Life expectancy and mortality rates

Today’s young people may expect to live longer than ever before

The indicator most commonly used to analyse mortality levels is life expectancy at birth. In the EU-28, life expectancy at birth is higher than in most regions of the world and continues to increase most years, reflecting reductions in mortality rates at all ages. Economic developments, changes in education, and lifestyle, as well as changes in access to health services across the EU have contributed to this increase. As shown in the article on demographic trends, the life expectancy of a new-born baby in the EU-28 was 80.6 years (83.3 years for females and 77.9 years for males) in 2015. During the 10 years from 2005 to 2015, life expectancy at birth in the EU-28 increased by 2.1 years, from 78.5 to 80.6 years (rising by 1.8 years on average for females and by 2.5 years on average for males).

Life expectancy rose in all EU Member States (see Figure 1), although there are major differences between their levels. With an average of 83.0 years in 2015, Spain was the EU Member State with the highest life expectancy in 2015; life expectancy at birth was also above 82 years in Italy, France, Luxembourg and Sweden. In total, 18 EU Member States recorded a life expectancy at birth above 80.0 years in 2015. By contrast, Lithuania, Bulgaria, Latvia and Romania reported the lowest levels of life expectancy at birth in 2015, at 75.0 years or less.
The gender gap in life expectancy also varies between countries, even if the life expectancy at birth for women was always higher than that for men (see Figure 2). In the EU, women systematically live longer than men on average: this difference may be explained by both biological and behavioural factors. Men are more likely to die from lung and prostate cancer, tuberculosis, cirrhosis of the liver and coronary heart disease as well as...
from injuries, whether unintentional or intentional (suicide and homicide). These causes of death for men far outweigh the female mortality rates for breast and cervical cancer. In 2015, the gender gap in life expectancy at birth in the EU-28 was 5.4 years in favour of women. In the Baltic EU Member States, new born women were expected to outlive new born men by around 9-11 years. The largest differences in life expectancy at birth between the genders were found in Lithuania (10.5 years) followed by Latvia (9.8 years) and Estonia (9.0 years), whereas the smallest gender gaps were found in the Netherlands (3.3 years), the United Kingdom (3.6 years), Sweden (3.7 years), Cyprus, Ireland (both 3.8 years) and Denmark (3.9 years). However, the gender gap in life expectancy at birth narrowed between 2005 and 2015: the gap for the EU-28 fell from 6.1 years in 2005 to 5.4 years in 2015.

**Mortality rates for children and young people declined in the EU**

**WHAT IS THE CRUDE DEATH RATE?**

The crude death rate is the ratio of the number of deaths during the year (in general, or due to a specific cause) to the average population in that year. It is expressed as the number of deaths per 100 000 inhabitants.

The crude death rate for the total EU-28 population has generally been following a downward trend over recent decades. Rising living standards, lifestyle changes, changes in safety at work and transport safety, better education, as well as advances in healthcare and medicine have gradually led to the reduction of mortality rates and to the rapid increase of life expectancy at birth in the EU-28.

Figure 3 illustrates the development of the crude death rates for children (0-14 years) and young people (15-29 years), during the 2005-2015 time period. Since the number of deaths in a population generally increases with age, the crude death rates for children and young people were relatively low compared with the total population in the EU, while the mortality of young people was slightly higher than that of children.

In absolute terms, 26.8 thousand children and 33.8 thousand young people died in the EU-28 during 2015, which corresponds to a crude death rate for children and young people of 34 and 38 deaths per 100 000 inhabitants respectively. Between 2005 and 2015, the crude death rate for children and young people followed a significant
downward path, with a decline by 27% for children (from 46 to 34 deaths per 100,000 inhabitants) and young people (from 52 to 38 deaths per 100,000 inhabitants).

Analysing the rates by gender, male mortality in the EU-28 exceeds female mortality for children and young people (see Table 1). In 2015, boys (0-14 years) and young men (15-29 years) accounted for 56% and 73% of the total number of deaths among children and young people respectively.

Table 1: Crude death rates, by age and gender

Among the EU Member States, Romania (71.9 deaths per 100,000 children), Bulgaria (64.7), Malta (55.3), Slovakia (52.8) and Lithuania (50.5) had the highest crude death rates for children in 2015, whereas Finland (18.4) and Slovenia (21.0) had the lowest rates (see Figure 4). In all EU Member States, except Malta, the crude death rate for children decreased between 2005 and 2015. The largest falls — where the crude death rates for children more than halved — were registered in Cyprus (down 58%) and Finland (down 53%).

