



Health is an important priority for Europeans, who expect to be protected against illness and disease – at home, in the workplace and when travelling. Health issues cut across a range of topics – including consumer protection (food safety issues), workplace safety, environmental or social policies – and thus have a considerable impact on the EU’s revised Lisbon Strategy and the EU 2020 Strategy. The policy areas covered within this chapter are under the remit of the Directorate-General for Health and Consumers and of the Directorate-General for Employment, Social Affairs and Equal Opportunities.

The competence for the organisation and delivery of health services and healthcare is largely held by the Member States, while the 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 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’ ⁽¹⁾. In order to bring about the changes sought within the sector and identified within the new strategy, the second programme of Community action in the field of health ⁽²⁾ came into force from 1 January 2008. It puts in place an overarching, strategic framework for work on health in the coming years and encompasses work not only in the health sector but across

(1) For more information: http://ec.europa.eu/health/ph_overview/strategy/health_strategy_en.htm.

(2) Decision No 1350/2007/EC of the European Parliament and of the Council of 23 October 2007 establishing a second programme of Community action in the field of health (2008-2013) (OJ L 301/3, 20.11.2007); for more information: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:301:0003:0013:EN:PDF>.



all policy areas. It has four main principles and three strategic themes for improving health in the EU. The principles include taking a value-driven approach, recognising the links between health and economic prosperity, integrating health in all policies, and 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, and 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.

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, and 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 a Resolution (2007/C 145/01 of 25 June 2007) on a new Community strategy on health and safety at work (2007-2012) ⁽³⁾.

In December 2008 the European Parliament and the Council adopted a Regulation on Community statistics on public health and health and safety at work ⁽⁴⁾.

3.1 Healthy life years

Introduction

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

The health status of a population is difficult to measure because it is hard to define among individuals, populations, cultures, or even across time. 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 the burden of these

⁽³⁾ Council Resolution 2007/C 145/01 of 25 June 2007 on a new Community strategy on health and safety at work (2007-2012); for more information: http://eur-lex.europa.eu/LexUriServ/site/en/oj/2007/c_145/c_14520070630en00010004.pdf.

⁽⁴⁾ Regulation (EC) No 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; for more information: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:354:0070:0081:EN:PDF>.



conditions may impact on healthcare and pension provisions, while resulting in a low quality of life for those who suffer from such conditions.

Healthy life years also monitor health as a productive or economic factor: these indicators form part of the structural indicators that are used to analyse progress being made in the EU with respect to the revised Lisbon criteria. An increase in healthy life years is one of the main goals for European 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 result in lower levels of public healthcare expenditure. If healthy life years are increasing 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 important effects: including an altered pattern of resource allocation within the healthcare system, as well as wider ranging effects on consumption and production throughout the economy.

Definitions and data availability

The indicator on **healthy life years** (also called **disability-free life expectancy**) measures the number of remaining years that a person of a specific age is expected to live without any severe or moderate health problems or acquired disabilities; in other words, this is a health expectancy indicator. The indicator is calculated separately for males and females.

There are two components to the calculation of healthy life years, namely, mortality statistics and data on self-perceived

disability. Mortality data comes from Eurostat's demographic database, while self-perceived disability data comes from European Union statistics on income and living conditions (EU-SILC). The EU-SILC question is ⁽⁵⁾: *'For at least the past 6 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?'*

Main findings

As life expectancy has risen, political attention has been re-focused on healthy life years. One measure that can be used to study the relative health of Europe's population is the relationship between healthy life years and total life expectancy, in other words, what percentage of each person's life can be expected to be lived free from disability and disease. Men were likely to spend the largest proportion of their lives free from disability. Women could expect to live a slightly lower proportion of their lives free from disability; although their overall life expectancy at birth was higher than for men. Indeed, in 2007 the male population consistently reported a higher proportion of healthy life years in total life expectancy when compared with rates for women, with differences of 7 percentage points or more in Lithuania, Slovakia, Latvia and Portugal.

The indicators concerning healthy life years are calculated at two ages: birth and the age of 65. The indicator at age 65 is of particular interest in relation to the possible future demand for healthcare

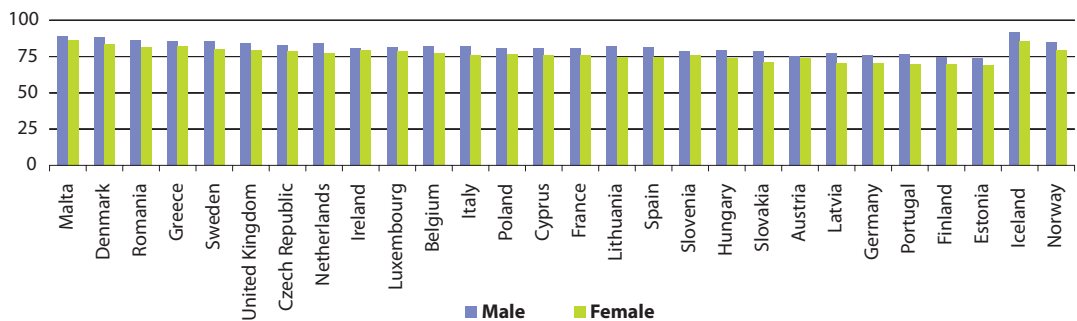
⁽⁵⁾ The disability prevalence data used in the calculation of the Healthy life years (HLY) indicator are provided by the GALI (Global Activity Limitation Instrument) question from EU-SILC. The way this question was implemented by the EU Member States in EU-SILC hampers cross-country comparisons for the data up to 2008. Therefore, before 2008, SILC health data should be used with caution and only the evolution in time for each country should be followed.



and social services, or the potential for older persons to remain within the workforce. For both men and women, Estonia, Slovakia and Latvia were the Member States where, in 2007, people could expect to spend the shortest period after the age of 65 without a disability. The data for Slovakia, Lithuania, Romania, Germany, the Czech Republic and Greece showed almost identical figures for men and women

in terms of additional healthy life years they may expect to live at the age of 65. The highest differences between the sexes were recorded in Luxembourg, Cyprus and Portugal: in Portugal and Cyprus men aged 65 were expected to have approximately 1.5 years of healthy life more than women, while in Luxembourg the opposite situation was found, as women could expect to have 1.7 additional years of healthy life compared with men.

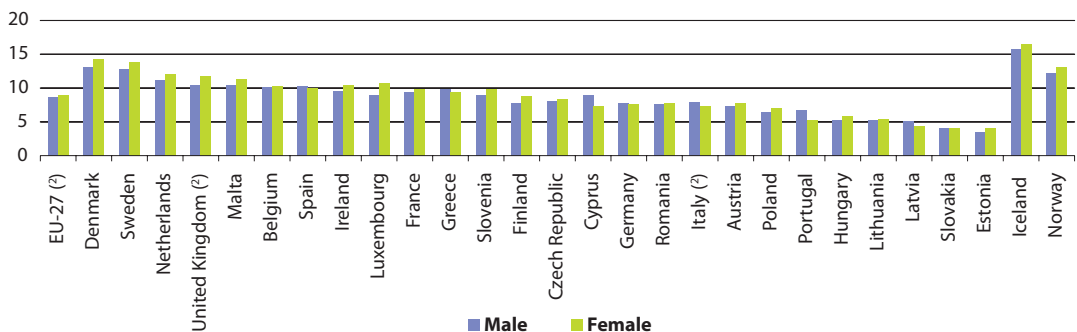
Figure 3.1: Healthy life years at birth, 2007 ⁽¹⁾
(% of total life expectancy)



⁽¹⁾ Bulgaria, not available; the figure is ranked on the average of male and female.

Source: Eurostat ([tsdph100](#) and [tps00025](#))

Figure 3.2: Healthy life years at age 65, 2007 ⁽¹⁾
(years)



⁽¹⁾ Bulgaria, not available; the figure is ranked on the average of male and female.

⁽²⁾ Estimates.

Source: Eurostat)



3.2 Causes of death and infant mortality

Introduction

Broadly speaking, the EU has witnessed a very significant reduction in mortality during the last century or so – both in terms of reduced infant mortality and as a result of general declines in infectious and degenerative diseases. Non-communicable diseases are largely preventable and are linked by common risk factors, underlying determinants and opportunities for intervention. Among these, cancer and cardiovascular diseases are currently by far the most important causes of death in the EU for both men and women.

Mortality during the first year of life has decreased considerably in all Member States, with current levels among the world's lowest. However, there are still persistent differences in rates across different social groups or geographical regions.

Definitions and data availability

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

- a shortlist of 65 causes of death;
- gender;
- age;
- geographical region (NUTS level 2).

The **infant mortality rate** represents the ratio between deaths of children under one year and the number of live births in a given year; the value is expressed per 1 000 live births.

Causes of death are classified according to the international statistical classification of diseases and related health problems (ICD), that is developed and maintained by the World Health Organisation (WHO). Causes of death statistics are based on information derived from medical certificates; the medical certification of death is an obligation in all Member States. They target 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). Although definitions are harmonised, 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. Annual data are provided in absolute numbers, as crude death rates and as standardised death rates.

The **standardised death rate (SDR)** is a weighted average of the age-specific mortality rates. The weights are the age distribution of the population whose mortality experience is being observed. Since most causes of death vary significantly by age and sex, the use of standardised death rates improves comparability over time and between countries. In order to facilitate the analysis of the development over time the series has been converted to indices with a fixed reference period (2000=100).



Main findings

In the EU-27 the total number of people that died in 2007 was 4.78 million. This figure was split almost equally between men and women, with about 12 000 more men dying than women. Looking at the number of deaths by each year of age, more men died than women at every year of age up to the age of 80. As a proportion of all deaths, 41 % of women who died were aged less than 80, whereas for men the proportion at the same age was much higher, at 66 %. Furthermore, 80 was the age of the peak number of deaths for men, whereas the number of deaths among women continued to rise and peaked at the age of 85.

The progress made in medical healthcare services is reflected in a decreasing infant mortality rate. In the course of the last four decades the infant mortality rate in the EU fell from 28.6 deaths per 1 000 live births in 1965 to 4.7 deaths per 1 000 live births in 2006. As a result of declining infant mortality rates, most Member States have among the world's lowest infant mortality rates, for example, 1.8 deaths per 1 000 live births in Luxembourg or less than 3 deaths per 1 000 live births in Slovenia, Sweden, Finland or the Czech Republic. Infant mortality rates have levelled-off in some countries in recent years, and actually increased in Cyprus and Malta, although the relatively small population in these two countries may lead to volatility in this rate. Reversals in infant mortality rates may, partly, be due to factors such as: an increasing number of women deferring childbirth into their

forties; or a higher number of multiple births as a result of the more common use of fertility treatments.

Non-communicable diseases – a group of conditions that includes cardiovascular disease, cancer, mental health problems, diabetes mellitus, chronic respiratory disease, and musculoskeletal conditions – cause more than 85 % of deaths in Europe. Among these, cancer (malignant neoplasm) and cardiovascular diseases (characterised by a reduced blood supply to the heart muscle, often as a result of coronary artery disease) were by far the most important causes of death in the EU-27 for both men and women in 2007; there were, however, large differences between standardised death rates for men and women.

Standardised death rates were higher for men for all the main causes of death, with rates up to four to five times as high as those recorded for women for drug dependence and alcohol abuse. The rates of AIDS/HIV and suicide and intentional self-harm were also three or four times as high for men as for women.

An analysis of death rates for men and women between 2000 and 2007 shows falling rates for all of the main causes of death. Death rates from cancer fell more slowly than for ischaemic heart diseases; for both of these causes the rates fell more quickly for men than for women. Among the major causes of death studied, the death rate for pneumonia fell most strongly (for both men and women), mainly as a result of reductions between 1999 and 2001.

