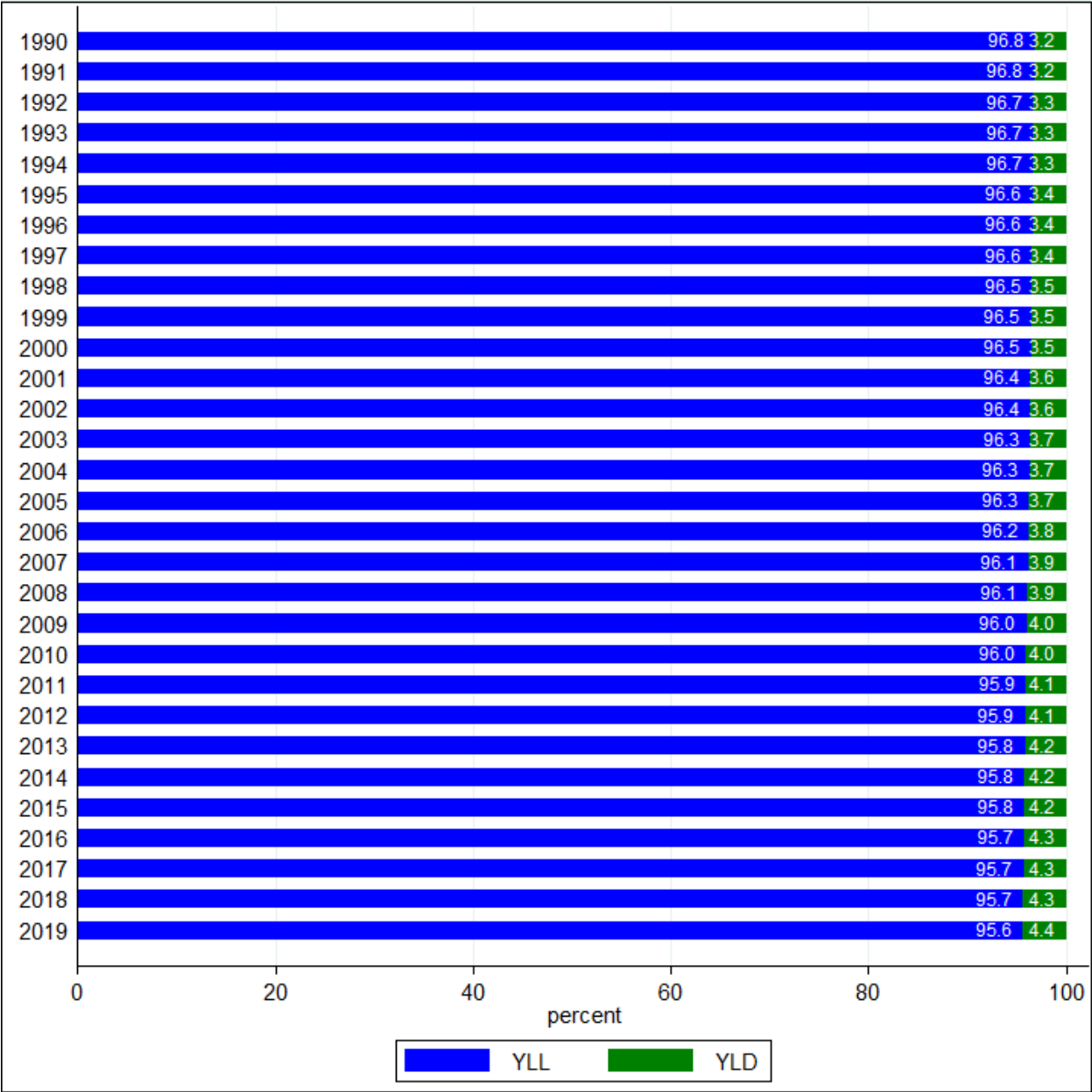
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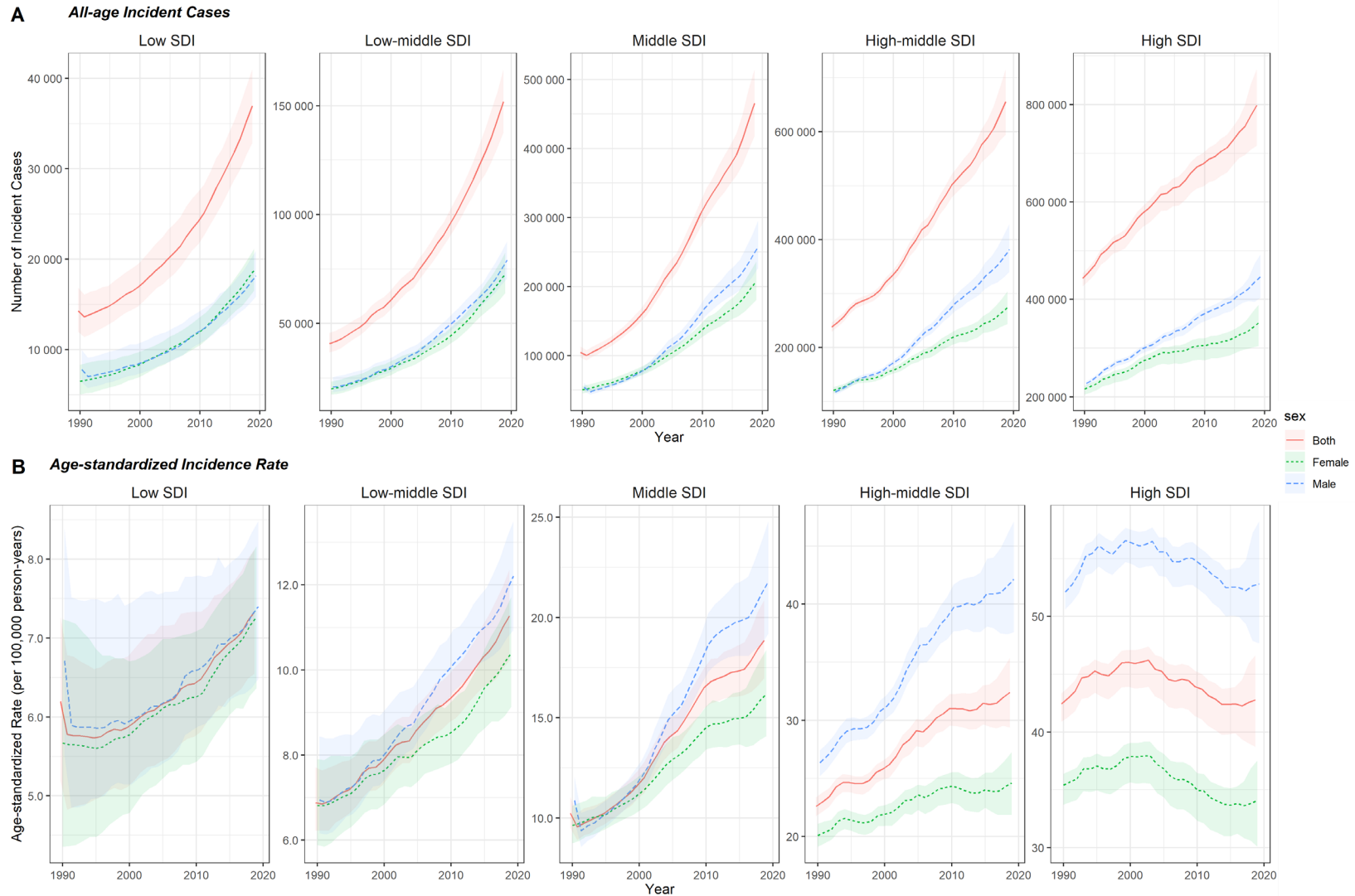
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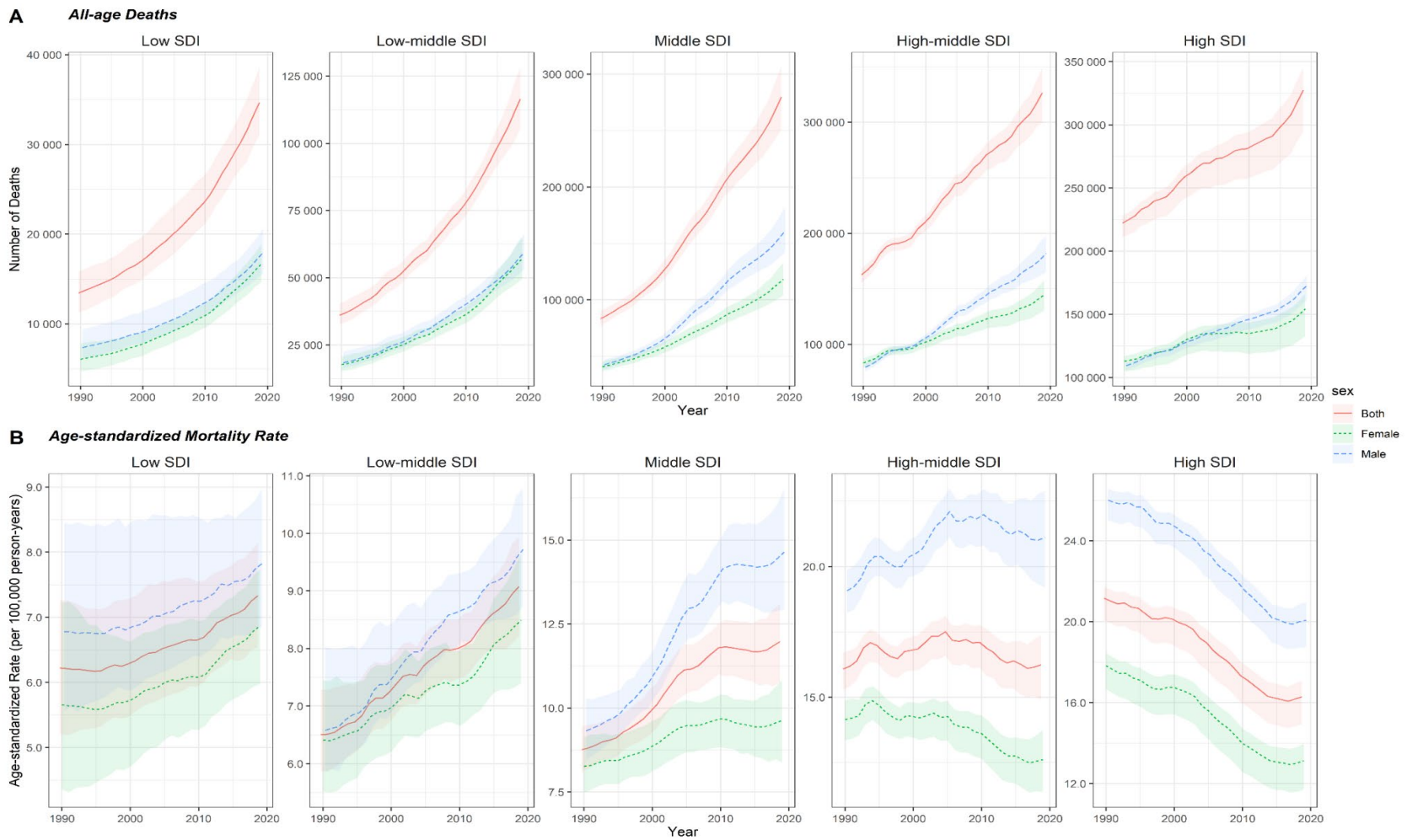
Supplementary Figure 1 Percent Contribution of YLL and YLD in All-age DALYs of Colorectal Cancer at Global Level, 1990-2019

YLL=Years of Life Lost; YLD=Years of Life Lived with Disability; DALYs=Disability-adjusted Life Years. DALYs are the sum of YLLs and YLDs. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019



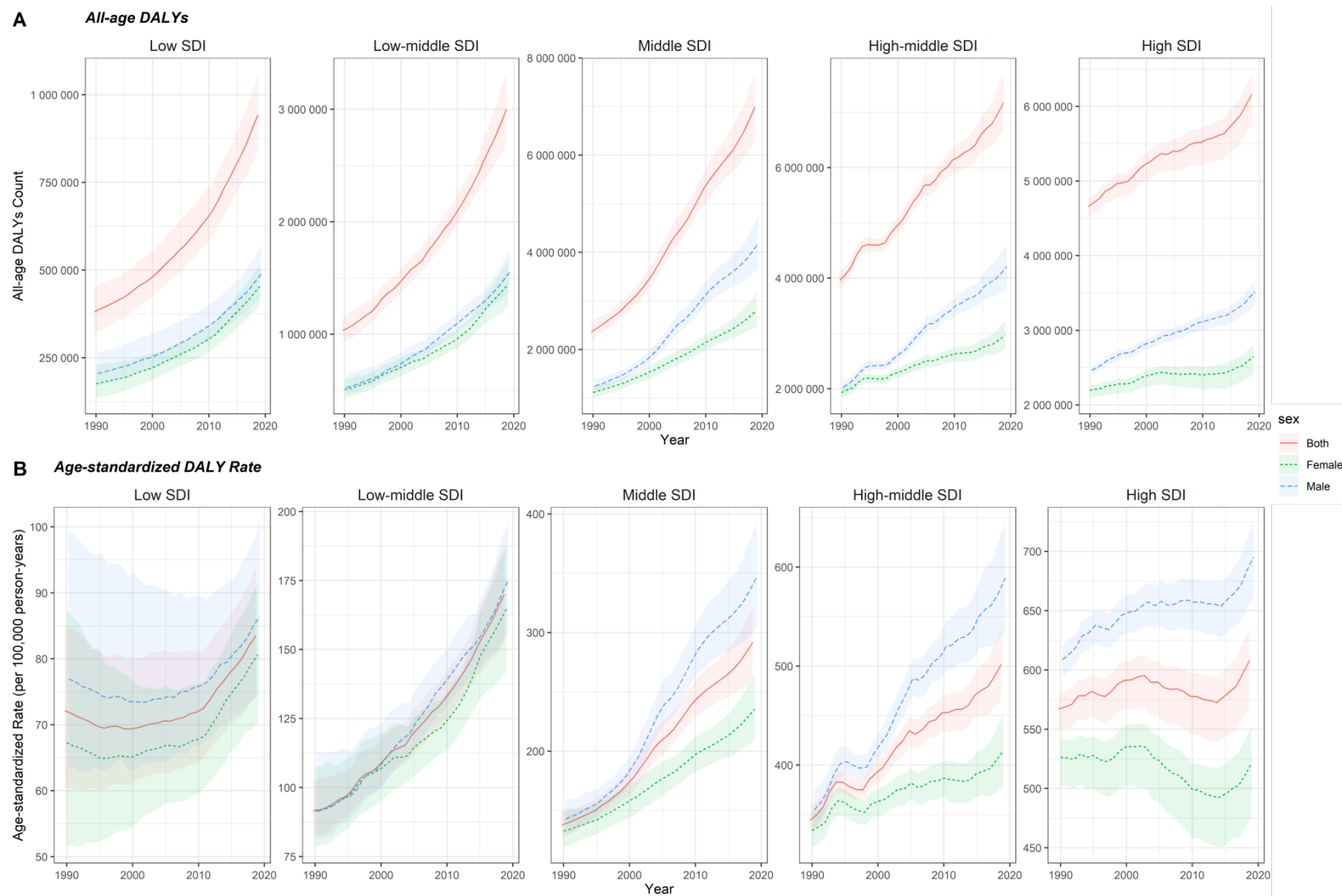
Supplementary Figure 2 Temporal Patterns of Colorectal Cancer Incidence by SDI, 1990-2019 A) All-age Incident Cases B) Age-standardized Incidence Rate (per 100,000 person-years).

SDI=Socio-demographic Index. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019



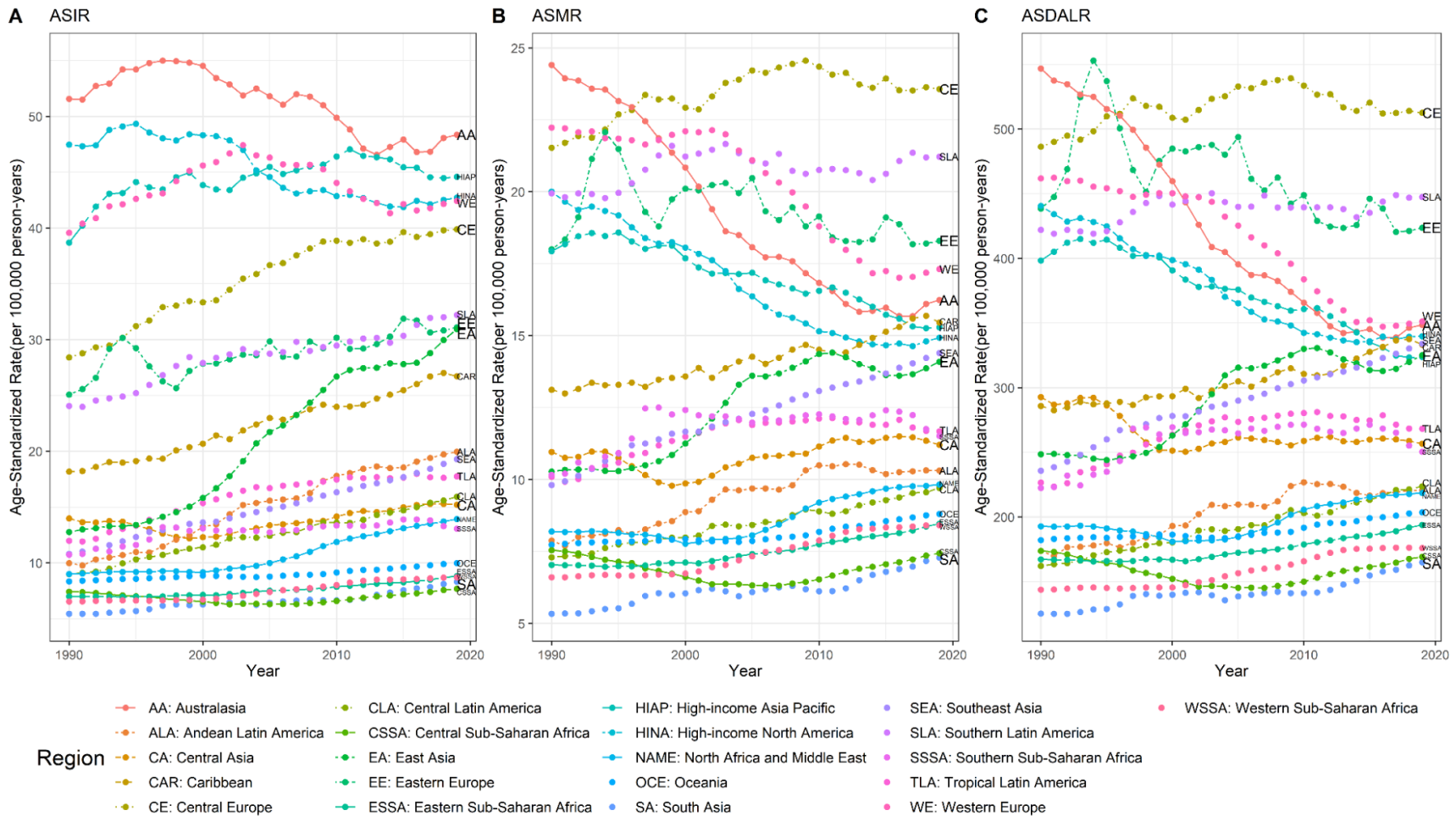
Supplementary Figure 3 Temporal Patterns of Colorectal Cancer Deaths by SDI, 1990-2019 A) All-age Deaths B) Age-standardized Mortality Rate (per 100,000 person-years).