Figure 4: Crude death rates for children aged 0-14 years

Among the EU Member States, Romania (71.9 deaths per 100,000 children), Bulgaria (64.7), Malta (55.3), Slovakia (52.8) and Lithuania (50.5) had the highest crude death rates for children in 2015, whereas Finland (18.4) and Slovenia (21.0) had the lowest rates (see Figure 4). In all EU Member States, except Malta, the crude death rate for children decreased between 2005 and 2015. The largest falls — where the crude death rates for children more than halved — were registered in Cyprus (down 58%) and Finland (down 53%).
Looking at the crude death rates for young people (15-29 years), Spain (23.7 deaths per 100,000 young people), the Netherlands (26.4), Denmark (27.1) and Italy (28.1) recorded the lowest rates in 2015, while the three Baltic Member States (Lithuania with 89.5 deaths per 100,000 young people, Latvia with 80.9 and Estonia with 62.5), Bulgaria (62.1) and Romania (60.7) recorded the highest rates (see Figure 5). The largest decreases between 2005 and 2015 were seen in Cyprus (down 57%), Portugal (down 49%), Spain (down 47%) and Estonia (down 45%). By contrast, Malta (1%) and Sweden (5%) registered increases in their crude death rates for young people during the 10 years to 2015.

Mortality rates for children and young people of all ages have fallen significantly in recent years across the EU-28. However, disparities by age group, gender and country persist.

Between 1961 and 2015 the infant mortality rate decreased by 90% in the EU

**INFANT MORTALITY RATE**

The infant mortality rate represents the ratio of the number of deaths of live-born children aged less than one year to the number of live births in a given year. The value is expressed per 1,000 live births.

The infant mortality rate in the EU-28 decreased by 90% between 1961 and 2015 reflecting a number of factors, in particular improvements in healthcare. Scientific advancements in medical treatment, higher quality in the delivery of healthcare services, and more personalised pre- and post-natal accompaniment have resulted in better prevention of premature deaths.
In 2015, around 18.4 thousand children died before reaching one year of age in the EU-28, resulting in an infant mortality rate of 3.6 deaths per 1000 live births. Among the EU Member States, Slovenia and Finland had the lowest infant mortality rates in 2015, at 1.6-1.7 deaths per 1000 live births (see Figure 7). By contrast, the highest rates were found in Romania (7.6 deaths per 1000 live births), Bulgaria (6.6), Malta (5.8) and Slovakia (5.1).

In the last 30 years for which data are available (comparing 2015 with 1985), the infant mortality rate in the EU-28 fell by more than two-thirds from 12.8 deaths per 1000 live births to 3.6, while in the last 50 years...
it fell by 87.5%. Note that the intervals between the years shown in Figure 7 are not regular, with the gap between the two most recent years being 10 years whereas between the earlier years the gaps are 20 years.

The most significant reductions in infant mortality in the last 50 years were — unsurprisingly — generally recorded within those EU Member States which had recorded relatively high levels of infant mortality in 1965. Finland is the main exception, as it already had the third lowest rate in 1965 but still recorded the eighth largest percentage fall between 1965 and 2015. In percentage terms, the largest falls in the infant mortality rate between 1965 and 2015 were recorded in Portugal (-96 %, from 64.9 to 2.9 deaths per 1 000 live births) and Slovenia (-95 %, from 29.6 to 1.6 deaths per live births).

Causes of death

External factors are the main cause of death for children and young people

Causes of death vary substantially according to age groups (see Figure 8). For instance, the most frequent causes of death for people over the age of 45 are cancer (neoplasms), circulatory and respiratory diseases, while most deaths among young people are related to external causes, such as transport accidents, intentional self-harm, accidental falls and assault, while for children cancers are a more significant cause as are some causes related to illnesses or conditions that are already present at childbirth.

![Figure 8: Causes of death for children and young people](source: Eurostat (hlth_cd_aro))

Whilst the broad category of other causes shown in Figure 8 has the highest share (48 %) of deaths among children aged 1-4 years, the most common causes of death among the narrower causes presented are external factors (21 % in 2014). Neoplasms were the next most common cause of death, accounting for 16 % of total causes, along with congenital malformations, deformations and chromosomal abnormalities (included within the other causes category in Figure 8) which also accounted for 16 % of the total.

Neoplasms were the main individual cause of death among children aged 5-9 years (accounting for 30 % of all deaths for this age group in 2014), followed by external causes of death (22 %). For children aged 10-14 years, this situation was reversed, as external factors were the most common cause of death (31 % of deaths in 2014), followed by neoplasms (25 %).
In 2014, external causes accounted for 59 %, 60 % and 52 % of deaths among young people aged 15-19, 20-24 and 25-29 years respectively. One of the main types of deaths from external causes was deaths from transport accidents, with 25 %, 22 % and 15 % of deaths respectively in these three five-year age groups. Another common cause of external deaths for young people was intentional self-harm, amounting to 18 % of deaths for those aged 15-19 years, 21 % of deaths for young people aged 20-24 years and 20 % for those aged 25-29 years; as such, the death rate from intentional self-harm for young people aged 25-29 years was greater than that from transport accidents.

In absolute terms, about 6.6 thousand young people aged 15-29 years died in 2014 as a result of transport accidents in the EU-28. Examining the numbers by age group and gender (see Table 2), young men aged 20-24 years were the age group most involved in fatal transport accidents (5.3 thousand deaths). In the same year, almost the same number of young men died due to intentional self-harm, close to 5.3 thousand young men aged 15-29 years, equivalent to 80 % of the total deaths — male and female — from this cause among young people aged 15-29 years. For all external factors, the number of victims was also higher among young men than among young women.

