

## MORTALITY FROM CIRCULATORY DISEASES

Circulatory diseases remain the main cause of mortality in nearly all EU member states, accounting for some 1 910 000 deaths and 37% of all deaths across EU countries in 2015. Circulatory diseases comprise a range of illnesses related to the circulatory system, including ischaemic heart diseases (notably heart attacks) and cerebrovascular diseases (such as strokes). Ischaemic heart diseases and strokes alone account for over 55% of all deaths from circulatory diseases, and caused more than one-fifth of all deaths in EU member states in 2015.

Ischaemic heart diseases (IHD) are caused by the accumulation of fatty deposits lining the inner wall of a coronary artery, restricting blood flow to the heart. Death rates for IHD are over 80% higher for men than for women across EU countries, because of a greater prevalence of risk factors among men, such as smoking, hypertension and high cholesterol.

Mortality rates from IHD are highest in Lithuania, Latvia, the Slovak Republic and Hungary, with age-standardised rates more than three times greater than the EU average. The countries with the lowest IHD mortality rates are France, the Netherlands, Portugal and Spain, with death rates about two times lower than the EU average (Figure 3.9).

Since 2000, age-standardised mortality rates from IHD have declined in all countries, with an overall reduction of over 40% on average across the EU, although the reduction has slowed down in recent years (Figure 3.11). The decrease since 2000 has been quite modest in some countries like Lithuania (only a 4% reduction), whereas it has been more rapid in Finland (a 44% reduction). Reductions in risk factors such as tobacco consumption have contributed to reducing the incidence of IHD and consequently mortality rates (see indicator “Smoking among adults” in Chapter 4). Improvements in medical care have also played an important role (see indicator “Mortality following acute myocardial infarction” in Chapter 6).

Strokes (or cerebrovascular diseases) were responsible for some 430 000 deaths across the EU in 2015, accounting for about 8% of all deaths. Strokes are caused by the disruption of the blood supply to the brain. In addition to being an important cause of

mortality, the disability burden from stroke is substantial. The gender gap in (age-standardised) mortality rates from stroke is not as large as for IHD (less than 20%).

As with IHD, there are wide variations in stroke mortality rates across countries. The rates are three times higher than the EU average in Bulgaria, Latvia and Romania. They are the lowest in France, Luxembourg and Spain (Figure 3.10).

Since 2000, stroke mortality rates have decreased by nearly 50% across the EU, although the gains have slowed down over the past five years. The reduction since 2000 has been much slower in some countries like Bulgaria and Lithuania (only a 10% to 15% reduction) compared with a reduction of between 40% to 50% in Finland, France and Germany (Figure 3.12). As with IHD, the reduction in stroke mortality can be attributed at least partly to both a reduction in risk factors and improvements in medical treatments (see indicator “Mortality following stroke” in Chapter 6).

Looking ahead, further progress in reducing mortality rates from IHD, strokes and other circulatory diseases may be hampered by a rise in certain risk factors such as obesity and diabetes (OECD, 2015).

### Definition and comparability

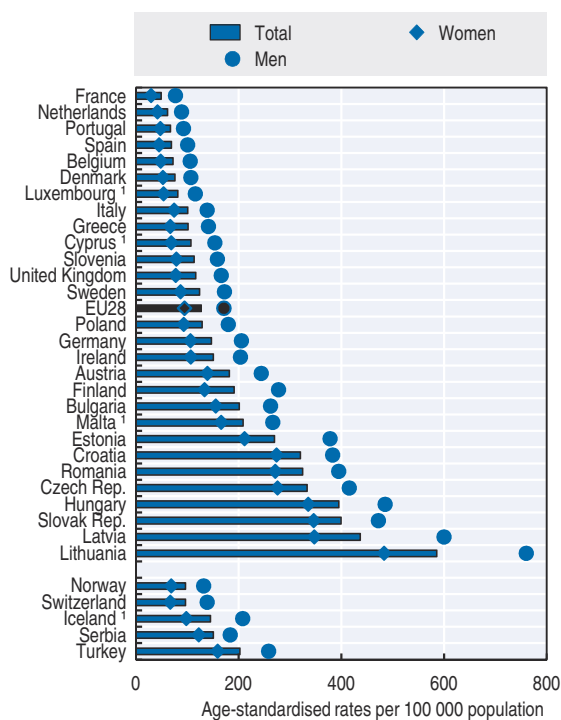
Mortality rates are based on the number of deaths registered in a country in a year divided by the population. The rates have been age-standardised to the revised European standard population adopted by Eurostat in 2012 to remove variations arising from differences in age structures across countries and over time.

