EUROPE

Highlights on health
in the United Kingdom
2004

Highlights on
health

This report gives an overview of health status in the United Kingdom and its constituent countries: England, Northern Ireland, Scotland and Wales. Where data are available, it describes recent mortality, morbidity and exposure to key risk factors, along with trends over time. The report links findings to considerations for public health policy developed by the WHO Regional Office for Europe and by other relevant agencies. *Highlights on health* reports are prepared in collaboration with Member States and do not constitute formal statistical publications.

Each report also compares a country, when possible, to a reference group. This report uses the 27 countries with very low child mortality and very low adult mortality, designated Eur-A by WHO, as the reference group. Eur-A comprises Andorra, Austria, Belgium, Croatia, Cyprus, the Czech Republic, Denmark, Germany, Greece, Finland, France, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

To make the comparisons as valid as possible, data, as a rule, are taken from one source to ensure that they have been harmonized in a reasonably consistent way. Unless otherwise noted, the source of data in the reports is the European health for all database of the WHO Regional Office for Europe. Other data and information are referenced accordingly.

Contents

Summary: findings and policy options

Life expectancy

People in the United Kingdom are living longer. Women continue to have a higher life expectancy than men: 80.5 years and 75.8 years, respectively. By 2030, about 1 in 5 people in the United Kingdom will be aged 65 or over. British people can expect to have more years of unhealthy life than people in most other Eur-A countries.

As the length of life increases, older people can respond with lifestyle changes that can increase healthy years of life. Correspondingly, health care systems need to shift towards more geriatric care, the prevention and management of chronic diseases and more formal long-term care. Since people are living longer, measures to improve health and prevent disease need to focus on people of working age.

Ageing and employment policies (OECD, 2004a)

What are the main risk factors for disability in old age and how can disability be prevented? (Health Evidence Network, 2003a)

Infant mortality

In 2001, rates of infant and neonatal mortality were higher (by 16% and 14%, respectively) in the United Kingdom than Eur-A averages. Both rates dropped between 2001 and 2002, however.

Antenatal care is one of the most important services in health care. Yet it can be expensive, with excessive, unneeded and unproven interventions sometimes provided. A simplified model of antenatal care, based on evidence of benefit, is available.

Managing newborn problems: a guide for doctors, nurses and midwives (WHO, 2003b)

Pregnancy & newborn screening: newsletter (NSD Scotland, 2002)

What is the efficacy/effectiveness of antenatal care? (Health Evidence Network, 2003b)

The WHO reproductive health library, version 6 (WHO, 2003e)

Noncommunicable conditions

Noncommunicable conditions cause 84% of all deaths in the United Kingdom. Cardiovascular diseases (CVD) account for 37% of total deaths; cancer, 28%; and external causes (intentional and unintentional injuries), 4%. Ischaemic heart disease is the single most important killer, accounting for almost one out of every five deaths. The country's rate of premature death from the disease in people aged 25–64 is among the highest in Eur-A.

Mortality from respiratory diseases in the United Kingdom is among the highest in Eur-A. Mortality from cancer is 6% higher than the Eur-A average, and that from oesophageal cancer is the highest in Eur-A for men and the second highest for women.

Preventive care, delivered through a country's primary care system, can improve all-cause mortality and premature mortality, particularly from CVD.

Shifting the balance of power (Department of Health of the United Kingdom, 2002)

A strategy to prevent chronic disease in Europe: a focus on public health action: the CINDI vision (WHO Regional Office for Europe, 2004e)

Towards a European strategy on noncommunicable diseases (WHO Regional Office for Europe, 2004h)

What are the advantages and disadvantages of restructuring a health care system to be more focused on primary health care services? (Health Evidence Network, 2004a)

Gender and health

In 2001 and 2002, women in the United Kingdom had mortality rates from several conditions that were higher than Eur-A averages:

- the second highest for respiratory diseases;
- the second highest for breast cancer;
- the third highest for ovarian cancer;
- the third highest for digestive diseases in the group aged 25–64 years; and
- the highest among reporting countries for bladder cancer.

British men had the third highest rate of death from respiratory diseases in Eur-A in 2001, but their mortality from cancer was below the Eur-A average.

Factors that determine health and ill health are not the same for women and men. To achieve the greatest standards of health in populations, health policies must recognize that women and men, owing to their biological differences and their gender roles, have different needs, obstacles and opportunities regarding their health and well-being. Gender mainstreaming in health is both a political and a technical process that requires shifts in organizational cultures and ways of thinking.

Mainstreaming gender equity in health: the need to move forward (WHO Regional Office for Europe, 2001a)

Excess weight and physical inactivity

The United Kingdom has some of the highest rates of excess weight in Eur-A: 63% of men and 53% of women are overweight. Data limited to England show that 21% of men and 23% of women are obese.

According to self-reported data on height and weight collected in schools in the United Kingdom, 14% of 15-year-old boys are pre-obese and about 4% obese; 11% of 15-year-old girls are pre-obese and 3% obese.

Between 1995 and 2002, the prevalence of overweight and obesity rose steadily in England. This trend affected children and adults, males and females, but was more marked in the manual than in non-manual social classes.

In 1998, 24% of males and 28% of females in England aged 16 years and over reported that they took no exercise. The 1998 Scottish Health Survey found that 23% of men and 24% of women aged 16–74 reported no participation in physical activity.

Better eating habits can prevent premature death from CVD, but people's chances for a healthy diet depend on what food is available and whether it is affordable. Food and nutrition policies need to cross sectors and be coordinated, so that non-health sectors give priority to public health. This also applies to the promotion of physical activity: policies to encourage active living over the life course need to be integrated across health and non-health sectors.

CINDI dietary guide (WHO Regional Office for Europe, 2000)

Diet, nutrition and the prevention of chronic diseases (WHO, 2003a)

Food and health in Europe: a new basis for action (Robertson et al., 2004)

Improving people's health (NHS Health Development Agency, 2004a)

Let's make Scotland more active: a strategy for physical activity (Physical Activity Task Force, 2003)

The potential contribution of increased vegetable and fruit consumption to health gain in the European Union (Joffe & Robertson, 2001)

Tobacco

People in the United Kingdom smoke about 30% fewer cigarettes per person than the Eur-A average. In 2002, 26% of the adult population in Great Britain smoked. Surveys conducted between 1994 and 2002 found that smoking decreased among both men and women. In 2002–2003, the group aged 20–24 had the

greatest proportion of smokers. In this and the group aged 16–19, more women smoked than men. A 2003 survey in Scotland found that almost a third of all women aged 16–59 years smoked.

In 2000, the estimated incidence of lung cancer among women in the United Kingdom was 70% higher than the Eur-A average. In 2001, the death rate from lung cancer in the United Kingdom was the fourth highest in Eur-A for women aged 25–64, and the highest for women aged 65 and over. British men aged 65 and over had the sixth highest rate of death from lung cancer in Eur-A.

To reduce consumption across the whole population, policy-makers need permanently to raise prices for tobacco through taxes, and cessation policies need to target vulnerable groups. Increasing adults' cessation of tobacco use is cost-effective for public health in the short and medium terms.

European Strategy for Tobacco Control (WHO Regional Office for Europe, 2002b)

Improving people's health NHS Health Development Agency (2004a)

Securing good health for the whole population – Final report (Wanless et al., 2004)

The smoking epidemic in England, executive summary (NHS Health Development Agency, 2004b)

Tobacco control database [online database] (WHO Regional Office for Europe, 2004f)

Which are the most effective and cost-effective interventions for tobacco control? (Health Evidence Network, 2003c)

WHO European strategy for smoking cessation policy (WHO Regional Office for Europe, 2003)

WHO Framework Convention on Tobacco Control (WHO, 2003d)

Mental health

Neuropsychiatric conditions account for the largest share of the burden of disease on the population of the United Kingdom, owing to the associated disability in daily living.

Better recognition and monitoring of depressive disorders can lead to positive effects, including reduced suicide rates. Comprehensive treatment programmes directed at the addictive and depressive features in alcohol abuse have been shown to be effective.

Mental health in Europe: country reports from the WHO European network on mental health (WHO Regional Office for Europe, 2001b)

Mental health policy implementation guide (Department of Health of the United Kingdom, 2001a)

Mental health policy and practice across Europe: the future direction of mental health care: proposal for analytical study (Knapp et al., 2004)

National service framework for mental health: modern standards and service models (Department of Health of the United Kingdom, 1999)

Project Atlas: mapping mental health resources in the world (WHO, 2003c)

The world health report 2001: mental health: new understanding, new hope (WHO, 2001)

Alcohol

Alcohol consumption per person in the United Kingdom has been fairly constant over the last 20 years, while the Eur-A average has declined. Binge drinking is common, comprising about 40% of all drinking occasions for men and about 22% for women. Surveys in 1998 and 2002 found binge drinking among women to have increased from 8% to 10% of those surveyed, and from 24% to 28% of those aged 16–24. The number of deaths due to chronic liver cirrhosis, an indicator of excessive use of alcohol, is rising in the United Kingdom but declining in Eur-A overall.

Alcohol consumption varies among countries and between population groups within countries. The variation in drinking patterns affects the rates of alcohol-related problems and has implications for the choice of alcohol control policies. Measures that are generally effective in reducing alcohol consumption and the associated harm include pricing and taxation and restricting the availability of alcohol, opening

hours for sales outlets and the legal drinking age. Most drink–driving countermeasures have been effective, as well.

Alcohol control database [online database] (WHO Regional Office for Europe, 2004a)

Alcohol harm reduction strategy for England (Cabinet Office, 2004)

Alcohol: no ordinary commodity. Research and public policy (Babor et al., 2003)

What are the most effective and cost-effective interventions in alcohol control? (Health Evidence Network, 2004b)

HIV/AIDS

Between 1995 and 2002, the number of new HIV infections reported in the United Kingdom doubled. By 2002, the rate was 1.6 times the average for Eur-A. New cases are likely to continue increasing as testing is promoted in sexual health clinics and for high-risk groups. An estimated 30% of HIV infections in the United Kingdom are undiagnosed.

Men who have sex with men remain the group most at risk of acquiring HIV in the United Kingdom. The key factors driving the increase in new infections are thought to be more transmission among this group and from HIV-infected heterosexual male and female immigrants from sub-Saharan Africa.

Prevention, treatment and care programmes need to reach all people affected by HIV/AIDS, particularly those whose language, culture or immigrant status might limit their access to health services.

Access to care: privilege or right? Migration and HIV vulnerability in Europe (Broring et al., 2003)

AIDS: epidemic update December 2003 (UNAIDS, 2003)

The HIV/AIDS epidemic in Europe and central Asia (WHO Regional Office for Europe, 2004d)

National strategy on sexual health and HIV (Department of Health of the United Kingdom, 2001b)

Drug use and hepatitis C

In England and Wales, limited local testing in drug treatment centres, needle-exchange locations and outreach facilities in 2001 found that 32–46% of injecting drug users were infected with hepatitis C. In Scotland, data from public health laboratories in 1997 found hepatitis C in 40–68% of injecting drug users being tested for HIV.

In 2003, England and Wales had a 112.7% occupancy level in prisons, based on official capacity; Scotland had 110.9%.

The key to effective prevention of hepatitis C is to reduce the number of people who start to inject drugs and to encourage harm reduction among young and new injectors. A high proportion of those with the most serious drug use and addiction problems are found in prisons. Coordination of efforts within and between countries is a vital component of effective drug policy in the WHO European Region.

Annual report 2003: the state of the drugs problem in the European Union and Norway (EMCDDA, 2003)

Declaration. Prison health as part of public health, Moscow, 24 October 2003 (HIPP, 2003)

TB

From 1995 to 2002, the case notification rate for tuberculosis (TB) in the United Kingdom rose by about 10%. Between 2001 and 2002, the rate jumped 14%.