### Table 2: Deaths of young people aged 15-29 years from external causes, EU-28, 2014

<table>
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<th>Source: Eurostat (hlth_cd_aro)</th>
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| Table 2: Deaths of young people aged 15-29 years from external causes

Certain perinatal conditions and congenital malformations are the most common causes of infant mortality

Looking at the cause of infant deaths, it appears that certain conditions originating in the perinatal period1 are the most common cause of death for infants aged between zero and one year (see Figure 9). In 20 EU Member States, at least 50 % of infant deaths were caused by such conditions in 2014. In Slovenia these conditions accounted for nearly two thirds (66 %) of all cases of infant mortality and this share peaked at nearly three quarters (73 %) in Luxembourg. Congenital malformations and chromosomal abnormalities are another common cause of death for infants aged less than one year, reported in 2014 most frequently in Lithuania (44 % of infant deaths) and Ireland (43 %). The other causes of infant deaths that are presented in Figure 9 were relatively uncommon across the EU-28 as a whole (each accounted for less than 5 % of all infant deaths), but were relatively common in a few of the Member States. For example, infant deaths resulting from diseases of the respiratory system were relatively common in Romania and to a lesser extent in Bulgaria, while sudden infant death syndrome (also known as cot death) was relatively common in Cyprus (2013 data), Luxembourg, Finland, Latvia and the Czech Republic. It should be noted that the overall number of infant deaths is relatively small and so the analysis of causes of death can vary greatly from one year to the next, particularly in smaller countries.

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1Conditions include, for example, birth trauma, respiratory and cardiovascular disorders, infections specific to the perinatal period.
Transport accidents are the leading cause of death among young people.

**TRANSPORT, TRAFFIC AND VEHICLE ACCIDENTS**

A transport accident is any accident involving a device designed primarily for, or being used at the time primarily for, conveying persons or goods from one place to another.

A traffic accident is any vehicle accident occurring on the public highway (in other words originating on, terminating on, or involving a vehicle partially on the highway).

A vehicle accident is assumed to have occurred on the public highway unless another place is specified, except in the case of accidents involving only off-road motor vehicles, which are classified as non-traffic accidents unless the contrary is stated.

*Source: WHO International Classification of Death Causes*

Transport accidents are an important cause of death, especially for young people. The main risk factors for fatal transport accidents are speed, alcohol or drug abuse, exposing vulnerable road users to motorised traffic, poor visibility and not using protective equipment.

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2 *Young drivers, the road to safety*, OECD and ECMT, 2006.
As seen above, the number of deaths of young people aged 15-29 years from transport accidents in the EU-28 amounted to 6.6 thousand in 2014, meaning that on average nearly one in 14 000 young people died as a consequence of a transport accident. The number of deaths of young people from transport accidents in 2014 corresponded to a decrease of 65 % compared with the 18.9 thousand such deaths in 2000. Looking at age groups, the number of deaths of young people aged 15-19 years decreased by 69 %, while the numbers for those aged 20-24 and 25-29 years decreased by 65 % and 62 % (see Figure 10).

For children and for young people, crude death rates from transport accidents were higher in 2014 for boys or young men than for girls or young women (see Figure 11). Differences are nevertheless more pronounced among young people than children. The biggest gender gap can be observed for the age groups 20-24 and 25-29 years.

Among the EU Member States, the lowest crude death rates from transport accidents for children and young people in 2014 were generally recorded in the United Kingdom, Spain, Denmark, Sweden and Malta. By contrast, the highest rates were in Latvia, Lithuania, Poland and Romania. Looking at the age group for 20-24 years, which had the highest crude death rate from transport accidents in the EU-28, the highest rates were recorded in Latvia, Estonia, Poland and Greece (see Figure 12).
Figure 11: Crude death rates for children and young people from transport accidents
Source: Eurostat (hlth_cd_acdr) and (hlth_cd_acdr2)

Figure 12: Crude death rates for children and young people from transport accidents, by age group, 2014
Source: Eurostat (hlth_cd_acdr2)
The number of deaths of children (0-14 years) from transport accidents in the EU-28 was much lower than for any of the three five-year age groups among young people, some 751 in 2014, 68 % fewer than in 2000 (2.3 thousand deaths). © Fotolia

Intentional self-harm remains a challenge in several northern EU Member States

**Intentional self-harm** implies purposely self-inflicted poisoning or injury and (attempted) suicide.

**Suicide** is the act of deliberately killing oneself. Risk factors for suicide include mental disorder (such as depression, personality disorder, alcohol dependence or schizophrenia), and some physical illnesses, such as neurological disorders, cancer, and HIV infection.

