

## Deaths caused by injury



## Key points

- Road injuries are the leading cause of injury death among both women and men, and the rate is almost three times higher for men.
- Road traffic injuries are the leading cause of death among children and young adults aged 5–29. About three quarters (73%) of all deaths from road traffic injuries occur among young men under age 25; young men under age 25 are almost 3 times as likely to be killed in a road traffic crash as young women.
- The risk of death from road injuries increases progressively after age 14 both for women and men, with deaths among men reported at consistently higher rates. Older persons (aged 65 and older) registered the highest rates in 2016, with death among older men at more than double the rates of older women (52.2 per 100,000 for men versus 23 per 100,000 for women).
- The global average suicide rate is 10.6 deaths per 100,000 population. Although suicide attempts are about two to four times more frequent among women, men are more likely to use lethal means, which results in higher suicide mortality rates among the male population (13.5 per 100,000 for men versus 7.7 per 100,000 for women).
- Suicide is the third leading cause of death in young people aged 15–19 and the second leading cause of death among people aged 15–29 globally.
- While men are four times more likely to be murdered than women, women are four times more likely to be murdered by their intimate partners.
- Worldwide some 200,000 homicides occur annually among youth aged 10–29, comprising 42% of the total of global homicides. Homicide is the fourth leading cause of death among people aged 10–29; in 84% of such homicides men are the victims.

## Road injuries

Measuring the risk of dying from road injuries is important for the assessment of the burden of risk in the population.<sup>1</sup> Road injuries are the leading cause of injury death among both women and men, with about 1.4 million deaths occurring in 2016. On average, the crude death rate due to road injuries has remained stable at below 20 per 100,000 since 2000, although the absolute number of deaths has increased.

### **Globally, the risk of dying due to road injuries is almost 3 times higher among men than among women**

For all age groups, the death rate due to road injuries is higher among men than among women. At the global level, the crude death rate due to road injuries among men (28 per 100,000) is 2.8 times higher than that among women (10 per 100,000), and among people aged 15–49 it is 3.8 times higher among men (see figure I). Road traffic injuries are the leading cause of death among children and young adults aged 5–29 and about three quarters (73%) of all road traffic deaths occur among young men under age of 25.<sup>2</sup> This gender gap may also be linked to difference in behaviours between the sexes, in particular **alcohol consumption** and driving under the influence of alcohol, and to possible differences in the absolute number of female and male drivers.

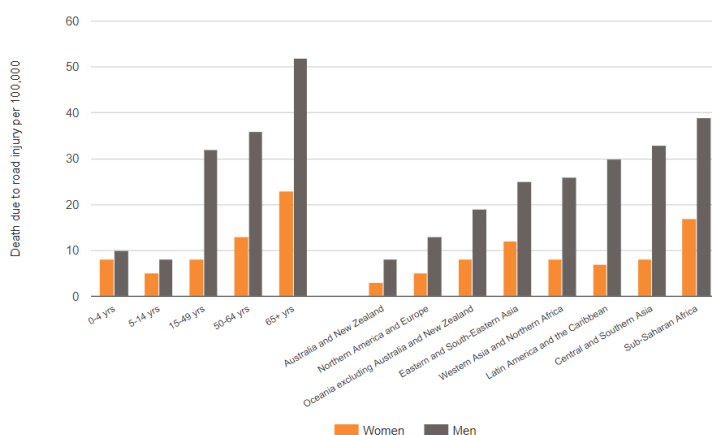
The risk of death from road injuries is lowest among young people aged 5–14, and increases progressively with age. Research<sup>3</sup> as to why the road fatality rate rises with age suggests that while older persons are more likely to use seatbelts and not to drive under the influence of drugs or alcohol, they are more likely to have pre-existing **health conditions** and therefore more likely to die in road accidents.