High rates of TB are frequently associated with HIV infection, weaknesses in the health care system and failure to reach vulnerable populations. Risk populations such as prison inmates, new immigrants or migrants from areas with high TB incidence need focused preventive interventions.

European framework to decrease the burden of TB/HIV (De Colombani et al., 2003)

Global tuberculosis control: surveillance, planning, financing (WHO, 2004a)

Selected demographic information

Population profile

The United Kingdom had a population of just over 59 million at the start of 2003. It has one of the higher percentages of urbanized population in the Eur-A group.

The most striking demographic feature for the country, observed across most of Eur-A, is the increasing proportion of elderly people in the population. As the large birth cohorts of the late 1940s approach retirement age, the proportion of people aged 65 and over is expected to grow from about 16% in 2003 (Council of Europe, 2003) to an estimated 21% in 2030 (Annex Age pyramid).

Percentage of the population aged 0–14, 15–64 and 65+ years,
the United Kingdom,1950 to 2050 (projected)
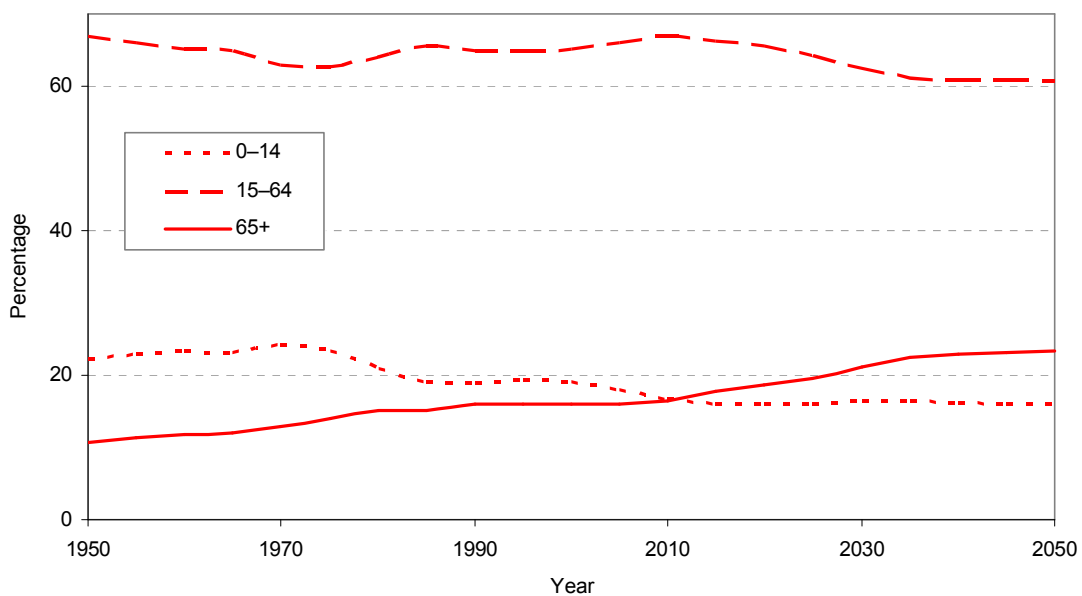
Source: United Nations (2002).

The birth rate in the United Kingdom is slightly higher than the Eur-A average (Table. Selected demographic indicators). Since 1980, the rate has dropped by 16% in the country but by 20% in Eur-A as a whole. The United Kingdom's natural growth rate is positive, although it has decreased by 35% since 1980. In 2002, it was among the lower rates in Eur-A. Net migration is also positive and below the Eur-A average.

Selected demographic indicators in the United Kingdom and Eur-A,
2002 or latest available year

Indicators	United Kingdom	Eur-A		
	Value	Average	Minimum	Maximum
Population (in 1000s)[a]	59 328.9	–	–	–
0–14 years (%)	18.6	–	–	–
15–64 years (%)	65.5	–	–	–
65+ years (%)	15.9	–	–	–
Urban population (%)[b, c]	89.5	79.5	49.2	100.0
Live births (per 1000)[b, d]	11.2	11.3	8.7	21.2
Natural population growth (per 1000)	1.1	1.1	–2.4	15.5
Net migration (per 1000)[b,d]	2.5	3.5	–9.6	17.3

[a] As of 1 January 2003.

[b] 2001.

[c] Including Andorra and Monaco.

[d] Including Andorra.

Sources: Council of Europe (2003), WHO Regional Office for Europe (2004c); Central Bureau of Statistics of Israel (2003) for data on Israel.

Vulnerable populations

Income

The evidence on determinants of health shows that people who are socioeconomically disadvantaged bear the greatest burden of disease. Among determinants, income is related to an accumulation of factors that affect mortality (Martikainen et al., 2001). For example, it influences and is influenced by education and employment.

Even in the richest Member States in the WHO European Region, wealth is not equitably distributed and pockets of relative poverty exist (WHO Regional Office for Europe, 2002a; WHO, 2002). The association between poverty and urban areas is especially important in Europe. As populations migrate and become more urban, there are increases in the number of urban poor whose housing, employment conditions and diet expose them to greater risk of illness and disease (WHO Regional Office for Europe, 2001c). The nature and impact of poverty can be unevenly distributed among poor people according to such factors as gender and age group (Ziglio et al., 2003).

According to the GINI index, the United Kingdom has a relatively high level of income inequality: a more uneven distribution of wealth than most Eur-A countries (UNDP, 2004). In the period 1990–2000, about 13% of the population in the United Kingdom lived below the 50% median income level, compared to an average of almost 9% for the 19 Eur-A countries with estimates.

Nevertheless, an antipoverty strategy has led to relative improvements. In 2002–2003, the number of low-income households was lower than at any time during the 1990s, although it was still much higher than in the early 1980s. In 2002–2003, 800 000 fewer children lived in households with below 60% of median income than in 1996–1997 (New Policy Institute, 2004).

In 2002, overall unemployment was 5.1% in the United Kingdom, below the average of 6.5% for 25 Eur-A countries (UNSD, 2004). Unemployment was higher among young people: 12% of males and 8.7% of females aged 15–24 in 2001 (UNECE, 2003). Of the unemployed, 55% had completed secondary education and 23% had a primary education; 28% had been jobless for 12 months or more.

Social exclusion

Social exclusion has a broad impact on health. It refers to the relative position of an individual or a group in society as a whole. The processes that accompany and result in social exclusion – such as discrimination, stigmatization and hostility – prevent people from getting education or training and from

gaining access to services and citizenship activities, making them more vulnerable to health risks and disease.

Examples of people outside the mainstream include members of ethnic or religious minorities; people who live in geographically disadvantaged areas, are unemployed or are elderly; and in some countries, indigenous peoples. People new to a country – such as refugees, immigrants or migrant workers – may also be socially excluded.

The table below gives the total population figures for various vulnerable groups of people resident in the United Kingdom. Immigrants include nationals and foreigners from within and outside the European Region. Countries have different data sources and administrative definitions of immigrant status.

Vulnerable populations in the United Kingdom

Population	1992	1995	1998	2001	2004 (estimate)
Immigrants	216 000	245 000	332 390[a]	372 206[a]	
Refugees				149 000	
Prison inmates (per 100 000 national population) England ad Wales	90	99	125	127	142
Prison inmates (per 100 000 national population) Scotland	104	110	119	122	134
Prison inmates (per 100 000 national population) Nothern Ireland	112	105	91	52	72

[a] Estimated value.
Sources: EUROSTAT (2004), UNDP (2003) and International Centre for Prison Studies (2004).

The table also includes data about prison inmates, a particularly vulnerable population in that they are typically from minority groups and have lower socioeconomic status and less education than the general population. Incarceration can expose them to direct health hazards, particularly if prison populations outpace capacity. The resulting overcrowding causes and contributes to many health problems, most notably mental health conditions and communicable diseases. In fact, drugs and drug-related infectious diseases in prisons are causing major problems in all countries in the European Region, with the risks of transmission affecting not only inmates but also prison employees and contacts outside the institutions (EMCDDA, 2002).

In 2003, the occupancy level in prisons, based on official capacity, was 112.7% in England and Wales, 110.9% in Scotland and 89.6% in Northern Ireland (International Centre for Prison Studies, 2004).

Burden of disease

The burden of disease can be viewed as the gap between current health status and an ideal situation in which everyone lives into old age free of disease and disability. Causing the gap are premature mortality, disability and certain risk factors that contribute to illness. The analysis that follows elaborates on the burden of disease in the population.

Life expectancy and healthy life expectancy

According to WHO (2003f) estimates, a person born in the United Kingdom in 2002 can expect to live 78.2 years on average: 80.5 years if female and 75.8 if male. Life expectancy (LE) in the United Kingdom is about equivalent to the Eur-A average for males and about a year below it for females.

Life expectancy at birth for males, the United Kingdom and Eur-A, 1980 to latest available year

Life expectancy at birth for females, the United Kingdom and Eur-A,
1980 to latest available year
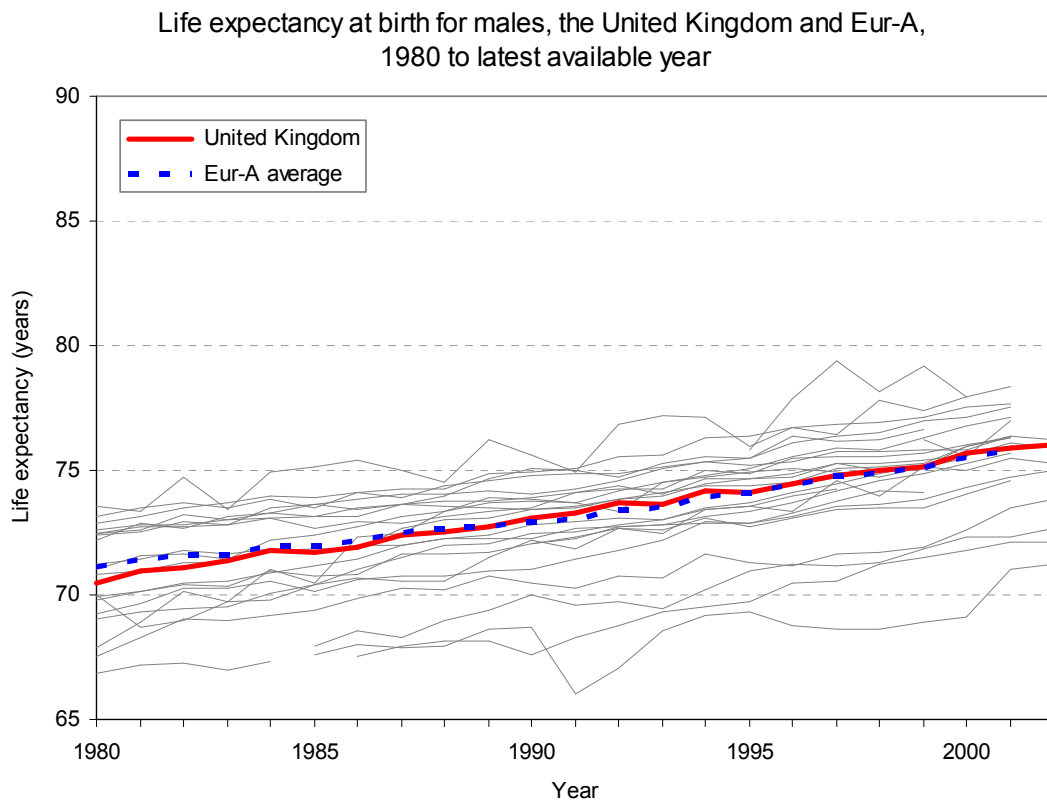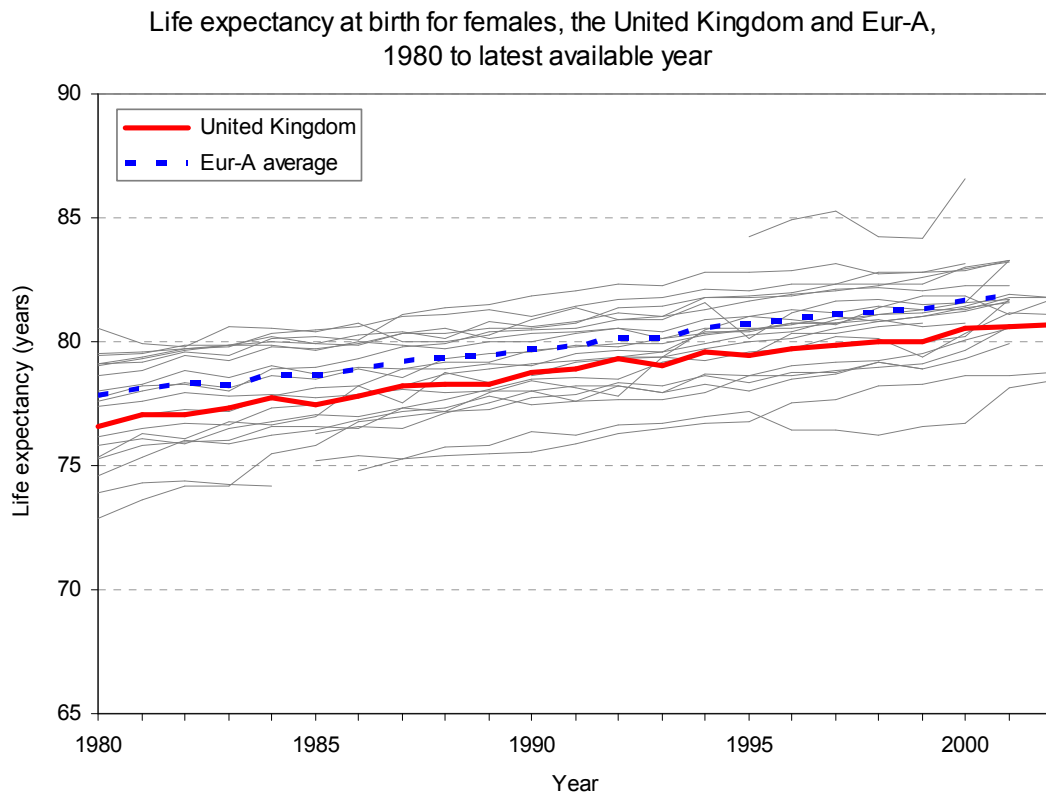
Since 1980, according to estimates provided by the United Kingdom, Britons have gained about 4.5 years in LE, with a greater gain for men (about 5 years) than women (about 4). These gains are similar to those in Eur-A.