*Source: WHO International Classification of Death Causes*

The most important risk factors for suicidal behaviour are psychological and social in nature. Social factors may include discrimination (for example, bullying at school), social isolation, relationship conflicts with family and friends, unemployment or poverty. Mental and psychological problems play a key role in the emergence of suicidal behaviour, with depression and hopelessness being associated with 9 out of 10 cases of suicide. Drug abuse and alcohol use are also determinants; indeed, almost one quarter of suicides involve alcohol abuse. Intentional self-harm may also be the consequence of severe painful and dissembling physical illnesses, in combination with social isolation. Note that suicide rates tend to increase during periods of economic recession and unemployment.3

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Young people are especially vulnerable to the threat of suicide, as intentional self-harm was the most frequent
cause of death among young people (15-29 years) in 2014. In absolute numbers, the cases of intentional self-harm dropped from 263 to 155 for children aged 0-14 years and from 8 874 to 6 580 for young people aged 15-29 years (see Figure 13). The 25-29 years age group seems to be the most confronted with intentional self-harm, with just fewer than three thousand cases in 2014.

Young women tend to be substantially less affected by suicide and intentional self-harm, with crude death rates for boys (0-14 years) being 1.4 times as high as for girls and rates for young men (for five-year age groups between 15 and 29 years) being 2.7 to 4.5 times as high as those for young women in the EU-28 (see Figure 14).
The vast majority of young people perceived themselves to be in good or very good health. **Self-perceived health** gives an overall assessment by the respondent of their health in general. It is by definition subjective and is expected to include different dimensions of health such as psychological and physical symptoms.

Generally, young people are in a better health condition and feel healthier than older age groups. However, this period of life requires special attention since health-related behaviour establishes itself during adolescence and is strongly influenced by social and environmental factors. In 2016, 91 % of the EU-28’s young population aged 16-29 years declared that they were in good or very good health.

Self-perceived health status varies to some extent between EU Member States (see Figure 16). The lowest proportions of young people who declared themselves to be in good or very good health were registered in Portugal (84 %), Sweden, Estonia, the United Kingdom, Latvia and Denmark (all 85 %). In Greece and Romania, 97-98 % of young people perceived their health as being good or very good. Cyprus and Bulgaria were also near the top of the list with 96% of their young people perceiving themselves to be in good or very good health.

Generally, young men were more likely than young women to perceive themselves to be in good or very good health: in the EU-28 as a whole, 92 % of young men were of this opinion compared with 90 % of young women. Among the EU Member States, Luxembourg recorded the biggest gender gap for self-perceived health among young people, with the proportion of young men perceiving themselves to be in good or very good health some 6 percentage points higher than for young women. In Sweden, Cyprus and Lithuania, the share of young women perceiving their health as being good or very good was however slightly higher than the share recorded among young men.
In 18 EU Member States, at least 90 % of the young Europeans declared themselves to be in good or very good health in 2016.© Fotolia

Besides the objective health status, these differences across EU Member States in the self-perceived health may relate to general health standards in a country, and to cultural differences, for example how people evaluate their personal health or how they disclose their health problems.

Looking at the relationship between self-perceived health status and an individual’s income situation (see Figure 17), a clear pattern can be observed in almost all of the EU Member States: the higher the income of a young individual, the higher the probability of that young person reporting good or very good health.

**HOUSEHOLD INCOME AND INCOME QUINTILES**

An analysis by Income quintile is based on the distribution of the (equivalised disposable) income across the population of a given geographical entity. The total income of a household, after tax and other deductions, which is available for spending or saving, is divided by the number of household members converted into ‘equivalised’ adults. Household members are equivalised or made equivalent by weighting each of them according to their age, using the so-called modified OECD equivalence scale: the scale gives a weight of 1.0 to the first adult, 0.5 to any other household member aged 14 years and over and 0.3 to each child below the age of 14 years.

Income quintiles refer to the position in the frequency distribution. Quintiles divide a distribution into five parts so that 20 % of total observations are present in each quintile group. The quintile cut-off value is obtained by sorting all observations by equivalised income from lowest to highest, and then choosing the value of income under which 20 % (lower limit), 40 %, 60 %, 80 % and 100 % (upper limit) of the sample are located. A quintile group refers to the observations between two cut-off values (limits). When distributing a population by income quintiles, the first quintile group includes the one fifth of the population which has income below the lower limit (0-20 % of the population) and the fifth quintile group includes the one fifth of the population which has income greater than fourth limit, in other words the richest fifth of the population, covering those with incomes in the range of 80-100 % of the population.
On average in the EU-28, 88 % of the young population in the first income quintile group perceived their health...
as good or very good in 2016 compared with 95 % in the fifth quintile group. An income gap was observed in all EU Member States (see Figure 17). The largest difference in self-perceived health status between young people aged 16-29 years with the highest and lowest incomes was recorded in Latvia (17 points), followed by Portugal, Lithuania, Finland, Denmark and Sweden (with income gaps in the range of 10-15 points). By contrast, differences below 3 points between the first and the fifth income quintiles were observed in Greece, Romania and Croatia.

**Long-standing health problems vary according to gender and income level**

According to the WHO, long-standing health problems or chronic illnesses (hereafter referred to as long-standing health problems), such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes, are by far the leading cause of mortality and disability worldwide, representing 60 % of all deaths. Some long-standing health problems can be positively influenced through a healthy lifestyle. Their consequences, such as premature death and disability, could be reduced by an adequate and timely diagnosis/treatment as well as preventative actions. Although the prevalence of long-standing health problems is lower in young people, the psychological burden may be more serious and this could have important implications on social integration.

