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The global burden of falls: global, regional and national estimates of morbidity and mortality from the Global Burden of Disease Study 2017

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ABSTRACT

Background Falls can lead to severe health loss including death. Past research has shown that falls are an important cause of death and disability worldwide. The Global Burden of Disease Study 2017 (GBD 2017) provides a comprehensive assessment of morbidity and mortality from falls.

Methods Estimates for mortality, years of life lost (YLLs), incidence, prevalence, years lived with disability (YLDs) and disability-adjusted life years (DALYs) were produced for 195 countries and territories from 1990 to 2017 for all ages using the GBD 2017 framework. Distributions of the bodily injury (eg, hip fracture) were estimated using hospital records.

Results Globally, the age-standardised incidence of falls was 2238 (1990–2532) per 100 000 in 2017, representing a decline of 3.7% (7.4 to 0.3) from 1990 to 2017. Age-standardised prevalence was 5186 (4622–5849) per 100 000 in 2017, representing a decline of 6.5% (7.6 to 5.4) from 1990 to 2017. Age-standardised mortality rate was 9.2 (8.5–9.8) per 100 000 which equated to 695 771 (644 927–741 720) deaths in 2017. Globally, falls resulted in 16 688 088 (15 101 897–17 636 830) YLLs, 19 252 699 (13 725 429–26 140 433) YLDs and 35 940 787 (30 185 695–42 903 289) DALYs across all ages. The most common injury sustained by fall victims is fracture of patella, tibia or fibula, or ankle. Globally, age-specific YLD rates increased with age.

Conclusions This study shows that the burden of falls is substantial. Investing in further research, fall prevention strategies and access to care is critical.

INTRODUCTION

Falls are one of the most common mechanisms of injury and endure as a persistent risk to morbidity and mortality across all ages. The risk of an injurious fall in a population as well as the resulting

disability may be governed by a wide array of factors ranging from drug and alcohol intoxication in younger populations to frailty and comorbidities in older adult populations. Falls pose sufficient risk in modern high-resource healthcare settings to necessitate the use of safety devices such as bed alarms and traction socks in inpatient wards and dedicated physical and occupational therapy services. Falls in young, otherwise healthy populations can produce lifelong disability in the form of traumatic brain injuries or spinal cord injuries and can also cause severe injuries that necessitate advanced surgical care, such as intra-abdominal organ injury or complicated skeletal fractures.¹ In older populations, the morbidity experienced by falls may be further modulated by comorbid conditions such as osteoporosis, osteopenia, or usage of anticoagulant or antiplatelet medications.^{2,3} Given that many fall incidents are preventable, occur in any population and can lead to substantial morbidity and mortality, it is surprising that falls do not draw more attention as an important global issue.

In the Global Burden of Diseases, Injuries and Risk Factors Study 2017 (GBD 2017), global estimates of the burden of falls show that falls were ranked as the 18th leading cause of age-standardised rates of disability-adjusted life years in 2017, outranking conditions such as chronic kidney disease, Alzheimer's disease and other dementias, and asthma.⁴ Additionally, falls were noted to be the second leading cause of death due to unintentional injuries in 2017, following road injuries and outranking causes such as interpersonal violence and drowning.⁵ Research outside of the GBD Study on the epidemiology of falls has largely focused on older populations as this is where the global burden of falls is thought to be most concentrated. The World Health Organization (WHO) reports that most deaths from falls happen in those aged 65 and

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older.⁶ For those 70 years or older, falls are the leading category in injury-related deaths.⁷ With a burden highly concentrated in older adults, many recent studies have discussed the effects of population ageing, recognising the potential for far more incident cases and deaths from falls as people live longer.^{8–10} In addition, several studies have focused on younger populations as they are an important high-risk group to consider as well. An injury surveillance system pilot study conducted in 4 low/middle-income countries found that falls accounted for the largest percentage (56%) of recorded injuries among children.¹¹ A study conducted in India similarly found that the most common type of home injury in children aged 0–14 was falling.¹²

Given the known extent of this burden, it is important to measure and understand how the burden of falls is distributed in terms of morbidity and mortality, across all age groups and between both sexes, and in every geographical region of the world. In addition, since the disability that results from falls may vary by location, it is of interest to systematically measure how the distribution of injuries resulting from falls varies by region.

The GBD Study represents the efforts of a global research collaboration that produces comprehensive estimates of hundreds of diseases, injuries and risk factors in 195 countries and territories using data and methods that are updated on an annual basis, most recently in GBD 2017. The specific estimates produced by the GBD include annual estimates of all-cause mortality, causes of death, non-fatal health outcomes (ie, incidence, prevalence and years lived with disability (YLDs)) and risk factors. These measures are estimated for all countries and territories, age groups and sexes, across a range of years. The intent of providing this level of estimation detail is to allow focused and nuanced analyses of death and disability across demographics, locations and causes of injuries. Falls is a category of injury in the GBD cause hierarchy and was included in the GBD 2017 results, but to date there have been no known studies that examined the findings for this cause in detail. Additionally, the injuries resulting from falls have not previously been reported using GBD 2017 results.

In this study, we use the GBD 2017 framework to analyse the morbidity and mortality caused by falls as reported in GBD 2017 and explore the burden of injuries resulting from falls.

METHODS

GBD Study 2017

Methods used in the GBD Study 2017 have been described in extensive detail elsewhere, including description of the analytical estimation framework used to measure mortality, incidence, prevalence, years of life lost (YLLs), years lived with disability (YLDs) and disability-adjusted life years (DALYs).^{4 5 13–16} Online supplementary appendix 1 provides a methodological overview of different components used in the GBD Study design and analytical framework. The methodological components specific to the estimation of falls within the GBD framework are summarised below.

GBD injury classification

The GBD 2017 reported estimates in terms of *external cause* of injury (eg, falls) and measured disability based on *nature* of injury (eg, hip fracture). Causes of injury were defined in accordance with the International Classification of Diseases (ICD). For this study, falls were defined as ICD-9 codes E880–E886, E888 and ICD-10 codes W00–W19.9. In terms of the nature-of-injury codes, falls had 47 mutually exclusive and collectively exhaustive nature-of-injury categories which were specified with chapters S

and T in ICD-10 and codes 800–999 in ICD-9 to quantify the various disabling outcomes that can occur with a fall.

Mortality and YLLs due to falls

For deaths due to falls, we estimated both mortality and YLLs due to premature mortality. Our approach for estimating causes of death for every cause, including falls, is provided in the GBD 2017 cause of death literature.¹⁷

First, we identified and obtained all available cause-of-death data sources. These sources included complete vital registration systems shared by countries; verbal autopsy studies published in literature; and mortality surveillance, censuses, surveys, hospital records and mortuary data. The cause of death estimates from these sources were mapped to the GBD cause list such that the corresponding ICD codes listed above were mapped to our ‘falls’ cause, as were non-ICD-coded reporting systems where ‘falls’ were designated as a cause of death, for example, in verbal autopsy studies which are typically not ICD coded but include a textual cause list.

Second, we conducted estimation models using the GBD Cause of Death Ensemble model (CODEm) to estimate cause-specific mortality for falls by age, sex, country and year. CODEm is an ensemble modelling approach for producing a large variety of possible models to estimate trends in causes of death using an algorithm that selects a wide array of combinations of covariates and different modelling methods.¹⁸

Third, we calculated YLLs by multiplying deaths by the residual life expectancy using the global maximum life expectancy at the age of death as derived from the GBD standard model life table. For example, if an individual dies at age 60 from a fall and their residual life expectancy is 20 years, then there were 20 YLLs due to that fall.

Injury incidence, prevalence and YLDs

The method for estimating non-fatal injury outcomes including falls in GBD 2017 is described in more detail in related publications.¹⁹ A methodological summary is as follows.

First, we used DisMod-MR 2.1 to measure incidence of falls that lead to any form of medical care (inpatient or outpatient). DisMod-MR 2.1 is a meta-regression tool for epidemiological modelling built on a Bayesian compartmental model framework that solves differential equations that modulate the relationships between a susceptible population becoming injured (incidence) and then either recovering (remission) or dying (excess mortality). For incidence data, we used emergency department records, hospital records, survey data and literature studies to estimate fall incidence by location, year, age and sex, and used the coefficient from outpatient care to split subsequent estimation processes into inpatient and outpatient incidence estimates so that inpatient and outpatient-specific data could be used where possible to preserve differences in incidence and severity. Since survey items for falls can include non-injurious falls, we included an indicator variable for falls that resulted in injury. Since excess mortality is calculated based on locations where there are overlapping incidence and cause-specific mortality data, its computation also allows for estimation of incidence in locations with cause-specific mortality data but no incidence data, requiring an assumption that case fatality rates among falls are affected by income.

Second, we estimated the distribution of nature-of-injury categories among the incidence of all falls. To do this, we created a hierarchy of nature-of-injury categories. We assumed that the disability experienced by an individual who has an injurious fall

was determined by the most severe nature-of-injury sustained due to this fall. For example, a fall resulting in a spinal cord injury would determine disability due to the fall instead of a co-occurring wrist sprain. The nature-of-injury hierarchy represents a combination of the likelihood of long-term disability and the corresponding GBD disability weight. To estimate the hierarchy, we used data from pooled follow-up studies in which we translated each individual's health status measure at 1 year after injury into a disability weight.^{20–26}

Third, we used a Dirichlet regression method to estimate the proportion of falls that result in each nature-of-injury category being the most severe injury for each fall, since Dirichlet methods enforce coefficient estimates for proportions that must sum to 1.²⁷ These matrices were derived from dual-coded hospital and emergency department data sets from multiple countries and data from the China injury surveillance system where both cause-of-injury and nature-of-injury diagnosis codes are present. The use of these data sources to inform this estimation process is described in more detail elsewhere.^{1 28} Separate cause-nature matrices were created for falls warranting hospital admission versus falls warranting other healthcare, high and low-income countries, male and female, and age category.

Fourth, we estimated short-term disability for falls by nature-of-injury category. For each nature-of-injury category and inpatient and outpatient injury, we used the Dutch Injury Surveillance System to derive average duration for treated cases, since for GBD 2017 this was the only available data source that could inform this parameter.^{23 24} These estimates were supplemented by expert-driven estimates of short-term duration for nature-of-injury categories that had insufficient numbers in the Dutch data set and for untreated injuries.

Fifth, we estimated the proportion of falls resulting in permanent disability for each nature-of-injury category by admission status and age. Disability due to falls was assumed to affect all injurious falls in the short term with a proportion having long-term (permanent) outcomes, defined as having persistent disability 1 year after the injury greater than the preinjury health status.

Sixth, we applied the ordinary differential equation solver used as the computational engine in DisMod-MR 2.1 to estimate the long-term prevalence for each fall-related nature-of-injury from incidence and the long-term mortality risk in cases with long-term disability based on meta-analyses of studies providing standardised mortality ratios. For example, since individuals with severe traumatic brain injuries die at a higher rate than the underlying population, we integrated the corresponding standardised mortality ratios to account for decreasing prevalence due to higher mortality risk in this injured population.

Finally, we calculated YLDs as prevalence of each health state multiplied by a disability weight for each nature-of-injury and corrected for comorbidity with other non-fatal diseases using microsimulation methods employed in GBD 2017.

Socio-demographic index

Socio-demographic index (SDI) is a composite indicator of development that is calculated based on income per capita, average educational attainment over age 15 and total fertility rate under age 25.¹⁵ The SDI has a scale that ranges from 0 representing the lowest income *per capita*, lowest educational attainment and highest fertility observed across all GBD locations from 1980 to 2017, to 1, representing the point at which the higher income per capita, higher educational attainment and lower fertility under age 25 are no longer associated with improved health.

We used SDI values for each country and territory to categorise our estimates in this study by SDI quintile to help illustrate how burden trends differ by development level.

GATHER compliance

This study complies with the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER) recommendations (online supplementary appendix 2). Analyses were completed using Python version 2.7, Stata version 13.1, or R version 3.3. Statistical code used for GBD estimation is publicly available online at healthdata.org.

RESULTS

Results tables are listed as web appendix tables. Results by age, sex, year, subnational location and nature of injury are also available online via the GBD Results Tool (<http://ghdx.healthdata.org/gbd-results-tool>) and GBD Compare (<https://vizhub.healthdata.org/gbd-compare/>).

Incidence

Figure 1 shows age-standardised incidence of falls by country and territory in 2017. This map illustrates the higher incidence rates in Eastern and Central European countries as well as Australia and New Zealand. Online supplementary appendix table 1 shows the all-ages incidence counts and the age-standardised incidence rates for 2017 as well as the percentage change in age-standardised rates from 1990 to 2017. Globally, the age-standardised incidence rate was 2238 (95% uncertainty interval 1990 to 2532) per 100 000 in 2017, representing a decline of 3.7% (7.4 to 0.3) from 1990 to 2017, and equating to 171 691 220 (152 472 652–194 061 874) new injuries from falls in 2017. The age-standardised incidence rate decreased in the high-middle and high SDI quintiles and increased in the middle, low-middle and low SDI quintiles. The largest decline was in the high SDI quintile, which decreased by 8.8% (–12.3 to –5.3). The geographic regions with the highest age-standardised incidence rates were Central Europe with 11 434 (10 103–12 996) cases per 100 000, Australasia with 8187 (6978–9553) cases per 100 000 and Eastern Europe with 8029 (7010–9233) cases per 100 000. Among the 21 GBD regions, 12 experienced significant increases in age-standardised incidence rates (Australasia, High-income Asia Pacific, Andean Latin America, Caribbean, Central Latin America, Tropical Latin America, South Asia, East Asia, Oceania, Southeast Asia, Central Sub-Saharan Africa, Southern Sub-Saharan Africa), 2 experienced significant decreases (Central Europe, High-income North America) and the remaining 7 regions experienced no significant change in age-standardised incidence rates (Central Asia, Eastern Europe, Southern Latin America, Western Europe, North Africa and Middle East, Western Sub-Saharan Africa).

Prevalence

Online supplementary appendix table 1 also shows the all-ages prevalence counts and the age-standardised prevalence rate for 2017 as well as the percentage change in age-standardised prevalence from 1990 to 2017. Globally, the age-standardised prevalence rate was 5186 (4622–5849) per 100 000 in 2017, representing a decline of 6.5% (7.6 to 5.4) from 1990 to 2017. There were 411 711 999 (366 390 987–465 354 952) prevalent cases in 2017. East Asia had the highest number of prevalent cases in 2017 with 62 282 056 (54 985 517–70 760 535) cases across all ages and both sexes. The age-standardised prevalence decreased in the high and high-middle SDI quintiles

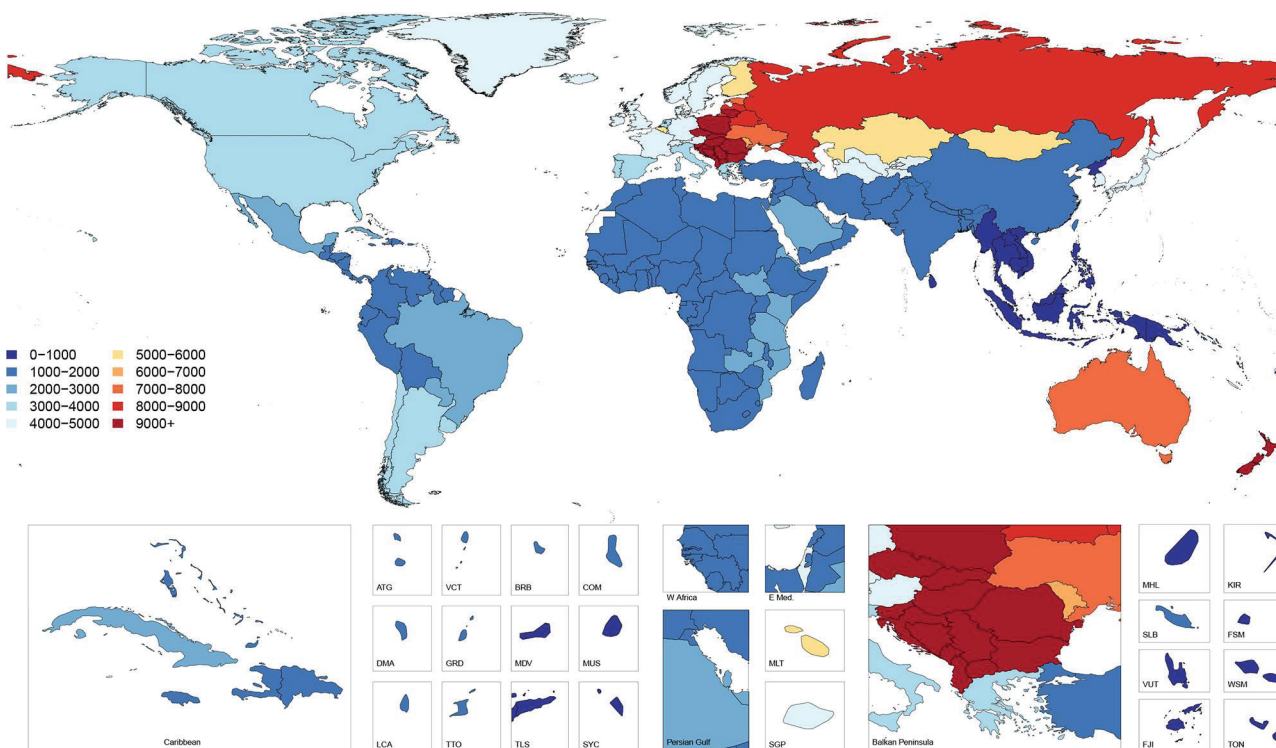


Figure 1 Age-standardised incidence rates per 100 000 of falls, 2017, both sexes.

and increased in the low, low-middle and middle SDI quintiles. The regions with the highest age-standardised prevalence were Central Europe with 23 428 (20 453–26 911) cases per 100 000, Eastern Europe with 17 429 (15 114–20 228) cases per 100 000 and Australasia with 16 175 (13 641–19 647) cases per 100 000. Among the 21 GBD regions, 14 experienced significant increases in age-standardised prevalence rates (East Asia, Oceania, Tropical Latin America, South Asia, Caribbean, Andean Latin America, Australasia, Southeast Asia, High-income Asia Pacific, Southern Sub-Saharan Africa, Central Latin America, Central Sub-Saharan Africa, Eastern Europe, Eastern Sub-Saharan Africa), 6 experienced significant decreases in age-standardised prevalence rates (High-income North America, Southern Latin America, Central Asia, Western Sub-Saharan Africa, Central Europe, Western Europe) and the remaining region experienced no significant change in age-standardised prevalence (North Africa and Middle East).

Cause-specific mortality

Figure 2 shows age-standardised cause-specific mortality rates for falls in 2017 by country. This map illustrates how the countries with the highest incidence do not necessarily have the highest cause-specific mortality, with countries such as India, Vietnam and Burkina Faso having markedly higher cause-specific mortality than the areas of Eastern and Central Europe that had the highest incidence. These patterns are further revealed in figure 3, which shows country-specific ratios of age-standardised mortality rates to age-standardised incidence rates in 2017, approximating the risk of death given a fall. This figure shows how mortality-to-incidence ratios (MIR) vary across the world. The ratio is highest in countries in Southeast Asia such as Indonesia, Cambodia, Myanmar and Vietnam, which have MIRs exceeding 0.03, meaning on average more than three deaths occur per 100 falls. MIRs also appear high throughout much of sub-Saharan Africa, in Afghanistan and across India.

Online supplementary appendix table 2 shows the all-ages deaths and the age-standardised mortality rates for 2017 as well as the percentage change in age-standardised rates from 1990 to 2017. Globally, the age-standardised mortality rate was 9.2 (8.5–9.8) per 100 000 which equated to 695 771 (644 927–741 720) deaths in 2017 and represented a non-significant decrease of 5.9% (–13.7 to 3.5) in age-standardised mortality from 1990 to 2017. Across SDI quintiles, only the high SDI quintile experienced a significant decrease in age-standardised mortality rate with a decline of 16.6% (18.8 to 14.4) from 1990 to 2017. All other quintiles experienced a non-significant decline in age-standardised mortality rates. The regions with the highest age-standardised mortality rates were South Asia with 22.0 (20.0–25.0) deaths per 100 000, Eastern Sub-Saharan Africa with 12.2 (11.2–13.5) deaths per 100 000 and Southeast Asia with 10.5 (9.8–11.3) deaths per 100 000. South Asia had the highest number of deaths, with 239 791 (220 244–270 634) deaths estimated in 2017.

YLDs, YLLs and DALYs

Online supplementary appendix table 3 shows the counts, age-standardised rates and per cent change from 1990 to 2017 of YLDs, YLLs and DALYs. Globally, falls resulted in 16 688 088 (15 101 897–17 636 830) YLLs, 19 252 699 (13 725 429–26 140 433) YLDs and 35 940 787 (30 185 695–42 903 289) DALYs, reflecting age-standardised rates of 217 (196–229) per 100 000, 243 (173–330) per 100 000 and 459 (387–547) per 100 000, respectively. Age-standardised YLLs, YLDs and DALYs declined by 18.5% (31.7 to 6.2), 9.3% (10.7 to 7.9) and 13.9% (21.3 to 8.0), respectively, between 1990 and 2017. The percentage of age-standardised DALYs caused by YLDs varied by region, with a high of 89% in Australasia and a low of 16% in Southeast Asia. The region with the highest age-standardised DALY rate was Central Europe with 1174 (875–1559) DALYs per 100 000

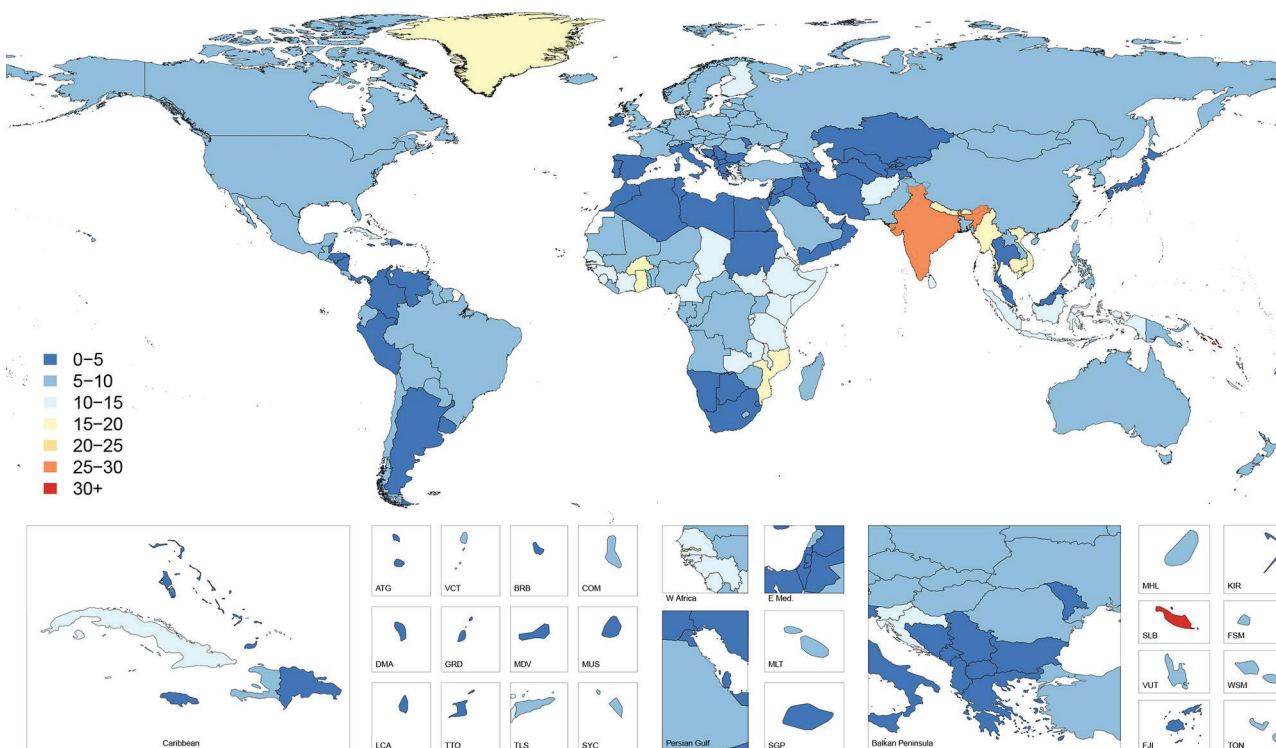


Figure 2 Age-standardised cause-specific mortality rate per 100 000 of falls, 2017, both sexes.

which represented 159 (153–165) YLLs per 100 000 and 1015 (713–1405) YLDs per 100 000.

Nature of injuries caused by falls

Globally, the average disability weight used in computing YLDs after comorbidity adjustment was 4%, meaning that the average

person suffering from a fall lost 4% of their full health status.