In addition, WHO (2003F) estimates that people in the United Kingdom can expect to be healthy for about 90% of their lives. They lose an average of 7.6 years to illness – the difference between LE and healthy life expectancy (HALE). This loss is slightly more than the Eur-A average.

LE and HALE, the United Kingdom and Eur-A[a], 2002

Country	LE	HALE
Monaco	81.2	72.9
San Marino	80.6	73.4
Switzerland	80.6	73.2
Sweden	80.4	73.3
Andorra	80.3	72.2
Iceland	80.1	72.8
Italy	79.7	72.7
France	79.7	72.0
Spain	79.6	72.6
Israel	79.4	71.4
Austria	79.4	71.4
Norway	79.1	72.0
Luxembourg	78.8	71.5
Germany	78.7	71.8
Netherlands	78.6	71.2
Eur-A average	78.6	71.1
Belgium	78.4	71.1
Greece	78.4	71.0
Finland	78.2	71.1
United Kingdom	78.2	70.6
Malta	78.1	71.0
Cyprus	77.3	67.6
Denmark	77.2	69.8
Ireland	77.1	69.8
Portugal	77.1	69.2
Slovenia	76.7	69.5
Czech Republic	75.8	68.4
Croatia	74.8	66.6

Years

[a] Including Andorra and Monaco.
Source: WHO (2003f).

Since women live and since the possibility of deteriorating health increases with age, women lose more healthy years of life (8.4 years) than men (6.7 years). Nevertheless, the longer LE for women in the United Kingdom gives them about 3 more years of healthy life.

Mortality (heading 2)

Infant mortality and neonatal death

In 2001, infant and neonatal mortality rates in the United Kingdom were slightly higher (by 16% and 14%, respectively) than Eur-A averages. Between 2001 and 2002, infant mortality fell by 4% and neonatal mortality by 3% in the country.

Infant deaths and neonatal deaths per 1000 live births,
the United Kingdom and Eur-A[a], latest available year

Country (year)	Infant deaths	Neonatal deaths
Croatia (2002)	7.0	5.0
Ireland (2001)	6.0	4.2
Malta (2002)	5.9	5.4
Israel (1999)	5.8	3.7
Belgium (1997)	5.6	3.6
⇨ United Kingdom (2002)	5.2	3.5
Netherlands (2000)	5.1	3.9
Portugal (2002)	5.1	3.4
Greece (2001)	5.1	3.5
Switzerland (2001)	5.0	3.6
Cyprus (2001)	4.9	
⇨ Eur-A average (2001)	4.7	3.2
Italy (2001)	4.7	3.4
France (2000)	4.4	2.8
Germany (2001)	4.3	2.7
Denmark (1999 and 1996)	4.2	3.9
Czech Republic (2002)	4.2	2.7
Spain (2001)	4.1	2.8
Norway (2001)	4.1	3.0
Austria (2002)	4.1	2.8
Luxembourg (2002)	3.9	2.8
Slovenia (2002)	3.8	3.0
Sweden (2001)	3.7	2.5
Finland (2002)	3.0	2.1
Iceland (2001)	2.7	2.0

Deaths per 1000 live births

Excess mortality

In general, mortality rates for males in the United Kingdom are 4% lower than the Eur-A average. In contrast, females have about 6% relatively higher mortality than the average, across age groups.

The highest excess mortality for males occurs among the very young and the very elderly. Females experience excess mortality as infants and from 25 to 74 years, with the highest relative excess among women aged 55–74.

Total mortality by sex and age group in the United Kingdom
in comparison with Eur-A (Eur-A = 100), 2002
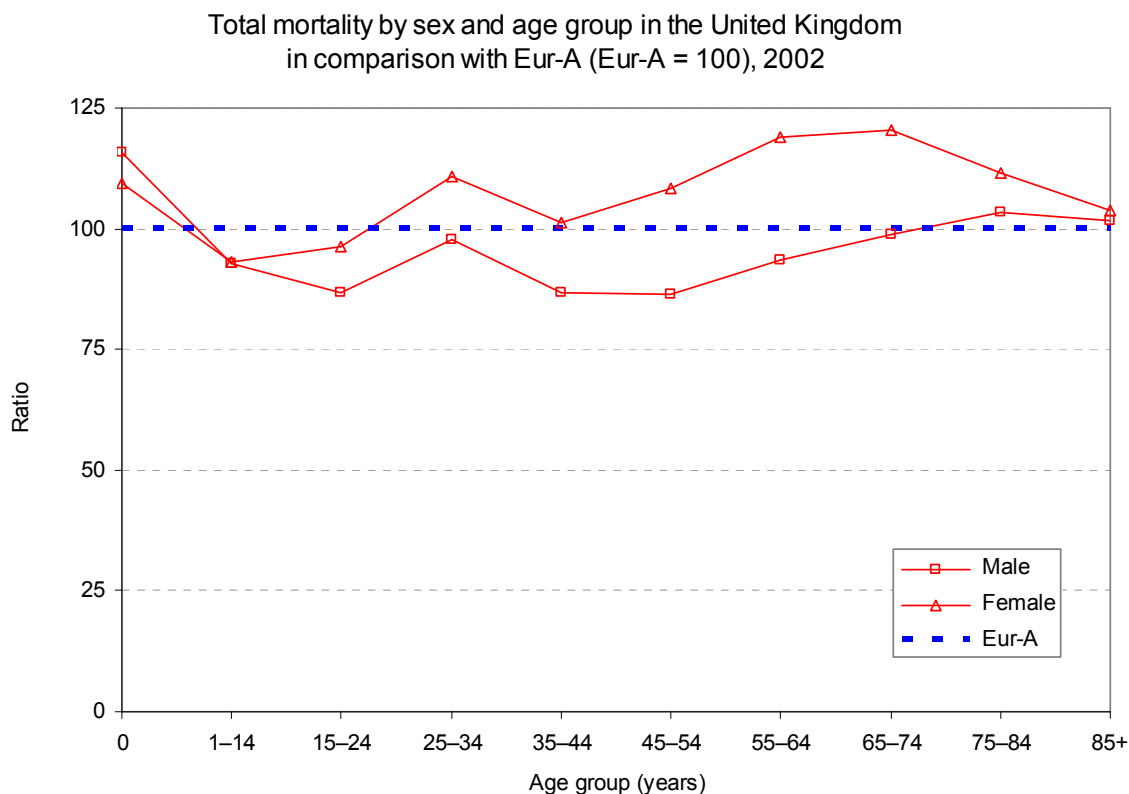
Main causes of death

In 2002, noncommunicable diseases accounted for about 84% of all deaths in the United Kingdom; external causes for about 4%; and communicable diseases for less than 1% (Annex. Selected mortality; Annex. Mortality data).

Across most age groups, women in the United Kingdom experienced higher mortality than Eur-A averages in 2002. CVD and cancer contributed 11% and 10% excess mortality, respectively. The youngest and oldest age groups were exceptions to the trend for CVD, and one age group (women aged 35–44 years) had mortality from cancer below the Eur-A average.

Main causes of mortality by sex and age group in the United Kingdom in comparison with Eur-A (Eur-A = 100), 2002
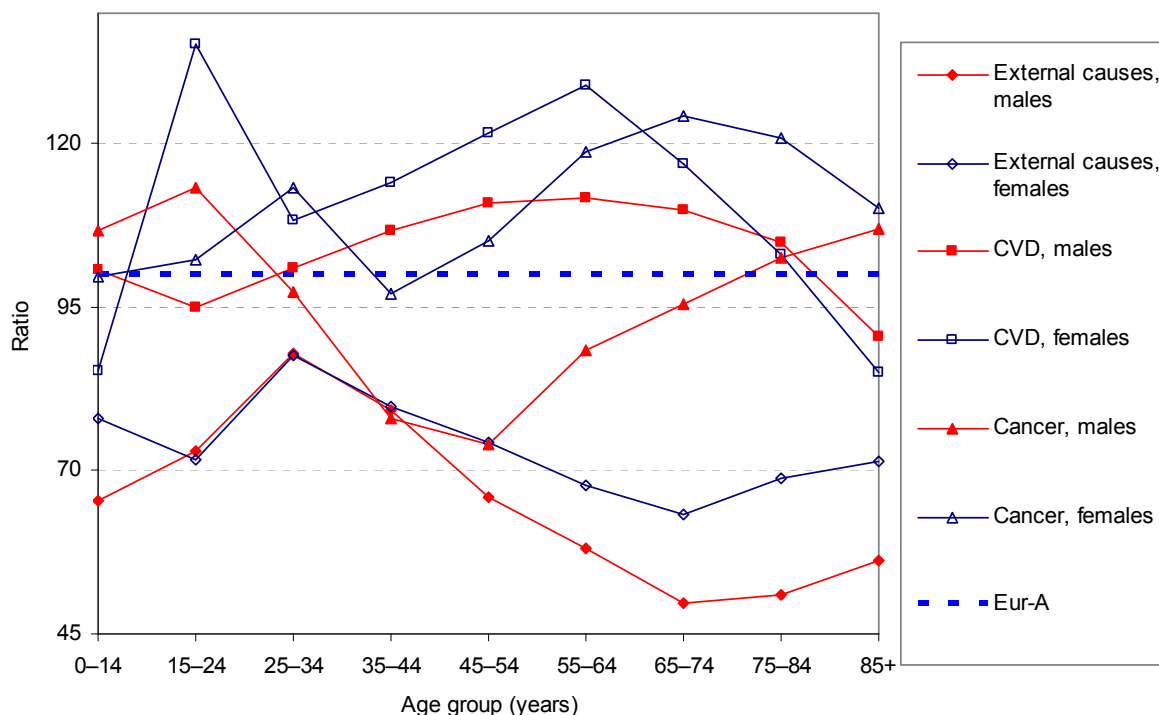
CVD

CVD was the main cause of excess mortality among adult men in the United Kingdom in 2002. Cancer accounted for an excess of 13% in young men and 5% in elderly ones.