SDI=Socio-demographic Index. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019



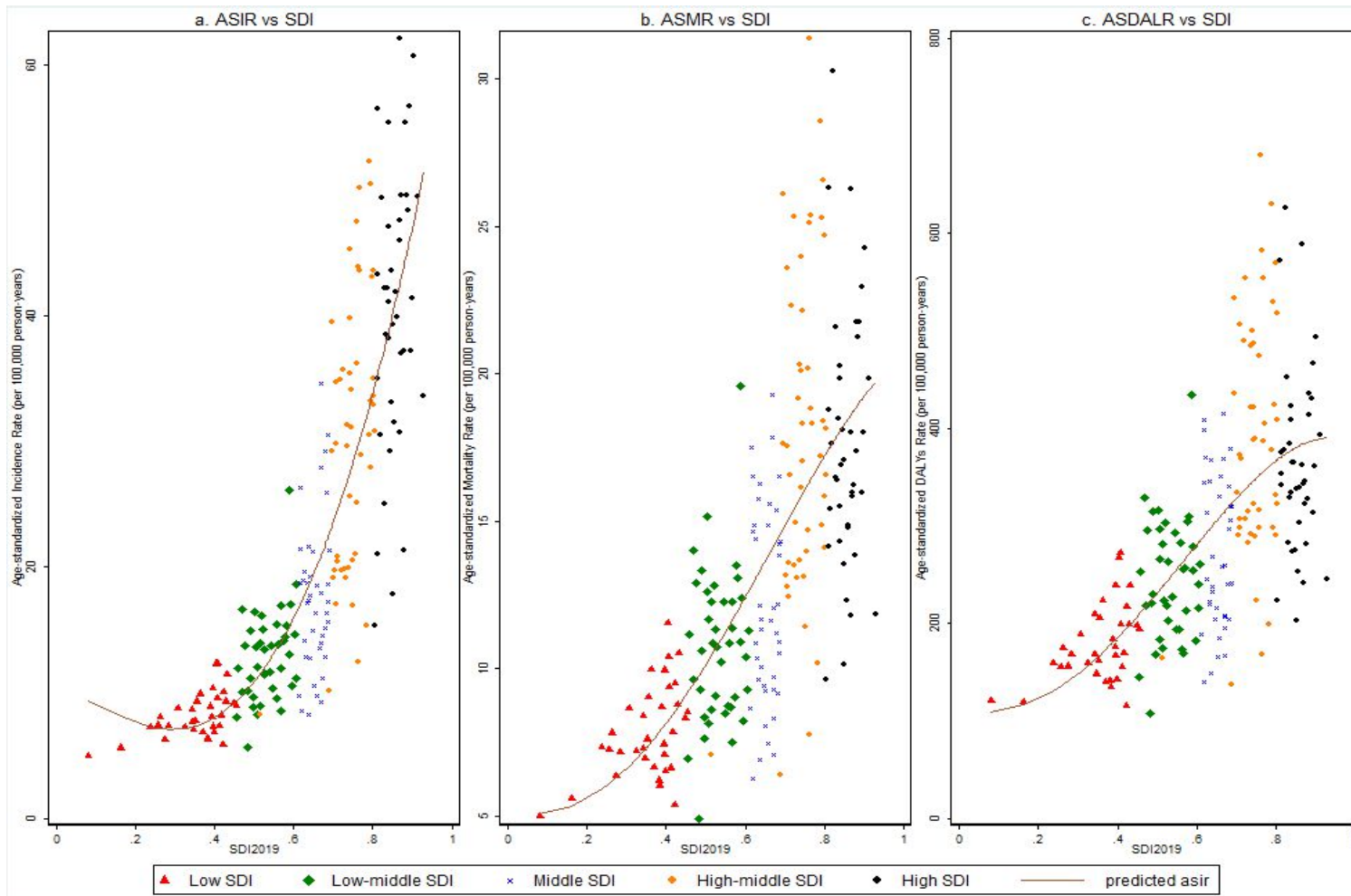
Supplementary Figure 4 Temporal Patterns of Colorectal Cancer DALYs by SDI, 1990-2019 A) All-age DALYs B) Age-standardized DALY Rate (per 100,000 person-years).

DALYs=Disability-adjusted Life Years. DALYs are sum of years of life lost and years lived with disability. SDI: Socio-demographic Index. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019



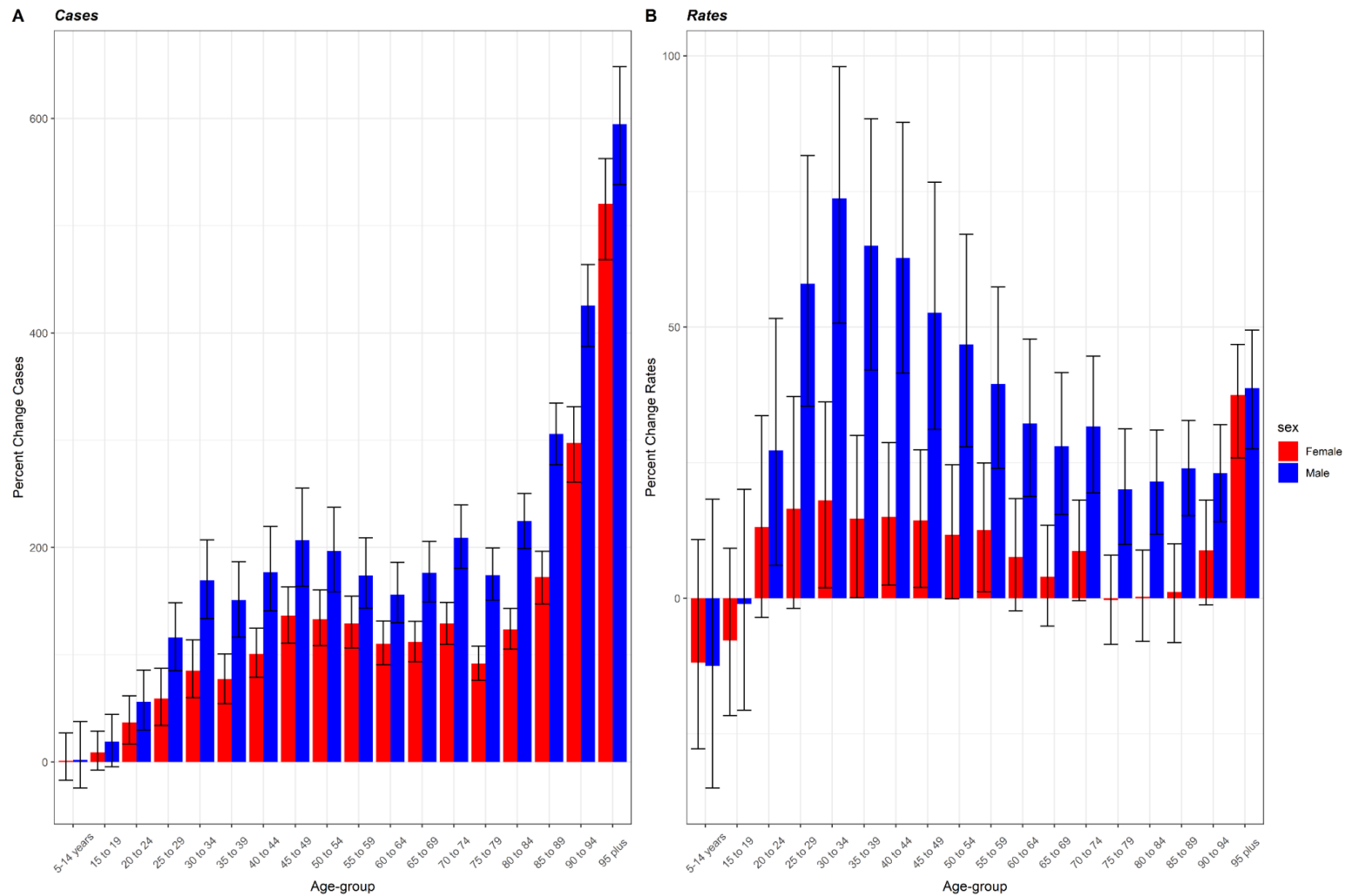
Supplementary Figure 5 Temporal Patterns of Colorectal Cancer Burden by Region, 1990-2019 A) ASIR B) ASMR C) ASDALR

ASIR=Age-standardized Incidence rate (per 100,000 person-years). ASMR=Age-standardized Mortality rate (per 100,000 person-years). ASDALR=Age-standardized DALY rate (per 100,000 person-years). DALYs are the sum of years of life lost and years lived with disability. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019



Supplementary Figure 6 Bivariate Association between Age-standardized Rates of Colorectal Cancer and Country-level SDI in 2019 a) ASIR vs SDI b) ASMR vs SDI c) ASDALR vs SDI.

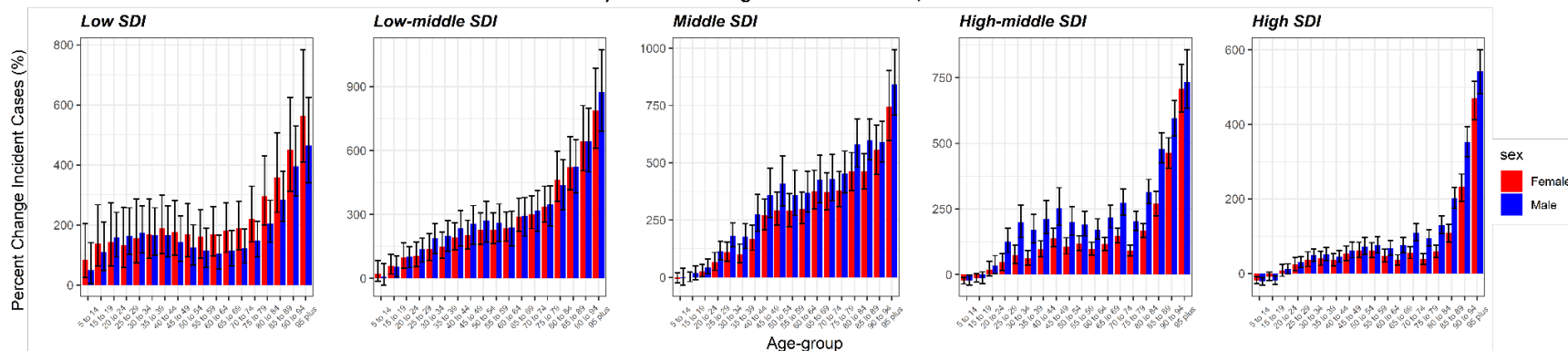
ASIR=Age-standardized Incidence rate (per 100,000 person-years). ASMR=Age-standardized Mortality rate (per 100,000 person-years). ASDALR=Age-standardized DALY rate (per 100,000 person-years). SDI=Socio-demographic Index. The fitting line pertains to fractional polynomial regression. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019



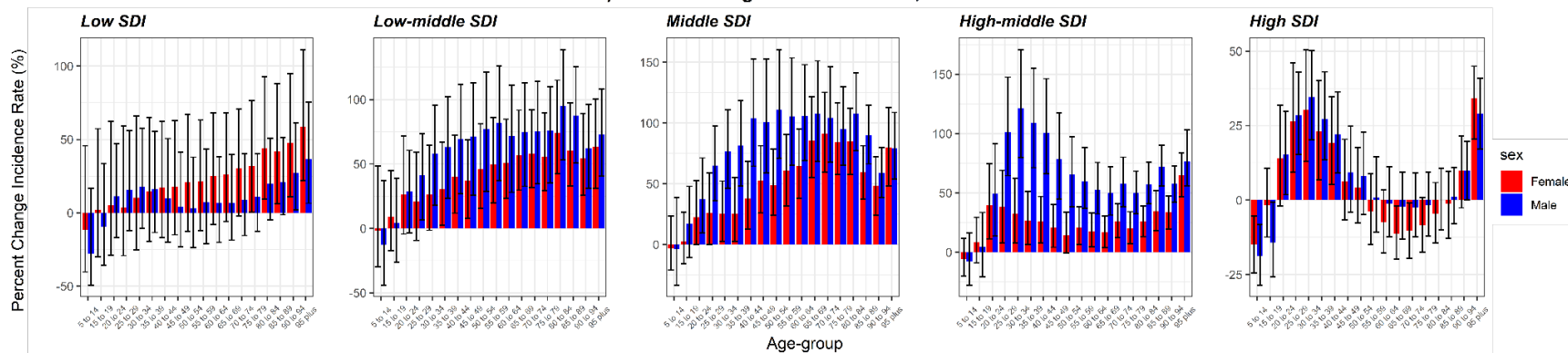
Supplementary Figure 7 Percent Changes in Global Burden of Colorectal Cancer Incidence between 1990 and 2019 by Age and Sex A) Incident Cases B) Age-specific Rate.

Error bars denote 95% uncertainty intervals. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019

A) Percent Change Incidence Count, 1990-2019

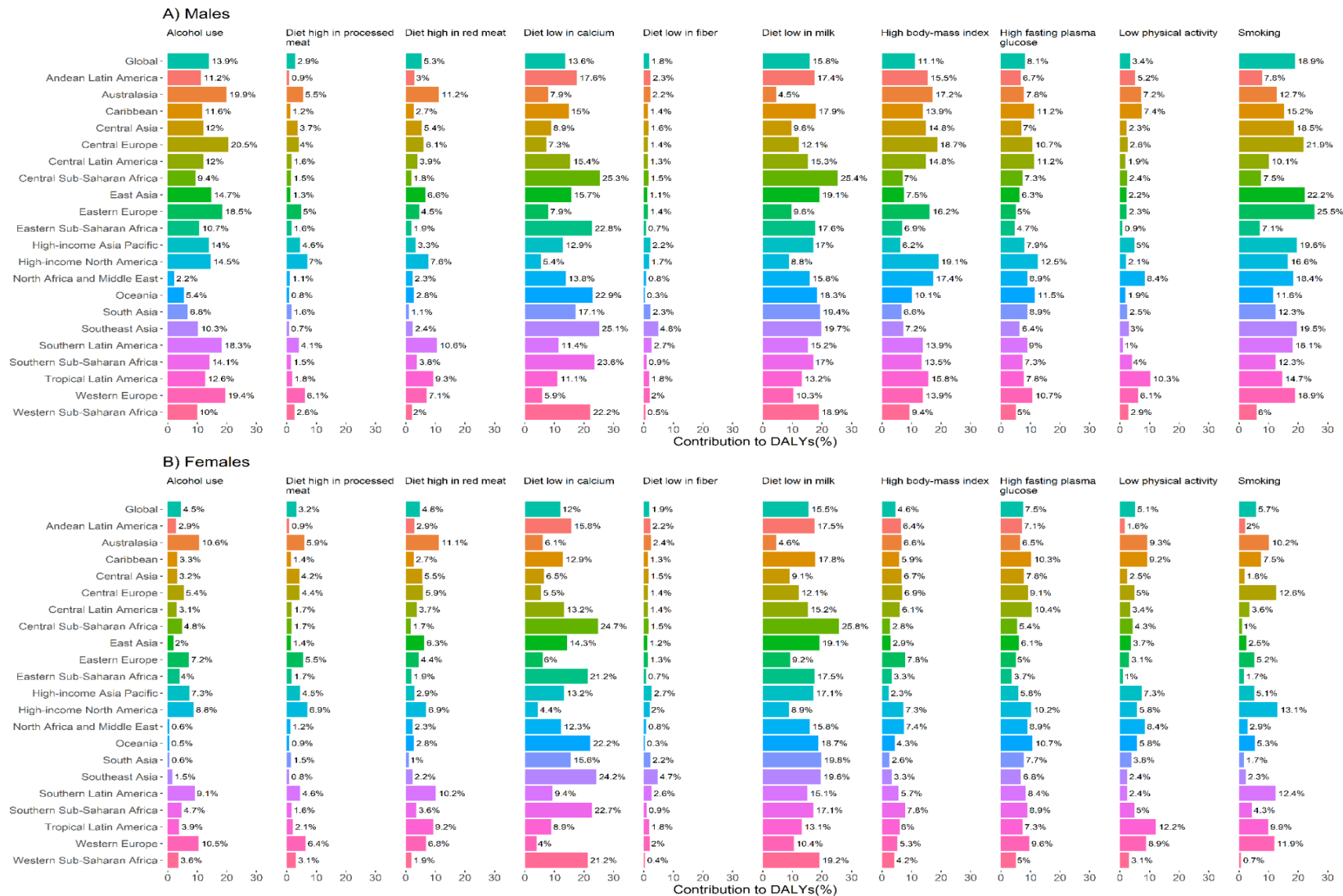


B) Percent Change Incidence Rates, 1990-2019



Supplementary Figure 8 SDI wise Percent Changes in Colorectal Cancer Incidence between 1990 and 2019 by Age and Sex A) Incident Cases B) Age-specific Incidence Rate.

Error bars denote 95% uncertainty intervals. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019



Supplementary Figure 9 Percent Contribution of Risk Factors in Colorectal Cancer DALYs in 2019 A) Males B) Females
 DALYs=disability-adjusted life-years. Data Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019

Supplementary Table 1 List of International Classification of Diseases (ICD) codes mapped to the Global Burden of Disease cause list for causes of death for Colorectal Cancer

| ICCC3 | ICD 10 | ICD 9 |
|------------|--|---|
| XIf2, XIf3 | C18, C18.0, C18.1, C18.2, C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9, C19, C19.0, C19.9, C2, C20, C20.0, C20.8, C20.9, C21, C21.0, C21.1, C21.2, C21.8, C21.9 | 153, 153.0, 153.1, 153.2, 153.3, 153.4, 153.5, 153.6, 153.7, 153.8, 153.9, 154, 154.0, 154.1, 154.2, 154.3, 154.4, 154.8, 154.9, 209.1, 209.10, 209.11, 209.12, 209.13, 209.14, 209.15, 209.16, 209.17, 569.0, 569.43, 569.44, 569.84, 569.85 |

Supplementary Table 2 Covariates Used in Colorectal Cancer Mortality Estimation in CODEm.

| | Males | | Females | |
|--------------|--|------------------|--|------------------|
| Level | Covariate | Direction | Covariate | Direction |
| 1 | Age- and sex-specific summary exposure value (SEV) for High red meat | + | Age- and sex-specific summary exposure value (SEV) for High red meat | + |
| | Log-transformed SEV scalar: Colorectal Cancer | + | Log-transformed SEV scalar: Colorectal Cancer | + |
| | Mean Body Mass Index | + | Mean Body Mass Index | + |
| | Tobacco (Cigarettes per capita) | + | Tobacco (cigarettes per capita) | + |
| | Total Physical Activity (MET-min/week), Age-specific | - | Total Physical Activity (MET-min/week), Age-specific | - |
| 2 | Age- and sex- specific SEV for Low vegetables | + | Age- and sex- specific SEV for Low vegetables | + |
| | Age- and sex-specific SEV for Low calcium | + | Age- and sex-specific SEV for Low calcium | + |
| | Age- and sex-specific SEV for Low fiber | + | Age- and sex-specific SEV for Low fiber | + |
| | Cumulative Cigarettes (20 years) | + | Cumulative cigarettes (5 years) | + |

| | Males | | Females | |
|-------|--|-----------|--|-----------|
| Level | Covariate | Direction | Covariate | Direction |
| | Diabetes Fasting Plasma Glucose (mmol/L), age-standardized 25+ | + | Diabetes Fasting Plasma Glucose (mmol/L), age-standardized 25+ | + |
| | Liters of alcohol consumed per capita | + | Liters of alcohol consumed per capita | + |
| | Polyunsaturated Fatty Acid adjusted (Percent) | - | Polyunsaturated Fatty Acid adjusted (Percent) | - |
| 3 | Age- and sex- specific SEV for low fruit | + | Age- and sex- specific SEV for low fruit | + |
| | Age- and sex-specific SEV for Low milk | + | Age- and sex-specific SEV for Low milk | + |
| | Age- and sex-specific SEV for Low nuts and seeds | + | Age- and sex-specific SEV for Low nuts and seeds | + |
| | Education (years per capita) | - | Education (years per capita) | - |
| | Healthcare Access and Quality Index | - | Healthcare Access and Quality Index | - |
| | Lag distributed income (I\$ per capita) | + | Lag distributed income (I\$ per capita) | + |
| | Socio-demographic Index | + | Socio-demographic Index | + |

MET=Metabolic equivalent of task. The “Direction” column refers to the direction of the association for that covariate.