The vast majority (93%) of fatalities resulting from road traffic accidents occur in low-income and middle-income countries,<sup>4</sup> with the risk of dying from road injuries being highest in sub-Saharan Africa (39 per 100,000 for men and 17 per 100,000 for women). Data show a rather flat trend in Africa between 2013 and 2016.<sup>5</sup> The lowest risk of dying from road injuries is in

Australia and New Zealand (8 per 100,000 for men and 3 per 100,000 for women) and Europe and Northern America (13 per 100,000 for men and 5 per 100,000 for women).

During the lockdown due to Coronavirus-19 (COVID-19), studies have shown a decline in traffic accidents and related injuries and fatalities. For example, in Turkey, in April 2020, traffic accidents dropped by approximately 60%, deaths declined by 43% and injuries declined by 64% compared to April 2019.<sup>6</sup>

**Figure I:** Deaths due to road injury per 100,000 population by age, sex and region: 2016

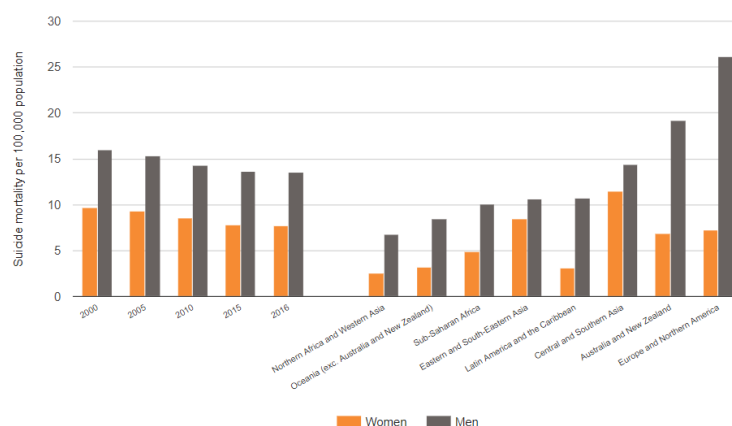


**Source:** World Health Organization (WHO), Global Health Estimates 2016 ([https://www.who.int/healthinfo/global\\_burden\\_disease/en/](https://www.who.int/healthinfo/global_burden_disease/en/))

**Note:** Regional values are for 2016; regions are organized in ascending order according to the mortality rate among the male population

## Suicide

Measuring the risk of dying from suicide is important for the assessment of the burden from suicide in the population. In 2016, there were nearly 800,000 deaths from suicide globally, which corresponds to an average suicide rate of 10.6 deaths per 100,000 population worldwide. Although suicide attempts are about two to four times more frequent among women,<sup>7 8</sup> death rates among men are nearly twice as high (1.8 male deaths for every female death). Men are more likely to use lethal means when attempting suicide,<sup>9</sup> which partly explains the higher suicide mortality rates observed in men (13.5 per 100,000 versus 7.7 per 100,000 for women). Globally, during the period 2000–2016, crude suicide mortality rates dropped by 16% in men and 21% in women.

**Figure II:** Deaths due to suicide per 100,000 population by age, sex and region: 2016

Source: World Health Organization (WHO), Global Health Estimates 2016 ([https://www.who.int/healthinfo/global\\_burden\\_disease/en/](https://www.who.int/healthinfo/global_burden_disease/en/))  
 Note: Regional values are for 2016; regions are organized in ascending order according to the mortality rate in the male population.

**Suicide rates among men are about 3.5 times higher than among women in both Europe and Northern America and in Latin America and the Caribbean; in contrast, gender differences in suicide rates are small in Central and Southern Asia and Eastern and South-Eastern Asia**

Suicide is a global phenomenon, and for each suicide there are many suicide attempts. In 2016, 79% of suicides occurred in low-income and middle-income countries.<sup>10</sup> In relative terms, developed regions are more affected, with particularly high suicide rates for men and, to a lesser extent, for women (see figure II). The highest suicide mortality rate is reported among men in Europe and Northern America (26 deaths per 100,000). Europe and Northern America is the region with the largest gender gap in the suicide mortality rate, with men being more than 3.5 times more likely to die due to suicide than women (7.2 deaths per 100,000 for women). The second highest suicide rate among men is in Australia and New Zealand (19.2 deaths per 100,000 for men and 6.9 deaths per 100,000 for women).