Ischaemic heart disease is the single biggest killer in the United Kingdom, accounting for almost one in five deaths (Annex 2). Premature death from the disease is high, even though it has dropped by almost 30% since 1995. In 2001, the rate for men aged 25–64 was about 50% higher than the average (and the sixth highest in Eur-A); for women, the rate was 67% higher (the fourth highest in Eur-A).

Standardized death rates (SDR) for ischaemic heart disease
in people aged 25–64 years, both sexes, the United Kingdom and Eur-A[a],
1980 to latest available year

a Excluding Cyprus.
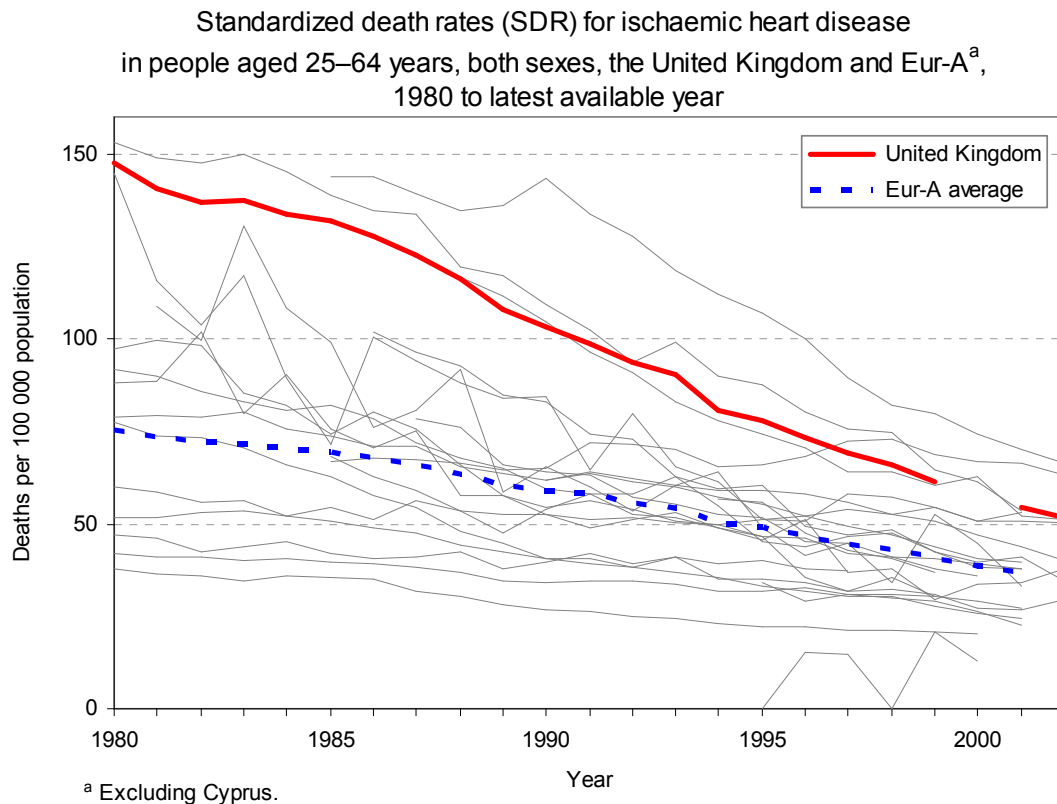
Respiratory diseases

In 2002, respiratory diseases accounted for about 12% of all deaths in the United Kingdom; the rates were high: men had the third highest rate in Eur-A and women, the second highest (Annex. Selected mortality). Within this disease category, chronic lower respiratory diseases cause high mortality: women have the second highest rate in Eur-A and men, the fourth highest.

SDR for diseases of the respiratory system in people aged 25–64 years, both sexes, the United Kingdom and Eur-A[a], 1980 to latest available year

[a] Excluding Cyprus.
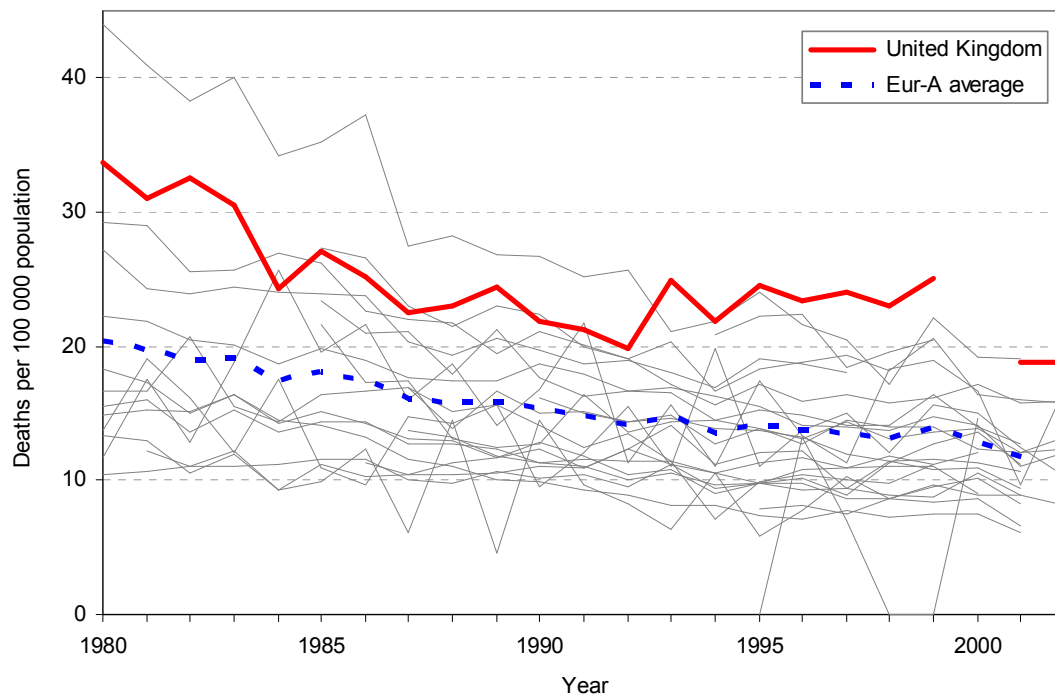
Digestive diseases

Mortality from digestive diseases has dropped steadily in Eur-A over the last 20 years, but risen by 22% in the United Kingdom since 1995. By 2002, the rate for men aged 25–64 was about equivalent to the Eur-A average, but the rate for women of the same age surpassed the Eur-A average by 20%, to become the third highest in the reference group.

SDR for diseases of the digestive system in females
aged 25–64 years, the United Kingdom and Eur-A[a],
1980 to latest available year

[a] Excluding Cyprus.

Cancer

Cancer accounted for 28% of all deaths in the United Kingdom in 2002. Deaths from this cause show dramatic gender differences in the country.

In 2001, the cancer mortality rate was about 6% higher than the Eur-A average. The overall rate was about 4% below the Eur-A average among males but about 18% higher than the average among women.

Deaths from oesophageal cancer were high in 2001 for both men and women in the United Kingdom: the highest and second highest in 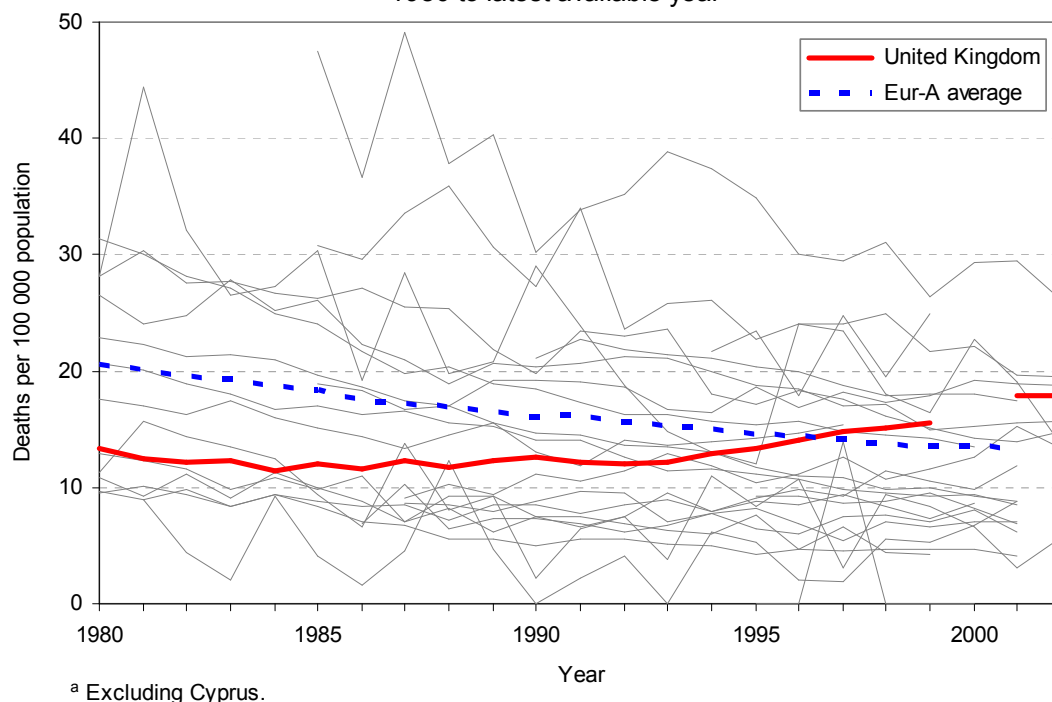Eur-A, respectively. Death rates for breast, cervical and ovarian cancer were also higher than in Eur-A: by 15%, 25% and about 40%, respectively. The rates for breast and ovarian cancer were the second highest and third highest in Eur-A, respectively. Similarly, mortality from bladder cancer among women was the highest among the reporting countries in 2001: 40% higher than the Eur-A average.

The overall rate of death in the United Kingdom from tracheal, bronchial and lung cancer was the third highest in Eur-A in 2001. While the rate for men was about 10% below the Eur-A average and showed a downward trend, that for women was twice the Eur-A average, and holding steady while Eur-A showed a slightly upward trend. British women aged 25–64 had the fourth highest death rate for lung cancer in Eur-A, and those aged 65 and over had the highest. Among men 65 and over, the rate of death from lung cancer was the sixth highest in Eur-A.

External causes

Deaths from external causes are relatively low in the United Kingdom, about 28% less than in Eur-A overall in 2001. Until the late 1990s, death rates from accidental falls among males and females were steady; since then, they have decreased, remaining below Eur-A averages. Death rates from exposure to smoke, fire and flame and from accidental poisoning were slightly above average in 2001.

In addition, mortality rates from homicide and assault among women and men have increased in the United Kingdom from their low points in the late 1990s: they have been rising since 1997 among males and since 1999 among females. The Eur-A rates have been more or less steady over this period.

Between 1995 and 2002, deaths from suicide in the group aged 15–29 years increased by 12% among females and dropped by 14% among males. Rates of completed suicide, however, vary considerably within the United Kingdom. In 2000, the rates among men in Northern Ireland and Wales were 1.5 times and 1.3 times, respectively, the rate in England. Among females, the rates in England and Wales were similar; that in Northern Ireland was about 25% higher than in England (Office for National Statistics, 2000).

