

Health

3





Introduction

Health is an important priority for Europeans, who expect to have a long and healthy life, to be protected against illnesses and accidents and to receive appropriate health care. Health issues cut across a range of topics – including consumer protection (food safety issues), workplace safety, environmental or social policies. The policy areas covered within this area are under the remit of the Directorate-General for Health and Consumers and of the Directorate-General for Employment, Social Affairs and Inclusion.

The competence for the organisation and delivery of health services and [healthcare](#) is largely held by the Member States, while the [European Union \(EU\)](#) complements the Member States' health policies through launching actions such as those in relation to cross-border health threats and patient mobility. Gathering and assessing accurate, detailed information on health issues is vital for the EU to effectively design policies and target future actions. A first programme for Community action in the field of public health covered the period from 2003 to 2008. On 23 October 2007 the [European Commission](#) adopted a new strategy 'Together for health: a strategic approach for the EU 2008-2013' (COM(2007) 630). In order to bring about the changes identified within this new strategy, the second programme of Community action in the field of health came into force from 1 January 2008. It put in place an overarching, strategic framework for policy developments relating to health in the coming years; it has four main principles and three strategic themes for improving health in the EU. The principles are:

- taking a value-driven approach;
- recognising the links between health and economic prosperity;
- integrating health in all policies;
- strengthening the EU's voice in global health issues.

The strategic themes include:

- fostering good health in an ageing Europe;
- protecting citizens from health threats;
- looking to develop dynamic health systems and new technologies.

The programme is valued at EUR 321.5 million and will be implemented by means of annual work plans which will set out priority areas and funding criteria. In October 2011 the European Commission published a mid-term evaluation of the strategy. Within this strategy there is a strong need for comparable data on health and health-related behaviour, diseases and health systems. This needs to be based on common EU health indicators, for which there is Europe-wide agreement regarding definitions, collection and use. These include the Healthy Life Years (HLY) indicators and the European Community Health Indicators (ECHI).

Set up at the [Lisbon European Council](#) of March 2000, the [open method of coordination \(OMC\)](#) on [social protection](#) and social inclusion provides a framework of political coordination without legal constraints. Member States agree to identify and promote their most effective policies in the fields of social protection and social inclusion with the aim of learning from each others' experiences. The health and long-term care strand of the OMC is structured according to three objectives:

- access to care and inequalities in outcomes;
- quality of care;
- long-term sustainability of systems.

Concerning health and safety at work, the [EC Treaty](#) states that 'the Community shall support and complement the activities of the Member States in the improvement in particular of the working environment to protect workers' health and safety'. In 2007 the [Council](#) adopted Resolution 2007/C 145/01 of 25 June 2007 on a new Community strategy on health and safety at work (2007-2012). Actions in the field of health and safety at work are supported by the PROGRESS programme (2007-2013).

In December 2008 the [European Parliament](#) and the Council adopted Regulation 1338/2008 on Community statistics on public health and health and safety at work. The Regulation is designed to ensure that health statistics provide adequate information for all EU Member States to monitor Community actions in the field of public health and



health and safety at work. In April 2011 two Commission regulations were adopted specifying in detail the variables, breakdowns and metadata that

Member States must deliver: Regulation 328/2011 on statistics on causes of death and Regulation 349/2011 on statistics on accidents at work.

3.1 Healthy life years

Healthy life years, the number of years that a person is expected to continue to live in a healthy condition, is an important measure of the relative health of populations in the **European Union (EU)**. **Eurostat** calculates this indicator for two ages (at birth and at the age of 65), with the indicator being presented separately for males and females.

Whether extra years of life gained through increased longevity are spent in good or bad health is a crucial question. Since **life expectancy at birth** is not able to fully answer this question, indicators of health expectancies, such as healthy life years (also called **disability-free life expectancy**) have been developed. These focus on the quality of life spent in a healthy state, rather than the quantity of life – as measured by **life expectancy**. The calculation of the healthy life years indicator is based on a self-perceived question which aims to measure the extent of any limitations because of a health problem that may have affected respondents as regards activities they usually do (for at least six months).

Main statistical findings

In 2009 the number of healthy life years at birth stood at 60.9 years for men and 61.6 years for women in the **EU-27**; this represented 79.4% and 74.5% of total life expectancy at birth for men and women. For survivors at the age of 65, the number of remaining healthy life years was 8.2 years for men and 8.3 years for women. These figures can be contrasted with the life expectancy of those who survive to the age of 65 – around 17 years for men and 20 years for women.

Life expectancy for women in the **EU-27** was, on average, six years longer than that for men in 2009. However, most of these additional years tend to be lived with activity limitations. Indeed,

the **gender gap** was considerably smaller in terms of healthy life years – around one year difference in favour of women – than for overall life expectancy. On average, men therefore tend to spend a greater proportion of their shorter lives free of activity limitation.

Across the EU Member States, life expectancy at birth in 2009 ranged between 67.5 years and 79.8 years (12.3 years difference) for men and between 77.4 years and 85.0 years (7.6 years difference) for women. The corresponding healthy life years values ranged from 52.1 years to 70.5 years (18.4 years difference) for men and from 52.3 years to 70.6 years (18.3 years difference) for women. Differences between Member States therefore occur more in terms of the quality (health wise) of life, rather than the number of years of life expectancy. In six of the Member States (Denmark, Spain, Italy, the Netherlands, Portugal and Sweden), men (at birth) could expect to live longer than women without disability. In Bulgaria, Estonia, Lithuania and Poland the gender gap in healthy life years at birth was around four years in favour of women.

Life expectancy was rather stable between 2008 and 2009. However, during the same period the number of healthy life years decreased for men in nine Member States and for women in eleven Member States.

Data sources and availability

The indicator for healthy life years is calculated using **mortality** statistics and data on self-perceived disability. Mortality data comes from Eurostat's demographic database, while self-perceived disability data comes from a minimum European health module that is integrated within the survey on **EU statistics on income and living conditions**



(EU-SILC). The EU-SILC question is: for at least the past six months, to what extent have you been limited because of a health problem in activities people usually do? Would you say you have been:

- strongly limited?
- limited?
- not limited at all?

Context

Life expectancy at birth remains one of the most frequently quoted indicators of health status and economic development. Life expectancy at birth has risen rapidly in the last century due to a number of important factors, including reductions in infant mortality, rising living standards, improved lifestyles and better education, as well as advances in [healthcare](#) and medicine. While most people are aware that successive generations are living longer, less is known about the health of the EU's ageing population.

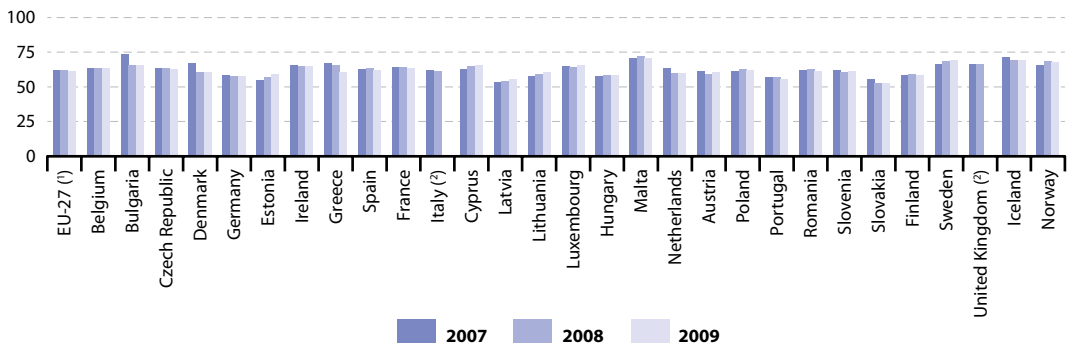
The health status of a population is difficult to measure because it is hard to define among individuals, populations, cultures, or even across time periods. As a result, the demographic measure of life expectancy has often been used as a measure of a nation's health status because it is based on a simple

and easy to understand characteristic – namely, that of death.

Indicators on healthy life years introduce the concept of the quality of life, by focusing on those years that may be enjoyed by individuals free from the limitations of illness or disability. Chronic disease, frailty, mental disorders and physical disability tend to become more prevalent in older age, and may result in a lower quality of life for those who suffer from such conditions, while the burden of these conditions may also impact on healthcare and pension provisions.

Healthy life years also monitor health as a productive or economic factor. An increase in healthy life years is one of the main goals for EU health policy, given that this would not only improve the situation of individuals (as good health and a long life are fundamental objectives of human activity) but would also lead to lower public healthcare expenditure. If healthy life years increase more rapidly than life expectancy, then not only are people living longer, but they are also living a greater proportion of their lives free from health problems. Any loss in health will, nonetheless, have significant effects. These will include an altered pattern of resource allocation within the healthcare system, as well as wider ranging effects on consumption and production throughout the economy.

Figure 3.1.1: Healthy life years at birth, females, 2007-2009 (years)

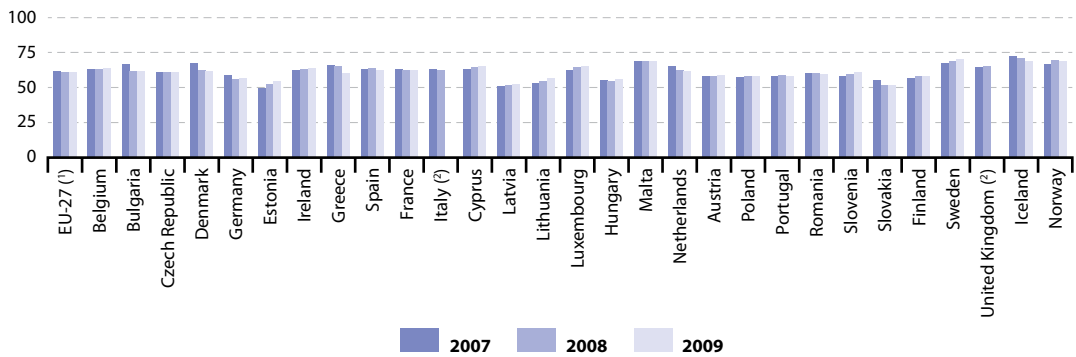


(*) 2009, provisional.

(?) 2009, not available.

Source: Eurostat (online data code: [hlth_hlye](#))

Figure 3.1.2: Healthy life years at birth, males, 2007-2009
(years)

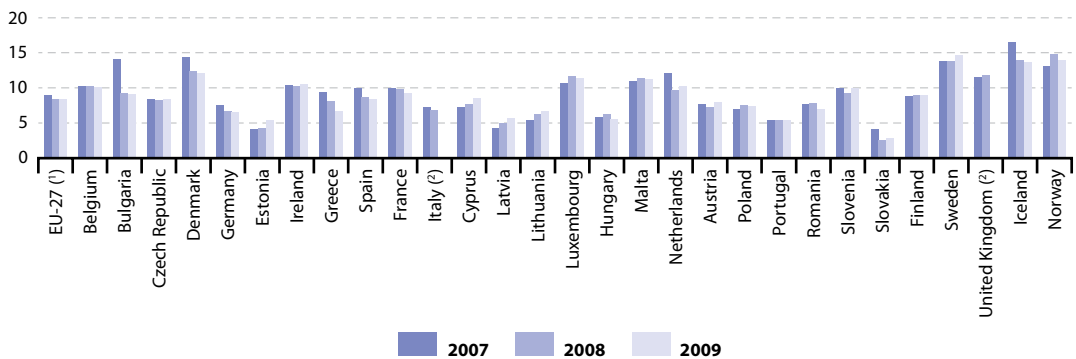


(¹) 2009, provisional.

(²) 2009, not available.