Supplementary Table 3 Number of data sources used as inputs for calculation of exposure of ten risk factors.

| Risk Factor | Number of data sources(site-years) | Countries with data |
|-----------------------|---|----------------------------|
| Alcohol Use | 10513 | 199 |
| Processed Meat | 737 | 66 |
| Red meat | 760 | 178 |
| Calcium | 160 | 178 |
| Fiber | 155 | 180 |
| Milk | 1148 | 177 |
| BMI | 2022 | 190 |
| FPG | 529 | 127 |
| Low physical Activity | 255 | 128 |
| Smoking | 3439 | 201 |

Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019.

Supplementary Table 3 Country-wise Colorectal Cancer Burden in 2019

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------------|---|--|-------------------------------------|---|---|--|
| Andean Latin America | 11094 (8935 - 13467) | 5630 (4593 - 6791) | 125578 (101753 - 151796) | 20.0 (16.1 - 24.2) | 10.3 (8.4 - 12.4) | 220.8 (179.0 - 266.3) |
| Bolivia | 1439 (991 - 1911) | 992 (678 - 1314) | 23074 (16068 - 30578) | 16.9 (11.6 - 22.4) | 12.3 (8.4 - 16.2) | 256.2 (178.2 - 339.7) |
| Ecuador | 2850 (2269 - 3613) | 1603 (1285 - 2008) | 36473 (28821 - 46627) | 19.3 (15.3 - 24.3) | 11.3 (9.1 - 14.2) | 237.6 (188.9 - 301.0) |
| Peru | 6805 (5101 - 8908) | 3035 (2291 - 3931) | 66030 (49368 - 86743) | 21.2 (15.9 - 27.8) | 9.4 (7.1 - 12.3) | 203.9 (152.4 - 267.9) |
| Australasia | 23671 (19439 - 28848) | 8382 (7575 - 8978) | 163248 (150872 - 173959) | 48.3 (39.6 - 59.1) | 16.2 (14.8 - 17.3) | 348.6 (324.2 - 370.7) |
| Australia | 19345 (15224 - 24451) | 6734 (6065 - 7265) | 131642 (120904 - 141505) | 47.0 (36.9 - 59.6) | 15.5 (14.1 - 16.7) | 334.6 (309.2 - 359.1) |
| New Zealand | 4326 (3591 - 5137) | 1648 (1481 - 1780) | 31606 (29269 - 33829) | 55.3 (45.7 - 65.8) | 20.3 (18.3 - 21.8) | 423.1 (394.6 - 449.8) |
| Caribbean | 13813 (11813 - 15959) | 7995 (6935 - 9176) | 172016 (147186 - 200175) | 26.7 (22.9 - 30.9) | 15.5 (13.4 - 17.7) | 333.3 (285.2 - 387.9) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|---------------------|---|--|--------------------------|---|---|--|
| Antigua and Barbuda | 25 (21 - 29) | 15 (13 - 17) | 327 (278 - 382) | 25.6 (22.1 - 29.4) | 16.2 (14.0 - 18.4) | 323.0 (276.8 - 374.9) |
| Bahamas | 108 (88 - 131) | 68 (55 - 82) | 1709 (1390 - 2098) | 28.0 (22.8 - 34.0) | 18.4 (15.1 - 22.2) | 423.6 (346.4 - 515.5) |
| Barbados | 195 (162 - 233) | 118 (99 - 139) | 2392 (1977 - 2865) | 39.8 (33.0 - 47.4) | 24.0 (20.1 - 28.3) | 500.6 (413.4 - 600.9) |
| Belize | 41 (35 - 47) | 28 (24 - 32) | 716 (622 - 829) | 14.6 (12.8 - 17.0) | 10.4 (9.0 - 12.0) | 239.7 (209.1 - 276.4) |
| Bermuda | 56 (47 - 68) | 26 (21 - 31) | 469 (390 - 571) | 43.3 (36.1 - 52.8) | 18.8 (15.7 - 22.7) | 375.6 (311.2 - 456.8) |
| Cuba | 6569 (5388 - 7975) | 3481 (2883 - 4186) | 68409 (56038 - 83589) | 34.6 (28.2 - 42.0) | 17.8 (14.7 - 21.5) | 369.0 (300.5 - 452.2) |
| Dominica | 18 (15 - 22) | 14 (11 - 16) | 277 (227 - 342) | 19.8 (16.3 - 24.2) | 15.0 (12.4 - 18.1) | 314.4 (256.7 - 387.3) |
| Dominican Republic | 1579 (1133 - 2067) | 1115 (823 - 1448) | 26797 (18887 - 35321) | 17.1 (12.4 - 22.3) | 12.4 (9.2 - 16.1) | 279.2 (198.2 - 367.6) |
| Grenada | 30 (27 - 33) | 20 (18 - 22) | 466 (419 - 517) | 27.9 (25.1 - 30.7) | 19.3 (17.4 - 21.1) | 414.8 (374 - 457.8) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------------------|---|--|--------------------------|---|---|--|
| Guyana | 116 (90 - 147) | 85 (68 - 107) | 2295 (1773 - 2936) | 18.7 (14.8 - 23.6) | 14.7 (11.9 - 18.2) | 344.8 (269.2 - 437.9) |
| Haiti | 779 (536 - 1065) | 671 (467 - 917) | 18317 (12572 - 25414) | 11.5 (8.0 - 15.4) | 10.5 (7.3 - 14.1) | 239.8 (166.0 - 329.0) |
| Jamaica | 772 (622 - 960) | 501 (405 - 615) | 11263 (8962 - 14208) | 26.0 (20.8 - 32.3) | 16.5 (13.4 - 20.4) | 378.9 (301.5 - 477.6) |
| Puerto Rico | 2379 (1864 - 3026) | 1136 (892 - 1429) | 22451 (17568 - 28605) | 35.0 (27.0 - 44.8) | 15.4 (12.2 - 19.5) | 353.9 (274.8 - 454.9) |
| Saint Kitts and Nevis | 20 (16 - 23) | 11 (9 - 13) | 263 (209 - 315) | 31.1 (26.3 - 36.4) | 18.3 (15.8 - 21.1) | 389.5 (318.9 - 463.1) |
| Saint Lucia | 38 (32 - 45) | 25 (21 - 29) | 558 (467 - 662) | 18.0 (15.1 - 21.2) | 12.1 (10.2 - 14.1) | 259.5 (218.1 - 307.9) |
| Saint Vincent and the Grenadines | 26 (23 - 30) | 19 (16 - 21) | 422 (367 - 487) | 19.7 (17.2 - 22.6) | 14.4 (12.7 - 16.5) | 313.8 (274.1 - 360.9) |
| Suriname | 128 (105 - 152) | 94 (78 - 111) | 2236 (1839 - 2690) | 21.6 (17.9 - 25.6) | 16.3 (13.6 - 19.2) | 367.4 (302.8 - 440.1) |
| Trinidad and Tobago | 387 (296 - 498) | 253 (194 - 326) | 5802 (4361 - 7586) | 21.1 (16.1 - 27.1) | 14.0 (10.7 - 18.0) | 315.4 (237.5 - 412.0) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|------------------------------|---|--|-------------------------------------|---|---|--|
| United States Virgin Islands | 79 (66 - 92) | 48 (40 - 55) | 1018 (832 - 1203) | 43.0 (35.7 - 50.6) | 26.6 (22.3 - 31.0) | 569.1 (463.8 - 678.0) |
| Central Asia | 10949 (9999 - 12008) | 7467 (6822 - 8166) | 199841 (182012 - 219941) | 15.2 (13.9 - 16.6) | 11.2 (10.3 - 12.2) | 256.8 (234.4 - 281.1) |
| Armenia | 880 (738 - 1035) | 585 (492 - 681) | 13091 (10974 - 15396) | 21.4 (17.8 - 25.0) | 14.3 (12.1 - 16.6) | 319.7 (267.4 - 375.2) |
| Azerbaijan | 1558 (1280 - 1911) | 1063 (875 - 1304) | 30658 (25244 - 37396) | 16.3 (13.3 - 20.1) | 12.2 (9.8 - 15.2) | 296.9 (244.9 - 362.7) |
| Georgia | 1096 (920 - 1284) | 782 (659 - 913) | 18328 (15328 - 21549) | 19.1 (16.0 - 22.5) | 13.2 (11.1 - 15.4) | 333.8 (279.7 - 393.7) |
| Kazakhstan | 3378 (2927 - 3878) | 2190 (1906 - 2491) | 54853 (47240 - 63021) | 19.7 (17.2 - 22.5) | 13.5 (11.8 - 15.3) | 307.7 (267.0 - 351.7) |
| Kyrgyzstan | 472 (412 - 541) | 346 (304 - 394) | 8817 (7649 - 10118) | 10.5 (9.2 - 12.0) | 8.2 (7.2 - 9.3) | 182.5 (158.8 - 208) |
| Mongolia | 256 (199 - 333) | 193 (150 - 248) | 5658 (4366 - 7438) | 11.1 (8.8 - 14.1) | 9.3 (7.4 - 11.7) | 215.5 (169.2 - 277.8) |
| Tajikistan | 551 (443 - 674) | 428 (347 - 526) | 12797 (10254 - 15802) | 11.6 (9.5 - 14.1) | 10.2 (8.4 - 12.3) | 227.6 (184.5 - 277.3) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|------------------------|---|--|---------------------------------------|---|---|--|
| Turkmenistan | 354 (284 - 439) | 254 (207 - 314) | 6955 (5526 - 8711) | 9.2 (7.5 - 11.3) | 7.1 (5.8 - 8.7) | 166.6 (134.3 - 206.9) |
| Uzbekistan | 2404 (2026 - 2826) | 1626 (1381 - 1901) | 48683 (41086 - 57806) | 12.8 (11.1 - 14.7) | 10.4 (9.1 - 11.8) | 219.6 (188.3 - 253.4) |
| Central Europe | 84474 (74551 - 95453) | 51567 (45636 - 57749) | 1052146 (922923 - 1184246) | 39.9 (35.2 - 45.1) | 23.6 (20.8 - 26.4) | 512.6 (448.7 - 577.9) |
| Albania | 630 (470 - 828) | 385 (291 - 502) | 8225 (6122 - 10808) | 15.2 (11.4 - 19.9) | 9.1 (7.0 - 11.9) | 204.5 (153.1 - 268.2) |
| Bosnia and Herzegovina | 2058 (1619 - 2571) | 1319 (1044 - 1639) | 28249 (22241 - 35385) | 34.9 (27.5 - 43.5) | 22.3 (17.8 - 27.7) | 490.1 (386.1 - 613.8) |
| Bulgaria | 6199 (4975 - 7641) | 3672 (2991 - 4477) | 78043 (62257 - 96600) | 43.8 (35.0 - 54.2) | 25.1 (20.4 - 30.6) | 582.3 (462.4 - 724.9) |
| Croatia | 4409 (3503 - 5472) | 2308 (1843 - 2847) | 44362 (35211 - 55455) | 50.5 (39.9 - 62.6) | 25.3 (20.1 - 31.2) | 529.2 (415.5 - 665.8) |
| Czechia | 8839 (7288 - 10730) | 4678 (3864 - 5626) | 91540 (75040 - 111253) | 42.1 (34.5 - 51.1) | 21.6 (17.8 - 26.0) | 452.1 (370.1 - 551.2) |
| Hungary | 9873 (8137 - 11905) | 5646 (4699 - 6700) | 115101 (94609 - 138287) | 52.2 (43.0 - 62.9) | 28.6 (23.6 - 34.0) | 630.3 (519.2 - 763.5) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|------------------------------|---|--|-------------------------------------|---|---|--|
| Montenegro | 299 (245 - 362) | 168 (137 - 200) | 3663 (3014 - 4386) | 30.5 (25.0 - 36.8) | 17.2 (14.1 - 20.4) | 377.3 (309.5 - 451.7) |
| North Macedonia | 1135 (898 - 1416) | 683 (545 - 850) | 15695 (12333 - 19727) | 35.4 (28.2 - 43.9) | 22.1 (17.8 - 27.3) | 487.5 (386.3 - 610.7) |
| Poland | 24277 (20748 - 28769) | 17768 (15129 - 20758) | 350819 (296650 - 412619) | 35.0 (29.8 - 41.6) | 24.7 (21.0 - 29.0) | 518.0 (437.3 - 610.6) |
| Romania | 13039 (10746 - 15541) | 7577 (6281 - 9022) | 163169 (133789 - 196693) | 36.2 (29.5 - 43.3) | 20.2 (16.6 - 24.1) | 474.4 (387.3 - 575.8) |
| Serbia | 6789 (5452 - 8446) | 4018 (3269 - 4943) | 84596 (67490 - 105391) | 43.6 (35.1 - 54.3) | 25.4 (20.6 - 31.0) | 554.8 (441.7 - 693.8) |
| Slovakia | 5203 (4087 - 6574) | 2433 (1932 - 3038) | 51875 (40791 - 65885) | 56.4 (44.4 - 71.0) | 26.3 (21.0 - 32.8) | 571.6 (449.1 - 723.9) |
| Slovenia | 1726 (1347 - 2222) | 913 (720 - 1163) | 16809 (13088 - 21737) | 41.1 (31.9 - 52.9) | 19.8 (15.6 - 25.4) | 408.2 (317.5 - 532.1) |
| Central Latin America | 37542 (32211 - 43870) | 22470 (19542 - 25997) | 539638 (465200 - 627069) | 15.9 (13.7 - 18.6) | 9.7 (8.4 - 11.2) | 223.7 (193.1 - 259.5) |
| Colombia | 9046 (7010 - 11553) | 5138 (3990 - 6532) | 116742 (90051 - 150159) | 17.1 (13.3 - 21.9) | 9.6 (7.5 - 12.2) | 222.2 (171.3 - 285.6) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|------------------------------------|---|--|------------------------------------|---|---|--|
| Costa Rica | 1496 (1161 - 1902) | 788 (622 - 986) | 17593 (13679 - 22430) | 29.2 (22.7 - 37.2) | 15.4 (12.2 - 19.3) | 340.4 (264.8 - 432.6) |
| El Salvador | 844 (644 - 1096) | 552 (426 - 710) | 12658 (9679 - 16508) | 14.1 (10.7 - 18.3) | 9.1 (7.0 - 11.7) | 213.5 (162.6 - 279.0) |
| Guatemala | 1290 (1020 - 1619) | 965 (771 - 1208) | 24462 (19260 - 30978) | 11.5 (9.2 - 14.4) | 9.1 (7.3 - 11.3) | 203.1 (160.2 - 256.0) |
| Honduras | 574 (398 - 812) | 430 (303 - 605) | 10631 (7442 - 15137) | 9.7 (6.7 - 13.6) | 7.7 (5.3 - 10.7) | 167.7 (117.1 - 239.1) |
| Mexico | 17470 (15042 - 20060) | 10518 (9036 - 12022) | 260198 (223549 - 299468) | 14.9 (12.9 - 17.1) | 9.2 (8.0 - 10.5) | 215.3 (185.1 - 247.2) |
| Nicaragua | 689 (571 - 820) | 430 (362 - 502) | 10192 (8311 - 12295) | 16.2 (13.4 - 19.0) | 10.9 (9.2 - 12.5) | 223.6 (184.7 - 266.1) |
| Panama | 772 (599 - 979) | 455 (357 - 576) | 9974 (7720 - 12719) | 18.6 (14.4 - 23.6) | 10.9 (8.5 - 13.8) | 239.9 (185.6 - 305.4) |
| Venezuela (Bolivarian Republic of) | 5361 (4064 - 7020) | 3194 (2439 - 4131) | 77189 (57827 - 102452) | 18.6 (14.1 - 24.2) | 11.3 (8.7 - 14.6) | 261.1 (197.5 - 344.8) |
| Central Sub Saharan Africa | 3957 (3015 - 5113) | 3544 (2705 - 4609) | 100988 (75749 - 131447) | 7.7 (5.9 - 10.1) | 7.4 (5.7 - 9.9) | 169.3 (129.2 - 220.2) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------------------|---|---|--|--|--|--|
| Angola | 1083 (829 - 1389) | 952 (738 - 1212) | 27809 (20727 - 35928) | 10.0 (8.1 - 12.5) | 9.7 (7.8 - 12.0) | 218.4 (170.0 - 277.4) |
| Central African Republic | 138 (98 - 192) | 128 (92 - 178) | 4004 (2786 - 5605) | 6.3 (4.6 - 8.7) | 6.4 (4.7 - 8.8) | 156.2 (112.9 - 216.3) |
| Congo | 303 (219 - 405) | 266 (197 - 352) | 7545 (5344 - 10226) | 11.9 (9.1 - 15.4) | 11.4 (8.8 - 14.5) | 257.2 (189.0 - 341.6) |
| Democratic Republic of the Congo | 2194 (1480 - 3261) | 1995 (1339 - 2956) | 56267 (38083 - 83820) | 6.4 (4.2 - 9.6) | 6.2 (4.1 - 9.5) | 141.4 (95.1 - 210.5) |
| Equatorial Guinea | 73 (45 - 108) | 61 (38 - 89) | 1653 (1002 - 2514) | 15.6 (9.8 - 22.4) | 14.2 (9.1 - 20.0) | 305.6 (189.9 - 449.5) |
| Gabon | 166 (119 - 210) | 141 (103 - 177) | 3710 (2597 - 4832) | 16.4 (12.1 - 20.3) | 14.9 (11.3 - 18.2) | 330.6 (237.6 - 418.6) |
| Eastern Asia | 637096 (548895 - 738549) | 275604 (238238 - 317886) | 6712862 (5774277 - 7735907) | 30.9 (26.8 - 35.7) | 14.1 (12.2 - 16.2) | 325.2 (280.7 - 373.2) |
| China | 607900 (521805 - 708420) | 261777 (224404 - 303318) | 6394918 (5462291 - 7408703) | 30.6 (26.4 - 35.5) | 13.9 (11.9 - 16.0) | 320.6 (275.4 - 370.7) |
| Democratic People's Republic | 4986 | 3442 | 92302 | 15.4 | 10.9 | 282.7 |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------------|--------------------------------------|---------------------------------------|--|--|--|-------------------------------------|
| of Korea | (3708 - 6464) | (2576 - 4380) | (67639 - 122531) | (11.5 - 19.9) | (8.1 - 13.8) | (207.2 - 376.7) |
| Taiwan (Province of China) | 24210 (19139 - 31206) | 10386 (8282 - 13153) | 225642 (176874 - 291070) | 62.0 (48.9 - 80.1) | 26.3 (20.9 - 33.3) | 588.4 (461.5 - 757.8) |
| Eastern Europe | 106017 (96250 - 117074) | 63476 (57180 - 70011) | 1419105 (1287540 - 1571374) | 31.1 (28.2 - 34.4) | 18.3 (16.5 - 20.2) | 423.7 (384.0 - 469.3) |
| Belarus | 5396 (4322 - 6837) | 2734 (2230 - 3445) | 60384 (47970 - 78137) | 34.1 (27.1 - 43.4) | 17.0 (13.9 - 21.5) | 388.7 (308.8 - 500.2) |
| Estonia | 1118 (892 - 1391) | 528 (425 - 660) | 9665 (7667 - 12205) | 42.2 (33.4 - 52.7) | 18.5 (14.8 - 23.2) | 384.2 (304.2 - 486.6) |
| Latvia | 1214 (1015 - 1461) | 746 (626 - 891) | 14162 (11810 - 17165) | 30.5 (25.4 - 37.0) | 17.6 (14.8 - 21.2) | 377.4 (314.6 - 460.4) |
| Lithuania | 1669 (1385 - 2008) | 1024 (857 - 1221) | 19673 (16149 - 23901) | 29.2 (24.0 - 35.4) | 16.9 (14.1 - 20.3) | 365.6 (299.1 - 446.1) |
| Republic of Moldova | 1691 (1472 - 1927) | 1028 (897 - 1164) | 24957 (21689 - 28419) | 29.2 (25.4 - 33.1) | 17.7 (15.4 - 20.0) | 436.3 (378.9 - 496.1) |
| Russian Federation | 71542 (62884 - 81644) | 42834 (37637 - 48395) | 939798 (822798 - 1069392) | 30.8 (27.0 - 35.1) | 18.2 (16.0 - 20.5) | 409.0 (357.7 - 466.0) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------------------|--------------------------------------|---------------------------------------|-------------------------------------|--|--|-------------------------------------|
| Ukraine | 23388 (19879 - 27253) | 14582 (12548 - 16939) | 350467 (300711 - 412417) | 31.3 (26.6 - 36.5) | 19.2 (16.5 - 22.4) | 485.3 (416.3 - 572.3) |
| Eastern Sub Saharan Africa | 14227 (12130 - 16886) | 12717 (10940 - 15001) | 356433 (301931 - 425606) | 8.8 (7.6 - 10.4) | 8.5 (7.4 - 9.9) | 193.9 (166.0 - 229.6) |
| Burundi | 335 (237 - 484) | 303 (216 - 438) | 8860 (6210 - 12874) | 7.3 (5.3 - 10.4) | 7.2 (5.2 - 10.1) | 168.4 (119.7 - 243.2) |
| Comoros | 43 (31 - 55) | 39 (29 - 50) | 996 (702 - 1311) | 9.0 (6.6 - 11.4) | 8.6 (6.4 - 10.8) | 194.4 (139.5 - 252.2) |
| Djibouti | 70 (49 - 97) | 59 (43 - 82) | 1739 (1181 - 2490) | 11.9 (9.1 - 15.8) | 11.2 (8.7 - 14.7) | 253.1 (184.4 - 346.6) |
| Eritrea | 279 (211 - 365) | 247 (189 - 322) | 7615 (5659 - 10148) | 10.3 (8.1 - 13.2) | 10.0 (7.9 - 12.7) | 239.0 (183.7 - 310.2) |
| Ethiopia | 3199 (2401 - 4461) | 2855 (2128 - 4003) | 79045 (58535 - 109671) | 7.7 (5.8 - 10.7) | 7.3 (5.5 - 10.4) | 168.6 (124.8 - 236.0) |
| Kenya | 1784 (1423 - 2206) | 1628 (1282 - 2038) | 45322 (35340 - 57167) | 8.2 (6.7 - 10.0) | 8.1 (6.5 - 10.0) | 183.8 (144.5 - 230.4) |
| Madagascar | 802 (582 - 1078) | 714 (528 - 957) | 21577 (15499 - 29044) | 7.3 (5.4 - 9.7) | 7.1 (5.3 - 9.3) | 167.6 (123.7 - 224.6) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|---------------------------------|---|--|--|---|---|--|
| Malawi | 442 (335 - 562) | 402 (308 - 507) | 10733 (7920 - 13894) | 6.3 (4.9 - 7.8) | 6.1 (4.7 - 7.5) | 134.7 (102.1 - 170.7) |
| Mozambique | 900 (649 - 1189) | 832 (607 - 1092) | 22365 (15783 - 29824) | 8.7 (6.4 - 11.4) | 8.7 (6.5 - 11.2) | 189.2 (136.7 - 248.6) |
| Rwanda | 549 (424 - 704) | 480 (377 - 608) | 13346 (9965 - 17536) | 9.3 (7.4 - 11.7) | 8.8 (7.1 - 10.8) | 199.2 (154.8 - 253.2) |
| Somalia | 330 (206 - 615) | 310 (197 - 580) | 9587 (6070 - 17896) | 5.0 (3.1 - 9.2) | 5.0 (3.2 - 9.3) | 121.2 (76.6 - 226.0) |
| South Sudan | 367 (236 - 552) | 346 (223 - 528) | 9502 (5890 - 14741) | 9.9 (6.6 - 14.7) | 10.0 (6.6 - 14.8) | 223.4 (142.4 - 340.6) |
| Uganda | 1737 (1348 - 2150) | 1519 (1194 - 1857) | 43114 (32533 - 54450) | 12.3 (9.8 - 14.8) | 11.6 (9.2 - 13.8) | 267.3 (208.9 - 329.3) |
| United Republic of Tanzania | 2457 (1926 - 3175) | 2180 (1732 - 2794) | 59014 (45123 - 78208) | 10.1 (8.1 - 12.7) | 9.5 (7.7 - 11.8) | 217.1 (171.0 - 282.2) |
| Zambia | 924 (671 - 1201) | 791 (581 - 1018) | 23332 (16632 - 30748) | 13.6 (10.1 - 17.4) | 12.6 (9.5 - 16.0) | 296.8 (215.9 - 383.0) |
| High-income Asia Pacific | 196371 (166417 - 225643) | 76929 (64821 - 83603) | 1327823 (1186117 - 1414814) | 44.6 (38.4 - 51.1) | 15.3 (13.4 - 16.4) | 323.9 (298.6 - 342.1) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------------------|---|--|--|---|---|--|
| Brunei Darussalam | 138 (122 - 159) | 72 (64 - 82) | 2013 (1771 - 2280) | 49.4 (43.4 - 55.9) | 30.3 (26.6 - 34.1) | 626.1 (552.5 - 710.0) |
| Japan | 160211 (130730 - 186831) | 63742 (53256 - 69584) | 1055345 (938927 - 1126078) | 47.6 (40.2 - 55.6) | 15.9 (13.9 - 16.9) | 343.0 (316.0 - 361.5) |
| Republic of Korea | 32929 (27484 - 39146) | 12004 (10649 - 13220) | 246590 (222651 - 270174) | 37.2 (31.1 - 44.0) | 13.9 (12.2 - 15.3) | 280.8 (253.9 - 307.5) |
| Singapore | 3093 (2471 - 3847) | 1111 (991 - 1197) | 23876 (21790 - 25814) | 39.9 (31.9 - 49.5) | 14.9 (13.2 - 16.1) | 303.7 (276.8 - 328.4) |
| High-income North America | 260911 (229909 - 295693) | 95664 (88321 - 99688) | 1987109 (1895869 - 2059774) | 42.7 (37.6 - 48.6) | 14.9 (13.9 - 15.5) | 339.9 (325.9 - 351.9) |
| Canada | 33633 (26448 - 42308) | 11616 (10433 - 12532) | 225956 (207794 - 242471) | 49.6 (38.8 - 62.8) | 16.2 (14.7 - 17.4) | 346.0 (320.1 - 370.6) |
| Greenland | 32 (26 - 38) | 20 (16 - 24) | 482 (390 - 583) | 47.4 (39.6 - 55.7) | 31.4 (26.0 - 37.1) | 680.3 (555.7 - 812.4) |
| United States of America | 227242 (197022 - 261375) | 84026 (77987 - 87516) | 1760640 (1681318 - 1826205) | 41.9 (36.1 - 48.2) | 14.8 (13.9 - 15.3) | 338.9 (324.9 - 350.8) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-------------------------------------|---|--|---------------------------------------|---|---|--|
| North Africa and Middle East | 60010 (53354 - 67555) | 39147 (34761 - 44107) | 1013634 (896161 - 1146526) | 13.9 (12.3 - 15.6) | 9.8 (8.7 - 11.0) | 218.7 (194.1 - 246.5) |
| Afghanistan | 1168 (749 - 1606) | 1046 (686 - 1420) | 33295 (20504 - 46503) | 8.7 (6.0 - 11.5) | 8.4 (6.0 - 11.2) | 209.3 (137.2 - 281.8) |
| Algeria | 3407 (2668 - 4282) | 2384 (1889 - 2951) | 57596 (45214 - 72440) | 10.5 (8.3 - 13.0) | 8.0 (6.4 - 9.8) | 166.0 (130.8 - 206.5) |