Disability-adjusted life-years

The disability-adjusted life-year (DALY) is a summary measure that combines the impact of illness, disability and mortality on population health. The table lists the top 10 conditions affecting males and females in the United Kingdom in terms of DALYs.

Ten leading disability groups as percentages of total DALYs for both sexes
in the United Kingdom

Rank	Males		Females	
	Disability groups	Total DALYs (%)	Disability groups	Total DALYs (%)
1	Neuropsychiatric conditions	24.9	Neuropsychiatric conditions	27.3
2	Cardiovascular diseases	19.4	Malignant neoplasms	16.0
3	Malignant neoplasms	14.9	Cardiovascular diseases	14.9
4	Respiratory diseases	8.6	Respiratory diseases	9.7
5	Unintentional injuries	5.4	Digestive diseases	5.3
6	Digestive diseases	4.9	Musculoskeletal diseases	4.9
7	Sense organ diseases	4.2	Sense organ diseases	4.6
8	Musculoskeletal diseases	3.2	Respiratory infections	3.3
9	Respiratory infections	2.9	Unintentional injuries	2.7
10	Intentional injuries	2.7	Infectious and parasitic diseases	1.5

Source: Background data from WHO (2003f).

Neuropsychiatric conditions account for the largest share of the burden of disease on the United Kingdom, as in most other Eur-A countries. Because mortality from these conditions is minor in comparison to that from other diseases, disability in daily living comprises the bulk of their burden on the population's health.

Main risk factors

The table presents the top 10 risks to health in developed countries in terms of DALYs. As with the conditions in the above table, risk factors are estimated to contribute differently to the burden of illness and death in a population. The degree to which the population in the United Kingdom is exposed to five of these risks is described below.

Ten leading selected risk factors as percentage causes of
disease burden measured in DALYs in developed
countries

| Risk factors	Total DALYs (%)
Tobacco	12.2
Blood pressure	10.9
Alcohol	9.2
Cholesterol	7.6
Overweight	7.4
Low fruit and vegetable intake	3.9
Physical inactivity	3.3
Illicit drugs	1.8
Unsafe sex	0.8
Iron deficiency	0.7

Source: WHO (2002).

Tobacco

The European Region has only 15% of the world's population but nearly 33% of the worldwide burden of tobacco-related diseases (WHO Regional Office for Europe, 2004g). The annual number of deaths in the Region attributable to the consumption of tobacco products was recently estimated to be 1.2 million, and about 40% occur in Eur-A countries (WHO Regional Office for Europe, 2002a). About half of the people who die are middle aged. Typically, the more affluent are the first both to begin smoking and to stop. As they quit, smokers increasingly comprise people with less education and lower income (Bostock, 2003).

In the United Kingdom, about 120 000 people die each year from tobacco-related illnesses (Callum, 1998)

In 2000, Britons consumed about 30% fewer cigarettes per person than the Eur-A average, according to official statistics for production, import and export. (These do not include the consumption of additional cigarettes available unofficially, for example, through smuggling across borders and bootlegging.) Surveys between 1994 and 2002 found that the prevalence of smoking had decreased among both men and women. In Great Britain, the largest decrease was among those aged 50 and over: from 40% in 1974 to 19% in 2002/2003. The decrease was smaller among those aged 20–24: from 48% to 38% (Office for National Statistics, 2004c).

Smoking prevalence among adults in the United Kingdom
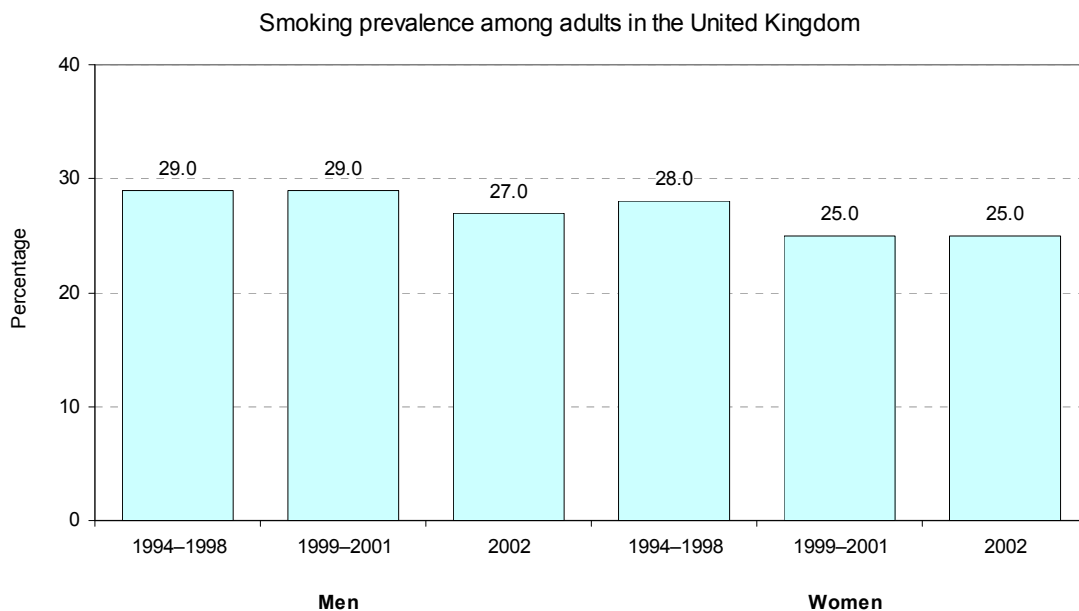
Source: WHO Regional Office for Europe (2004f).

In 2002/2003, 26% of people over 16 years of age in Great Britain were cigarette smokers: 27% of men and 25% of women. The proportion of smokers was greatest in the group aged 20–24 (37% of men and 38% of women) and lower in those aged 16–19 (29% of women and 22% of men) (Office for National Statistics, 2004c).

The Scottish Household Survey of 2003 (Martin et al., 2003) found that overall, 28% of both men and women in Scotland smoke. The proportions are greatest in the younger age groups. Almost one third of women aged 16–59 years smoke. Smoking among men is highest in the group aged 25–34 (36%), followed by those aged 35–44 (31%) and the groups aged 16–24 and 45–59 (29%).

In surveys taken in 1997/1998 and 2001/2002, 15-year-olds in the United Kingdom reported decreasing rates of daily smoking. All rates reported were higher than Eur-A averages, however, except the rate among boys in 2001/2002.

Fifteen-year-olds who smoke every day,
the United Kingdom and Eur-A[a] average
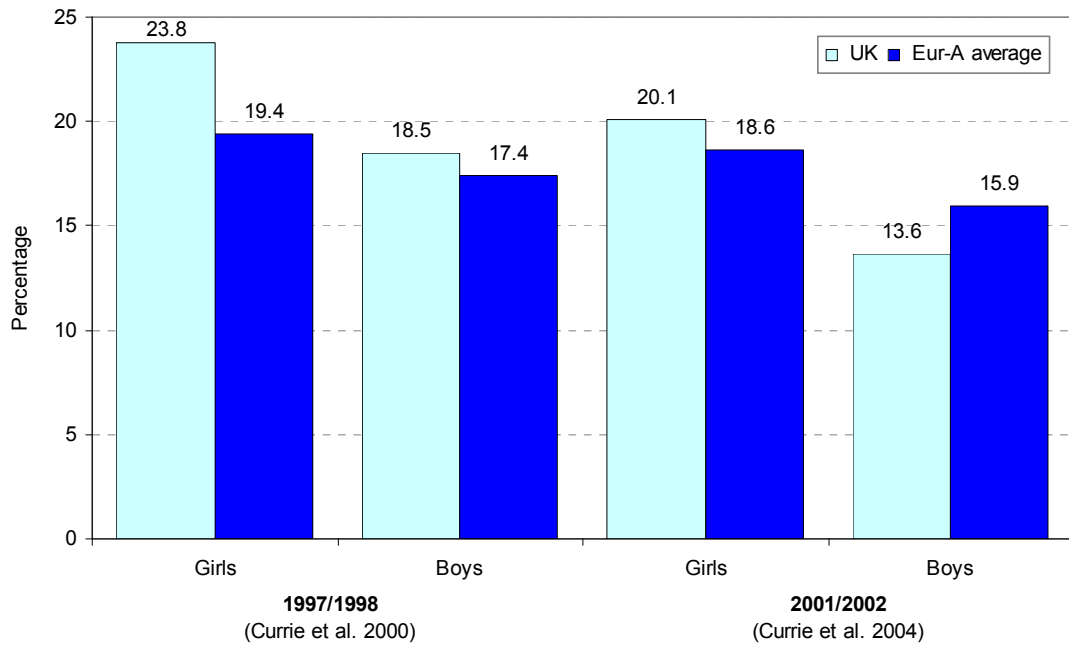
1997/1998
(Currie et al. 2000)

2001/2002
(Currie et al. 2004)

[a] Excluding Cyprus, Iceland, Luxembourg and San Marino.

Fifteen-year-olds who smoke every day,
Wales and Eur-A[a] average
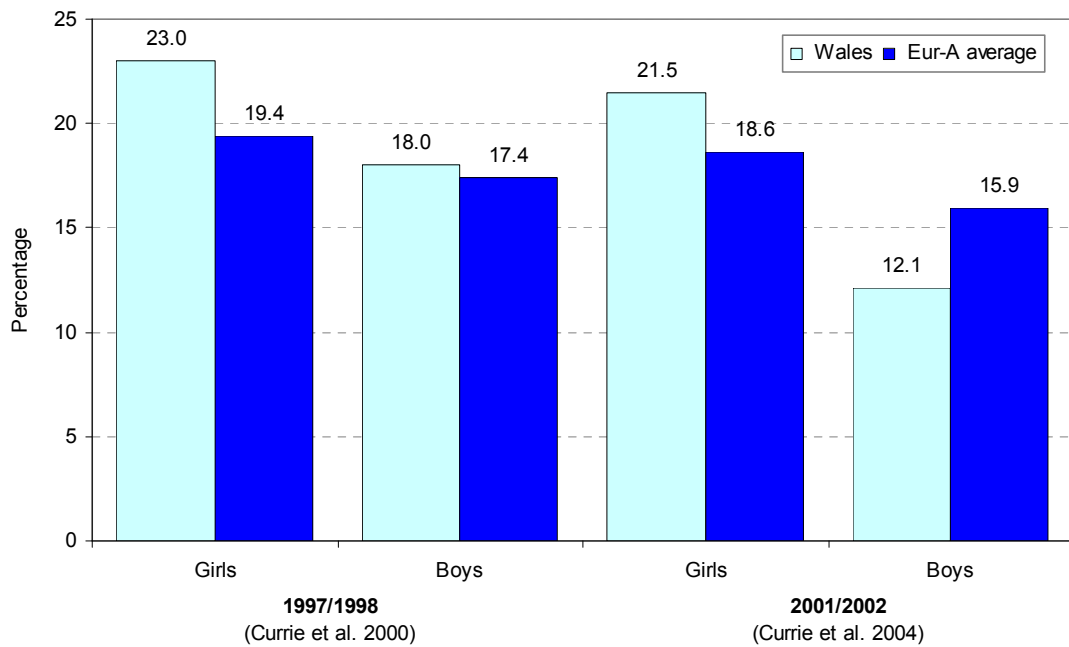
1997/1998
(Currie et al. 2000)

2001/2002
(Currie et al. 2004)

[a] Excluding Cyprus, Iceland, Luxembourg and San Marino.

