

## 1. HEALTH STATUS

### 1.6. Mortality from road accidents

Worldwide, an estimated 1.2 million people are killed in road traffic accidents each year, and as many as 50 million people are injured or disabled (WHO, 2009c). In OECD countries alone, they were responsible for more than 125 000 deaths in 2006, occurring most often in the United States (46 000), Mexico (17 000) and Japan (9 000). Around 5 000-6 000 road accident deaths occurred in each of Italy, Poland and Germany in 2006.

Mortality from road accidents is the leading cause of death among children and young people, and especially young men, in many countries. The fatality risk for motor cycles and mopeds is highest among all modes of transport, even though most fatal traffic injuries occur in passenger vehicles (ETSC, 2003; Beck *et al.*, 2007).

Besides the adverse social, physical and psychological effects, the direct and indirect financial costs of road traffic accidents are substantial; one estimate put these at 2% of gross national product annually in highly-motorised countries (Peden *et al.*, 2004). Injury and mortality from road accidents remains a serious public health concern.

Death rates were the highest in 2006 in Mexico and Portugal, followed by Korea and the United States, all in excess of 15 deaths per 100 000 population (Figure 1.6.1). They were the lowest in the Netherlands, Norway and Sweden, at five deaths per 100 000 population or less. A four-fold difference exists between the Netherlands and Mexico, the countries with the lowest and highest rates. Deaths from road accidents are much higher for males than for females in all OECD countries, with disparities in rates ranging from twice as high among males in Iceland to more than four times higher in Greece and Italy. On average, three times as many males than females die in road accidents (Figure 1.6.2).

Much road accident injury and mortality is preventable. Road security has increased greatly over the past decades in many countries through improvements of road systems, education and prevention campaigns, the adoption of new laws and regulations and the

enforcement of these new laws through more traffic controls. As a result, death rates due to road accidents have been cut by more than half on average in OECD countries since 1970 (Figure 1.6.3). The Netherlands, Germany and Switzerland have seen the largest declines in death rates, with a reduction of about 80% since 1970, although vehicle kilometers travelled have increased by 2.7 times on average in European countries in the same period (OECD/ITF, 2008). Death rates have also declined in the United States, but at a slower pace, and therefore remain above the OECD average. In Mexico and Greece, there have been significant increases in death rates from road accidents since 1970 (Figure 1.6.4).

Based on an extrapolation of past trends, projections from the World Bank indicate that between 2000 and 2020, road traffic deaths may decline further by about 30% in high-income countries, but may increase substantially in low- and middle-income countries if no additional road safety counter-measures are put in place (Peden *et al.*, 2004).

#### Definition and deviations

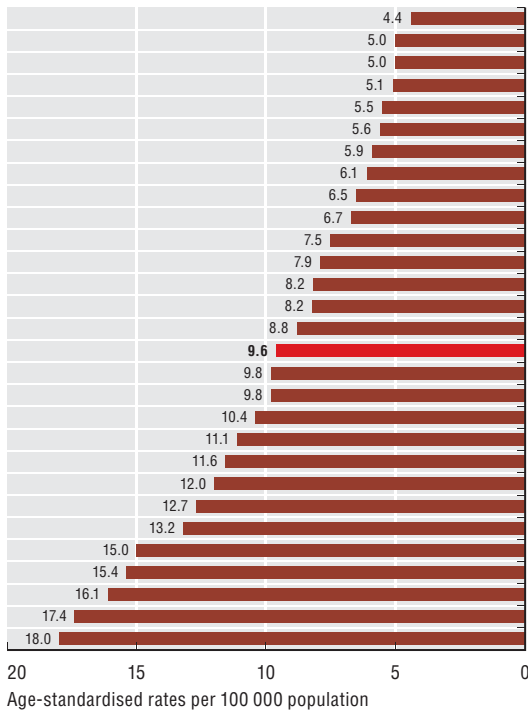
Mortality rates are based on the crude number of deaths according to selected causes in the WHO Mortality Database. Mathers *et al.* (2005) have provided a general assessment of the coverage, completeness and reliability of WHO data on causes of death. Mortality rates have been age-standardised to the 1980 OECD population, to remove variations arising from differences in age structures across countries and over time within each country.

Mortality rates from road traffic accidents in Luxembourg are biased upward because of the large volume of traffic in transit, resulting in a significant proportion of *non-residents* killed.