In 2016, 16 % of young people aged 16-29 years in the EU-28 reported that they suffered from a long-standing health problem. The lowest prevalence of long-standing health problems was observed in Romania, Bulgaria, Italy and Greece (all less than 5 %). The highest rates of young people having long-standing health problems — almost one out of four young people (23-24 %) — were registered in Finland and Sweden. These differences between EU Member States could also be related to cultural differences in self-perception and in practices for diagnosis, management and treatment of long-standing health problems.

![Figure 19: Young people aged 16-29 years suffering from a long-standing illness or health problem, by income quintile](https://www.eurostat.europa.eu/)

Overall there were 15 % of young men compared with 18 % of young women in the EU-28 declaring long-standing health problems in 2016. The biggest gender gap was observed in Finland, with a difference of 10 points, followed by Germany (5 points), Portugal and Slovenia (both 4 points). In 20 EU Member States, young
men reported long-standing health problems less often than young women did. In the remaining EU Member States, young men were more likely than young women to report long-standing health problems, with a gender gap of 2 points in Ireland (2015 data), Cyprus and Estonia, and 4 points in Lithuania.

Like self-reported health, the frequency of long-standing health problems among young people varies according to income level. On average, 19 % of young people in the EU-28 aged 16-29 years and in the first income quintile group reported a long-standing health problem in 2016 compared with 13 % for the fifth income quintile (see Figure 19). This pattern of a higher proportion of young people in the first income quintile reporting long-standing health problems than in the fifth quintile was observed in most EU Member States, the exceptions being Italy, Malta, Greece, Bulgaria, Luxembourg (2015 data) and Austria. By far the largest gap was observed in Sweden, where the proportion of people suffering from a long-standing health problem was 14 points higher among young people in the first quintile than among those in the fifth quintile.

**Limitations in usual activities also vary according to gender and income level**

People with long-standing health problems can experience difficulties in accomplishing everyday activities, which affects their quality of life. Data on the degree of limitation in usual activities due to health problems are used as a proxy measure for disability.

In 2016, 8 % of people aged 16-29 years living in the EU-28 reported health-related long-standing (longer than six months) limitations in usual activities (hereafter referred to as activity limitations) — see Figure 20. The prevalence of activity limitation among young people was highest in Denmark (20 %), Finland (17 %) and the Netherlands (16 %). The lowest prevalences of activity limitations among this age group were reported in Malta (2 %) and Bulgaria (4 %).

As for long-standing health problems, young women tended to report activity limitations more frequently than young men in the EU-28 as a whole and in a small majority of the EU Member States in 2016. The greatest gender gaps were observed in Finland and the Netherlands, where the difference between young women and men was 7-8 points. Nevertheless, in 10 Member States, proportionally more young men reported activity limitations than young women: in Lithuania, Estonia and Cyprus this difference was about 2 points.

![Figure 20: Young people aged 16-29 years with some or severe long-standing limitations in usual activities due to health problem, by sex, 2016](https://sslproxy06.data.eurostat.ec.europa.eu/NSPL/b/bd80508/bd80508f.png)
Young people aged 16-29 years with some or severe long-standing limitations in usual activities due to health problem, by income quintile, 2016

Source: Eurostat (hlth_silc_12)

Figure 21: Young people aged 16-29 years with some or severe long-standing limitations in usual activities due to health problem, by income quintile

Unmet needs for medical examination of young people aged 16-29 years, by type of barrier to access, 2016

Source: Eurostat (hlth_silc_08)

Figure 22: Unmet needs for medical examination of young people aged 16-29 years, by type of barrier to access

Income level was again a differentiating factor for activity limitations in almost all EU Member States (see Figure 21). For the EU-28, 6% of young people among the top (fifth) income quintile group compared with
11 % of young people from the bottom (first) quintile group declared activity limitations in 2016. This income gap varied considerably across EU Member States. The largest differences between the first and fifth quintile groups were registered in several northern Member States — Latvia, Denmark, Sweden and Estonia — where shares were 9 points higher among young women than among young men. By contrast, there was almost no difference in the shares between the sexes in Austria, Luxembourg (2015 data) and Italy.

**Medical needs of young people in the EU-28 are not always covered**

Differences in health status may be partly related to access to healthcare. Within the EU-28, 3 % of young people declared in 2016 having had unmet needs for medical examination during the previous 12 months (see Figure 22). For most of these, the reasons were that the medical services were too expensive, that they preferred to wait (for example, to see if their medical issue resolved itself), that they did not have time for an examination, or that waiting lists were too long.

However, the situation varied widely between EU Member States. While in Cyprus, Austria, the Netherlands, Slovenia, Germany, Spain, Lithuania, Croatia and Malta almost all (at least 99 %) young people did not face any unmet needs for medical examination in the previous 12 months, more than 1 in 10 young people in Sweden, Estonia and Greece declared having experienced unmet needs. In Greece the main barrier for unmet needs was cost, in Estonia it was waiting lists, while in Sweden there were a variety of barriers.