Fifteen-year-olds who smoke every day,
Scotland and Eur-A[a] average
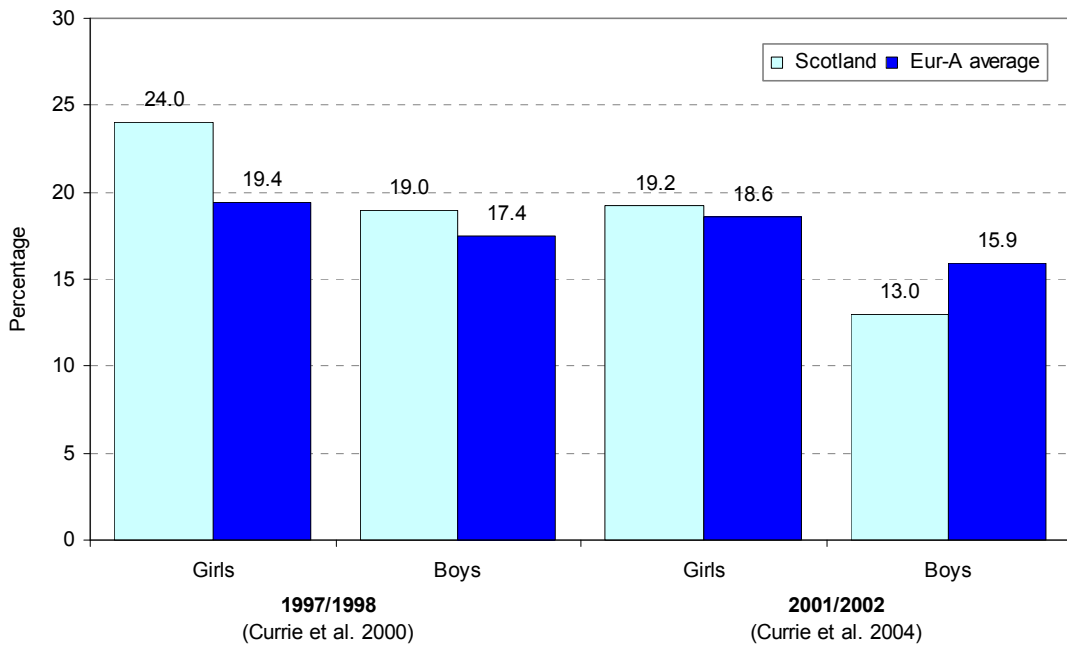
a Excluding Cyprus, Iceland, Luxembourg and San Marino.

Fifteen-year-olds who smoke every day,
Northern Ireland and Eur-A[a] average
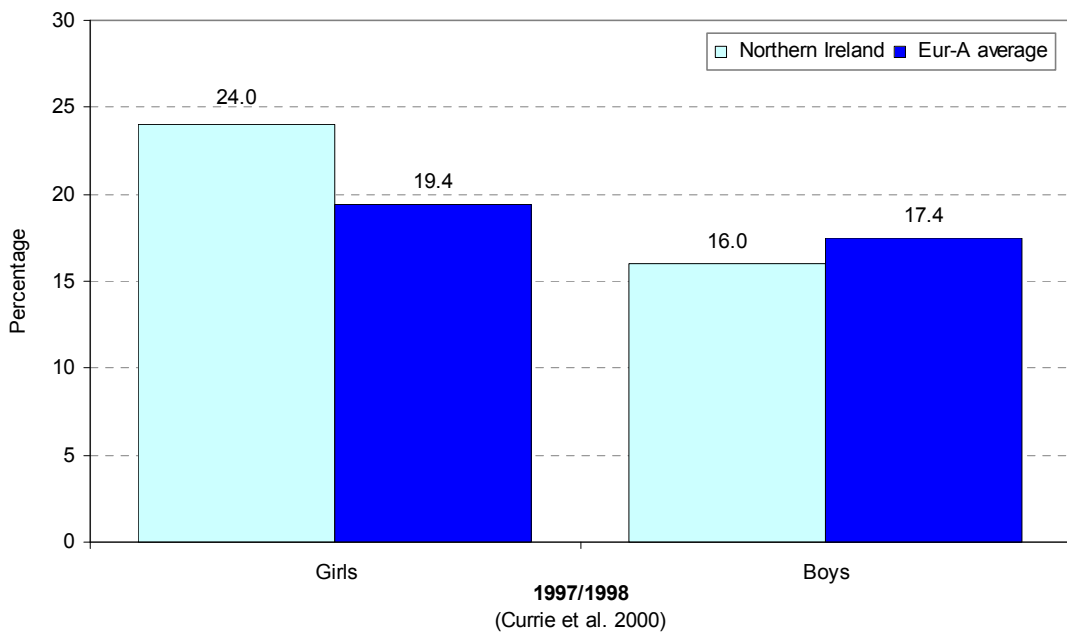
a Excluding Cyprus, Iceland, Luxembourg and San Marino.

Alcohol

Two major public health issues are related to alcohol consumption: regular drinking of more than small amounts and harmful patterns such as binge drinking (when a person consumes a bottle of wine or equivalent on one occasion, or has five or more standard drinks in a row). Both practices cause or aggravate health problems and increase the risks of injury to the drinker and others (European Commission, 2003).

Over the past 20 years, the per capita consumption of pure alcohol in the United Kingdom has been relatively constant (according to official statistics on local production, sales, imports and exports), while the average for Eur-A has been decreasing. By 2001, however, the Eur-A average level was still slightly higher than that in the United Kingdom.

Alcohol consumption in the group aged 15+ years,
the United Kingdom and Eur-A[a], 1980 to latest available year

[a] Excluding San Marino.
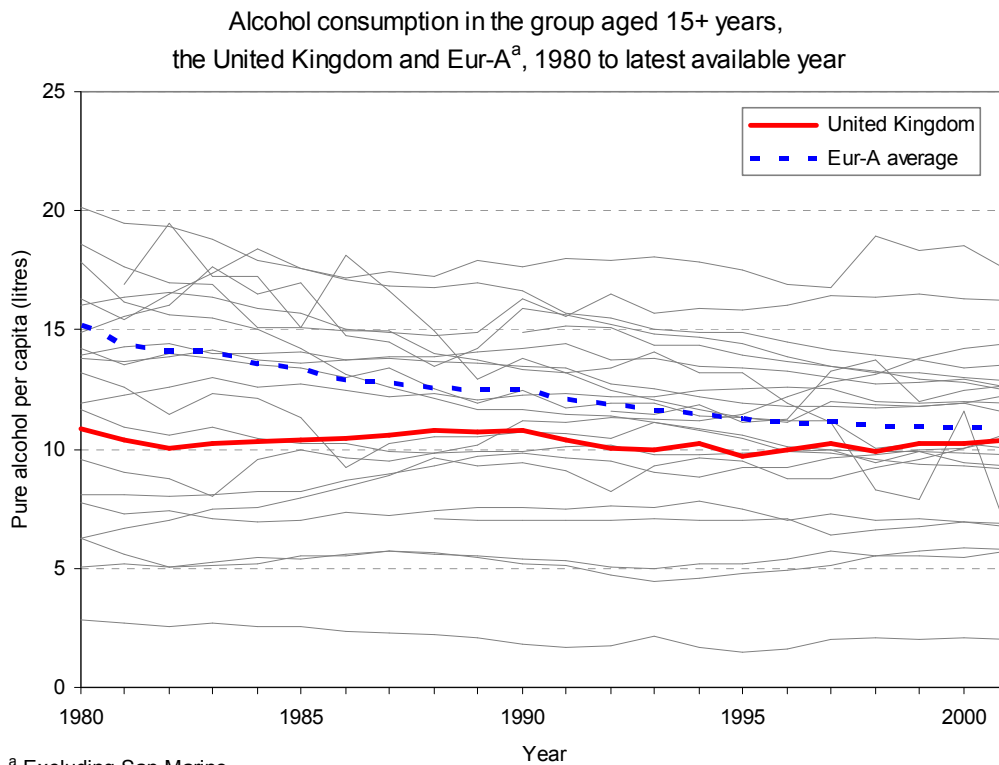
Nevertheless, Britons have harmful drinking patterns: Within a small sample of countries, the United Kingdom had the highest levels of binge drinking.

Binge drinking as a percentage of all drinking occasions in
the past 12 months, selected countries in Eur-A, 2000
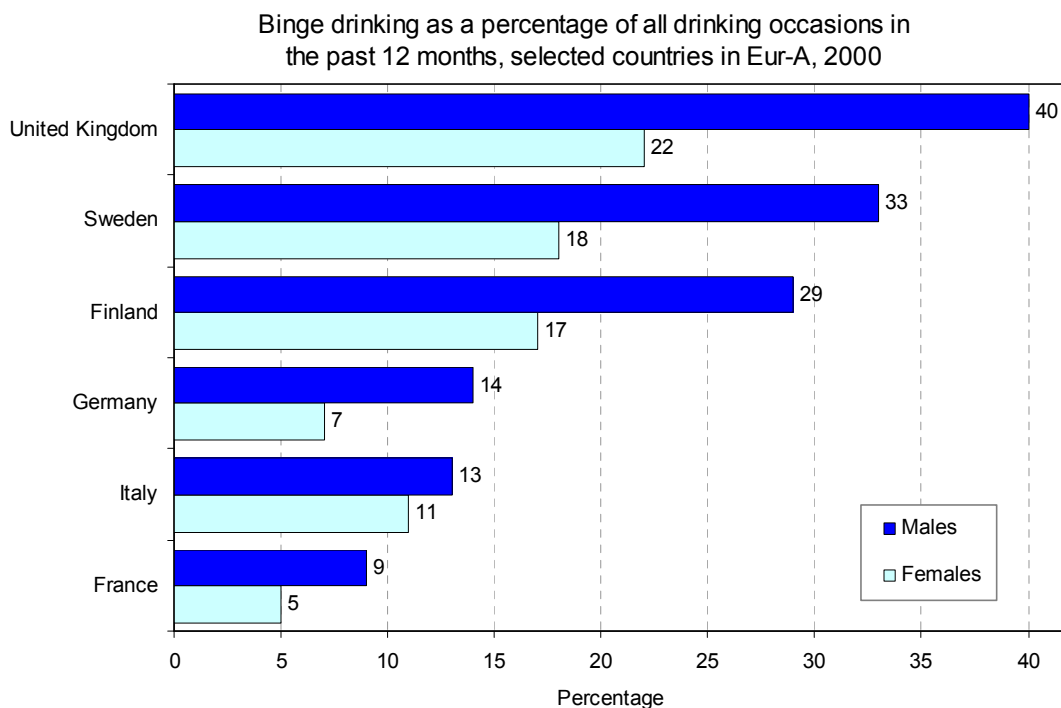
Source: Hemström et al. (2002).

In Great Britain, the General Household Survey in 2002 (Office for National Statistics, 2003) found no statistically significant changes overall since 1998 in the proportion of men drinking more than their recommended number of daily units on any day of the week prior to interview. The youngest group surveyed (aged 16–24), however, showed evidence of a slight downward trend in the percentage drinking more than four units on at least one day in the week prior to interview. Between 1998 and 2002, this fell from 52% to 49%, while the proportion drinking more than eight units fell from 39% to 35%.

In women, however, the proportion drinking more than six units on at least one day in the previous week showed a significant increase: from 8% in 1998 to 10% in 2002. This level has remained steady. Most of the increase occurred in younger women: for example, among those aged 16–24, the proportion drinking more than six units at a time rose from 24% in 1998 to 28% in 2002 (Office of National Statistics, 2004d).

In England in 2002, 37% of men reported drinking more than four units of alcohol on at least one day in the previous week and 21% had drunk more than eight units. Among women, 22% said they had drunk more than three units of alcohol on at least one day in the previous week and 9% had drunk more than six units (Department of Health of the United Kingdom, 2004b).

Mortality from liver cirrhosis is the classic indicator of harm from chronic excessive drinking. From the early 1990s to 2001, the rate in the United Kingdom rose steadily to just below the Eur-A average, which was falling during this period.