Source: Eurostat (online data code: [hlth_hlye](#))

Figure 3.1.3: Healthy life years at age 65, females, 2007-2009
(years)



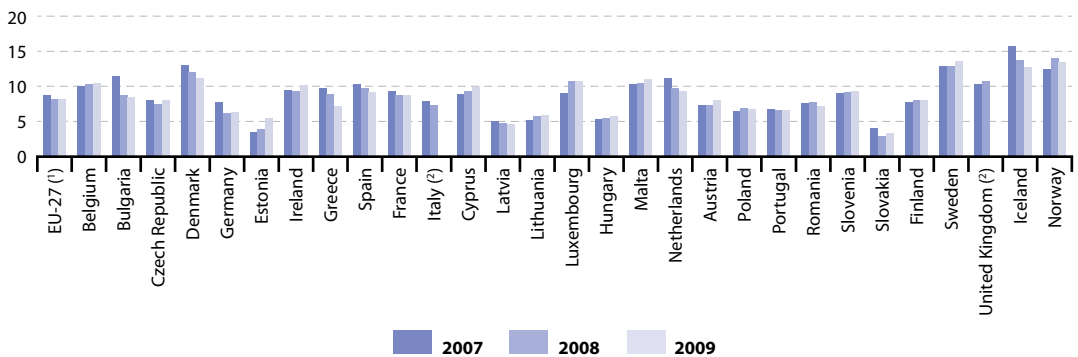
(¹) 2009, provisional.

(²) 2009, not available.

Source: Eurostat (online data code: [hlth_hlye](#))



Figure 3.1.4: Healthy life years at age 65, males, 2007-2009 (years)



(*) 2009, provisional.

(*) 2009, not available.

Source: Eurostat (online data code: [hlth_hlye](#))

3.2 Causes of death

This subchapter gives an overview of recent statistics on [causes of death](#) in the [European Union \(EU\)](#). By relating all deaths in the population to an underlying cause of death, the risks associated with death from a range of specific diseases and other causes can be assessed; these figures can be further broken down by age, sex, nationality and region ([NUTS level 2](#)), using [standardised death rates](#).

Statistics on causes of death are important to evaluate the state of health and [healthcare](#) in the EU. They suggest which preventive and medical-curative measures and which investments in research might increase the [life expectancy](#) of the population. These statistics, which are among the oldest medical statistics available, provide information on developments over time and differences in causes of death between Member States.

Main statistical findings

The latest information available for 2009 (*) shows that diseases of the circulatory system and cancer

were, by far, the leading causes of death in Europe. Between 2000 and 2009 there was a marked reduction in [EU-27](#) death rates resulting from ischaemic heart disease and from transport accidents (with combined rates for men and women falling by more than 30%), while there was a reduction of almost 10% in the [EU-27](#) death rate for cancer during the same period.

Diseases of the circulatory system

Diseases of the circulatory system include those related to high blood pressure, cholesterol, diabetes, and smoking; although, the most common causes of death were ischaemic heart diseases and cerebrovascular diseases. The Member States with the highest death rates from ischaemic heart disease – for men and women combined – were the [Baltic Member States](#), Hungary and Slovakia (all above 200 deaths per 100 000 inhabitants in 2009), while France, Portugal, the Netherlands, Luxembourg and Spain had the lowest rates (below 50 deaths per 100 000 inhabitants).

(*) France and Italy, 2008; Switzerland, 2007; Belgium, 2005.



Cancer

Cancer was a major cause of death in each of the EU Member States (averaging 169 deaths per 100 000 inhabitants across the EU-27 in 2009). Hungary, Poland, Slovenia, the Czech Republic, Slovakia, Latvia and Lithuania were most affected by this group of diseases. The most common forms of cancer in the EU-27 in 2009 included malignant neoplasms of the larynx, trachea, bronchus and lung, colon, breast, and those that the [International classification of diseases \(ICD\)](#) classifies as 'stated or presumed to be primary, of lymphoid, hematopoietic and related tissue'.

Analysing the figures by sex, men outnumbered women in relation to the number of deaths from cancer. Data for cancer of the larynx, trachea, bronchus and lung showed some marked differences between Member States in 2009: for men Hungary reported the highest death rate from these cancers among the EU Member States, followed by Poland, the Baltic Member States, Belgium (2005 data) and Romania; Hungary also reported a high rate for women, just behind the rate reported for Denmark. Mortality figures for this type of cancer are generally rising for women while decreasing for men.

Breast cancer as a cause of death of women was lowest (17.6 deaths per 100 000 inhabitants) in Spain in 2009, around half the rate recorded in Malta (34.4 deaths per 100 000 inhabitants). There were also relatively high death rates from breast cancer among women from Belgium, Denmark, Ireland and Hungary – see Table 3.2.1.

Respiratory diseases

The highest death rates from respiratory diseases in 2009 were recorded in Ireland, the United Kingdom, Belgium (2005 data), Denmark and Portugal. After cancer and circulatory diseases, this was the third most common cause of death in the EU-27 (with an average of 43.6 deaths per 100 000

inhabitants). Within this group of diseases, chronic lower respiratory diseases were the most common cause of mortality followed by pneumonia. Respiratory diseases are age-related with the vast majority of deaths from these diseases recorded among those aged 65 or more.

External causes of death

This category includes deaths resulting from intentional self-harm (suicide) and transport accidents. Although suicide is not a major cause of death and the data for some Member States may suffer from underreporting, it is often considered as an important indicator to be addressed by society. The lowest suicide rates in 2009 were recorded in Greece and Cyprus, and relatively low rates were also recorded in Italy (2008), Spain, the United Kingdom, Portugal and Malta. In 2009, the death rate from suicide in Lithuania was approximately three times the EU-27 average (10.3 deaths per 100 000 inhabitants), and relatively high rates (around double the EU-27 average) were recorded in Hungary and Latvia. Among women, relatively high suicide rates were recorded in Finland, Belgium (2005 data), Hungary and Lithuania – see Figure 3.2.5.

Although transport accidents occur on a daily basis, the number of deaths caused by transport accidents are fewer than, for example, the number of suicides. Romania, Greece, Lithuania and Poland had the highest death rates (in excess of 12 deaths per 100 000 inhabitants) resulting from transport accidents in 2009, while Sweden, the Netherlands and the United Kingdom reported the lowest rates (no more than four deaths from transport accidents per 100 000 inhabitants).

Gender

EU-27 death rates were higher for men than for women for all of the main causes of death in 2009 (except for breast cancer) – see Figure 3.2.3. Death rates for ischaemic heart diseases were



about twice as high for men (110 deaths per 100 000 inhabitants in 2009) as for women (56 deaths per 100 000 inhabitants). Death rates for men were four to five times higher than those recorded for women for drug dependence and alcohol abuse, and three to four times higher for AIDS (HIV) and suicide (intentional self-harm).

There was a higher incidence of death from heart disease than from cancer for both sexes in the Baltic Member States, Slovakia and Romania, while in Finland there were more deaths from heart disease than from cancer among the male population.

Age

For people below 65 years of age the leading causes of mortality were somewhat different in terms of their relative importance (see Table 3.2.2). Cancer was the leading cause of death within this age group, followed by diseases of the circulatory system, external causes of mortality and morbidity, and diseases of the digestive system. However, unlike for those aged 65 years or more, diseases of the respiratory system did not figure among the four most prevalent causes of mortality.

Data sources and availability

Eurostat began collecting and disseminating mortality data in 1994, broken down by:

- a shortlist of 65 causes of death based on the International classification of diseases (ICD), developed and maintained by the [World Health Organization \(WHO\)](#);
- sex;
- age;
- geographical region (NUTS level 2).

Annual data are provided in absolute numbers, as crude death rates and as standardised death rates. Since most causes of death vary significantly by age and according to sex, the use of standardised death rates improves comparability over time and between countries as death rates can be measured independently of the population's age structure.

Statistics on the causes of death are based on two pillars: medical information contained on death certificates, which may be used as a basis for the ascertaining the cause of death; and the coding of causes of death following the [WHO-ICD](#) system.

The validity and reliability of statistics on the causes of death rely on the quality of the data provided by certifying physicians. Inaccuracies may result for several reasons, including:

- errors can occur with the issue of the death certificate;
- the medical diagnosis;
- the selection of the main cause of death;
- the coding of the cause of death.

Sometimes there is ambiguity in the cause of death of a person. Besides the illness leading directly to death, the medical data on the death certificate should also contain a causal chain linked to the suffering of the deceased. Other substantial health conditions may be indicated, which did not have a link to the illness leading directly to death, but may have unfavourably affected the course of a disease and thus contributed to the fatal outcome. Indeed, there is sometimes criticism that the coding of only one illness as a cause of death appears more and more unrealistic in view of the increasing life expectancy and associated changes in morbidity. For the majority of the deceased of 65 years and older the selection of just one out of a number of possible causes of death may be somewhat misleading. For this reason, some of the EU Member States have started to consider multiple-cause coding. Eurostat has supported Member States in their efforts of developing a joint automated coding system called IRIS for the improvement and better comparability of the causes of death data in Europe.

Context

Statistics on causes of death play a key role in the general information system relating to the state of health in the EU. All deaths in the population are identified by the underlying cause of death, in other words 'the disease or injury which initiated the train of morbid

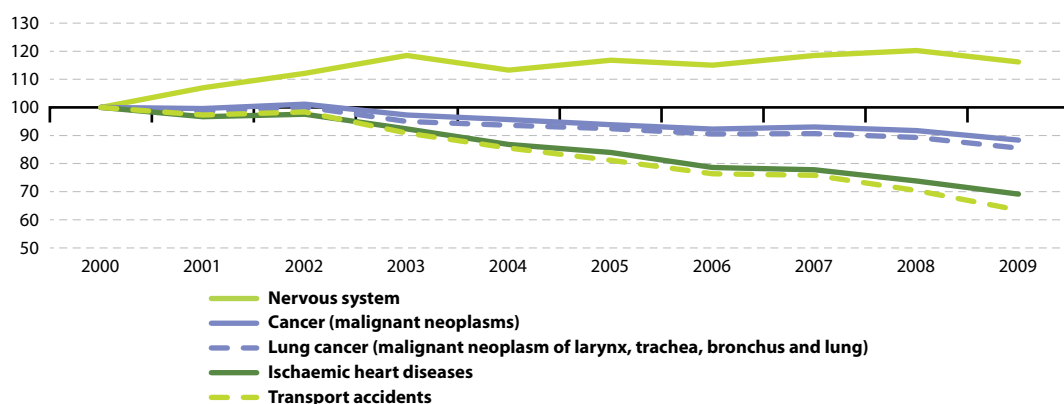


events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury' (a definition adopted by the World Health Assembly). The data presented in this subchapter provide information on the risks associated with death from a range of specific diseases and other causes; a breakdown by age, sex, nationality and region (NUTS level 2) of the deceased is also available.

Statistics on causes of death provide indications as to which preventive and medical-curative measures

as well as investments in research have the potential to increase the life expectancy of the population. Standardised death rates may be used as a starting point for targeted epidemiological research. As there is a general lack of comprehensive European morbidity statistics, data on causes of death are often used as a tool for evaluating health systems in the EU and may also be employed for evidence-based health policy.

Figure 3.2.1: Causes of death – standardised death rate per 100 000 inhabitants, males, EU-27, 2000-2009 (¹)
(2000 = 100)



(¹) Provisional.