| Bahrain | 163 (123 - 211) | 84 (64 - 106) | 2476 (1882 - 3176) | 17.0 (13.2 - 21.1) | 11.4 (9.1 - 14.0) | 223.7 (175.0 - 280.0) |
| Egypt | 6520 (4676 - 9006) | 4557 (3300 - 6275) | 133038 (95340 - 183321) | 9.8 (7.1 - 13.4) | 7.4 (5.4 - 10.1) | 184.4 (133.6 - 253.6) |
| Iran (Islamic Republic of) | 10183 (9381 - 11029) | 6413 (5903 - 6908) | 159445 (148776 - 171672) | 13.9 (12.8 - 15.1) | 9.3 (8.5 - 10.1) | 206.7 (192.2 - 222.1) |
| Iraq | 2647 (2045 - 3379) | 1797 (1401 - 2258) | 51191 (39091 - 66602) | 11.1 (8.7 - 13.8) | 8.3 (6.6 - 10.2) | 195.2 (151.5 - 247.4) |
| Jordan | 1258 (1037 - 1520) | 754 (628 - 901) | 20411 (16995 - 24617) | 19.1 (16.0 - 22.9) | 13.1 (10.9 - 15.5) | 282.7 (235.5 - 339.7) |
| Kuwait | 454 (377 - 545) | 223 (187 - 265) | 5693 (4768 - 6824) | 17.8 (14.6 - 21.3) | 10.1 (8.4 - 12.0) | 202.3 (168.8 - 242.2) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------|---|--|--------------------------|---|---|--|
| Lebanon | 1555 (1259 - 1991) | 910 (740 - 1199) | 19495 (15743 - 24699) | 29.8 (24.1 - 38.1) | 17.6 (14.3 - 23.1) | 372.5 (300.3 - 471.8) |
| Libya | 901 (658 - 1180) | 620 (452 - 801) | 17140 (12334 - 22493) | 17.0 (12.4 - 21.8) | 12.5 (9.1 - 15.8) | 298.1 (217.6 - 386.0) |
| Morocco | 3213 (2395 - 4072) | 2482 (1856 - 3110) | 63650 (47435 - 81128) | 10.3 (7.7 - 13.0) | 8.5 (6.3 - 10.5) | 193.6 (145.4 - 245.0) |
| Oman | 251 (200 - 333) | 133 (108 - 167) | 3789 (2998 - 5029) | 15.3 (12.6 - 18.6) | 10.2 (8.5 - 12.0) | 199.1 (162.3 - 243.4) |
| Palestine | 616 (521 - 716) | 419 (358 - 487) | 11254 (9574 - 13095) | 26.1 (22.1 - 30.3) | 19.6 (16.7 - 22.7) | 434.7 (368.8 - 503.9) |
| Qatar | 191 (137 - 258) | 83 (61 - 110) | 2644 (1936 - 3535) | 25.1 (19.3 - 31.9) | 16.5 (12.9 - 20.5) | 283.0 (218.2 - 354.5) |
| Saudi Arabia | 3167 (2418 - 4019) | 1629 (1263 - 2045) | 53803 (40724 - 69784) | 15.4 (12.2 - 18.8) | 9.7 (7.8 - 11.6) | 223.1 (175.7 - 276.0) |
| Sudan | 1564 (1105 - 2336) | 1256 (901 - 1851) | 34670 (23958 - 50931) | 8.2 (6.0 - 12.3) | 7.1 (5.3 - 10.6) | 164.4 (116.9 - 242.6) |
| Syrian Arab Republic | 1028 (744 - 1375) | 685 (499 - 908) | 17974 (12946 - 24204) | 8.5 (6.3 - 11.3) | 6.3 (4.7 - 8.2) | 140.0 (102.1 - 185.7) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------|---|--|----------------------------------|---|---|--|
| Tunisia | 1801 (1300 - 2441) | 1154 (843 - 1546) | 26506 (19101 - 36063) | 14.5 (10.5 - 19.5) | 9.7 (7.2 - 13.0) | 208.1 (151.0 - 280.7) |
| Turkey | 18104 (14441 - 22119) | 11194 (9055 - 13549) | 259024 (205968 - 318284) | 20.6 (16.4 - 25.0) | 13.1 (10.6 - 15.8) | 289.2 (230.4 - 354.8) |
| United Arab Emirates | 762 (521 - 1030) | 449 (306 - 608) | 15820 (10845 - 21393) | 21.4 (14.7 - 29.8) | 17.4 (11.9 - 24.3) | 327.1 (223.9 - 452.3) |
| Yemen | 996 (736 - 1350) | 833 (626 - 1119) | 23690 (17133 - 32022) | 7.4 (5.6 - 10.0) | 6.7 (5.0 - 9.1) | 156.0 (116.2 - 211.9) |
| Oceania | 691 (555 - 855) | 551 (443 - 682) | 16315 (12915 - 20556) | 10.0 (8.2 - 12.1) | 8.8 (7.2 - 10.7) | 203.6 (163.6 - 252.5) |
| American Samoa | 10 (8 - 12) | 7 (6 - 9) | 180 (148 - 219) | 20.8 (17.6 - 24.7) | 16.6 (14.1 - 19.6) | 368.5 (306.7 - 443.4) |
| Cook Islands | 3 (3 - 4) | 2 (2 - 2) | 40 (33 - 49) | 12.4 (10.3 - 15.1) | 7.8 (6.5 - 9.3) | 168.3 (136.5 - 206.9) |
| Fiji | 95 (75 - 120) | 75 (59 - 93) | 2006 (1563 - 2523) | 13.5 (10.9 - 16.6) | 11.7 (9.5 - 14.2) | 258.1 (204.7 - 320.4) |
| Guam | 40 (33 - 47) | 27 (22 - 31) | 645 (539 - 769) | 21.0 (17.6 - 24.8) | 14.2 (12.0 - 16.7) | 341.6 (286.5 - 407.5) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------------------|---|--|------------------------|---|---|--|
| Kiribati | 8 (6 - 10) | 7 (5 - 9) | 209 (154 - 281) | 11.4 (8.7 - 15.1) | 10.8 (8.3 - 14.0) | 263.4 (197.6 - 350.1) |
| Marshall Islands | 5 (3 - 6) | 4 (3 - 5) | 117 (85 - 155) | 13.7 (10.5 - 17.4) | 12.3 (9.5 - 15.4) | 293.4 (220.2 - 379.3) |
| Micronesia (Federated States of) | 11 (7 - 14) | 8 (6 - 11) | 241 (158 - 329) | 15.4 (10.9 - 20.0) | 13.1 (9.5 - 16.9) | 310.1 (213.8 - 411.0) |
| Nauru | 1 (1 - 1) | 1 (0 - 1) | 22 (14 - 29) | 21.4 (14.8 - 27.8) | 16.5 (11.7 - 21.2) | 398.5 (268.2 - 519.9) |
| Niue | 0 (0 - 1) | 0 (0 - 0) | 7 (5 - 8) | 20.4 (15.7 - 26.1) | 13.6 (10.8 - 17.0) | 307.5 (230.0 - 399.4) |
| Northern Mariana Islands | 15 (12 - 17) | 8 (7 - 9) | 220 (181 - 261) | 28.9 (24.5 - 33.1) | 18.3 (15.9 - 20.9) | 404.7 (339.9 - 472.0) |
| Palau | 4 (3 - 5) | 2 (2 - 3) | 62 (48 - 80) | 19.9 (15.7 - 24.7) | 13.7 (10.9 - 16.7) | 291.3 (228.3 - 363.0) |
| Papua New Guinea | 382 (273 - 515) | 318 (229 - 425) | 9813 (6952 - 13274) | 8.1 (5.9 - 10.5) | 7.5 (5.5 - 9.6) | 175.7 (126.6 - 233.2) |
| Samoa | 18 (15 - 23) | 14 (11 - 17) | 355 (274 - 445) | 12.8 (10.3 - 15.7) | 10.1 (8.2 - 12.3) | 232.9 (183.1 - 289.1) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-------------------|---|--|--|---|---|--|
| Solomon Islands | 41 (26 - 56) | 31 (20 - 42) | 1060 (646 - 1441) | 12.4 (8.4 - 16.1) | 10.4 (7.4 - 13.3) | 273.0 (177.7 - 361.0) |
| Tokelau | 0 (0 - 0) | 0 (0 - 0) | 3 (2 - 4) | 14.1 (10.5 - 18.4) | 10.9 (8.1 - 14.0) | 245.6 (178.5 - 323.8) |
| Tonga | 7 (5 - 8) | 5 (4 - 7) | 120 (93 - 154) | 8.3 (6.4 - 10.5) | 6.9 (5.4 - 8.7) | 149.3 (115.1 - 190.4) |
| Tuvalu | 1 (1 - 2) | 1 (1 - 1) | 27 (19 - 35) | 13.0 (9.6 - 16.9) | 10.9 (8.1 - 14.0) | 254.3 (184.4 - 332.4) |
| Vanuatu | 17 (13 - 23) | 15 (11 - 19) | 417 (301 - 557) | 10.1 (7.6 - 13.1) | 9.3 (7.1 - 11.9) | 220.3 (161.6 - 289.7) |
| South Asia | 113711 (98190 - 129352) | 94846 (81524 - 109075) | 2419098 (2078019 - 2782570) | 8.3 (7.2 - 9.4) | 7.3 (6.2 - 8.3) | 165.1 (141.7 - 189.9) |
| Bangladesh | 7167 (4965 - 10209) | 6023 (4166 - 8611) | 143863 (99756 - 205795) | 5.6 (3.9 - 8.0) | 4.9 (3.4 - 7.1) | 107.4 (74.6 - 152.7) |
| Bhutan | 43 (26 - 59) | 36 (22 - 49) | 838 (495 - 1146) | 8.0 (4.9 - 10.9) | 7.0 (4.4 - 9.4) | 145.1 (87.2 - 196.7) |
| India | 95112 (79687 - 110631) | 79098 (67137 - 92724) | 1998681 (1694556 - | 8.6 (7.2 - 9.9) | 7.5 (6.3 - 8.8) | 169.1 (143.8 - 199.0) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------------------|--------------------------------------|---------------------------------------|--|--|--|-------------------------------------|
| | | | 2358983) | | | |
| Nepal | 1249 (891 - 1727) | 1084 (781 - 1501) | 26399 (18642 - 36362) | 5.9 (4.2 - 8.1) | 5.4 (3.9 - 7.4) | 115.8 (82.1 - 158.5) |
| Pakistan | 10140 (8100 - 12938) | 8605 (6927 - 10776) | 249316 (199384 - 312981) | 9.1 (7.3 - 11.6) | 8.3 (6.7 - 10.4) | 198.3 (159.2 - 248.7) |
| Southeast Asia | 117010 (96631 - 136244) | 82024 (67617 - 94606) | 2142434 (1780490 - 2482287) | 19.3 (16.0 - 22.4) | 14.4 (11.9 - 16.6) | 334.0 (276.6 - 386.4) |
| Cambodia | 1983 (1563 - 2416) | 1561 (1240 - 1881) | 42135 (32919 - 52153) | 16.7 (13.3 - 20.0) | 14.0 (11.2 - 16.5) | 329.1 (260.7 - 401.7) |
| Indonesia | 39110 (26895 - 49833) | 30242 (20642 - 38807) | 807988 (557416 - 1039823) | 18.5 (12.6 - 23.4) | 15.6 (10.5 - 19.9) | 350.6 (240.6 - 450.0) |
| Lao People's Democratic Republic | 656 (465 - 874) | 545 (389 - 721) | 15427 (10929 - 20823) | 14.9 (10.6 - 19.5) | 13.3 (9.6 - 17.2) | 315.1 (224.2 - 419.9) |
| Malaysia | 7627 (5970 - 9403) | 4838 (3829 - 5962) | 114326 (88561 - 142867) | 29.6 (23.3 - 36.5) | 20.3 (16.1 - 24.8) | 422.0 (331.7 - 524.8) |
| Maldives | 41 (34 - 49) | 24 (19 - 28) | 566 (465 - 676) | 13.8 (11.3 - 16.4) | 8.7 (7.1 - 10.4) | 173.8 (142.0 - 207.3) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-------------------------------|---|--|-------------------------------------|---|---|--|
| Mauritius | 344 (278 - 423) | 215 (176 - 261) | 5091 (4106 - 6239) | 19.8 (16.1 - 24.2) | 12.8 (10.5 - 15.5) | 290.7 (235.6 - 355.5) |
| Myanmar | 6913 (5085 - 9011) | 5582 (4135 - 7152) | 148391 (107637 - 195590) | 15.0 (11.1 - 19.3) | 12.8 (9.6 - 16.2) | 302.6 (221.4 - 393.4) |
| Philippines | 15220 (12313 - 18708) | 11193 (9309 - 13497) | 320716 (265900 - 389975) | 18.9 (15.4 - 23.1) | 14.9 (12.5 - 17.8) | 370.3 (308.3 - 447.4) |
| Seychelles | 39 (34 - 44) | 26 (23 - 29) | 625 (548 - 714) | 35.7 (31.4 - 40.6) | 25.3 (22.2 - 28.7) | 554.2 (485.7 - 629.5) |
| Sri Lanka | 2546 (1896 - 3346) | 1510 (1129 - 1967) | 34803 (25537 - 45949) | 10.2 (7.6 - 13.2) | 6.4 (4.8 - 8.3) | 137.1 (101.1 - 179.7) |
| Thailand | 17397 (12834 - 22839) | 10533 (7839 - 13572) | 243610 (178190 - 319798) | 17.2 (12.7 - 22.5) | 10.5 (7.9 - 13.6) | 241.9 (177.4 - 316.6) |
| Timor-Leste | 112 (76 - 144) | 93 (64 - 119) | 2400 (1611 - 3135) | 13.9 (9.7 - 17.8) | 12.3 (8.5 - 15.8) | 280.8 (190.6 - 365.2) |
| Viet Nam | 24869 (19211 - 30956) | 15557 (12175 - 18985) | 403551 (306601 - 505645) | 26.4 (20.6 - 32.4) | 17.5 (13.9 - 21.1) | 409.3 (316.3 - 505.6) |
| Southern Latin America | 26866 (21480 - 33612) | 17930 (16774 - 18975) | 366436 (347729 - 385441) | 32.2 (25.7 - 40.4) | 21.2 (19.9 - 22.4) | 447.6 (424.7 - 470.5) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|------------------------------------|---|--|-------------------------------------|---|---|--|
| Argentina | 18697 (14880 - 23362) | 12886 (12008 - 13759) | 267946 (252346 - 283535) | 34.7 (27.6 - 43.4) | 23.6 (22.0 - 25.1) | 506.6 (477.2 - 536.6) |
| Chile | 6006 (4800 - 7551) | 3524 (3224 - 3795) | 70896 (65757 - 75714) | 25.1 (20.1 - 31.6) | 14.7 (13.5 - 15.8) | 298.5 (277.5 - 318.7) |
| Uruguay | 2162 (1734 - 2690) | 1520 (1389 - 1630) | 27575 (25661 - 29468) | 39.5 (31.6 - 49.5) | 26.1 (24.1 - 27.8) | 533.4 (498.2 - 568.5) |
| Southern Sub Saharan Africa | 7106 (6389 - 7882) | 5922 (5329 - 6580) | 147780 (132439 - 165539) | 13.1 (11.8 - 14.5) | 11.5 (10.4 - 12.7) | 250.4 (225.1 - 279.3) |
| Botswana | 247 (171 - 334) | 189 (133 - 252) | 5194 (3524 - 7135) | 18.8 (13.5 - 24.5) | 15.8 (11.6 - 20.5) | 346.2 (240.6 - 464.5) |
| Eswatini | 80 (53 - 111) | 70 (47 - 96) | 1924 (1264 - 2738) | 14.4 (9.8 - 19.7) | 13.5 (9.3 - 18.2) | 304.7 (203.6 - 426.8) |
| Lesotho | 146 (104 - 194) | 132 (96 - 174) | 3600 (2529 - 4837) | 12.0 (8.8 - 15.5) | 11.7 (8.7 - 15.1) | 266.1 (190.7 - 354.1) |
| Namibia | 133 (103 - 172) | 113 (89 - 143) | 2774 (2114 - 3679) | 9.7 (7.7 - 12.3) | 8.7 (7.0 - 10.8) | 188.2 (145.6 - 244.8) |
| South Africa | 5566 (5002 - 6289) | 4601 (4159 - 5198) | 111491 (100297 - 126629) | 12.9 (11.6 - 14.5) | 11.2 (10.1 - 12.6) | 240.5 (216.9 - 273.5) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-------------------------------|---|--|--|---|---|--|
| Zimbabwe | 935 (709 - 1183) | 818 (623 - 1031) | 22797 (17078 - 29260) | 13.8 (10.6 - 17.2) | 12.9 (9.9 - 16.2) | 295.1 (224.1 - 372.2) |
| Tropical Latin America | 42891 (40118 - 44928) | 27704 (25668 - 29090) | 660129 (625562 - 687740) | 17.8 (16.6 - 18.6) | 11.7 (10.8 - 12.3) | 268.3 (253.7 - 279.8) |
| Brazil | 41935 (39320 - 43999) | 27052 (25085 - 28403) | 644732 (611426 - 672419) | 17.8 (16.6 - 18.6) | 11.7 (10.8 - 12.3) | 268.3 (254.0 - 279.8) |
| Paraguay | 955 (731 - 1218) | 652 (507 - 824) | 15396 (11739 - 19750) | 17.4 (13.4 - 22.1) | 12.2 (9.5 - 15.3) | 268.6 (206.4 - 343.2) |
| Western Europe | 382442 (332800 - 432448) | 172454 (155345 - 181815) | 3008234 (2815060 - 3152895) | 42.4 (37.1 - 48.3) | 17.3 (15.8 - 18.1) | 351.2 (332.0 - 366.8) |
| Andorra | 79 (60 - 101) | 34 (26 - 42) | 649 (497 - 829) | 56.6 (42.8 - 71.9) | 23.0 (17.9 - 28.9) | 466.3 (355.3 - 596.4) |
| Austria | 5847 (4783 - 7109) | 2603 (2355 - 2811) | 46854 (43158 - 50277) | 33.1 (26.7 - 40.6) | 13.5 (12.4 - 14.5) | 275.4 (254.2 - 294.8) |
| Belgium | 8994 (7126 - 11223) | 4325 (3880 - 4687) | 73674 (67681 - 79242) | 39.3 (30.9 - 49.5) | 17.1 (15.6 - 18.4) | 337.5 (312.9 - 361.0) |
| Cyprus | 739 (638 - 843) | 265 (230 - 301) | 5205 (4555 - 5928) | 38.1 (33.1 - 43.4) | 14.3 (12.4 - 16.3) | 273.6 (239.2 - 311.5) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------|---|--|-----------------------------|---|---|--|
| Denmark | 5577 (4364 - 7017) | 2647 (2396 - 2872) | 47755 (43566 - 51734) | 48.4 (37.8 - 61.1) | 21.7 (19.8 - 23.5) | 431.1 (395.7 - 464.9) |
| Finland | 3799 (2973 - 4805) | 1616 (1455 - 1756) | 28876 (26509 - 31339) | 31.5 (24.6 - 40.0) | 12.3 (11.3 - 13.4) | 253.6 (233.4 - 275.1) |
| France | 52277 (40682 - 65962) | 25497 (22330 - 27996) | 422215 (381664 - 458064) | 38.5 (30.1 - 49.3) | 16.4 (14.7 - 17.8) | 328.7 (300.7 - 354.4) |
| Germany | 78951 (62925 - 101417) | 37552 (34131 - 40326) | 647921 (598987 - 694996) | 41.4 (32.7 - 53.8) | 18.0 (16.5 - 19.3) | 360.7 (336.7 - 385.9) |
| Greece | 7903 (6276 - 9940) | 4000 (3600 - 4305) | 66397 (60982 - 71241) | 33.2 (26.1 - 42.1) | 14.9 (13.7 - 15.9) | 297.9 (277.0 - 318.6) |
| Iceland | 169 (147 - 195) | 70 (61 - 78) | 1291 (1159 - 1436) | 30.7 (26.8 - 35.4) | 11.8 (10.5 - 13.2) | 241.2 (216.5 - 267.5) |
| Ireland | 3431 (2687 - 4295) | 1377 (1242 - 1498) | 26562 (24283 - 28836) | 46.0 (35.9 - 57.7) | 18.0 (16.3 - 19.5) | 362.7 (332.2 - 392.6) |
| Israel | 3893 (3050 - 4900) | 2008 (1797 - 2172) | 36384 (33302 - 39185) | 33.6 (26.3 - 42.6) | 16.6 (14.9 - 17.8) | 323.0 (296.7 - 346.8) |
| Italy | 60514 (50073 - 71460) | 24877 (22016 - 26457) | 436750 (402100 - 459967) | 43.5 (36.0 - 51.6) | 15.8 (14.4 - 16.7) | 331.0 (309.6 - 347) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------|---|--|-----------------------------|---|---|--|
| Luxembourg | 372 (302 - 451) | 170 (147 - 192) | 3075 (2665 - 3506) | 37.2 (30.3 - 45.1) | 16.0 (13.9 - 18.1) | 313.5 (273.1 - 358.2) |
| Malta | 303 (256 - 361) | 136 (120 - 154) | 2547 (2254 - 2880) | 32.9 (27.8 - 39.1) | 14.1 (12.4 - 15.9) | 289.7 (256.5 - 327.3) |
| Monaco | 57 (46 - 68) | 25 (21 - 30) | 436 (350 - 523) | 60.7 (48.5 - 73.6) | 24.3 (19.6 - 28.8) | 494.1 (392.6 - 604.4) |
| Netherlands | 18774 (14703 - 23598) | 7774 (7036 - 8444) | 142372 (130387 - 153821) | 55.4 (43.3 - 69.8) | 21.8 (19.8 - 23.5) | 435.3 (402.3 - 469.4) |
| Norway | 4746 (4026 - 5535) | 2035 (1838 - 2176) | 36432 (33544 - 38790) | 49.5 (41.9 - 57.7) | 19.8 (18.0 - 21.1) | 393.9 (364.5 - 418.9) |
| Portugal | 10245 (8094 - 12946) | 5189 (4700 - 5586) | 92569 (85464 - 99118) | 45.3 (35.2 - 57.7) | 20.1 (18.5 - 21.5) | 421.3 (391.8 - 449.5) |
| San Marino | 32 (25 - 42) | 15 (11 - 21) | 256 (172 - 363) | 49.5 (37.9 - 65.5) | 21.2 (14.3 - 29.6) | 413.5 (272.8 - 603.3) |
| Spain | 47432 (37493 - 60137) | 20011 (17768 - 21746) | 350229 (320237 - 377643) | 50.1 (39.3 - 63.8) | 18.8 (17.1 - 20.2) | 387.3 (355.2 - 416.4) |
| Sweden | 7720 (6590 - 8930) | 3623 (3273 - 3863) | 63293 (59047 - 67075) | 37.0 (31.4 - 42.8) | 16.0 (14.7 - 17.0) | 322.7 (303.5 - 341.3) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------------------|--------------------------------------|---------------------------------------|-------------------------------------|--|--|-------------------------------------|
| Switzerland | 5824 (4529 - 7396) | 2234 (1980 - 2431) | 40285 (36400 - 43855) | 33.6 (25.9 - 42.7) | 11.9 (10.7 - 12.8) | 244.8 (222.3 - 265.1) |
| United Kingdom | 54429 (45870 - 63942) | 24220 (22210 - 25338) | 433585 (409710 - 451674) | 43.6 (36.6 - 51.5) | 18.1 (16.8 - 18.8) | 365.2 (347.8 - 379.1) |
| Western Sub Saharan Africa | 15321 (12895 - 17824) | 13773 (11698 - 16069) | 353242 (295571 - 420704) | 8.7 (7.4 - 10.0) | 8.4 (7.3 - 9.7) | 176.1 (149.0 - 206.2) |
| Benin | 360 (283 - 465) | 331 (261 - 423) | 8549 (6539 - 11330) | 7.8 (6.3 - 9.8) | 7.6 (6.2 - 9.5) | 161.5 (126.5 - 209.1) |
| Burkina Faso | 641 (501 - 816) | 585 (461 - 742) | 15422 (11862 - 19947) | 7.4 (5.9 - 9.4) | 7.3 (5.8 - 9.1) | 156.0 (122.4 - 198.6) |
| Côte d'Ivoire | 946 (724 - 1199) | 850 (663 - 1066) | 23373 (17376 - 30280) | 9.6 (7.6 - 11.9) | 9.4 (7.6 - 11.5) | 199.3 (155.1 - 250.8) |
| Cabo Verde | 56 (45 - 66) | 47 (38 - 56) | 951 (779 - 1124) | 13.4 (10.7 - 15.7) | 11.4 (9.0 - 13.4) | 218.2 (177.2 - 258.2) |
| Cameroon | 1267 (933 - 1684) | 1114 (838 - 1460) | 30027 (21577 - 40868) | 11.2 (8.6 - 14.6) | 10.6 (8.3 - 13.8) | 229.3 (170.0 - 303.2) |
| Chad | 391 (300 - 513) | 369 (285 - 480) | 9761 (7359 - 12987) | 7.3 (5.7 - 9.4) | 7.4 (5.8 - 9.3) | 159.6 (122.0 - 210.8) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------|---|--|-----------------------------|---|---|--|
| Gambia | 64 (46 - 85) | 58 (43 - 78) | 1463 (1032 - 1978) | 6.8 (5.0 - 9.2) | 6.6 (4.8 - 8.8) | 142.7 (101.6 - 191.7) |
| Ghana | 1495 (1165 - 1901) | 1273 (1003 - 1615) | 34863 (26475 - 45098) | 9.5 (7.6 - 11.9) | 8.8 (7.0 - 10.9) | 194.2 (152.1 - 246.9) |
| Guinea | 390 (296 - 510) | 370 (282 - 480) | 9411 (7035 - 12395) | 7.3 (5.6 - 9.4) | 7.2 (5.5 - 9.2) | 159.6 (120.6 - 209.5) |
| Guinea-Bissau | 65 (49 - 83) | 59 (44 - 74) | 1692 (1241 - 2181) | 9.3 (7.1 - 11.7) | 9.1 (6.9 - 11.3) | 205.8 (153.2 - 262.3) |
| Liberia | 132 (89 - 189) | 120 (81 - 171) | 3163 (2078 - 4534) | 6.8 (4.7 - 9.7) | 6.7 (4.6 - 9.5) | 140.6 (95.2 - 199.9) |
| Mali | 675 (529 - 853) | 615 (487 - 773) | 16327 (12540 - 21004) | 8.1 (6.4 - 10.1) | 7.8 (6.3 - 9.7) | 175.0 (136.7 - 220.6) |
| Mauritania | 173 (130 - 220) | 156 (119 - 195) | 3583 (2606 - 4671) | 8.8 (6.8 - 11.1) | 8.3 (6.5 - 10.3) | 168.0 (124.0 - 213.6) |
| Niger | 406 (295 - 556) | 374 (276 - 510) | 10059 (7150 - 14047) | 5.6 (4.2 - 7.6) | 5.6 (4.2 - 7.5) | 119.8 (87.9 - 164.0) |
| Nigeria | 7084 (5312 - 8958) | 6382 (4884 - 8138) | 157285 (116487 - 205168) | 8.9 (6.9 - 11.0) | 8.6 (6.7 - 10.8) | 174.7 (132.5 - 224.0) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------|---|--|---|---|---|--|
| Sao Tome and Principe | 16 (12 - 22) | 14 (10 - 19) | 351 (246 - 476) | 16.5 (12.0 - 22.2) | 15.2 (11.2 - 20.6) | 315.4 (225.4 - 427.9) |
| Senegal | 635 (499 - 800) | 585 (467 - 731) | 14439 (11000 - 18603) | 8.9 (7.2 - 11.1) | 8.7 (7.1 - 10.8) | 183.4 (144.5 - 232.7) |
| Sierra Leone | 244 (185 - 316) | 225 (172 - 290) | 5780 (4264 - 7593) | 7.1 (5.5 - 9.1) | 7.0 (5.4 - 8.9) | 148.5 (112.4 - 192.3) |
| Togo | 280 (205 - 368) | 246 (181 - 320) | 6738 (4823 - 9014) | 8.2 (6.1 - 10.5) | 7.9 (5.9 - 10.0) | 169.4 (124.2 - 221.4) |
| Global | 2.17 million (2.0 - 2.34 million) | 1.09 million (1.02 - 1.15 million) | 24.3 million (22.6 - 25.7 million) | 26.7 (24.6 - 28.9) | 13.7 (12.6 - 14.5) | 295.5 (275.2 - 313.0) |

