Mortality and life expectancy statistics

This article provides information relating to mortality in the European Union (EU).

Life expectancy at birth rose rapidly during the last century due to a number of factors, including reductions in infant mortality, rising living standards, improved lifestyles and better education, as well as advances in healthcare and medicine.

Slight decrease in number of deaths in 2016

In 2016, some 5.1 million persons died in the EU-28. The annual number of deaths slightly decreased compared with 2015, the peak over the previous five decades (see Figure 1). The crude death rate, which is the number of deaths per 1 000 persons, was 10.0 in the EU-28 in 2016.

Figure 1: Number of deaths, EU-28, 1961-2016(million)Source: Eurostat (demogind)

Life expectancy at birth increased in 2016

The most commonly used indicator for analysing mortality is life expectancy at birth: the mean number of years that a person can expect to live at birth if subjected to current mortality conditions throughout the rest of their life. It is a simple but powerful way of illustrating the developments in mortality.
Life expectancy at birth in the EU-28 was estimated at 81.0 years in 2016, reaching 83.6 years for women and 78.2 years for men. After the small decline observed in 2015, life expectancy at birth has increased in 2016 by 0.3 years for both women and men (see Figure 2 and Table 1), as compared with 2015. Overall, between 2002 (the first year for which data are available for all EU Member States) and 2016, life expectancy in the EU-28 increased by 3.3 years, from 77.7 to 81.0 years; the increase was by 2.7 years for women and 3.7 years for men.

![Life expectancy at birth, EU-28, 2002-2016](image)


Source: Eurostat (code: demomlexpec)

Figure 2: Life expectancy at birth, EU-28, 2002-2016 (years)Source: Eurostat (demomlexpec)

Table 1 shows that in 2016 life expectancy increased in 25 Member States, compared with 2015, decreasing only in Finland by 0.1 and remaining stable in Estonia and Portugal.

In the years between 2000 and 2016, the rise in life expectancy at birth for men in the EU Member States ranged from a minimum of 2.8 years (in Lithuania) to a maximum of 7.7 years (in Estonia). For women, the increase ranged from 2.1 years (in Sweden) to 5.8 years (in Estonia).
Table 1: Life expectancy at birth, 1980-2016(years)

Source: Eurostat (demomlexpec)

There are still major differences between countries (see Table 1). In 2016, the differences between the highest and lowest life expectancies among EU Member States amounted to 11.5 years for men and 7.8 for women. For men, the lowest life expectancy was recorded in Lithuania (69.5 years) and the highest in Italy (81.0 years). For women, the range was from a low of 78.5 years in Bulgaria to a high of 86.3 years in Spain.

In 2016, the life expectancy for women is still higher than the life expectancy for men. With a gender gap of 5.4 years of life in 2016, newly born females in the EU-28 should generally expect to outlive men. Furthermore, this gap varied substantially between EU Member States. In 2016, the largest difference between the sexes was found in Lithuania (10.6 years) and the smallest in the Netherlands (3.2 years) — see Figure 3.
Table 1 shows that in 2016 life expectancy increased in Switzerland and Norway among the EFTA countries compared with 2015, and in Albania and Serbia among the candidate countries.

Among the EFTA countries, in the years between 2000 and 2016, the rise in life expectancy at birth for men ranged from a minimum of 2.6 years (in Iceland) to a maximum of 6.7 years (in Liechtenstein). For women, the increase ranged from 2.5 years to 4.1 years in the same countries.

Regarding the candidate countries, data for the years between 2000 and 2016 are available only for the former Yugoslav Republic of Macedonia and Serbia. Life expectancy in the former Yugoslav Republic of Macedonia rose by 2.3 years for women and by 2.6 years for men, and life expectancy in Serbia rose by 4.3 years for men and by 3.9 for women.

In 2016, EFTA and candidate countries recorded smaller differences between the highest and lowest life expectancies than in the EU-28. For EFTA countries these differences were 1.3 years for men (ranging from a low of 80.4 in Iceland and a high of 81.7 in Switzerland) and 1.6 for women (from 84.0 in Iceland to 85.6 in Switzerland). Within the candidate countries, the difference between the highest and lowest life expectancies amounted to 3.8 years for men (from 73.2 in Serbia to 77.0 in Albania) and to 3.5 years for women (from 77.5 in the Former Yugoslav Republic of Macedonia to 81.0 in Turkey).

The EFTA countries recorded relatively low differences between life expectancy at birth for men and women,
ranging from 3.9 years in Switzerland and 3.4 in Lichtenstein. The same behaviour can be observed in the candidate countries, where the differences ranged between 5.6 years in Turkey and 3.1 in Albania.

**Life expectancy at age 65 also increased in 2016**

Looking at the older generations in the EU-28, Table 2 shows that, after the slight decrease in 2015, life expectancy at 65 increased again in 2016. It was estimated at 20.0 years (0.3 higher than 2015), reaching 21.6 years for women (0.4 years higher than 2015) and 18.2 years for men (0.3 years higher than 2015).