SDR for chronic liver disease and cirrhosis, all ages, both sexes, the United Kingdom and Eur-A[a], 1980 to latest available year

[a] Excluding San Marino.
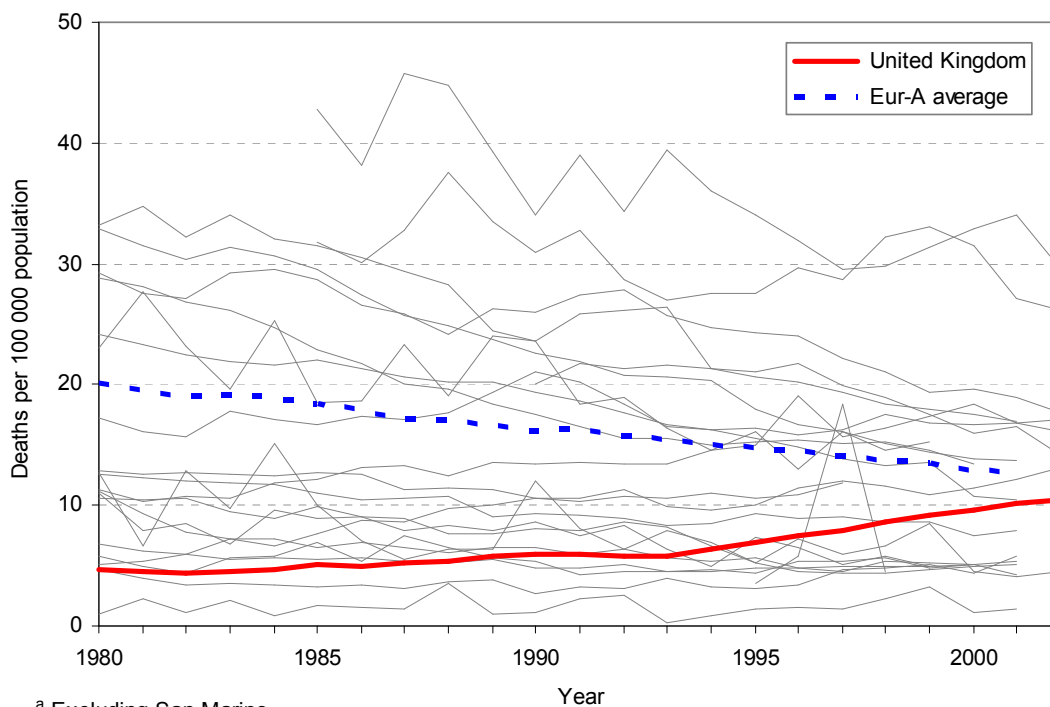
Mortality due to cirrhosis explicitly caused by alcohol is another indicator of harm, but variations in the coding of deaths classified as alcoholic cirrhosis make cross-country comparisons unreliable. The figure below is therefore descriptive, showing where alcohol was the major risk factor in deaths due to cirrhosis in a particular country. In the period 1987–1995, alcoholic cirrhosis accounted for about 45% of total deaths from liver cirrhosis among men in the United Kingdom. The rate among women was slightly lower.

Mortality from alcoholic liver cirrhosis as a percentage of total mortality from
liver cirrhosis, selected countries in Eur-A, averages for 1987–1995
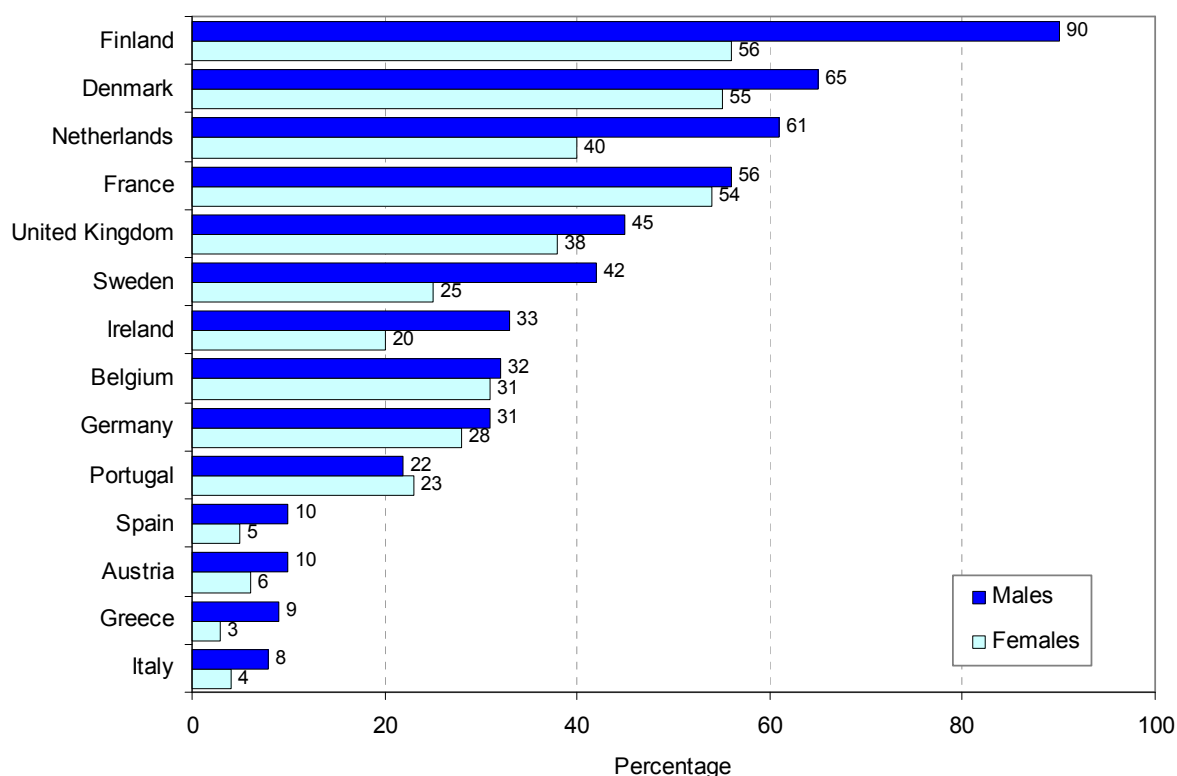
Note: Data for Germany refer to the territory of the Federal Republic of Germany as up to 3 October 1990.
Source: Hemström et al. (2002).

In 2000, there were 11 800 drink–driving incidents in Great Britain, resulting in 530 deaths, as well as an estimated total of 5543 alcohol-related deaths in England and Wales (Office for National Statistics, 2004a).

Excess weight

Studies have shown that excess weight contributes to CVD and cancer. In the 15 countries that comprised the European Union before May 2004, research suggests that the condition is responsible for 5% of all cancer cases (3% among men and 6% among women) and overall, almost 300 000 deaths annually (Banegas, 2002; Bergstrom et al., 2001). For children and adolescents, the main problem associated with excess weight, and obesity in particular, is its persistence into adult life and its association with the risk of diabetes and CVD (Stark et al., 1981).

Excess weight is a widespread problem in the United Kingdom. According to recommended levels for body mass index (BMI), well over half of adults are overweight (BMI of 25.0–29.9). Data on obesity are available only for England; they show that about 21% of men and 23% of women are obese (BMI of 30+).

Overweight and obese adults,
the United Kingdom and Eur-A[a] average
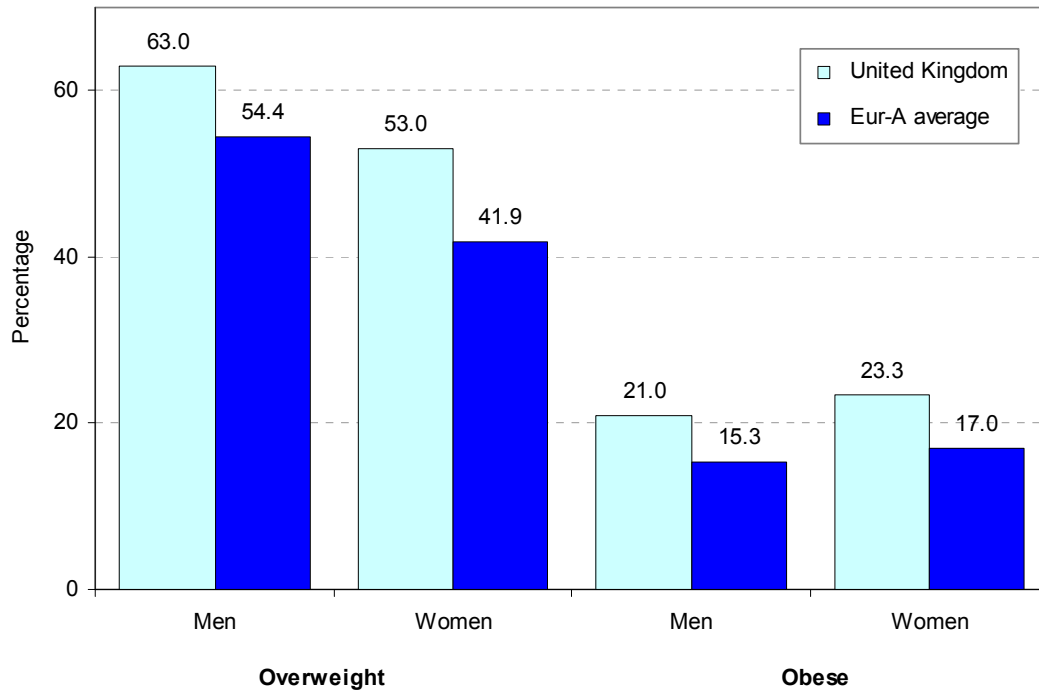
[a] Excluding Austria, Croatia, Cyprus, Iceland, Ireland, Luxembourg, San Marino and Slovenia.
Sources: Robertson et al. (2004), the Danish Nutrition Council (2003) for data on Denmark and
Israeli Center for Disease Control (2003) for data on Israel.

According to self-reported data on height and weight collected in schools, adjusted to correspond to
adult BMI, 15-year-old boys and girls in the United Kingdom had higher rates of pre-obesity and obesity
than Eur-A averages. For girls, the rates were the highest in the reference group.

Pre-obese and obese 15-year-olds by sex,
the United Kingdom and Eur-A[a] average
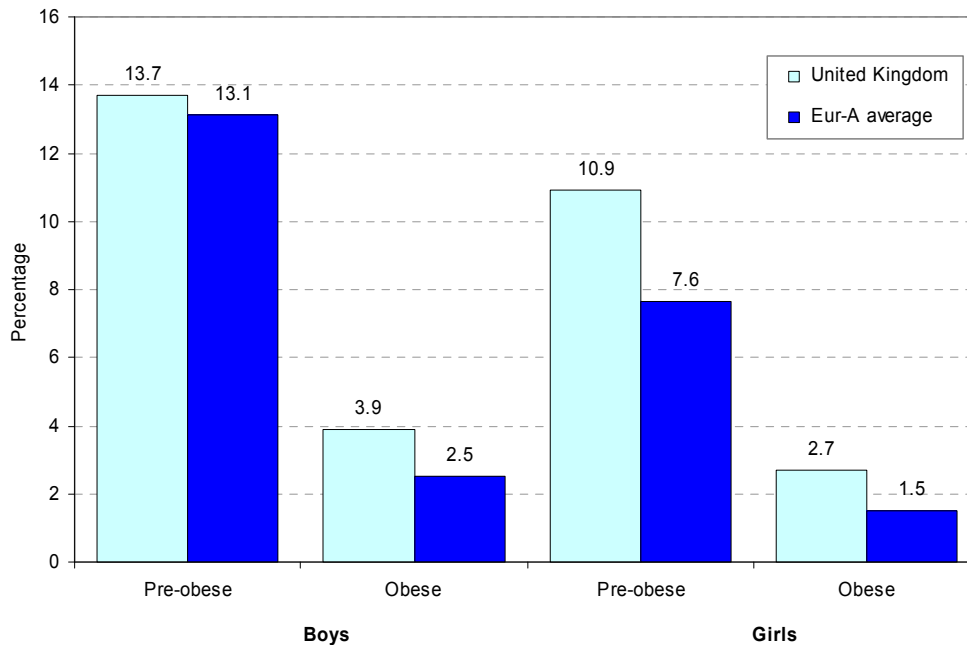
[a] Excluding Cyprus, Iceland, Luxembourg and San Marino.
Sources: Mulvihill et al. (2004) and the Danish Nutrition Council (2003) for data on Denmark.