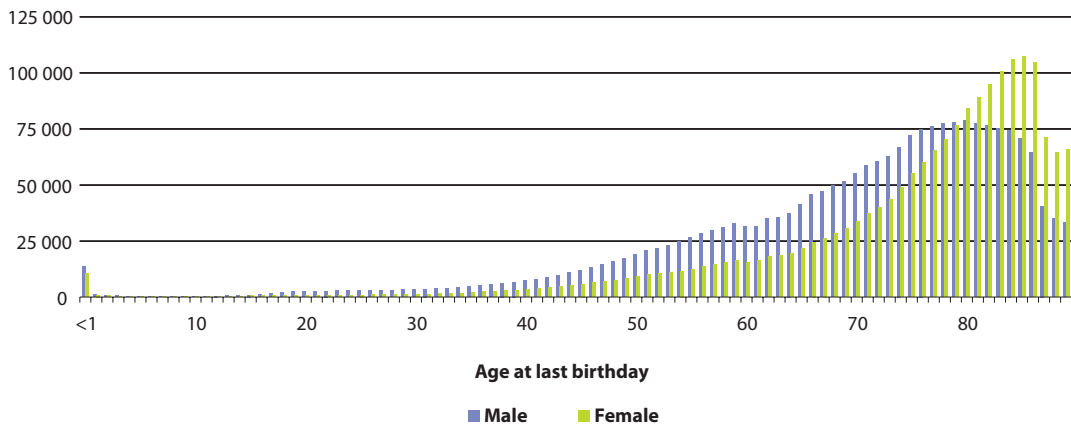


Deaths from cancer among men had an incidence of 229 per 100 000, while the corresponding rate for women was 132. The difference in cancer deaths between the sexes was often particularly high among those Member States that joined the EU since 2004, although France and Spain also recorded considerable disparities.

Standardised death rates for ischaemic heart diseases in 2007 were about twice as high for men (at 120 per 100 000) as for women (61) in the EU-27. Heart disease

was particularly prevalent among men and women in the Baltic Member States, Slovakia, Hungary and Romania. There was a higher incidence of death from heart disease than from cancer for both men and women in five of these countries (Hungary was the exception) and this was also the case in Romania, while in Finland there were more deaths from heart disease than from cancer among the male population. Countries reporting the lowest incidence of death from heart disease included France, Portugal, Spain and the Netherlands.

Figure 3.3: Mortality, EU-27, 2006 ⁽¹⁾
(number, based on age at last birthday)



⁽¹⁾ The number of deaths in the EU-27 for persons aged 90 or more in 2006 was: male – 185 508; female – 501 965.

Source: Eurostat ([demo_magec](#))



Table 3.1: Infant mortality
(per 1 000 live births)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2008
EU-27⁽¹⁾	28.6	25.5	20.8	15.8	12.8	10.3	7.5	5.9	4.9	4.7
Euro area⁽¹⁾	28.5	23.8	19.0	13.0	9.8	7.7	5.7	4.7	3.9	3.8
Belgium	23.7	21.1	16.1	12.1	9.8	8.0	6.0	4.8	3.7	3.4
Bulgaria	30.8	27.3	23.1	20.2	15.4	14.8	14.8	13.3	10.4	8.6
Czech Republic	23.7	20.2	19.4	16.9	12.5	10.8	7.7	4.1	3.4	2.8
Denmark	18.7	14.2	10.4	8.4	7.9	7.5	5.1	5.3	4.4	4.0
Germany	24.1	22.5	18.9	12.4	9.1	7.0	5.3	4.4	3.9	3.5
Estonia	20.3	17.7	18.2	17.1	14.1	12.3	14.9	8.4	5.4	5.0
Ireland ⁽²⁾	25.2	19.5	17.5	11.1	8.8	8.2	6.4	6.2	4.0	3.1
Greece	34.3	29.6	24.0	17.9	14.1	9.7	8.1	5.9	3.8	3.5
Spain	29.4	20.7	18.9	12.3	8.9	7.6	5.5	4.4	3.8	3.5
France ⁽³⁾	22.4	18.2	13.8	10.0	8.3	7.3	4.9	4.5	3.8	3.7
Italy	35.0	:	20.8	14.6	10.5	8.2	6.2	4.5	3.8	3.7
Cyprus	32.0	26.0	18.2	14.4	14.4	12.9	9.7	5.6	4.6	5.3
Latvia	18.9	17.7	20.3	15.3	13.0	13.7	18.8	10.4	7.8	6.7
Lithuania	24.7	19.3	19.6	14.5	14.2	10.2	12.5	8.6	6.8	4.9
Luxembourg	24.0	24.9	14.8	11.5	9.0	7.3	5.5	5.1	2.6	1.8
Hungary	38.8	35.9	32.8	23.2	20.4	14.8	10.7	9.2	6.2	5.6
Malta	34.8	27.9	18.3	15.2	14.5	9.1	8.9	5.9	6.0	9.9
Netherlands	14.4	12.7	10.6	8.6	8.0	7.1	5.5	5.1	4.9	3.8
Austria	28.3	25.9	20.5	14.3	11.2	7.8	5.4	4.8	4.2	3.7
Poland	41.6	36.4	24.8	25.4	22.1	19.4	13.6	8.1	6.4	5.6
Portugal	64.9	55.5	38.9	24.2	17.8	11.0	7.5	5.5	3.5	3.3
Romania	44.1	49.4	34.7	29.3	25.6	26.9	21.2	18.6	15.0	11.0
Slovenia	29.6	24.5	17.3	15.3	13.0	8.4	5.5	4.9	4.1	2.1
Slovakia	28.5	25.7	23.7	20.9	16.3	12.0	11.0	8.6	7.2	5.9
Finland	17.6	13.2	9.6	7.6	6.3	5.6	3.9	3.8	3.0	2.6
Sweden	13.3	11.0	8.6	6.9	6.8	6.0	4.1	3.4	2.4	2.5
United Kingdom	19.6	18.5	18.9	13.9	11.1	7.9	6.2	5.6	5.1	4.7
Croatia	49.5	34.2	23.0	20.6	16.6	10.7	8.9	7.4	5.7	4.5
FYR of Macedonia	105.8	87.9	65.1	54.2	43.4	31.6	22.7	11.8	12.8	9.7
Turkey	:	:	:	:	:	:	:	28.9	23.6	16.0
Iceland	15.0	13.2	12.5	7.7	5.7	5.9	6.1	3.0	2.3	2.5
Liechtenstein ⁽¹⁾	22.8	11.8	6.5	7.6	10.7	:	:	9.5	2.6	5.5
Norway	14.6	11.3	9.5	8.1	8.5	6.9	4.0	3.8	3.1	2.7
Switzerland	17.8	15.1	10.7	9.1	6.9	6.8	5.0	4.9	4.2	4.0

(¹) 2006 instead of 2008.

(²) 2007 instead of 2008.

(³) 2007 instead of 2008; break in series in 2000 when French overseas departments are included.

Source: Eurostat ([demo_minfind](#))



Table 3.2: Causes of death – standardised death rate, 2007 ⁽¹⁾
(per 100 000 inhabitants)

	Cancer ⁽²⁾	Heart disease ⁽³⁾	Nervous system	Pneumonia	Chronic liver disease	Diabetes mellitus	Accidents	Suicide ⁽⁴⁾	Alc. abuse	Homicide, assault	AIDS (HIV)	Drug dependence
EU-27	172.7	87.4	12.4	14.9	13.9	12.9	25.0	9.8	2.7	1.0	1.0	0.6
Belgium	173.9	71.2	20.3	21.9	9.3	10.1	28.1	17.5	2.6	1.7	0.6	0.4
Bulgaria	170.3	135.4	9.7	17.6	17.8	18.0	29.8	9.5	0.3	1.7	0.0	0.0
Czech Republic	203.9	185.5	9.6	20.4	16.8	17.1	34.0	11.9	1.3	1.0	0.0	0.0
Denmark	208.0	71.6	18.4	18.3	14.5	16.3	24.5	10.6	12.6	0.7	0.5	0.7
Germany	162.1	92.6	13.2	13.7	13.3	14.4	16.0	9.4	4.7	0.6	0.5	0.9
Estonia	192.9	236.3	16.4	9.5	25.7	13.0	73.2	16.8	15.5	6.8	3.1	0.0
Ireland	184.8	109.2	15.7	41.4	5.8	11.4	18.2	9.1	2.1	0.8	0.1	2.0
Greece	157.9	73.3	8.4	5.8	4.9	7.3	27.4	2.6	0.3	1.0	0.2	0.0
Spain	157.1	50.4	21.2	10.5	9.0	12.7	20.8	6.1	0.5	0.7	2.7	0.1
France	169.2	35.7	25.3	8.6	10.7	10.7	27.3	14.6	4.4	0.7	1.2	0.3
Italy	164.9	64.1	16.9	5.5	9.6	16.6	21.8	5.2	0.3	0.9	1.5	0.7
Cyprus	122.4	85.8	14.3	9.3	4.7	36.1	31.4	2.2	0.5	1.3	0.5	0.9
Latvia	193.6	298.6	14.4	15.2	21.5	11.5	86.3	17.8	3.5	8.0	1.8	0.0
Lithuania	196.5	338.2	15.4	19.6	43.3	6.9	99.2	28.4	1.2	6.9	0.3	0.6
Luxembourg	161.1	77.0	20.8	12.2	16.5	9.2	31.4	13.2	3.1	1.4	1.0	0.2
Hungary	240.9	226.6	13.9	5.3	45.3	20.8	37.9	21.4	3.7	1.7	0.1	0.0
Malta	155.0	119.9	12.5	11.3	5.9	21.0	21.9	6.0	0.2	0.7	0.2	0.0
Netherlands	183.6	50.2	16.2	20.1	4.3	13.6	14.9	7.7	1.0	0.9	0.4	0.0
Austria	157.7	103.3	15.6	8.6	15.5	21.8	23.0	13.2	3.9	0.6	0.7	2.3
Poland	208.6	104.2	10.9	19.2	16.9	13.5	38.0	12.9	5.0	1.3	0.3	0.0
Portugal	149.4	46.2	14.5	28.9	10.8	21.4	18.6	6.8	0.8	1.5	6.3	0.1
Romania	178.1	200.9	8.3	24.5	40.9	8.5	39.6	10.5	2.2	2.0	0.8	0.0
Slovenia	202.7	67.2	8.7	18.0	26.7	9.1	40.4	18.4	2.6	0.9	0.1	0.0
Slovakia	204.4	268.6	13.3	32.1	26.8	10.7	35.6	8.8	0.0	1.2	0.0	0.0
Finland	138.3	134.2	39.7	7.1	19.9	6.8	45.3	17.6	2.4	2.1	0.2	0.4
Sweden	149.1	93.0	18.4	10.2	5.3	11.4	21.4	11.4	2.8	1.2	0.3	0.2
United Kingdom	178.1	93.0	19.3	27.7	11.4	6.4	16.6	6.1	1.3	0.4	0.4	1.8
Croatia	209.0	154.2	11.9	16.3	23.4	19.9	39.3	15.0	4.9	1.4	0.0	0.3
FYR of Macedonia	172.3	97.8	6.5	5.4	7.9	34.9	26.9	7.8	0.6	2.2	0.0	0.0
Iceland	165.5	89.0	37.6	9.5	2.9	6.6	16.3	11.5	1.5	0.6	0.0	0.3
Norway	163.7	73.3	19.0	19.6	3.7	10.5	27.9	10.0	2.8	0.7	0.2	0.5
Switzerland	146.1	66.1	20.7	9.1	7.1	10.7	20.8	15.1	2.3	0.6	0.7	0.5

⁽¹⁾ Denmark, Ireland, Italy, Luxembourg and Portugal, 2006; Belgium, 2004.

⁽²⁾ Malignant neoplasms.