Source: Eurostat (online data code: [hlth_cd_asdr](#))



Table 3.2.1: Causes of death – standardised death rate, 2009 ⁽¹⁾
(per 100000 inhabitants)

	Total							Females	
	Cancer ⁽²⁾	Lung cancer ⁽³⁾	Colo-rectal cancer	Circula-tory disease	Heart disease ⁽⁴⁾	Respira-tory diseases	Transport accidents	Breast cancer	Uterus cancer
EU-27	169.0	38.6	18.9	217.3	79.8	43.6	7.4	23.1	7.2
Belgium	174.5	46.3	18.4	198.2	67.5	68.9	10.6	29.4	6.2
Bulgaria	161.2	36.3	21.8	605.0	116.1	39.7	11.0	21.3	13.5
Czech Republic	197.5	41.5	27.0	357.2	170.2	43.8	9.0	20.0	9.5
Denmark	188.9	48.2	23.8	159.5	59.8	66.5	5.5	28.9	5.7
Germany	159.8	34.3	18.1	217.1	84.4	39.5	5.0	24.0	5.5
Estonia	187.3	35.5	21.1	423.6	204.8	23.9	8.1	22.1	9.9
Ireland	180.8	39.9	20.1	190.1	102.3	70.6	5.9	28.1	8.0
Greece	153.5	40.1	12.4	244.6	67.4	53.7	13.6	21.1	5.3
Spain	153.0	36.1	20.0	143.2	45.4	50.3	5.7	17.6	5.8
France	166.0	36.6	16.7	124.7	33.8	27.3	6.9	24.1	6.4
Italy	161.2	35.2	17.4	173.8	60.3	28.6	8.3	23.5	5.1
Cyprus	123.1	25.0	10.0	194.4	70.7	39.4	10.5	21.5	4.2
Latvia	193.5	37.1	20.8	479.5	254.5	22.7	10.8	25.2	13.3
Lithuania	190.5	37.1	21.8	496.8	305.1	35.7	12.8	24.2	14.3
Luxembourg	165.8	40.6	19.4	186.2	44.8	44.3	9.1	24.5	4.5
Hungary	243.2	70.5	34.8	421.2	214.8	44.3	10.1	28.1	10.3
Malta	153.1	28.5	18.5	212.2	115.8	51.1	4.9	34.4	6.1
Netherlands	182.4	46.2	21.1	150.2	42.8	52.8	3.9	26.8	5.0
Austria	157.9	32.6	16.4	213.0	97.8	28.3	6.9	22.8	6.2
Poland	201.6	53.0	21.9	355.4	96.7	41.8	12.1	20.3	12.2
Portugal	156.2	26.5	22.0	177.6	42.2	63.7	9.0	20.2	8.4
Romania	181.4	42.3	19.5	548.4	188.8	50.6	15.1	22.6	17.4
Slovenia	198.5	39.0	26.5	231.7	64.4	37.8	9.3	25.5	8.4
Slovakia	197.0	37.6	28.8	450.0	270.1	51.7	9.2	21.3	12.4
Finland	134.8	25.9	13.2	218.1	122.5	24.4	6.0	19.4	5.6
Sweden	144.8	25.1	17.2	186.9	83.7	30.7	3.8	19.1	6.4
United Kingdom	172.6	40.3	17.0	169.2	80.8	69.6	4.0	25.4	5.9
Iceland	155.9	38.0	17.1	172.7	83.2	42.3	4.2	20.1	2.7
Norway	156.4	33.5	22.1	157.6	65.9	49.4	5.2	19.0	6.4
Switzerland	146.1	30.4	15.1	161.2	66.1	27.2	5.0	22.1	5.1
Croatia	211.8	49.4	28.5	387.6	158.4	33.2	12.9	25.4	9.6
FYR of Macedonia	173.8	42.5	18.8	566.4	89.7	33.4	7.2	23.7	10.5

⁽¹⁾ France and Italy, 2008; Switzerland, 2007; Belgium, 2005.

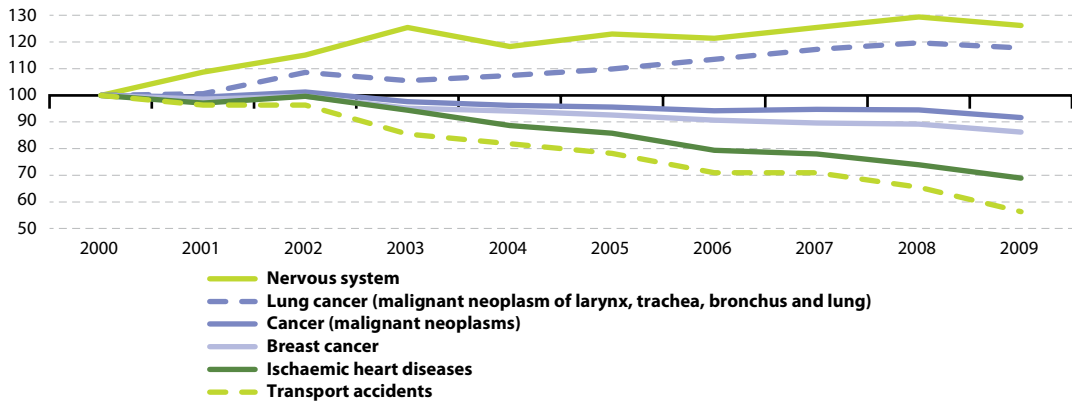
⁽²⁾ Malignant neoplasms.

⁽³⁾ Malignant neoplasm of larynx, trachea, bronchus and lung.

⁽⁴⁾ Ischaemic heart diseases.

Source: Eurostat (online data code: [hlth_cd_asdr](#))

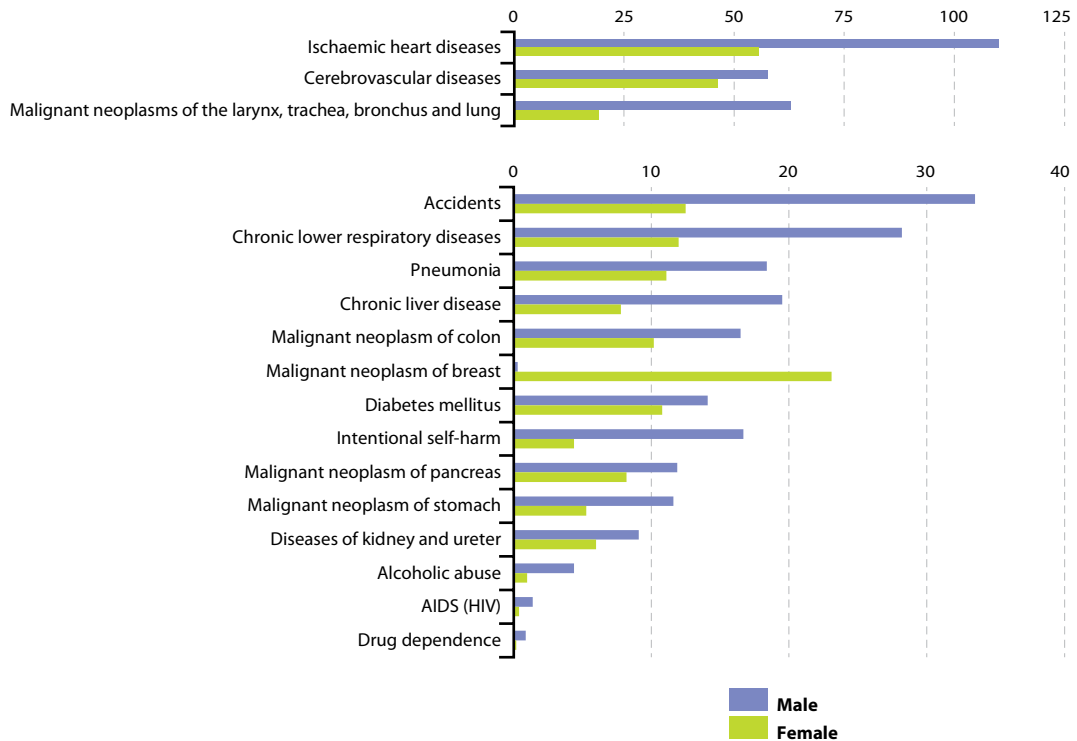
Figure 3.2.2: Causes of death – standardised death rate per 100 000 inhabitants, females, EU-27, 2000-2009 ⁽¹⁾ (2000 = 100)



⁽¹⁾ Provisional.

Source: Eurostat (online data code: [hlth_cd_asdr](#))

Figure 3.2.3: Causes of death – standardised death rate, EU-27, 2009 ⁽¹⁾ (per 100 000 inhabitants)

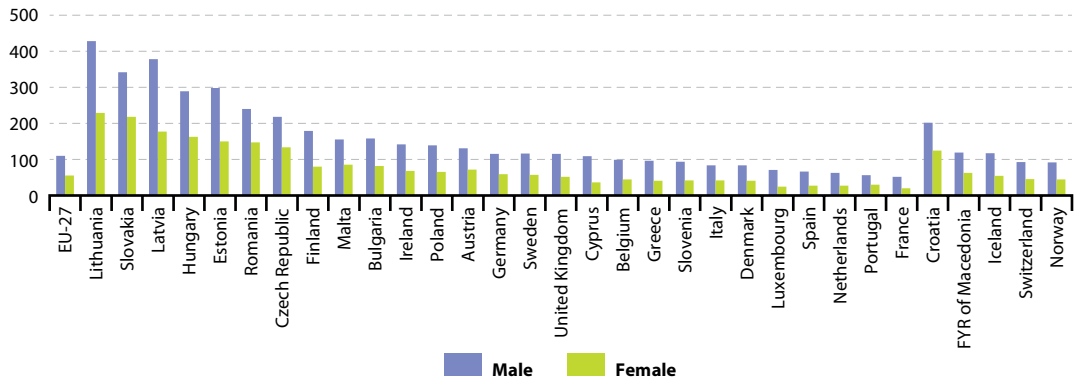


⁽¹⁾ Provisional; the figure is ranked on the average of male and female; note the difference in the scales employed between the two parts of the figure.

Source: Eurostat (online data code: [hlth_cd_asdr](#))



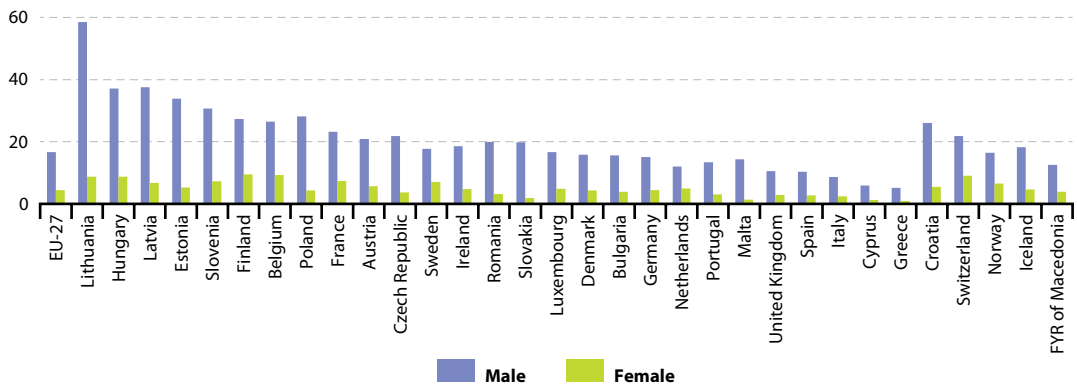
Figure 3.2.4: Deaths from ischaemic heart diseases – standardised death rate, 2009 ⁽¹⁾
(per 100 000 inhabitants)



⁽¹⁾ EU-27 and Denmark, provisional; the figure is ranked on the average of male and female; France and Italy, 2008; Switzerland, 2007; Belgium, 2005.

Source: Eurostat (online data code: [tps00119](#))

Figure 3.2.5: Deaths from suicide – standardised death rate, 2009 ⁽¹⁾
(per 100 000 inhabitants)



⁽¹⁾ EU-27 and Denmark, provisional; the figure is ranked on the average of male and female; France and Italy, 2008; Switzerland, 2007; Belgium, 2005.