The highest suicide mortality rate among women is reported in Central and Southern Asia (11.5 deaths per 100,000 for women compared to 14.4 deaths per 100,000 for men), a region with one of the lowest gender gaps observed. The second highest suicide mortality rate among women is in Eastern and South-Eastern Asia (8.5 deaths per 100,000 for women and 10.6 per 100,000 for men), the region with the smallest overall gender gap in the suicide mortality rate. Worldwide, the lowest suicide mortality rates, for both men and women, are in Northern Africa and Western Asia, where the rate is 6.8 per 100,000 for men and 2.5 per 100,000 for women, revealing a sizable gender gap (men in Northern Africa and Western Asia are almost three times as likely to die from suicide than women).

While data seem to show an overall pattern where the male and, to a lesser extent, female suicide death rates are higher in regions with higher socioeconomic development, caution is advised against drawing strong conclusions. When looking at individual countries, there are exceptions to broad observations. For instance, Lesotho has the tenth highest suicide rate in the world, with 24.4 deaths per 100,000 for women, and 17.8 deaths per 100,000 for men. It is also the only country in the world where women have a higher suicide death rate than men. Research on individual country predictors and suicide rates reveal no clear overall patterns.<sup>11</sup>

Suicide is a highly complex phenomenon, and difficult to understand; it occurs throughout the lifespan, and is the third leading cause of death among adolescents aged 15–19.<sup>12</sup> In 2016, among the global population aged 15–29, it was the second leading cause of death for women after **maternal conditions**, and the third leading cause of death for men after road injuries and interpersonal violence.<sup>13</sup>

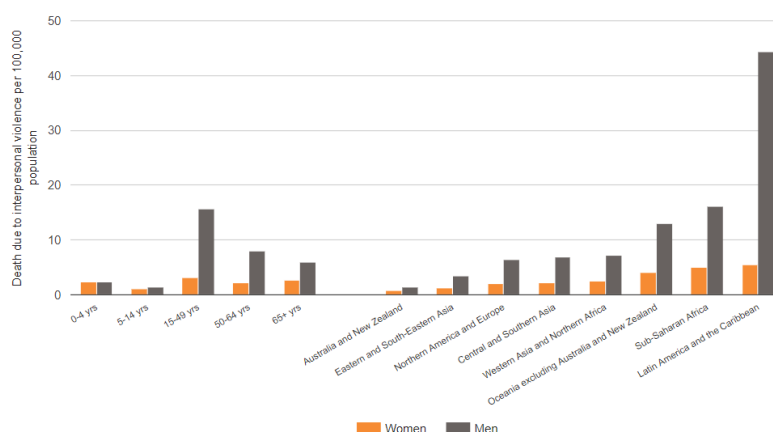
## Interpersonal violence

**Men are four times more likely to be murdered than women; however women are more than four times more likely to be murdered by their intimate partners**

Measuring the risk of dying from interpersonal violence (homicide) is important for the assessment of the burden of risk in the population. In 2016, there were an estimated 475,000 deaths globally due to homicide, 380,000 men and 95,000 women. Rates were highest in **Latin America and the Caribbean**, where the homicide rate for men was over 8 times higher than that for women.

Globally, the highest interpersonal violence death rates are found among men aged 15–49 (almost 5 times higher than rates for women in the same age group) (see figure III). Worldwide, some 200,000 homicides occur annually among youth aged 10–29, comprising 42% of all homicides globally each year. Homicide is the fourth leading cause of death in people aged 10–29, and 84% of such deaths involve male victims.<sup>14</sup>

**Figure III:** Deaths due to interpersonal violence per 100,000 population by age, sex and region: 2016



Source: World Health Organization (WHO), Global Health Estimates 2016 ([https://www.who.int/healthinfo/global\\_burden\\_disease/en/](https://www.who.int/healthinfo/global_burden_disease/en/))

Note: Regional values are for 2016; regions are organized in ascending order according to the mortality rate among the male population.