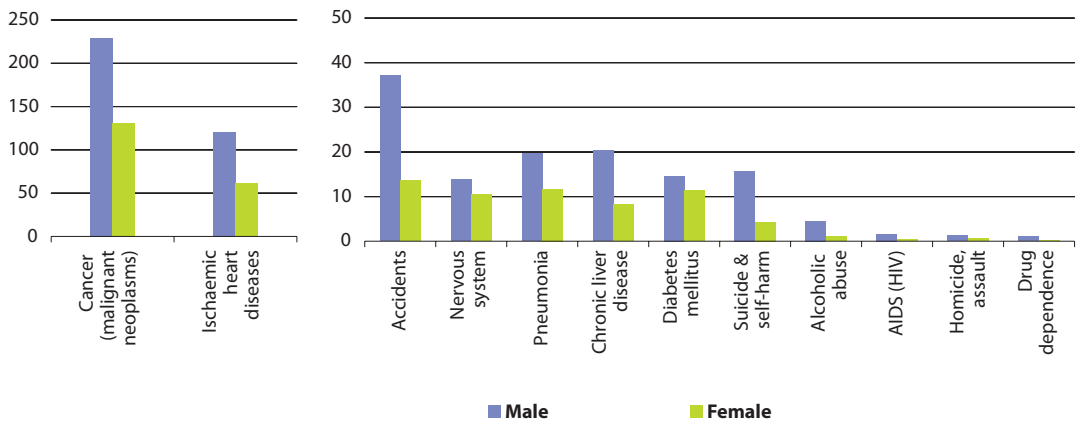
⁽³⁾ Ischaemic heart diseases.

⁽⁴⁾ Suicide and intentional self-harm.

Source: Eurostat (tps00116, tps00119, tps00134, tps00128, tps00131, tps00137, tps00125, tps00122, tps00140, tps00146, tps00143 and tps00149)



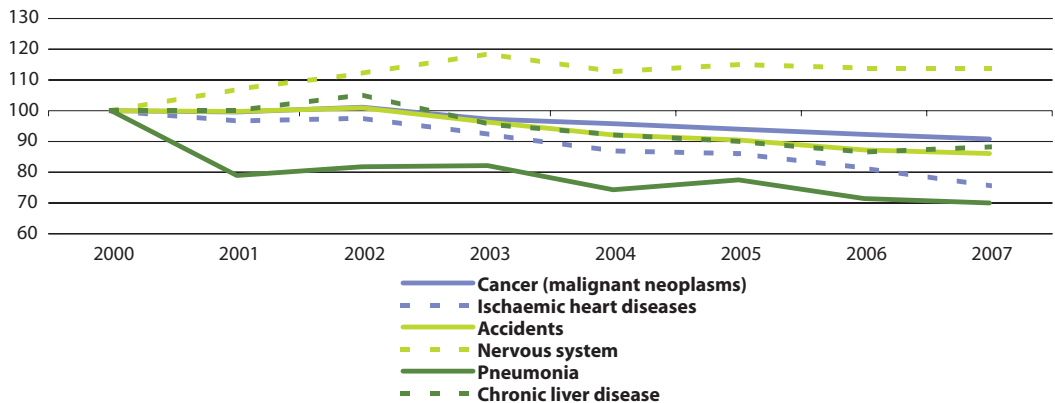
Figure 3.4: Causes of death – standardised death rate, EU-27, 2007 ⁽¹⁾
(per 100 000 inhabitants)



⁽¹⁾ Note the differences in the scales employed between the two parts of the figure; the figure is ranked on the average of male and female; EU-27 averages calculated on the basis of the latest year available for each Member State.

Source: Eurostat (tps00116, tps00119, tps00125, tps00134, tps00128, tps00131, tps00137, tps00122, tps00140, tps00143, tps00146 and tps00149)

Figure 3.5: Causes of death – standardised death rate per 100 000 inhabitants, males, EU-27 ⁽¹⁾
(2000=100)

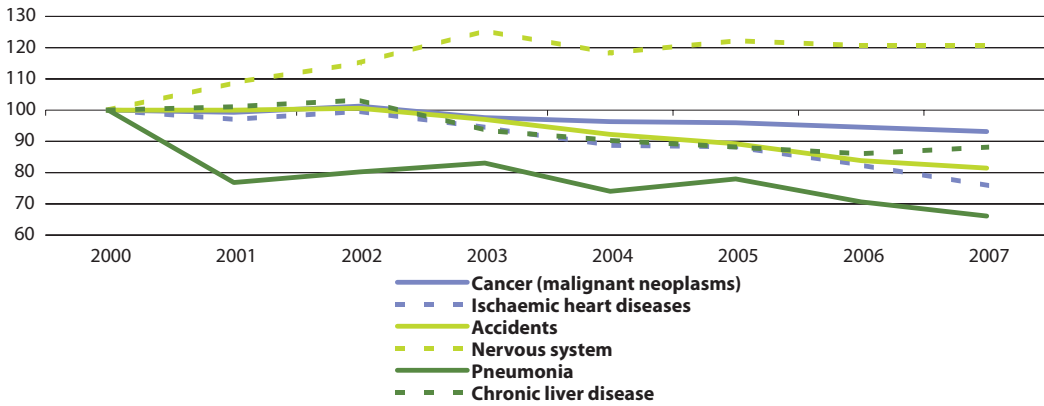


⁽¹⁾ Provisional.

Source: Eurostat (hlth_cd_asdr)



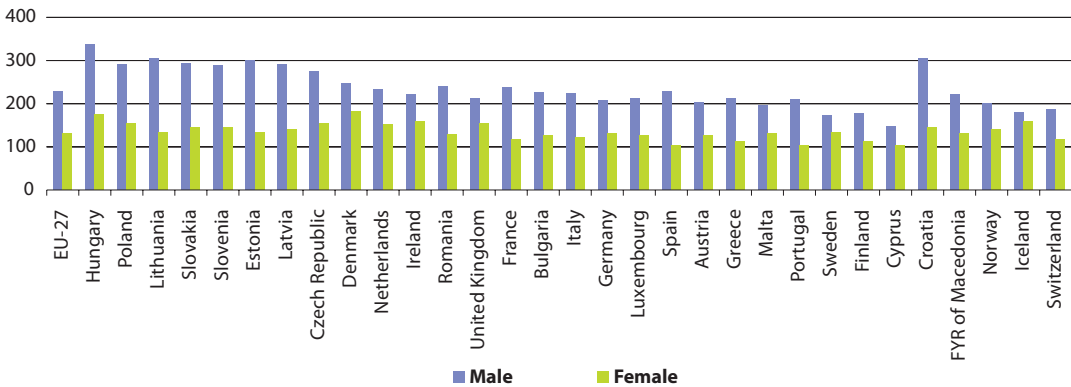
Figure 3.6: Causes of death - standardised death rate per 100 000 inhabitants, females, EU-27 (¹) (2000=100)



(¹) Provisional.

Source: Eurostat (hlth_cd_asdr)

Figure 3.7: Deaths from cancer (malignant neoplasms) - standardised death rate, 2007 (¹) (per 100 000 inhabitants)

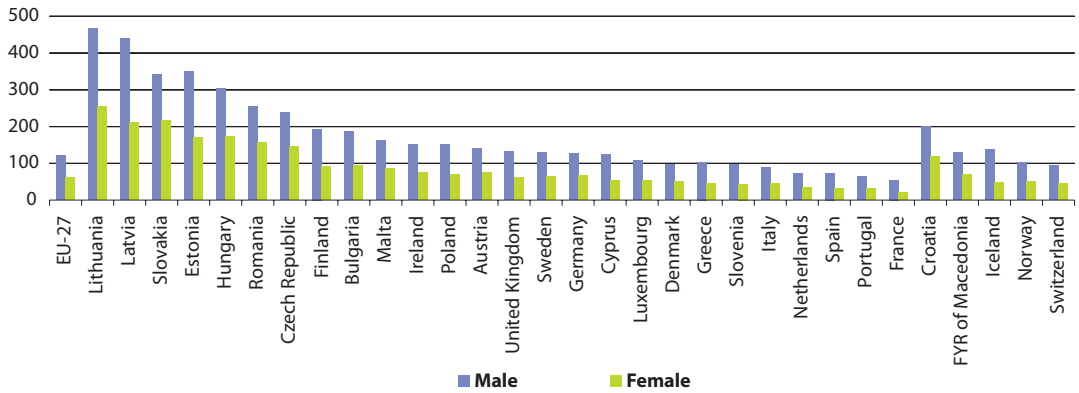


(¹) Denmark, Ireland, Italy, Luxembourg and Portugal, 2006; the figure is ranked on the average of male and female.

Source: Eurostat (tps00116)



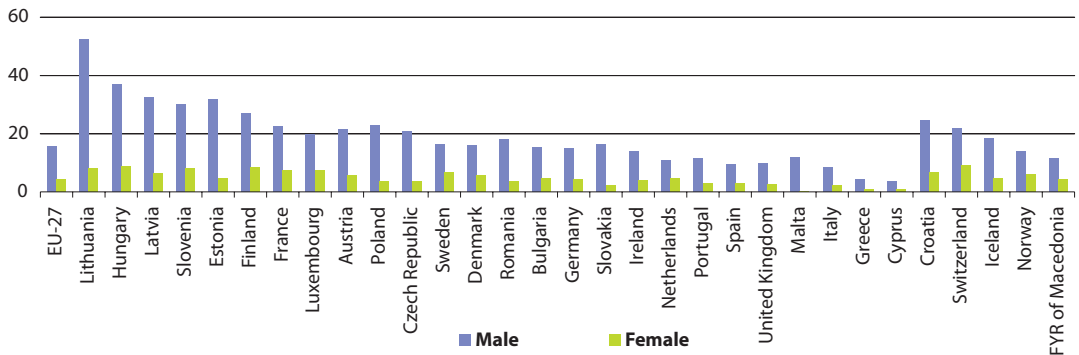
Figure 3.8: Deaths from ischaemic heart diseases - standardised death rate, 2007 ⁽¹⁾
(per 100 000 inhabitants)



⁽¹⁾ Denmark, Ireland, Italy, Luxembourg and Portugal, 2006; the figure is ranked on the average of male and female; EU-27, provisional; Belgium, not available.

Source: Eurostat ([tps00119](#))

Figure 3.9: Deaths from suicide - standardised death rate, 2007 ⁽¹⁾
(per 100 000 inhabitants)

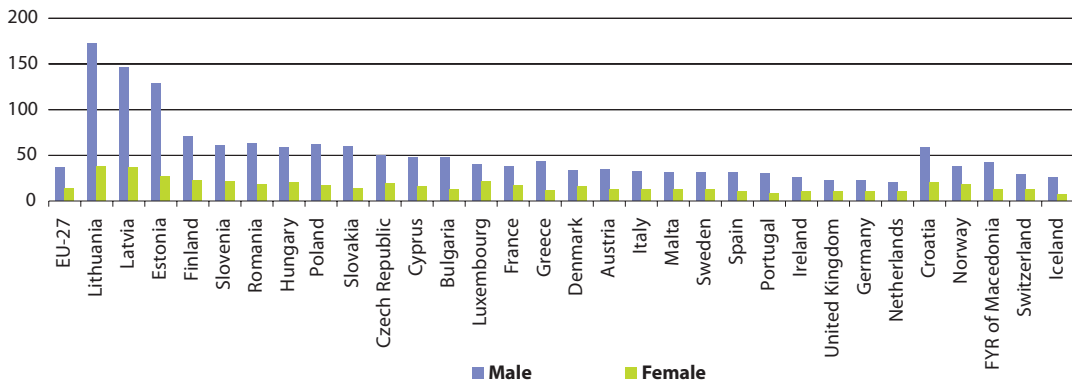


⁽¹⁾ Denmark, Ireland, Italy, Luxembourg and Portugal, 2006; the figure is ranked on the average of male and female; EU-27, provisional; Belgium, not available.

Source: Eurostat ([tps00122](#))



Figure 3.10: Deaths from accidents - standardised death rate, 2007 (¹)
(per 100 000 inhabitants)



(¹) Denmark, Ireland, Italy, Luxembourg and Portugal, 2006; the figure is ranked on the average of male and female; EU-27, provisional; Belgium, not available.

Source: Eurostat (tps00125)

3.3 Healthcare

Introduction

A new health strategy ‘Together for health: a strategic approach for the EU 2008-2013’ was adopted on 23 October 2007, putting in place a framework to improve health in the EU through a value-driven approach, recognising the links between health and economic prosperity, integrating health in all policies, and strengthening the EU’s voice in global health.