Source: Eurostat (online data code: [tps00122](#))



Table 3.2.2: Causes of death – standardised death rate, 2009 ⁽¹⁾
(per 100 000 inhabitants aged less than 65)

	Total							Females	
	Cancer ⁽²⁾	Lung cancer ⁽³⁾	Colo-rectal cancer	Circula-tory disease	Heart disease ⁽⁴⁾	Suicide ⁽⁵⁾	Transport accidents	Breast cancer	Uterus cancer
EU-27	71.9	18.5	6.3	45.0	19.4	9.5	7.1	13.3	4.2
Belgium	73.5	21.8	5.7	37.6	16.5	16.5	10.4	17.7	3.0
Bulgaria	88.3	23.7	8.8	151.1	37.1	7.7	10.8	13.1	9.8
Czech Republic	81.8	19.5	8.9	61.3	29.6	11.7	8.6	9.9	5.0
Denmark	68.7	18.3	7.2	29.2	11.2	8.7	5.2	13.7	2.8
Germany	65.9	16.5	5.9	37.0	16.7	8.3	4.7	13.0	3.0
Estonia	81.6	16.6	7.0	100.6	40.3	17.1	7.7	13.4	5.7
Ireland	65.2	14.3	6.2	34.8	21.1	11.9	5.6	15.0	5.0
Greece	61.6	18.9	3.4	46.3	28.8	2.9	13.3	10.9	2.6
Spain	65.7	18.3	6.7	26.8	11.7	5.5	5.4	10.7	3.1
France	75.0	20.7	5.4	25.6	8.9	13.5	6.8	14.3	3.3
Italy	61.9	13.7	5.8	26.6	11.5	4.8	8.0	13.6	2.5
Cyprus	46.7	10.2	3.3	35.3	22.8	3.5	9.5	13.3	1.1
Latvia	94.0	19.1	6.4	144.2	71.7	20.0	10.9	16.9	7.7
Lithuania	93.1	19.6	6.9	122.3	64.7	30.6	12.4	15.7	10.2
Luxembourg	61.5	18.1	4.7	30.8	11.4	9.8	8.6	12.2	3.1
Hungary	132.2	45.3	13.5	104.3	53.0	19.8	9.5	17.1	6.7
Malta	57.4	10.1	6.6	29.7	18.3	7.9	4.1	21.1	2.4
Netherlands	70.3	18.8	6.9	27.6	10.3	8.2	3.4	15.3	2.4
Austria	64.4	16.7	5.3	31.3	17.2	10.8	6.3	11.6	3.3
Poland	93.1	27.3	7.4	84.8	27.1	15.4	11.4	12.5	7.5
Portugal	70.6	15.0	7.5	27.6	9.7	6.3	8.2	12.9	4.4
Romania	100.4	26.6	7.7	115.9	49.2	10.5	14.0	14.4	13.4
Slovenia	79.3	18.5	8.5	36.6	17.4	16.7	8.4	12.1	4.8
Slovakia	91.1	18.9	9.9	89.2	47.4	9.8	8.8	11.5	7.3
Finland	50.7	9.8	4.2	44.9	22.2	18.2	5.3	11.5	2.6
Sweden	50.7	9.1	5.3	28.8	15.0	11.8	3.4	11.0	2.8
United Kingdom	62.8	13.6	5.6	36.2	20.4	6.7	4.0	14.5	3.0
Iceland	54.1	13.2	4.8	23.2	11.1	11.8	4.3	8.3	1.5
Norway	56.0	13.0	7.0	24.4	13.2	11.3	4.9	10.2	3.0
Switzerland	57.4	14.2	5.1	23.9	11.7	12.4	4.5	11.6	2.2
Croatia	91.3	26.6	8.9	67.3	31.7	12.5	12.1	12.7	4.5
FYR of Macedonia	86.7	24.7	7.0	95.2	31.0	6.2	5.8	13.8	6.9

⁽¹⁾ France and Italy, 2008; Switzerland, 2007; Belgium, 2005.

⁽²⁾ Malignant neoplasms.

⁽³⁾ Malignant neoplasm of larynx, trachea, bronchus and lung.

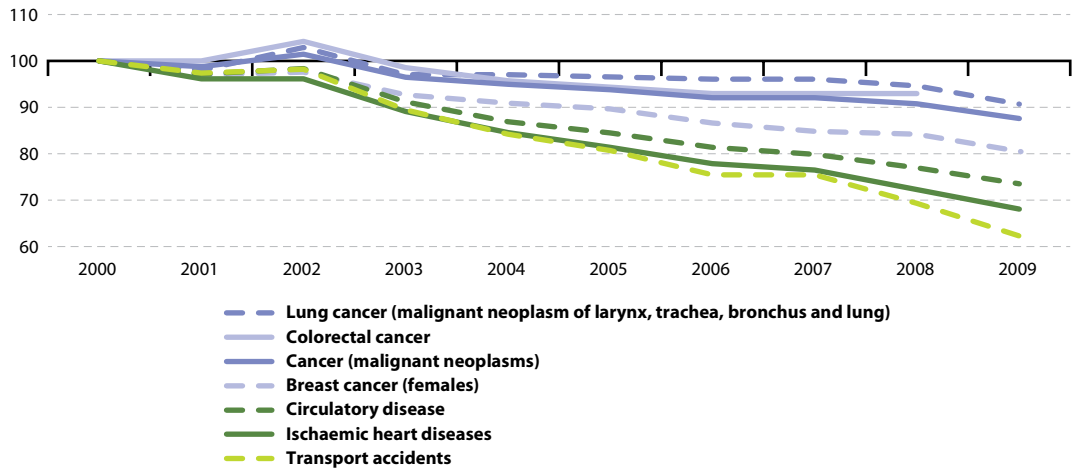
⁽⁴⁾ Ischaemic heart diseases.

⁽⁵⁾ Suicide and intentional self-harm.

Source: Eurostat (online data code: [hlth_cd_asdr](#))



Figure 3.2.6: Causes of death – standardised death rate per 100 000 inhabitants aged less than 65, EU-27, 2000-2009 ⁽¹⁾
(2000 = 100)



⁽¹⁾ Provisional.

Source: Eurostat (online data code: [hlth_cd_asdr](#))

3.3 Healthcare

This subchapter presents key statistics on monetary and non-monetary aspects of **healthcare** in the **European Union (EU)** and its Member States. The state of health of individuals and of the population in general is influenced by genetic and environmental factors, cultural and socio-economical conditions, as well as the healthcare services that are available to prevent and to treat illness and disease.

Healthcare systems are organised and financed in different ways across the EU Member States, but most Europeans would agree that universal access to good healthcare, at an affordable cost to both individuals and society at large, is a basic need.

Monetary and non-monetary statistics may be used to evaluate how a country's healthcare system responds to this basic need, through measuring financial, human and technical resources within the healthcare sector and the allocation of these resources

between healthcare activities (for example, preventive and curative care), groups of healthcare providers (for example, **hospitals** and ambulatory centres), or healthcare professionals (for example, medical and paramedical staff). It is possible to assess and measure the performance of healthcare systems by combining these data with information on technical and managerial choices that are made in relation to healthcare provision (for example, the use of inpatient or outpatient care, or the average length of stays in hospital).

Main statistical findings

Healthcare expenditure

Total current healthcare expenditure (both in relative and absolute terms) varied significantly among the EU Member States in 2009 ⁽²⁾. As shown in Figure 3.3.1 the share of current healthcare

⁽²⁾ Bulgaria, Cyprus, Latvia, Luxembourg and Portugal, 2008.



expenditure exceeded 11 % of **gross domestic product (GDP)** in four EU Member States (France, the Netherlands, Germany and Denmark), which was almost double the share of healthcare expenditure relative to GDP recorded in Romania and Cyprus (below 6 % of GDP). The disparity was even bigger when comparing the level of total healthcare spending per inhabitant, which varied from **PPS 608** in Romania to **PPS 4286** in Luxembourg. Notwithstanding the differences in organising and financing healthcare systems, these comparisons suggest that individuals living in those Member States with a higher average level of income per capita generally spend more on purchasing healthcare goods and services.

Public and private healthcare expenditure by financing agent

The mix of public and private funding of healthcare in the EU reflects specific arrangements in healthcare financing systems. Table 3.3.1 provides a breakdown of healthcare expenditure into public and private units that incur health expenditure. Public funding dominates the healthcare sector in the majority of EU Member States, the main exception being Cyprus, where public funding (general government and social security funds) accounted for a 42.1 % share of total funding. Among those Member States for which data are available (no information for Ireland, Greece, Italy, Malta or the United Kingdom), the share of public funding in current healthcare spending ranged from 56.2 % in Bulgaria to more than 80 % in the Netherlands, Denmark, the Czech Republic, Luxembourg and Sweden.

Public financing of healthcare is conducted through two main funding paths, social security funds and government financing. The former was somewhat more popular as a means for funding healthcare within the EU Member States and accounted for three quarters or more of overall spending on healthcare in the Czech Republic (78.2 %) and the Netherlands (76.0 %) in 2009. In contrast, Denmark and Sweden reported that government financing accounted for more than four fifths (84.5 % and 81.4 % respectively) of their total current expenditure on healthcare.

Private expenditure on healthcare is often used as an indicator to measure the accessibility of healthcare systems. The major source of private funding was direct household payments, referred to as out-of-pocket expenditure, which peaked in terms of its share of total current healthcare expenditure in Cyprus (50.2 %) and Bulgaria (42.6 %), falling to a single-digit share in France and the Netherlands (7.5 % and 6.2 % respectively). Private insurance generally represented a small share of healthcare financing among the Member States for which data are available; its relative share only exceeded 10 % in France and Slovenia.

Healthcare expenditure by function

The functional patterns of healthcare expenditure presented in Table 3.3.2 show that in 2009 curative and rehabilitative services incurred more than 50 % of current healthcare expenditure in the majority of EU Member States for which data are available, the exceptions being Hungary, Romania and Slovakia.

Medical goods dispensed to outpatients was the second largest function, with average spending accounting for around one quarter of total current healthcare expenditure – although with a significant degree of variation, from 11.5 % in Denmark up to more than one third of the total in Bulgaria (36.9 %), Slovakia (37.0 %) and Hungary (37.7 %).

Services related to long-term nursing care accounted for less than 10 % of current healthcare expenditure in more than half of the reporting Member States, but for almost a quarter of the total spend in the Netherlands (22.6 %) and Denmark (24.5 %). It should be noted that the relatively low share reported for many Member States could well be due to the main burden of long-term nursing care residing with family members with no payment being made for providing these services. In addition, limitations within the data compilation exercise also make it difficult to separate medical and social components of expenditure for long-term nursing care, leading to an inevitable impact on cross-country comparisons.

The proportion of current healthcare expenditure incurred by ancillary services to healthcare (such as



laboratory testing or the transportation of patients) varies significantly among EU Member States, ranging from around 2% in the Netherlands and Belgium to 10.1% in Estonia. Similarly, expenditure related to prevention and public health programmes exhibits large discrepancies between Member States. In both cases these figures are likely to provide an underestimate of the true values, as part of the expenditure on these services is attributed to medical treatment and as such may be recorded under the heading of curative care. Expenditure on healthcare administration and health insurance was generally lower in those Member States with centralised social security systems or those Member States where private insurance plays a relatively restricted role, ranging from less than 1.5% of total current healthcare expenditure in Bulgaria, Denmark, Hungary, Poland and Sweden, through to 5.5% in Germany and 7% in France.

Healthcare expenditure by provider

The breakdown of current healthcare expenditure by provider is shown in Table 3.3.3. Hospitals generally accounted for the highest share of current healthcare expenditure, ranging from 25.8% of the total in Slovakia to more than 45% in Denmark, Estonia and Sweden. The second most important category was that of ambulatory care providers, its share ranging from 13.9% of current healthcare expenditure in Romania to more than 30% in Belgium, Poland, Germany, Portugal, Finland and Cyprus. The share of various retail establishments and other providers of medical goods in current healthcare expenditure varied by a factor of three – with the lowest shares of between 11.2% and 13.5% being recorded in Luxembourg, Denmark and the Netherlands. Most of the Member States reported that retail establishments and other providers of medical goods accounted for a share of current healthcare expenditure ranging between 16% and 27%, a share that rose to between 36.9% and 37.7% in Bulgaria, Slovakia and Hungary. However, it should be borne in mind that healthcare providers classified under the same group do not necessarily perform the same set of activities. Hospitals, for example, may, in addition to inpatient services, offer outpatient, ancillary or other type of services.

Non-expenditure data on healthcare

High demand for healthcare staff in some Member States may result in qualified resources moving from other countries. One of the key indicators for measuring healthcare staff is the total number of **physicians** (head count), expressed per 100 000 inhabitants. In this context, Eurostat gives preference to the concept of **practising physicians** (although data are not available for six Member States – being replaced by the number of **professionally active physicians** for Greece, France, the Netherlands and Slovakia, and by the number of **licensed physicians** for Ireland and Portugal) – see Table 3.3.4.

