

CO4.4: Teenage suicide (15-19 years old)

Definitions and methodology

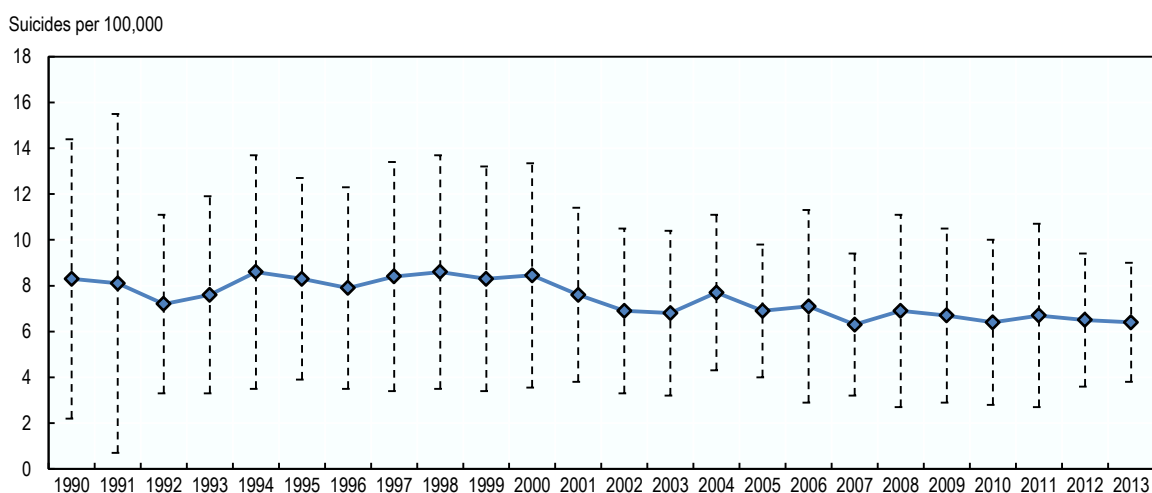
Teenage suicide rates are calculated as the total number of deaths due to ‘intentional self-harm’ among the population aged 15-19 years old in a given year, divided by the total population of 15-19 years old that year, and multiplied by a factor of 100 000. The result is expressed in units of suicides per 100 000 individuals (aged 15-19) per year.

Key Findings

Teenage suicides rates have, on average, declined slightly over the past two decades or so (Chart CO4.4.A). While in 1990 there were, on average across the OECD, 8.3 suicides per 100 000 teenagers (15-19), by 2013 this rate had fallen to 6.4. Much of this decline occurred across the 2000s. Between 1990 and 1999 the OECD average teenage suicide remained fairly stable at around 8.1 suicides per 100,000, but this average fell across the 2000s before reaching a low of 6.3 per 100,000 in 2007. The OECD average teenage suicide rate has stabilised slightly since, but remains almost 2 points lower than in 1990.

Chart CO4.4.A. Average trends in teenage suicides, 1990-2013

Suicides by people aged 15-19 years old per 100,000 people aged 15-19, OECD-33 average with +/- 1 standard deviation, from 1990-2013