The provision of healthcare varies considerably within the EU, although widespread use is made of public provision and comprehensive healthcare insurance. Healthcare schemes generally cover all residents; nevertheless, an increasing proportion of individuals choose to adhere to

private insurance schemes (usually on top of the national provision for care).

Public regulation of the healthcare sector is a complex task, as the healthcare market is characterised by numerous market imperfections. Member States generally aim to balance the efficient use of resources ensuring that healthcare provisions are available to all. There is no easy answer to the question of how much a country should spend on healthcare, as the Member States face a different disease burden, while populations have different expectations of what services their national healthcare systems should offer. Indeed, the amount of money needed to fund a healthcare system is a function of several



variables, the most obvious being the burden of disease requiring treatment. However, there is no simple linear relationship between the burden of disease and the need for resources, as some conditions can be treated without complications and at a relatively low cost while others may require complex and expensive care.

The main consumers of healthcare are older people – a section of the European population that is growing rapidly, partly as a result of ageing baby-boomers, but also because of continued increases in life expectancy. The increasing number of elderly persons in the coming years will probably drive demand for more healthcare provision, particularly for long-term care (nursing and convalescence homes). Medical advances are also likely to result in more and better treatments being made available.

An increasing number of Europeans (and persons from non-member countries) are travelling across borders to receive health treatment, to avoid waiting lists or to seek specialist treatment that may only be available abroad. The EU works towards ensuring that its citizens who move across borders have access to healthcare anywhere within the EU and healthcare systems and policies are becoming more interconnected. This is not only a result of the movement of patients and professionals between countries, but may also be attributed to a set of common public expectations of health services across Europe, as well as more rapid dissemination of new medical technologies and techniques. On 2 July 2008, as part of a renewed social agenda, the European Commission adopted a draft Directive on the application of patients' rights to cross-border healthcare ⁽⁶⁾.

Definitions and data availability

Healthcare expenditure

According to the system of health accounts (SHA), **healthcare expenditure** data can be analysed by type of provider, by function (goods and services) and by financing agent. Healthcare data on expenditure are based on various information sources including surveys and administrative data sources. The country-specific way of organising and financing healthcare, existing departures from SHA definitions, and information gaps, may explain why data are not always completely comparable between countries. To collect data on healthcare expenditure, the system of health accounts (SHA) and its related set of international classification for health accounts (ICHA) is used. The SHA is organised around a tri-axial system for recording health expenditure, defining healthcare financing agents, functions and service providers.

Mechanisms of **healthcare financing** are becoming increasingly complex in many countries with a wide range of institutions involved; at least a basic subdivision of public and private financing is reported in many cases. A detailed breakdown of expenditure on health by financing agents is an essential component of a comprehensive SHA.

Healthcare in a country comprises the sum of activities performed either by institutions or individuals pursuing, through the application of medical, paramedical and nursing knowledge and technology, the **purposes/core functions** of:

- promoting health and preventing disease;

⁽⁶⁾ For more information: http://ec.europa.eu/health/ph_overview/co_operation/healthcare/docs/COM_en.pdf.



- curing illness and reducing premature mortality;
- caring for persons affected by chronic illness who require nursing care;
- caring for persons with health-related impairment, disability, and handicaps who require nursing care;
- assisting patients to die with dignity;
- providing and administering public health; and
- providing and administering health programs, health insurance and other funding arrangements.

Health-related functions such as the education and training of the health workforce, research and development in health, and environmental health should be distinguished from the core functions; as far as possible they should be excluded when measuring activities belonging to core healthcare functions.

The way of organising healthcare services reflects the country-specific division of labour between providers of healthcare services which is becoming increasingly complex in many countries. A classification of **healthcare providers** organises the country-specific institutions into common, internationally applicable categories and provides tools for linking data on personnel and other resource inputs as well as output measurement.

Non-expenditure data on healthcare

Information on healthcare can be divided into two broad groups of data: resource-related data on human and technical resources; and output-related data that focus on hospital patients and the treatment(s) they receive. Healthcare data are largely based on administrative data sources, and, to a large degree, they

reflect country-specific ways of organising healthcare; as such, the information collected may not always be completely comparable.

Hospitals are defined according to the classification of healthcare providers of 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, is provided irrespective of the sector of employment (whether the personnel are independent, employed by a hospital, or any other healthcare provider). These statistics cover healthcare professionals such as physicians, dentists, nurses, pharmacists and physiotherapists. Physicians may be counted as licensed, professionally active or practising; data for two or more of these concepts are available in the majority of Member States. In the context of comparing healthcare services across Member States, Eurostat gives preference to the concept of '**practising professionals**', as this best describes the availability of healthcare resources. Practising physicians are defined as those providing services directly to patients. Their tasks include: conducting medical examinations and making diagnosis; prescribing medication and giving treatment for diagnosed illnesses, disorders or injuries; giving specialised medical or surgical treatment for particular types of illnesses, disorders or injuries; giving advice on and applying preventive medicine methods and treatments. The number of physicians may be used as a proxy for access to the healthcare system.



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 are those which are regularly maintained and staffed and immediately available for the care of admitted patients. These include: beds in all hospitals, including general hospitals, mental health and substance abuse hospitals, and other specialty hospitals; occupied and unoccupied beds are covered. The statistics exclude surgical tables, recovery trolleys, emergency stretchers, beds for same-day care, cots for healthy infants, beds in wards which were closed for any reason, provisional and temporary beds, or beds in nursing and residential care facilities. They cover beds accommodating patients who are formally admitted (or hospitalised) to an institution for treatment and/or care and who stay for a minimum of one night in the hospital or other institution providing in-patient care.

Curative care (or acute care) beds in hospitals are beds 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, in the form of the treatment received. Data in this domain are available for a range of indicators including **hospital discharges** of in-patients and day cases by age, sex, and selected (groups of) diseases; the average length of stay of in-patients; 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 in-

patient care are based on information gathered at the time of discharge. A hospital discharge is defined as the formal release of a patient from a hospital after a procedure or course of treatment. A discharge occurs whenever a patient leaves because of finalisation of treatment, signs out against medical advice, transfers to another healthcare institution or if a patient dies. Healthy newborn babies should be included, while patient transfers to another department within the same institution are excluded.

Main findings

Healthcare expenditure

Current expenditure on healthcare in 2006 ranged from PPS 403 per inhabitant in Romania to more than PPS 2 700 per inhabitant in Germany, France, Belgium, the Netherlands, Austria (2004), Denmark and Sweden; note that no data is available for six of the Member States. In nearly all of the Member States expenditure was greatest for care provided by hospitals, while a significant proportion of healthcare expenditure was for providers of ambulatory healthcare, as well as for retail sale and other providers of medical goods.

An analysis of the functions of healthcare expenditure show that curative care generally accounted for around half of all healthcare expenditure. Medical goods for outpatients was generally the second largest function, with around one quarter of total expenditure, although it exceeded one third in Slovakia, Bulgaria, Hungary and Lithuania. Rehabilitative care was generally 4 % or less of the total, with the 11 % share in Cyprus an exception among



those Member States with data available. Long-term nursing care accounted for less than 10 % of expenditure in the majority of the Member States, but reached 22 % in Denmark.

Sources of financing varied considerably, reflecting the variety of health systems in place across the Member States. In several countries, three fifths or more of healthcare expenditure is financed from social security funds: the highest shares were in the Czech Republic (81 %) and the Netherlands (77 %). Other government financing was the main source in Denmark and Sweden at more than four fifths of the total, while more than half of the financing in Portugal, Spain, Finland and Latvia also came from this source. The other major source of funds was direct payments, referred to as 'out-of-pocket' expenditure, which ranged from less than 10 % of the total in the Netherlands and France, to over two fifths in Bulgaria and Latvia (2004), and nearly half the total in Cyprus. Private insurance enterprises generally contributed a small share of healthcare finance, only surpassing 10 % of the total in Slovenia (13.8 %) and France (13.1 %).

Non-expenditure data on healthcare

Among the Member States with recent data available, the highest number of physicians per 100 000 inhabitants was recorded in Belgium (405 practising physicians in 2008) followed by Austria (374 practising physicians in 2008); note, however, that methodological differences occur between the various types of physicians reported in some countries. Between 1997 and 2007 the number of physicians per 100 000 inhabitants increased in the

majority of Member States, although reductions were recorded in Italy, Hungary, Poland and Lithuania; the slight fall in Estonia may be due to methodological reasons.

The number of hospital beds per 100 000 inhabitants in 2007 ranged from 288 in Sweden to 829 in Germany. During the ten years between 1997 and 2007, the number of hospital beds per 100 000 inhabitants fell in every Member State for which data is available, except in Malta. The largest reductions in the availability of hospital beds were recorded in Luxembourg, Bulgaria, Sweden, the Baltic Member States and Italy. A more detailed breakdown shows that reductions in bed numbers were spread across different categories, with an average of 390 curative care beds available per 100 000 inhabitants in the EU-27 in 2007, while there were 55 psychiatric beds in hospitals per 100 000 inhabitants; when compared with 1998, these latest figures represent overall reductions in bed numbers of 22.3 % and 26.8 % respectively.

The general reduction in hospital bed numbers may result from a more efficient use of resources, with an increasing number of operations conducted as out-patient treatment, and shorter periods spent in hospital following an operation. Nevertheless, the output of each health system, as measured by the number of in-patient discharges, will usually (at least to some degree), reflect the number of physicians and hospital beds available. The highest number of hospital discharges in 2007 was recorded in Austria (more than 27 000 per 100 000 inhabitants), which was almost 25 % more than the



next highest figure (22 100 discharges in Lithuania). At the other end of the range, the number of hospital discharges of in-patients was relatively low in both Malta (2004) and Cyprus (2007), both below 8 000 per 100 000 inhabitants.

Circulatory system diseases were the most common type of diagnosis of in-patients and these accounted for around one quarter of hospital discharges in 2007 in the vast majority of Member States for which data are available, often with upwards of 3 000 discharges per 100 000 inhabitants. However, in Romania higher numbers of discharges were recorded for respiratory system diseases, while in Ireland and

Spain there were more discharges from pregnancies and related diagnosis, and in Cyprus the highest number of discharges resulted from injury or poisoning. Cyprus had a particularly low level of hospital discharges, which may in part be due to patients travelling abroad for specialist treatment; indeed, this trend may also be significant for other Member States.

The average length of hospital stays was generally longest for those patients suffering from circulatory system problems, cancer, injury/poisoning, or respiratory problems. The average time spent in hospital is a function of hospital efficiency, as well as the type of treatments available.



Table 3.3: Healthcare expenditure by provider, 2006
(PPS per inhabitant)

	All providers of healthcare	Hospitals	Nursing and residential care facilities	Providers of ambulatory healthcare	Retail sale & other providers of medical goods	Provision of administration and prevention
Belgium	2 763.9	843.7	299.5	828.2	495.4	105.9
Bulgaria	611.7	234.4	4.2	109.3	234.8	7.8
Czech Republic	1 219.8	561.9	18.3	287.6	263.7	2.8
Denmark	2 680.6	1200.3	546.2	538.6	354.5	4.7
Germany	2 780.7	839.9	221.4	836.0	591.3	23.0
Estonia	778.3	338.6	18.7	164.7	216.7	17.6
Ireland	:	:	:	:	:	:
Greece	:	:	:	:	:	:
Spain	1 981.9	769.2	96.1	573.8	449.6	19.5
France	2 769.8	988.5	173.1	762.8	604.2	17.0
Italy	:	:	:	:	:	:
Cyprus	1 291.8	530.4	32.0	422.1	238.7	1.8
Latvia (1)	675.2	273.1	18.5	172.1	187.0	1.3
Lithuania	761.5	285.1	11.0	155.4	272.5	4.3
Luxembourg (1)	4 300.5	1437.9	518.3	1072.8	432.2	1.2
Hungary	1 203.7	397.5	27.4	250.1	436.4	58.4
Malta	:	:	:	:	:	:
Netherlands	2 743.6	1016.1	328.7	655.2	449.2	46.6
Austria (2)	2 733.9	1045.0	206.9	704.5	458.8	19.1
Poland	723.7	223.3	12.7	196.0	226.0	10.6
Portugal	1 702.7	636.9	31.5	565.1	423.0	0.1
Romania	403.0	174.5	3.2	50.0	130.5	14.0
Slovenia	1 626.3	635.6	84.9	404.5	384.2	10.0
Slovakia	1 052.3	284.7	:	259.5	411.1	19.7
Finland	2 111.7	770.0	183.5	639.7	395.0	26.9
Sweden	2 530.6	1154.1	:	533.9	426.0	29.9
United Kingdom	:	:	:	:	:	:
Iceland	2 676.1	1108.5	317.6	695.8	433.4	74.6
Norway (1)	4 475.8	1280.0	580.7	916.3	474.6	56.5
Switzerland	3 470.0	1218.1	592.1	1120.0	321.4	0.0
Japan (1)	2 024.5	988.0	68.0	574.1	307.2	39.2
United States	5 639.5	1859.3	358.3	2044.7	791.8	168.4

(1) 2005.