**Health determinants**

The health status of an individual results from a combination of several factors: genetic and biological characteristics, personal behaviour, socioeconomic background (income and education level) and physical environment. This section focuses on some health determinants that are linked to lifestyle related behaviours like obesity, drug and alcohol consumption.

**Obesity increases with age**

Obesity is a serious public health problem, as it significantly increases the risk of chronic diseases such as cardiovascular disease, type-2 diabetes, hypertension, coronary-heart diseases and certain cancers. Moreover, obesity is linked to a higher risk for psychological problems. For society, obesity has substantial direct and indirect costs that put a strain on national healthcare systems, economic productivity and social resources.

In 2014, 3 % of young people aged 15-19 years were classified as obese according to the body mass index (BMI), which can be a consequence of their dietary habits and lifestyles. This proportion increased with age, to 7 % among people aged 20-24 years and 9 % among people aged 25-29 years.

**BODY MASS INDEX EXPLAINED**

The body mass index (BMI) is a measure of a person’s weight relative to height that correlates fairly well with body fat. The BMI is accepted as the most useful indicator of obesity in adults when only weight and height data are available.

The BMI is calculated by dividing body weight (in kilograms) by height (in metres) squared.

The following subdivisions are used to categorise the BMI into four categories:

- < 18.5: underweight;
- ≥ 18.5 and < 25: normal weight;
- ≥ 25 and < 30: overweight (excluding obesity);
- ≥ 30: obesity.
As noted above, the share of obese young people in the EU-28 tends to increase with age (see Figure 23). The highest shares of obese young people were registered in Ireland, Malta and the United Kingdom, with shares for the youngest age group (15-19 years) around 6-7%, rising through 12-21% for the age group 20-24 years to a range of 14-20% among those aged 25-29 years. The lowest shares of obese young people were registered in Romania: 1% for the youngest age group and 4% for the oldest age group. This pattern of the share of obesity
increasing with age among younger people was observed in most EU Member States, with the only exceptions being in Ireland and Cyprus (where the share of obesity was higher among young people aged 20-24 years than among those aged 25-29 years) and Slovakia (where the shares were the same for the two youngest age groups, 15-19 and 20-24 years).

In most EU Member States for which data are available, more young men than young women aged 15-24 years were classified as obese (see Figure 24). The largest gender differences were observed in Hungary, Greece, Ireland, Austria and Slovakia, where the difference between the share of obese young men and women was around 3 points. In 12 Member States, more young women than young men were classified as obese, the difference being 2-3 points in Denmark, Cyprus, France, the United Kingdom, the Netherlands and the Czech Republic.

Around 30 % of young people in Hungary and Austria were daily smokers in 2014

The health consequences of regular smoking are both immediate (such as addiction to nicotine, respiratory difficulties and diseases) and long-term (such as specific types of cancer and coronary heart diseases). Smoking has been identified as a serious cause of premature illness and death. Although the majority of smoking-related deaths occur among middle-aged and elderly people, smoking behaviour is very often acquired at younger ages.

Around one fifth (19 %) of young people (15-29 years) in the EU-28 in 2014 were daily smokers. Among the EU Member States, this share ranged from 11 % in Denmark to 28 % in Bulgaria, with Sweden (8 %) below this range and Austria (30 %) and Hungary (also 30 %) above it.

Figure 25: Young people who are daily smokers, 2014(% share)

Source: Eurostat (hlth_ehis_sk1e)
aged 25-29 years was in fact lower than the proportion among young people aged 20-24 years.

![Graph showing daily smokers by sex among young people aged 15-24 years in 2014.](figure26)

Note: ranked on the average proportion for young men and women.

Source: Eurostat [online data code: hlth_ehis_sk1e]

Figure 26: Young people aged 15-24 years who are daily smokers, by sex

Source: Eurostat [hlth_ehis_sk1e]

Among young people aged 15-24 years in 2014, young men were more likely to be daily smokers than young women (see Figure 26). For the EU-28, 18% of young men declared themselves to be daily smokers, compared with 14% of young women. The same pattern — higher rates of daily smokers among young men — was observed in all EU Member States, except for Belgium, Ireland and Denmark where the rate was higher for young women, and the United Kingdom where the rates were the same for young men and young women. The gender gap was widest in Cyprus, where the percentage of young men who smoked daily was more than three times the equivalent percentage among young women.

The highest proportions of young male smokers were observed in Cyprus, Hungary (both 33%), Austria (30%), and Estonia (29%), while the lowest was in Sweden (8%). Concerning young female smokers, the highest rate was registered in Austria (24%), followed by Hungary and France (both 21%), while the lowest rates were in Romania, the Czech Republic, Sweden, Lithuania and Cyprus (all under 10%).

Young men are more likely to use cannabis than young women, except in Sweden

The use of illicit drugs or psychoactive substances may affect an individual’s physical and mental health, as well as their relationships and integration in society. In particular among young people, who undergo a period of neurological development, consumption of illicit substances may have more serious effects as it can impact the brain maturation processes.