Numbers in parenthesis represent 95% uncertainty intervals (UIs). DALYs=Disability-adjusted Life Years. The age-standardised incidence rate, age-standardised mortality rate, and age-standardised DALY rate are shown per 100 000 person-years. Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019.

Supplementary Table 4 Country-wise Percentage Change in Colorectal Cancer Burden, 1990-2019

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------------|---|--|-----------------------------------|---|---|--|
| Andean Latin America | 448.8 (336.0 to 586.4) | 269.8 (201.9 to 349.8) | 230.2 (163.3 to 312.7) | 100.0 (59.6 to 148.7) | 30.9 (7.4 to 59.2) | 27.0 (1.8 to 58.4) |
| Bolivia | 378.8 (261.8 to 526.7) | 280.7 (192.3 to 389.3) | 241.8 (153.7 to 357.1) | 74.6 (33.9 to 123.9) | 38.5 (6.2 to 76.0) | 29.9 (-2.7 to 71.9) |
| Ecuador | 521.3 (393.3 to 692.3) | 337.5 (251.4 to 450.1) | 312.5 (224.8 to 429.8) | 119.4 (74.7 to 178.8) | 53.8 (24.4 to 91.9) | 53.1 (21.1 to 95.4) |
| Peru | 439.2 (290.5 to 642.2) | 238.8 (148.3 to 359.6) | 194.2 (112.3 to 309.1) | 100.4 (45.2 to 175.9) | 20.3 (-11.7 to 63.3) | 16.0 (-16.6 to 61.4) |
| Australasia | 96.8 (63.0 to 138.6) | 48.6 (38.9 to 57.9) | 29.4 (22.0 to 37.2) | -6.2 (-22.7 to 14.7) | -33.5 (-37.2 to -29.9) | -36.3 (-39.6 to -32.5) |
| Australia | 100.7 (58.7 to 153.9) | 49.7 (38.9 to 59.9) | 30.8 (21.8 to 39.8) | -5.2 (-25.3 to 20.5) | -33.7 (-37.9 to -29.6) | -36.0 (-40.2 to -31.5) |
| New Zealand | 81.1 (49.4 to 115.3) | 44.4 (33.0 to 55.0) | 24.0 (15.6 to 32.5) | -9.9 (-25.8 to 7.0) | -31.4 (-36.1 to -26.7) | -36.6 (-40.7 to -32.4) |
| Caribbean | 194.5 (153.9 to 237.7) | 143.3 (112.2 to 175.9) | 126.5 (94.7 to 160.3) | 46.9 (26.5 to 68.6) | 17.8 (2.4 to 33.9) | 16.6 (0.2 to 34.0) |
| Antigua and Barbuda | 188.5 (142.4 to 239.3) | 126.5 (92.2 to 165.6) | 141.1 (102.2 to 183.9) | 59.9 (35.1 to 86.8) | 34.7 (15.7 to 56.7) | 25.4 (5.9 to 47.1) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|--------------------|---|--|---------------------------|---|---|--|
| Bahamas | 200.9 (139.3 to 273.1) | 165.8 (113.3 to 229.9) | 152.5 (100.8 to 214.8) | 21.5 (-2.8 to 50.3) | 6.8 (-13.6 to 31.6) | 4.4 (-16.7 to 29.8) |
| Barbados | 179.9 (130.4 to 233.1) | 125.8 (88.6 to 165.5) | 126.1 (83.3 to 170.9) | 67.2 (37.9 to 98.9) | 37.2 (13.7 to 60.7) | 31.7 (7.3 to 57.6) |
| Belize | 422.7 (341.2 to 516.9) | 331.4 (267.5 to 406.9) | 396.0 (319.2 to 486.8) | 74.6 (47.9 to 106.0) | 48.5 (27.1 to 74.0) | 59.7 (35.4 to 88.6) |
| Bermuda | 122.7 (83.5 to 173.1) | 58.1 (32.2 to 90.9) | 33.3 (9.6 to 62.9) | 4.9 (-13.3 to 28.3) | -31.0 (-42.2 to -16.8) | -33.1 (-45.0 to -18.0) |
| Cuba | 173.7 (123.0 to 230.7) | 121.5 (82.7 to 164.7) | 97.1 (60.9 to 141.5) | 48.1 (20.4 to 79.2) | 15.0 (-5.1 to 38.1) | 9.9 (-10.5 to 34.5) |
| Dominica | 60.4 (31.5 to 99.1) | 52.3 (25.4 to 87.5) | 52.6 (23.2 to 89.7) | 29.0 (5.3 to 60.0) | 23.4 (1.8 to 51.4) | 19.8 (-4.0 to 50.0) |
| Dominican Republic | 416.7 (267.9 to 598.7) | 330.7 (208.8 to 474.5) | 299.6 (181.2 to 439.4) | 104.4 (44.5 to 175.0) | 64.2 (18.2 to 118.6) | 69.3 (19.4 to 128.0) |
| Grenada | 137.9 (108.4 to 170.4) | 85.7 (63.8 to 110.5) | 109.1 (82.1 to 139.3) | 60.3 (40.7 to 81.5) | 35.8 (20.1 to 53.6) | 29.2 (12.3 to 47.7) |
| Guyana | 111.8 (58.3 to 176.8) | 87.4 (42.1 to 142.0) | 88.8 (39.6 to 149.3) | 29.1 (-1.7 to 66.3) | 15.1 (-10.4 to 46.9) | 17.1 (-12.2 to 53.4) |
| Haiti | 137.7 (59.0 to 252.3) | 122.6 (48.7 to 226.8) | 114.9 (43.0 to 218.5) | 11.9 (-24.5 to 62.5) | 5.0 (-29.0 to 51.4) | 0.6 (-32.9 to 48.2) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------------------|--------------------------------------|---------------------------------------|--------------------------------------|--|--|--|
| Jamaica | 205.8 (143.7 to 282.0) | 159.0 (110.1 to 219.9) | 183.5 (124.0 to 256.8) | 85.0 (47.0 to 130.8) | 55.2 (25.0 to 92.1) | 69.2 (33.8 to 113.3) |
| Puerto Rico | 207.2 (138.5 to 289.5) | 133.0 (86.4 to 192.4) | 105.3 (58.4 to 163.6) | 63.3 (25.7 to 109.0) | 12.8 (-11.7 to 43.3) | 16.8 (-10.7 to 51.1) |
| Saint Kitts and Nevis | 109.4 (70.8 to 152.9) | 55.7 (30.2 to 84.6) | 74.8 (38.0 to 114.3) | 22.3 (1.7 to 45.5) | -3.1 (-17.9 to 13.1) | -6.8 (-24.9 to 13.0) |
| Saint Lucia | 203.0 (152.9 to 263.1) | 151.6 (111.1 to 200.2) | 143.1 (101.9 to 194.1) | 22.3 (2.0 to 46.6) | -0.3 (-16.0 to 18.2) | -0.2 (-16.8 to 20.3) |
| Saint Vincent and the Grenadines | 151.5 (116.6 to 196.0) | 126.0 (96.6 to 162.6) | 128.5 (95.4 to 168.6) | 35.6 (17.1 to 59.1) | 21.9 (6.1 to 40.7) | 23.4 (5.9 to 45.3) |
| Suriname | 247.5 (184.5 to 322.1) | 204.5 (152.3 to 266.7) | 196.0 (143.2 to 262.1) | 51.0 (24.5 to 82.6) | 31.9 (10.0 to 58.9) | 31.7 (8.3 to 60.5) |
| Trinidad and Tobago | 146.5 (87.7 to 221.8) | 107.7 (59.8 to 168.1) | 101.5 (51.0 to 166.5) | 10.7 (-15.7 to 43.9) | -9.8 (-30.4 to 16.0) | -5.1 (-28.8 to 25.2) |
| United States Virgin Islands | 264.7 (190.6 to 348.7) | 213.6 (152.6 to 281.6) | 169.6 (111.2 to 233.1) | 62.8 (30.1 to 100.4) | 34.3 (8.8 to 63.3) | 33.2 (4.9 to 66.3) |
| Central Asia | 62.3 (49.0 to 78.9) | 45.8 (33.7 to 60.4) | 35.2 (23.2 to 49.9) | 8.8 (-0.3 to 19.1) | 2.3 (-6.2 to 11.5) | -12.3 (-19.6 to -3.2) |
| Armenia | 75.1 (46.3 to 106.2) | 57.5 (33.0 to 84.3) | 24.5 (4.1 to 47.2) | 17.9 (-1.7 to 39.0) | 2.4 (-13.1 to 19.8) | -11.6 (-25.9 to 4.7) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------|--------------------------------------|---------------------------------------|--------------------------------|--|--|-------------------------------------|
| Azerbaijan | 124.6 (84.1 to 178.4) | 96.6 (59.3 to 142.7) | 80.9 (48.2 to 122.1) | 25.1 (0.6 to 54.2) | 15.6 (-8.7 to 43.3) | -1.3 (-19.2 to 21.2) |
| Georgia | 12.9 (-6.9 to 34.6) | 16.2 (-3.5 to 37.6) | -1.9 (-19.5 to 17.8) | 22.2 (1.6 to 45.7) | 19.1 (-1.1 to 41.0) | 11.2 (-8.7 to 33.8) |
| Kazakhstan | 37.0 (18.6 to 56.8) | 16.4 (1.0 to 32.7) | 6.9 (-8.2 to 22.7) | 2.5 (-11.0 to 16.8) | -10.9 (-22.3 to 0.9) | -19.9 (-30.6 to -8.4) |
| Kyrgyzstan | 9.8 (-5.7 to 26.9) | 0.9 (-12.9 to 16.2) | -8.6 (-21.2 to 5.6) | -24.6 (-35.1 to -12.8) | -27.3 (-37.1 to -16.6) | -39.6 (-48.1 to -30.5) |
| Mongolia | 154.8 (89.9 to 243.7) | 117.1 (62.9 to 189.5) | 128.6 (68.5 to 212.5) | 17.1 (-11.7 to 55.3) | 6.3 (-18.0 to 39.8) | -1.0 (-26.1 to 33.1) |
| Tajikistan | 69.7 (34.4 to 112.4) | 64.4 (31.4 to 103.3) | 53.3 (20.2 to 91.7) | 8.6 (-12.5 to 33.9) | 15.2 (-6.5 to 40.5) | -12.2 (-29.9 to 9.1) |
| Turkmenistan | 88.9 (51.8 to 136.4) | 74.0 (40.2 to 115.3) | 50.3 (19.5 to 89.3) | 2.3 (-17.2 to 26.0) | -3.9 (-22.0 to 17.3) | -18.9 (-34.6 to 1.5) |
| Uzbekistan | 124.6 (89.3 to 164.6) | 98.8 (68.6 to 132.3) | 92.8 (61.4 to 127.7) | 44.8 (24.3 to 66.2) | 47.1 (27.5 to 67.2) | 12.0 (-4.5 to 29.5) |
| Central Europe | 103.1 (80.1 to 128.7) | 67.3 (49.0 to 85.8) | 46.8 (29.5 to 64.7) | 40.4 (24.4 to 58.4) | 9.5 (-2.7 to 21.8) | 5.4 (-7.3 to 18.4) |
| Albania | 186.7 | 126.7 | 83.7 | 43.9 | 6.0 | 3.2 |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|------------------------|---|--|--------------------------|---|---|--|
| | (112.4 to 279.0) | (69.8 to 195.1) | (35.1 to 143.0) | (7.2 to 89.9) | (-19.5 to 38.3) | (-23.6 to 36.9) |
| Bosnia and Herzegovina | 184.8 (122.5 to 261.0) | 142.6 (90.1 to 203.1) | 97.4 (53.5 to 149.0) | 93.8 (50.5 to 144.5) | 55.0 (21.7 to 91.8) | 46.3 (14.1 to 84.5) |
| Bulgaria | 76.2 (40.1 to 119.6) | 55.2 (24.9 to 90.8) | 32.2 (4.7 to 64.9) | 55.7 (23.4 to 95.2) | 29.4 (4.2 to 59.5) | 22.2 (-3.6 to 53.1) |
| Croatia | 100.0 (57.1 to 151.1) | 66.5 (32.2 to 106.8) | 41.5 (10.4 to 78.8) | 44.0 (13.1 to 81.9) | 11.4 (-11.8 to 38.7) | 7.5 (-16.7 to 36.2) |
| Czechia | 31.5 (7.0 to 59.7) | 0.7 (-17.1 to 21.4) | -10.2 (-26.9 to 8.9) | -13.6 (-30.3 to 5.2) | -36.1 (-47.5 to -22.8) | -39.7 (-51.2 to -26.4) |
| Hungary | 60.3 (32.8 to 92.4) | 27.7 (7.1 to 50.8) | 20.2 (-0.8 to 43.9) | 23.7 (1.7 to 48.7) | -7.0 (-22.5 to 10.2) | -4.8 (-21.9 to 14.6) |
| Montenegro | 121.6 (76.9 to 180.1) | 96.1 (58.3 to 147.2) | 78.9 (42.9 to 125.5) | 39.9 (13.0 to 76.8) | 21.3 (-1.6 to 51.7) | 16.6 (-6.5 to 47.1) |
| North Macedonia | 215.3 (143.8 to 298.6) | 153.2 (99.1 to 219.1) | 128.4 (77.4 to 190.6) | 83.5 (42.7 to 131.2) | 47.1 (17.1 to 84.3) | 37.5 (7.6 to 74.5) |
| Poland | 130.7 (97.4 to 171.9) | 93.5 (65.1 to 125.6) | 68.2 (42.2 to 97.6) | 44.3 (23.4 to 69.7) | 15.3 (-1.7 to 34.7) | 8.4 (-8.6 to 27.5) |
| Romania | 168.1 (122.1 to 222.1) | 113.5 (78.3 to 155.7) | 78.4 (46.5 to 115.6) | 109.2 (72.3 to 151.7) | 57.0 (30.3 to 88.6) | 46.2 (20.2 to 77.1) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|------------------------------|--------------------------------------|---------------------------------------|-----------------------------------|--|--|-------------------------------------|
| Serbia | 120.7 (72.1 to 187.2) | 76.6 (39.8 to 129.4) | 51.0 (18.0 to 96.1) | 59.4 (24.2 to 108.9) | 20.3 (-5.2 to 56.4) | 13.5 (-11.7 to 48.1) |
| Slovakia | 128.0 (80.6 to 188.3) | 72.5 (37.9 to 116.3) | 56.0 (23.2 to 97.0) | 47.9 (17.2 to 87.1) | 10.7 (-11.2 to 39.2) | 2.4 (-19.3 to 29.8) |
| Slovenia | 114.8 (48.3 to 198.0) | 73.7 (23.8 to 140.7) | 46.6 (0.9 to 106.7) | 24.6 (-13.9 to 74.0) | -8.5 (-35.3 to 26.7) | -13.3 (-40.5 to 22.2) |
| Central Latin America | 402.1 (332.9 to 483.0) | 292.0 (241.0 to 349.4) | 264.2 (214.1 to 322.9) | 77.0 (52.8 to 105.3) | 33.0 (15.8 to 52.5) | 37.8 (19.0 to 59.4) |
| Colombia | 342.1 (239.6 to 462.6) | 232.7 (160.3 to 322.8) | 192.7 (123.9 to 277.5) | 45.3 (11.9 to 85.8) | 2.1 (-20.1 to 29.6) | 6.2 (-19.0 to 36.7) |
| Costa Rica | 484.1 (351.4 to 649.2) | 380.5 (276.7 to 505.4) | 349.0 (246.4 to 482.0) | 99.7 (54.4 to 156.3) | 59.0 (24.3 to 99.9) | 60.3 (23.5 to 107.4) |
| El Salvador | 396.4 (272.8 to 546.4) | 290.5 (196.0 to 402.4) | 242.3 (157.4 to 349.5) | 150.1 (86.4 to 227.7) | 87.9 (41.8 to 142.9) | 84.4 (37.7 to 143.4) |
| Guatemala | 572.4 (418.2 to 761.1) | 474.7 (349.9 to 635.1) | 419.2 (299.7 to 572.6) | 112.8 (65.1 to 170.1) | 77.9 (41.0 to 122.9) | 75.1 (35.4 to 125.0) |
| Honduras | 412.6 (266.6 to 609.0) | 351.5 (225.8 to 523.6) | 293.4 (182.7 to 438.7) | 84.3 (31.9 to 155.2) | 62.7 (16.9 to 124.4) | 46.5 (5.1 to 102.2) |
| Mexico | 421.4 (347.6 to 498.1) | 304.5 (251.4 to 364.8) | 289.2 (237.1 to 349.7) | 89.2 (63.1 to 116.8) | 41.7 (23.6 to 62.3) | 51.3 (31.4 to 74.8) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------------------|---|--|----------------------------------|---|---|--|
| Nicaragua | 507.0 (372.7 to 675.2) | 371.5 (268.6 to 507.3) | 317.4 (226.6 to 425.0) | 120.5 (72.0 to 188.3) | 73.6 (34.9 to 128.3) | 58.3 (23.5 to 101.5) |
| Panama | 337.5 (237.3 to 461.1) | 257.2 (178.1 to 352.8) | 225.9 (148.9 to 320.1) | 57.3 (21.5 to 101.7) | 24.4 (-2.7 to 57.4) | 22.3 (-6.8 to 57.6) |
| Venezuela | 405.8 (279.7 to 564.9) | 299.1 (203.6 to 417.0) | 269.6 (175.4 to 390.9) | 70.3 (28.6 to 122.2) | 30.7 (-0.1 to 68.6) | 32.3 (-0.8 to 75.3) |
| Central Sub Saharan Africa | 145.4 (67.6 to 245.4) | 133.8 (60.6 to 223.7) | 131.7 (58.5 to 224.8) | 3.5 (-27.8 to 40.3) | -1.4 (-30.5 to 32.4) | -2.6 (-32.8 to 33.1) |
| Angola | 260.0 (143.6 to 436.2) | 234.5 (132.2 to 394.3) | 224.6 (119.4 to 394.0) | 27.7 (-10.9 to 81.5) | 20.5 (-12.4 to 71.0) | 14.4 (-20.5 to 69.2) |
| Central African Republic | 61.5 (13.4 to 124.0) | 58.8 (11.9 to 119.3) | 64.5 (14.8 to 131.0) | -13.7 (-38.2 to 16.6) | -14.3 (-38.4 to 14.5) | -14.7 (-39.6 to 17.1) |
| Congo | 144.6 (59.2 to 278.8) | 130.1 (50.7 to 253.6) | 127.1 (45.6 to 264.1) | 1.4 (-32.3 to 50.8) | -3.1 (-34.3 to 41.8) | -9.0 (-40.1 to 40.4) |
| Democratic Republic of the Congo | 117.4 (37.5 to 216.2) | 110.6 (33.1 to 204.9) | 108.7 (31.4 to 206.3) | -5.7 (-39.1 to 34.2) | -9.3 (-41.5 to 28.2) | -9.2 (-42.3 to 30.8) |
| Equatorial Guinea | 484.6 (202.0 to 827.1) | 405.3 (162.0 to 697.3) | 380.2 (148.2 to 686.9) | 144.6 (28.5 to 288.9) | 118.3 (14.9 to 241.5) | 93.0 (0.2 to 203.6) |
| Gabon | 106.0 (31.3 to 203.9) | 88.4 (21.4 to 175.5) | 89.2 (17.4 to 183.2) | 11.1 (-27.6 to 60.4) | 3.4 (-31.8 to 48.5) | -1.1 (-37.3 to 46.3) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|---------------------------------------|--------------------------------------|---------------------------------------|----------------------------------|--|--|-------------------------------------|
| Eastern Asia | 467.2 (367.8 to 585.9) | 230.8 (174.1 to 295.5) | 181.4 (132.4 to 238.1) | 142.3 (101.1 to 190.9) | 37.1 (15.1 to 62.3) | 30.8 (8.5 to 56.7) |
| China | 474.0 (369.2 to 600.9) | 230.0 (172.0 to 298.3) | 181.6 (129.7 to 242.3) | 144.1 (100.0 to 195.5) | 36.2 (13.4 to 62.7) | 30.5 (7.2 to 58.0) |