(2) 2004.

Source: Eurostat (hlth_sha_hp)



Table 3.4: Healthcare expenditure by function, 2006
(PPS per inhabitant)

	Current healthcare expenditure	Curative care	Rehabilitative care	Long-term nursing care	Medical goods dispensed to out-patients	Prevention and public health services
Belgium	2 763.9	1266.5	106.9	455.3	520.8	97.6
Bulgaria	611.7	309.6	8.1	1.7	234.8	21.5
Czech Republic	1 219.8	658.0	42.0	45.4	333.9	26.5
Denmark	2 680.6	:	:	602.8	354.5	63.8
Germany	2 780.7	1407.2	91.5	347.3	553.2	96.2
Estonia	778.3	413.9	9.0	27.8	216.7	20.0
Ireland	:	:	:	:	:	:
Greece	:	:	:	:	:	:
Spain	1 981.9	1112.2	0.0	167.7	488.2	47.4
France	2 769.8	1411.7	82.2	282.5	584.6	62.0
Italy	:	:	:	:	:	:
Cyprus	1 291.8	618.0	139.8	32.0	298.5	8.2
Latvia (1)	675.2	357.9	5.3	20.8	196.6	1.8
Lithuania	761.5	364.9	30.0	30.8	273.4	9.7
Luxembourg (1)	4 300.5	2286.4	108.3	751.4	476.9	48.4
Hungary	1 203.7	550.1	25.4	33.7	436.4	85.1
Malta	:	:	:	:	:	:
Netherlands	2 743.6	1367.5	129.5	380.9	469.5	134.3
Austria (2)	2 733.9	1564.0	111.3	351.1	459.2	59.1
Poland	723.7	366.6	21.9	50.0	228.4	17.7
Portugal	1 702.7	:	:	25.1	423.1	32.3
Romania	403.0	194.9	2.5	3.5	130.5	23.8
Slovenia	1 626.3	873.8	36.3	137.6	392.8	66.3
Slovakia	1 052.3	463.6	6.7	4.5	411.1	47.3
Finland	2 111.7	1163.5	65.0	267.7	383.7	113.4
Sweden	2 530.6	:	:	198.7	428.3	91.4
United Kingdom	:	:	:	:	:	:
Iceland	2 676.1	1411.5	139.9	548.7	433.4	40.6
Norway (1)	3 374.9	1649.1	49.7	872.8	486.2	69.0
Switzerland	3 470.0	1950.2	55.6	667.1	431.4	75.1
Japan (1)	2 024.5	1133.5	19.6	339.1	430.1	39.2
United States	5 295.0	:	:	344.9	735.1	189.2

(1) 2005.

(2) 2004.

Source: Eurostat ([hlth_sha_hc](#))



Table 3.5: Healthcare expenditure by financing agent, 2006
(PPS per inhabitant)

	All financing agents	Social security funds	Other government	Private insurance enterprises	Out-of-pocket expenditure	Rest of the world
Belgium	2 763.9	1 634.0	369.4	142.0	601.1	:
Bulgaria	611.7	240.6	102.4	2.2	260.9	0.0
Czech Republic	1 219.8	988.6	80.2	2.7	144.2	:
Denmark	2 680.6	:	2 235.9	42.5	400.6	:
Germany	2 780.7	1 945.6	203.4	263.9	346.0	:
Estonia	778.3	491.5	81.9	8.3	187.3	3.2
Ireland	:	:	:	:	:	:
Greece	:	:	:	:	:	:
Spain	1 981.9	102.2	1 300.1	123.6	440.8	:
France	2 769.8	2 046.3	145.9	363.9	191.9	:
Italy	:	:	:	:	:	:
Cyprus	1 291.8	1.4	523.3	89.7	621.2	0.0
Latvia (¹)	675.2	0.0	376.1	15.4	281.5	2.1
Lithuania	761.5	473.7	44.8	3.3	238.9	0.1
Luxembourg (¹)	4 300.5	3 115.5	776.2	:	287.7	:
Hungary	1 203.7	747.3	99.1	16.4	280.3	:
Malta	:	:	:	:	:	:
Netherlands	2 743.6	2 123.4	114.6	166.3	169.1	0.0
Austria (²)	2 733.9	1 270.0	806.9	146.3	475.8	:
Poland	723.7	449.2	51.9	4.3	196.2	:
Portugal	1 702.7	15.3	1 186.6	73.8	417.2	:
Romania	403.0	266.3	43.6	1.6	91.4	0.0
Slovenia	1 626.3	1 148.7	29.6	224.3	202.6	0.3
Slovakia	1 052.3	669.1	67.3	:	279.8	:
Finland	2 111.7	329.9	1 249.9	48.7	412.7	:
Sweden	2 530.6	:	2 075.6	:	423.8	:
United Kingdom	:	:	:	:	:	:
Iceland	2 676.1	734.5	1 458.7	:	444.4	:
Norway (¹)	3 374.9	495.9	2 307.0	:	564.1	0.0
Switzerland	3 470.0	1 490.3	561.3	228.1	1 068.5	:
Japan (¹)	2 024.5	1 331.4	334.5	51.2	295.7	:
United States	5 295.0	:	2 401.2	1 958.5	705.9	:

(¹) 2005.

(²) 2004.

Source: Eurostat (hlth_sha_hf)



Table 3.6: Healthcare indicators
(per 100 000 inhabitants)

	Practising physicians (1)		Hospital beds		Hospital discharges of in-patients (excluding healthy new born babies)	
	1997 (2)	2007 (3)	1997 (4)	2007 (5)	2001 (6)	2007 (7)
Belgium	367.4	405.1	794.8	660.1	16 162	15 741
Bulgaria	345.9	364.9	1 031.1	638.1	:	20 015
Czech Republic	311.3	355.7	804.3	727.3	22 065	20 624
Denmark	262.0	314.4	461.5	340.8	16 326	16 498
Germany	312.7	345.5	938.0	829.1	20 060	22 138
Estonia	325.4	323.4	774.8	557.3	:	:
Ireland	213.4	298.6	670.8	519.9	14 025	13 743
Greece	398.1	:	512.4	473.8	:	:
Spain	293.5	352.2	382.9	330.2	10 904	10 659
France	325.0	335.5	847.7	700.3	17 937	16 146
Italy	400.9	363.5	588.3	386.3	:	14 417
Cyprus	249.6	271.5	467.3	375.5	7 031	6 536
Latvia	288.1	306.7	975.1	744.5	:	19 970
Lithuania	377.2	371.1	1 023.0	816.2	23 454	22 100
Luxembourg	225.5	348.3	1 066.8	569.4	18 172	16 468
Hungary	307.9	280.6	817.9	713.3	:	19 838
Malta	245.7	334.9	562.0	737.3	:	7 337
Netherlands	189.9	:	520.1	481.5	9 088	10 634
Austria	293.0	374.2	918.6	777.9	:	27 363
Poland	235.7	218.0	757.4	647.5	:	13 965
Portugal	261.0	:	394.4	:	:	9 127
Romania	:	222.0	738.7	641.1	:	21 274
Slovenia	219.1	237.6	565.3	473.2	:	16 168
Slovakia	239.8	315.9	813.8	674.9	20 534	19 290
Finland	229.9	269.5	790.8	673.6	21 045	19 620
Sweden	291.5	356.6	522.1	287.7	14 997	14 910
United Kingdom	:	248.5	:	341.8	12 698	12 248
Croatia	227.7	266.0	606.0	548.3	12 268	14 151
FYR of Macedonia	224.3	253.5	517.1	463.1	:	9 876
Turkey	:	:	252.4	:	:	:
Iceland	324.5	366.8	:	:	16 789	15 018
Norway	251.7	387.8	395.9	382.3	15 999	17 160
Switzerland	326.1	382.6	664.0	539.3	:	16 223

(1) Greece, France, Italy, the former Yugoslav Republic of Macedonia and Switzerland, professionally active physicians; Ireland and Malta, licensed physicians; Estonia, break in series, 1998.

(2) Slovenia, 1998.

(3) Belgium, Spain, Latvia, Malta and Austria, 2008; the Czech Republic, Germany, France, Poland, Slovakia and Sweden, 2006.

(4) France and Switzerland, 1998.

(5) Belgium, France, Latvia, Malta and Slovenia, 2008; Germany, Luxembourg, Poland, Sweden and the former Yugoslav Republic of Macedonia, 2006; Greece, 2005.

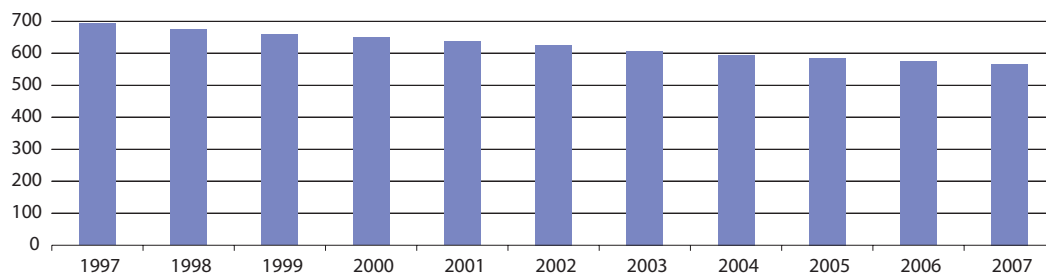
(6) The Czech Republic, the Netherlands, Finland and the United Kingdom, 2002.

(7) Bulgaria, Italy, Cyprus, Slovakia, Finland, Sweden, Croatia, the former Yugoslav Republic of Macedonia and Iceland, 2006; Latvia and Portugal, 2005.