**EU DRUGS STRATEGY**

In 2012, the European Council endorsed a new EU Drugs Strategy (2013-2020). In addition to the two traditional aims of reducing both the supply and demand of drugs, the new strategy introduced the 'reduction of the health and social risks and harms caused by drugs' as a policy objective.
Cannabis is the most commonly used illicit drug. Data coming from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) show that cannabis consumption amongst young people aged 15-24 years varied greatly between EU Member States in 2015 (see Figure 27). The lowest rate of use was reported in Romania (3 %; 2013 data), followed by Cyprus (2016 data), Portugal (2012 data), Hungary and Lithuania (2012 data), all with rates of 5-6 %). The highest rates, 27 %, were reported in the Czech Republic and France (2014 data), followed by Denmark (24 %; 2013 data) and Italy (22 %; 2014 data).

Looking at the issue from a gender perspective, it can be noted that in all EU Member States, except Sweden, the rate of cannabis use was higher for young men than for young women. In the Czech Republic, which had the highest share among the EU Member States of young men who had used cannabis during the previous year, the rate of use among young men (39 %) was 23 points higher than that for young women (15 %).

Data coming from the 2015 ESPAD report4 shed light on the drug consumption behaviour of very young people, namely those aged 15-16 years (see Table 3). The highest rates of young people aged 15-16 years who had not used cannabis during the year preceding the survey were found in Sweden, Romania, Cyprus, Finland and Greece (93-954 %), while the lowest rates were registered in the Czech Republic and France (both 73 %). France accounted for the highest share of young people who had used cannabis on more than 20 occasions during the previous year (7 %). As for the rate of young people who had used cannabis only once or twice during the previous year (so-called experimental users), the highest proportion was observed in the Czech Republic (13 %). At the other end of the scale, Sweden, Cyprus and Romania, had the lowest rates of experimental users, all 3 %.

4European School Survey Project on Alcohol and Other Drugs.
Table 3: Frequency of marijuana or hashish use during the previous 12 months among pupils who turned 16
Source: European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), ESPAD report 2015

Austria, Estonia, Germany and Slovenia had the highest rates of young people having consumed alcohol in 2015

In many societies, consumption of alcoholic beverages is a regular feature of social gatherings. However, alcohol is a psychoactive substance with dependence-producing properties. Depending on drinking patterns and the strength of the alcohol being consumed it can have serious negative consequences on health (such as toxic effects on organs and tissues, intoxication, dependency), while the consumption of alcohol may also increase the chances of being involved in situations resulting in injuries. For adolescents, alcohol consumption may play a role in social interaction and impact on a person’s image among peers. According to the WHO, children, adolescents and elderly people are more vulnerable to alcohol-related harm than other age groups. Furthermore, the early onset of alcohol consumption is associated with increased risk of alcohol abuse and addiction at later ages.

Data for 2015 (or earlier years) gathered by the EMCDDA show that in all 23 EU Member States for which data are available (see Figure 28), the majority of young people aged 15-24 years had consumed alcohol during the previous year. The proportion of those who had consumed alcohol ranged from 85-90 % in Austria, Estonia (2008 data), Germany, Slovenia (2012 data) and Malta (2013 data), to 58 % in Portugal (2012 data).

In general, young men tend to consume more alcohol than young women. The largest differences between the sexes for young people aged 15-24 years in 2015 — both 17 points — were recorded in Bulgaria (2012 data) and Latvia, followed by Romania (2013 data), Hungary and Portugal (2012 data) where the difference was 14-16 points. In some EU Member States, including Croatia and Finland (2014 data), the gender difference concerning the use or not of alcohol was almost non-existent (below 1 point). In the Czech Republic (2012 data), Sweden (2013 data) and Germany, the proportion of young women who had consumed alcohol during the previous 12 months slightly outnumbered the share recorded among young men.
Alcohol intoxication or drunkenness occurs when the quantity of alcohol consumed leads to the impairment of a person’s mental and physical abilities (for example, staggering when walking, not being able to speak properly, vomiting or loss of memory). Data collected through the ESPAD survey (see Table 4) reveal that in most EU Member States between one fifth and two fifths of pupils aged 15-16 years had been drunk at least once during the year preceding the 2015 survey. Approximately half to three quarters of them were drunk once or twice, whereas 0.5-6.3 % of those who had been drunk at least once experienced drunkenness on more than 20 occasions.

Portugal and Sweden were the EU Member States where alcohol consumption in harmful quantities was the least common among pupils aged 15-16 years: 78 % of them declared not to have been drunk during the last year, with shares above three quarters also reported in Romania, Cyprus, and Belgium (Flanders only). At the other end of the spectrum, more than half of pupils aged 15-16 years in Denmark declared that they had been drunk at least once during the previous 12 months, more than half of whom declared that they had been drunk three or more times.
### Table 4: Frequency of being drunk during the previous 12 months among pupils who turned 16

(\% share of pupils who turned 16 in 2015)

<table>
<thead>
<tr>
<th>Country</th>
<th>None</th>
<th>At least once</th>
<th>of which</th>
<th>Number of occasions</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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(*) Flanders only.