In 2009 the highest number of practising physicians per 100 000 inhabitants was recorded in Austria (467.1), followed by Sweden (371.5), while Norway (399.9), Switzerland (381.2) and Iceland (372.0) also recorded relatively high ratios of practising physicians per 100 000 inhabitants; note that Greece, Ireland and Portugal also reported a relatively high number of professionally active and licensed physicians. Between 1999 and 2009 the number of physicians per 100 000 inhabitants increased in the majority of EU Member States, although modest reductions were recorded in Estonia, Lithuania, Hungary and Poland. Furthermore, the reduction of practising physicians in Poland may be explained by several breaks in the data series – for example, from 2004 onwards the Polish data excludes private practices (thought to account for about 2 000 physicians).

The number of **hospital beds** per 100 000 inhabitants averaged 551 in the EU-27 in 2009. Among the Member States, this ratio ranged from 277 in Sweden to 823 in Germany; among the non-member countries for which data are available Turkey (251) was the only one outside this range. During the ten years between 1999 and 2009, the number of hospital beds per 100 000 inhabitants fell in every Member State, except Greece; the average reduction in bed numbers across the whole of the EU-27 was 97 beds per 100 000 inhabitants. The largest reductions in the availability of hospital beds were recorded in the three **Baltic Member States**, France, Slovakia, Finland, Ireland, Belgium and Italy. These reductions may reflect, among others, economic constraints, increased efficiency through the use of technical resources



(for example, imaging equipment), a general shift from inpatient to outpatient operations, and shorter periods spent in hospital following an operation.

A closer look at the availability of hospital beds, broken down for [curative care beds](#) and psychiatric beds (see Table 3.3.5), shows a reduction in numbers for both types of beds between 1999 and 2009, with the EU-27 average falling to 308 curative care beds and 44 psychiatric care beds. The reduction was reproduced in each of the Member States for which data are available, except for an increase in the number of curative care beds in Greece and the number of psychiatric beds in Bulgaria, Germany and Austria.

In terms of healthcare activity, diseases of the circulatory system often accounted for the highest number of hospital [discharges](#) in 2009 – see Table 3.3.6. Almost one third of the Member States for which data are available reported in excess of 3 000 discharges per 100 000 inhabitants for diseases of the circulatory system. The average length of a hospital stay was generally highest among those patients suffering from cancer or problems relating to the circulatory system (see Table 3.3.7).

Data sources and availability

Eurostat, the [Organisation for Economic Co-operation and Development \(OECD\)](#) and the [World Health Organization \(WHO\)](#) have established a common framework for a joint healthcare data collection. Following this framework, EU Member States submit their data to Eurostat on the basis of a gentlemen's agreement. The data collected relates to:

- healthcare expenditure following the methodology of the [system of health accounts \(SHA\)](#);
- statistics on human and physical resources in healthcare – supplemented by additional Eurostat data on hospital activities (discharges and procedures).

Healthcare expenditure

Healthcare data on expenditure are based on various surveys and administrative (register-based) data sources, as well as estimations made within the Member States, reflecting country-specific ways of organising healthcare and different reporting systems for the collection of statistics pertaining to healthcare.

Total current healthcare expenditure quantifies the economic resources of both the public and private sectors dedicated to healthcare, with the exception of those related to capital investment. It reflects current expenditure of resident units on final consumption of goods and services directed at improving the health status of individuals and of the population.

The SHA provides a framework for interrelated classifications and tables relating to the international reporting of healthcare expenditure and its financing. The set of core SHA tables addresses three basic questions: i) who finances healthcare goods and services; ii) which healthcare providers deliver them, and; iii) what kinds of healthcare goods and services are consumed. Consequently, the SHA is organised around a tri-dimensional system for the recording of health expenditure, by means of the [international classification for health accounts \(ICHA\)](#), defining:

- healthcare expenditure by financing agents (ICHA-HF) – which provides a breakdown of public and private units that directly pay providers for their provision of healthcare goods and services;
- healthcare expenditure by provider (ICHA-HP) – which classifies units contributing to the provision of healthcare goods and services such as hospitals, various outpatients settings, diagnosis centres or retailers of medical goods;
- healthcare expenditure by function (ICHA-HC) – which details the split in healthcare expenditure following the purpose of healthcare activities – such as, health promotion, curing illnesses, rehabilitation or long-term care.

Data coverage is close to 100 % for the first-digit level of each of the three core classifications, but ranges between 75 % and 85 % at the second-digit level. However, it is possible that despite relatively high rates of coverage, there may be departures from the standard classifications. Expenditure reported under some of these ICHA categories may be under or overestimated and it is recommended to refer to specific country metadata before analysing the data.

Non-expenditure data on healthcare

Non-expenditure healthcare data are mainly based on administrative national sources; a few countries compile this information from surveys.



As a consequence, the information collected is not always comparable.

Information on the non-expenditure component of healthcare can be divided into two broad groups of data:

- resource-related healthcare data on human, physical and technical resources, including staff (such as physicians, dentists, nursing and caring professionals, pharmacists and physiotherapists) and hospital beds;
- output-related data that focuses on hospital patients and their treatment(s), in particular for inpatients.

Hospitals are defined according to the classification of healthcare providers within the SHA; all public and private hospitals should be covered.

Data on healthcare staff, in the form of human resources available for providing healthcare services, are provided irrespective of the sector of employment (in other words, regardless of whether the personnel are independent, employed by a hospital, or any other healthcare provider). Three main concepts are used for health professionals: practising, professionally active and licensed. Practising physicians provide services directly to patients; professionally active physicians include those who practice as well as those working in administration and research with their medical education being a pre-requisite for the job they carry out; physicians licensed to practice are those entitled to work as physicians plus, for example, those who are retired.

Hospital bed numbers provide information on healthcare capacities, in other words on the maximum number of patients who can be treated by hospitals. Hospital beds (occupied or unoccupied) are those which are regularly maintained and staffed and immediately available for the care of admitted patients. This indicator should ideally cover beds in all hospitals, including general hospitals, mental health and substance abuse hospitals, and other specialty hospitals. The statistics should include public as well as private sector establishments – although some Member States provide data only for the public sector – for example, Denmark (psychiatric beds), Ireland (total and curative beds),

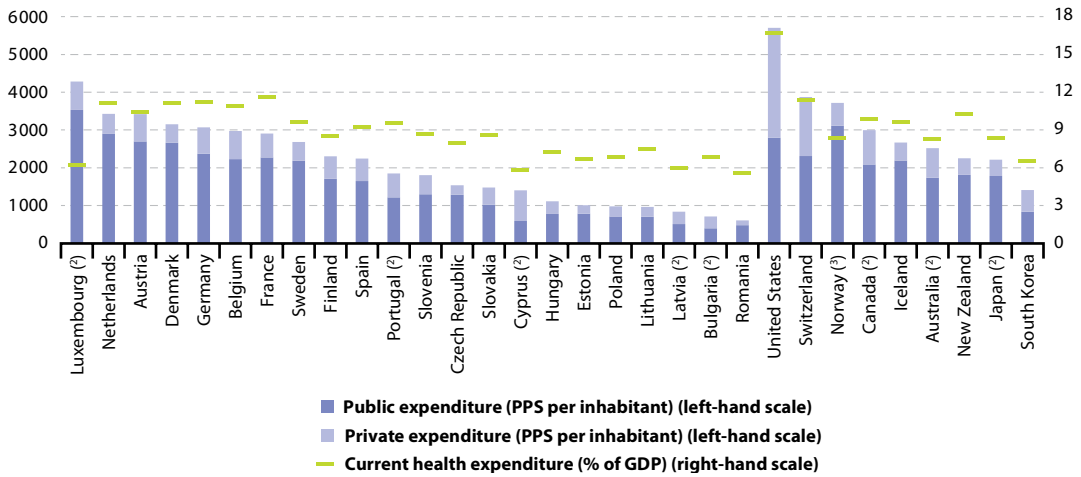
Cyprus (curative and psychiatric beds) and the United Kingdom. Curative care (or acute care) beds are those that are available for curative care; these form a subgroup of total hospital beds.

Output-related indicators focus on hospital patients and cover the interaction between patients and healthcare systems, generally through the form of the treatment they receive. Data are available for a range of indicators including hospital discharges of inpatients and day cases by age, sex, and selected (groups of) diseases; the average length of stay of inpatients; or the medical procedures performed in hospitals. The number of hospital discharges is the most commonly used measure of the utilisation of hospital services. Discharges, rather than admissions, are used because hospital abstracts for inpatient care are based on information gathered at the time of discharge.

Context

Health outcomes across the EU are strikingly different according to where you live, your ethnicity, sex and socio-economic status. The EU promotes the coordination of national healthcare policies through an open method of coordination which places particular emphasis on the access to, and the quality and sustainability of healthcare. Some of the main objectives include: shorter waiting times; universal insurance coverage; affordable care; more patient-centred care and a higher use of outpatients; greater use of evidence-based medicine, effective prevention programmes, generic medicines, and simplified administrative procedures; and strengthening health promotion and disease prevention.

In the current economic climate, access to healthcare, the introduction of technological progress and greater patient choice is increasingly being considered against a background of financial sustainability. Many of the challenges facing governments across the EU are outlined in the European Commission's White paper, titled 'Together for health: a strategic approach for the EU 2008-2013' (COM(2007) 630).

Figure 3.3.1: Current healthcare expenditure, 2009 ⁽¹⁾


⁽¹⁾ Countries are ranked on the total (public + private) health expenditure in PPS per inhabitant; Ireland, Greece, Italy, Malta and the United Kingdom, not available.

⁽²⁾ 2008.

⁽³⁾ 2007.

Source: Eurostat (online data code: [hlth_sha_hf](#))



Table 3.3.1: Healthcare expenditure by financing agent, 2009
(% of current health expenditure)

	General government excluding social security funds	Social security funds	Private insurance enterprises (including private social insurance)	Private household out-of-pocket expenditure	Non-profit institutions serving households	Corporations (other than health insurance)	Rest of the world
Belgium	11.3	63.8	4.8	20.0	0.1	0.1	0.0
Bulgaria ⁽¹⁾	17.7	38.5	0.5	42.6	0.5	0.3	0.0
Czech Republic	5.3	78.2	0.2	14.9	1.1	0.3	0.0
Denmark	84.5	0.0	1.8	13.7	0.1	0.0	0.0
Germany	6.9	70.5	9.6	12.3	0.4	0.4	0.0
Estonia	10.4	67.8	0.2	21.1	0.0	0.3	0.1
Ireland	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:
Spain	68.6	4.6	5.5	20.7	0.6	0.0	0.0
France	5.6	72.5	13.6	7.5	0.1	0.6	0.0
Italy	:	:	:	:	:	:	:
Cyprus ⁽¹⁾	42.0	0.1	5.7	50.2	2.0	0.0	0.0
Latvia ⁽¹⁾	60.3	0.0	2.0	37.3	0.3	0.0	0.1
Lithuania	11.4	61.7	0.7	26.2	0.0	0.1	0.0
Luxembourg ⁽¹⁾	8.5	73.9	3.5	13.7	0.4	0.0	0.0
Hungary	9.5	60.1	2.8	24.3	1.9	1.5	0.0
Malta	:	:	:	:	:	:	:
Netherlands	8.8	76.0	5.5	6.2	1.5	2.2	0.0
Austria ⁽¹⁾	31.8	46.8	4.7	15.5	1.0	0.1	0.0
Poland	7.6	64.7	0.6	23.8	1.1	2.2	0.0
Portugal ⁽¹⁾	64.3	1.3	5.2	28.7	0.1	0.5	0.0
Romania	14.1	64.6	0.1	20.9	0.0	0.3	0.0
Slovenia	1.5	70.4	13.3	13.8	0.0	0.9	0.0
Slovakia	6.6	62.6	0.0	26.9	1.0	2.9	0.0
Finland	58.6	15.7	2.3	20.1	1.1	2.2	0.0
Sweden	81.4	0.0	0.2	17.4	0.2	0.7	0.0
United Kingdom	:	:	:	:	:	:	:
Iceland	52.7	29.3	0.0	16.6	1.4	0.0	0.0
Norway ⁽²⁾	70.6	13.1	0.0	16.1	0.0	0.2	0.0
Switzerland	18.9	40.8	8.8	30.5	1.0	0.0	0.0
Australia ⁽¹⁾	69.0	0.0	8.5	19.2	0.3	3.0	0.0
Canada ⁽¹⁾	68.1	1.5	13.5	15.5	0.0	1.5	0.0
Japan ⁽¹⁾	8.5	72.0	2.5	16.0	0.0	1.0	0.0
Rep. of Korea ⁽¹⁾	12.4	47.1	5.5	34.2	0.7	0.1	0.0
New Zealand	71.0	9.4	4.8	13.4	1.3	0.0	0.0
United States	5.8	43.2	34.4	12.9	3.6	0.2	0.0

⁽¹⁾ 2008.