Source: Eurostat ([tps00044](#), [tps00046](#) and [hlth_co_disch2t](#))



Figure 3.11: Number of hospital beds, EU-27
(per 100 000 inhabitants)



Source: Eurostat (tps00046)



Table 3.7: Hospital beds
(per 100 000 inhabitants)

	Curative care beds in hospitals			Psychiatric care beds in hospitals		
	1998	2003	2007 ⁽¹⁾	1998	2003 ⁽²⁾	2007 ⁽³⁾
EU-27	476.7	418.3	389.6	75.3	62.4	55.1
Belgium	485.8	451.7	425.2	259.6	248.0	180.3
Bulgaria	:	484.3	490.6	72.8	64.4	67.2
Czech Republic	610.3	556.4	515.2	113.3	112.6	106.4
Denmark	372.2	328.6	289.9	78.9	70.4	51.0
Germany	696.6	656.6	619.6	:	:	:
Estonia	587.1	440.4	380.4	89.5	58.7	56.2
Ireland	285.1	282.2	267.4	150.5	109.3	86.3
Greece	391.7	382.2	386.9	107.7	88.1	86.9
Spain	292.6	265.2	255.5	53.2	49.0	41.7
France	434.1	385.8	355.3	118.9	99.9	89.3
Italy	501.7	352.9	314.2	33.1	13.6	11.6
Cyprus	400.2	398.7	349.1	55.7	32.4	26.5
Latvia	660.1	555.7	516.1	180.6	137.4	137.3
Lithuania	700.1	582.8	510.7	125.7	108.0	102.6
Luxembourg	596.6	553.4	450.2	124.9	110.1	92.1
Hungary	569.5	553.4	413.9	96.1	40.1	30.5
Malta	383.9	338.6	278.1	175.9	142.0	169.1
Netherlands	323.4	295.1	320.8	166.7	128.0	136.9
Austria	663.0	615.6	610.5	52.8	51.0	58.7
Poland	552.8	486.4	465.4	77.4	71.5	68.0
Portugal	:	:	:	:	:	:
Romania	525.1	452.3	448.1	88.6	76.3	79.4
Slovenia	461.6	401.3	382.5	79.8	73.7	69.0
Slovakia	588.9	509.1	491.5	92.6	89.8	82.4
Finland	260.6	230.5	211.2	109.0	98.3	88.5
Sweden	257.1	222.7	211.3	66.4	51.3	49.1
United Kingdom	:	304.6	268.8	:	83.1	66.0
Croatia	373.6	346.2	342.2	100.3	95.5	96.3
FYR of Macedonia	335.7	318.1	319.1	73.4	67.1	58.5
Turkey	181.2	223.1	:	12.6	11.9	:
Norway	324.7	292.0	275.9	68.7	113.3	94.8
Switzerland	442.3	386.5	348.7	119.8	107.8	102.5

⁽¹⁾ Belgium, France, Latvia, Malta and Slovenia, 2008; Germany, Luxembourg, Poland, Sweden and the former Yugoslav Republic of Macedonia, 2006; Greece, 2005.

⁽²⁾ Luxembourg, 2004.

⁽³⁾ Belgium, France, Latvia, Malta and Slovenia, 2008; Luxembourg, Poland, Sweden and the former Yugoslav Republic of Macedonia, 2006; Greece, 2005.

Source: Eurostat ([tps00168](#) and [tps00047](#))



Table 3.8: Hospital discharges of in-patients by diagnosis (ISHMT – international shortlist for hospital morbidity tabulation), 2007
(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	1 183.9	2 068.1	1 359.1	1 649.9	1 369.7	1 634.7
Bulgaria	1 417.6	3 341.8	2 964.0	1 937.2	1 910.3	1 257.6
Czech Republic	1 775.4	3 086.8	1 397.8	1 811.3	1 596.2	1 677.8
Denmark	1 396.1	2 068.8	1 468.5	1 352.4	1 220.8	1 502.9
Germany	2 412.8	3 391.8	1 396.0	2 102.2	1 095.8	2 128.2
Estonia	1 798.9	3 371.7	1 841.2	1 612.8	1 900.8	1 210.9
Ireland	856.0	1 197.2	1 338.3	1 229.4	2 669.0	1 360.2
Greece	:	:	:	:	:	:
Spain	918.9	1 322.8	1 167.8	1 255.9	1 392.8	897.9
France	1 214.0	1 951.5	965.8	1 624.4	1 566.4	1 396.7
Italy (¹)	1 311.7	2 427.5	1 173.9	1 408.9	1 298.2	1 286.8
Cyprus	518.6	869.9	763.0	730.8	408.9	1 019.9
Latvia (²)	1 799.7	3 538.9	2 221.7	1 831.8	1 619.2	2 243.1
Lithuania	1 716.1	4 485.3	2 371.2	1 802.8	1 625.1	1 857.3
Luxembourg	1 560.0	2 172.3	1 347.7	1 509.6	1 397.5	1 234.2
Hungary	:	:	:	:	:	:
Malta	:	:	:	:	:	:
Netherlands	1 052.2	1 543.9	762.3	939.5	910.1	902.8
Austria	2 890.8	3 755.3	1 688.6	2 502.0	1 303.1	2 905.1
Poland	1 403.1	2 329.2	1 288.8	1 269.3	1 377.8	1 048.6
Portugal (²)	920.3	1 206.2	955.9	1 061.9	1 089.3	684.7
Romania	1 508.3	2 824.4	2 856.6	2 153.7	1 783.2	1 271.5
Slovenia	1 776.1	1 948.1	1 328.4	1 402.9	1 285.3	1 516.8
Slovakia (¹)	1 752.9	3 075.6	1 677.2	1 939.8	1 596.7	1 614.7
Finland (¹)	1 769.3	3 032.6	1 411.9	1 414.9	1 316.9	1 932.3
Sweden (¹)	1 376.2	2 370.6	964.4	1 174.6	1 306.2	1 421.2
United Kingdom	936.3	1 275.3	1 134.0	1 144.9	1 381.5	1 208.1
Croatia (¹)	2 022.6	1 945.9	1 108.4	1 223.5	264.7	1 073.3
FYR of Macedonia (¹)	849.5	1 669.5	1 494.6	1 104.9	494.5	624.9
Iceland (¹)	1 282.8	1 547.5	900.0	1 322.3	1 970.8	1 051.4
Norway	1 733.2	2 448.7	1 486.0	1 240.2	1 507.5	1 875.1
Switzerland	1 098.2	1 743.9	877.3	1 373.7	1 187.5	1 949.3

(¹) 2006.

(²) 2005.

Source: Eurostat (hlth_co_disch2)



Table 3.9: Hospital discharges of in-patients by diagnosis (ISHMT – international shortlist for hospital morbidity tabulation), average length of stay, 2007 (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	9.3	8.2	8.1	5.9	4.8	8.6
Bulgaria	7.4	6.0	7.5	5.8	4.6	5.8
Czech Republic	9.9	13.8	9.1	7.6	5.3	10.4
Denmark	6.4	5.4	5.4	5.0	3.4	5.1
Germany	10.3	10.4	9.0	7.4	4.8	9.3
Estonia	8.0	11.0	5.2	5.3	3.1	8.8
Ireland	11.4	10.1	7.1	6.4	2.9	5.7
Greece	:	:	:	:	:	:
Spain	9.5	8.3	7.2	5.9	3.1	8.5
France	7.6	6.9	7.0	5.3	4.8	5.6
Italy (1)	9.5	8.8	8.4	6.8	4.0	8.1
Cyprus	8.9	6.4	5.2	5.1	5.4	5.8
Latvia (2)	9.3	9.2	7.9	6.2	5.6	7.5
Lithuania	10.3	13.2	7.6	6.7	4.5	8.7
Luxembourg	9.3	7.9	6.3	5.8	4.8	7.9
Hungary	6.2	8.5	6.8	6.5	4.9	6.7
Malta	7.5	6.5	4.9	3.9	3.5	5.9
Netherlands	7.7	7.3	7.3	6.4	3.5	7.2
Austria	7.7	10.9	8.3	6.8	5.5	8.9
Poland	7.6	7.9	8.3	6.0	5.2	6.5
Portugal (2)	8.7	7.9	8.2	5.9	3.3	9.3
Romania	7.1	8.1	7.2	6.6	5.0	6.1
Slovenia	7.9	8.3	7.0	6.2	4.6	7.0
Slovakia (1)	9.1	8.8	8.3	6.4	5.8	6.8
Finland (1)	9.0	16.3	13.4	6.0	3.7	11.1
Sweden (1)	7.9	6.5	5.6	4.9	2.9	6.2
United Kingdom	8.9	10.6	7.7	6.3	2.5	8.6
Croatia (1)	10.0	10.3	8.9	8.6	8.5	8.7
FYR of Macedonia (1)	10.2	7.3	7.6	5.9	3.4	8.1
Iceland (1)	7.3	6.9	6.4	4.0	2.6	6.7
Norway	7.1	5.4	6.2	4.8	3.6	4.8
Switzerland	10.7	8.7	8.5	7.2	6.0	7.6

(1) 2007.

(2) 2005.

Source: Eurostat (hlth_co_inpst)



3.4 Health problems

Introduction

The promotion of health and healthy lifestyle choices can play an important role in reducing disease and early death ^(?). On average, Europeans with better jobs, more education or higher incomes live healthier and longer lives. Actions to reduce health inequalities aim to:

- improve everyone's level of health closer to that of the most advantaged;
- ensure that the health needs of the most disadvantaged are fully addressed;
- help improve faster the health of people in countries and regions with lower levels of health.

Health problems linked to lifestyle-related health determinants can be age specific (in childhood or in old-age), as well as resulting from socio-economic factors. Health promotion in various settings, such as schools, workplaces, families or local communities has proven to be efficient in addressing health issues across communities, focusing on specific diseases or target groups.

The seven most important risk factors for premature death in the EU (smoking, blood pressure, cholesterol, body mass index, inadequate fruit and vegetable intake, physical inactivity, excessive alcohol consumption) relate, at least to some extent, to consumption and exercise. As such, a balanced diet and regular physical activity, along with avoiding both smoking and excessive drinking, are important factors for promoting and maintaining good health.

Smoking is widely acknowledged as a leading cause of health problems, with legislation adopted in a majority of Member States restricting or forbidding smoking in public places and/or workplaces, as well as offering protection to passive smokers. Indirect taxes, health warnings, and restrictions on advertising have also targeted smokers. Smoking is the single largest cause of avoidable death in the EU accounting for over half a million deaths each year. The Directorate-General for Health and Consumers estimates that 25 % of all cancer deaths and 15 % of all deaths in the EU can be attributed to smoking. The European Commission is developing a tobacco control policy, focused on:

- legislative measures;
- support for Europe-wide smoking prevention and cessation activities;
- mainstreaming tobacco control into a range of other EU policies (such as agricultural, taxation or development policy);
- making sure that the pioneering role played by the EU in many tobacco control areas has an impact at a global level.

Weight problems and obesity are increasing at an alarming rate in Europe, especially among children. Obesity is a serious public health problem, as it significantly increases the risk of chronic diseases such as cardiovascular disease, type 2 diabetes and certain cancers. Lifestyle factors, including diet, eating habits and levels of physical activity (and inactivity) are often adopted during the early years of life; as

^(?) For more information: http://ec.europa.eu/health/ph_determinants/healthdeterminants_en.htm.



such, childhood obesity is strongly linked to adult obesity. However, maintaining a 'normal weight' can be a challenging exercise, given the abundance of energy-rich foods and lifestyle pressures that reduce the opportunities for physical activity both at work and during leisure time.

Definitions and data availability

Health interview surveys (HIS) are the source of information for describing the health status and the health-related behaviours of the European population. The following topics are usually covered in such surveys:

- height and weight which form the basis for the calculation of the body mass index (BMI);
- self-perceived health;
- activities that have been reduced because of health problems;
- long-standing illnesses or health problems;
- smoking behaviour;
- alcohol consumption.

Many health-related indicators are expressed as percentages within different population cohorts on the basis of background variables covering gender, age, activity status, and educational level. Note that the information comes from non-harmonised national surveys and that the Member States were asked to post-harmonise the data according to a set of common guidelines; Member States have since joined efforts on a harmonised EU survey (EHIS).

The **body mass index (BMI)** is a measure of a person's weight relative to their height that correlates fairly well with body fat. The BMI is accepted as the most

useful measure of obesity for adults when only weight and height data are available. It is calculated as the result of dividing body weight (in kilograms) by body height (in metres) squared. The following subdivisions are used to categorise the BMI: underweight people have a BMI less than 18.5, normal weight people have a BMI from 18.5 to less than 25, overweight people have a BMI greater than or equal to 25, while the threshold for obesity is a BMI of 30; note that the BMI is not calculated for children.

For perceptions concerning long-standing illness or health problems the data presented comes from European Union statistics on income and living conditions (EU-SILC). A long-standing illness or health problem is anything that has troubled the respondent or that is likely to affect the respondent over a period of time.

Workplace health is a special health issue: the 2007 labour force survey (LFS) included an ad-hoc module surveying work-related accidents, health problems and work-related factors affecting mental well-being or physical health – see Subchapter 3.5.