In many cases, homicides are committed by **intimate partners or family members**, with women the majority of those killed. In 2017, an estimated 87,000 women were intentionally killed: more than half (58%) were killed by intimate partners or family members; and a third (34%) were killed by intimate partners (excluding other family members).<sup>15</sup> In comparison, the estimated male rate of intimate partner homicide hovers in the range of 7% to 9% of all male killings, although data, being very scarce, are not robust.<sup>16</sup>

Put another way, almost two thirds (64%) of the victims of intimate partner/family-related homicide are women, in contrast to all cases of homicide, in which 20% of the victims are women.<sup>17</sup> While the overall risk of suffering a violent death as a result of intentional homicide has been declining steadily for a quarter of a century, the killing of women by intimate partners or family members is on the rise, from 47% in 2012 to 58% in 2017.<sup>18</sup>

In addition to the death toll caused by **violence against women**, such violence places a heavy burden on the family and on society more broadly, including high levels of morbidity and ill health, both mental and physical. Preventing homicide and non-fatal violence requires a multisectoral approach that addresses underlying causes, such as: gender, social, ethnic and economic inequalities; **cultural norms** that support violence and make violence against women acceptable; easy access to and misuse of alcohol, drugs and firearms; as well as laws that are inadequate in protecting women against violence—and intimate partner violence in particular.

## About the data

### Definitions

- **Road traffic death rate:** Deaths per year due to road injuries per 100,000 population.
- **Suicide mortality rate:** Deaths due to self-harm (suicide) per 100,000 population, defined as the number of suicide deaths per year, divided by the population and multiplied by 100,000, often simply referred to as the "suicide rate".<sup>19</sup>
- **Interpersonal violence mortality rate:** Deaths per year due to interpersonal violence per 100,000 population.

### Coverage

The World Health Organization (WHO) calculates estimates for all WHO member States with a population of more than 90,000 (184 countries).

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Footnotes

1. Causes of death are classified under the WHO International Classification of Diseases into three groups: (a) communicable diseases, maternal, perinatal and nutritional conditions, (b) non-communicable diseases, and (c) injuries.
2. WHO, Health Topics, Fact sheets, Road traffic injuries.
3. See Kent, R., and Henary, B., "On the Fatal Crash Experience of Older Drivers", Association for the Advancement of Automotive Medicine, vol. 49, 2005.
4. WHO, Health Topics, Fact sheets, Road traffic injuries.
5. WHO, Global status report on road safety 2018, Geneva, 2018.
6. Oguzoglu, U., "COVID-19 Lockdowns and Decline in Traffic Related Deaths and Injuries", IZA Institute of Labor Economics, May 2020.
7. Wolff, S., Puts, D. A., "Sex differences: summarizing more than a century of scientific research", Archives of Sexual Behaviour, vol. 38 (6), December 2009.
8. Miranda-Mendizabal, A. et al, "Gender differences in suicidal behavior in adolescents and young adults: systematic review and meta-analysis of longitudinal studies", International Journal of Public Health, vol. 64 (2), January 2019.
9. Wolff, S., Puts, D. A., "Sex differences: summarizing more than a century of scientific research", Archives of Sexual Behaviour, vol. 38 (6), December 2009.
10. WHO, Health Topics, Suicide prevention.
11. Case, A. and Deaton, A., "Suicide and Happiness", VoxDev, May 2017.
12. WHO, 2020, Suicide fact sheet.
13. WHO.
14. WHO, Health Topics, Fact sheets, Youth violence.
15. United Nations Office on Drugs and Crime (UNODC), Global Study on Homicide: Gender-related killing of women and girls, Vienna, 2018.
16. Computed by the United Nations Department of Economic and Social Affairs (UNDESA), Statistics Division, based on UNODC, Global Study on Homicide: Gender-related killing of women and girls, Vienna, 2018.
17. UNODC, Global Study on Homicide: Gender-related killing of women and girls, Vienna, 2018.
18. UNODC, Global Study on Homicide 2019, Executive summary.
19. World Health Organization (WHO), Global Health Observatory, Suicide mortality rate.