⁽²⁾ 2007.

Source: Eurostat (online data code: [hlth_sha_hf](#))



Table 3.3.2: Healthcare expenditure by function, 2009
(% of current health expenditure)

	Services of curative & rehabilitative care	Services of long-term nursing care	Ancillary services to healthcare	Medical goods dispensed to out-patients	Prevention & public health services	Health administration & health insurance	Not specified by kind
Belgium	52.7	19.7	2.4	17.5	2.7	4.9	0.0
Bulgaria (1)	53.6	0.1	3.6	36.9	4.3	1.1	0.6
Czech Republic	60.0	3.5	5.8	23.1	2.7	3.4	1.5
Denmark	55.8	24.5	4.7	11.5	2.2	1.2	0.0
Germany	53.3	12.4	4.7	20.5	3.7	5.5	0.0
Estonia	54.0	4.4	10.1	26.9	2.3	2.4	0.0
Ireland	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:
Spain	58.2	9.0	5.3	21.7	2.7	3.2	0.0
France	53.1	11.5	5.2	21.0	2.2	7.0	0.0
Italy	:	:	:	:	:	:	:
Cyprus (1)	59.3	2.5	9.5	23.9	0.7	4.2	0.0
Latvia (1)	55.3	3.9	9.4	24.3	1.6	5.5	0.0
Lithuania	51.5	9.1	6.0	29.6	1.2	2.7	0.0
Luxembourg (1)	58.3	19.9	5.9	12.5	1.9	1.7	0.0
Hungary	47.4	3.9	4.4	37.7	4.4	1.3	1.1
Malta	:	:	:	:	:	:	:
Netherlands	51.7	22.6	1.9	14.5	4.3	4.0	0.9
Austria	60.3	14.0	2.8	17.5	1.8	3.6	0.0
Poland	58.2	5.4	6.2	26.4	2.3	1.4	0.0
Portugal (1)	58.3	1.1	9.3	25.8	1.9	1.7	0.0
Romania	46.8	13.5	4.0	25.6	8.3	1.8	0.1
Slovenia	56.5	8.7	3.0	23.7	3.8	4.3	0.0
Slovakia	46.7	0.3	7.7	37.0	4.9	3.4	0.0
Finland	58.9	12.3	3.2	18.0	5.6	2.1	0.0
Sweden	66.0	7.7	4.5	16.0	3.8	1.4	0.6
United Kingdom	:	:	:	:	:	:	:
Iceland	58.5	18.0	2.3	17.9	1.5	1.9	0.0
Norway (2)	51.4	26.2	6.4	13.2	2.1	0.8	0.0
Switzerland	57.7	19.3	3.3	12.2	2.5	4.9	0.0
Australia (1)	69.2	0.4	6.1	18.5	2.1	3.6	0.0
Canada (1)	46.4	14.8	6.3	20.9	7.1	3.8	0.6
Japan (1)	65.4	8.9	0.7	20.8	2.4	1.9	0.0
Rep. of Korea (1)	57.0	10.0	0.9	25.2	3.3	3.6	0.0
New Zealand	56.5	13.9	5.2	10.6	6.7	7.2	0.0
United States	69.5	5.9	0.0	14.1	3.6	7.0	0.0

(1) 2008.

(2) 2007.

Source: Eurostat (online data code: [hlth_sha_hc](#))



Table 3.3.3: Healthcare expenditure by provider, 2009
(% of current health expenditure)

	Hospitals	Nursing & residential care facilities	Ambulatory health-care	Retail sale & medical goods	Admin. of public health programmes	General health admin. & insurance	Other (rest of economy)	Rest of the world
Belgium	31.0	12.4	30.6	16.5	4.1	4.6	0.8	0.0
Bulgaria ⁽¹⁾	41.0	0.8	16.7	36.9	1.8	1.1	1.7	0.0
Czech Republic	42.6	1.5	25.5	18.2	0.2	3.6	0.6	0.2
Denmark	45.2	13.4	28.2	11.5	0.1	1.5	0.1	0.1
Germany	29.5	7.8	30.8	21.8	0.7	5.9	3.0	0.5
Estonia	45.6	2.7	20.2	26.9	2.1	2.4	0.0	0.1
Ireland	:	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:	:
Spain	41.0	5.5	26.3	21.7	1.3	3.2	1.0	0.0
France	35.3	7.1	27.4	21.7	0.7	7.0	0.8	0.0
Italy	:	:	:	:	:	:	:	:
Cyprus ⁽¹⁾	41.9	2.5	33.4	18.8	0.2	1.9	0.0	1.2
Latvia ⁽¹⁾	42.6	2.5	26.9	24.3	0.0	2.9	0.8	0.0
Lithuania	36.4	1.6	22.5	29.6	0.1	2.7	7.0	0.1
Luxembourg ⁽¹⁾	32.9	15.7	26.2	11.2	0.4	1.4	2.8	9.5
Hungary	32.3	3.3	20.3	37.7	2.7	1.2	2.3	0.3
Malta	:	:	:	:	:	:	:	:
Netherlands	33.7	22.8	22.5	13.5	1.2	4.4	1.0	0.9
Austria ⁽¹⁾	39.4	7.9	23.4	18.2	0.6	4.0	6.4	0.2
Poland	34.3	1.3	30.6	26.1	1.6	1.4	4.6	0.1
Portugal ⁽¹⁾	37.5	1.3	31.5	25.6	0.1	1.7	1.3	1.0
Romania	41.5	2.1	13.9	25.6	2.0	1.5	13.4	0.1
Slovenia	41.1	5.8	24.0	23.1	0.7	4.3	0.9	0.1
Slovakia	25.8	0.0	27.8	37.0	2.0	3.4	3.8	0.2
Finland	35.1	8.5	32.9	18.5	1.1	1.2	2.9	0.0
Sweden	46.0	0.0	21.7	16.0	1.3	1.7	9.2	0.2
United Kingdom	:	:	:	:	:	:	:	:
Iceland	39.6	10.9	27.2	17.9	1.5	1.9	0.0	1.1
Norway ⁽²⁾	39.3	17.0	27.3	12.8	1.7	0.0	1.9	0.1
Switzerland	35.6	17.2	31.6	9.0	0.0	6.6	0.0	0.0
Australia ⁽¹⁾	41.5	0.0	35.5	17.7	1.6	3.7	0.0	0.0
Canada ⁽¹⁾	28.9	10.6	28.4	20.9	6.6	3.8	0.2	0.0
Japan ⁽¹⁾	47.8	3.6	27.8	16.5	2.4	1.9	0.0	0.0
Rep. of Korea ⁽¹⁾	41.1	3.0	28.1	21.0	2.0	3.6	1.1	0.2
New Zealand	35.9	9.3	32.0	10.6	3.6	7.3	1.4	0.0
United States	32.6	5.9	36.9	14.1	3.6	7.0	0.0	0.0

⁽¹⁾ 2008.

⁽²⁾ 2007.

Source: Eurostat (online data code: [hlth_sha_hp](#))



Table 3.3.4: Healthcare indicators, 1999-2009
(per 100 000 inhabitants)

	Practising physicians (¹)		Hospital beds		Hospital discharges of inpatients (excluding healthy new born babies)	
	1999	2009 (²)	1999 (³)	2009 (⁴)	2000 (⁵)	2009 (⁶)
EU-27	:	:	648.1	550.9	:	:
Belgium	279.7	291.3	782.3	653.4	16 252	16 284
Bulgaria	345.0	370.0	751.3	661.6	14 456	23 356
Czech Republic	308.0	355.5	774.0	710.1	22 065	19 968
Denmark	287.8	341.6	439.5	350.1	16 316	16 498
Germany	320.6	364.1	920.2	822.9	19 961	22 692
Estonia	327.7	326.7	754.9	543.9	19 947	17 567
Ireland	224.2	406.6	628.3	495.1	13 805	13 236
Greece	423.0	610.6	473.3	485.8	:	:
Spain	308.5	354.8	376.0	319.3	11 243	10 416
France	323.3	325.6	817.5	660.5	18 397	16 035
Italy	:	336.2	492.8	364.3	:	13 236
Cyprus	255.2	285.6	449.9	377.2	6 795	7 500
Latvia	272.7	300.4	906.7	638.3	:	20 290
Lithuania	372.8	366.2	898.4	682.4	22 784	21 887
Luxembourg	247.5	268.9	:	551.4	18 075	15 869
Hungary	310.9	302.3	812.6	715.0	:	19 435
Malta	:	304.4	556.0	482.6	:	10 901
Netherlands	232.2	285.9	505.6	466.9	9 088	11 279
Austria	376.3	467.1	807.2	765.0	:	27 839
Poland	226.4	217.0	:	665.0	:	15 658
Portugal	311.3	376.9	385.8	334.9	:	17 507
Romania	188.2	221.5	758.0	657.4	21 748	24 634
Slovenia	212.1	240.1	554.0	462.0	:	16 576
Slovakia	331.9	328.1	794.9	649.7	19 876	18 031
Finland	240.3	272.7	761.4	623.1	21 380	17 890
Sweden	302.3	371.5	358.6	277.1	15 266	15 200
United Kingdom	190.8	265.9	410.5	330.2	12 698	12 913
Iceland	336.1	372.0	:	585.7	17 085	13 027
Norway	327.5	399.9	390.2	336.6	15 409	16 637
Switzerland	:	381.2	662.7	513.2	14 646	25 868
Croatia	232.0	266.9	596.5	536.8	12 710	16 259
FYR of Macedonia	220.1	261.8	509.2	447.4	9 444	9 939
Turkey	122.6	163.5	:	251.2	:	13 345

(¹) Greece, France, the Netherlands, Slovakia, the former Yugoslav Republic of Macedonia and Turkey, professionally active physicians; Ireland and Portugal, licensed physicians.

(²) Denmark, Cyprus, the Netherlands, Romania, Finland, Sweden, Iceland and the former Yugoslav Republic of Macedonia, 2008.

(³) United Kingdom, 2000.

(⁴) Ireland, Cyprus and Romania, 2008; Iceland, 2007.

(⁵) The Czech Republic, the Netherlands, the United Kingdom and Switzerland, 2002; Lithuania, 2001.

(⁶) Belgium, Germany, Latvia and Croatia, 2008; Denmark, Cyprus and the former Yugoslav Republic of Macedonia, 2007.