Main findings

Obesity is a serious public health problem that increases the risk of death and disability; it is primarily associated with poor dietary habits and a lack of physical activity. The proportion of the population that is overweight has increased considerably in most Member States over the last decade, resulting in approximately half the EU population being overweight or obese. In 2003 ⁽⁸⁾ the highest rates were recorded in the

⁽⁸⁾ Data are collected in different years depending on the country (ranging from 1996 to 2003).



United Kingdom (61.0 %, England only) and Germany (59.7 %) ⁽⁹⁾, while Italy and France were the only Member States to report less than 40 % of their population as either overweight or obese.

In 2003 ⁽¹⁰⁾ the proportion of daily smokers was close to 50 % of the male population in Latvia and Estonia, while Sweden (16.5 %) reported the lowest proportion of male smokers. Daily smoking rates were lower among women (compared with men) in each of the Member States, with the exception of Sweden which reported a slightly higher proportion of female daily smokers. Austria and Denmark recorded the highest incidence of daily smoking among women, at just over 30 % of the female population, while Portugal (6.8 %) was the only Member State where the proportion of female daily smokers was under one in 10. The largest absolute differences in smoking habits between the sexes were reported for the Baltic States, where the proportion of men smoking daily was 30 percentage points or more above the rate for women. In relative terms, the proportion of men who smoked on a daily basis was four times as high as the proportion recorded among women in Portugal, while the rate for men was more than three times as high as that for women in Cyprus, Lithuania, Romania and Latvia.

There appears to be a shift in smoking patterns across Europe between the sexes. Among the population group aged 15 to 24, there was a much smaller difference between the proportion of men

and women smoking. Young females in Sweden and the United Kingdom were more likely to smoke than young males. Furthermore, in the majority of Member States the proportion of young women smoking often exceeded the corresponding average for women of all ages; this was particularly the case in the United Kingdom, Spain, Ireland and Germany.

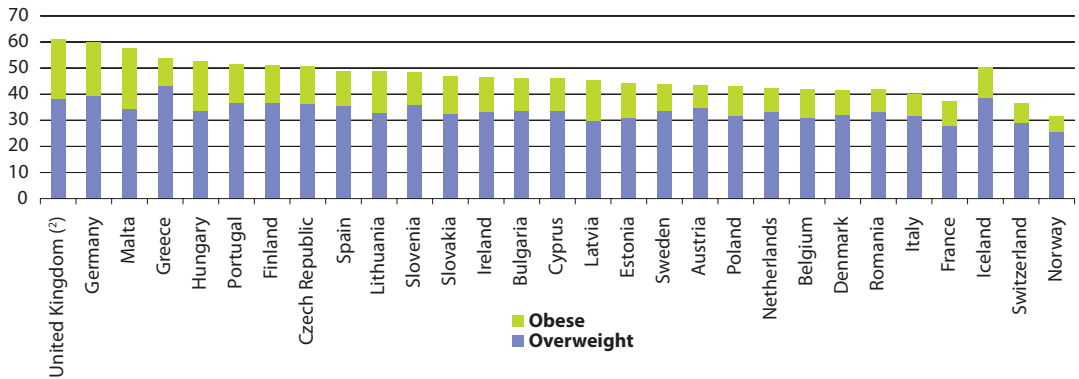
Results from a 2007 survey of European Union statistics on income and living conditions (EU-SILC) provide information on the difficulties Europeans faced in their daily lives and the amount of assistance they might need; note that the survey data represents people's perceptions and does not specifically measure disability levels. Within the EU-27, some 29.1 % of men and 33.4 % of women (aged 18 or more) said they had a long-standing illness or health problem. In each Member State, the proportion of women that reported that they had such a long-standing problem was higher than the corresponding proportion for men, although in the United Kingdom the proportion of men was less than 1 percentage point lower than that for women. This difference between the sexes rose to over 9 percentage points in Latvia and Slovakia. Overall, the highest proportions of people reporting long-standing illnesses or health problems were in Finland and Estonia, where the proportions for both men and women were around two fifths, while the lowest proportions were recorded in Romania, Italy and Greece.

⁽⁹⁾ Data for Germany and England relate to valid height and weight measurements, while for the other countries the data correspond to self-declared height and weight.

⁽¹⁰⁾ Data are collected in different years depending on the country (ranging from 1996 to 2003).



Figure 3.12: Overweight people, 2003⁽¹⁾
(% of total population)

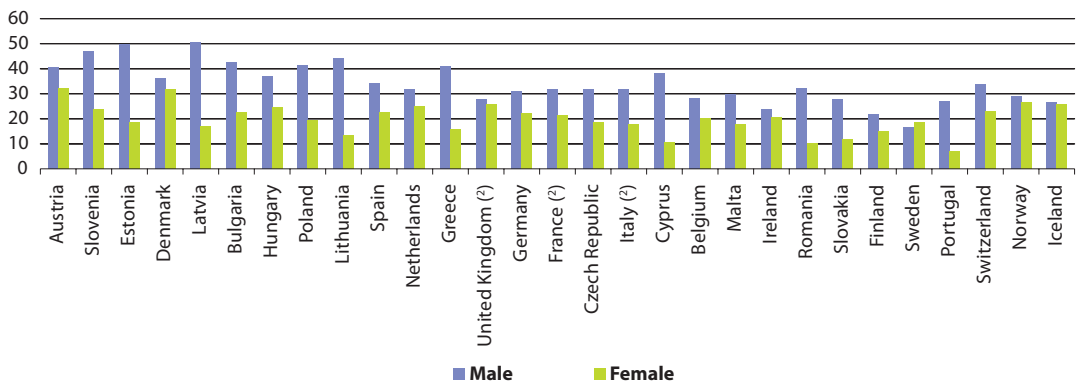


⁽¹⁾ National health interview survey (HIS) data, 1996-2003 depending on the country; note that data for Germany and for England relate to valid height and weight measurements, while for the other countries the data correspond to self-declared height and weight; Luxembourg, not available.

⁽²⁾ Only England.

Source: Eurostat ([hlth_ls_bmia](#))

Figure 3.13: Daily smokers, 2003⁽¹⁾
(% of male/female population)



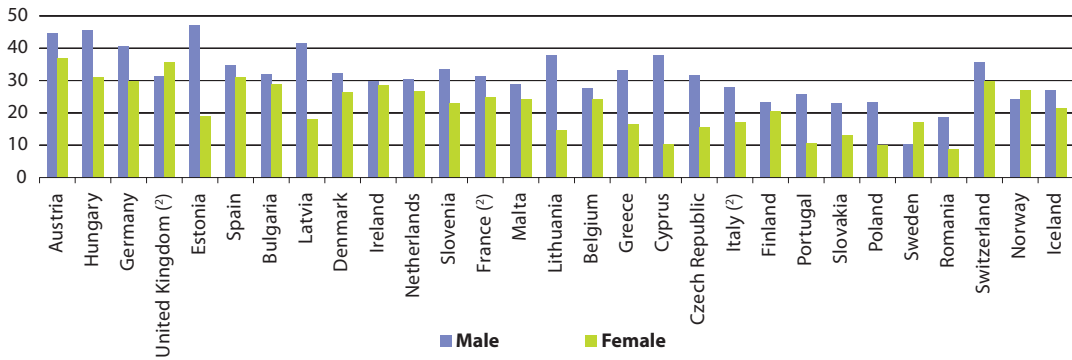
⁽¹⁾ National health interview survey (HIS) data, 1996-2003 depending on the country; Luxembourg, not available; the figure is ranked on the average of male and female.

⁽²⁾ No distinction between daily and occasional smoking.

Source: Eurostat ([tps00169](#))



Figure 3.14: Daily smokers among the population aged 15-24, 2003 ⁽¹⁾
(% of male/female population aged 15-24)

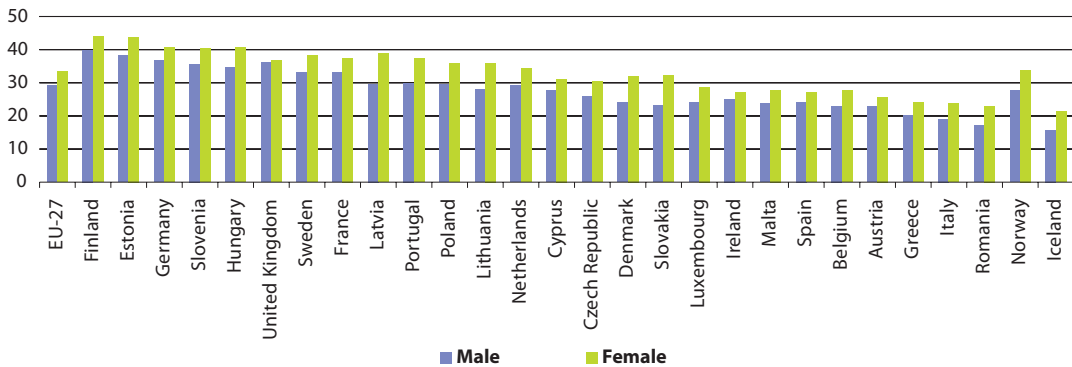


⁽¹⁾ National health interview survey (HIS) data, 1996-2003 depending on the country; Luxembourg, not available; the figure is ranked on the average of male and female.

⁽²⁾ No distinction between daily and occasional smoking.

Source: Eurostat (tps00170)

Figure 3.15: People having a long-standing illness or health problem, 2007 ⁽¹⁾
(% of male/female population aged 18 or more)



⁽¹⁾ Long-standing refers to any illnesses or health problems which have lasted, or are expected to last, for 6 months or more; Bulgaria, not available; graph is ranked on the average of male and female.

Source: Eurostat (hlth_silc_11)



3.5 Health and safety at work

Introduction

A relatively high proportion of people spend around eight hours a day, five days a week at work. Many aspects of work have the potential to bring about illness (or death) and these are not restricted to safety issues and accidents. Working conditions change over time, and health and safety in the workplace has been redefined in order to take account of the move from traditional, industrial, heavy industries, to focus on the modern-day world of work, which is characterised more by issues such as stress and psychological risks, musculoskeletal disorders, noise, or the abuse of tobacco, alcohol, or dangerous substances related to work.

Health at work also involves physical, moral and social well-being (issues such as intimidation and violence in the workplace), which are considered especially important determinants regarding the quality of work and the productivity of the workforce. A strategic health and safety policy is therefore not just crucial to ensuring the well-being of Europe's workers; it is also a key issue in relation to the EU's competitiveness.

The adoption and application in recent decades of a large body of Community laws has aimed to improve working conditions in the Member States and has reduced the incidence of work-related accidents and illnesses. The new strategy on health and safety at work for 2007-2012⁽¹⁾ aims to achieve a sustained reduction of occupational accidents and diseases in the EU, which as well as having direct ef-

fects on employees, will also play a role in contributing towards the success of the revised Lisbon growth and jobs strategy.

Definitions and data availability

European statistics on **accidents at work** and occupational diseases respond to the requirements of the strategy on health and safety at work for 2007-2012. Harmonised data on accidents at work are collected in the framework of European statistics on accidents at work (ESAW). The ESAW methodology is in accordance with the International Labour Organisation (ILO) Resolution of 1998 concerning 'statistics of occupational injuries: resulting from occupational accidents'. National sources are typically declarations of accidents at work, either to the public (social security) or private insurance systems, or to other relevant national authorities. Data are presented in numbers or as incidence rates. **Incidence rates** are calculated as follows: number of persons involved in (fatal) accidents at work / number of persons in employment in the reference population x 100 000.

An **accident at work** is a discrete occurrence during the course of work which leads to physical or mental harm. This includes accidents in the course of work outside the premises of a person's business, even if caused by a third party (on clients' premises, on another company's premises, in a public place or during transport, including road traffic accidents) and cases of acute poisoning. The information presented excludes accidents on the way to or from work (commuting accidents), occurrences having only a

⁽¹⁾ Council Resolution 2007/C 145/01 of 25 June 2007 on a new Community strategy on health and safety at work (2007-2012) (OJ C 145, 30.6.2007, p. 1); for more information: http://eur-lex.europa.eu/LexUriServ/site/en/oj/2007/c_145/c_14520070630en00010004.pdf.



medical origin (such as a heart attack at work) and occupational diseases. The data on **serious accidents at work** refer to accidents that result in more than three days absence from work.