<table>
<thead>
<tr>
<th>Table 2: Life expectancy at age 65, 1980-2016(years)</th>
<th>Source: Eurostat (demomlexpec)</th>
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Life expectancy at age 65 increased in all the EU Member States between 2015 and 2016.

In 2016, it can be observed that once a man had reached the age of 65, he could, on average, expect to live between another 14.0 years, as in Latvia, and 19.7 years, as in Malta. The life expectancy of women at age 65 was higher; in 2016 it ranged from 17.9 years in Bulgaria to 23.7 years in France — see Figure 4 and Table 2.
When looking at life expectancy at age 65 it can be observed that the gap between the sexes is smaller than the gap at birth. In 2016 women aged 65 in the EU-28 should generally expect to outlive men for 3.4 years. The largest difference between the sexes was found in Estonia (5.3 years) and the smallest in the United Kingdom (2.3 years) — see Figure 4.

In 2016, in the EFTA countries, the life expectancy of men at age 65 ranged from 18.1 years in Liechtenstein to 20.0 years in Switzerland, while the life expectancy for women varied from a minimum of 21.3 years in Iceland to a maximum of 22.9 years in Switzerland. — see Figure 4 and Table 2.

In the candidate countries, the life expectancy of men at age 65 ranged from 14.5 years in the former Yugoslav Republic of Macedonia to 16.8 years in Albania, while the life expectancy for women varied from a minimum of 16.5 years in the former Yugoslav Republic of Macedonia to a maximum of 19.5 years in Turkey. — see Figure 4 and Table 2.

Figure 4 shows that in 2016 women aged 65 in the EFTA countries expected to outlive men from a minimum of 2.5 years in Norway to a maximum of 4.5 years in Liechtenstein. Within the candidate countries the biggest gap in life expectancy at age 65 between sexes was registered in Turkey (3.4 years) and the lowest was in Albania (1.5 years).

**Infant mortality**

Around 18.6 thousand children died before reaching one year of age in the EU-28 in 2016; this was equivalent to an infant mortality rate of 3.6 deaths per 1 000 live births.
One of the most significant changes that have led to increases in life expectancy at birth has been the decrease in infant mortality rates. During the 10 years from 2006 to 2016, the infant mortality rate in the EU-28 fell from 4.6 deaths per 1,000 live births to 3.6 deaths per 1,000 live births; extending the analysis to the last 20 years, the infant mortality rate was halved (7.6 deaths per 1,000 in 1996). The most significant reductions in infant mortality were generally recorded within those EU Member States which tended to record higher levels of infant mortality in 2006, compared with the EU average. Malta recorded a lower infant mortality rate in 2006 and, therefore, an increase is observed between 2006 and 2016; this is justified by the fact that Malta has a small population number and few infant deaths and any variation in this number is highly influencing the infant mortality rate.

In 2016, the highest infant mortality rates in the EU-28 were registered in Malta (7.4 deaths per 1,000 live births), Romania (7.0 deaths per 1,000 live births) and Bulgaria (6.5 deaths per 1,000 live births), and the lowest were recorded in Finland (1.9 deaths per 1,000 live births) and Slovenia (2.0 deaths per 1,000 live births).

In 2016, in the EFTA countries the infant mortality rates ranged from a minimum of 0.7 deaths per 1,000 live births in Lichtenstein (this very low value is influenced by the small population number of the country) to a maximum of 3.6 in Switzerland.

In 2016, all the candidate countries, except Montenegro, registered infant mortality rates higher than the EU-28 average.

Source data for tables and graphs

- Mortality and life expectancy statistics: tables and figures

Data sources

Eurostat provides information on a wide range of demographic data, including statistics on the number of deaths by sex, by age, by year of birth, as well as according to citizenship, country of birth and educational attainment; statistics are also collected for infant mortality and late foetal deaths. A series of mortality indicators are produced, which may be used to derive a range of information on subjects such as crude death rates or life expectancy measures by age, sex or educational attainment.
Context
The gradual increase in life expectancy in the EU is one of the contributing factors to the ageing of the EU-28’s population — alongside relatively low levels of fertility that have persisted for decades (see the articles on population structure and ageing and fertility statistics).

Other articles
- Causes of death statistics
- Fertility statistics
- Healthy life years statistics
- Population and population change statistics
- Population structure and ageing

Tables
- Mortality (tdemomor), see:
  - Life expectancy at birth, by sex (tps00025)
  - Life expectancy at age 65, by sex (tps00026)
  - Deaths by NUTS 2 region (tgs00098)
  - Life expectancy at birth by sex and NUTS 2 region (tgs00101)
  - Infant mortality rate (tps00027)

Database
- Mortality (demomor)

Dedicated section
- Deaths and life expectancy data

Publications
- Short analytical webnote - Demography Report - 2015 edition
- Highly educated men and women likely to live longer — Statistics in focus 24/2010
- The greying of the baby boomers — Statistics in focus 23/2011

Methodology
- Mortality (ESMS metadata file - demoresms)

External links
- The European Perinatal Health Report 2010

View this article online at http://ec.europa.eu/eurostat/statistics-explained/index.php/Mortality_and_life_expectancy_statistics