Figure 4 shows the distribution of nature-of-injury codes among all falls for age-standardised YLDs by region. This figure shows that for all 21 of the GBD regions, the leading cause of disability among fall victims is fracture of patella, tibia or fibula, or ankle. Fracture of hip and moderate/severe traumatic brain injury are the

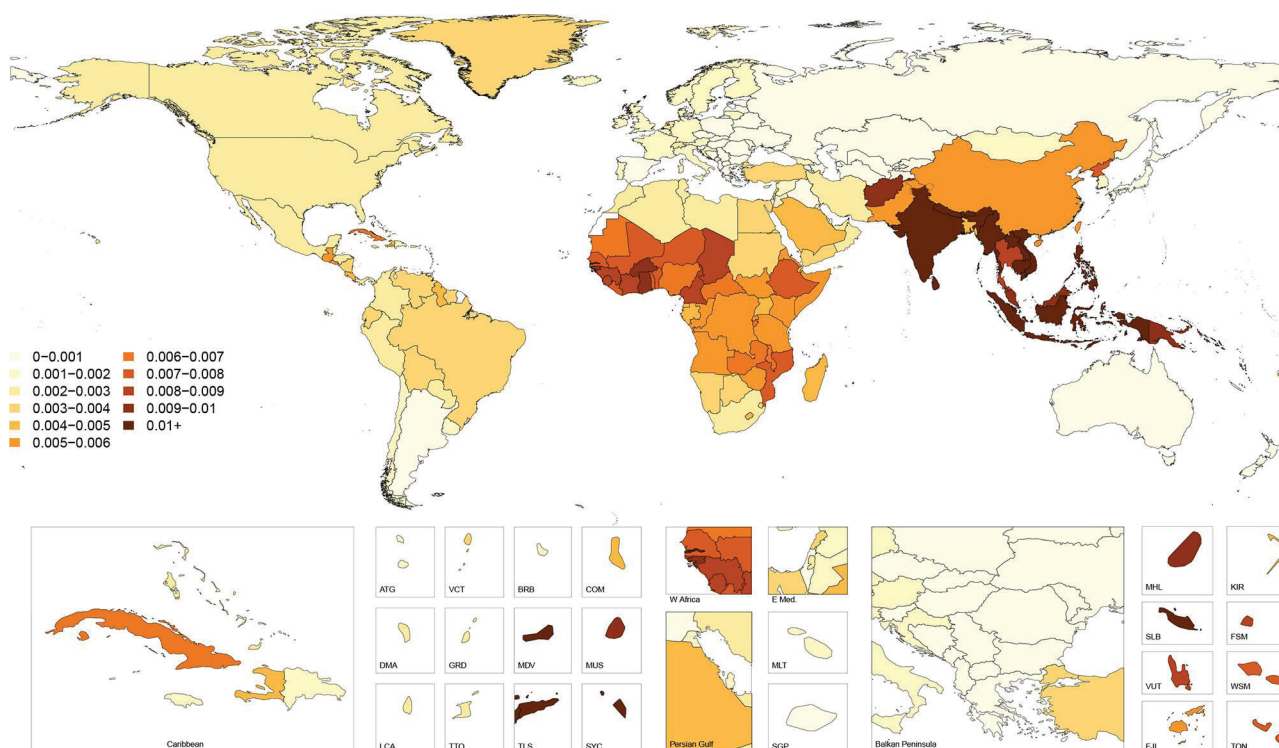


Figure 3 Ratio of age-standardised mortality to incidence rates, 2017, both sexes.

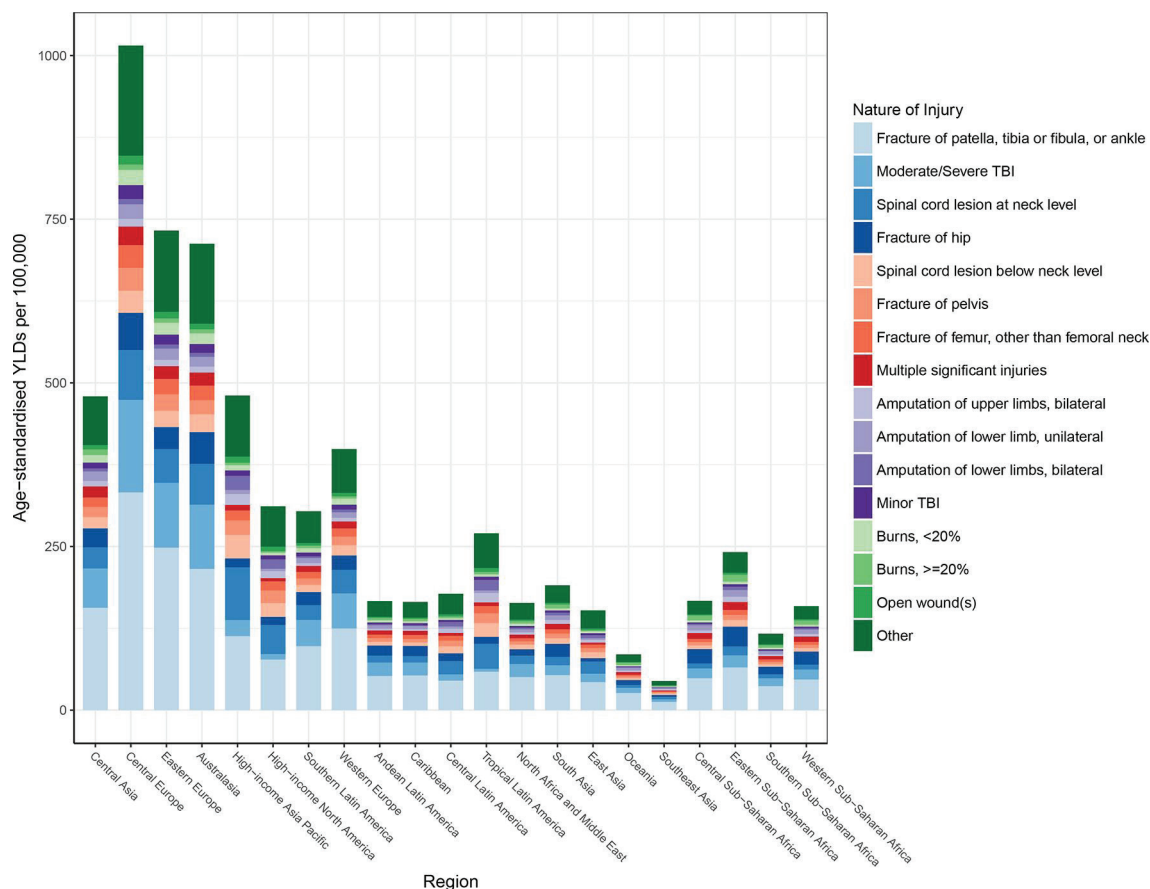


Figure 4 Age-standardised nature-of-injury composition of falls by region. TBI, traumatic brain injury; YLDs, years lived with disability.

next leading causes of disability among fall victims across regions. Global age-specific distributions of nature-of-injury codes are shown in figure 5. This figure shows that fractures of patella, tibia or fibula, or ankle are the most common causes of disability after an injurious fall in all age groups, though fracture of hip and femur fracture increasingly contribute to disability in older age groups.

DISCUSSION

This study represents the first time that GBD estimates for falls have been reported in this level of detail through recent years, and illustrates the substantial amount of mortality and health loss in every country, age group and sex. Globally, total deaths and DALYs due to falls have increased steadily since 1990, with death counts nearly doubling by 2017. Conversely, age-standardised mortality rates and DALY rates have slightly decreased over the same period. At the country level, age-standardised mortality due to falls was highest in the Solomon Islands, India and Vietnam. The patterns of MIRs described in the results of our study emphasise how mortality risk per fall varies substantially by country and reveal that certain areas of the world likely have inadequate capabilities of responding to injurious falls. Since mortality from falls is associated with age and since global populations are generally ageing, it is important for all countries to ensure that their older adult populations as well as their ageing populations have adequate access to caretaking and treatment resources now and in the future.¹⁰ More focused research in the countries with the highest MIRs should investigate the specific causes of injury deaths from falls, the associated risk factors, and the circumstances and context of falls in order to target prevention efforts and appropriately allocate treatment resources. We

additionally describe how falls have improved in terms of incidence and cause-specific mortality in the highest SDI countries, but that these improvements have not necessarily been experienced in lower SDI countries. This pattern emphasises how it is critical for lower SDI countries to more thoroughly investigate patterns of falls and to invest in prevention and treatment programmes.

Among clinicians, falls are known to be an important risk in certain populations, as they can be an origin of injury that leads to more complex care, such as the otherwise healthy older adult who slips, falls, sustains a femur fracture and then is admitted to the hospital for surgical repair and develops a condition like healthcare-acquired pneumonia. Such vignettes emphasise how a fall can precipitate significant health loss and potentially death.²⁹ However, a young person who falls can also suffer disability the rest of his or her life, leading to income loss, dependence on caretakers and adequate accessibility options. Among the countries with highest incidence in 2017 were Slovenia, Czech Republic and Slovakia—countries with high percentages of rural populations.³⁰ In Slovenia, nearly half of the population lives in a rural area, and there is evidence that falls are less fatal and more frequent in rural older people.^{31 32} Age-standardised DALY rates were particularly high in specific regions, including Central Europe, Eastern Europe and Australasia. Many of these regions are experiencing intensive ageing of the population.³³ Poland, for example, is projected to increase the population aged 65 and over by 4.9 million in the years 2015–2050, requiring significant public healthcare expenditure on therapeutic rehabilitation.³⁴

Research suggests that falls can cause physical harm and psychological and financial harm. A 3-year longitudinal study

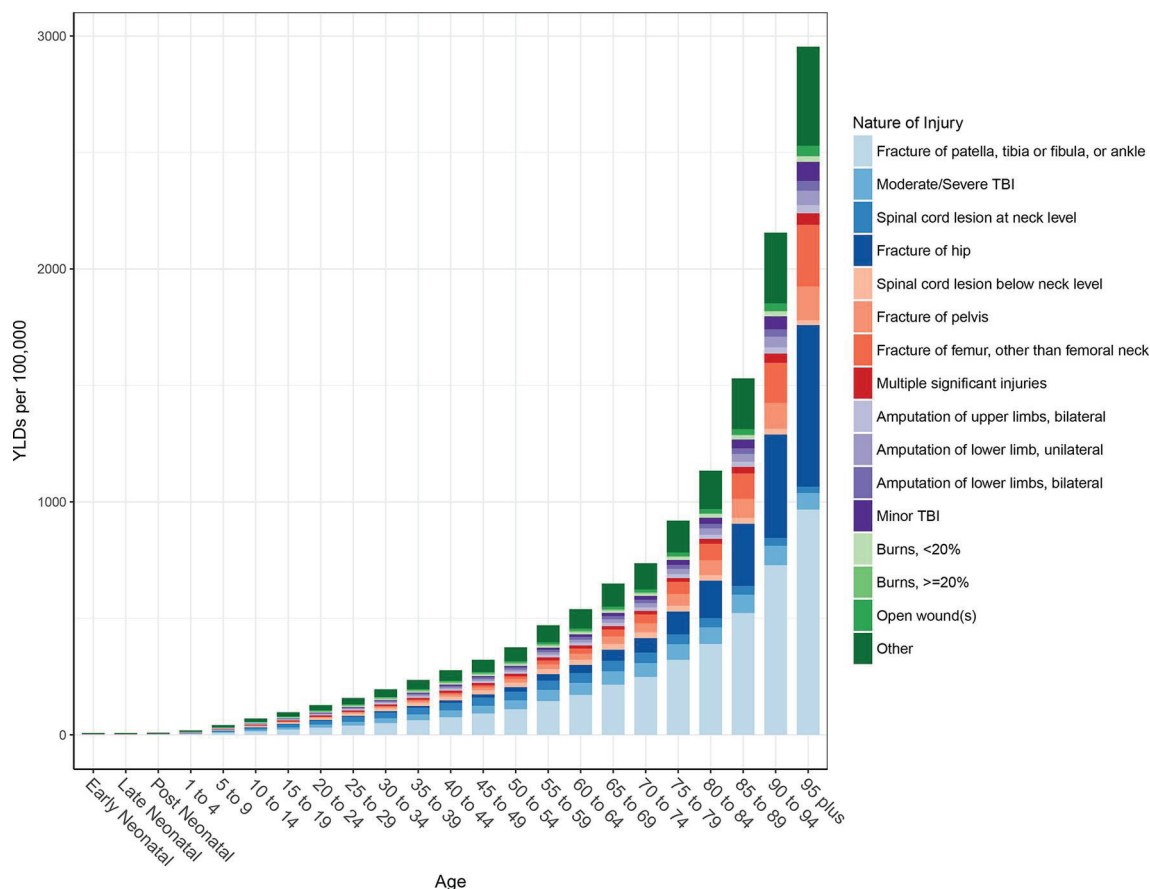


Figure 5 Age-specific nature-of-injury composition of falls globally. TBI, traumatic brain injury; YLDs, years lived with disability.

conducted by Tinetti and Williams explored the short and long-term effects of a fall on the well-being of those 65 and older. Among the participants, injurious falls resulted in a variety of conditions, including hip fractures, other fractures and soft tissue injuries; ultimately these injurious falls led to a decline in daily functional status.³⁵ Other research has shown that falling often triggers a fear of falling again, likely impairing one's sense of mobility and autonomy.⁹ This fear is a proven risk factor for future falls; thus, one fall can initiate a cascade of negative health outcomes.⁹ Ultimately, the initial morbidity of a fall can manifest into significant health loss over time, amounting to considerable treatment and care costs.³⁶ Future GBD research may provide estimates on the probability of long-term disability for individuals who sustain injurious falls.

In general, research on the prevention of falls has shown that improving personal health as well as addressing unsafe external factors can be effective in preventing falls. For example, exercise programmes have been shown to reduce falls among community-dwelling individuals aged 65 and older.^{8, 37} A person's surrounding environment has also been identified as a leading cause of falls,^{9, 10} meaning it is possible to prevent falls through the improvement of living conditions and public spaces, especially if older adults and universal design principles attending to safety are kept in mind when spaces are designed, altered and maintained.³⁸ While some external hazards for falls are well known (eg, slippery surfaces or poor lighting), others are less visible or obvious. For example, in the inpatient setting, a study by Vassallo *et al* found that the hospital wards with more inpatient beds within the sightline of the nursing station had fewer falls than the ward with poor visibility between beds and

the nursing station.³⁹ Location-specific research in falls prevention has also shown that exercise, home modification, educational materials and vision correction are all important.^{40, 41} It is also important to consider how morbidity or mortality resulting from falls might be mitigated. Clinical literature has supported frequent medication review with avoidance of polypharmacy,⁴² and dietary supplementation with cholecalciferol (vitamin D₃) for select patients as methods to both prevent fall incidents and to help minimise fracture risk, though more recent assessments and recommendations by the US Preventive Services Task Force have revealed mixed results in terms of the benefits of vitamin D supplementation.^{43–46}

Our study has several limitations. The first limitation is a function of our case definition in non-fatal models, where we estimate the incidence of falls that require medical care. While not every fall leads to injury, it is possible that care-seeking behavior with similar injuries could vary by location. Similarly, it is possible that in survey data or routine outpatient care visits, a patient may not report falls in the past year even if they led to minor injuries. Since our case definition includes only falls that lead to injury, our MIR estimates are likely lower than if we included all falls regardless of whether they led to injury requiring medical care. However, since the purpose of estimating those ratios is to illustrate patterns in severity and access to treatment, this limitation does not impact the key themes highlighted in our study. In addition, a general limitation in GBD analysis is that some areas of the world that may have high burden of various diseases and injuries do not have reliable incidence and cause-of-death data, and therefore our estimation process relies more heavily on covariates and regional trends in those areas. Similarly, the

Original research

nature-of-injury distributions and injury duration parameters rely more heavily on data from higher income locations and Dutch injury data, and therefore may benefit in the future from adding more data sources from lower income locations so that that these parameters can be refined with greater location heterogeneity in future studies. Accordingly, an emphasis of GBD estimation going forward is to continue seeking additional data sources to be used in our modelling process.

CONCLUSION

As reported in prior GBD literature, falls have persisted over the past three decades as a leading cause of morbidity and mortality globally. This study, which examines the burden of falls in more detail in terms of location and age-specific patterns, reveals that falls are concentrated in certain locations, but the burden of fall mortality reliably corresponds with burden of fall incidence. In other words, it appears that morbidity and mortality of falls are influenced by geographic factors that likely pertain to care access and fall severity. Further research should be conducted to better define and measure these relationships so that future policy and investment can be appropriately designed and implemented.

What is already known on the subject

- Prior research has shown that every region of the world experiences health loss from falls.
- Falls have consistently been a leading cause of fatal and non-fatal health loss in the Global Burden of Disease Study (GBD).

What this study adds

- While age-standardised incidence of injuries from falls decreased by 8.8% in the high socio-demographic index (SDI) quintile from 1990 to 2017, incidence increased in the middle, low-middle and low SDI quintiles during that time.
- Countries with the highest incidence of injuries from falls do not necessarily have the highest cause-specific mortality.
- For all 21 GBD regions, the most common nature of injury sustained by fall victims is fracture of patella, tibia or fibula, or ankle.

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Appendix 1

Summary of General Global Burden of Disease Study Methods

The Institute for Health Metrics and Evaluation with a growing collaboration of scientists produces annual updates of the Global Burden of Disease study. Estimates span the period from 1990 to the most recent completed year (2017). By the time of the release of GBD 2017 in November 2018, there were 3,676 collaborators in 144 countries and 2 territories who contributed to this global public good. Annual updates allow incorporation of new data and method improvements to ensure that the most up-to-date information is available to policy makers in a timely fashion to help make resource allocation decisions.

The guiding principle of GBD is to assess health loss due to mortality and disability comprehensively, where we define disability as any departure from full health. In GBD 2017, estimates were made for 195 countries and territories, and 579 subnational locations, for 28 years starting from 1990, for 23 age groups and both sexes. Deaths were estimated for 282 diseases and injuries, while prevalence and incidence were estimated for 355 diseases and injuries. In order to allow meaningful comparisons between deaths and non-fatal disease outcomes as well as between diseases, the data on deaths and prevalence are summarised in a single indicator, the disability-adjusted life-year (DALY). DALYs are the sum of years of life lost (YLLs) and years lived with disability (YLDs). YLLs are estimated as the multiplication of counts of death and a standard, “ideal”, remaining life expectancy at the age of death. The standard life expectancy is derived from the lowest observed mortality rates in any population in the world greater than 5 million. YLDs are estimated as the product of prevalence of individual consequences of disease (or “sequelae”) times a disability weight that quantifies the relative severity of a sequela as a number between zero (representing “full health”) and 1 (representing death). Disability weights have been estimated in nine population surveys and an open-access internet survey in which respondents are asked to choose the “healthier” between random pairs of health states that are presented with a short description of the main features.

All-cause mortality rates are estimated from vital registration data in countries with complete coverage¹. For other countries, the probabilities of death before age 5 and between ages 15 and 60 are estimated from censuses and surveys asking mothers to provide a history of children ever born and those still alive, and surveys asking adults about siblings who are alive or have passed away. Using model life tables, these probabilities of death are transformed into age-specific death rates by location, year, and sex.

For cause of death estimation, GBD has collated a large database of cause of death data from vital registrations and verbal autopsy surveys in which relatives are asked a standard set of questions to ascertain the likely cause of death, supplemented with police and mortuary data for injury deaths in countries with no other data². For countries with vital registration data, the completeness is assessed with demographic methods based on comparing recorded deaths with population counts between two successive censuses. The cause of death information is provided in a large number of different classification systems based on versions of the

International Classification of Diseases or bespoke classifications in some countries. All data are mapped into the disease and injury categories of GBD. All classification systems contain codes that are less informative because they lack a specific diagnosis (eg, unspecified cancer) or refer to codes that cannot be underlying cause of death (eg, low back pain or senility) or are intermediate causes (eg, heart failure or sepsis). Such deaths are redistributed to more precise underlying causes of death. After these redistributions and corrections for under-registration, the data are analysed in CODEm (cause of death ensemble model), a highly systematised tool that runs many different models on the same data and chooses an ensemble of models that best reflects all the available input data. Models are chosen with variations in the statistical approach (“mixed effects” of spatiotemporal Gaussian Process Regression), in the unit of analysis (rates or cause fractions), and the choice of predictive covariates. The statistical performance of all models is tested by holding out 30% of the data and checking how well a model covers the data that were held out. To enforce consistency from CODEm, the sum of all cause-specific mortality rates is scaled to that of the all-cause mortality rates in each age, sex, location, and year category.

Non-fatal estimates are based on systematic reviews of published papers and unpublished documents, survey microdata, administrative records of health encounters, registries, and disease surveillance systems³. Our Global Health Data Exchange (GHDx, <http://ghdx.healthdata.org/>) is the largest repository of health data globally. We first set a reference case definition and/or study method that best quantifies each disease or injury or consequence thereof. If there is evidence of a systematic bias in data that used different case definitions or methods compared to reference data we adjust those data points to reflect what its value would have been if measured as the reference. This is a necessary step if one wants to use all data pertaining to a particular quantity of interest rather than choosing a small subset of data of the highest quality only. DisMod-MR 2.1, a Bayesian meta-regression tool, is our main method of analyzing non-fatal data. It is designed as a geographical cascade where a first model is run on all the world’s data, which produces an initial global fit and estimates coefficients for predictor variables and the adjustments for alternative study characteristics. The global fit adjusted by the values of random effects for each of seven GBD super-regions, the coefficients on sex and country predictors, are passed down as data to a model for each super-region together with the input data for that geography. The same steps are repeated going from super-region to 21 region fits and then to 195 fits by country and where applicable a further level down to subnational units. Below the global fit, all models are run separately by sex and for six time periods: 1990, 1995, 2000, 2005, 2010, and 2017. During each fit all data on prevalence, incidence, remission, and mortality are forced to be internally consistent. For most diseases, the bulk of data on prevalence or incidence is at the disease level with fewer studies providing data on the proportions of cases of disease in each of the sequelae defined for the disease. The proportions in each sequela are pooled using DisMod-MR 2.1 or meta-analysis, or derived from analyses of patient-level datasets. The multiplication of prevalent cases for each disease sequela and the appropriate disability weight produces YLD estimates that do not yet take into account comorbidity. To correct for comorbidity, these data are used in a simulation to create hypothetical individuals in each age, sex, location, and year combination who experience no, one, or multiple sequelae simultaneously. We assume that disability weights are

multiplicative rather than additive as this avoids assigning a combined disability weight value in any individual to exceed 1, ie, be worse than a “year lost due to death”. This comorbidity adjustment leads to an average scaling down of disease-specific YLDs ranging from about 2% in young children up to 17% in oldest ages.

All our estimates of causes of death are categorical: each death is assigned to a single underlying cause. This has the attractive property that all estimates add to 100%. For risks, we use a different, “counterfactual” approach, ie, answering the question: “what would the burden have been if the population had been exposed to a theoretical minimum level of exposure to a risk”. Thus, we need to define what level of exposure to a risk factor leads to the lowest amount of disease. We then analyse data on the prevalence of exposure to a risk and derive relative risks for any risk-outcome pair for which we find sufficient evidence of a causal relationship. Prevalence of exposure is estimated in DisMod-MR 2.1, using spatiotemporal Gaussian Process Regression, or from satellite imagery in the case of ambient air pollution. Relative risk data are pooled using meta-analysis of cohort, case-control and/or intervention studies. For each risk and outcome pair, we evaluate the evidence and judge if the evidence falls into the categories of “convincing” or “probable” as defined by the World Cancer Research Fund⁴.

From the prevalence and relative risk results, population attributable fractions are estimated relative to the theoretical minimum risk exposure level (TMREL). When we aggregate estimates for clusters of risks, eg, metabolic or behavioural risks, we use a multiplicative function rather than simple addition and take into account how much of each risk is mediated through another risk. For instance, some of the risk of high body mass index is directly onto stroke as an outcome but much of its impact is mediated through high blood pressure, high cholesterol, or high fasting plasma glucose, and we would not want to double count the mediated effects when we estimate aggregates across risk factors⁵.

Uncertainty is propagated throughout all these calculations by creating 1,000 values for each prevalence, death, YLL, YLD, or DALY estimate and performing aggregations across causes and locations at the level of each of the 1,000 values for all intermediate steps in the calculation. The lower and upper bounds of the 95% uncertainty interval are the 25th and 975th values of the ordered 1,000 values. For all age-standardised rates, GBD uses a standard population estimated elsewhere in the GBD analytical process.

GBD uses a composite indicator or sociodemographic development, SDI, which reflects the geometric mean of normalised values of a location’s income per capita, the average years of schooling in the population 15 and over, and the total fertility rate under age 25. Countries and territories are grouped into five quintiles of high, high-middle, middle, low-middle, and low SDI based on their 2017 values.

1 GBD 2017 Collaborators. Global, regional, and national age- and sex-specific mortality and life expectancy for 195 countries and territories, 1950–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet* 2018.