A **fatal accident at work** is defined as an accident which leads to the death of a victim generally within one year of the accident. In practice the notification of an accident as fatal ranges from national registration procedures where the accident is registered as fatal when the victim died the same day (the Netherlands) to cases where no time limits are laid down (Belgium, Greece, France, Italy, Luxemburg, Austria, Sweden and Norway).

The 2007 labour force survey (LFS) included an ad-hoc module consisting of four variables on accidents at work (using the standard definition), five variables on work-related health problems, and two variables on factors that can adversely affect mental well-being or physical health.

Work-related health problems include illnesses, disabilities or other physical or psychic health problems, apart from accidental injuries. The main inclusion criterion is that the person considers this health problem as caused or made worse by work (past or current). This means that the surveyed problems are not restricted to cases reported or recognised by the authorities. The onset of the problem could have been more than a year before the interview, but the person must have suffered from the problem during the 12-month reference period. The analysis is limited to persons aged 15-64 (16-64 for Spain and the United Kingdom) who are or have been employed or self-employed.

Factors that can adversely affect mental or physical well-being concern workplace exposure to a number of mentioned factors that a person is clearly exposed to more frequently or more intensively than people experience in general day-to-day life. The factors relating to mental well-being include: harassment and bullying; violence or the threat of violence; time pressure or being overloaded with work. The factors relating to physical well-being include: chemicals, dusts, fumes, smoke or gases; noise or vibration; difficult work postures, work movements or handling of heavy loads; risk of accident.

Main findings

In recent years the incidence rate of serious accidents at work in the EU-27 has fallen, such that by 2006 it had decreased by 24 % in relation to 1998. During the same period there was a 19 % reduction in fatal accidents at work in the EU-27. In 2006, 5 785 lives were lost due to accidents at work in the EU-27. The incidence of fatal accidents may, in part, reflect the structural shift of the European economy towards services, where the risks of accident and death at work are usually less than within agriculture, industry or construction.

There were only three Member States that reported a higher incidence of serious accidents at work in 2006 when compared with 1998: Estonia (20 % higher), Ireland (7 % higher) and Lithuania (1 % higher). At the other end of the scale, the incidence of serious accidents in Greece, Bulgaria and Belgium was at least 40 % lower in 2006 than in 1998. The majority of the Member States also reported a reduction in the incidence of fatal accidents at work,



although this was not the case in six Member States, most notably in Slovenia (49 % increase), Lithuania (17 % increase) and Sweden (15 % increase). France (provisional data) halved its incidence of fatal accidents at work by 2006.

Men are considerably more likely to have an accident or to die at work. This is due, at least in part, to a higher proportion of men working in 'higher risk' sectors and occupations, while men are also more likely to work on a full-time basis. Structural changes, as well as changes in working practices, may also explain why the incidence of accidents tended to fall at a more rapid pace for men than for women. For example, the incidence of serious accidents for men fell by 23 % between 1998 and 2006, while the corresponding reduction for women was 18 %.

In 2007 accidents at work were most common in the sectors of agriculture, hunting and forestry, manufacturing, and construction. However, there is a clear gender difference, as the sectors with the highest

likelihood of accidents for women were health and social work, and hotels and restaurants.

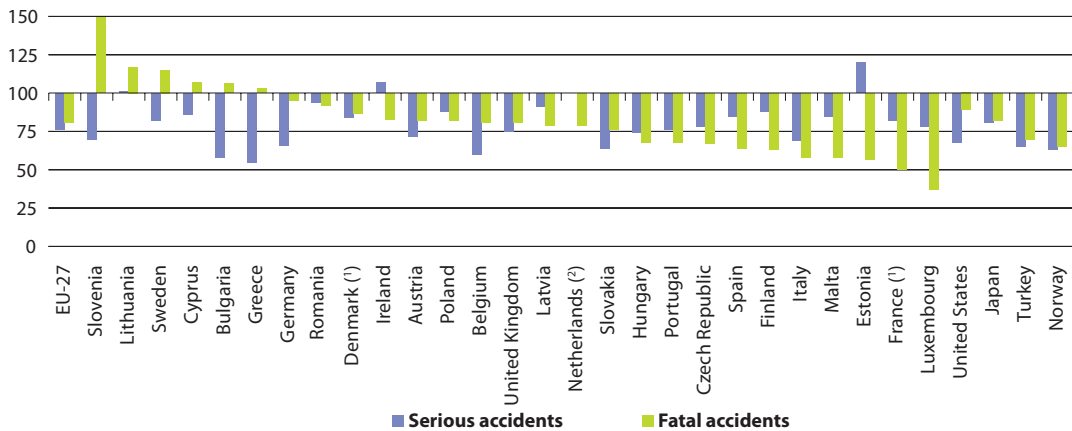
According to the 2007 labour force survey, some 8.6 % of persons employed (aged 15-64) in the EU-27 experienced one or more work-related health problems during the previous 12 months; two or more work-related health problems were reported by 2.1% of persons employed. Among persons with a work-related health problem, back problems (28 %), neck, shoulder, arm or hand problems (19 %), and stress, depression or anxiety (14 %) were most often reported: men were more likely to report back problems than women, whereas women were more likely to report neck, shoulder, arm or hand problems.

A recent study, in which the European Agency for Safety and Health at Work ⁽¹²⁾ took part, refers to figures from the International Labour Organisation (ILO) estimating that in 2006, some 159 500 workers died from occupational diseases in the EU-27.

⁽¹²⁾ For more information: <http://osha.europa.eu/en>.



Figure 3.16: Incidence of accidents at work, 2006
(1998=100, based on the number of accidents per 100 000 persons employed)

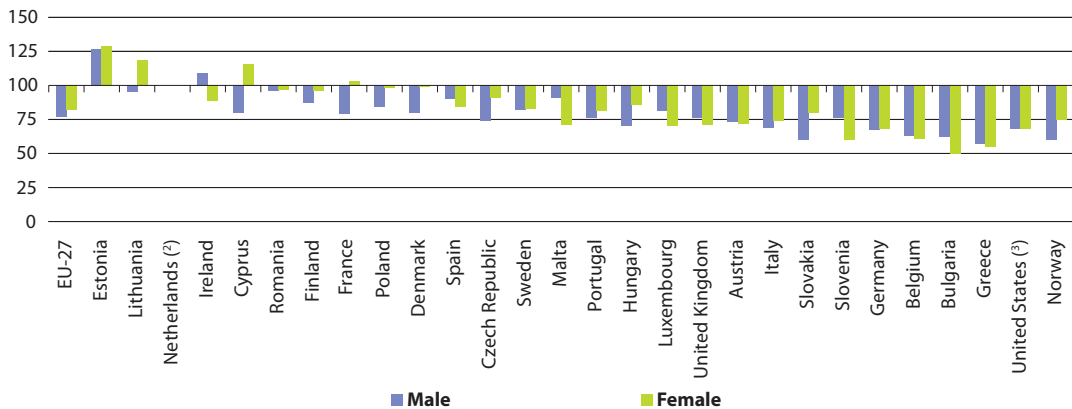


(¹) Fatal accidents, provisional.

(²) Break in series for serious accidents (re-based, 2005=100).

Source: Eurostat ([tsiem090](#) and [tsiem100](#))

Figure 3.17: Incidence of serious accidents at work, by gender, 2006 (¹)
(1998=100, based on the number of serious accidents per 100 000 persons employed)



(¹) Latvia, not available; the figure is ranked on the average of male and female.

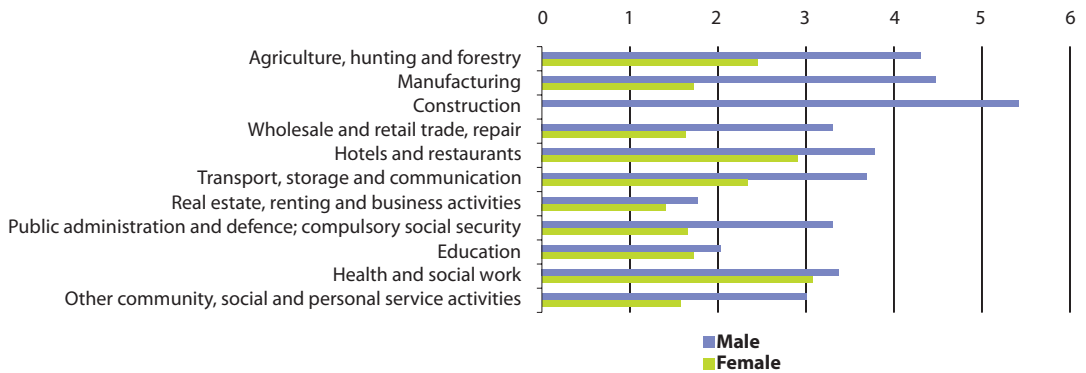
(²) Break in series, re-based, 2005=100.

(³) 2005.

Source: Eurostat ([tsiem090](#))



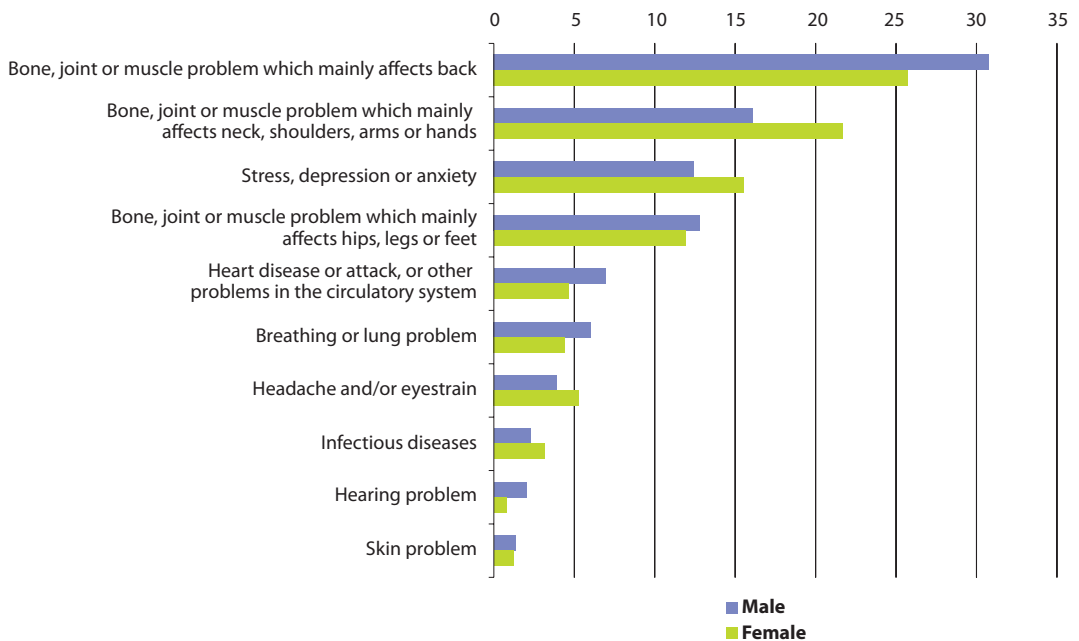
Figure 3.18: Workers reporting one or more accidents in the past 12 months, EU-27, 2007 ⁽¹⁾
(% of male/female persons employed aged 15-64 years old)



⁽¹⁾ The following activities are not included since their reliability cannot be guaranteed due to small sample sizes: fishing; mining and quarrying; electricity, gas and water supply; construction (female); financial intermediation; private households with employed persons; extra-territorial organisations and bodies; the figure is ranked on the average of male and female.

Source: Eurostat (LFS)

Figure 3.19: Work-related health problems experienced in the past 12 months, EU-27, 2007 ⁽¹⁾
(% of male/female persons employed aged 15-64 years old)



⁽¹⁾ Excluding France; the figure is ranked on the average of male and female.

Source: Eurostat (LFS)