| Democratic People's Republic of Korea | 114.1 (40.8 to 207.4) | 109.6 (39.8 to 197.3) | 86.3 (19.4 to 174.4) | 10.7 (-25.7 to 55.5) | 2.6 (-30.4 to 42.7) | 1.9 (-33.8 to 46.9) |
| Taiwan (Province of China) | 492.6 (364.8 to 661.8) | 343.3 (254.8 to 454.2) | 249.3 (174.0 to 345.9) | 149.2 (95.4 to 219.8) | 69.0 (35.2 to 111.4) | 56.5 (23.1 to 99.4) |
| Eastern Europe | 50.6 (37.4 to 66.6) | 27.4 (15.6 to 39.7) | 15.2 (4.7 to 27.1) | 24.0 (13.0 to 37.2) | 1.6 (-7.8 to 11.6) | -3.4 (-12.2 to 6.6) |
| Belarus | 59.3 (26.3 to 103.4) | 21.7 (-1.5 to 53.6) | 7.4 (-15.1 to 38.0) | 30.3 (3.5 to 66.8) | -2.5 (-21.0 to 23.3) | -11.0 (-29.9 to 14.7) |
| Estonia | 76.3 (39.7 to 120.9) | 33.3 (7.3 to 66.2) | 5.0 (-17.7 to 33.3) | 36.6 (7.1 to 72.6) | -4.7 (-24.6 to 20.0) | -15.2 (-34.0 to 7.2) |
| Latvia | 34.1 (11.9 to 62.0) | 15.9 (-2.4 to 37.9) | -5.6 (-21.1 to 14.3) | 20.6 (0.4 to 47.2) | -1.9 (-17.5 to 17.0) | -11.1 (-26 to 8.0) |
| Lithuania | 50.8 (24.5 to 80.9) | 37.3 (14.3 to 62.3) | 12.0 (-7.7 to 34.9) | 18.5 (-2.5 to 42.9) | 1.7 (-16.0 to 21.2) | -7.2 (-24.2 to 13.2) |
| Republic of Moldova | 51.9 (32.8 to 73.4) | 28.8 (13.0 to 46.3) | 15.4 (0.1 to 31.9) | 18.5 (3.2 to 35.2) | -2.4 (-14.3 to 10.6) | -7.1 (-19.4 to 6.4) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------------------|--------------------------------------|---------------------------------------|-----------------------------------|--|--|-------------------------------------|
| Russian Federation | 71.4 (51.0 to 95.3) | 44.2 (27.5 to 62.5) | 29.8 (14.3 to 47.2) | 33.8 (17.7 to 52.4) | 8.8 (-3.9 to 22.5) | 3.0 (-9.3 to 17.1) |
| Ukraine | 8.7 (-8.4 to 26.9) | -4.7 (-18.4 to 11.8) | -9.5 (-23.0 to 6.5) | 4.1 (-12.3 to 22.1) | -10.6 (-23.7 to 4.9) | -11.7 (-24.8 to 4.2) |
| Eastern Sub Saharan Africa | 173.8 (118.8 to 241.7) | 159.5 (109.7 to 222.0) | 154.3 (101.5 to 225.9) | 25.9 (2.3 to 53.8) | 20.3 (-1.5 to 45.5) | 15.9 (-6.6 to 45.2) |
| Burundi | 78.6 (15.4 to 185.6) | 68.1 (8.7 to 166.6) | 75.9 (11.2 to 186.2) | -7.7 (-39.9 to 43.7) | -10.5 (-41.2 to 37.5) | -14.0 (-44.7 to 38.5) |
| Comoros | 156.0 (64.3 to 371.4) | 141.0 (55.8 to 322.4) | 137.0 (48.5 to 398.4) | 15.9 (-24.2 to 98.7) | 8.8 (-27.9 to 79.8) | 8.1 (-31.5 to 108.6) |
| Djibouti | 461.3 (262.4 to 733.4) | 428.9 (246.4 to 681.5) | 403.3 (218.1 to 664.1) | 32.5 (-10.1 to 88.5) | 24.3 (-14.1 to 75.1) | 22.8 (-18.9 to 80.2) |
| Eritrea | 318.2 (187.4 to 532.8) | 297.5 (172.5 to 495.2) | 280.3 (160.6 to 478.3) | 59.0 (11.7 to 132.1) | 52.2 (6.3 to 119.8) | 44.6 (-0.8 to 115.7) |
| Ethiopia | 113.2 (54.1 to 242.1) | 103.1 (45.6 to 216.4) | 81.5 (25.9 to 200.5) | 5.1 (-22.8 to 55.3) | 0.0 (-26.3 to 44.4) | -9.6 (-35.7 to 42.6) |
| Kenya | 316.9 (227.8 to 457.3) | 315.2 (229.3 to 447.9) | 327.5 (232.5 to 464.2) | 56.7 (25.6 to 108.6) | 58.7 (27.8 to 107.6) | 57.2 (24.3 to 107.3) |
| Madagascar | 127.7 (59.9 to 215.9) | 114.8 (53.6 to 194.5) | 126.1 (59.4 to 216.1) | 7.8 (-23.2 to 45.8) | 4.2 (-24.9 to 40.7) | 2.0 (-27.5 to 40.6) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|---------------------------------|---|--|--------------------------------|---|---|--|
| Malawi | 151.2 (83.1 to 235.5) | 143.4 (78.7 to 221.3) | 134.9 (65.3 to 222.1) | 32.1 (-2.1 to 72.5) | 27.3 (-4.6 to 64.6) | 24.7 (-9.6 to 65.8) |
| Mozambique | 234.4 (146.0 to 350.2) | 213.2 (129.8 to 317.9) | 221.6 (131.9 to 341.1) | 78.3 (31.2 to 136.3) | 68.4 (24.2 to 121.3) | 70.5 (24.7 to 128.2) |
| Rwanda | 115.2 (50.3 to 254.2) | 98.5 (41.0 to 219.7) | 89.7 (27.0 to 221.4) | 6.6 (-23.1 to 66.6) | 0.1 (-26.3 to 51.9) | -7.8 (-35.5 to 51.0) |
| Somalia | 147.2 (58.6 to 275.4) | 146.5 (62.2 to 271.0) | 147.0 (59.0 to 278.8) | -5.7 (-37.1 to 40.9) | -5.8 (-36.3 to 38.3) | -6.6 (-38.5 to 40.4) |
| South Sudan | 56.6 (12.6 to 133.2) | 52.1 (8.3 to 126.4) | 58.2 (8.8 to 145.2) | -1.6 (-27.3 to 42.0) | -2.8 (-28.4 to 39.3) | -4.6 (-32.5 to 42.1) |
| Uganda | 309.7 (205.6 to 435.7) | 275.7 (184.3 to 383.2) | 300.4 (193.2 to 437.8) | 82.3 (39.6 to 131.3) | 70.7 (31.8 to 114.9) | 73.5 (29.6 to 126.2) |
| United Republic of Tanzania | 191.0 (127.1 to 265.1) | 175.9 (118.5 to 242.2) | 175.1 (109.8 to 256.6) | 27.1 (1.8 to 55.7) | 20.5 (-2.9 to 46.1) | 19.8 (-6.3 to 50.6) |
| Zambia | 216.1 (124.6 to 328.5) | 187.0 (105.9 to 287.2) | 195.3 (103.7 to 309.0) | 31.7 (-3.6 to 74.2) | 21.1 (-10.2 to 58.3) | 21.2 (-13.7 to 64.2) |
| High-income Asia Pacific | 154.4 (120.1 to 189.2) | 124.0 (98.7 to 138.2) | 64.7 (52.3 to 72.6) | 15.2 (0.4 to 31.1) | -14.8 (-20.6 to -10.9) | -18.7 (-22.4 to -15.6) |
| Brunei Darussalam | 262.8 (181.0 to 355.2) | 187.2 (125.8 to 254.2) | 177.6 (115.1 to 245.8) | 21.2 (-3.2 to 50.6) | 0.0 (-19.9 to 22.6) | -3.9 (-24.4 to 18.3) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-------------------------------------|--------------------------------------|---------------------------------------|-----------------------------------|--|--|-------------------------------------|
| Japan | 125.1 (90.2 to 160.9) | 108.3 (83.2 to 122.8) | 50.0 (37.6 to 57.4) | 12.8 (-4.2 to 31.5) | -15.2 (-21.1 to -11.5) | -17.8 (-21.6 to -14.9) |
| Republic of Korea | 555.1 (445.1 to 681.2) | 274.7 (233.7 to 317.1) | 176.1 (147.7 to 206.0) | 119.0 (83.6 to 160.3) | 17.5 (5.4 to 30.3) | 3.1 (-7.2 to 13.9) |
| Singapore | 232.2 (163.7 to 313.0) | 121.4 (103.0 to 139.0) | 89.0 (74.7 to 105.0) | -7.0 (-25.6 to 15.0) | -40.0 (-44.8 to -35.3) | -44.1 (-48.2 to -39.5) |
| High-income North America | 55.4 (36.7 to 76.0) | 33.0 (28.9 to 36.5) | 31.7 (28.1 to 35.4) | -10.0 (-21.1 to 2.5) | -25.3 (-27.3 to -23.5) | -22.9 (-24.9 to -20.7) |
| Canada | 128.5 (78.1 to 191.0) | 84.0 (71.2 to 96.5) | 63.7 (53.3 to 75.2) | 9.1 (-15.1 to 39.2) | -17.2 (-22.4 to -11.9) | -19.7 (-24.6 to -14.2) |
| Greenland | 150.3 (101.7 to 209.7) | 113.5 (70.4 to 163.0) | 83.7 (44.8 to 132.1) | 25.5 (2.5 to 54.5) | 5.4 (-14.4 to 29.3) | -1.1 (-21.3 to 23.1) |
| United States of America | 48.4 (28.9 to 70.8) | 28.1 (24.3 to 31.6) | 28.5 (24.9 to 32.1) | -12.1 (-23.9 to 1.5) | -26.3 (-28.2 to -24.4) | -23.2 (-25.4 to -20.9) |
| North Africa and Middle East | 289.0 (209.8 to 396.0) | 199.3 (140.5 to 280.1) | 177.6 (120.1 to 250.0) | 54.5 (24.4 to 98.0) | 19.9 (-2.7 to 53.9) | 13.4 (-9.5 to 43.1) |
| Afghanistan | 107.4 (45.4 to 204.1) | 94.1 (36.3 to 181.7) | 118.6 (50.7 to 228.2) | 9.9 (-23.5 to 56.5) | 7.1 (-25.0 to 51.7) | 3.3 (-28.9 to 52.8) |
| Algeria | 283.0 (177.0 to 412.9) | 220.4 (132.4 to 328.8) | 185.1 (105.7 to 283.5) | 34.7 (-1.6 to 78.4) | 11.2 (-17.7 to 45.8) | 5.9 (-23.2 to 40.9) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------|---|--|---------------------------|---|---|--|
| Bahrain | 555.1 (370.5 to 849.5) | 340.9 (216.0 to 525.4) | 337.3 (213.6 to 518.3) | 19.8 (-12.4 to 69.8) | -8.2 (-32.1 to 25.7) | -16.8 (-39.1 to 17.4) |
| Egypt | 261.5 (156.4 to 407.0) | 193.6 (110.1 to 311.0) | 184.3 (101.8 to 296.5) | 64.9 (17.7 to 131.0) | 36.5 (-1.0 to 90.0) | 33.6 (-4.4 to 86.1) |
| Iran | 370.9 (270.7 to 499.0) | 285.2 (206.4 to 392.6) | 229.5 (162.7 to 315.7) | 66.3 (31.5 to 112.5) | 29.9 (3.8 to 66.7) | 24.8 (-0.4 to 57.7) |
| Iraq | 319.0 (173.2 to 531.4) | 232.1 (120.7 to 394.5) | 248.8 (126.1 to 424.8) | 38.7 (-7.4 to 107.0) | 15.5 (-21.4 to 70.9) | 13.6 (-25.3 to 69.5) |
| Jordan | 555.6 (373.3 to 781.7) | 389.7 (262.3 to 552.4) | 356.1 (238.1 to 511.0) | 35.7 (-1.3 to 83.1) | 5.3 (-21.6 to 41.4) | -2.5 (-27.9 to 29.7) |
| Kuwait | 610.1 (482.6 to 764.1) | 456.7 (370.0 to 564.5) | 380.0 (300.8 to 479.6) | 75.7 (46.3 to 114.6) | 37.8 (16.4 to 65.1) | 26.4 (6.4 to 52.8) |
| Lebanon | 361.9 (226.1 to 579.6) | 231.5 (135.4 to 392.3) | 186.6 (99.1 to 318.6) | 92.9 (35.6 to 179.7) | 30.7 (-7.0 to 92.2) | 27.1 (-11.5 to 82.9) |
| Libya | 237.9 (86.9 to 464.4) | 187.0 (60.4 to 375.5) | 190.0 (58.5 to 386.0) | 21.4 (-32.6 to 101.6) | 4.4 (-41.6 to 72.3) | 3.9 (-42.6 to 72.9) |
| Morocco | 255.2 (156.0 to 373.6) | 207.4 (122.0 to 309.2) | 192.6 (109.7 to 288.8) | 55.2 (12.6 to 107.7) | 35.6 (-0.4 to 80.4) | 30.9 (-5.5 to 73.6) |
| Oman | 330.7 (166.2 to 572.6) | 198.0 (85.7 to 365.2) | 195.5 (82.6 to 358.2) | 70.1 (9.5 to 166.2) | 32.0 (-13.8 to 108.1) | 16.7 (-26.3 to 82.0) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------|---|---|---|--|--|---------------------------------------|
| Palestine | 314.4 (188.1 to 539.4) | 241.7 (137.9 to 418.3) | 246.7 (139.7 to 432.6) | 53.2 (6.4 to 135.9) | 32.5 (-7.1 to 101.5) | 24.7 (-14.1 to 91.8) |
| Qatar | 1140.6 (692.4 to 1771.6) | 630.5 (380.0 to 970.3) | 644.2 (377.3 to 1021.1) | 60.8 (10.1 to 135.0) | 17.3 (-18.4 to 75.1) | 4.1 (-28.5 to 48.8) |
| Saudi Arabia | 715.3 (405.3 to 1173.1) | 343.9 (173.8 to 605.9) | 418.1 (212.3 to 734.7) | 131.1 (46.7 to 259.6) | 42.8 (-10.5 to 127.1) | 47.1 (-7.9 to 132.5) |
| Sudan | 222.9 (125.0 to 353.2) | 181.0 (98.0 to 294.7) | 179.4 (88.2 to 299.7) | 58.8 (14.7 to 118.8) | 41.6 (3.9 to 91.5) | 35.5 (-6.1 to 91.9) |
| Syrian Arab Republic | 199.8 (91.6 to 355.3) | 142.3 (57.2 to 267.0) | 112.9 (34.9 to 224.2) | 37.7 (-10.6 to 108.9) | 13.8 (-25.0 to 69.5) | 3.5 (-33.7 to 56.8) |
| Tunisia | 309.1 (180.7 to 489.4) | 219.5 (121.6 to 359.5) | 195.2 (101.6 to 330.5) | 58.1 (9.4 to 127.4) | 20.4 (-15.3 to 71.6) | 20.5 (-16.5 to 74.7) |
| Turkey | 238.4 (142.1 to 364.5) | 144.6 (77.4 to 230.5) | 107.6 (46.5 to 181.7) | 39.5 (1.0 to 91.5) | -1.0 (-27.7 to 34.8) | -9.3 (-35.0 to 23.0) |
| United Arab Emirates | 946.5 (488.4 to 1621.7) | 702.7 (359.1 to 1219.1) | 772.9 (389.7 to 1351.2) | 8.2 (-36.0 to 71.2) | -6.2 (-44.1 to 48.0) | -9.8 (-47.6 to 44.9) |
| Yemen | 260.8 (121.9 to 492.5) | 233.7 (108.0 to 441.3) | 229.0 (98.6 to 453.0) | 30.6 (-17.7 to 109.0) | 21.5 (-22.9 to 92.9) | 19.2 (-26.1 to 94.5) |
| Oceania | 181.0 (125.4 to 247.3) | 167.4 (114.8 to 230.1) | 163.0 (108.4 to 230.1) | 19.7 (-2.0 to 45.5) | 13.8 (-6.1 to 37.7) | 11.7 (-10.2 to 37.9) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|--------------------------|---|--|--------------------------|---|---|--|
| American Samoa | 134.5 (81.9 to 202.7) | 122.6 (74.2 to 182.8) | 98.7 (53.1 to 156.7) | 11.8 (-12.7 to 42.2) | 1.5 (-19.8 to 28.0) | 2.2 (-20.9 to 31.2) |
| Cook Islands | 121.2 (69.9 to 190.7) | 92.1 (51.7 to 146.3) | 63.1 (23.6 to 118.0) | 13.4 (-13.0 to 48.6) | -7.4 (-26.8 to 18.9) | -9.9 (-32.0 to 19.5) |
| Fiji | 160.7 (90.4 to 258.6) | 149.0 (82.8 to 237.6) | 124.2 (60.7 to 209.4) | 31.9 (-2.7 to 76.0) | 24.5 (-6.5 to 65.2) | 19.8 (-12.1 to 62.9) |
| Guam | 148.6 (96.0 to 212.4) | 148.1 (97.4 to 211.4) | 115.4 (71.4 to 168.8) | -3.4 (-23.6 to 22.0) | -17.2 (-34.0 to 5.9) | -5.4 (-24.6 to 19.1) |
| Kiribati | 82.3 (28.2 to 171.0) | 72.8 (21.7 to 155.9) | 71.0 (19.5 to 155.5) | 2.2 (-26.9 to 48.6) | -0.8 (-28.3 to 43.6) | -6.3 (-33.6 to 37.7) |
| Marshall Islands | 146.8 (78.4 to 234.3) | 124.7 (62.7 to 202.4) | 137.0 (71.0 to 221.0) | 19.5 (-11.0 to 58.7) | 12.7 (-15.9 to 48.7) | 12.7 (-17.6 to 51.7) |
| Micronesia | 90.1 (23.6 to 167.0) | 66.2 (9.3 to 131.5) | 65.3 (3.5 to 134.3) | 28.5 (-14.0 to 76.6) | 15.8 (-20.1 to 56.1) | 11.7 (-27.1 to 55.8) |
| Nauru | 14.5 (-18.6 to 58.1) | -1.4 (-29.2 to 35.4) | 4.3 (-26.2 to 43.6) | 1.4 (-25.9 to 36.3) | -8.8 (-33.1 to 21.4) | -9.2 (-34.3 to 22.5) |
| Niue | 27.4 (-2.6 to 65.2) | -0.2 (-22.6 to 27.6) | 3.3 (-23.5 to 35.8) | 31.2 (-0.4 to 72.4) | 6.4 (-17.5 to 36.4) | 4.4 (-23.5 to 39.3) |
| Northern Mariana Islands | 192.5 (118.3 to 281.8) | 167.5 (101.9 to 240.9) | 115.1 (56.9 to 188.7) | 8.3 (-16.2 to 33.1) | -6.8 (-26.7 to 14.0) | -8.4 (-30.5 to 14.6) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-------------------|---|---|---|--|--|-------------------------------------|
| Palau | 146.7 (71.5 to 244.7) | 102.2 (42.1 to 179.2) | 104.1 (40.1 to 184.2) | 16.4 (-17.9 to 60.0) | -0.6 (-29.6 to 35.4) | -2.8 (-31.7 to 34.6) |
| Papua New Guinea | 216.1 (135.9 to 327.9) | 200.7 (125.4 to 306.4) | 203.5 (124.7 to 313.9) | 23.1 (-6.1 to 64.4) | 18.2 (-8.9 to 55.5) | 16.5 (-12.7 to 56.7) |
| Samoa | 80.4 (34.8 to 141.4) | 62.1 (23.6 to 111.7) | 59.8 (16.1 to 119.0) | 7.9 (-18.2 to 41.6) | -3.2 (-24.8 to 25.4) | -3.8 (-28.5 to 29.0) |
| Solomon Islands | 199.3 (112.0 to 308.9) | 173.5 (95.8 to 271.5) | 174.4 (91.9 to 274.1) | 32.6 (-2.7 to 79.3) | 23.0 (-9.0 to 65.2) | 19.4 (-14.3 to 62.4) |
| Tokelau | 26.9 (-5.6 to 68.9) | 4.6 (-20.4 to 36.2) | 6.6 (-22.8 to 44.3) | 29.7 (-3.5 to 71.9) | 9.8 (-16.9 to 43.4) | 6.1 (-23.2 to 44.7) |
| Tonga | 83.6 (41.6 to 139.5) | 77.5 (38.5 to 130.3) | 57.0 (18.7 to 108.0) | 24.6 (-3.0 to 62.3) | 14.4 (-10.0 to 47.5) | 12.3 (-14.2 to 46.6) |