Source: Eurostat (online data codes: [hlth_rs_prs](#), [tps00046](#) and [hlth_co_disch2t](#))



Figure 3.3.2: Number of hospital beds, EU-27, 1999-2009
(per 100 000 inhabitants)



Source: Eurostat (online data code: [tps00046](#))

Table 3.3.5: Hospital beds, 1999-2009
(per 100 000 inhabitants)

	Curative care beds in hospitals			Psychiatric care beds in hospitals		
	1999 ⁽¹⁾	2004	2009 ⁽²⁾	1999 ⁽³⁾	2004	2009 ⁽⁴⁾
EU-27	385.9	336.8	308.2	52.1	48.3	44.0
Belgium	477.4	448.3	419.2	259.4	248.5	179.2
Bulgaria	586.1	471.4	509.1	65.0	64.7	68.5
Czech Republic	585.0	540.0	498.1	112.9	112.0	103.3
Denmark	359.0	326.2	286.7	79.0	67.6	57.9
Germany	644.8	593.0	564.8	44.3	50.8	49.0
Estonia	585.1	426.7	361.5	82.2	52.6	55.1
Ireland	282.4	280.8	257.8	143.2	102.3	77.5
Greece	376.1	380.1	406.1	97.2	89.7	79.7
Spain	290.3	263.0	247.4	53.6	48.0	41.0
France	416.1	369.0	345.3	110.7	93.7	88.0
Italy	458.1	334.8	293.8	16.2	13.1	10.6
Cyprus	394.8	389.7	351.1	55.1	31.4	26.1
Latvia	648.1	548.7	429.4	185.1	156.6	133.9
Lithuania	677.8	556.3	503.4	127.5	107.1	102.4
Luxembourg	:	505.8	428.0	:	110.1	87.5
Hungary	588.4	551.2	413.4	45.0	39.2	32.8
Malta	380.9	298.3	271.7	175.2	160.4	155.9
Netherlands	317.9	291.8	307.2	165.9	136.6	139.6
Austria	626.1	582.1	556.3	75.9	73.1	77.3
Poland	530.2	478.7	438.5	:	68.6	64.1
Portugal	315.6	298.8	275.6	69.5	65.5	58.6
Romania	520.0	443.5	451.0	88.9	76.0	80.4
Slovenia	458.5	385.1	372.8	77.7	73.7	65.9
Slovakia	584.8	483.5	479.2	92.5	86.7	79.9
Finland	249.0	226.1	183.4	106.2	96.7	80.1
Sweden	253.7	223.1	204.7	65.3	50.2	48.1
United Kingdom	312.2	303.7	264.9	93.4	78.8	60.8
Norway	319.3	291.7	239.6	70.9	107.9	86.8
Switzerland	445.0	378.2	330.1	120.5	106.9	98.8
Croatia	374.2	341.8	335.6	100.8	94.2	94.5
FYR of Macedonia	330.3	317.1	302.0	72.7	63.8	56.7
Turkey	194.2	210.3	242.2	5.4	5.3	6.6

(1) Bulgaria, the United Kingdom and Turkey, 2000.

(2) Ireland, Cyprus and Romania, 2008.

(3) The United Kingdom and Turkey, 2000.

(4) Cyprus and Romania, 2008.

Source: Eurostat (online data codes: [tps00168](#) and [tps00047](#))



Table 3.3.6: Hospital discharges of inpatients by diagnosis (ISHMT – international shortlist for hospital morbidity tabulation), 2009 (per 100 000 inhabitants)

	Neoplasms (cancers)	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Pregnancy childbirth & the puerperium	Injury poisoning & certain other consequences of external causes
Belgium (1)	1 165.0	2 075.2	1 363.7	1 670.9	1 395.7	1 623.6
Bulgaria	1 564.6	3 867.2	3 250.1	2 092.7	2 023.2	1 372.2
Czech Republic	1 641.1	2 996.2	1 344.5	1 732.0	1 555.5	1 702.3
Denmark (2)	1 396.1	2 068.8	1 468.5	1 352.4	1 220.8	1 502.9
Germany (1)	2 444.1	3 463.1	1 400.1	2 156.0	1 091.8	2 186.5
Estonia	1 666.9	3 326.3	1 772.7	1 475.7	1 816.5	1 168.8
Ireland	827.5	1 163.5	1 307.9	1 128.4	2 678.9	1 254.6
Greece	:	:	:	:	:	:
Spain	942.8	1 295.4	1 186.2	1 241.9	1 301.1	881.2
France	1 178.1	1 919.8	1 009.8	1 555.1	1 548.6	1 378.3
Italy	1 267.3	2 208.3	1 084.9	1 260.6	1 231.3	1 155.6
Cyprus (2)	518.6	869.9	763.0	730.8	408.9	1 019.9
Latvia (1)	1 945.6	3 782.9	1 895.1	1 824.2	1 719.1	1 944.8
Lithuania	1 719.6	4 283.4	2 339.1	1 825.2	1 634.9	1 652.5
Luxembourg	1 473.1	1 970.1	1 241.9	1 473.5	1 352.8	1 251.5
Hungary	2 333.8	3 431.4	1 604.0	1 441.5	1 462.6	1 367.7
Malta	701.5	1 180.7	984.6	1 034.6	787.7	990.6
Netherlands	1 064.0	1 654.0	793.8	981.0	1 006.7	1 001.0
Austria	2 947.4	3 686.5	1 801.9	2 467.9	1 286.5	3 140.5
Poland	1 325.0	2 624.4	1 279.3	1 369.6	1 550.3	1 073.8
Portugal	1 075.2	1 320.4	1 078.5	1 099.6	970.2	703.9
Romania	2 016.1	3 539.1	3 281.1	2 508.1	1 836.7	1 288.0
Slovenia	1 771.9	1 988.9	1 425.4	1 422.4	1 351.0	1 545.7
Slovakia	1 573.8	2 726.6	1 471.3	1 724.6	1 615.0	1 434.2
Finland	1 682.9	2 655.4	1 419.5	1 318.7	1 258.7	1 734.1
Sweden	1 320.9	2 334.5	1 021.5	1 172.7	1 347.0	1 429.0
United Kingdom	923.7	1 287.2	1 184.6	1 197.9	1 552.1	1 277.0
Iceland	1 179.6	1 443.3	743.8	1 153.2	1 840.5	1 007.2
Norway	1 602.1	2 381.7	1 416.0	1 214.5	1 549.1	1 832.8
Switzerland	2 103.8	2 772.6	1 461.4	2 224.2	1 939.9	3 412.3
Croatia (1)	1 934.6	2 031.7	1 077.0	1 162.6	1 406.9	1 230.9
FYR of Macedonia (2)	1 169.1	1 443.9	1 548.3	1 185.4	581.8	588.5
Turkey	852.1	1 441.7	1 684.6	1 102.1	1 591.3	588.0

(1) 2008.

(2) 2007.

Source: Eurostat (online data code: [hlth_co_disch2](#))



Table 3.3.7: Hospital discharges of inpatients by diagnosis (ISHMT – international shortlist for hospital morbidity tabulation), average length of stay, 2009 (days)

	Neoplasms (cancers)	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Pregnancy, childbirth & the puerperium	Injury, poisoning & certain other consequences of external causes
Belgium ⁽¹⁾	9.1	8.1	8.0	5.8	4.7	8.6
Bulgaria	6.3	5.0	7.0	5.6	4.3	5.3
Czech Republic	9.3	12.8	8.9	7.2	5.1	10.1
Denmark ⁽²⁾	6.4	5.4	5.4	5.0	3.4	5.1
Germany ⁽¹⁾	10.1	10.2	8.7	7.2	4.7	9.0
Estonia	8.5	10.7	4.8	5.1	2.8	8.3
Ireland	11.1	9.5	7.2	6.2	2.8	5.6
Greece	:	:	:	:	:	:
Spain	9.0	8.2	7.0	5.8	3.1	8.2
France	0.7	0.2	0.2	1.1	0.3	0.3
Italy	9.3	9.1	8.7	6.7	3.9	8.9
Cyprus ⁽²⁾	8.9	6.4	5.2	5.1	5.4	5.8
Latvia ⁽¹⁾	9.3	8.6	7.7	6.2	5.2	7.9
Lithuania	8.8	8.5	6.6	6.0	4.2	6.7
Luxembourg	9.1	8.0	6.3	5.9	4.7	7.5
Hungary	5.3	7.1	5.7	5.5	4.2	5.6
Malta	6.3	9.4	5.1	4.8	3.4	6.1
Netherlands	7.3	6.7	7.0	6.0	3.3	6.5
Austria	7.5	10.8	8.4	6.6	5.4	8.6
Poland	7.2	7.4	7.4	5.8	4.8	6.1
Portugal	7.2	7.4	7.6	5.4	3.3	9.4
Romania	6.7	7.8	7.0	6.4	4.9	6.2
Slovenia	7.9	8.2	6.7	6.0	4.4	6.7
Slovakia	8.4	7.8	7.9	5.9	5.5	6.1
Finland	8.3	16.1	11.1	5.4	3.5	10.1
Sweden	7.8	6.1	5.4	4.7	2.7	5.9
United Kingdom	8.6	10.2	7.7	6.2	2.4	8.2
Iceland	7.6	7.6	7.0	4.5	2.2	6.6
Norway	6.6	4.7	6.0	4.5	1.6	4.5
Switzerland	8.7	7.7	7.2	6.0	4.9	6.2
Croatia ⁽¹⁾	9.2	10.0	7.9	7.2	5.9	9.4
FYR of Macedonia ⁽²⁾	7.9	10.0	7.5	5.6	4.2	9.0
Turkey	5.8	4.6	4.7	3.8	2.1	4.6

⁽¹⁾ 2008.

⁽²⁾ 2007.

Source: Eurostat (online data code: [hlth_co_inpst](#))



3.4 Health and safety at work

This subchapter presents the main statistical data on **serious** and **fatal accidents at work**, as well as some statistical information in relation to work-related health problems in the **European Union (EU)**. An accident at work is a discrete occurrence during the course of work which leads to physical or mental harm. Serious accidents at work are those that imply more than three days of absence from work. Fatal accidents at work are those that lead to the death of the victim within one year. The phrase ‘in the course of work’ means whilst engaged in an occupational activity or during the time spent at work. This includes cases of road traffic accidents in the course of work but excludes accidents during the journey between home and the workplace.

Main statistical findings

Serious and fatal accidents at work

In 2008, there were almost five thousand fatal accidents at work across the EU (excluding Greece and Northern Ireland) and nearly four million other accidents at work that resulted in more than three days of absence from work. These data relate to 193 million workers that were insured for accidents at work in the EU. An alternative way to analyse the information is to express the number of accidents in relation to the number of persons employed. For example, across the EU there were, on average, 2 040 serious accidents at work per 100 000 persons employed in 2008, while there were 2.53 fatal accidents per 100 000 persons employed.

Figure 3.4.1, illustrates the incidence rates of fatal accidents at work per 100 000 persons employed. Romania, with an average of 8.0 fatal work accidents per 100 000 persons employed, had the highest incidence rate followed by Lithuania and Bulgaria (6.0 and 5.2 fatal accidents per 100 000 persons employed). Denmark, Germany, the Netherlands, Sweden, Finland and France (as well as the United Kingdom, although values excluded Northern Ireland and road traffic accidents at work) had the lowest incidence rates with less than two fatal accidents at work per 100 000 persons employed in 2008.

According to the information that is available broken down by sex, men are considerably more likely to have an accident or to die at work than women. EU-27 incidence rates for serious accidents at work for men were 2.5 times higher on average than those for women in 2008. In Denmark, Sweden and Norway the average incidence rates for serious accidents at work for men were 1.5 times as high as the average incidence rate for women, while in France, Spain, Italy, Bulgaria and Finland they were 2.5 times as high and in Germany three times as high.

The number of accidents at work also varies considerably depending upon the economic activity where the victim works (see Figure 3.4.2). The construction, manufacturing and transportation and storage sectors accounted for more than 50 % of all fatal and serious accidents at work. The construction sector accounted for the largest number of fatal accidents at work (28.2 % of all fatal work accidents), followed by the manufacturing sector (18.1 %), transportation and storage (15.8 %) and agriculture, forestry and fishing (13.1 %). Most of the serious accidents at work also took place within the manufacturing and construction sectors, respectively 25.5 % and 16.5 % of all serious accidents, followed by wholesale and retail trade activities and transportation and storage, respectively 13.4 % and 8.4 % of all serious accidents.