- 2 GBD 2017 Collaborators. Global, regional, and national age-sex-specific mortality for 282 causes of death for 195 countries and territories, 1980–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet* 2018.
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Appendix 2

GATHER checklist of information that should be included in reports of global health estimates, with description of compliance and location of information for GBD 2017.

| # | GATHER checklist item | Description of compliance | Reference |
|---|---|--|--|
| Objectives and funding | | | |
| 1 | Define the indicators, populations, and time periods for which estimates were made. | Narrative provided in paper and appendix describing indicators, definitions, and populations | Main text (Methods) and appendix |
| 2 | List the funding sources for the work. | Funding sources listed in paper | Summary (Funding) |
| Data Inputs | | | |
| <i>For all data inputs from multiple sources that are synthesised as part of the study:</i> | | | |
| 3 | Describe how the data were identified and how the data were accessed. | Narrative description of data seeking methods provided | Main text (Methods) and appendix |
| 4 | Specify the inclusion and exclusion criteria. Identify all ad-hoc exclusions. | Narrative about inclusion and exclusion criteria by data type provided; ad hoc exclusions in cause-specific write-ups | Main text (Methods) and appendix |
| 5 | Provide information on all included data sources and their main characteristics. For each data source used, report reference information or contact name/institution, population represented, data collection method, year(s) of data collection, sex and age range, diagnostic criteria or measurement method, and sample size, as relevant. | An interactive, online data source tool that provides metadata for data sources by component, geography, cause, risk, or impairment has been developed | Online data citation tools: http://ghdx.healthdata.org/gbd-2017 |
| 6 | Identify and describe any categories of input data that have potentially important biases (e.g., based on characteristics listed in item 5). | Summary of known biases by cause included in appendix | Appendix |
| <i>For data inputs that contribute to the analysis but were not synthesised as part of the study:</i> | | | |
| 7 | Describe and give sources for any other data inputs. | Included in online data source tool | http://ghdx.healthdata.org/gbd-2017 |
| <i>For all data inputs:</i> | | | |
| 8 | Provide all data inputs in a file format from which data can be efficiently extracted (e.g., a spreadsheet as opposed to a PDF), including all relevant meta-data listed in item 5. For any data inputs that cannot be shared due to ethical or legal reasons, such as third-party ownership, provide a contact name or the name of the institution that retains the right to the data. | Downloads of input data available through online tools, including data visualisation tools and data query tools; input data not available in tools will be made available upon request | Online data visualisation tools, data query tools, and the Global Health Data Exchange |
| Data analysis | | | |

| | | | |
|-------------------------------|---|---|--|
| 9 | Provide a conceptual overview of the data analysis method. A diagram may be helpful. | Flow diagrams of the overall methodological processes, as well as cause-specific modelling processes, have been provided | Main text (Methods) and appendix |
| 10 | Provide a detailed description of all steps of the analysis, including mathematical formulae. This description should cover, as relevant, data cleaning, data pre-processing, data adjustments and weighting of data sources, and mathematical or statistical model(s). | Flow diagrams and corresponding methodological write-ups for each cause, as well as the databases and modelling processes, have been provided | Main text (Methods) and appendix |
| 11 | Describe how candidate models were evaluated and how the final model(s) were selected. | Provided in the methodological write-ups | Appendix |
| 12 | Provide the results of an evaluation of model performance, if done, as well as the results of any relevant sensitivity analysis. | Provided in the methodological write-ups | Appendix |
| 13 | Describe methods for calculating uncertainty of the estimates. State which sources of uncertainty were, and were not, accounted for in the uncertainty analysis. | Appendix | Appendix |
| 14 | State how analytic or statistical source code used to generate estimates can be accessed. | Appendix | http://ghdx.healthdata.org/gbd-2017/code |
| Results and Discussion | | | |
| 15 | Provide published estimates in a file format from which data can be efficiently extracted. | GBD 2017 results are available through online data visualisation tools, the Global Health Data Exchange, and the online data query tool | Main text, and online data tools (data visualisation tools, data query tools, and the Global Health Data Exchange) |
| 16 | Report a quantitative measure of the uncertainty of the estimates (e.g. uncertainty intervals). | Uncertainty intervals are provided with all results | Main text, appendix, and online data tools (data visualisation tools, data query tools, and the Global Health Data Exchange) |
| 17 | Interpret results in light of existing evidence. If updating a previous set of estimates, describe the reasons for changes in estimates. | Discussion of methodological changes between GBD rounds provided in the narrative of the manuscript and appendix | Main text (Methods and Discussion) and appendix |
| 18 | Discuss limitations of the estimates. Include a discussion of any modelling assumptions or data limitations that affect interpretation of the estimates. | Discussion of limitations provided in the narrative of the main paper, as well as in the methodological write-ups in the appendix | Main text (Limitations) and appendix |

| Table 1: Incidence and prevalence for 2017 and percentage change of age-standardised rates between 1990 and 2017 by location for falls | | | | | | |
|--|---|---|---|---|---|---|
| Location | Incidence (95% UI) | | | Prevalence (95% UI) | | |
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Global | 171 691 220 (152 472 652 to 194 061 874) | 2 238 (1 990 to 2 532) | -3.7 (-7.4 to -0.3) | 411 711 999 (366 390 987 to 465 354 952) | 5 186 (4 622 to 5 849) | -6.5 (-7.6 to -5.4) |
| Low SDI | 17 499 653 (14 975 887 to 20 547 072) | 1 597 (1 400 to 1 824) | 16.0 (11.3 to 20.6) | 31 022 660 (27 331 173 to 35 024 800) | 3 393 (3 010 to 3 836) | 15.3 (13.7 to 17.0) |
| Low-middle SDI | 24 401 866 (21 203 737 to 28 302 838) | 1 581 (1 390 to 1 805) | 26.0 (21.2 to 30.6) | 47 383 747 (41 829 874 to 437 565) | 3 375 (3 010 to 3 807) | 23.6 (21.9 to 25.6) |
| Middle SDI | 28 246 597 (24 926 685 to 32 295 306) | 1 353 (1 195 to 1 544) | 41.4 (36.3 to 45.7) | 65 634 605 (58 297 959 to 74 204 118) | 2 958 (2 634 to 3 335) | 38.8 (36.1 to 41.5) |
| High-middle SDI | 43 941 932 (38 932 641 to 49 520 075) | 3 133 (2 758 to 3 570) | -4.0 (-7.9 to -0.2) | 116 716 021 (102 845 012 to 132 955 230) | 7 029 (6 191 to 7 997) | -10.1 (-11.5 to -8.7) |
| High SDI | 57 175 600 (51 319 808 to 63 910 608) | 4 307 (3 770 to 4 929) | -8.8 (-12.3 to -5.3) | 149 790 629 (133 521 836 to 170 195 274) | 9 316 (8 135 to 10 647) | -7.6 (-9.0 to -6.1) |
| Central Europe, Eastern Europe, and Central Asia | 36 244 565 (32 310 224 to 40 669 642) | 8 240 (7 262 to 9 388) | -4.1 (-8.4 to 0.1) | 93 942 180 (82 524 124 to 108 293 264) | 17 955 (15 660 to 20 662) | -2.5 (-3.6 to -1.2) |
| Central Asia | 4 253 163 (3 692 253 to 4 883 974) | 4 761 (4 146 to 5 475) | -4.2 (-10.6 to 1.9) | 9 249 220 (7 998 797 to 10 645 734) | 10 653 (9 274 to 12 223) | 5.4 (-6.8 to -3.9) |
| Armenia | 141 308 (122 550 to 162 828) | 4 670 (3 988 to 5 473) | -18.4 (-25.7 to -11.1) | 378 950 (329 119 to 438 804) | 10 471 (9 051 to 12 106) | -17.9 (-19.9 to -15.6) |
| Azerbaijan | 476 025 (407 964 to 551 195) | 4 705 (4 051 to 5 457) | 5.6 (-2.6 to 14.4) | 1 116 858 (961 605 to 1 296 298) | 10 544 (9 131 to 12 206) | 4.1 (1.8 to 6.4) |
| Georgia | 184 251 (164 254 to 208 007) | 4 668 (4 137 to 5 332) | 15.4 (-22.0 to -7.8) | 473 778 (419 041 to 541 441) | 9 921 (8 726 to 11 347) | -18.7 (-20.4 to -16.9) |
| Kazakhstan | 937 158 (826 507 to 1 067 295) | 5 306 (4 690 to 6 072) | 0.2 (-7.3 to 8.1) | 2 077 867 (1 807 985 to 2 394 836) | 11 489 (10 029 to 13 190) | -18.7 (-3.3 to -0.1) |
| Kyrgyzstan | 263 893 (222 094 to 311 221) | 4 188 (3 571 to 4 890) | -25.1 (-32.7 to -16.8) | 548 570 (470 213 to 635 527) | 9 708 (8 370 to 11 198) | -22.5 (-24.9 to -20.2) |
| Mongolia | 189 074 (166 033 to 216 155) | 5 915 (5 223 to 6 747) | 11.8 (5.8 to 17.9) | 395 668 (342 567 to 456 194) | 13 234 (11 568 to 15 192) | 10.7 (8.6 to 13.2) |
| Tajikistan | 422 650 (365 070 to 497 518) | 4 660 (4 082 to 5 425) | -11.6 (-17.4 to -4.9) | 811 887 (700 577 to 937 562) | 10 868 (9 476 to 12 448) | -10.9 (-12.7 to -9.2) |
| Turkmenistan | 273 612 (190 766 to 260 932) | 4 586 (3 934 to 5 352) | 4.6 (-3.9 to 12.2) | 485 983 (417 368 to 564 662) | 10 396 (8 996 to 12 001) | 3.1 (1.0 to 5.1) |
| Uzbekistan | 1 415 182 (1 200 497 to 1 651 819) | 4 451 (3 816 to 5 176) | 0.5 (-8.0 to 8.4) | 2 959 650 (2 547 463 to 3 438 521) | 10 088 (8 752 to 11 624) | -0.8 (-2.7 to 1.5) |
| Central Europe | 14 767 638 (13 282 613 to 16 427 055) | 11 434 (10 103 to 12 996) | -5.9 (-11.2 to -0.8) | 37 233 284 (33 073 677 to 42 407 489) | 23 428 (20 453 to 26 911) | -3.9 (-5.4 to -2.2) |
| Albania | 267 827 (234 155 to 305 388) | 9 528 (8 188 to 11 053) | 20.2 (23.9 to 36.7) | 714 463 (620 728 to 827 904) | 20 964 (18 128 to 24 261) | 22.2 (19.8 to 24.6) |
| Bosnia and Herzegovina | 325 989 (285 952 to 372 233) | 9 556 (8 216 to 11 168) | 29.3 (23.9 to 34.7) | 960 384 (835 505 to 1 112 321) | 21 321 (18 395 to 24 752) | 22.8 (20.6 to 25.3) |
| Bulgaria | 782 650 (701 965 to 878 893) | 10 252 (8 954 to 11 755) | -4.8 (-11.5 to 2.5) | 2 241 967 (1 975 487 to 2 580 312) | 21 980 (19 035 to 25 361) | -7.7 (-9.0 to -5.9) |
| Croatia | 532 044 (498 864 to 569 372) | 9 356 (8 144 to 10 029) | -3.0 (-11.7 to 6.7) | 1 140 021 (1 036 701 to 1 269 180) | 17 368 (15 655 to 19 446) | -7.3 (-10.6 to -4.3) |
| Czech Republic | 1 601 099 (1 419 768 to 1 809 994) | 13 389 (11 519 to 15 469) | -11.9 (-19.7 to -4.6) | 4 018 820 (3 557 410 to 4 581 118) | 27 302 (23 797 to 31 517) | 2.1 (-0.3 to 5.1) |
| Hungary | 1 377 645 (1 226 330 to 1 542 949) | 11 783 (10 312 to 13 538) | -23.0 (-29.7 to -16.2) | 3 260 122 (2 897 693 to 3 720 297) | 23 372 (20 420 to 26 906) | -9.8 (-12.9 to -6.4) |
| Macedonia | 217 944 (191 778 to 246 425) | 9 873 (8 563 to 11 447) | 29.3 (23.9 to 35.0) | 593 523 (516 649 to 687 735) | 21 535 (18 620 to 24 957) | 23.0 (21.1 to 25.0) |
| Montenegro | 63 348 (55 787 to 71 924) | 9 879 (8 484 to 11 465) | 17.8 (12.3 to 23.9) | 170 139 (147 924 to 197 611) | 21 556 (18 574 to 25 063) | 17.3 (15.4 to 19.0) |
| Poland | 5 206 349 (4 680 507 to 5 801 280) | 11 933 (10 506 to 13 597) | -0.5 (-7.5 to 6.8) | 24 118 (11 331 892 to 14 475 960) | 24 118 (21 141 to 27 664) | 0.3 (-2.1 to 1.3) |
| Romania | 2 335 397 (2 096 120 to 2 593 540) | 10 889 (9 551 to 12 429) | -16.8 (-23.1 to -9.6) | 6 231 936 (5 525 360 to 7 109 467) | 22 887 (19 963 to 26 243) | -20.2 (-22.1 to -18.2) |
| Serbia | 935 472 (828 128 to 1 057 295) | 10 013 (8 637 to 11 598) | 22.9 (16.7 to 28.8) | 2 524 792 (2 212 807 to 2 919 389) | 21 561 (18 658 to 24 978) | 20.4 (18.1 to 22.9) |
| Slovakia | 738 806 (661 530 to 825 576) | 12 239 (10 806 to 13 916) | 11.2 (-16.9 to -5.5) | 1 774 767 (1 578 271 to 2 018 410) | 24 425 (21 482 to 27 965) | -8.4 (-10.4 to -6.2) |
| Slovenia | 338 068 (340 080 to 432 286) | 14 790 (12 950 to 16 774) | -1.0 (-8.9 to 7.1) | 845 372 (763 593 to 942 614) | 28 254 (24 953 to 32 226) | 4.6 (2.6 to 6.6) |
| Eastern Europe | 17 223 763 (15 097 423 to 19 546 254) | 8 029 (7 010 to 9 233) | 3.6 (-1.4 to 8.6) | 47 459 675 (41 508 361 to 55 020 220) | 17 429 (15 114 to 20 228) | 3.2 (1.7 to 4.7) |
| Belarus | 836 348 (752 621 to 931 024) | 8 433 (7 448 to 9 491) | 2.8 (-3.9 to 9.9) | 2 259 393 (1 990 759 to 2 598 887) | 17 965 (15 690 to 20 674) | -0.1 (-1.7 to 1.7) |
| Estonia | 112 476 (100 762 to 126 160) | 7 995 (6 982 to 9 154) | 21.9 (-28.7 to -14.5) | 313 546 (276 093 to 361 654) | 17 231 (14 939 to 19 945) | -18.2 (-20.6 to -15.7) |
| Latvia | 181 592 (162 291 to 201 400) | 8 437 (7 417 to 9 528) | -22.7 (-29.1 to -15.5) | 492 351 (436 833 to 564 524) | 17 725 (15 518 to 20 317) | -19.8 (-22.5 to -17.3) |
| Lithuania | 304 680 (274 072 to 337 700) | 9 236 (8 175 to 10 379) | -6.8 (-13.8 to 0.9) | 785 538 (699 256 to 896 628) | 18 919 (16 631 to 21 733) | -8.0 (-10.7 to -5.4) |
| Moldova | 246 915 (218 517 to 279 575) | 6 749 (5 856 to 7 797) | -16.7 (-23.8 to -9.0) | 710 311 (620 107 to 822 168) | 15 209 (13 194 to 17 556) | -14.4 (-16.7 to -11.6) |
| Russian Federation | 12 075 603 (10 555 676 to 13 773 029) | 8 082 (7 057 to 9 203) | 9.3 (4.4 to 14.2) | 32 823 200 (28 687 609 to 38 056 625) | 17 542 (15 203 to 20 362) | 8.4 (7.8 to 11.0) |
| Ukraine | 3 466 149 (2 998 287 to 3 979 301) | 7 785 (6 725 to 9 006) | -6.4 (-11.7 to -0.9) | 10 075 335 (8 786 177 to 11 720 903) | 17 029 (14 737 to 19 813) | 7.2 (-8.7 to -5.5) |
| High-income | 49 103 178 (43 975 014 to 54 930 253) | 3 900 (3 415 to 4 469) | -8.5 (-11.9 to -5.0) | 128 475 940 (114 333 653 to 146 380 526) | 8 516 (7 433 to 9 743) | -8.4 (-10.2 to -6.6) |
| Australasia | 2 680 001 (2 368 150 to 3 030 484) | 8 187 (6 978 to 9 553) | 25.5 (18.8 to 32.7) | 5 709 338 (4 924 777 to 6 795 061) | 16 175 (13 641 to 19 647) | 19.7 (16.9 to 22.3) |
| Australia | 2 159 427 (1 892 073 to 2 460 772) | 7 888 (6 638 to 9 269) | 26.0 (18.6 to 34.0) | 4 702 711 (4 049 255 to 5 591 701) | 15 785 (13 277 to 19 200) | 21.0 (19.0 to 23.4) |
| New Zealand | 520 575 (462 937 to 584 568) | 9 799 (8 577 to 11 062) | -25.9 (-16.6 to 35.6) | 1 006 627 (874 748 to 1 186 462) | 18 269 (15 521 to 22 017) | 15.1 (8.3 to 21.6) |
| High-income Asia-Pacific | 8 907 346 (7 810 673 to 10 058 576) | 4 450 (3 810 to 5 197) | 7.5 (2.2 to 12.6) | 28 152 727 (24 660 093 to 32 450 922) | 10 300 (8 816 to 12 086) | 12.3 (10.3 to 14.8) |
| Brunei | 20 115 (17 507 to 22 960) | 5 065 (4 413 to 5 814) | 7.5 (1.6 to 12.8) | 46 270 (39 697 to 54 145) | 11 009 (9 552 to 12 820) | 6.2 (4.4 to 8.1) |
| Japan | 6 424 809 (5 588 243 to 7 321 969) | 4 501 (3 833 to 5 277) | 19.8 (15.4 to 24.4) | 20 945 728 (18 408 357 to 24 193 741) | 10 612 (9 060 to 12 470) | 25.6 (22.9 to 29.0) |
| South Korea | 2 238 628 (1 985 828 to 2 508 127) | 4 423 (3 807 to 5 103) | -10.0 (-17.8 to -1.5) | 6 508 161 (5 674 209 to 7 516 082) | 9 628 (8 289 to 11 311) | -14.3 (-16.3 to -12.1) |
| Singapore | 223 793 (195 607 to 255 803) | 4 401 (3 771 to 5 155) | 5.8 (-0.1 to 11.8) | 652 569 (558 380 to 759 874) | 10 048 (8 595 to 11 773) | 5.8 (3.1 to 8.2) |
| High-income North America | 13 844 032 (12 097 284 to 15 788 708) | 3 135 (2 751 to 3 565) | -25.1 (-31.3 to -19.1) | 33 970 923 (29 874 085 to 39 104 635) | 6 653 (5 843 to 7 600) | -29.8 (-35.2 to -24.4) |
| Canada | 1 465 341 (1 307 300 to 1 647 918) | 3 277 (2 892 to 3 738) | 8.2 (2.5 to 13.7) | 3 402 624 (3 094 832 to 3 919 349) | 6 663 (5 909 to 7 547) | 6.7 (5.2 to 8.4) |
| Greenland | 2 551 (2 274 to 2 851) | 4 297 (3 841 to 4 806) | -24.6 (-29.1 to -20.2) | 5 505 (4 888 to 6 232) | 8 550 (7 623 to 9 649) | -28.9 (-30.7 to -27.2) |
| USA | 12 375 898 (10 788 202 to 14 145 067) | 3 122 (2 734 to 3 561) | -27.4 (-34.0 to -21.2) | 30 502 200 (26 747 366 to 35 199 706) | 6 658 (5 835 to 7 611) | -32.3 (-37.9 to -26.6) |
| Southern Latin America | 2 187 890 (1 989 360 to 2 427 548) | 3 250 (2 925 to 3 653) | -3.8 (-8.0 to 0.3) | 5 005 794 (4 420 407 to 5 653 636) | 6 798 (5 978 to 7 711) | -7.5 (-8.8 to -6.3) |
| Argentina | 1 457 216 (1 280 419 to 1 662 038) | 3 239 (2 816 to 3 743) | -1.3 (-7.7 to 3.5) | 3 379 574 (2 953 650 to 3 846 931) | 6 972 (6 067 to 7 960) | 3.7 (-5.8 to -1.8) |
| Chile | 601 770 (577 618 to 633 697) | 3 223 (3 092 to 3 398) | -10.5 (-18.5 to -1.7) | 1 325 549 (1 199 546 to 1 478 324) | 6 340 (5 705 to 7 107) | -18.5 (-21.0 to -15.7) |