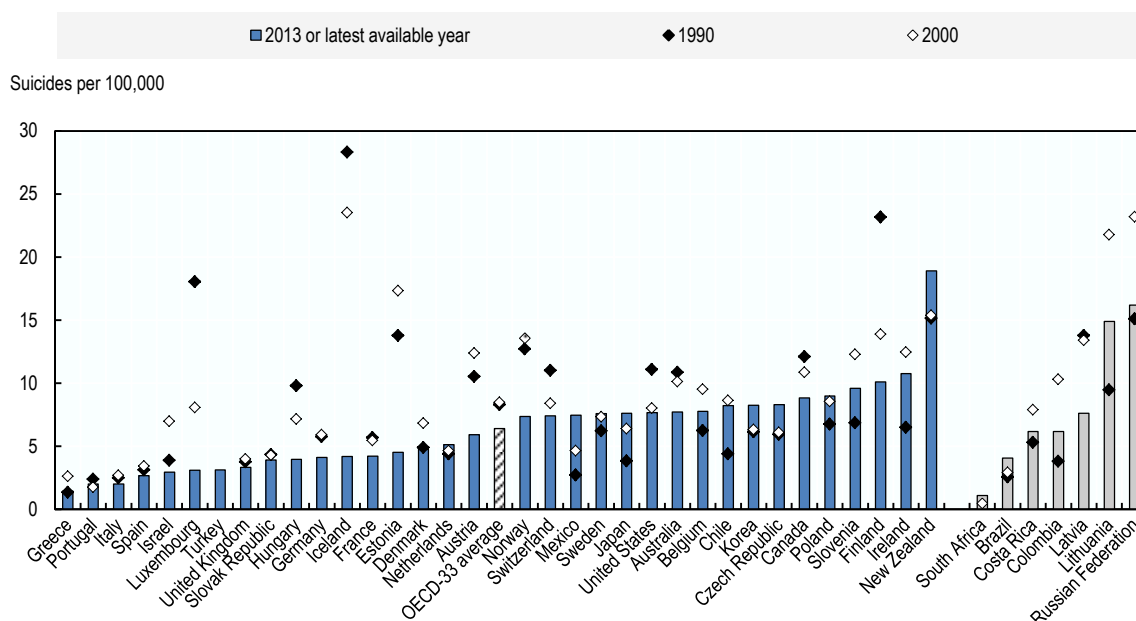


Note: OECD-33 average excludes Turkey.
 Source: WHO (2015) WHO Mortality Database.

Other relevant indicators: CO3.5 Young people not in education or employment; CO4.3 Substance abuse by young people.

Chart CO4.1.B shows teenage suicide rates across OECD and OECD key partner countries in 1990, 2000 and 2013. In 2013, the highest teenage suicide rates were observed in Finland, Ireland and New Zealand, with 10 or more suicides per 100 000 teenagers (15-19). By contrast, countries with the lowest suicide rates were Greece, Israel, Italy, Portugal and Spain with less than 3 suicides per 100 000 teenagers. Most of those countries that have seen large decreases in the teenage suicide rate are also those that, historically, had high teenage suicide rates.

Chart CO4.4.B. Teenage suicides, 1990^a, 2000^b and 2013^c or latest available year
 Suicides by people aged 15-19 per 100,000 people aged 15-19



Note: Due to small populations, suicide rates in Iceland and Luxembourg are likely to show high variability and outliers across the time series.

a) Data for the Slovak Republic refer to 1992

b) Data for Luxembourg and the United Kingdom refer to 2001

c) Data for Iceland refer to 2009, for Ireland, the Slovak Republic, Slovenia and the United States to 2010, for Australia, Canada, France, New Zealand, Colombia and the Russian Federation to 2011, and for Belgium, Chile, Denmark, Estonia, Greece, Israel, Italy, Korea, Mexico, Switzerland, Costa Rica, Latvia, Lithuania, and Brazil to 2012.

d) The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: WHO (2015) WHO Mortality Database.

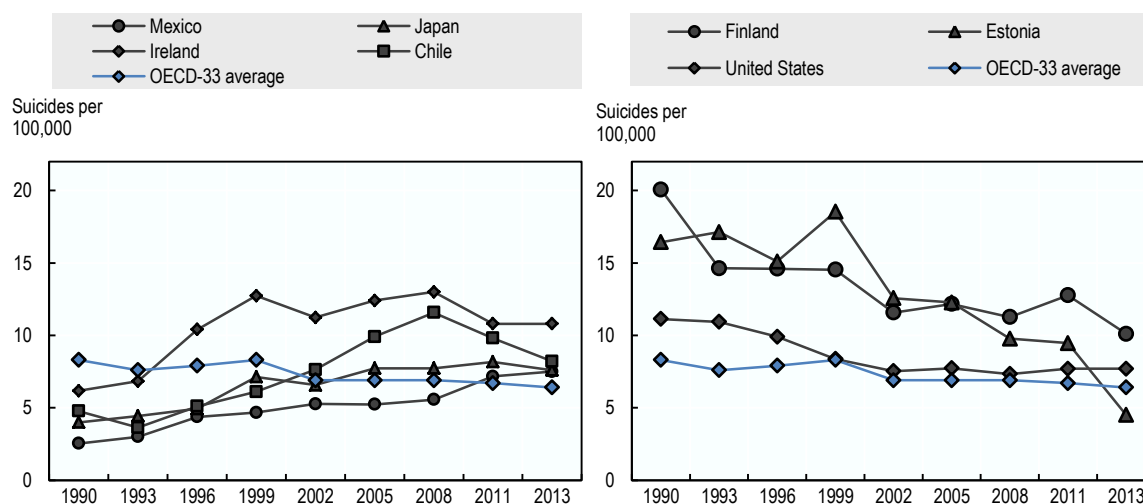
Some countries with relatively low rates in the early 1990s have seen an increase in their teenage suicide rates over time. Chart CO4.1.C shows the four countries with the steepest increase in suicide rates, as well as the three countries with steepest decrease in suicide rates since 1990.¹