Work-related health problems

In the EU-27, some 8.1 % of those aged 15 to 64 that worked or had previously worked reported a work-related health problem in the 12 months prior to a LFS ad-hoc survey module in 2007; this was equivalent to approximately 23 million persons.

As shown in Figure 3.4.3, musculo-skeletal problems were most often reported as the main work-related health problem (59.8 %), followed by stress, depression or anxiety (13.7 %). The occurrence of work-related health problems generally increased with age, but the rate of increase slowed down for workers aged 55 to 64 years; this may be due to unhealthy workers leaving the workforce early.



Workers with a low level of education reported work-related health problems more often than their colleagues. In particular, this group of workers were more often identified with musculoskeletal health problems as their most serious work-related health problem, whereas persons with higher levels of education most often identified stress, depression or anxiety as their main work-related health problem.

Work-related health problems were more likely to occur in agriculture, hunting and forestry, or in mining and quarrying; among women, work-related health problems were also more likely for those working in the health and social work sector. Furthermore, manual workers more often reported work-related health problems than non-manual workers.

Half (50.0%) of all persons with a work-related health problem in the EU experienced some limitations in their ability to carry out day-to-day activities, and an additional 22.6% experienced considerable limitations. Work-related health problems resulted in sick leave of at least one day in the past 12 months for 62.0% of persons with a work-related health problem, and in sick leave of at least one month for 27.1%.

It is estimated that work-related health problems resulted in at least 367 million calendar days of sick leave in the EU in 2007; this figure excludes persons that never expect to work again because of their work-related health problem.

Data sources and availability

There are two major data sources of statistics on health and safety at work: [European Statistics on Accidents at Work \(ESAW\)](#) and a Labour Force Survey (LFS) ad-hoc module for 2007 on accidents at work and work-related health problems.

European Statistics on Accidents at Work (ESAW) include case-by-case data on occupational accidents with more than three days of absence from work and fatal accidents. These are accidents reported to

national bodies/authorities responsible for insurance against accidents at work.

The LFS ad-hoc module provides data on self-reported accidents at work and work-related health problems in the 12 months prior to the survey. The LFS module asked respondents to record all accidents leading to injuries, irrespective of whether the accident led to any absence from work. The survey module also included questions about physical or mental health problems which the respondent considered to be caused or made worse by work.

Context

A safe, healthy working environment is a crucial factor in an individual's quality of life and is also a collective concern. Member State governments across the EU recognise the social and economic benefits of better health and safety at work. Reliable, comparable, up-to-date statistical information is vital for setting policy objectives and adopting suitable policy measures and preventing actions.

The EU action in health and safety at work has its legal basis in Article 153 of the EU Treaty. The main principles governing the protection of workers' health and safety are laid down in a 1989 framework Directive 89/391/EEC, the basic objective of which is to encourage improvements in occupational health and safety. All sectors of activity, both public and private, are covered by this legislation, which establishes the principle that the employer has a duty to ensure workers' safety and health in all aspects relating to work, while the worker has an obligation to follow the employer's health and safety instructions and report potential dangers.

In this field, the policy agenda of the European Commission is set out in a Communication ((2007) 62) which details a Community strategy for 2007-2012 on health and safety at work, outlining actions to make workplaces across the EU safer and healthier. It also sets a quantitative target of a 25% reduction in accidents at work, to be achieved through various EU and national measures.



Table 3.4.1: Number of serious and fatal accidents at work, 2008
(persons)

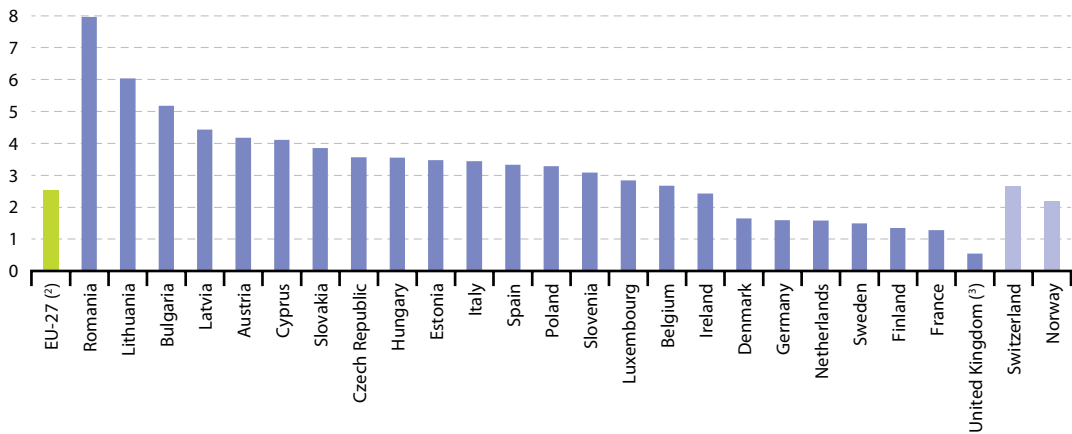
	Accidents at work involving more than three days of absence from work ⁽¹⁾			Fatal accidents at work		
	Total	Male	Female	Total	Male	Female
EU-27	3 942 999	2 923 491	1 018 409	4 898	4 638	260
Belgium	76 514	58 445	18 024	96	92	4
Bulgaria	3 037	2 181	856	151	141	10
Czech Republic	99 477	73 444	26 033	174	166	8
Denmark	71 288	43 850	26 981	47	:	:
Germany	943 993	734 885	208 589	616	573	43
Estonia	7 228	5 143	2 085	21	:	:
Ireland	18 078	12 897	5 118	51	:	:
Greece	:	:	:	:	:	:
Spain	689 131	517 880	171 251	529	512	17
France	637 357	450 992	186 365	289	265	24
Italy	503 431	389 947	113 484	780	753	27
Cyprus	2 355	1 890	465	12	12	0
Latvia	1 705	1 121	584	43	39	4
Lithuania	3 156	2 122	1 034	79	71	8
Luxembourg	8 133	6 650	1 483	10	10	0
Hungary	22 337	15 185	7 146	117	108	9
Malta	3 213	2 818	395	:	:	0
Netherlands	184 901	119 063	65 058	106	100	6
Austria	72 990	60 119	12 871	170	159	11
Poland	96 318	69 881	26 437	520	495	25
Portugal	147 349	116 979	30 370	221	213	8
Romania	4 559	3 607	952	497	460	37
Slovenia	20 186	15 601	4 585	27	27	0
Slovakia	11 614	8 142	3 472	80	:	:
Finland	57 373	41 645	15 728	34	31	3
Sweden	34 413	21 218	13 195	68	63	5
United Kingdom ⁽²⁾	223 635	147 785	75 847	157	:	:
Norway	56 518	33 928	22 590	50	:	:
Switzerland	73 640	58 967	14 673	90	85	5

⁽¹⁾ EU-27: estimates made for the purpose of this publication include under-reported levels for Latvia, Poland and Romania, but exclude Greece and Northern Ireland; Latvia, Poland and Romania, data include a certain level of under-reporting.

⁽²⁾ Great Britain (hence, excluding Northern Ireland).

Source: Eurostat (online data codes: [hsw_n2_01](#) and [hsw_n2_02](#))

Figure 3.4.1: Number of fatal accidents at work, 2008 ⁽¹⁾
(incidence rates per 100 000 persons employed)



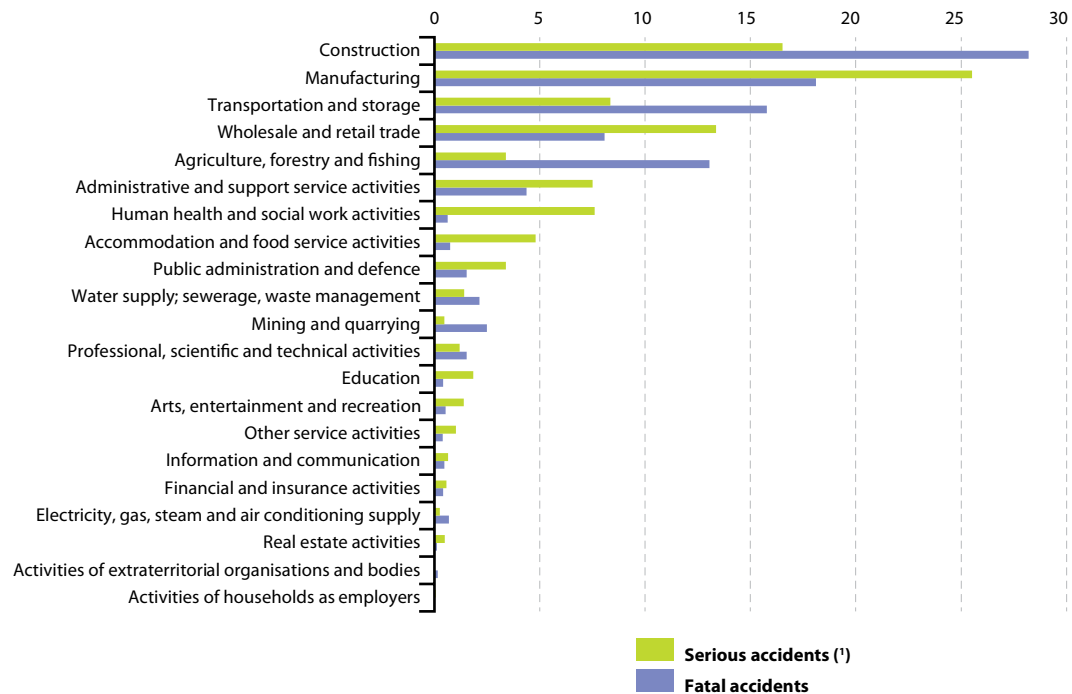
⁽¹⁾ Greece, not available.

⁽²⁾ Estimate made for the purpose of this publication includes under-reported levels for Latvia, Poland and Romania, but excludes Greece and Northern Ireland.

⁽³⁾ Great Britain (hence, excluding Northern Ireland); also excludes road traffic accidents at work.

Source: Eurostat (online data code: [hsw_n2_02](#))

Figure 3.4.2: Fatal and serious accidents at work by economic activity, EU, 2008
(% of serious and fatal accidents)

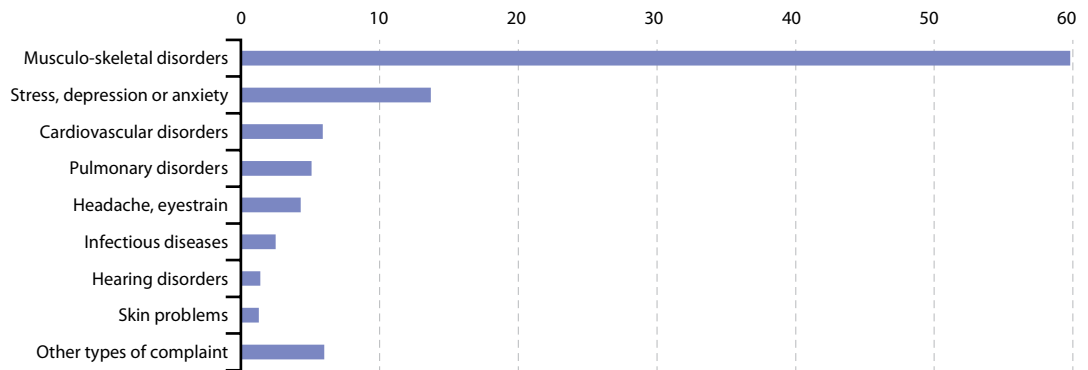


⁽¹⁾ Estimates made for the purpose of this publication including under-reported levels for Latvia, Poland and Romania, but excluding Greece and Northern Ireland.

Source: Eurostat (online data codes: [hsw_n2_01](#) and [hsw_n2_02](#))



Figure 3.4.3: Type of work-related health problem indicated as the most serious among persons with a work-related health problem, EU-27, 2007 ⁽¹⁾
(% of persons citing each complaint)



⁽¹⁾ Excluding France (data are not comparable).

Source: Eurostat (online data code: [hsw_pb5](#))