| Location | Incidence (95% UI) | | | Prevalence (95% UI) | | |
|----------------------------------|--|---|---|--|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Uruguay | 128 808 (114 320 to 145 427) | 3 369 (2 944 to 3 838) | 3.5 (-1.8 to 9.5) | 300 649 (267 360 to 340 315) | 7 004 (6 155 to 7 964) | 0.7 (-0.9 to 2.4) |
| Western Europe | 21 483 909 (19 383 395 to 24 007 380) | 4 267 (3 704 to 4 935) | -2.3 (-6.1 to 1.5) | 55 637 159 (49 150 798 to 63 388 923) | 9 142 (7 914 to 10 580) | -1.0 (-1.7 to -0.3) |
| Andorra | 3 866 (3 443 to 4 350) | 4 572 (3 965 to 5 256) | 1.0 (-4.2 to 6.3) | 10 590 (9 305 to 12 081) | 9 820 (8 507 to 11 333) | 0.7 (-0.8 to 2.3) |
| Austria | 461 202 (415 458 to 514 214) | 4 583 (3 996 to 5 298) | -17.1 (-22.9 to -11.2) | 1 202 772 (1 064 397 to 1 370 161) | 9 745 (8 420 to 11 288) | -14.2 (-16.0 to -12.5) |
| Belgium | 738 406 (660 137 to 830 740) | 5 378 (4 689 to 6 166) | 14.9 (8.5 to 22.1) | 1 784 786 (1 583 131 to 2 027 425) | 11 191 (9 723 to 12 923) | 12.7 (11.1 to 14.5) |
| Cyprus | 51 237 (45 147 to 58 060) | 4 176 (3 594 to 4 862) | -0.3 (-5.0 to 5.1) | 142 633 (123 796 to 163 843) | 9 203 (7 900 to 10 664) | 0.5 (-1.1 to 2.0) |
| Denmark | 275 778 (243 153 to 312 177) | 4 346 (3 729 to 5 072) | -8.0 (-14.3 to -1.4) | 714 858 (625 618 to 819 450) | 9 312 (7 996 to 10 829) | 0.8 (-1.2 to 2.7) |
| Finland | 369 102 (331 439 to 415 951) | 5 435 (4 769 to 6 269) | 5.4 (-0.8 to 12.7) | 903 704 (805 416 to 1 020 509) | 11 297 (9 869 to 12 082) | 7.9 (6.3 to 9.4) |
| France | 3 776 416 (3 382 461 to 4 212 943) | 4 619 (4 013 to 5 327) | -8.4 (-13.3 to -2.8) | 9 019 607 (8 009 442 to 10 268 965) | 9 718 (8 426 to 11 223) | 4.9 (-6.3 to -3.5) |
| Germany | 4 435 165 (3 996 472 to 4 949 163) | 4 447 (3 852 to 5 147) | -0.3 (-6.3 to 5.8) | 11 574 449 (10 236 811 to 13 190 387) | 9 468 (8 195 to 10 103) | 1.2 (-0.2 to 2.9) |
| Greece | 416 500 (372 994 to 465 633) | 3 861 (3 281 to 4 522) | -6.8 (-12.1 to -2.2) | 1 284 041 (1 126 871 to 1 470 521) | 8 752 (7 510 to 10 155) | -5.3 (-6.9 to -3.8) |
| Iceland | 15 635 (13 865 to 17 665) | 4 378 (3 785 to 5 075) | 3.3 (-1.7 to 8.9) | 39 418 (34 439 to 45 300) | 9 493 (8 185 to 11 006) | 4.5 (2.0 to 5.3) |
| Ireland | 207 341 (183 484 to 235 879) | 4 231 (3 656 to 4 928) | 2.8 (-2.0 to 7.5) | 539 897 (470 349 to 623 617) | 9 322 (8 053 to 10 887) | 4.1 (2.1 to 6.1) |
| Israel | 368 373 (316 292 to 430 370) | 4 015 (3 419 to 4 710) | 10.1 (4.2 to 15.8) | 865 519 (744 674 to 1 003 947) | 9 048 (7 736 to 10 554) | 10.8 (8.0 to 13.1) |
| Italy | 2 841 180 (2 553 045 to 3 170 734) | 3 802 (3 331 to 4 382) | -10.4 (-15.0 to -5.3) | 7 461 482 (6 645 747 to 8 466 579) | 8 111 (7 054 to 9 331) | -9.2 (-11.0 to -7.4) |
| Luxembourg | 30 368 (27 401 to 34 096) | 4 709 (4 101 to 5 407) | -8.9 (-14.6 to -2.7) | 75 168 (66 190 to 85 833) | 9 811 (8 518 to 11 307) | -9.2 (-10.7 to -7.6) |
| Malta | 23 160 (20 873 to 25 814) | 5 007 (4 347 to 5 720) | 12.1 (6.0 to 18.4) | 63 947 (56 382 to 73 093) | 10 794 (9 349 to 12 567) | 12.3 (9.9 to 14.3) |
| Netherlands | 721 872 (659 797 to 793 950) | 3 676 (3 223 to 4 125) | 4.1 (-4.2 to 13.2) | 1 765 054 (1 573 989 to 2 000 060) | 7 565 (6 616 to 8 739) | 1.5 (-1.3 to 4.1) |
| Norway | 299 873 (259 974 to 339 786) | 4 995 (4 301 to 5 752) | -1.6 (-5.3 to 1.7) | 749 990 (659 212 to 859 692) | 10 815 (9 321 to 12 589) | -0.9 (-2.2 to 0.1) |
| Portugal | 371 169 (320 725 to 415 610) | 3 112 (2 695 to 3 627) | -27.4 (-33.0 to -21.1) | 1 054 998 (934 591 to 1 201 872) | 6 810 (5 909 to 7 857) | -29.7 (-31.5 to -27.7) |
| Spain | 1 922 262 (1 716 547 to 2 154 504) | 3 826 (3 281 to 4 475) | -1.1 (-6.2 to 4.5) | 5 498 483 (4 826 112 to 6 271 470) | 8 497 (7 306 to 9 828) | -1.1 (-2.6 to 0.3) |
| Sweden | 539 643 (466 549 to 614 803) | 4 634 (3 976 to 5 367) | 11.7 (7.6 to 15.9) | 1 432 049 (1 256 323 to 1 647 133) | 10 367 (8 882 to 12 094) | 11.9 (10.1 to 13.9) |
| Switzerland | 497 728 (458 772 to 547 216) | 4 594 (4 167 to 5 142) | -26.6 (-31.8 to -20.1) | 1 154 454 (1 035 156 to 1 300 314) | 9 217 (8 117 to 10 476) | -27.3 (-29.2 to -25.2) |
| United Kingdom | 3 095 384 (2 704 973 to 3 500 866) | 4 290 (3 678 to 4 985) | 14.4 (10.8 to 17.9) | 8 241 612 (7 220 907 to 9 439 086) | 9 419 (8 109 to 10 926) | 15.2 (13.8 to 16.9) |
| Latin America and Caribbean | 11 776 802 (10 571 218 to 13 159 361) | 2 059 (1 843 to 2 297) | 29.6 (26.4 to 32.8) | 25 073 723 (22 386 743 to 28 287 435) | 4 286 (3 837 to 4 840) | 29.5 (27.5 to 31.9) |
| Andean Latin America | 975 728 (855 995 to 1 111 401) | 1 642 (1 446 to 1 868) | 25.7 (19.0 to 31.7) | 1 984 980 (1 770 537 to 2 236 342) | 3 444 (3 083 to 3 878) | 23.2 (20.8 to 26.5) |
| Bolivia | 167 244 (145 638 to 192 298) | 1 588 (1 402 to 1 799) | 16.6 (9.4 to 23.9) | 324 413 (288 205 to 364 319) | 3 304 (2 955 to 3 699) | 15.2 (12.6 to 18.3) |
| Ecuador | 302 692 (267 916 to 343 348) | 1 885 (1 674 to 2 130) | 14.1 (6.1 to 23.3) | 610 719 (548 029 to 688 230) | 3 885 (3 497 to 4 371) | 11.3 (8.9 to 14.1) |
| Peru | 505 793 (441 152 to 576 364) | 1 548 (1 351 to 1 763) | 36.3 (29.0 to 43.9) | 1 049 848 (934 637 to 1 188 225) | 3 277 (2 924 to 3 712) | 33.1 (29.7 to 37.8) |
| Caribbean | 823 052 (731 226 to 928 599) | 1 716 (1 520 to 1 940) | 30.0 (24.5 to 36.3) | 1 707 204 (1 528 010 to 1 923 194) | 3 441 (3 077 to 3 885) | 30.0 (27.4 to 33.3) |
| Antigua and Barbuda | 293 (1 114 to 1 493) | 1 430 (1 387 to 1 655) | 42.2 (36.2 to 48.7) | 2 985 (2 642 to 3 371) | 3 007 (2 658 to 3 400) | 39.7 (35.5 to 43.8) |
| The Bahamas | 5 595 (4 897 to 6 403) | 1 537 (1 352 to 1 757) | 30.7 (24.4 to 36.4) | 12 017 (10 665 to 13 559) | 3 099 (2 762 to 3 504) | 31.0 (27.2 to 35.2) |
| Barbados | 4 873 (4 249 to 5 634) | 1 457 (1 263 to 1 685) | 39.7 (33.8 to 46.6) | 11 917 (10 644 to 13 429) | 3 033 (2 683 to 3 417) | 38.5 (34.3 to 42.6) |
| Belize | 5 352 (4 593 to 6 193) | 1 508 (1 326 to 1 711) | 47.3 (41.2 to 53.4) | 10 442 (9 210 to 11 888) | 3 174 (2 828 to 3 572) | 46.9 (42.7 to 52.1) |
| Bermuda | 299 (1 140 to 1 494) | 1 582 (1 381 to 1 818) | 25.3 (19.3 to 31.4) | 3 135 (2 801 to 3 560) | 3 217 (2 868 to 3 645) | 26.4 (23.0 to 30.1) |
| Cuba | 315 328 (283 323 to 351 233) | 2 130 (1 907 to 2 402) | 27.8 (20.5 to 36.5) | 625 959 (562 627 to 704 614) | 3 886 (3 487 to 4 378) | 25.9 (22.5 to 29.3) |
| Dominica | 1 062 (935 to 1 215) | 1 435 (1 251 to 1 649) | 48.0 (42.2 to 54.7) | 2 506 (2 234 to 2 831) | 3 072 (2 729 to 3 472) | 47.1 (42.8 to 52.2) |
| Dominican Republic | 146 235 (125 939 to 168 242) | 1 453 (1 259 to 1 673) | 50.0 (43.2 to 57.1) | 311 474 (274 376 to 353 721) | 3 115 (2 754 to 3 534) | 44.4 (39.6 to 49.9) |
| Grenada | 9 881 (1 662 to 2 132) | 1 535 (1 342 to 1 749) | 37.3 (30.4 to 43.9) | 4 271 (3 822 to 4 821) | 3 219 (2 871 to 3 624) | 38.0 (33.5 to 42.3) |
| Guyana | 11 312 (9 939 to 12 961) | 1 642 (1 452 to 1 866) | 37.5 (30.1 to 44.8) | 22 743 (20 250 to 25 523) | 3 361 (3 008 to 3 766) | 36.8 (32.4 to 41.1) |
| Haiti | 128 573 (109 188 to 150 412) | 1 285 (1 119 to 1 474) | 30.2 (23.2 to 37.2) | 245 488 (215 380 to 277 676) | 2 707 (2 414 to 3 025) | 29.7 (26.2 to 33.3) |
| Jamaica | 40 860 (35 361 to 47 156) | 1 475 (1 271 to 1 700) | 46.0 (40.3 to 51.7) | 94 065 (83 351 to 106 483) | 3 219 (2 847 to 3 648) | 43.3 (38.9 to 48.6) |
| Puerto Rico | 91 170 (81 236 to 102 808) | 1 940 (1 700 to 2 212) | 35.9 (28.4 to 44.5) | 210 801 (188 473 to 238 359) | 3 842 (3 426 to 4 333) | 34.8 (31.4 to 38.7) |
| Saint Lucia | 2 562 (2 233 to 2 928) | 1 418 (1 235 to 1 625) | 38.1 (32.5 to 44.5) | 5 987 (5 332 to 6 742) | 3 009 (2 672 to 3 395) | 38.3 (34.3 to 43.0) |
| Saint Vincent and the Grenadines | 1 938 (1 718 to 2 183) | 1 610 (1 423 to 1 826) | 51.6 (44.6 to 58.1) | 4 350 (3 888 to 4 892) | 3 384 (3 016 to 3 802) | 51.1 (45.8 to 56.0) |
| Suriname | 8 965 (7 832 to 10 247) | 1 587 (1 390 to 1 806) | 42.2 (35.0 to 49.9) | 18 863 (16 795 to 21 246) | 3 231 (2 882 to 3 628) | 40.5 (36.5 to 45.4) |
| Trinidad and Tobago | 23 013 (20 156 to 26 218) | 1 569 (1 367 to 1 785) | 26.1 (19.2 to 33.6) | 54 029 (48 180 to 60 799) | 3 291 (2 933 to 3 699) | 27.6 (24.4 to 31.8) |
| Virgin Islands | 2 144 (1 889 to 2 437) | 1 690 (1 482 to 1 926) | 37.2 (31.3 to 43.6) | 4 781 (4 253 to 5 437) | 3 262 (2 908 to 3 696) | 32.6 (28.6 to 36.4) |
| Central Latin America | 4 365 274 (3 891 450 to 4 938 440) | 1 810 (1 614 to 2 044) | 10.9 (7.1 to 15.0) | 8 704 856 (7 732 689 to 9 912 609) | 3 576 (3 182 to 4 074) | 9.9 (8.0 to 12.4) |
| Colombia | 639 271 (563 674 to 733 681) | 1 261 (1 105 to 1 448) | -8.0 (-15.1 to -0.7) | 1 345 985 (1 194 928 to 1 530 954) | 2 544 (2 253 to 2 901) | -6.2 (-8.6 to -3.9) |
| Costa Rica | 73 314 (65 346 to 82 701) | 1 586 (1 406 to 1 802) | 8.6 (1.8 to 15.8) | 145 159 (129 533 to 163 783) | 2 958 (2 635 to 3 348) | 13.2 (10.7 to 16.4) |
| El Salvador | 91 859 (81 906 to 103 738) | 1 580 (1 406 to 1 789) | 24.9 (16.5 to 34.1) | 171 514 (152 981 to 194 992) | 2 902 (2 591 to 3 291) | 17.1 (14.1 to 20.1) |
| Guatemala | 208 164 (180 559 to 240 469) | 1 461 (1 292 to 1 657) | 8.2 (1.8 to 15.3) | 382 640 (335 380 to 439 929) | 2 862 (2 556 to 3 250) | 6.9 (4.5 to 10.0) |
| Honduras | 100 651 (86 007 to 118 499) | 1 193 (1 046 to 1 376) | 29.3 (22.2 to 36.4) | 190 567 (165 038 to 221 735) | 2 497 (2 195 to 2 843) | 23.2 (19.8 to 27.0) |
| Mexico | 2 697 567 (2 389 537 to 3 043 225) | 2 276 (2 016 to 2 566) | 20.7 (15.8 to 24.9) | 5 357 266 (4 779 128 to 6 112 974) | 4 482 (4 002 to 5 130) | 17.6 (15.1 to 21.1) |
| Nicaragua | 73 151 (63 266 to 85 697) | 1 300 (1 141 to 1 497) | 17.1 (10.7 to 24.2) | 137 756 (120 960 to 157 881) | 2 537 (2 251 to 2 872) | 16.6 (13.4 to 19.8) |

| Location | Incidence (95% UI) | | | Prevalence (95% UI) | | |
|--|--|---|---|--|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Panama | 53 715 (47 145 to 60 506) | 1 359 (1 201 to 1 549) | 13.6 (7.3 to 20.4) | 107 674 (95 861 to 121 838) | 2 706 (2 405 to 3 064) | 16.1 (13.0 to 19.4) |
| Venezuela | 428 082 (375 802 to 486 515) | 1 497 (1 318 to 1 707) | 0.5 (-6.1 to 7.8) | 866 296 (764 916 to 993 630) | 2 929 (2 596 to 3 336) | 2.3 (-0.5 to 5.3) |
| Tropical Latin America | 5 612 748 (5 035 668 to 6 288 061) | 2 522 (2 266 to 2 814) | 48.7 (44.6 to 52.8) | 12 676 683 (11 247 927 to 14 408 324) | 5 402 (4 803 to 6 117) | 48.0 (44.5 to 51.8) |
| Brazil | 5 480 139 (4 920 456 to 6 134 580) | 2 536 (2 280 to 2 826) | 49.2 (45.1 to 53.5) | 12 412 809 (11 011 375 to 14 113 681) | 5 430 (4 827 to 6 149) | 48.6 (45.0 to 52.4) |
| Paraguay | 132 608 (113 800 to 152 872) | 2 032 (1 776 to 2 311) | 28.0 (21.8 to 33.9) | 263 875 (232 752 to 298 429) | 4 287 (3 805 to 4 829) | 20.6 (17.6 to 23.8) |
| North Africa and Middle East | 9 084 601 (7 746 853 to 10 562 639) | 1 562 (1 349 to 1 793) | 3.2 (-1.5 to 7.5) | 19 413 992 (16 874 777 to 22 281 107) | 3 582 (3 144 to 4 081) | -0.1 (-1.5 to 1.6) |
| North Africa and Middle East | 9 084 601 (7 746 853 to 10 562 639) | 1 562 (1 349 to 1 793) | 3.2 (-1.5 to 7.5) | 19 413 992 (16 874 777 to 22 281 107) | 3 582 (3 144 to 4 081) | -0.1 (-1.5 to 1.6) |
| Afghanistan | 503 769 (423 506 to 596 609) | 1 528 (1 334 to 1 740) | -0.9 (-5.7 to 4.0) | 803 232 (687 686 to 939 871) | 3 634 (3 203 to 4 134) | -2.2 (-4.4 to 0.3) |
| Algeria | 591 550 (508 284 to 679 527) | 1 504 (1 301 to 1 743) | -2.5 (-8.2 to 3.1) | 1 351 184 (1 176 579 to 1 553 355) | 3 486 (3 049 to 3 982) | 4.3 (-6.5 to -1.9) |
| Bahrain | 21 480 (18 176 to 25 283) | 1 558 (1 317 to 1 838) | 9.4 (3.7 to 15.5) | 58 143 (49 952 to 67 491) | 3 711 (3 217 to 4 280) | 9.4 (6.0 to 12.8) |
| Egypt | 1 323 510 (1 115 031 to 1 559 706) | 1 410 (1 215 to 1 627) | 8.8 (2.7 to 14.7) | 2 647 936 (2 288 775 to 3 056 336) | 3 249 (2 844 to 3 701) | 4.1 (1.3 to 6.9) |
| Iran | 1 344 586 (1 151 472 to 1 567 985) | 1 701 (1 462 to 1 976) | 7.9 (3.4 to 12.4) | 3 229 617 (2 806 087 to 3 697 598) | 3 899 (3 411 to 4 454) | 5.1 (3.6 to 6.9) |
| Iraq | 626 536 (512 072 to 759 959) | 1 378 (1 153 to 1 631) | 14.2 (5.7 to 22.8) | 1 218 473 (1 040 997 to 1 424 301) | 3 437 (2 979 to 3 958) | 19.4 (14.9 to 24.4) |
| Jordan | 147 491 (122 800 to 175 900) | 1 384 (1 183 to 1 618) | 1.7 (-5.1 to 8.0) | 293 031 (250 836 to 341 424) | 3 230 (2 805 to 3 700) | -0.8 (-3.5 to 2.2) |
| Kuwait | 74 673 (64 300 to 86 138) | 1 815 (1 570 to 2 110) | -4.9 (-10.3 to 0.5) | 180 593 (156 081 to 207 999) | 4 251 (3 720 to 4 860) | -4.9 (-7.3 to -2.3) |
| Lebanon | 134 232 (113 643 to 158 436) | 1 631 (1 407 to 1 906) | 8.9 (2.7 to 15.0) | 275 078 (234 315 to 317 558) | 3 572 (3 109 to 4 104) | 9.1 (5.8 to 13.0) |
| Libya | 107 284 (91 898 to 123 652) | 1 615 (1 400 to 1 844) | -6.0 (-11.6 to -0.6) | 230 536 (200 236 to 265 410) | 3 622 (3 175 to 4 132) | -7.6 (-9.6 to -5.6) |
| Morocco | 487 872 (417 555 to 570 750) | 1 408 (1 210 to 1 636) | 8.7 (2.2 to 14.5) | 1 149 026 (999 534 to 1 314 358) | 3 275 (2 861 to 3 725) | 5.5 (3.3 to 7.8) |
| Palestine | 70 758 (58 259 to 85 605) | 1 431 (1 224 to 1 672) | 3.7 (-2.6 to 10.1) | 130 092 (112 403 to 150 085) | 3 397 (2 969 to 3 871) | 3.8 (1.8 to 5.9) |
| Oman | 66 261 (55 336 to 80 190) | 1 582 (1 362 to 1 849) | 5.3 (0.5 to 11.3) | 148 726 (126 285 to 174 723) | 3 574 (3 109 to 4 112) | 5.4 (2.7 to 8.1) |
| Qatar | 54 445 (45 831 to 64 277) | 2 011 (1 744 to 2 313) | -3.2 (-9.8 to 4.0) | 125 405 (102 951 to 146 810) | 4 603 (4 029 to 5 271) | -3.5 (-6.1 to -0.1) |
| Saudi Arabia | 695 984 (606 109 to 802 551) | 2 191 (1 922 to 2 493) | -6.4 (-11.4 to -1.0) | 1 412 818 (1 232 967 to 1 613 742) | 4 688 (4 161 to 5 312) | -8.6 (-10.5 to -6.9) |
| Sudan | 527 474 (439 000 to 639 987) | 1 303 (1 121 to 1 509) | 8.9 (3.2 to 14.5) | 945 064 (817 590 to 1 105 440) | 3 198 (2 802 to 3 670) | 7.7 (5.0 to 10.7) |
| Syria | 259 893 (213 922 to 316 693) | 1 404 (1 177 to 1 651) | 23.4 (16.6 to 30.4) | 543 105 (464 701 to 630 683) | 3 328 (2 880 to 3 833) | 20.8 (16.7 to 25.1) |
| Tunisia | 163 409 (140 390 to 189 712) | 1 474 (1 256 to 1 722) | 8.3 (2.8 to 15.0) | 413 032 (359 236 to 473 833) | 3 377 (2 932 to 3 881) | 4.6 (1.8 to 7.4) |
| Turkey | 1 276 654 (1 112 675 to 1 452 784) | 1 610 (1 393 to 1 859) | -11.6 (-17.3 to -5.0) | 3 045 977 (2 669 478 to 3 499 517) | 3 515 (3 072 to 4 038) | -17.9 (-21.1 to -14.7) |
| United Arab Emirates | 191 722 (161 644 to 226 252) | 2 010 (1 743 to 2 313) | -15.0 (-19.5 to -9.5) | 495 721 (426 385 to 574 778) | 4 616 (4 041 to 5 262) | -16.4 (-18.3 to -14.2) |
| Yemen | 406 535 (337 920 to 490 550) | 1 339 (1 157 to 1 546) | 2.6 (-2.4 to 8.4) | 701 073 (602 668 to 813 602) | 3 177 (2 783 to 3 610) | 1.3 (-1.1 to 4.3) |
| South Asia | 27 645 658 (23 929 866 to 31 790 195) | 1 709 (1 495 to 1 959) | 33.4 (27.9 to 38.9) | 54 501 408 (48 091 376 to 61 867 360) | 3 585 (3 184 to 4 064) | 30.4 (28.2 to 32.9) |
| South Asia | 27 645 658 (23 929 866 to 31 790 195) | 1 709 (1 495 to 1 959) | 33.4 (27.9 to 38.9) | 54 501 408 (48 091 376 to 61 867 360) | 3 585 (3 184 to 4 064) | 30.4 (28.2 to 32.9) |
| Bangladesh | 1 879 191 (1 600 626 to 2 201 983) | 1 237 (1 064 to 1 431) | 38.8 (30.2 to 47.4) | 3 975 599 (3 470 320 to 4 541 326) | 2 801 (2 465 to 3 176) | 42.5 (36.9 to 48.5) |
| Bhutan | 13 737 (12 000 to 15 729) | 1 627 (1 439 to 1 836) | 12.6 (6.1 to 19.7) | 26 689 (23 565 to 30 111) | 3 383 (3 020 to 3 804) | 9.9 (7.3 to 12.7) |
| India | 22 618 646 (19 574 098 to 26 132 069) | 1 793 (1 567 to 2 059) | 31.4 (25.8 to 37.1) | 44 741 891 (39 434 255 to 50 716 561) | 3 723 (3 313 to 4 225) | 28.0 (25.9 to 30.4) |
| Nepal | 349 043 (302 584 to 403 990) | 1 291 (1 136 to 1 468) | 15.8 (8.7 to 22.3) | 677 787 (600 780 to 764 528) | 2 726 (2 435 to 3 064) | 14.2 (11.3 to 17.0) |
| Pakistan | 2 785 040 (2 384 681 to 3 254 158) | 1 475 (1 288 to 1 681) | 44.9 (37.3 to 52.4) | 5 079 442 (4 444 064 to 5 716 010) | 3 244 (2 879 to 3 610) | 39.4 (35.6 to 43.1) |
| Southeast Asia, East Asia, and Oceania | 24 523 775 (21 530 658 to 27 957 854) | 1 104 (971 to 1 262) | 85.4 (77.8 to 93.1) | 68 124 841 (60 201 836 to 77 289 748) | 2 688 (2 375 to 3 036) | 83.2 (75.8 to 91.0) |
| East Asia | 21 903 706 (19 252 383 to 24 912 373) | 1 462 (1 275 to 1 672) | 111.4 (102.8 to 121.3) | 62 282 056 (54 985 517 to 70 760 535) | 3 375 (2 972 to 3 834) | 99.1 (90.5 to 108.9) |
| China | 21 032 439 (18 488 797 to 23 929 008) | 1 477 (1 288 to 1 691) | 113.2 (104.4 to 123.6) | 59 820 373 (52 811 012 to 67 990 803) | 3 411 (3 004 to 3 874) | 100.4 (91.6 to 110.3) |
| North Korea | 239 052 (206 380 to 274 852) | 935 (803 to 1 075) | 78.5 (66.4 to 90.6) | 661 540 (578 846 to 755 182) | 2 211 (1 930 to 2 515) | 80.9 (71.5 to 90.8) |
| Taiwan (Province of China) | 279 358 (248 092 to 314 981) | 1 126 (978 to 1 288) | 12.6 (30.2 to 55.8) | 796 814 (706 078 to 903 269) | 2 502 (2 203 to 2 827) | 39.3 (33.5 to 45.4) |
| Oceania | 85 737 (73 359 to 101 145) | 708 (616 to 824) | 89.2 (80.1 to 98.9) | 164 350 (144 178 to 187 668) | 1 690 (1 498 to 1 916) | 91.9 (83.9 to 101.8) |
| American Samoa | 431 (366 to 508) | 781 (672 to 910) | 65.8 (56.4 to 75.0) | 907 (795 to 1 029) | 1 797 (1 581 to 2 037) | 64.8 (58.6 to 72.1) |
| Federated States of Micronesia | 708 (599 to 839) | 692 (596 to 806) | 91.1 (79.5 to 104.4) | 1 477 (1 292 to 1 685) | 1 637 (1 441 to 1 849) | 92.3 (83.5 to 102.5) |
| Fiji | 6 054 (5 095 to 7 141) | 670 (568 to 787) | 100.9 (89.8 to 113.0) | 13 907 (12 174 to 15 879) | 1 612 (1 416 to 1 830) | 100.3 (89.3 to 112.9) |
| Guam | 1 534 (1 334 to 1 783) | 907 (791 to 1 052) | 89.5 (80.3 to 100.3) | 3 579 (3 165 to 4 029) | 2 031 (1 795 to 2 290) | 89.2 (80.2 to 98.3) |
| Kiribati | 685 (567 to 832) | 574 (481 to 688) | 118.0 (104.1 to 134.7) | 1 402 (1 223 to 1 598) | 1 450 (1 274 to 1 647) | 118.7 (105.5 to 133.5) |
| Marshall Islands | 385 (326 to 452) | 702 (608 to 813) | 99.7 (88.6 to 111.1) | 770 (675 to 880) | 1 653 (1 463 to 1 875) | 100.3 (90.5 to 110.2) |
| Northern Mariana Islands | 379 (323 to 442) | 833 (717 to 971) | 97.2 (50.7 to 67.9) | 972 (854 to 1 102) | 1 873 (1 651 to 2 131) | 58.5 (52.4 to 65.0) |
| Papua New Guinea | 58 834 (50 099 to 69 931) | 661 (573 to 772) | 102.3 (90.0 to 115.5) | 109 907 (96 082 to 125 691) | 1 583 (1 400 to 1 802) | 103.8 (93.9 to 116.7) |
| Samoa | 1 438 (1 211 to 1 710) | 739 (632 to 856) | 92.7 (82.3 to 104.1) | 2 872 (2 521 to 3 273) | 1 752 (1 548 to 1 989) | 93.1 (84.6 to 103.5) |
| Solomon Islands | 71 719 (6 839 to 8 769) | 3 344 (1 204 to 1 507) | 36.0 (28.8 to 44.1) | 13 907 (12 309 to 15 687) | 3 051 (2 726 to 3 441) | 37.6 (33.9 to 41.8) |
| Tonga | 719 (607 to 860) | 704 (600 to 827) | 89.1 (78.8 to 99.5) | 1 526 (1 339 to 1 731) | 1 678 (1 478 to 1 900) | 93.9 (84.2 to 104.3) |
| Vanuatu | 2 126 (1 813 to 2 511) | 776 (673 to 900) | 94.3 (84.1 to 105.9) | 4 075 (3 591 to 4 632) | 1 844 (1 644 to 2 077) | 95.1 (86.7 to 104.3) |
| Southeast Asia | 2 534 331 (2 181 508 to 2 958 504) | 398 (344 to 463) | 15.0 (10.5 to 20.2) | 5 678 435 (5 027 741 to 6 452 084) | 882 (786 to 1 002) | 16.2 (13.9 to 18.6) |
| Cambodia | 77 041 (66 794 to 89 252) | 523 (461 to 598) | 16.7 (37.1 to 56.8) | 153 486 (136 024 to 174 333) | 1 125 (1 004 to 1 277) | 46.5 (42.3 to 50.8) |
| Indonesia | 652 968 (543 971 to 789 394) | 273 (231 to 326) | -29.5 (-33.9 to -24.6) | 1 478 919 (1 300 607 to 1 728 999) | 613 (541 to 711) | -28.3 (-30.5 to -26.3) |