Deaths from ischaemic heart diseases relate to ICD-10 codes I20-I25, and stroke (or cerebrovascular diseases) to I60-I69.

### Reference

OECD (2015), *Cardiovascular Disease and Diabetes: Policies for Better Health and Quality of Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264233010-en>.

### 3.9. Ischaemic heart disease mortality, 2015

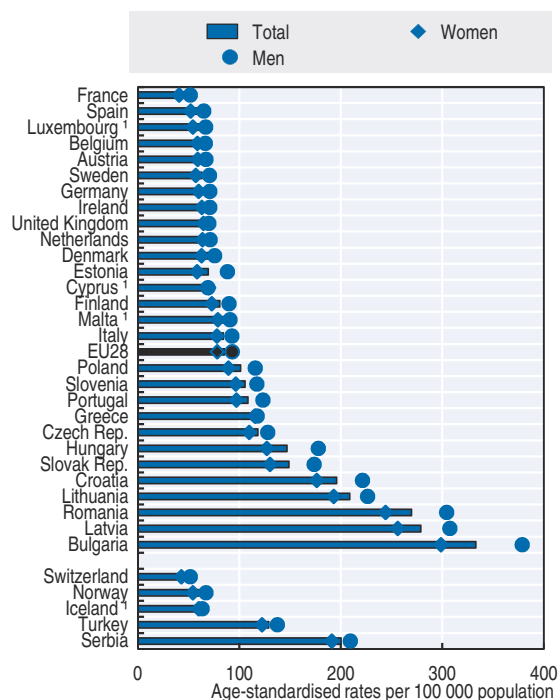


1. Three-year average (2013-15).

Source: Eurostat Database.

StatLink <http://dx.doi.org/10.1787/888933834433>

### 3.10. Stroke mortality, 2015

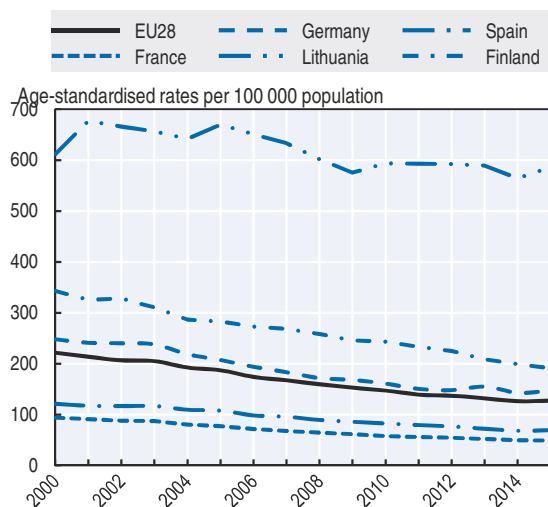


1. Three-year average (2013-15).

Source: Eurostat Database.

StatLink <http://dx.doi.org/10.1787/888933834452>

### 3.11. Trends in ischaemic heart disease mortality, selected EU countries, 2000-15

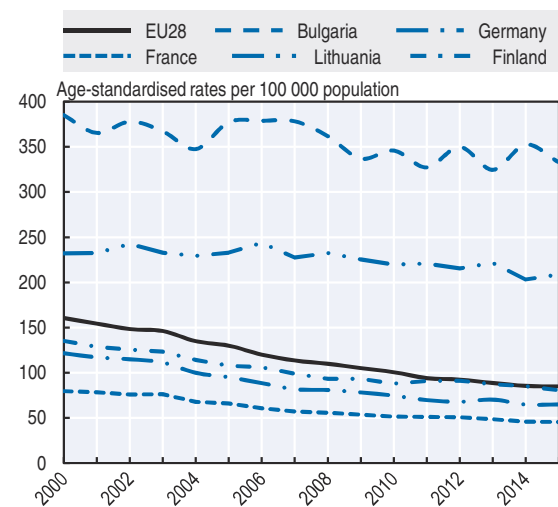


Note: OECD estimates of EU28 average for 2000 and 2001.

Source: Eurostat Database.

StatLink <http://dx.doi.org/10.1787/888933834471>

### 3.12. Trends in stroke mortality, selected EU countries, 2000-15



Note: OECD estimates of EU28 average for 2000 and 2001.

Source: Eurostat Database.

StatLink <http://dx.doi.org/10.1787/888933834490>



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