1.5. Mortality from transport accidents

Worldwide, an estimated 1.2 million people are killed in transport accidents each year, most of which are road traffic accidents, and as many as 50 million people are injured or disabled (WHO, 2009a). In OECD countries alone transport accidents were responsible for more than 120 000 deaths in 2009, occurring most often in the United States (45 000), Mexico (17 000), Korea and Japan (7 000 each). In addition, there were 38 000 deaths in the Russian Federation.

Mortality from road accidents is the leading cause of death among children and young people – especially young men – in many countries. Most fatal traffic injuries occur in passenger vehicles, although the fatality risk for motor cycles and mopeds is highest among all modes of transport (OECD/ITF, 2011).

Besides the adverse social, physical and psychological effects, the direct and indirect financial costs of transport accidents are substantial; one estimate put these at 2% of gross national product annually in highly-motorised countries (Peden *et al.*, 2004).

Death rates were the highest in the Russian Federation in 2009, and among OECD countries, in Mexico and the United States, all in excess of 14 deaths per 100 000 population (Figure 1.5.1). They were the lowest in Iceland, the Netherlands and the United Kingdom, at four deaths per 100 000 population or less, much lower than the OECD average of 8.2. A five-fold difference exists between Iceland and Mexico, the OECD countries with the lowest and highest rates. In all countries, death rates from transport accidents are much higher for males than for females, with disparities ranging from twice as high in New Zealand to almost five times higher in Greece and Chile. On average, three times as many males than females die in transport accidents (Figure 1.5.1).

Much transport 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 laws through more traffic controls. As a result, death rates due to transport accidents have been halved in OECD countries since 1995 (Figure 1.5.2). Estonia, Iceland, Korea, Portugal and Japan have seen the largest declines, with a reduction of 60% or more since 1995, although the number of vehicle kilometres travelled has increased in the same period (OECD/ITF, 2010). Death rates have also declined in the United States, but at a slower pace, and therefore remain above the OECD average. In Chile and the Russian Federation, there have been significant increases in death rates from road accidents since 1995 (Figure 1.5.3).

The effects of the recent economic crisis may have had a favourable outcome on transport accident mortality. Many countries had a slight decrease or stagnation in traffic volumes, but a much more significant reduction in fatalities. However, in the long-term, effective road safety policies are the main contributor to reduced mortality (OECD/ITF, 2011).