| Location | Incidence (95% UI) | | | Prevalence (95% UI) | | |
|-----------------------------|--|---|---|--|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Laos | 27 395 (23 238 to 32 211) | 426 (368 to 493) | 63.0 (51.8 to 74.4) | 54 750 (48 334 to 62 213) | 966 (861 to 1 089) | 59.0 (53.7 to 64.3) |
| Malaysia | 123 322 (102 861 to 147 763) | 417 (351 to 496) | 70.1 (58.7 to 81.8) | 276 611 (243 961 to 317 962) | 938 (832 to 1 075) | 68.7 (60.2 to 76.9) |
| Maldives | 1 836 (1 528 to 2 213) | 424 (359 to 498) | 29.7 (20.1 to 42.1) | 4 071 (3 578 to 4 670) | 955 (845 to 1 086) | 27.4 (23.2 to 32.1) |
| Mauritius | 9 928 (5 154 to 16 933) | 463 (397 to 544) | 60.0 (50.0 to 70.4) | 16 068 (14 236 to 18 316) | 1 053 (929 to 1 199) | 57.5 (51.0 to 64.2) |
| Myanmar | 271 773 (238 553 to 312 106) | 536 (473 to 610) | 32.7 (33.3 to 49.9) | 581 330 (516 566 to 655 758) | 1 161 (1 038 to 1 306) | 38.1 (34.2 to 41.8) |
| Philippines | 364 928 (308 087 to 434 894) | 369 (315 to 433) | 87.7 (74.5 to 102.1) | 751 580 (658 588 to 863 634) | 837 (738 to 955) | 81.7 (73.7 to 89.5) |
| Sri Lanka | 115 106 (100 678 to 132 382) | 523 (456 to 601) | 50.3 (39.6 to 61.1) | 261 390 (232 626 to 297 059) | 1 104 (984 to 1 253) | 43.9 (39.5 to 49.1) |
| Seychelles | 511 (445 to 595) | 499 (432 to 582) | 56.8 (47.7 to 67.1) | 1 213 (1 071 to 1 375) | 1 099 (974 to 1 246) | 54.8 (49.2 to 61.2) |
| Thailand | 329 474 (283 509 to 380 917) | 447 (382 to 523) | 32.7 (23.6 to 42.8) | 879 742 (782 178 to 999 750) | 992 (880 to 1 125) | 34.7 (30.2 to 39.9) |
| Timor-Leste | 5 119 (4 262 to 6 119) | 428 (367 to 500) | 80.3 (67.9 to 92.5) | 9 540 (8 439 to 10 869) | 970 (864 to 1 098) | 72.9 (66.3 to 80.4) |
| Vietnam | 555 596 (487 358 to 634 919) | 592 (520 to 677) | 53.8 (45.3 to 63.5) | 1 202 264 (1 073 553 to 1 355 875) | 1 231 (1 102 to 1 387) | 53.7 (48.8 to 59.1) |
| Sub-Saharan Africa | 13 112 641 (11 202 194 to 15 911 838) | 1 585 (1 387 to 1 917) | 0.6 (-3.4 to 4.5) | 22 179 916 (19 338 138 to 25 333 682) | 3 365 (2 988 to 3 792) | 1.3 (0.2 to 2.3) |
| Central sub-Saharan Africa | 1 384 416 (1 159 424 to 1 647 365) | 1 439 (1 254 to 1 643) | 5.4 (0.8 to 10.0) | 2 308 971 (2 016 706 to 2 627 336) | 3 047 (2 712 to 3 430) | 6.0 (4.3 to 7.5) |
| Angola | 337 738 (284 330 to 401 232) | 1 645 (1 447 to 1 861) | 1.8 (-3.5 to 7.2) | 534 079 (469 414 to 607 797) | 3 357 (2 988 to 3 776) | -0.4 (-2.0 to 1.4) |
| Central African Republic | 49 775 (41 838 to 59 024) | 1 302 (1 137 to 1 493) | 7.5 (1.5 to 13.3) | 87 815 (76 841 to 100 310) | 2 816 (2 504 to 3 161) | 10.8 (8.2 to 13.4) |
| Congo (Brazzaville) | 60 930 (51 862 to 71 202) | 1 534 (1 332 to 1 753) | -1.8 (-7.1 to 3.5) | 109 468 (96 246 to 124 071) | 3 169 (2 820 to 3 549) | -0.4 (-2.2 to 1.3) |
| DR Congo | 894 868 (744 923 to 1 072 234) | 1 365 (1 181 to 1 568) | 6.9 (1.5 to 12.5) | 1 507 505 (1 315 899 to 1 719 802) | 2 941 (2 614 to 3 310) | 8.4 (6.2 to 10.5) |
| Equatorial Guinea | 16 784 (14 064 to 20 174) | 1 683 (1 477 to 1 916) | 30.0 (22.8 to 37.4) | 25 192 (22 071 to 28 725) | 3 291 (2 930 to 3 707) | 19.8 (17.0 to 22.7) |
| Gabon | 24 321 (20 955 to 28 161) | 1 696 (1 485 to 1 929) | -11.4 (-16.7 to -5.8) | 44 911 (39 614 to 50 755) | 3 471 (3 091 to 3 900) | -9.0 (-10.6 to -7.3) |
| Eastern sub-Saharan Africa | 6 257 478 (5 253 032 to 7 503 431) | 2 026 (1 780 to 2 315) | 1.5 (-2.5 to 5.1) | 10 221 577 (8 919 131 to 11 657 411) | 4 269 (3 786 to 4 813) | 9.1 (1.6 to 14.4) |
| Burundi | 159 367 (132 203 to 193 238) | 1 835 (1 595 to 2 096) | 9.0 (-14.6 to -3.7) | 261 510 (227 444 to 300 475) | 3 942 (3 496 to 4 447) | -4.5 (-6.5 to -2.2) |
| Comoros | 12 392 (10 567 to 14 644) | 1 952 (1 705 to 2 245) | -5.7 (-11.2 to -0.5) | 23 561 (20 684 to 26 718) | 4 172 (3 707 to 4 708) | -5.1 (-7.1 to -2.9) |
| Djibouti | 18 893 (16 201 to 22 165) | 2 079 (1 830 to 2 378) | -5.5 (-10.9 to 0.2) | 36 025 (31 538 to 41 136) | 4 390 (3 899 to 4 945) | -4.3 (-5.9 to -2.5) |
| Eritrea | 93 626 (79 068 to 110 944) | 2 028 (1 790 to 2 297) | 2.0 (-2.8 to 8.1) | 154 710 (134 738 to 177 045) | 4 167 (3 708 to 4 675) | 1.8 (0.2 to 3.6) |
| Ethiopia | 1 462 066 (1 219 718 to 1 768 436) | 1 861 (1 614 to 2 167) | -7.3 (-11.6 to -2.7) | 2 378 021 (2 071 706 to 2 715 632) | 3 908 (3 457 to 4 411) | -4.9 (-6.6 to -3.1) |
| Kenya | 953 132 (803 115 to 1 132 723) | 2 437 (2 121 to 2 803) | 11.2 (6.8 to 15.1) | 1 638 927 (1 417 177 to 1 896 755) | 5 268 (4 636 to 6 012) | 13.4 (11.2 to 15.6) |
| Madagascar | 406 930 (338 817 to 489 470) | 1 902 (1 661 to 2 177) | -2.5 (-8.6 to 3.0) | 679 831 (591 095 to 777 498) | 4 120 (3 638 to 4 638) | -3.1 (-5.3 to -0.6) |
| Malawi | 267 854 (226 087 to 319 449) | 1 932 (1 712 to 2 190) | 1.1 (-3.7 to 6.2) | 436 216 (382 584 to 498 067) | 3 998 (3 554 to 4 498) | 2.8 (0.7 to 4.7) |
| Mozambique | 489 770 (409 743 to 587 058) | 2 152 (1 891 to 2 444) | 9.9 (4.0 to 16.0) | 748 843 (654 444 to 851 070) | 4 364 (3 889 to 4 898) | 7.1 (5.2 to 9.4) |
| Rwanda | 198 008 (166 126 to 238 037) | 1 938 (1 699 to 2 225) | -8.4 (-13.9 to -2.9) | 338 370 (295 308 to 387 167) | 4 053 (3 591 to 4 559) | -6.6 (-8.7 to -4.8) |
| Somalia | 248 751 (206 588 to 303 438) | 1 842 (1 608 to 2 109) | 8.1 (2.9 to 12.8) | 404 757 (351 109 to 464 115) | 4 003 (3 534 to 4 505) | 3.7 (7.7 to 11.9) |
| South Sudan | 160 057 (134 678 to 194 096) | 2 035 (1 785 to 2 337) | 1.6 (-3.8 to 6.5) | 255 470 (222 993 to 291 637) | 4 347 (3 859 to 4 901) | 4.4 (2.3 to 6.5) |
| Tanzania | 906 582 (773 546 to 1 081 957) | 2 099 (1 857 to 2 376) | 2.6 (-2.9 to 8.0) | 1 496 145 (1 310 157 to 1 703 384) | 4 362 (3 885 to 4 911) | 3.4 (1.7 to 5.0) |
| Uganda | 590 422 (491 649 to 721 514) | 1 886 (1 651 to 2 170) | 13.0 (8.2 to 17.7) | 905 569 (785 266 to 1 042 560) | 3 998 (3 537 to 4 494) | 15.1 (12.8 to 17.6) |
| Zambia | 285 704 (243 159 to 342 294) | 2 193 (1 946 to 2 487) | 4.5 (-10.1 to 0.4) | 457 213 (398 984 to 525 604) | 4 458 (3 965 to 5 011) | -3.7 (-5.7 to -1.7) |
| Southern sub-Saharan Africa | 783 539 (660 901 to 927 509) | 1 094 (939 to 1 277) | 6.9 (3.4 to 10.3) | 1 588 819 (1 386 207 to 1 814 625) | 2 364 (2 084 to 2 685) | 10.0 (8.2 to 12.1) |
| Botswana | 22 497 (18 558 to 26 839) | 1 121 (961 to 1 304) | 3.9 (-1.4 to 9.4) | 44 067 (38 357 to 50 964) | 2 349 (2 071 to 2 672) | 3.6 (1.3 to 6.4) |
| Lesotho | 18 638 (15 651 to 22 158) | 1 081 (933 to 1 248) | 16.9 (12.1 to 21.9) | 35 456 (30 871 to 40 448) | 2 285 (2 018 to 2 583) | 15.0 (12.6 to 17.9) |
| Namibia | 23 192 (19 459 to 27 532) | 1 110 (959 to 1 289) | 1.3 (-4.3 to 6.6) | 42 942 (37 528 to 49 369) | 2 335 (2 072 to 2 645) | 2.1 (-0.3 to 4.7) |
| South Africa | 565 374 (477 501 to 669 633) | 1 086 (928 to 1 278) | 7.7 (3.6 to 11.5) | 1 199 313 (1 048 571 to 1 371 373) | 2 354 (2 076 to 2 674) | 10.6 (8.6 to 12.9) |
| Swaziland | 10 647 (8 842 to 12 717) | 1 102 (955 to 1 271) | 6.1 (1.2 to 11.6) | 18 886 (16 545 to 21 681) | 2 314 (2 054 to 2 623) | 6.7 (4.4 to 9.0) |
| Zimbabwe | 143 192 (119 532 to 172 513) | 1 168 (1 018 to 1 349) | 6.8 (1.1 to 11.7) | 248 155 (214 732 to 283 358) | 2 469 (2 181 to 2 789) | 9.9 (7.3 to 12.4) |
| Western sub-Saharan Africa | 4 887 207 (4 090 246 to 5 814 346) | 1 377 (1 202 to 1 573) | -4.6 (-9.4 to 0.4) | 8 060 548 (7 056 412 to 9 186 624) | 2 964 (2 631 to 3 333) | -5.2 (-6.3 to -4.1) |
| Benin | 124 717 (103 339 to 150 605) | 1 291 (1 115 to 1 487) | -5.6 (-11.7 to 0.0) | 205 588 (178 823 to 234 573) | 2 842 (2 513 to 3 193) | -4.7 (-6.3 to -2.9) |
| Burkina Faso | 261 546 (224 754 to 307 546) | 1 620 (1 436 to 1 830) | -4.0 (-8.9 to 1.1) | 421 164 (371 412 to 475 402) | 3 334 (2 980 to 3 739) | -4.1 (-5.7 to -2.5) |
| Cameroon | 316 255 (265 044 to 377 492) | 1 382 (1 211 to 1 587) | -11.5 (-17.0 to -6.1) | 524 826 (458 718 to 600 423) | 2 977 (2 642 to 3 355) | -10.2 (-11.9 to -8.4) |
| Cape Verde | 6 579 (5 539 to 7 758) | 1 222 (1 049 to 1 425) | 11.6 (6.7 to 16.3) | 13 633 (12 003 to 15 484) | 2 709 (2 396 to 3 067) | 9.8 (7.4 to 12.1) |
| Chad | 160 558 (132 985 to 194 187) | 1 325 (1 156 to 1 520) | 6.5 (1.0 to 11.8) | 250 268 (218 617 to 283 549) | 2 962 (2 625 to 3 329) | 8.6 (6.3 to 10.9) |
| Cote d'Ivoire | 280 607 (235 856 to 334 523) | 1 369 (1 193 to 1 563) | -8.3 (-13.7 to -2.6) | 486 432 (424 637 to 558 341) | 2 991 (2 652 to 3 366) | -7.3 (-8.9 to -5.3) |
| The Gambia | 24 003 (19 807 to 28 674) | 1 319 (1 139 to 1 514) | -2.8 (-8.4 to 2.0) | 40 273 (35 115 to 45 899) | 2 885 (2 554 to 3 246) | -2.8 (-4.6 to -0.8) |
| Ghana | 393 890 (337 465 to 462 131) | 1 584 (1 396 to 1 797) | 10.2 (4.6 to 16.1) | 689 807 (608 315 to 781 358) | 3 246 (2 888 to 3 645) | 6.3 (4.2 to 8.4) |
| Guinea | 129 686 (108 858 to 154 865) | 1 304 (1 135 to 1 497) | -5.1 (-10.2 to -0.2) | 219 808 (192 536 to 250 433) | 2 895 (2 573 to 3 263) | -4.5 (-6.3 to -2.4) |
| Guinea-Bissau | 18 835 (15 649 to 22 676) | 1 234 (1 077 to 1 422) | -11.3 (-16.9 to -5.9) | 31 297 (27 174 to 36 023) | 2 713 (2 397 to 3 059) | -10.4 (-12.2 to -8.7) |
| Liberia | 49 085 (40 484 to 59 226) | 1 204 (1 038 to 1 400) | -7.6 (-14.3 to -1.4) | 84 817 (73 614 to 97 168) | 2 702 (2 374 to 3 044) | -6.5 (-8.4 to -4.5) |
| Mali | 214 790 (176 951 to 259 269) | 1 276 (1 103 to 1 469) | -3.2 (-9.5 to 2.4) | 346 839 (302 244 to 397 309) | 2 841 (2 504 to 3 208) | -2.7 (-5.0 to -0.6) |
| Mauritania | 45 865 (38 411 to 54 923) | 1 352 (1 175 to 1 566) | -11.8 (-17.7 to -5.4) | 79 675 (69 860 to 90 178) | 2 965 (2 635 to 3 323) | -10.2 (-12.0 to -8.1) |

| Location | Incidence [95% UI] | | | Prevalence [95% UI] | | |
|-----------------------|---------------------------------------|---|---|---------------------------------------|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Niger | 216 174 (176 516 to 268 586) | 1 248 (1 081 to 1 452) | -5.5 (-11.6 to 1.0) | 331 276 (288 335 to 378 987) | 2 805 (2 485 to 3 159) | -6.1 (-7.0 to -3.1) |
| Nigeria | 2 309 653 (1 926 332 to 2 758 290) | 1 370 (1 183 to 1 576) | -5.9 (-12.0 to -0.1) | 3 751 042 (3 287 478 to 4 287 688) | 2 937 (2 604 to 3 310) | -7.2 (-8.9 to -5.4) |
| Sao Tome and Principe | 3 436 (3 000 to 3 979) | 1 975 (1 755 to 2 234) | -1.4 (-7.1 to 4.9) | 6 000 (5 300 to 6 800) | 4 192 (3 724 to 4 736) | -6.3 (-8.5 to -4.0) |
| Senegal | 166 558 (139 141 to 197 758) | 1 331 (1 155 to 1 532) | -6.9 (-12.4 to -0.5) | 290 933 (255 447 to 329 724) | 2 917 (2 597 to 3 276) | -7.1 (-8.6 to -5.5) |
| Sierra Leone | 83 184 (69 008 to 99 780) | 1 258 (1 086 to 1 447) | -5.6 (-11.5 to -0.2) | 142 636 (124 135 to 162 832) | 2 772 (2 449 to 3 129) | -5.8 (-7.6 to -4.1) |
| Togo | 81 738 (67 864 to 98 041) | 1 256 (1 088 to 1 452) | -5.8 (-11.7 to -0.1) | 144 156 (125 451 to 164 284) | 2 754 (2 438 to 3 094) | -5.0 (-6.8 to -3.0) |

| Location | Mortality (95% UI) | | |
|---|--|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Global | 695 771 (644 927 to 741 720) | 9.2 (8.5 to 9.8) | -5.9 (-13.7 to 3.5) |
| Low SDI | 93 850 (86 459 to 104 963) | 15.1 (13.9 to 17.1) | -10.8 (-22.4 to 6.0) |
| Low-middle SDI | 157 311 (144 698 to 175 240) | 15.3 (14.1 to 17.2) | -2.7 (-19.3 to 18.3) |
| Middle SDI | 192 591 (167 707 to 212 051) | 10.1 (8.9 to 11.0) | -8.3 (-17.6 to 5.7) |
| High-middle SDI | 105 593 (93 147 to 112 263) | 6.7 (5.9 to 7.1) | -2.2 (-19.4 to 9.2) |
| High SDI | 143 826 (140 311 to 147 243) | 5.7 (5.6 to 5.9) | -16.6 (-18.8 to -14.4) |
| Central Europe, Eastern Europe, and Central Asia | 35 374 (34 224 to 36 301) | 6.3 (6.1 to 6.5) | -25.8 (-28.2 to -23.6) |
| Central Asia | 2 868 (2 682 to 3 094) | 3.6 (3.4 to 3.9) | -33.5 (-38.0 to -27.9) |
| Armenia | 88 (83 to 94) | 2.4 (2.2 to 2.5) | -68.5 (-71.1 to -65.8) |
| Azerbaijan | 258 (205 to 360) | 2.9 (2.3 to 3.8) | -32.3 (-48.4 to -3.1) |
| Georgia | 262 (243 to 280) | 5.1 (4.7 to 5.4) | -17.4 (-24.8 to -9.6) |
| Kazakhstan | 780 (706 to 851) | 4.5 (4.1 to 4.8) | -18.0 (-25.3 to -11.0) |
| Kyrgyzstan | 132 (120 to 144) | 2.5 (2.3 to 2.7) | -65.3 (-68.5 to -61.8) |
| Mongolia | 206 (149 to 253) | 6.9 (5.1 to 8.4) | -9.1 (-27.4 to 14.5) |
| Tajikistan | 311 (269 to 388) | 4.0 (3.5 to 4.9) | -34.6 (-45.7 to -11.4) |
| Turkmenistan | 106 (94 to 118) | 2.6 (2.3 to 2.8) | -35.7 (-43.5 to -28.0) |
| Uzbekistan | 725 (635 to 820) | 2.9 (2.6 to 3.3) | -36.1 (-43.7 to -28.2) |
| Central Europe | 14 438 (13 990 to 14 908) | 7.1 (6.9 to 7.4) | -47.0 (-48.9 to -45.0) |
| Albania | 80 (64 to 101) | 2.2 (1.8 to 2.7) | -3.1 (-24.2 to 21.2) |
| Bosnia and Herzegovina | 118 (103 to 136) | 2.2 (2.0 to 2.5) | -21.3 (-41.6 to 15.0) |
| Bulgaria | 501 (462 to 540) | 4.2 (3.9 to 4.6) | -30.7 (-36.3 to -24.6) |
| Croatia | 1 150 (1 072 to 1 237) | 12.8 (11.9 to 13.7) | 24.9 (14.4 to 35.9) |
| Czech Republic | 1 461 (1 346 to 1 580) | 7.2 (6.6 to 7.7) | -72.5 (-74.6 to -70.2) |
| Hungary | 1 874 (1 767 to 1 984) | 9.4 (8.8 to 9.9) | -69.1 (-71.1 to -67.1) |
| Macedonia | 99 (80 to 112) | 3.2 (2.6 to 3.7) | 36.5 (-12.3 to 73.0) |
| Montenegro | 26 (22 to 30) | 2.9 (2.5 to 3.4) | -19.0 (-31.6 to -4.0) |
| Poland | 5 567 (5 195 to 5 967) | 8.2 (7.7 to 8.8) | -31.9 (-36.9 to -26.3) |
| Romania | 1 677 (1 567 to 1 787) | 5.4 (5.0 to 5.8) | -39.8 (-44.2 to -35.6) |
| Serbia | 584 (485 to 649) | 3.9 (3.3 to 4.3) | 3.2 (-11.3 to 19.9) |
| Slovakia | 758 (638 to 856) | 9.1 (7.7 to 10.3) | -46.1 (-53.3 to -34.9) |
| Slovenia | 543 (501 to 589) | 11.6 (10.7 to 12.5) | -33.3 (-38.9 to -27.2) |

| Location | Mortality (95% UI) | | |
|----------------------------------|---|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Eastern Europe | 18 067 (17 367 to 18 629) | 6.3 (6.0 to 6.5) | -0.6 (-4.5 to 2.5) |
| Belarus | 982 (884 to 1 076) | 7.3 (6.5 to 8.0) | 7.7 (-3.6 to 18.5) |
| Estonia | 119 (103 to 136) | 5.4 (4.7 to 6.2) | -54.6 (-61.0 to -47.6) |
| Latvia | 244 (216 to 274) | 7.3 (6.4 to 8.2) | -49.5 (-55.9 to -42.8) |
| Lithuania | 474 (441 to 506) | 9.5 (8.8 to 10.2) | -17.3 (-23.9 to -10.2) |
| Moldova | 249 (232 to 267) | 4.8 (4.5 to 5.2) | -45.9 (-49.8 to -41.7) |
| Russian Federation | 12 477 (12 058 to 12 822) | 6.3 (6.1 to 6.5) | 11.6 (4.9 to 15.3) |
| Ukraine | 3 522 (3 290 to 3 790) | 5.8 (5.4 to 6.3) | -16.7 (-22.8 to -9.3) |
| High-income | 131 213 (127 836 to 134 821) | 5.4 (5.3 to 5.6) | -12.9 (-15.4 to -10.4) |
| Australasia | 3 739 (3 431 to 4 043) | 6.5 (5.9 to 7.0) | 32.1 (20.8 to 44.4) |
| Australia | 3 172 (2 863 to 3 476) | 6.5 (5.8 to 7.1) | 41.8 (28.0 to 58.0) |
| New Zealand | 567 (527 to 610) | 6.6 (6.1 to 7.1) | 0.6 (-7.2 to 8.7) |
| High-income Asia-Pacific | 16 160 (15 448 to 16 859) | 3.4 (3.2 to 3.5) | -24.1 (-27.9 to -20.1) |
| Brunei | 19 (17 to 22) | 5.9 (5.3 to 7.0) | -16.5 (-29.7 to 2.7) |
| Japan | 12 142 (11 671 to 12 623) | 2.9 (2.8 to 3.1) | -20.3 (-23.7 to -16.6) |
| South Korea | 3 834 (3 477 to 4 196) | 5.0 (4.6 to 5.5) | -22.1 (-29.6 to -14.5) |
| Singapore | 165 (151 to 179) | 2.6 (2.3 to 2.8) | -26.8 (-33.5 to -20.1) |
| High-income North America | 44 300 (43 240 to 45 357) | 6.6 (6.4 to 6.7) | 57.2 (52.9 to 61.3) |
| Canada | 5 922 (5 481 to 6 406) | 7.6 (7.0 to 8.2) | 22.0 (11.6 to 33.0) |
| Greenland | 8 (8 to 10) | 15.8 (14.3 to 18.0) | -22.5 (-33.1 to -7.7) |
| USA | 38 368 (37 389 to 39 312) | 6.4 (6.3 to 6.6) | 61.0 (56.5 to 65.2) |
| Southern Latin America | 3 143 (2 919 to 3 379) | 3.8 (3.5 to 4.1) | -22.9 (-29.0 to -16.5) |
| Argentina | 1 619 (1 464 to 1 798) | 3.0 (2.7 to 3.3) | -37.6 (-44.0 to -30.4) |
| Chile | 1 274 (1 147 to 1 411) | 5.6 (5.0 to 6.2) | 8.8 (-3.1 to 20.9) |
| Uruguay | 250 (223 to 277) | 4.2 (3.8 to 4.7) | -16.3 (-25.8 to -5.9) |
| Western Europe | 63 871 (61 445 to 66 265) | 5.9 (5.7 to 6.1) | -28.2 (-31.3 to -25.1) |
| Andorra | 9 (7 to 11) | 5.6 (4.6 to 6.9) | -16.0 (-31.2 to 3.6) |
| Austria | 1 408 (1 302 to 1 522) | 7.1 (6.6 to 7.6) | -43.8 (-48.3 to -39.1) |
| Belgium | 2 156 (1 993 to 2 329) | 8.1 (7.5 to 8.7) | 9.5 (0.1 to 19.2) |
| Cyprus | 87 (75 to 98) | 4.7 (4.1 to 5.3) | -36.1 (-47.6 to -18.9) |
| Denmark | 827 (765 to 898) | 6.5 (6.0 to 7.0) | -58.7 (-62.1 to -54.6) |
| Finland | 1 339 (1 252 to 1 433) | 10.2 (9.5 to 10.9) | -15.1 (-21.4 to -8.0) |