Source: European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), ESPAD report 2015

### Source data for tables and graphs

- Health: tables and figures

### Data sources

Eurostat provides information on a wide range of demographic data, at national and regional level on an annual basis. These include statistics on the number of deaths by age, by year of birth, as well as by sex, educational attainment, legal marital status, citizenship and country of birth. Statistics are also collected for life expectancy, infant mortality and late foetal deaths. The completeness of information depends on the availability of data reported by the national statistical authorities. A series of mortality indicators are produced, which may be used to derive a range of information on subjects such as crude death rates by age, gender or educational attainment.

Health statistics collected during the period up to and including reference year 2010 were submitted by EU Member States to Eurostat on the basis of a gentleman’s agreement. Regulation 1338/2008 of the European Parliament and of the Council of 16 December 2008 on Community statistics on public health and health and safety at work provides the legal basis for compiling statistics on: causes of death; healthcare; health status and health determinants; accidents at work; occupational diseases and other work-related health problems. Within the context of this regulation, an implementing Regulation on Community statistics on public health and health and safety at work, as regards statistics on causes of death (328/2011) was adopted by the European Parliament and the Council on 5 April 2011; it provides a legal basis for the collection of statistics in each EU Member State from reference year 2011 onwards and has resulted in a broader range of statistics being collected.

A wide range of statistics, for example, on healthcare systems, health-related behaviour, diseases and causes of death and a common set of EU health indicators, upon which there is EU-wide agreement regarding definitions, data collection and use has been established within the framework of the open method of coordination for health issues.
The causes and groups of medical causes of death chosen have been selected from the summary list of 86 causes compiled by Eurostat in the European shortlist 2012, which is based on the International Statistical Classification of Diseases and Related Health Problems (ICD) developed and maintained by the World Health Organisation (WHO). Statistics on causes of death are based on information derived from death certificates. The medical certification of death is an obligation in all EU Member States. All deaths are identified by the underlying cause of death, in other words, the disease or injury which initiated the train of morbid events leading directly to death (a definition adopted by the World Health Assembly). Although definitions are harmonised amongst EU Member States, the statistics may not be fully comparable as classifications may vary when the cause of death is multiple or difficult to evaluate and because of different notification procedures.

Health interview surveys are the source of information for describing the health status and the health-related behaviours of the European population. The European health interview survey (EHIS) aims at measuring, in a harmonised way and with a high degree of comparability among EU Member States, the health status, lifestyle (health determinants) and use of healthcare services among people in the EU.

Context

WHAT IS THE 'HEALTH PROGRAMME'?

The main instrument for implementing the EU’s public health strategy is the 'Health programme', which contributes to funding projects on health promotion, health security and health information.

In March 2014, the third 'Multi-annual programme of EU action in the field of health for the period 2014-2020' was adopted (Regulation (EU) No 282/2014). The programme has four overarching objectives:

- promote health, prevent diseases and foster supportive environments for healthy lifestyles taking into account the 'health in all policies' principle;
- protect EU citizens from serious cross-border health threats;
- contribute to innovative, efficient and sustainable health systems;
- facilitate access to better and safer healthcare for EU citizens.

SOLIDARITY IN HEALTH

A specific EU action on health inequality was set out in the 2009 Communication on health inequalities “Solidarity in health” (COM(2009) 567 final). It aims to support EU Member States and stakeholder action as well as provide support from EU policies in areas such as public health, employment, social policies, research and regional policy towards addressing health inequalities. The latest progress report on the implementation of this communication was published in September 2013.

EUROPEAN CORE HEALTH INDICATORS

The European Core Health Indicators (ECHI) project established a list of 88 indicators which focus on general public health issues and are designed to provide a comprehensive overview on health.

EUROPEAN HEALTH INTERVIEW SURVEY

Most data on health determinants come from the European Health Interview Survey (EHIS), which consists of four modules on health status, health care use, health determinants and socioeconomic background variables. The first wave of EHIS (EHIS wave 1) was conducted under a gentlemen’s agreement between 2006 and 2009. A total of 19 EU Member States took part in this first survey but not all of them implemented all modules and variables. The second wave (EHIS wave 2, 2013-2015) was undertaken on the basis of a European Commission regulation, which made the survey compulsory for all EU Member States.
Other articles

- All articles from the publication Being young in Europe today
- All articles on Health

Main tables

- Population (t_demo_pop)

Database

- Mortality (demo_mor)
- Youth (yth), see:
  - Youth health (yth_health)

Dedicated section

- Quality of life
- Youth

Methodology

- Causes of death (ESMS metadata file — hlth_cdeath_esms)
- European Health Interview Survey (EHIS) (ESMS metadata file — hlth_det_esms)
- Mortality (ESMS metadata file — demo_mor_esms)

Legislation

- Regulation (EU) No 328/2011 of 5 April 2011 implementing Regulation (EC) No 1338/2008 on Community statistics on public health and health and safety at work, as regards statistics on causes of death Text with EEA relevance
- Regulation (EC) No 1338/2008 of 16 December 2008 on Community statistics on public health and health and safety at work (Text with EEA relevance)

External links

- European Commission — Public health
- European Commission Directorate-General for Employment, Social affairs & Inclusion

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