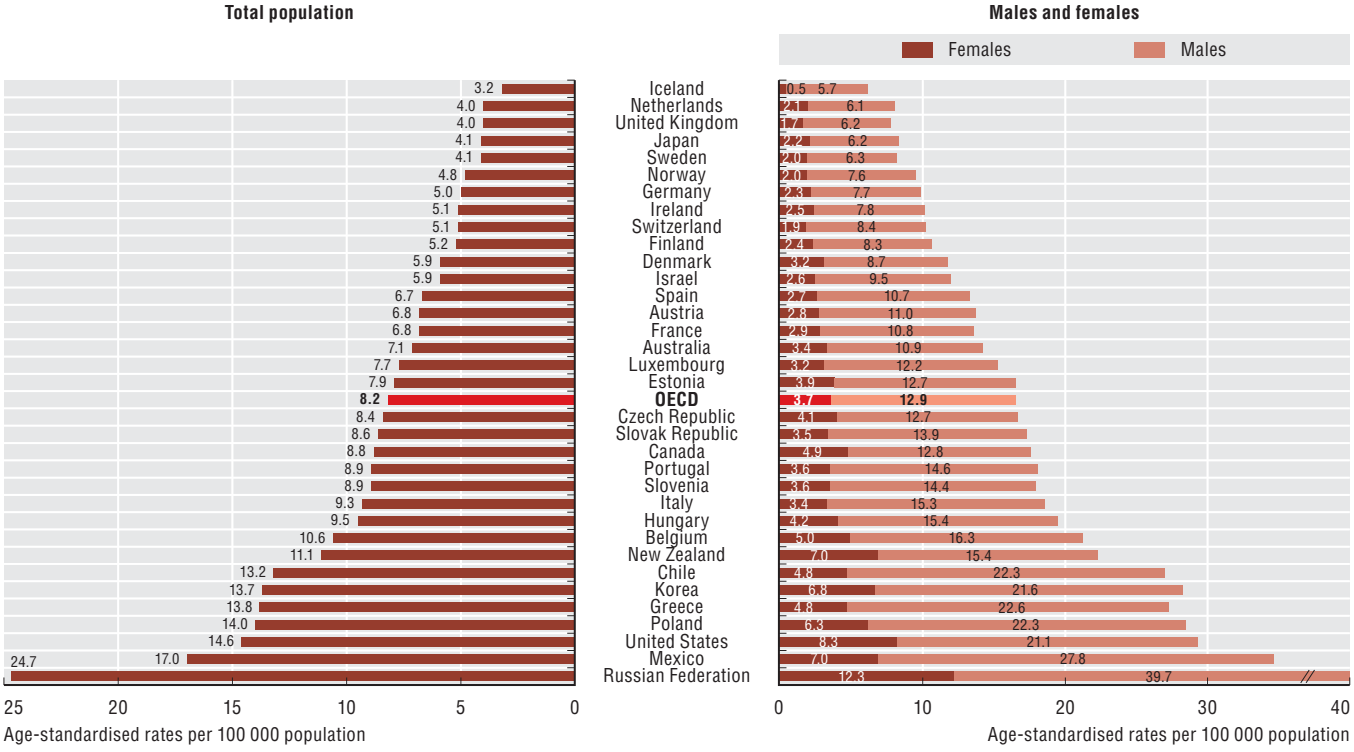
Definition and comparability

Mortality rates are based on numbers of deaths registered in a country in a year divided by the size of the corresponding population. The rates have been directly age-standardised to the 1980 OECD population to remove variations arising from differences in age structures across countries and over time. The source is the *WHO Mortality Database*.

Deaths from transport accidents are classified to ICD-10 codes V01-V89. 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. Mathers *et al.* (2005) have provided a general assessment of the coverage, completeness and reliability of data on causes of death.

Information on data for Israel: *http://dx.doi.org/10.1787/888932315602*.

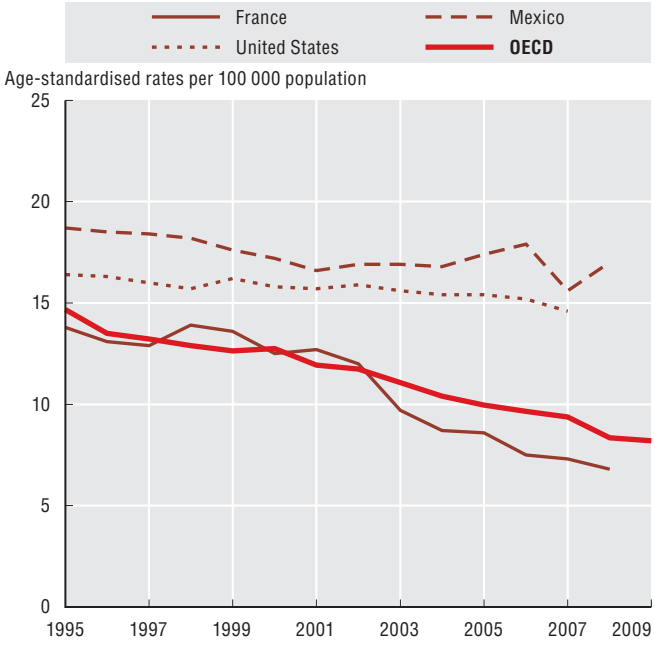
1.5.1 Transport accident mortality rates, 2009 (or nearest year)



Source: OECD Health Data 2011; IS-GBE (2011).

StatLink http://dx.doi.org/10.1787/888932523500

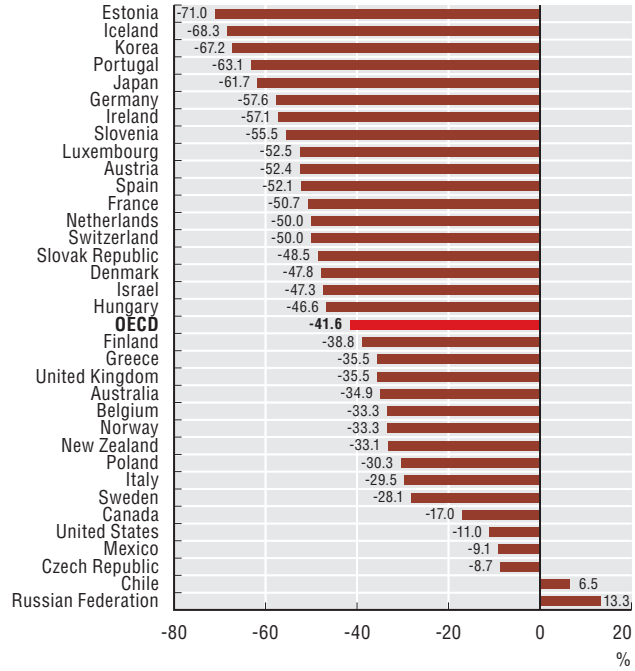
1.5.2 Trends in transport accident mortality rates, selected OECD countries, 1995-2009



Source: OECD Health Data 2011.

StatLink http://dx.doi.org/10.1787/888932523519

1.5.3 Change in transport accident mortality rates, 1995-2009 (or nearest year)



Source: OECD Health Data 2011; IS-GBE (2011).

StatLink http://dx.doi.org/10.1787/888932523538

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