| Location | Mortality (95% UI) | | |
|------------------------------------|--|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| France | 13 812 (12 711 to 14 953) | 7.8 (7.2 to 8.4) | -38.6 (-44.1 to -32.5) |
| Germany | 14 328 (12 997 to 15 881) | 6.5 (5.9 to 7.2) | -23.6 (-31.9 to -14.6) |
| Greece | 672 (626 to 723) | 2.8 (2.6 to 3.0) | -41.0 (-45.2 to -36.6) |
| Iceland | 35 (33 to 38) | 5.8 (5.4 to 6.2) | -7.1 (-14.7 to 1.5) |
| Ireland | 323 (296 to 352) | 4.4 (4.0 to 4.8) | -32.5 (-38.4 to -25.6) |
| Israel | 369 (339 to 399) | 2.9 (2.7 to 3.2) | -29.3 (-35.4 to -22.5) |
| Italy | 7 665 (7 068 to 8 314) | 4.2 (3.9 to 4.5) | -45.4 (-50.0 to -40.4) |
| Luxembourg | 82 (73 to 92) | 7.7 (6.9 to 8.6) | -17.0 (-26.8 to -6.6) |
| Malta | 55 (51 to 60) | 6.4 (5.9 to 6.9) | -17.8 (-25.2 to -10.0) |
| Netherlands | 3 465 (3 203 to 3 740) | 9.2 (8.6 to 10.0) | 41.6 (29.3 to 55.3) |
| Norway | 1 014 (973 to 1 055) | 8.8 (8.4 to 9.2) | -21.4 (-25.1 to -17.9) |
| Portugal | 784 (722 to 843) | 3.2 (2.9 to 3.4) | -52.4 (-56.6 to -48.4) |
| Spain | 3 996 (3 708 to 4 301) | 3.6 (3.3 to 3.8) | -19.7 (-26.0 to -13.5) |
| Sweden | 1 670 (1 560 to 1 786) | 6.6 (6.2 to 7.0) | 2.8 (-4.8 to 11.1) |
| Switzerland | 1 929 (1 785 to 2 083) | 9.3 (8.6 to 10.0) | -41.1 (-46.0 to -35.7) |
| United Kingdom | 7 781 (7 617 to 7 958) | 5.4 (5.3 to 5.6) | 12.3 (9.5 to 15.1) |
| Latin America and Caribbean | 35 929 (34 977 to 36 769) | 6.5 (6.3 to 6.6) | -22.5 (-25.0 to -20.3) |
| Andean Latin America | 2 568 (2 263 to 2 824) | 4.6 (4.1 to 5.1) | -14.8 (-27.1 to -3.1) |
| Bolivia | 518 (387 to 653) | 6.2 (4.7 to 7.8) | -22.0 (-38.3 to -0.3) |
| Ecuador | 966 (870 to 1 070) | 6.5 (5.9 to 7.2) | -19.8 (-27.8 to -10.6) |
| Peru | 1 084 (818 to 1 312) | 3.4 (2.6 to 4.1) | -5.8 (-34.1 to 20.5) |
| Caribbean | 3 800 (3 485 to 4 103) | 7.4 (6.8 to 8.0) | 2.8 (-5.5 to 11.6) |
| Antigua and Barbuda | 2 (2 to 2) | 2.2 (2.1 to 2.4) | 7.9 (-3.0 to 20.0) |
| The Bahamas | 13 (12 to 15) | 4.1 (3.7 to 4.5) | 7.9 (-3.5 to 20.7) |
| Barbados | 13 (12 to 14) | 2.7 (2.5 to 3.0) | 9.9 (-1.2 to 21.5) |
| Belize | 12 (11 to 12) | 4.5 (4.1 to 4.8) | 11.4 (-2.3 to 24.8) |
| Bermuda | 4 (3 to 4) | 3.0 (2.7 to 3.2) | -17.7 (-26.5 to -8.7) |
| Cuba | 2 592 (2 341 to 2 852) | 12.9 (11.6 to 14.2) | 12.2 (0.4 to 25.2) |
| Dominica | 3 (3 to 3) | 3.3 (3.0 to 3.6) | 37.0 (22.0 to 52.3) |
| Dominican Republic | 188 (152 to 245) | 2.0 (1.6 to 2.6) | -17.1 (-34.3 to 13.9) |
| Grenada | 7 (7 to 8) | 4.3 (4.0 to 4.6) | -4.6 (-13.6 to 5.1) |
| Guyana | 40 (35 to 45) | 7.3 (6.5 to 8.2) | -2.6 (-15.1 to 10.8) |

| Location | Mortality (95% UI) | | |
|-------------------------------------|--------------------------------------|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Haiti | 315 (223 to 425) | 5.6 (4.1 to 7.6) | -17.1 (-32.6 to 2.3) |
| Jamaica | 69 (57 to 79) | 2.2 (1.8 to 2.6) | 35.0 (9.5 to 58.0) |
| Puerto Rico | 304 (280 to 328) | 4.3 (3.9 to 4.6) | 0.9 (-7.6 to 10.0) |
| Saint Lucia | 6 (6 to 7) | 3.2 (2.9 to 3.4) | -4.6 (-13.6 to 5.5) |
| Saint Vincent and the Grenadines | 7 (7 to 8) | 5.3 (4.8 to 5.7) | 24.8 (11.9 to 38.9) |
| Suriname | 27 (24 to 30) | 5.2 (4.7 to 5.8) | 10.5 (-3.0 to 23.9) |
| Trinidad and Tobago | 54 (44 to 64) | 3.3 (2.8 to 4.0) | -26.5 (-39.5 to -12.4) |
| Virgin Islands | 8 (7 to 9) | 5.2 (4.4 to 5.8) | 5.2 (-13.8 to 22.4) |
| Central Latin America | 12 069 (11 495 to 12 478) | 5.3 (5.0 to 5.4) | -43.0 (-46.7 to -40.8) |
| Colombia | 1 808 (1 606 to 2 037) | 3.4 (3.0 to 3.8) | -52.6 (-58.3 to -46.5) |
| Costa Rica | 324 (289 to 350) | 6.4 (5.7 to 7.0) | -32.7 (-40.5 to -25.7) |
| El Salvador | 486 (398 to 582) | 8.2 (6.7 to 9.8) | -8.1 (-25.8 to 22.2) |
| Guatemala | 849 (754 to 946) | 7.7 (6.9 to 8.5) | -27.5 (-36.1 to -18.8) |
| Honduras | 185 (139 to 253) | 3.0 (2.2 to 4.2) | -18.5 (-42.7 to 15.2) |
| Mexico | 6 827 (6 405 to 7 016) | 6.2 (5.8 to 6.4) | -43.3 (-47.9 to -41.5) |
| Nicaragua | 220 (190 to 253) | 4.7 (4.1 to 5.4) | -19.2 (-30.8 to -2.9) |
| Panama | 154 (142 to 167) | 3.8 (3.5 to 4.1) | -32.5 (-39.0 to -25.6) |
| Venezuela | 1 216 (1 064 to 1 400) | 4.6 (4.0 to 5.2) | -35.4 (-43.9 to -25.6) |
| Tropical Latin America | 17 493 (16 920 to 17 936) | 7.9 (7.7 to 8.1) | -8.2 (-11.8 to -5.2) |
| Brazil | 17 200 (16 626 to 17 651) | 8.0 (7.7 to 8.2) | -8.8 (-12.5 to -5.8) |
| Paraguay | 293 (224 to 349) | 5.8 (4.5 to 7.0) | 34.2 (1.7 to 69.1) |
| North Africa and Middle East | 21 444 (17 796 to 23 324) | 4.9 (4.0 to 5.4) | -19.0 (-28.7 to 5.0) |
| North Africa and Middle East | 21 444 (17 796 to 23 324) | 4.9 (4.0 to 5.4) | -19.0 (-28.7 to 5.0) |
| Afghanistan | 2 540 (2 091 to 3 098) | 13.8 (12.0 to 16.0) | -20.1 (-40.7 to 38.9) |
| Algeria | 1 274 (1 017 to 1 635) | 3.7 (3.1 to 4.7) | -18.9 (-31.9 to 7.1) |
| Bahrain | 18 (12 to 22) | 1.6 (1.2 to 2.0) | -37.9 (-50.1 to -15.4) |
| Egypt | 2 750 (1 971 to 3 597) | 4.4 (3.1 to 5.8) | -13.5 (-31.5 to 10.3) |
| Iran | 2 715 (2 547 to 3 135) | 3.9 (3.7 to 4.5) | -26.3 (-36.1 to -5.2) |
| Iraq | 352 (308 to 427) | 1.3 (1.1 to 1.4) | -56.9 (-69.2 to -34.3) |
| Jordan | 165 (144 to 192) | 2.4 (2.1 to 2.8) | -34.2 (-46.8 to -14.1) |
| Kuwait | 94 (84 to 105) | 2.4 (2.1 to 2.6) | -23.9 (-32.0 to -14.8) |
| Lebanon | 304 (186 to 496) | 5.8 (3.6 to 8.8) | -25.0 (-52.7 to 12.3) |

| Location | Mortality (95% UI) | | |
|---|---|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Libya | 239 (149 to 325) | 4.6 (3.0 to 6.2) | -15.5 (-46.5 to 13.4) |
| Morocco | 1 251 (975 to 1 571) | 4.1 (3.2 to 5.1) | -11.3 (-28.9 to 16.7) |
| Palestine | 115 (82 to 137) | 3.5 (2.8 to 4.0) | -29.9 (-43.9 to -11.4) |
| Oman | 75 (60 to 93) | 3.2 (2.5 to 3.9) | -26.8 (-47.4 to 6.6) |
| Qatar | 78 (41 to 108) | 3.6 (2.6 to 4.6) | -25.3 (-46.1 to 3.6) |
| Saudi Arabia | 1 785 (1 159 to 2 522) | 8.8 (5.5 to 12.2) | -18.4 (-52.1 to 33.1) |
| Sudan | 1 199 (886 to 1 609) | 4.5 (3.3 to 6.1) | -21.8 (-41.9 to 10.4) |
| Syria | 274 (218 to 337) | 2.1 (1.7 to 2.7) | -24.1 (-41.8 to 3.1) |
| Tunisia | 347 (265 to 434) | 3.1 (2.4 to 3.9) | -17.6 (-37.2 to 10.0) |
| Turkey | 4 536 (3 290 to 5 270) | 5.4 (3.9 to 6.2) | -25.1 (-40.6 to 5.8) |
| United Arab Emirates | 423 (228 to 610) | 4.6 (3.1 to 6.0) | -23.1 (-51.1 to 18.4) |
| Yemen | 889 (610 to 1 225) | 4.9 (3.3 to 6.5) | -16.1 (-40.0 to 42.5) |
| South Asia | 239 791 (220 244 to 270 634) | 22.0 (20.0 to 25.0) | -2.7 (-19.6 to 20.4) |
| South Asia | 239 791 (220 244 to 270 634) | 22.0 (20.0 to 25.0) | -2.7 (-19.6 to 20.4) |
| Bangladesh | 6 304 (5 349 to 7 374) | 5.9 (5.1 to 6.8) | -28.9 (-48.0 to 0.1) |
| Bhutan | 95 (70 to 124) | 17.6 (13.1 to 22.3) | -22.9 (-40.3 to 4.6) |
| India | 221 298 (201 395 to 251 201) | 25.4 (23.0 to 29.2) | -7.4 (-23.6 to 15.4) |
| Nepal | 2 911 (2 253 to 3 619) | 16.4 (12.8 to 20.1) | -12.5 (-29.5 to 13.6) |
| Pakistan | 9 182 (6 111 to 11 763) | 8.8 (6.0 to 11.2) | -0.3 (-31.3 to 41.4) |
| Southeast Asia, East Asia, and Oceania | 193 933 (158 885 to 209 800) | 8.9 (7.4 to 9.6) | -3.8 (-24.8 to 12.1) |
| East Asia | 140 843 (107 347 to 155 273) | 8.5 (6.6 to 9.3) | 12.1 (-23.6 to 32.2) |
| China | 134 773 (102 016 to 148 952) | 8.6 (6.7 to 9.5) | 12.8 (-23.9 to 33.4) |
| North Korea | 1 757 (1 355 to 2 219) | 6.7 (5.2 to 8.3) | 28.5 (-5.1 to 68.0) |
| Taiwan (Province of China) | 2 045 (1 921 to 2 182) | 5.7 (5.3 to 6.0) | -26.7 (-31.8 to -21.2) |
| Oceania | 506 (367 to 661) | 7.5 (6.0 to 9.0) | 12.7 (-7.0 to 33.9) |
| American Samoa | 2 (1 to 2) | 4.8 (4.2 to 5.4) | 5.7 (-13.7 to 29.8) |
| Federated States of Micronesia | 4 (3 to 5) | 6.1 (4.7 to 7.4) | 11.9 (-16.6 to 45.6) |
| Fiji | 21 (18 to 24) | 3.4 (3.0 to 3.9) | 7.4 (-13.9 to 42.0) |
| Guam | 7 (6 to 8) | 4.6 (4.0 to 5.2) | 26.8 (-0.6 to 57.4) |
| Kiribati | 2 (1 to 2) | 2.4 (1.9 to 2.9) | -0.8 (-18.0 to 19.4) |
| Marshall Islands | 2 (1 to 3) | 7.0 (5.6 to 8.6) | 16.9 (-9.0 to 47.1) |
| Northern Mariana Islands | 2 (2 to 2) | 5.2 (4.4 to 5.9) | 4.2 (-22.9 to 32.0) |

| Location | Mortality (95% UI) | | |
|-----------------------------------|--------------------------------------|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Papua New Guinea | 317 (193 to 460) | 6.5 (4.4 to 8.5) | 20.3 (-11.8 to 51.7) |
| Samoa | 7 (5 to 8) | 5.4 (4.2 to 6.7) | 24.4 (-4.9 to 59.3) |
| Solomon Islands | 101 (85 to 119) | 31.2 (27.0 to 35.4) | -11.5 (-28.5 to 8.1) |
| Tonga | 4 (3 to 4) | 5.3 (4.3 to 6.3) | -5.8 (-29.3 to 23.0) |
| Vanuatu | 10 (7 to 13) | 6.2 (4.5 to 8.1) | 22.6 (-11.6 to 60.4) |
| Southeast Asia | 52 585 (49 148 to 57 098) | 10.5 (9.8 to 11.3) | -29.8 (-39.8 to -13.0) |
| Cambodia | 1 681 (1 452 to 1 944) | 17.5 (15.3 to 20.1) | -6.4 (-23.7 to 17.9) |
| Indonesia | 18 244 (16 924 to 20 366) | 10.9 (10.1 to 12.0) | -44.8 (-54.6 to -28.5) |
| Laos | 406 (311 to 508) | 9.9 (7.7 to 12.4) | 5.5 (-28.6 to 39.9) |
| Malaysia | 831 (626 to 978) | 3.8 (2.9 to 4.5) | -18.3 (-36.6 to 14.4) |
| Maldives | 15 (13 to 17) | 5.0 (4.4 to 5.7) | -44.2 (-58.7 to -8.6) |
| Mauritius | 65 (59 to 72) | 4.4 (3.9 to 4.8) | 31.5 (17.8 to 45.4) |
| Myanmar | 6 872 (5 953 to 7 929) | 17.4 (15.3 to 19.9) | -15.7 (-32.6 to 7.9) |
| Philippines | 3 921 (3 478 to 4 411) | 6.2 (5.5 to 6.9) | 57.5 (39.7 to 77.6) |
| Sri Lanka | 2 147 (1 783 to 2 568) | 10.4 (8.7 to 12.3) | -3.3 (-27.4 to 24.6) |
| Seychelles | 6 (5 to 7) | 6.2 (5.2 to 7.1) | -3.6 (-21.4 to 13.8) |
| Thailand | 3 602 (3 161 to 4 143) | 4.0 (3.5 to 4.6) | -50.6 (-60.1 to -32.0) |
| Timor-Leste | 63 (47 to 77) | 8.4 (6.7 to 10.2) | 18.6 (-15.9 to 60.4) |
| Vietnam | 14 662 (12 524 to 17 136) | 18.0 (15.4 to 21.0) | -2.7 (-26.5 to 29.4) |
| Sub-Saharan Africa | 38 086 (34 089 to 44 273) | 9.5 (8.6 to 11.1) | -14.1 (-24.6 to 0.0) |
| Central sub-Saharan Africa | 3 387 (2 742 to 4 773) | 7.5 (6.2 to 9.7) | -8.1 (-23.9 to 13.9) |
| Angola | 855 (677 to 1 174) | 9.2 (7.3 to 12.3) | -10.9 (-32.5 to 20.3) |
| Central African Republic | 146 (94 to 249) | 7.9 (5.9 to 11.2) | -10.5 (-33.5 to 12.6) |
| Congo (Brazzaville) | 168 (110 to 257) | 8.1 (5.3 to 12.1) | -16.9 (-39.9 to 11.8) |
| DR Congo | 2 111 (1 564 to 3 049) | 7.0 (5.4 to 9.1) | -5.4 (-26.2 to 20.5) |
| Equatorial Guinea | 33 (20 to 53) | 7.5 (4.8 to 11.8) | -18.8 (-49.6 to 30.2) |
| Gabon | 75 (54 to 109) | 8.3 (6.0 to 11.7) | -20.0 (-44.2 to 7.5) |
| Eastern sub-Saharan Africa | 16 221 (14 760 to 17 956) | 12.2 (11.2 to 13.5) | -16.9 (-28.4 to -2.3) |
| Burundi | 389 (305 to 487) | 12.0 (9.6 to 14.7) | -26.2 (-40.8 to -1.1) |
| Comoros | 35 (28 to 45) | 9.6 (7.8 to 12.4) | -21.4 (-38.7 to -0.2) |
| Djibouti | 41 (29 to 58) | 10.0 (7.4 to 13.6) | -18.1 (-40.8 to 8.2) |
| Eritrea | 207 (153 to 282) | 11.6 (8.8 to 15.1) | -16.4 (-37.1 to 10.9) |

| Location | Mortality (95% UI) | | |
|------------------------------------|--------------------------------------|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Ethiopia | 4 461 (3 845 to 5 132) | 13.1 (11.5 to 14.9) | -27.5 (-42.9 to -3.3) |
| Kenya | 2 125 (1 898 to 2 485) | 12.7 (11.3 to 14.5) | -8.2 (-33.4 to 15.7) |
| Madagascar | 726 (564 to 939) | 8.6 (6.8 to 10.9) | -22.8 (-35.3 to -8.1) |
| Malawi | 923 (797 to 1 077) | 13.2 (11.4 to 15.4) | -14.5 (-31.2 to 20.0) |
| Mozambique | 1 471 (1 085 to 1 821) | 15.5 (12.1 to 19.0) | -7.4 (-29.4 to 25.4) |
| Rwanda | 499 (404 to 629) | 11.1 (9.1 to 13.8) | -31.8 (-46.7 to -5.7) |
| Somalia | 500 (363 to 694) | 10.3 (7.8 to 13.6) | -10.8 (-31.4 to 22.0) |
| South Sudan | 346 (261 to 466) | 10.8 (7.9 to 14.4) | -10.7 (-32.0 to 21.5) |
| Tanzania | 2 585 (2 240 to 3 029) | 11.5 (9.8 to 13.8) | -12.0 (-26.8 to 9.2) |
| Uganda | 1 094 (846 to 1 351) | 9.3 (7.4 to 11.3) | -14.5 (-39.0 to 16.4) |
| Zambia | 811 (701 to 933) | 14.7 (12.7 to 17.0) | -18.9 (-36.3 to 0.2) |
| Southern sub-Saharan Africa | 1 569 (1 461 to 1 796) | 3.1 (2.9 to 3.6) | -20.6 (-36.9 to -2.0) |
| Botswana | 44 (34 to 56) | 3.7 (3.0 to 4.6) | -22.2 (-40.7 to 5.3) |
| Lesotho | 54 (41 to 68) | 5.1 (3.9 to 6.3) | -2.1 (-35.7 to 38.2) |
| Namibia | 57 (49 to 68) | 4.3 (3.7 to 5.1) | -23.5 (-38.7 to -2.9) |
| South Africa | 1 036 (933 to 1 186) | 2.6 (2.3 to 2.9) | -25.4 (-38.9 to -5.1) |
| Swaziland | 22 (17 to 28) | 4.4 (3.4 to 5.5) | -20.0 (-42.2 to 8.5) |
| Zimbabwe | 356 (262 to 455) | 6.7 (5.0 to 8.7) | 8.0 (-22.0 to 34.7) |
| Western sub-Saharan Africa | 16 911 (14 329 to 20 729) | 10.2 (8.6 to 12.4) | -14.4 (-26.5 to 3.3) |
| Benin | 411 (330 to 501) | 9.7 (7.9 to 11.8) | -19.0 (-34.7 to 0.9) |
| Burkina Faso | 1 249 (1 081 to 1 438) | 15.7 (13.8 to 17.7) | -12.7 (-25.9 to 6.1) |
| Cameroon | 1 164 (933 to 1 429) | 11.8 (9.6 to 14.5) | -18.0 (-34.4 to 1.4) |
| Cape Verde | 11 (9 to 13) | 2.2 (1.9 to 2.7) | -35.1 (-48.2 to -17.3) |
| Chad | 592 (452 to 792) | 11.0 (8.1 to 15.2) | -1.9 (-20.0 to 23.4) |
| Cote d'Ivoire | 984 (792 to 1 248) | 11.3 (9.1 to 14.2) | -12.9 (-31.6 to 8.9) |
| The Gambia | 129 (106 to 155) | 15.4 (12.9 to 18.3) | -2.4 (-27.5 to 23.0) |
| Ghana | 1 865 (1 580 to 2 141) | 15.0 (12.9 to 17.2) | 14.0 (-10.8 to 49.6) |
| Guinea | 554 (461 to 661) | 11.0 (9.1 to 13.1) | -9.3 (-32.1 to 17.3) |
| Guinea-Bissau | 68 (55 to 89) | 11.2 (9.4 to 13.8) | -24.5 (-39.5 to -5.3) |
| Liberia | 152 (115 to 193) | 8.9 (6.9 to 11.0) | -26.6 (-41.4 to -5.8) |
| Mali | 709 (546 to 977) | 9.1 (7.0 to 12.8) | -22.8 (-36.6 to -2.2) |
| Mauritania | 156 (121 to 206) | 8.8 (7.0 to 11.5) | -23.6 (-39.6 to -1.0) |

| Location | Mortality (95% UI) | | |
|-----------------------|---------------------------|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Niger | 599 (430 to 884) | 9.1 (6.4 to 13.7) | -22.5 (-36.3 to -3.1) |
| Nigeria | 7 018 (5 103 to 9 772) | 8.7 (6.3 to 12.1) | -21.2 (-41.4 to 7.2) |
| Sao Tome and Principe | 14 (10 to 19) | 13.4 (8.6 to 18.8) | 9.9 (-23.5 to 49.1) |
| Senegal | 662 (518 to 805) | 10.3 (8.3 to 12.3) | -14.1 (-28.4 to 5.1) |
| Sierra Leone | 323 (264 to 400) | 10.5 (8.7 to 12.8) | -10.9 (-30.5 to 13.9) |
| Togo | 252 (204 to 316) | 9.3 (7.7 to 11.2) | -20.9 (-37.9 to -0.3) |