¹ Although they showed declining rates over time, Iceland and Luxembourg were left out of the chart because of the high variability of teenage suicides rates in these countries on account of their small population size.

Increasing teenage suicide rates have been particularly noticeable in Chile, Ireland, Japan and Mexico, although in the former two countries rates have declined slightly since the mid-to-late 2000s. All four of these countries began the period with rates below the OECD average, and all ended the period with rates at least slightly above the OECD average. In Estonia, Finland and the United States, by contrast, teenage age suicides rates have fallen considerably since 1990. All stated the period with rates well above the OECD average, but by 2013 rates in all were at least closer to or – in the case of Estonia – below the OECD average.

Chart CO4.4.C. Trends in teenage suicides, 1990-2013

Suicides by people aged 15-19 years old per 100,000 people aged 15-19, selected countries, 1990-2013



Note: for presentation purposes, data points are three-year moving averages

a) The OECD-33 average excludes Turkey

Source: WHO (2014), WHO Mortality Database.

Comparability and data issues

Suicide rates are calculated using the World Health Organization (WHO) Mortality database. This database covers deaths registered in national civil registration systems, with the underlying causes of death coded by the relevant national authority. Underlying causes of death are defined as "the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury" in accordance with the rules of the International Statistical Classification of Diseases and Related Health Problems (ICD) (see <http://www.who.int/classifications/icd/en/>).²

The International Statistical Classification of Diseases and Related Health Problems (ICD) provide a cross-national framework for the recording of the causes of death. Different countries use different WHO standard coding systems (ICD 8th, 9th and 10th) at different times. For calculation purposes, the following causes of death were classified as suicides:

² For detailed information about ICD system, please refer to <http://www.who.int/classifications/icd/en/>

	ICD 8th	ICD 9th	ICD 10th
Condensed data	A147/B049 (suicide and self-inflicted injury)	B54 (suicide and self-inflicted injury)	1101/UE63 (intentional self-harm)
Detailed data	E950 - E959 (suicide and self-inflicted injury)	E950 - E960 (suicide and self-inflicted injury)	X600 - X840 (intentional self-harm)

The comparability of suicide data between countries could be affected by a number of reporting criteria, including: the establishment of a person’s intention to kill him or herself, the authority responsible for completing the death certificate, the need to carry out a forensic examination of the corpse, and possible provisions on the confidentiality on the cause of death. It is sometimes argued that stigmatisation may also affect the reliability of data on suicides. Suicide data should thus be interpreted with care, although comparability and reliability issues should not be exaggerated. Some studies conclude that despite reporting issues, suicide data are comparable across countries (Jouglu et al., 2002).

Finally, in Iceland and Luxembourg the size of the population aged 15-19 is quite small compared to other countries. This means that suicide rates for these countries can vary sharply over time, as small changes in the absolute number of suicides in a given year can lead to large changes in the relative suicide rate. This sensitivity should be kept in mind when interpreting results for these two countries.

Sources and further reading: WHO mortality database (2015); Society at a Glance (2009); Jouglu E, Pequignot F, Chappert JL, et al. (2002), «La qualite des donnees de mortalite sur le suicide» Revue Epidemiologie et de Sante Publique; Vol. 50, pp:49–62. ; Sainsbury P. and J.S. Jenkins (1982): "The accuracy of officially reported suicide statistics for purposes of epidemiological research", Journal of Epidemiology and Community Health, 36: 43-48.