| Tuvalu | 78.6 (32.1 to 143.2) | 62.2 (20.4 to 119.3) | 51.1 (10.1 to 108.2) | 19.9 (-11.3 to 61.1) | 8.1 (-20.0 to 43.9) | 4.1 (-23.7 to 42.6) |
| Vanuatu | 232.6 (138.7 to 364.3) | 220.2 (131.0 to 338.6) | 211.3 (117.2 to 347.1) | 26.7 (-7.4 to 71.4) | 20.8 (-10.0 to 61.7) | 22.1 (-13.0 to 70.8) |
| South Asia | 279.8 (201.2 to 353.4) | 247.3 (177.9 to 314.5) | 207.5 (146.3 to 267.0) | 52.6 (20.6 to 81.6) | 36.6 (8.5 to 62.8) | 31.7 (5.0 to 57.6) |
| Bangladesh | 231.1 (125.5 to 380.0) | 194.3 (101.7 to 323.2) | 157.3 (72.8 to 289.3) | 20.9 (-16.1 to 70.6) | 6.8 (-25.4 to 48.4) | -1.0 (-32.3 to 44.3) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|----------------------------------|--------------------------------------|---------------------------------------|-----------------------------------|--|--|-------------------------------------|
| Bhutan | 298.5 (187.7 to 456.3) | 254.2 (157.7 to 386.4) | 186.1 (102.6 to 316.8) | 74.6 (27.9 to 135.5) | 51.3 (12.3 to 103.6) | 36.6 (-1.4 to 89.2) |
| India | 291.1 (202.9 to 374.9) | 260.0 (184.6 to 334.0) | 210.5 (144.4 to 274.7) | 53.6 (19.6 to 85.8) | 37.1 (7.9 to 64.7) | 32.1 (4.1 to 59.8) |
| Nepal | 273.6 (167.2 to 412.1) | 246.1 (150.8 to 375.1) | 190.4 (102.5 to 306.4) | 62.7 (18.1 to 122.2) | 49.1 (9.8 to 104.0) | 33.8 (-4.8 to 83.4) |
| Pakistan | 226.0 (149.2 to 343.1) | 190.0 (121.2 to 291.9) | 220.9 (145.9 to 338.0) | 66.4 (28.2 to 125.0) | 53.5 (17.6 to 106.6) | 55.3 (19.3 to 110.9) |
| Southeast Asia | 319.4 (249.4 to 385.2) | 247.0 (189.6 to 300.1) | 218.4 (166.6 to 265.8) | 78.5 (47.8 to 106.9) | 46.7 (21.8 to 70.0) | 41.6 (18.3 to 62.8) |
| Cambodia | 362.4 (232.6 to 514.1) | 300.7 (187.9 to 423.9) | 264.4 (158.3 to 403.5) | 78.8 (29.8 to 129.9) | 55.2 (12.7 to 96.4) | 45.9 (3.1 to 94.8) |
| Indonesia | 311.3 (221.0 to 401.8) | 265.8 (187.6 to 354.5) | 230.9 (159.7 to 310.9) | 94.5 (51.4 to 140.8) | 74.1 (35.8 to 117.2) | 61.4 (26.8 to 100.2) |
| Lao People's Democratic Republic | 195.0 (100.8 to 313.9) | 164.9 (80.9 to 264.0) | 151.7 (70.0 to 265.7) | 42.7 (-1.7 to 93.0) | 30.4 (-9.4 to 75.0) | 20.4 (-18.2 to 68.0) |
| Malaysia | 364.3 (244.6 to 511.7) | 253.7 (162.0 to 363.0) | 229.2 (145.6 to 331.4) | 61.1 (19.0 to 112.2) | 24.9 (-8.0 to 64.2) | 18.8 (-11.7 to 54.9) |
| Maldives | 373.7 (233.8 to 634.2) | 227.4 (131.9 to 395.1) | 174.8 (92.5 to 340.8) | 37.9 (-1.5 to 98.7) | -5.4 (-31.7 to 32.4) | -17.2 (-41.6 to 25.4) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-------------------------------|--|--|--------------------------------------|--|--|-------------------------------------|
| Mauritius | 351.5 (264.6 to 459.6) | 282.7 (215.6 to 368.5) | 243.9 (176.7 to 323.2) | 90.0 (54.3 to 135.6) | 55.5 (28.5 to 89.7) | 53.5 (24.4 to 89.1) |
| Myanmar | 216.3 (107.2 to 335.9) | 180.6 (78.6 to 280.8) | 151.4 (62.0 to 252.8) | 62.8 (6.0 to 120.7) | 43.8 (-7.7 to 94.3) | 33.5 (-14.7 to 83.9) |
| Philippines | 226.4 (155.7 to 324.6) | 197.5 (137.9 to 284.8) | 183.5 (126.7 to 264.7) | 26.8 (0.3 to 63.1) | 13.3 (-8.2 to 44.4) | 15.4 (-7.4 to 48.6) |
| Seychelles | 256.8 (205.8 to 314.3) | 178.6 (140.4 to 221.9) | 188.3 (145.8 to 235.3) | 86.5 (60.1 to 115.0) | 53.5 (32.5 to 77.2) | 45.4 (24.9 to 68.3) |
| Sri Lanka | 327.4 (205.3 to 469.8) | 216.1 (129.3 to 316.5) | 174.1 (95.2 to 266.6) | 81.4 (31.0 to 139.4) | 31.2 (-3.6 to 71.9) | 25.9 (-9.3 to 68.1) |
| Thailand | 285.3 (179.8 to 419.7) | 194.9 (117.5 to 292.7) | 144.8 (77.8 to 231.3) | 36.5 (-1.0 to 83.2) | -2.2 (-28.0 to 30.2) | -4.0 (-30.6 to 29.7) |
| Timor-Leste | 405.2 (230.0 to 629.9) | 368.9 (209.3 to 578.3) | 285.6 (144.3 to 469.5) | 83.0 (22.4 to 164.1) | 64.4 (10.5 to 136.8) | 56.9 (2.2 to 127.8) |
| Viet Nam | 524.7 (360.8 to 730.1) | 346.6 (230.2 to 480.0) | 356.1 (226.7 to 510.7) | 165.4 (96.6 to 248.0) | 94.9 (46.2 to 151.7) | 92.9 (40.5 to 154.3) |
| Southern Latin America | 145.8 (96.6 to 204.8) | 103.1 (92.7 to 114.2) | 87.6 (77.9 to 97.7) | 33.9 (6.8 to 66.2) | 6.4 (1.2 to 12.0) | 6.0 (0.8 to 11.8) |
| Argentina | 131.9 (84.8 to 189.1) | 95.4 (83.1 to 108.6) | 82.9 (71.8 to 94.9) | 37.1 (8.8 to 70.7) | 11.5 (5.0 to 18.9) | 11.8 (4.9 to 18.9) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|------------------------------------|---|--|-----------------------------------|---|---|--|
| Chile | 299.9 (217.1 to 404.1) | 202.0 (179.8 to 226.1) | 167.0 (147.0 to 188.5) | 61.0 (28.0 to 102.6) | 15.9 (8.1 to 24.8) | 13.9 (5.6 to 22.7) |
| Uruguay | 58.6 (27.4 to 98.7) | 42.2 (32.8 to 52.2) | 24.2 (16.4 to 32.9) | 12.7 (-9.9 to 42.0) | -5.1 (-10.8 to 1.2) | -8.3 (-14.0 to -1.9) |
| Southern Sub Saharan Africa | 147.7 (121.4 to 184.0) | 130.5 (105.2 to 168.9) | 125.0 (98.8 to 158.7) | 21.8 (8.1 to 41.1) | 13.3 (-0.3 to 33.3) | 12.5 (-0.3 to 30.2) |
| Botswana | 312.9 (177.6 to 477.3) | 252.4 (142.1 to 388.1) | 263.5 (136.0 to 420.2) | 69.2 (18.0 to 128.7) | 47.4 (3.8 to 98.7) | 47.2 (-0.1 to 106.4) |
| Eswatini | 177.9 (94.6 to 293.2) | 161.5 (85.4 to 268.7) | 169.2 (81.5 to 288.9) | 38.7 (-0.8 to 92.2) | 32.1 (-5.4 to 79.4) | 35.0 (-5.5 to 91.1) |
| Lesotho | 140.6 (54.4 to 250.0) | 128.9 (49.2 to 231.9) | 150.8 (57.3 to 269.4) | 84.7 (21.9 to 165.6) | 79.1 (20.0 to 153.7) | 87.6 (19.7 to 174.3) |
| Namibia | 226.0 (134.9 to 353.4) | 193.2 (114.5 to 298.5) | 180.3 (95.0 to 312.1) | 67.8 (23.2 to 129.1) | 51.1 (12.9 to 104.4) | 43.7 (2.4 to 105.0) |
| South Africa | 145.7 (117.7 to 182.1) | 126.6 (99.6 to 163.5) | 116.0 (91.9 to 146.8) | 16.8 (2.1 to 36.1) | 7.9 (-6.3 to 26.7) | 5.1 (-6.5 to 20.8) |
| Zimbabwe | 126.1 (65.4 to 195.4) | 125.7 (66.1 to 195.0) | 139.8 (70.8 to 216.5) | 29.1 (-4.2 to 67.5) | 29.2 (-2.9 to 68.6) | 34.8 (-2.1 to 76.9) |
| Tropical Latin America | 300.2 (277.8 to 319.0) | 226.9 (208.2 to 241.9) | 197.2 (182.4 to 211.0) | 48.0 (40.2 to 54.8) | 15.6 (10.1 to 20.6) | 18.3 (12.5 to 23.6) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------|--------------------------------------|---------------------------------------|--------------------------------|--|--|-------------------------------------|
| Brazil | 297.3 (274.9 to 315.5) | 224.4 (205.7 to 239.6) | 194.6 (179.6 to 208.4) | 46.6 (38.7 to 53.1) | 14.4 (8.8 to 19.4) | 17.2 (11.5 to 22.4) |
| Paraguay | 495.1 (336.3 to 685.7) | 384.3 (260.2 to 530.9) | 373.7 (244.4 to 531.0) | 138.0 (75.2 to 213.9) | 91.9 (42.7 to 149.2) | 94.7 (42.3 to 158.5) |
| Western Europe | 66.7 (47.6 to 87.9) | 31.7 (25.0 to 36.7) | 16.0 (11.2 to 20.1) | 7.2 (-5.6 to 21.6) | -22.1 (-25.0 to -19.6) | -24.0 (-26.5 to -21.4) |
| Andorra | 177.6 (91.8 to 282.2) | 137.9 (65.5 to 221.5) | 101.0 (37.8 to 176.1) | 6.3 (-26.5 to 44.2) | -20.1 (-43.3 to 5.4) | -19.9 (-44.8 to 9.3) |
| Austria | -0.6 (-18.6 to 21.4) | -20.5 (-26.4 to -14.8) | -29.7 (-34.4 to -25.0) | -34.1 (-46.7 to -19.1) | -50.2 (-53.3 to -46.8) | -53.2 (-56.2 to -50.0) |
| Belgium | 37.0 (8.1 to 72.8) | 8.2 (0.5 to 16.6) | -1.8 (-8.5 to 5.3) | -7.3 (-27.0 to 16.6) | -33.2 (-37.5 to -28.6) | -32.4 (-36.8 to -27.7) |
| Cyprus | 361.7 (275.7 to 454.6) | 176.5 (128.6 to 228.4) | 151.6 (108.5 to 198.4) | 86.5 (52.3 to 122.4) | 7.8 (-11.4 to 28.6) | 5.4 (-12.1 to 24.6) |
| Denmark | 76.5 (38.0 to 120.7) | 29.4 (19.7 to 39.2) | 18.1 (9.1 to 27.7) | 24.1 (-3.7 to 56.2) | -11.2 (-17.7 to -4.7) | -17.5 (-23.9 to -10.8) |
| Finland | 103.4 (58.5 to 159.8) | 53.9 (41.9 to 67.1) | 34.9 (24.2 to 46.4) | 20.3 (-6.8 to 54.5) | -15.7 (-21.8 to -9.0) | -17.3 (-23.8 to -9.9) |
| France | 61.8 (28.5 to 104.3) | 25.8 (15.1 to 36.1) | 10.7 (2.3 to 19.4) | -0.6 (-21.9 to 26.0) | -30.3 (-35.2 to -25.2) | -30.7 (-35.8 to -25.4) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------|---|--|------------------------|---|---|--|
| Germany | 41.7 (11.6 to 81.6) | 18.2 (9.8 to 26.4) | 3.5 (-3.4 to 10.8) | -5.0 (-25.7 to 23.6) | -26.2 (-30.8 to -21.7) | -28.6 (-33.0 to -23.7) |
| Greece | 105.6 (63.9 to 159.3) | 87.6 (74.3 to 102.0) | 56.6 (45.5 to 68.5) | 31.7 (3.4 to 67.1) | 4.8 (-2.0 to 11.8) | 5.2 (-1.8 to 12.6) |
| Iceland | 99.8 (70.7 to 132.3) | 62.0 (43.9 to 82.3) | 49.2 (32.3 to 68.3) | 3.7 (-11.5 to 20.6) | -19.7 (-28.6 to -9.7) | -22.0 (-30.8 to -12.3) |
| Ireland | 92.9 (50.8 to 142.7) | 33.0 (22.5 to 44.3) | 22.2 (12.2 to 32.7) | 5.0 (-18.1 to 32.7) | -29.9 (-35.2 to -24.1) | -33.5 (-38.9 to -27.8) |
| Israel | 153.2 (100.2 to 221.7) | 93.8 (78.3 to 109.8) | 73.8 (61.0 to 88.0) | 5.6 (-16.8 to 34.8) | -24.8 (-30.1 to -18.9) | -26.1 (-31.4 to -20.1) |
| Italy | 78.3 (48.3 to 109.7) | 43.3 (32.0 to 50.1) | 21.3 (14.4 to 26.4) | 13.5 (-6.1 to 34.6) | -18.7 (-23.1 to -15.4) | -20.9 (-24.5 to -17.9) |
| Luxembourg | 51.8 (23.1 to 83.8) | 15.4 (1.0 to 29.9) | 4.2 (-9.3 to 18.2) | -17.2 (-33.0 to 0.3) | -40.9 (-48.0 to -33.4) | -43.0 (-50.3 to -35.4) |
| Malta | 153.8 (108.1 to 205.1) | 93.6 (68.9 to 121.1) | 70.8 (48.8 to 94.9) | 17.1 (-3.6 to 40.0) | -17.2 (-27.3 to -5.8) | -17.1 (-27.7 to -5.8) |
| Monaco | 78.8 (35.6 to 132.8) | 48.5 (15.6 to 87.5) | 41.5 (6.9 to 86.4) | 33.0 (-1.5 to 76.5) | 6.9 (-17.4 to 37.6) | 4.4 (-22.5 to 40.4) |
| Netherlands | 114.2 (68.6 to 168.2) | 66.9 (55.0 to 79.3) | 52.3 (41.9 to 64.2) | 26.1 (-1.4 to 58.6) | -5.6 (-11.8 to 1.0) | -9.1 (-15.2 to -2.2) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------------------|--------------------------------------|---------------------------------------|-----------------------------------|--|--|-------------------------------------|
| Norway | 70.0 (46.0 to 97.1) | 26.3 (18.6 to 33.6) | 17.9 (10.8 to 25.0) | 21.1 (3.4 to 40.6) | -12.6 (-17.7 to -7.5) | -17.8 (-22.9 to -13.0) |
| Portugal | 134.7 (85.2 to 195.6) | 74.9 (61.0 to 87.8) | 49.3 (38.3 to 59.6) | 41.5 (10.5 to 79.8) | -9.3 (-15.6 to -3.4) | -8.3 (-14.9 to -1.8) |
| San Marino | 116.9 (60.8 to 189.9) | 96.1 (31.0 to 176.5) | 71.5 (9.8 to 151.8) | 11.7 (-18.4 to 50.6) | -10.1 (-41.2 to 28.4) | -9.2 (-42.6 to 35.2) |
| Spain | 148.4 (96.8 to 213.9) | 94.6 (79.4 to 109.2) | 64.8 (52.6 to 77.4) | 42.1 (10.9 to 81.3) | -0.6 (-6.9 to 6.2) | -3.9 (-10.9 to 3.1) |
| Sweden | 52.9 (31.2 to 76.9) | 26.9 (19.6 to 34.3) | 17.2 (11.0 to 23.8) | 10.4 (-5.2 to 27.6) | -12.3 (-16.7 to -7.5) | -15.3 (-19.7 to -10.7) |
| Switzerland | 81.6 (41.7 to 129.8) | 47.7 (35.2 to 58.7) | 33.5 (22.5 to 43.8) | 9.4 (-14.6 to 39.4) | -15.7 (-22.2 to -9.7) | -18.9 (-25.5 to -12.8) |
| United Kingdom | 40.6 (18.7 to 65.5) | 7.5 (3.1 to 11.4) | -2.3 (-5.5 to 0.7) | 2.0 (-14.3 to 20.6) | -26.1 (-28.5 to -23.8) | -28.6 (-30.8 to -26.5) |
| Western Sub Saharan Africa | 181.9 (127.7 to 251.4) | 165.4 (117.3 to 232.0) | 165.7 (113.9 to 238.6) | 33.2 (9.2 to 64.7) | 27.3 (5.3 to 58.1) | 22.4 (-0.1 to 53.9) |
| Benin | 189.1 (117.9 to 268.3) | 171.9 (107.0 to 242.8) | 182.9 (108.3 to 272.1) | 22.0 (-5.6 to 52.2) | 18.0 (-7.7 to 45.3) | 13.2 (-14.4 to 45.6) |
| Burkina Faso | 170.1 (117.3 to 241.5) | 156.5 (107.8 to 221.9) | 163.2 (104.5 to 239.3) | 28.7 (5.5 to 59.9) | 23.8 (2.0 to 51.5) | 21.5 (-2.7 to 53.3) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------|---|--|---------------------------|---|---|--|
| Côte d'Ivoire | 181.2 (100.3 to 275.0) | 176.5 (100.6 to 265.0) | 159.2 (81.0 to 253.5) | 8.3 (-18.5 to 39.0) | 5.9 (-19.7 to 34.2) | 1.0 (-26.7 to 33.2) |
| Cabo Verde | 405.3 (302.4 to 509.1) | 347.3 (250.7 to 439.7) | 310.2 (233.1 to 396.7) | 180.6 (121.1 to 237.3) | 152.9 (97.3 to 204.0) | 114.2 (71.8 to 159.4) |
| Cameroon | 229.5 (128.3 to 356.9) | 206.0 (116.0 to 321.4) | 209.6 (111.0 to 343.8) | 22.7 (-12.4 to 66.3) | 15.7 (-16.6 to 55.9) | 12.8 (-21.2 to 56.3) |
| Chad | 172.5 (109.2 to 250.3) | 160.7 (101.7 to 231.9) | 178.7 (112.3 to 263.0) | 40.4 (10.3 to 77.2) | 38.2 (9.6 to 71.9) | 34.5 (3.6 to 71.4) |
| Gambia | 298.7 (156.0 to 497.7) | 290.2 (154.2 to 475.9) | 265.7 (130.3 to 463.2) | 44.5 (-4.9 to 109.0) | 39.0 (-6.2 to 100.1) | 37.4 (-11.5 to 106.8) |
| Ghana | 285.1 (178.6 to 426.6) | 260.0 (161.7 to 389.0) | 245.4 (145.4 to 382.8) | 49.4 (9.4 to 101.1) | 39.6 (3.7 to 86.6) | 36.2 (-1.2 to 86.3) |
| Guinea | 118.5 (56.8 to 205.8) | 109.6 (49.2 to 191.1) | 115.3 (52.2 to 202.2) | 30.6 (-6.2 to 80.9) | 26.0 (-9.0 to 73.6) | 25.5 (-10.9 to 75.2) |
| Guinea-Bissau | 88.7 (35.0 to 164.4) | 80.2 (29.6 to 151.9) | 84.2 (28.7 to 162) | 8.2 (-21.0 to 48.7) | 5.9 (-22.2 to 44.4) | 0.5 (-28.5 to 40.2) |
| Liberia | 84.6 (26.2 to 159.7) | 71.3 (17.2 to 139.2) | 83.7 (21.7 to 162.7) | 2.4 (-29.7 to 41.9) | -2.0 (-31.6 to 35.1) | -6.1 (-35.5 to 32.3) |
| Mali | 159.8 (99.2 to 243.2) | 147.5 (91.9 to 223.6) | 142.6 (82.6 to 226.7) | 25.0 (-2.4 to 61.1) | 19.9 (-6.1 to 53.8) | 15.3 (-11.4 to 52.4) |