| Location | YLLs (95% UI) | | | YLDs (95% UI) | | | DALYs (95% UI) | | |
|--|----------------------------|---|---|----------------------------|---|---|----------------------------|---|---|
| | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 | 2017 counts | 2017 age-standardised rates per 100,000 | Percentage change in age-standardised rates between 1990 and 2017 |
| Global | 16 688 088 | 237 | 18.5 | 35 952 699 | 243 | 9.3 | 35 940 787 | 459 | -3.1 |
| Low SDI | (15 101 897 to 17 336 830) | (196 to 229) | (31.7 to 4.2) | (13 725 429 to 26 140 433) | (173 to 330) | (10.7 to 7.9) | (12 855 695 to 22 028 289) | (187 to 347) | (-21.3 to 8.0) |
| Low-middle SDI | (9 809 061 to 13 972 961) | (132 to 193) | (26.6 to 4.4) | (8 785 368 to 13 555 556) | (127 to 224) | (12.0 to 18.3) | (8 035 272 to 12 652 744) | (148 to 257) | (-20.8 to 4.7) |
| Middle SDI | (4 783 212) | 238 | -20.3 | 3 184 082 | 214 | -21.4 | 2 767 254 | 372 | -16.3 |
| High-middle SDI | (2 312 949 to 2 700 612) | (150 to 175) | (-40.3 to -15.9) | (1 573 300 to 1 952 811) | (109 to 139) | (-16.1 to -26.7) | (1 063 448 to 1 310 943) | (137 to 189) | (-26.5 to 16.0) |
| High SDI | (1 886 178 to 1 983 251) | 103 | -29.4 | 1 036 296 to 1 200 555 | 49 | -48.2 | 470 810 to 570 345 | 32 | -13.3 |
| Central Europe, Eastern Europe, and Central Asia | (828 588 to 997 962) | 187 | -28.5 | 4 022 519 | 771 | -4.4 | 4 980 097 | 969 | -13.3 |
| Central Asia | (131 998 to 334 455) | 136 | -16.1 | (284 390 to 5 182 122) | (542 to 1 067) | (-10.5 to 6.2) | (880 499 to 1 629 438) | (742 to 257) | (-15.1 to 2.3) |
| Armenia | (217) | 22 | -79.8 | (299 878 to 574 794) | (479 to 658) | (-14.2 to -9.2) | (173 653 to 605 406) | (475 to 72) | (-26.5 to 19.2) |
| Azerbaijan | (10 720) | 108 | -46.0 | (45 940) | 470 | -60.7 | (18 784 to 50 043) | (390 to 599) | (-47.0 to 37.3) |
| Georgia | (2 867 to 16 408) | (84 to 160) | (-59.6 to 12.8) | (35 164 to 68 858) | (333 to 646) | (-10.2 to 2.3) | (42 000 to 79 483) | (147 to 281) | (-24.8 to 6.7) |
| Kazakhstan | (6 504 to 7 513) | 164 | -40.2 | (14 778 to 703) | 412 | -20.7 | (28 042) | 578 | -17.1 |
| Kyrgyzstan | (9 140 to 36 155) | 177 | -10.1 | (50 542) | 500 | -22.0 | (122 616 to 18 777) | (447 to 3765) | (-30.2 to 15.1) |
| Mongolia | (3 361 to 5 546) | 190 | -22.3 | (63 818 to 124 280) | (352 to 689) | (-12.4 to 6.1) | (95 788 to 17 645) | (526 to 866) | (-19.7 to 32.1) |
| Tajikistan | (7 327 to 12 349) | 176 | -39.7 | (17 964 to 34 851) | (336 to 609) | (-10.6 to 3.3) | (22 008 to 36 248) | (712 to 1 158) | (-11.8 to 8.0) |
| Turkmenistan | (4 015 to 21 160) | 168 | -29.8 | (50 542) | 500 | -22.0 | (56 775) | 704 | -24.2 |
| Uzbekistan | (28 880 to 36 336) | 176 | -39.7 | (17 964 to 34 851) | (336 to 609) | (-10.6 to 3.3) | (14 812 to 27 136) | (427 to 724) | (-27.5 to 18.2) |
| Central Europe | (249 888) | 159 | -47.7 | (1 452 149) | 419 | -10.6 | (1 894 234) | 1 174 | -13.4 |
| Albania | (1 692 to 2 623) | 69 | -15.7 | (1 452 149) | 419 | -10.6 | (1 360 588 to 1 508 415) | (218 to 354) | (-21.1 to 15.4) |
| Bosnia and Herzegovina | (2 589) | 55 | -23.9 | (1 452 149) | 419 | -10.6 | (1 360 588 to 1 508 415) | (218 to 354) | (-21.1 to 15.4) |
| Bulgaria | (2 589 to 2 903) | (48 to 61) | (-40.0 to 1.8) | (22 870 to 56 486) | (640 to 1 267) | (-8.4 to 13.3) | (31 409 to 90 203) | (893 to 3 139) | (0.8 to 10.7) |
| Croatia | (13 193 to 15 147) | (131 to 154) | (-44.1 to 32.9) | (66 593 to 131 476) | (650 to 1 283) | (-14.0 to 6.5) | (79 183 to 144 455) | (796 to 1 420) | (-15.9 to 14.0) |
| Czech Republic | (21 769) | 126 | -67.7 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Hungary | (20 213 to 31 408) | 173 | -17.3 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Macedonia | (6 476 to 11 393) | (60 to 80) | (-56.1 to 46.9) | (15 572 to 30 456) | (130 to 653) | (-10.6 to 3.3) | (20 143 to 36 644) | (424 to 738) | (-23.5 to 31.9) |
| Montenegro | (1 674 to 2 193) | (102 to 135) | (-51.6 to 41.5) | (27 722 to 35 055) | (86 to 162) | (-8.6 to 16.7) | (16 875 to 36 395) | (172 to 374) | (-27.5 to 18.2) |
| Poland | (97 365 to 113 222) | (174 to 203) | (-40.1 to 29.1) | (50 775 to 9 994) | (643 to 1 274) | (-11.2 to 35.9) | (5 604 to 30 781) | (707 to 3 444) | (5.6 to 42.1) |
| Romania | (46 331 to 49 655) | (88 to 103) | (-55.5 to 48.8) | (188 498 to 367 328) | (881 to 1 350) | (-28.9 to 26.4) | (232 675 to 412 907) | (865 to 1 555) | (-35.0 to 28.9) |
| Serbia | (8 786 to 12 193) | (102 to 135) | (-51.6 to 41.5) | (27 722 to 35 055) | (86 to 162) | (-8.6 to 16.7) | (16 875 to 36 395) | (172 to 374) | (-27.5 to 18.2) |
| Slovakia | (12 875 to 18 267) | (77 to 124) | (-55.0 to 31.5) | (55 120 to 108 465) | (735 to 1 480) | (-14.4 to 10.2) | (70 120 to 124 080) | (592 to 695) | (-25.1 to 16.0) |
| Slovenia | (6 895 to 7 444) | (182 to 194) | (-40.1 to 40.1) | (23 310 to 24 881) | (907 to 1 788) | (-1.8 to 6.0) | (95 178 to 61 653) | (1 088 to 1 948) | (-10.0 to 3.3) |
| Eastern Europe | (549 117 to 596 079) | 220 | -24.0 | (1 452 149) | 419 | -10.6 | (1 894 234) | 1 174 | -13.4 |
| Belarus | (27 689 to 34 287) | (230 to 249) | (-12.6 to 5.8) | (38 114 to 749 579) | (514 to 1 051) | (-6.2 to 6.4) | (9 666 184 to 31 916 952) | (747 to 2 445) | (-4.6 to -2.2) |
| Estonia | (2 517 to 6 489) | (27 to 39) | (-66.6 to 131.7) | (66 861 to 131 733) | (513 to 1 047) | (-7.5 to 2.4) | (89 278 to 162 803) | (734 to 1 311) | (-6.9 to 15.5) |
| Latvia | (6 039 to 8 893) | (60 to 80) | (-56.1 to 46.9) | (15 572 to 30 456) | (130 to 653) | (-10.6 to 3.3) | (20 143 to 36 644) | (424 to 738) | (-23.5 to 31.9) |
| Lithuania | (10 465 to 12 561) | (64 to 92) | (-38.9 to 26.8) | (27 688 to 46 493) | (666 to 1 209) | (-12.7 to 6.7) | (85 183 to 159 744) | (724 to 1 254) | (-16.5 to 14.6) |
| Moldova | (785 to 12 561) | (78 to 124) | (-55.0 to 31.5) | (55 120 to 108 465) | (735 to 1 480) | (-14.4 to 10.2) | (70 120 to 124 080) | (592 to 695) | (-25.1 to 16.0) |
| Russian Federation | (278 213 to 405 484) | (259 to 385) | (-46.6 to 47.8) | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Ukraine | (121 893 to 132 443) | (217 to 236) | (-30.2 to 16.9) | (38 114 to 749 579) | (514 to 1 051) | (-6.2 to 6.4) | (9 666 184 to 31 916 952) | (747 to 2 445) | (-4.6 to -2.2) |
| High-income | (1 705 180) | 86 | -34.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Australia | (87 201 to 144 017) | 82 | -10.7 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Austria | (34 091) | 88 | -10.7 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Canada | (100 739 to 174 099) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Denmark | (6 429) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Finland | (6 000 to 8 899) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| France | (235 005) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Germany | (222 961 to 248 489) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Greece | (61 818 to 82 824) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Italy | (153 654 to 161 071) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Japan | (76 952 to 107 071) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| South Korea | (69 039 to 84 788) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Singapore | (3 901 to 4 700) | 97 | -13.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| High-income North America | (584 915 to 615 363) | 102 | -10.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Canada | (66 502 to 71 689) | 102 | -10.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Greenland | (1 700 to 214) | 102 | -10.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| USA | (518 637 to 546 456) | 102 | -10.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| South Latin America | (99 531) | 80 | -31.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Argentina | (29 309 to 37 207) | 80 | -31.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Chile | (22 363 to 25 050) | 80 | -31.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Colombia | (18 430 to 25 050) | 80 | -31.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Costa Rica | (3 614 to 4 575) | 80 | -31.2 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Cuba | (769 672 to 801 284) | 93 | -10.1 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Dominican Republic | (120) | 26.4 | -42.7 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Ecuador | (16 151 to 19 201) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| El Salvador | (7 743 to 20 772) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Honduras | (26 047 to 30 076) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Paraguay | (1515) | 141 | -40.0 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Peru | (1 292 to 1 299) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Puerto Rico | (8 687) | 81 | -61.7 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Uruguay | (17 948 to 19 929) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Venezuela | (16 700 to 19 929) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Western Europe | (142 288 to 165 362) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| France | (142 288 to 165 362) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Germany | (177 662 to 197 657) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Greece | (11 410 to 11 410) | 71 | -44.1 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Iceland | (10 650 to 12 558) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Ireland | (40 510 to 51) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Israel | (4 686 to 6 540) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Italy | (1 347 to 13 485) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Japan | (88 219 to 123) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Malta | (733 to 847) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Netherlands | (36 334 to 39 107) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Norway | (10 650 to 12 558) | 127 | -49.5 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | -10.6 |
| Portugal | (11 410 to 11 410) | 71 | -44.1 | (1 452 149) | 419 | -10.6 | (1 452 149) | 419 | - |

| Location | YLLs(95% UI) | | | YLDs(95% UI) | | | DALYs(95% UI) | | |
|----------------------------------|----------------------|---|---|------------------------|---|---|--------------------------|---|---|
| | 2017 counts | 2017 age-standardized rates per 100,000 | Percentage change in age-standardized rates between 1990 and 2017 | 2017 counts | 2017 age-standardized rates per 100,000 | Percentage change in age-standardized rates between 1990 and 2017 | 2017 counts | 2017 age-standardized rates per 100,000 | Percentage change in age-standardized rates between 1990 and 2017 |
| | | | | | | | | | |
| United Kingdom | 99 475 | 91 | 6.6 | 358 687 | 406 | 16.1 | 458 163 | 497 | 11.1 |
| | (97 158 to 103 657) | (89 to 93) | (3.2 to 4.4) | (354 001 to 403 597) | (286 to 361) | (14.6 to 17.4) | (354 175 to 593 849) | (378 to 650) | (9.7 to 12.6) |
| Latin America and Caribbean | 831 990 | 144 | 33.4 | 3 243 792 | 213 | 16.9 | 3 075 683 | 397 | 36.4 |
| | (805 313 to 853 332) | (140 to 148) | (33.9 to 29.5) | (893 099 to 1 658 404) | (151 to 233) | (11.8 to 20.3) | (1 728 233 to 2 486 729) | (288 to 427) | (14.2 to 5.0) |
| Andean Latin America | 73 666 | 125 | 32.4 | 267 764 | 167 | 16.6 | 246 834 | 251 | 35.4 |
| | (64 005 to 82 028) | (110 to 140) | (36.4 to 9.3) | (68 412 to 130 236) | (115 to 227) | (13 to 11.6) | (38 604 to 202 617) | (239 to 350) | (17.5 to 0.5) |
| Bolivia | 15 971 | 157 | 32.0 | 16 734 | 171 | 3.9 | 32 705 | 328 | 17.1 |
| | (11 612 to 20 723) | (118 to 199) | (51.2 to 4.2) | (12 063 to 22 265) | (122 to 129) | (4.5 to 8.0) | (25 927 to 40 004) | (200 to 398) | (10.0 to 31.0) |
| Ecuador | 28 705 | 179 | 24.9 | 29 188 | 186 | 4.5 | 57 893 | 365 | 15.7 |
| | (25 462 to 32 280) | (159 to 201) | (33.3 to 15.3) | (20 843 to 39 978) | (133 to 256) | (9.5 to 0.8) | (48 905 to 68 161) | (308 to 431) | (12.1 to 9.9) |
| Peru | 28 932 | 86 | 16.6 | 49 844 | 156 | 13.8 | 79 236 | 244 | 6.4 |
| | (21 118 to 35 155) | (66 to 109) | (44.8 to 11.6) | (35 701 to 67 959) | (112 to 212) | (7.1 to 20.3) | (61 448 to 97 774) | (192 to 305) | (15.8 to 14.7) |
| Caribbean | 61 877 | 148 | 7.3 | 82 046 | 165 | 22.1 | 143 404 | 294 | 29.4 |
| | (55 871 to 67 470) | (133 to 168) | (14.4 to 0.3) | (58 184 to 131 446) | (117 to 232) | (19.0 to 15.7) | (31 845 to 127 510) | (239 to 351) | (8.8 to 32.2) |
| Antigua and Barbuda | 19 646 | 45 | 1.6 | 136 | 177 | 28.9 | 181 | 22.2 | 21.1 |
| | (19 to 46) | (41 to 49) | (5.4 to 17.4) | (96 to 184) | (64 to 186) | (23 to 33.6) | (119 to 227) | (142 to 231) | (16.4 to 27.6) |
| The Bahamas | 335 | 85 | 2.8 | 554 | 144 | 22.5 | 870 | 229 | 14.3 |
| | (285 to 349) | (77 to 93) | (8.1 to 15.6) | (394 to 780) | (102 to 197) | (18.6 to 26.5) | (702 to 1 090) | (186 to 285) | (20.2 to 20.2) |
| Barbados | 187 | 45 | 2.7 | 443 | 137 | 13.7 | 182 | 21.1 | 21.1 |
| | (171 to 205) | (41 to 50) | (7.6 to 13.7) | (186 to 744) | (97 to 187) | (23.5 to 33.6) | (570 to 932) | (143 to 233) | (15.3 to 26.5) |
| Belize | 823 | 99 | 21.8 | 511 | 157 | 37.4 | 833 | 256 | 36.9 |
| | (288 to 350) | (92 to 107) | (5.9 to 36.1) | (367 to 689) | (112 to 210) | (32.8 to 42.0) | (691 to 1 020) | (212 to 309) | (22.9 to 37.4) |
| Bermuda | 54 | 52 | 28.6 | 143 | 144 | 18.7 | 157 | 157 | 0.9 |
| | (50 to 59) | (49 to 58) | (36.2 to 18.8) | (100 to 266) | (105 to 299) | (14.3 to 22.5) | (154 to 251) | (154 to 252) | (1.5 to 3.6) |
| Cuba | 32 784 | 187 | 3.6 | 29 236 | 179 | 18.0 | 61 022 | 366 | 10.2 |
| | (29 579 to 36 385) | (169 to 208) | (7.4 to 16.0) | (20 550 to 40 057) | (126 to 246) | (14.1 to 21.9) | (32 440 to 73 158) | (108 to 434) | (3.5 to 17.0) |
| Dominica | 61 | 45 | 11.8 | 118 | 145 | 37.5 | 224 | 224 | 40.4 |
| | (59 to 69) | (73 to 88) | (80.2 to 63.0) | (84 to 161) | (101 to 187) | (32.7 to 42.3) | (346 to 223) | (181 to 274) | (84.1 to 47.1) |
| Dominican Republic | 4 805 | 25.0 | 45.0 | 14 658 | 147 | 22.1 | 19 463 | 195 | 19.6 |
| | (3 820 to 5 184) | (39 to 62) | (41.1 to 0.9) | (10 400 to 19 876) | (104 to 199) | (15.8 to 29.9) | (4 921 to 24 137) | (150 to 246) | (13.2 to 36.5) |
| Grenada | 125 | 90 | 10.4 | 208 | 156 | 29.6 | 332 | 245 | 11.4 |
| | (115 to 135) | (81 to 98) | (19.2 to 6.7) | (149 to 280) | (111 to 212) | (25.1 to 37.2) | (271 to 407) | (193 to 300) | (9.9 to 30.0) |
| Guyana | 1 099 | 166 | 2.6 | 1 140 | 169 | 2.6 | 2 240 | 335 | 10.9 |
| | (950 to 1 263) | (144 to 188) | (17.4 to 3.1) | (817 to 1 331) | (127 to 226) | (17.3 to 32.8) | (3 869 to 2 639) | (281 to 395) | (1.5 to 19.7) |
| Haiti | 10 499 | 111 | 27.4 | 13 646 | 150 | 24.5 | 2 415 | 268 | 7.9 |
| | (7 098 to 14 401) | (83 to 159) | (42.3 to 1.7) | (8 913 to 18 175) | (109 to 198) | (19.4 to 26.6) | (18 782 to 30 051) | (211 to 333) | (15.9 to 13.1) |
| Jamaica | 1 549 | 46.4 | 40.7 | 4 407 | 151 | 5.6 | 5 954 | 204 | 20.4 |
| | (1 217 to 1 851) | (42 to 63) | (11.2 to 29.7) | (3 140 to 5 791) | (107 to 204) | (16.8 to 25.8) | (4 677 to 7 281) | (140 to 240) | (25.8 to 45.5) |
| Puerto Rico | 5 273 | 96 | 0.2 | 9 617 | 171 | 29.9 | 14 890 | 269 | 17.4 |
| | (4 850 to 5 716) | (89 to 105) | (6.9 to 10.3) | (6 749 to 12 265) | (121 to 239) | (26.1 to 37.6) | (12 073 to 18 527) | (223 to 334) | (11.8 to 34.0) |
| Saint Lucia | 128 | 64 | 5.1 | 281 | 141 | 26.5 | 406 | 205 | 14.7 |
| | (116 to 138) | (59 to 70) | (14.7 to 5.8) | (200 to 380) | (106 to 190) | (22.3 to 31.7) | (323 to 507) | (163 to 255) | (8.8 to 20.4) |
| Saint Vincent and the Grenadines | 166 | 106 | 32.8 | 311 | 164 | 43.1 | 376 | 294 | 47.6 |
| | (151 to 181) | (119 to 143) | (8.3 to 48.0) | (151 to 282) | (117 to 219) | (38.6 to 47.6) | (244 to 352) | (200 to 352) | (20.0 to 45.2) |
| Suriname | 599 | 107 | 7.5 | 940 | 136 | 30.8 | 1 539 | 280 | 20.0 |
| | (532 to 669) | (92 to 119) | (6.5 to 22.8) | (675 to 1 210) | (116 to 217) | (25.7 to 34.6) | (2 270 to 1 868) | (272 to 325) | (22.0 to 32.0) |
| Trinidad and Tobago | 1 482 | 99 | 15.7 | 2 512 | 153 | 40.0 | 232 | 2.0 | 2.0 |
| | (1 201 to 1 824) | (80 to 130) | (31.8 to 0.7) | (1 781 to 3 431) | (109 to 198) | (14.0 to 22.3) | (8 174 to 9 964) | (202 to 310) | (17.6 to 11.3) |
| Virgin Islands | 149 | 1.1 | 11.4 | 243 | 243 | 19.4 | 364 | 243 | 24.3 |
| | (121 to 169) | (14 to 11) | (14.2 to 0.3) | (115 to 295) | (101 to 202) | (19.1 to 24.6) | (293 to 451) | (197 to 301) | (1.5 to 16.1) |
| Central Latin America | 111 994 | 137 | 45.5 | 432 429 | 178 | 2.4 | 744 415 | 386 | 38.6 |
| | (295 931 to 324 289) | (21 to 332) | (49.1 to 49.1) | (209 701 to 576 251) | (277 to 237) | (6.2 to 1.5) | (6 22 308 to 885 431) | (254 to 363) | (3.1 to 22.4) |
| Colombia | 50 422 | 61.7 | 51.7 | 63 701 | 119 | 11.3 | 216 | 216 | 97.2 |
| | (43 932 to 57 977) | (58 to 64) | (58.1 to 44.3) | (44 728 to 85 716) | (84 to 161) | (20.6 to 12.9) | (93 733 to 136 339) | (179 to 259) | (24.0 to 31.8) |
| Costa Rica | 5 817 | 118 | 23.0 | 6 682 | 136 | 25.9 | 12 499 | 254 | 11.2 |
| | (5 125 to 6 961) | (104 to 129) | (32.6 to 15.7) | (5 095 to 10 041) | (96 to 186) | (14.0 to 7.1) | (10 282 to 14 874) | (209 to 302) | (17.8 to 4.2) |
| El Salvador | 10 798 | 103 | 18.3 | 13 864 | 142 | 1.0 | 19 812 | 211 | 21.1 |
| | (8 568 to 13 833) | (85 to 233) | (36.2 to 8.8) | (5 924 to 11 289) | (100 to 191) | (4.5 to 6.8) | (15 969 to 23 191) | (271 to 391) | (22.7 to 16.3) |
| Guatemala | 25 285 | 187 | 24.9 | 38 652 | 197 | 44.0 | 44 037 | 236 | 23.6 |
| | (20 582 to 28 484) | (165 to 211) | (42.5 to 25.5) | (14 091 to 26 266) | (107 to 198) | (6.4 to 1.2) | (88 275 to 52 302) | (286 to 390) | (20.9 to 17.2) |
| Honduras | 5 772 | 107 | 32.0 | 10 016 | 132 | 11.1 | 15 788 | 209 | 8.8 |
| | (4 482 to 7 612) | (83 to 103) | (50.4 to 7.7) | (7 390 to 13 388) | (95 to 192) | (6.5 to 15.6) | (12 663 to 19 339) | (166 to 257) | (21.1 to 31.8) |
| Mexico | 173 248 | 143 | 47.2 | 272 504 | 228 | 3.8 | 445 752 | 371 | 24.4 |
| | (162 722 to 178 651) | (133 to 148) | (51.6 to 45.3) | (195 339 to 361 744) | (162 to 302) | (6.8 to 8.2) | (869 909 to 334 632) | (508 to 446) | (29.8 to 19.8) |
| Nicaragua | 5 008 | 102 | 4.1 | 7 962 | 136 | 11.7 | 11 770 | 211 | 21.1 |
| | (4 307 to 5 871) | (81 to 110) | (41.3 to 18.2) | (4 828 to 9 082) | (100 to 169) | (6.0 to 9.1) | (9 661 to 14 209) | (181 to 266) | (21.8 to 4.4) |
| Panama | 1 006 | 100 | 10.4 | 1 046 | 127 | 8.3 | 839 | 227 | 22.7 |
| | (570 to 4 355) | (89 to 113) | (30.5 to 12.8) | (1 560 to 6 885) | (89 to 173) | (1.9 to 9.7) | (7 443 to 17 705) | (188 to 271) | (15.5 to 4.2) |
| Venezuela | 31 692 | 107 | 18.5 | 40 194 | 137 | 4.8 | 7 481 | 244 | 24.4 |
| | (27 091 to 37 225) | (87 to 120) | (27.5 to 10.8) | (28 124 to 51 748) | (197 to 386) | (13.1 to 4.7) | (58 073 to 87 477) | (108 to 295) | (4.0 to 31.8) |
| Tropical Latin America | 384 951 | 170 | 23.2 | 633 580 | 195 | 33.2 | 1 018 530 | 440 | 3.8 |
| | (369 450 to 395 868) | (163 to 174) | (27.4 to 20.2) | (457 886 to 844 999) | (195 to 361) | (28.1 to 38.5) | (845 849 to 1 226 178) | (566 to 528) | (2.6 to 9.8) |
| Brazil | 178 158 | 171 | 23.8 | 629 786 | 272 | 33.1 | 1 099 144 | 443 | 27.2 |
| | (163 124 to 189 588) | (164 to 177) | (27.9 to 20.5) | (448 970 to 827 987) | (196 to 363) | (28.4 to 39.1) | (829 821 to 1 200 599) | (589 to 532) | (2.2 to 9.3) |
| Paraguay | 6 199 | 107 | 29.8 | 32 793 | 209 | 10.8 | 16 896 | 256 | 16.8 |
| | (4 735 to 7 981) | (82 to 131) | (17.5 to 56.9) | (8 015 to 17 253) | (146 to 287) | (6.1 to 14.9) | (14 987 to 23 605) | (250 to 391) | (6.2 to 25.8) |
| North Africa and Middle East | 845 178 | 151 | 28.4 | 891 722 | 167 | 11.6 | 1 736 900 | 315 | 21.1 |
| | (727 622 to 930 195) | (139 to 165) | (41.1 to 16.6) | (631 423 to 1 208 846) | (117 to 224) | (15.2 to 8.0) | (1 448 309 to 2 074 624) | (226 to 376) | (22.0 to 37.5) |
| North Africa and Middle East | 845 178 | 151 | 28.4 | 891 722 | 167 | 11.6 | 1 736 900 | 315 | 21.1 |
| | (727 622 to 930 195) | (139 to 165) | (41.1 to 16.6) | (631 423 to 1 208 846) | (117 to 224) | (15.2 to 8.0) | (1 448 309 to 2 074 624) | (226 to 376) | (22.0 to 37.5) |
| Algeria | 153 178 | 49.7 | 30.3 | 45 605 | 197 | 19.1 | 199 133 | 694 | 24.0 |
| | (123 454 to 192 311) | (37 to 552) | (58.1 to 61.6) | (14 240 to 260) | (144 to 260) | (15.7 to 1.4) | (166 288 to 239 237) | (518 to 765) | (10.2 to 14.4) |
| Bahrain | 49 519 | 26.9 | 41.7 | 741 | 136 | 24.4 | 111 302 | 284 | 28.4 |
| | (7 875 to 67 203) | (96 to 169) | (41.7 to 35.5) | (43 718 to 355) | (113 to 220) | (19.5 to 11.8) | (88 342 to 140 831) | (226 to 358) | (29.0 to 41.3) |
| Egypt | 721 | 26.6 | 2 483 | 158 | 158 | 3.04 | 206 | 206 | 14.3 |
| | (473 to 930) | (15 to 93) | (1 750 to 1 402) | (112 to 137) | (112 to 137) | (8.7 to 0.8) | (108 to 248) | (110 to 8.8) | (1.0 to 8.8) |
| Iran | 124 914 | 142 | 122 849 | 149 | 149 | 9.8 | 247 763 | 291 | 18.7 |
| | (92 504 to 156 122) | (104 to 180) | (41.7 to 1.3) | (86 980 to 387 786) | (106 to 203) | (14.5 to 5.1) | (136 727 to 300 405) | (282 to 354) | (29.0 to 4.0) |
| Iraq | 96 728 | 123 | 119 119 | 168 | 168 | 7.8 | 235 844 | 292 | 29.2 |
| | (86 702 to 113 091) | (110 to 142) | (44.0 to 18.5) | (88 180 to 192 417) | (119 to 233) | (11.9 to 3.8) | (10 975 to 290 941) | (338 to 359) | (15.6 to 11.8) |
| Israel | 15 749 | 42.7 | 60 091 | 168 | 168 | 17.4 | 75 640 | 268 | 26.8 |
| | (13 286 to 20 227) | (35 to 50) | (74.7 to 34.3) | (43 196 to 80 640) | (121 to 225) | (14.0 to 20.8) | (58 724 to 95 545) | (161 to 264) | (16.1 to 26.4) |
| Jordan | 7870 | 79 | 43.4 | 12 727 | 149 | 11.5 | 20 597 | 219 | 26.5 |
| | (6 502 to 9 266) | (60 to 91) | (52.0 to 19.3) | (8 955 to 27 533) | (89 to 193) | (15.8 to 7.4) | (55 502 to 75 739) | (176 to 273) | (17.6 to 14.6) |
| Kuwait | 4319 | 28.8 | 7 644 | 180 | 180 | 8.7 | 11 962 | 271 | 16.6 |
| | (3 805 to 8 820) | (80 to 100) | (37.0 to 20.2) | (5 399 to 10 630) | (127 to 249) | (11.5 to 5.9) | (9 667 to 14 896) | (218 to 337) | (20.8 to 12.7) |
| Lebanon | 6 866 | 33.4 | 5.0 | 13 357 | 153 | 18.97 | 18 397 | 208 | 20.8 |
| | (3 989 to 14 365) | (81 to 179) | (87.6 to 41.4) | (8 077 to 16 034) | (106 to 209) | (9.7 to 0.3) | (13 314 to 25 893) | (181 to 341) | (15.0 to 30.9) |
| Libya | 9 233 | 21.7 | 18 078 | 147 | 147 | 6.9 | 19 600 | 246 | 24.6 |
| | (6 104 to 13 107) | (15 to 19) | (50.4 to 7.7) | (6 964 to 11 652) | (109 to 214) | (23.4 to 10.4) | (14 408 to 24 004) | (226 to 376) | (17.7 to 15.3) |
| Morocco | 46 783 | 117 | 22.0 | 53 585 | 153 | 6.1 | 100 168 | 289 | 14.4 |
| | (51 723 to 62 302) | (104 to 126) | (19.8 to 12.6) | (38 169 to 71 167) | (108 to | | | | |