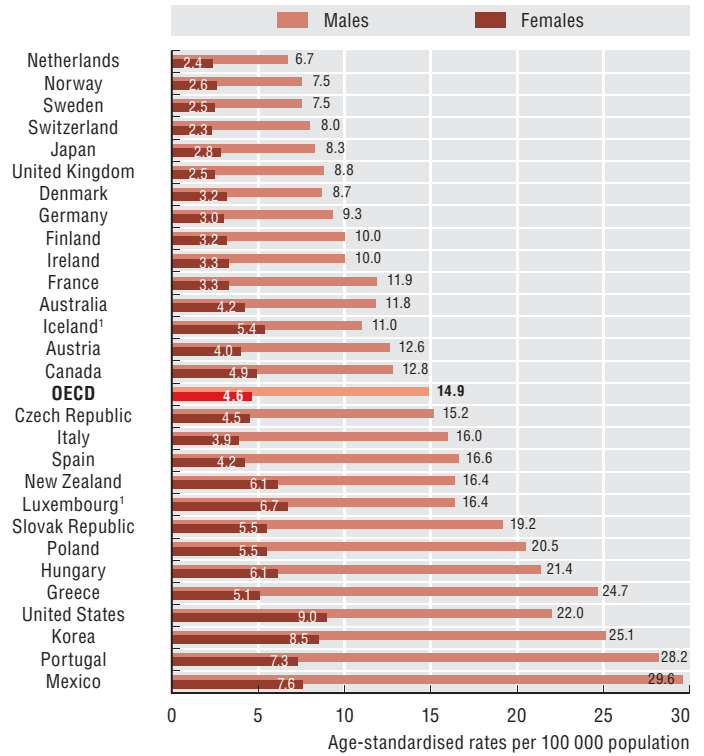
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## 1.6. Mortality from road accidents

**1.6.1 Road accidents, mortality rates, total population, 2006 (or latest year available)**

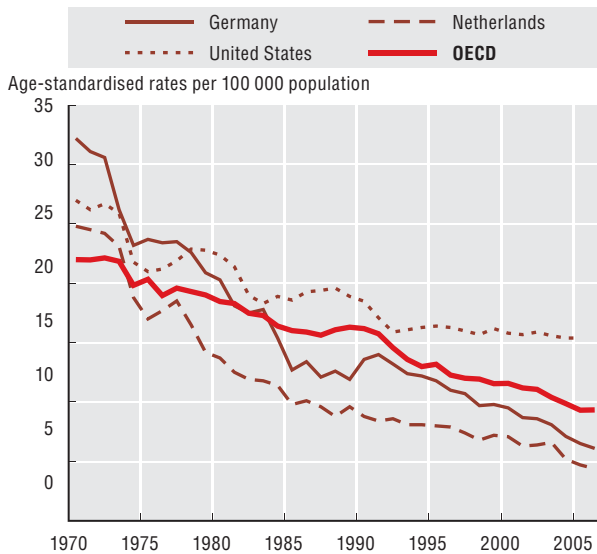


**1.6.2 Road accidents, mortality rates, males and females, 2006 (or latest year available)**

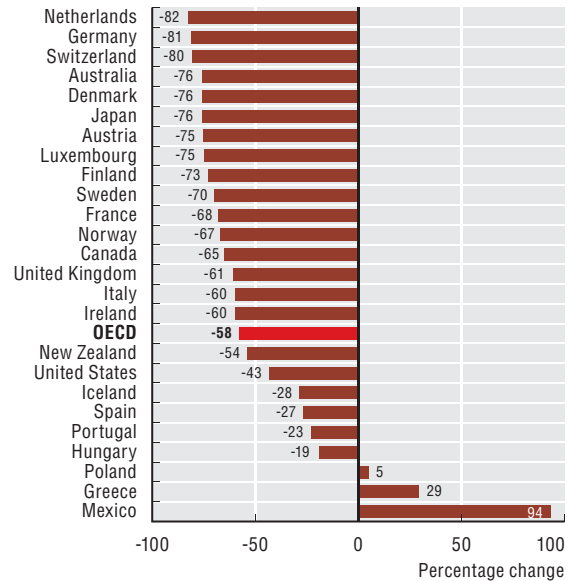


1. Three-year average.

**1.6.3 Trends in road accident mortality rates, selected OECD countries, 1970-2006**



**1.6.4 Change in road accident mortality rates, 1970-2006 (or nearest year)**



Source: OECD Health Data 2009. The raw mortality data have been extracted from the WHO Mortality Database, and age-standardised to the 1980 OECD population.

StatLink <http://dx.doi.org/10.1787/717527613871>



**From:**  
**Health at a Glance 2009**  
OECD Indicators

**Access the complete publication at:**  
[https://doi.org/10.1787/health\\_glance-2009-en](https://doi.org/10.1787/health_glance-2009-en)

**Please cite this chapter as:**

OECD (2009), "Mortality from road accidents", in *Health at a Glance 2009: OECD Indicators*, OECD Publishing, Paris.

DOI: [https://doi.org/10.1787/health\\_glance-2009-8-en](https://doi.org/10.1787/health_glance-2009-8-en)

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