| Location | Incidence - number of cases (95% UI) | Mortality - number of deaths (95% UI) | DALYs (95% UI) | Age-standardised incidence rate (95% UI) | Age-standardised Mortality rate (95% UI) | Age-standardised DALY rate (95% UI) |
|-----------------------|--|---------------------------------------|--------------------------------------|--|--|--------------------------------------|
| Mauritania | 108.4 (49.1 to 207.1) | 94.7 (41.5 to 185.2) | 78.0 (23.6 to 166.8) | 3.5 (-24.4 to 50.4) | -2.6 (-27.8 to 39.1) | -12.3 (-38.0 to 30.8) |
| Niger | 187.6 (116.6 to 279.2) | 178.2 (112.6 to 263.2) | 164.2 (93.6 to 255.9) | 6.1 (-17.8 to 34.8) | 3.4 (-20.0 to 30.7) | -2.2 (-25.6 to 28.1) |
| Nigeria | 173.9 (102.7 to 287.1) | 156.7 (85.4 to 263.7) | 158.8 (82.6 to 278.3) | 41.6 (6.5 to 95.3) | 35.0 (-1.0 to 88.6) | 29.8 (-6.8 to 85.2) |
| Sao Tome and Principe | 172.3 (91.7 to 277.1) | 143.5 (74.5 to 235.0) | 154.9 (74.3 to 263.0) | 69.6 (21.6 to 134.3) | 55.1 (13.5 to 112.8) | 52.4 (6.3 to 112.2) |
| Senegal | 172.2 (105.0 to 256.1) | 161.4 (99.7 to 238.0) | 150.7 (83.0 to 235.0) | 18.9 (-7.8 to 52.4) | 14.4 (-9.5 to 46.0) | 9.5 (-18.1 to 43.8) |
| Sierra Leone | 116.4 (58.2 to 192.3) | 102.2 (49.6 to 170.1) | 115.4 (54.8 to 194.0) | 17.5 (-12.7 to 57.0) | 12.9 (-15.1 to 48.9) | 10.5 (-19.6 to 49.3) |
| Togo | 227.9 (144.9 to 333.1) | 213.2 (134.8 to 311.5) | 210.4 (127.8 to 317.7) | 15.3 (-12.2 to 49.7) | 11.9 (-14.1 to 44.4) | 8.3 (-19.3 to 42.6) |
| Global | 157.2 (139.5 - 177.2) | 109.6 (96.2 - 121.7) | 95.7 (82.1 - 108.9) | 20.1 (12.1 - 29.2) | -4.4 (-10.0 to 0.9) | -4.2 (-10.7 to 1.9) |

Numbers in parenthesis represent 95% uncertainty intervals (UIs). DALYs=Disability-adjusted Life Years. The age-standardised incidence rate, age-standardised mortality rate, and age-standardised DALY rate are shown per 100 000 person-years. Source: Global Burden of Diseases, Injuries and Risk Factors Study 2019.