| Location | YLLs (95% UI) | | | YLDs (95% UI) | | | DALYs (95% UI) | | |
|-----------------------------|--------------------------|---|---|------------------------|---|---|--------------------------|---|---|
| | 2017 counts | 2017 age-standardized rates per 100,000 | Percentage change in age-standardized rates between 1990 and 2017 | 2017 counts | 2017 age-standardized rates per 100,000 | Percentage change in age-standardized rates between 1990 and 2017 | 2017 counts | 2017 age-standardized rates per 100,000 | Percentage change in age-standardized rates between 1990 and 2017 |
| Marshall Islands | 80 | 178 | 14.4 | 39 | 81 | 87.1 | 119 | 259 | 80.3 |
| Northern Mariana Islands | 48 | 107 | 15.8 | 28 | 58 | 109 | 187 | 42 | 86 |
| Papua New Guinea | 15 202 | 87 (9 to 136) | (28.0 to 31.0) | 29 (5 to 58) | 56 (10 to 112) | (39.4 to 51.7) | 74 (10 to 108) | 156 (20 to 223) | (7.6 to 36.3) |
| Northern New Guinea | 8 805 (to 22 711) | 157 (20 to 279) | (21.2 to 48.9) | 45 (203 to 786) | 58 (107) | (87.6 to 103.7) | 14 (158 to 28 424) | 192 (305) | (5.5 to 58.9) |
| Samoa | 189 | 117 | 6.3 | 145 | 88 | 80.4 | 334 | 204 | 29.1 |
| Solomon Islands | 4 077 | 823 | -15.8 | 759 | 162 | 34.4 | 4 836 | 986 | -10.3 |
| Tonga | 82 | 180 (to 973) | (33.8 to 6.2) | (55.1 to 1 003) | (117 to 213) | (31.1 to 37.7) | (4 037 to 5 653) | (843 to 1 131) | (27.4 to 9.7) |
| Vanuatu | 368 | 158 | 17.5 | 164 (to 302) | 59 (to 111) | (68.7 to 85.3) | (132 to 187) | 149 (to 209) | (6.3 to 40.6) |
| Vanuatu | 255 (to 219) | (217 to 219) | (21.7 to 10.7) | (157 to 204) | (70 to 129) | (83.1 to 38.2) | (445 to 760) | (195 to 323) | (7.7 to 74.0) |
| Southeast Asia | 1 400 902 | 232 | -29.9 | 287 492 | 45 | 1.8 | 1 688 994 | 277 | -36.2 |
| | (1 309 912 to 1 542 331) | (217 to 253) | (-39.2 to -14.9) | (268 176 to 305 489) | (32 to 60) | (2.4 to 6.2) | (1 565 442 to 1 846 988) | (257 to 305) | (-53.9 to -11.6) |
| Cambodia | 50 273 | 183 | -15.7 | 8 257 | 60 | 36.0 | 58 529 | 443 | -11.1 |
| Indonesia | 42 486 (to 60 195) | (238 to 450) | (-35.0 to 11.7) | (8 021 to 11 051) | (44 to 80) | (31.2 to 40.8) | (50 520 to 68 410) | (386 to 512) | (-29.5 to 14.0) |
| Laos | 15 087 | 231 | -22.9 | 86 103 | 35 | 33.2 | 595 138 | 268 | -41.8 |
| Malaysia | 21 467 | 79 | -24.4 | 12 333 | 42 | 43.8 | 33 800 | 121 | -8.5 |
| Maldives | 450 | 111 | -10.2 | (8 789 to 9 533) | (39 to 77) | (34.5 to 6.2) | (28 156 to 39 558) | 153 | -43.2 |
| Mauritius | 349 (to 520) | (270 to 328) | (-67.5 to -18.0) | (128 to 249) | (30 to 59) | (81.2 to 14.9) | (505 to 706) | (134 to 376) | (-59.5 to 10.9) |
| Myanmar | 2 039 | 136 | 0.0 | 700 | 46 | 27.9 | 2 739 | 185 | -32.1 |
| Philippines | (1 825 to 2 256) | (235 to 354) | (-3.0 to 44.4) | (456 to 865) | (32 to 63) | (37.1 to 50.6) | (2 450 to 3 090) | (166 to 266) | (-59.6 to 44.7) |
| Thailand | 202 482 | 44.2 | -85.9 | 85 595 | 65 | 27.1 | 233 281 | 483 | -40.1 |
| Timor-Leste | (170 674 to 261 608) | (162 to 499) | (-44.4 to 30.1) | (22 257 to 40 838) | (44 to 101) | (22.3 to 32.4) | (201 312 to 255 562) | (438 to 568) | (-39.7 to 10.8) |
| Sri Lanka | 188 211 | 165 | 44.4 | 38 921 | 41 | 67.4 | 175 131 | 156 | -48.7 |
| Sri Lanka | (121 330 to 271 940) | (177 to 323) | (-26.3 to 65.9) | (28 578 to 50 029) | (49 to 95) | (59.5 to 75.5) | (156 236 to 198 222) | (117 to 230) | (-33.6 to 66.0) |
| Seychelles | 52 358 | 231 | 11.7 | 11 721 | 29 | 10.2 | 64 008 | 230 | -10.5 to 7.0 |
| Shanghai | (41 342 to 64 751) | (84 to 283) | (-26.9 to 16.32) | (26 749 to 36 329) | (19 to 68) | (20.1 to 33.8) | (52 641 to 77 138) | (232 to 337) | (-10.3 to 9.7) |
| Thailand | 191 | 174 | 7.8 | 50 | 24 | 50 | 224 | 156 | -22.4 |
| Thailand | (157 to 210) | (-25.9 to 9.3) | (39 to 76) | (35 to 108) | (30.0 to 44.0) | (208 to 279) | (191 to 254) | (-17.4 to 16.8) | |
| Thailand | 100 080 | 123 | -40.2 | 89 279 | 14 | 107 | 144 139 | 91.5 | -51.5 |
| Thailand | (85 240 to 121 275) | (-30.0 to 14.2) | (-54.3 to 21.2) | (77 713 to 104 266) | (31 to 101) | (7.4 to 21.0) | (120 699 to 166 601) | (-14.1 to 193) | (-53.3 to 29.9) |
| Tiemo-Leste | 2166 | 205 | 4.1 | 50 | 56.7 | 2.66 | 256 | 3.9 | -3.9 |
| Vietnam | (1 402 to 2 509) | (230 to 357) | (-37.2 to 37.5) | (363 to 671) | (37 to 97) | (49.2 to 120.6) | (1 951 to 3 206) | (150 to 307) | (-28.3 to 0.9) |
| Vietnam | 299 251 | 327 | 57 685 | 59 | 32.1 | 356 935 | 387 | 5.7 | 5.7 |
| Vietnam | (254 572 to 352 194) | (282 to 381) | (-27.1 to 20.9) | (40 942 to 78 882) | (42 to 81) | (24.9 to 39.5) | (308 271 to 412 763) | (338 to 445) | (-21.0 to 21.0) |
| Sub-Saharan Africa | 1 383 900 | 188 | -18.0 | 1 239 945 | 184 | -3.3 | 1 533 796 | 234 | -3.4 |
| | (1 143 167 to 1 528 381) | (169 to 221) | (-29.2 to 1.4) | (893 400 to 1 641 170) | (124 to 245) | (4.3 to 1.1) | (1 234 544 to 2 937 994) | (186 to 430) | (-18.4 to 2.2) |
| Central sub-Saharan Africa | 132 699 | 159 | -15.0 | 129 391 | 3.5 | 261 092 | 326 | 4.5 | 4.5 |
| | (99 451 to 208 115) | (239 to 224) | (-46.3 to 10.5) | (93 308 to 170 291) | (123 to 222) | (1.3 to 5.5) | (208 146 to 339 885) | (270 to 468) | (-17.4 to 40.8) |
| Angola | 34 760 | 189 | -23.9 | 29 496 | 3.8 | 74 256 | 43 | -15.1 | -15.1 |
| Central African Republic | (2 860 to 50 585) | (101 to 361) | (-4.4 to 19.0) | (21 518 to 32 607) | (134 to 245) | (4.1 to 1.5) | (51 805 to 81 507) | (101 to 458) | (-3.1 to 26.4) |
| Congo (Brazzaville) | 6 854 | 114 | -11.4 | 103 | 11 | 11.8 | 943 | 32.1 | -32.1 |
| Congo (Brazzaville) | (8 856 to 9 027) | (132 to 263) | (-43.2 to 6.6) | (173 to 228) | (8.9 to 14.3) | (78.7 to 120.7) | (2 910 to 475) | (14.3 to 17.6) | 17.6 |
| DR Congo | 82 345 | 114 | -11.4 | 84 271 | 6.4 | 102 | 117 796 | 301 | -17.9 |
| Equatorial Guinea | (54 823 to 138 129) | (109 to 213) | (-30.0 to 10.1) | (61 487 to 131 188) | (118 to 131) | (3.7 to 6.0) | (128 270 to 224 729) | (249 to 388) | (-27.4 to 10.2) |
| Gabon | 119 | 30.9 | 1.6 | 1 264 | 106 | 6.6 | 2 460 | 316 | -15.3 |
| | (704 to 1 031) | (91 to 248) | (-62.3 to 13.6) | (910 to 1 705) | (139 to 223) | (1.4 to 1.7) | (8 802 to 22 523) | (273 to 410) | (-59.3 to 13.6) |
| Eastern sub-Saharan Africa | 544 844 | 227 | -20.6 | 586 065 | 242 | -0.7 | 620 909 | 408 | -0.9 |
| | (479 936 to 600 996) | (206 to 251) | (-33.7 to 0.6) | (426 to 819) | (176 to 319) | (-0.8 to 2.1) | (599 862 to 1 332 942) | (186 to 552) | (-19.4 to 0.9) |
| Burundi | 13 690 | 225 | -30.2 | 15 009 | 232 | -7.1 | 28 699 | 447 | -20.4 |
| Comoros | 920 | 177 | -27.3 | 1 330 | 235 | 8.7 | 2 250 | 427 | -17.8 |
| Djibouti | (718 to 1 225) | (432 to 234) | (-41.9 to 4.2) | (566 to 1 760) | (170 to 311) | (-11.2 to 6.5) | (8 831 to 27 244) | (246 to 495) | (-26.0 to 4.8) |
| Eritrea | (912 to 1 941) | (35 to 263) | (-43.9 to 8.4) | (176 to 322) | (12.6 to 7.6) | (26.1 to 4.0) | (3430 to 531) | (167 to 210) | (-27.7 to 2.0) |
| Ethiopia | 7 993 | 130 | -18.4 | 7 765 | 232 | -6.1 | 7 462 | 402 | -14.9 |
| Ethiopia | (8 35 to 11 123) | (21 to 313) | (-40.3 to 16.6) | (6 359 to 11 596) | (68 to 307) | (-2.5 to 2.2) | (13 325 to 20 375) | (107 to 560) | (-24.8 to 10.5) |
| Kenya | 144 032 | 238 | -81.1 | 139 331 | 228 | -8.3 | 283 363 | 466 | -21.7 |
| Kenya | (120 313 to 160 974) | (130 to 351) | (-10.1 to 3.5) | (101 238 to 185 384) | (169 to 329) | (-6.9 to 3.9) | (232 561 to 337 655) | (188 to 511) | (-18.8 to 5.1) |
| Madagascar | 36 203 | 7.2 | 96.950 | 298 | 100 153 | 8.8 | 528 | 1.0 | 1.0 |
| Madagascar | (5 512 to 76 054) | (205 to 270) | (-31.4 to 15.3) | (70 510 to 128 483) | (219 to 392) | (6.1 to 10.5) | (32 620 to 193 433) | (440 to 630) | (-15.3 to 11.4) |
| Malawi | 25 846 | 166 | -28.9 | 38 628 | 236 | -5.1 | 396 | 396 | -0.9 |
| Malawi | (9 652 to 34 332) | (239 to 215) | (-43.5 to 8.6) | (27 879 to 51 439) | (166 to 205) | (-8.0 to 2.8) | (51 836 to 79 093) | (137 to 480) | (-25.1 to 7.2) |
| Mozambique | 27 599 | 32.8 | -23.8 | 24 906 | 223 | -7.3 | 52 156 | 474 | -21.9 |
| Mozambique | (27 530 to 64 515) | (27 to 380) | (-26.6 to 37.4) | (25 783 to 54 899) | (27 to 104) | (-6.1 to 10.7) | (74 328 to 113 460) | (633 to 653) | (-17.7 to 4.4) |
| Rwanda | 15 256 | 300 | -36.8 | 18 739 | 224 | -9.9 | 33 995 | 24.9 | -24.9 |
| Somalia | (11 881 to 20 085) | (206 to 255) | (-53.5 to 7.7) | (13 624 to 23 024) | (163 to 298) | (-12.1 to 7.8) | (3435 to 510) | (18.6 to 8.5) | 8.5 |
| Somalia | (2 765 to 26 794) | (42 to 263) | (-39.1 to 47.9) | (17 775 to 19 959) | (70 to 208) | (6.9 to 1.4) | (37 286 to 53 297) | (103 to 525) | (-23.1 to 20.9) |
| South Sudan | 12 394 | 87 | -24.6 | 24 496 | 240 | -27.0 | 448 | 3.4 | -3.4 |
| Tanzania | (9 337 to 17 194) | (54 to 279) | (-34.4 to 42.2) | (10 530 to 19 244) | (243 to 398) | (-0.9 to 5.7) | (356 to 548) | (168 to 18.5) | 18.5 |
| Uganda | 86 274 | 227 | -12.0 | 83 589 | 276 | -0.2 | 169 862 | 470 | -6.0 |
| Uganda | (87 410 to 105 749) | (137 to 313) | (-20.4 to 12.3) | (60 346 to 112 655) | (179 to 322) | (-2.3 to 6.2) | (141 505 to 203 729) | (105 to 555) | (-16.6 to 10.9) |
| Zambia | 36 951 | 169 | -12.7 | 51 097 | 224 | -17.5 | 88 048 | 393 | -2.3 |
| Zambia | (2 783 to 47 700) | (30 to 210) | (-35.9 to 17.1) | (37 014 to 68 263) | (162 to 296) | (14.7 to 20.5) | (70 536 to 107 418) | (137 to 476) | (-14.1 to 10.5) |
| Southern sub-Saharan Africa | 27 600 | 21.3 | -25.9 | 25 996 | 23 | 3.6 | 525 | 3.6 | 3.6 |
| | (23 300 to 32 423) | (236 to 316) | (-38.7 to 1.4) | (18 913 to 34 499) | (187 to 314) | (-5.8 to 1.4) | (44 834 to 63 173) | (466 to 609) | (-25.1 to 2.1) |
| Botswana | 44 682 | 199 | -20.1 | 436 774 | 159 | -10.9 | 1 013 509 | 388 | -38.8 |
| Botswana | (7 637 to 64 623) | (61 to 3.3) | (-50.2 to 106 673) | (40 to 157) | (87 454 to 148 485) | (10.9 to 2.2) | (509 to 224) | (143 to 0.6) | 0.6 |
| Lesotho | 1139 | 71 | -26.8 | 2 140 | 118 | -4.6 | 3 269 | 185 | -14.5 |
| Lesotho | (822 to 1 536) | (32 to 107) | (-45.8 to 2.7) | (1 529 to 3 914) | (82 to 155) | (-8.2 to 1.2) | (5 571 to 11 214) | (166 to 238) | (-16.6 to 2.6) |
| Namibia | 1 586 | 114 | -1.8 | 1 831 | 117 | 3.4 | 3 425 | 5.2 | -5.2 |
| Namibia | (1 152 to 2 072) | (84 to 146) | (-34.6 to 48.9) | (1 325 to 2 454) | (84 to 156) | (-4.5 to 10.6) | (2 691 to 5 171) | (183 to 279) | (-17.2 to 26.9) |
| South Africa | 1 464 | 97 | -21.6 | 2 182 | 118 | -7.3 | 3 956 | 206 | -10.1 |
| South Africa | (1 163 to 1 805) | (136 to 0.4) | (-37.8 to 0.4) | (1 578 to 2 955) | (86 to 160) | (-10.4 to 3.9) | (2 904 to 4 441) | (167 to 248) | (-22.8 to 4.4) |
| Swaziland | 22 281 (to 29 349) | (47 to 62) | (-35.8 to 11.6) | (41 363 to 78 786) | (82 to 154) | (-1.9 to 3.1) | (66 336 to 105 098) | (133 to 210) | (-16.2 to 3.7) |
| Swaziland | 723 | 99 | -13.3 | 951 | 115 | -2.4 | 1 674 | 214 | -7.2 |
| Swaziland | (916 to 941) | (716 to 372) | (-19.1 to 10.6) | (883 to 1 284) | (84 to 156) | (-5.4 to 0.9) | (1 317 to 1 941) | (171 to 258) | (-12.1 to 10.1) |
| Zimbabwe | 10 723 | 13.3 | 13.3 | 13 591 | 13.0 | 24.14 | 258 | 13.1 | 13.1 |
| Zimbabwe | (7 873 to 13 123) | (10 to 160) | (-23.9 to 47.6) | (9 813 to 18 102) | (164 to 177) | (10.1 to 16.2) | (14 421 to 29 220) | (207 to 356) | (-16.1 to 28.7) |
| Western sub-Saharan Africa | 594 776 | 199 | -20.1 | 436 774 | 159 | -10.9 | 1 013 509 | 388 | -38.8 |
| | (486 326 to 731 838) | (167 to 246) | (-31.1 to 2.9) | (316 033 to 584 559) | (116 to 212) | (-3.2 to 8.5) | (853 388 to 1 189 433) | (299 to 419) | (-23.0 to 4.5) |
| Benin | 13 189 | 184 | -25.8 | 11 574 | 108 | 8.4 | 24 763 | 842 | -18.7 |
| Benin | (10 177 to 16 143) | (46 to 227) | (-40.9 to 4.7) | (8 429 to 15 402) | (115 to 209) | (-10.9 to 5.9) | (20 302 to 29 555) | (281 to 405) | (-28.7 to 7.0) |
| Burkina Faso | 45 026 | 309 | -15.1 | 21 871 | 167 | -7.1 | 68 898 | 496 | -12.3 |
| Burkina Faso | (6 747 to 65 273) | (169 to 357) | (-38.1 to 1.3) | (17 380 to 21 739) | (236 to 248) | (-9.9 to 4.6) | (58 442 to 82 568) | (429 to 577) | (-12.1 to 0.4) |
| Cameroun | 38 123 | 229 | -20.9 | 28 938 | 162 | -14.0 | 67 060 | 390 | -8.1 |
| Cape Verde | (29 507 to 48 142) | (83 to 281) | (-36.8 to 2.4) | (20 874 to 38 671) | (118 to 116) | (-16.2 to 11.6) | (54 546 to 75 559) | (322 to 462) | (-28.1 to 0.9) |
| Cote d'Ivoire | 245 | 45 | -35.8 | 668 | 153 | -1.1 | 951 | 182 | -15.1 |
| Cote d'Ivoire | (212 to 282) | (43 to 57) | (-47.2 to 15.5) | (95 to 181) | (5.5 to 2.2) | (719 to 1 161) | (144 to 231) | (-20.7 to 5.3) | |
| Chad | 22 111 | 723 | 1.1 | 14 942 | 104 | 4.7 | 36 479 | 388 | -6.0 |
| Chad | (17 060 to 28 994) | (21 to 303) | (-31.4 to 20.1) | (10 435 to 18 994) | (21 to 139) | (-2.2 to 7.3) | (29 726 to 44 887) | (131 to 482) | (-11.4 to 13.1) |
| Cote d'Ivoire | 35 188 | 224 | -15.1 | 27 690 | 167 | -8.1 | 62 877 | 391 | -12.3 |
| Cote d'Ivoire | (27 605 to 45 254) | (137 to 281) | (-37.3 to 16.9) | (20 307 to 38 872) | (121 to 221) | (-10.1 to 5.9) | (51 849 to 75 209) | (324 to 467) | (-23.3 to 10.7) |
| The Gambia | 3 665 | 284 | 7.6 | 1 176 | 1 | | | | |