The 2002 Health Survey for England (Sproston & Primatesta, 2002) found that, among people aged 16–24, 9.2% of men and 11.5% of women were obese. Overall, 32.2% of men and 32.8% of women had excess weight. The Survey also found that about 1 in 20 boys and about 1 in 15 girls aged 2–15 were obese. Overall, just over one in five boys and over one in four girls were either pre-obese or obese.

The survey indicated that excess weight was more common in more deprived areas for both children and young adults. In children aged 2–15, having two obese parents increased the risk of obesity by a factor of 12 for boys and 10 for girls.

Between 1995 and 2002, health surveys in England found that weight and BMI increased year by year for all age groups and both sexes. As a result, the prevalence of overweight and obesity showed a steady upward trend: obesity almost doubled among boys (from about 3% to almost 6%) and increased among girls (from about 5% to almost 8%). Similarly, it increased from about 6% to 9% among young men and from almost 8% to about 12% among young women. This trend was more marked in manual than in non-manual social classes.

Intake of fruits and vegetables

Both CVD and cancer have substantial dietary bases. Conservative estimates suggest that better eating habits could prevent about a third of CVD cases and a third of all cancer deaths worldwide (Robertson et al., 2004). Contributing risk factors are high blood pressure and serum cholesterol, overweight and obesity, and low intake of fruits and vegetables. For the large proportion of the population that does not smoke, diet is one of the most important modifiable determinants of cancer risk.

Low fruit and vegetable intake is estimated to cause around 18% of gastrointestinal cancer, about 28% of ischaemic heart disease and 18% of stroke in the European Region. WHO recommends an intake of more than 400 g fruits and vegetables per person per day. The average intake in the United Kingdom in 1995 was reported to be 209 g. Mean consumption, however, is a poor measure of the intake distribution within a population. Data for the countries comprising the European Union before May 2004 show that people with higher incomes typically eat more fruits and vegetables than those with lower incomes (Joffe & Robertson, 2001).

Vegetable and fruit intake in selected countries in Eur-A,
latest available year

Country	Intake (mean g/day)
Spain (1994)	605
Slovenia (1997)	516
Greece (1997)	500
Italy (1994–1995)	479
France (1997)	437
Czech Republic (1999)	413
Portugal (1980)	399
Israel (1999–2001)	399
Belgium (1989)	360
Norway (1993–1994)	341
Austria (2003)	330
Denmark (2000–2001)	313
Croatia (1990)	299
Sweden (1989)	265
Finland (1997)	258
Germany (1990)	250
Netherlands (1997–1998)	228
Iceland (1990)	224
Ireland (1989)	220
United Kingdom (1986–1987)	209

Intake (mean g/day)

Sources: WHO Regional Office for Europe (2004b), Robertson et al. (2004) for data on Germany, Greece, Ireland and Spain, IFEW (2003) for data on Austria, Danish Institute of Food and Veterinary Research (2004) for data on Denmark and Israeli Center for Disease Control (2003) for data on Israel.

The 2002 Health Survey for England (Sproston & Primatesta, 2002) asked about fruit and vegetable consumption on the day before interview, which was assumed to be a typical day. The WHO recommendation was converted to five 80-g portions of fruit and vegetables a day, and the portions defined in everyday measures, such as tablespoons, cereal bowls and slices. The Survey found that females tended to eat more portions of fruit and vegetables than males and were more likely to eat five or more per day (18% and 15%, respectively). Fruit made up nearly half of children's total daily portions of fruit and vegetables, but vegetable consumption increased with age, so that young adults' consumption of fruit and vegetables was spread more evenly between the two food types.

Confirming the results of Joffe & Robertson (2001), the Survey showed a positive association between fruit and vegetable consumption and various measures of socioeconomic status. Consumption increased with household income. The survey also showed that young adults who smoked ate less fruit and vegetables than nonsmokers (including ex-smokers).

Physical inactivity

WHO and other international and national agencies encourage at least 30 minutes of physical activity each day, defined as any body movement that results in energy expenditure. Promoting physical activity is probably one of public health's most beneficial interventions, reducing the risk of several diseases and conditions, including CVD, non-insulin-dependent diabetes and obesity, and contributing to physical coordination, strength and mental well-being. Physical activity comprises more than sports – it is a cornerstone of a healthy lifestyle, integrated into the routines of everyday life. In Europe, more than 30% of adults do not meet the WHO recommendation of 30 minutes of physical activity daily (Racioppi et al., 2002).

A regular health survey in England in 1998, involving both urban and rural populations, found that 24% of men and 28% of women aged 16 and over reported taking no exercise (WHO, 2004b). In 2002, a survey in Great Britain found that 59% of adults had taken part in some sport, game or physical activity in

the four weeks prior to interview. Excluding people whose only activity was walking, 43% of adults reported activity in the four weeks prior to survey. The rates had fallen between 1996 and 2002: from 54% to 51% among men and from 38% to 36% among women (Office for National Statistics, 2004e).

The 1998 Scottish Health Survey (Shaw et al., 2000) found that 23% of men and 24% of women aged 16–74 reported no participation in physical activities. Of those who were active, 38% of men and 27% of women reported 30 minutes or more of activity on at least five days a week.

Selected causes of illness

Cancer incidence

The combination of death and illness due to cancer, represented as DALYs (Table 3), accounts for almost 15% of disease burden on men in the United Kingdom and 16% of that on women. Together, the indicators show that the burden of cancer to the population is mainly attributable to death, rather than long-term illness.

Cancer incidence in the United Kingdom increased steadily from 1990 until 1997. A large drop between 1997 and 1998 is likely an artefact of cancer registration practices, not a true indication of a lower rate.

Lung cancer is the most common cancer in the Region and the world. The most important risk factor is tobacco (Tyczynski et al., 2002).

In 2000, the estimated incidence of lung cancer among women in the United Kingdom was 70% higher than the Eur-A.

Estimated lung cancer incidence in the United Kingdom and Eur-A[a], 2000

Country	Males	Females
Croatia	82.5	11.8
Belgium	76.4	11.1
Czech Republic	68.9	12.7
Slovenia	64.4	11.1
Netherlands	62.0	17.5
Luxembourg	60.5	12.2
Italy	59.4	9.0
Greece	55.8	8.3
France	53.5	7.4
Spain	53.2	4.0
Eur-A average	50.7	12.8
Germany	50.2	11.4
Switzerland	48.5	11.6
United Kingdom	47.6	21.8
Denmark	46.8	27.7
Malta	44.5	5.3
Austria	42.1	12.0
Ireland	39.5	18.7
Finland	36.8	8.9
Norway	35.1	16.6
Portugal	33.9	5.5
Iceland	31.5	23.8
Sweden	21.4	12.1

Cases per 100 000 population

[a] Excluding Cyprus, Israel and San Marino.
Source: Tyczynski et al. (2002).

HIV

Increased trade and population movement within the European Region have facilitated the spread of infectious diseases. Surveillance of communicable diseases in western Europe remains incomplete, particularly testing for and reporting HIV. Data on newly diagnosed HIV infections and especially comparisons of rates in countries should be interpreted with caution (EuroHIV, 2003a,b).

In the United Kingdom, the number of new HIV infections reported per 100 000 population doubled between 1995 and 2002. By 2002, the rate was 1.6 times the average for Eur-A.

New registered cases of HIV, the United Kingdom and Eur-A[a],
1990 to latest available year
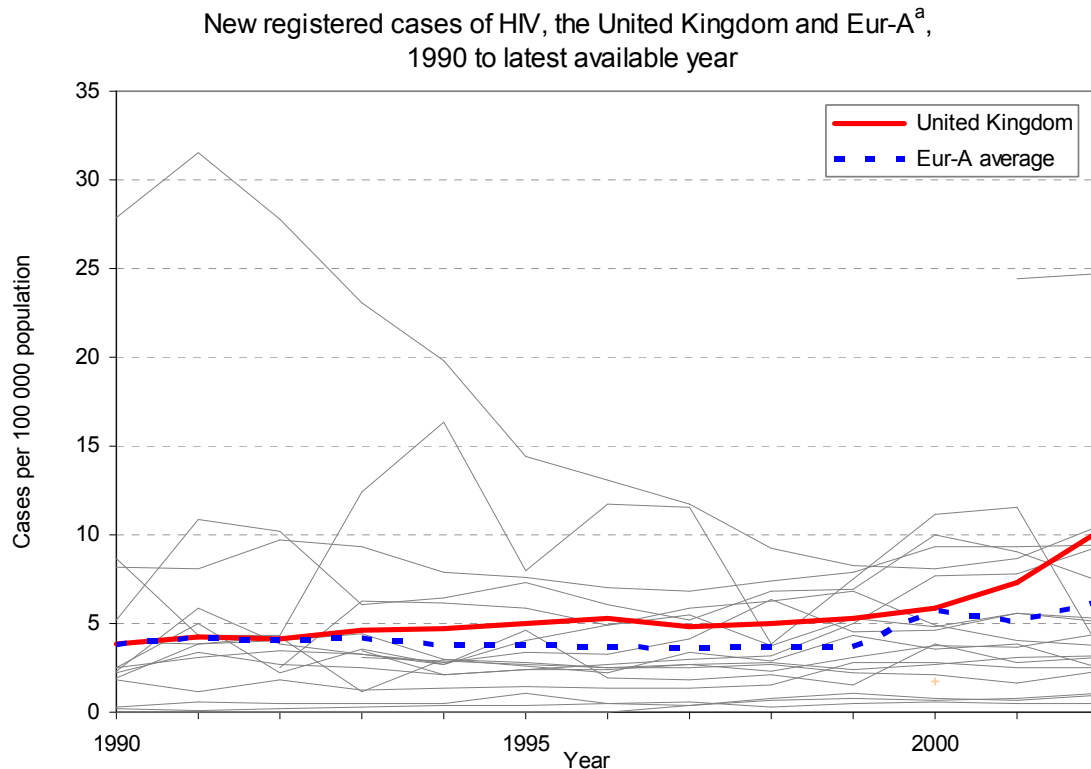
[a] Excluding Austria, Cyprus, France, Italy, the Netherlands and Spain.

From the start of the epidemic until the end of December 2003, 61 179 people in the United Kingdom were diagnosed with HIV. The annual incidence had been relatively low, but rising since the late 1980s. During 2002, the estimated overall prevalence of HIV infection jumped by 20% from that in 2001. The total of 5542 cases in 2002 was almost double that in 1998. New diagnoses are likely to keep increasing as testing is promoted in sexual health clinics and for high-risk groups. In addition, 30% of HIV infections in the United Kingdom are estimated to be undiagnosed.

The key factors driving these increases are thought to be a possible increase in transmission among men who have sex with men and from HIV-infected heterosexual male and female immigrants from sub-Saharan Africa. Three quarters of heterosexually acquired HIV infections diagnosed in the United Kingdom in 2002 were probably acquired in Africa. HIV prevalence in injecting drug users has remained low (below 1%) since the late 1980s (UNAIDS &WHO, 2004).

As a result of routine HIV testing as part of antenatal care, high proportions of infected pregnant women know their status before they give birth (around 80% in 2002) and accept interventions to reduce mother-to-child transmission.

Hepatitis C

Since the introduction of screening of blood and blood products for hepatitis C in the countries of the European Union before May 2004, transmission of the virus has fallen dramatically. Injecting drug users are now the group at greatest risk, accounting for up to 60–90% of new infections. Young and new injectors are at high risk of contracting the virus shortly after they begin injecting.

Wherever injecting drug use is likely to increase, new epidemics of hepatitis C are likely to emerge. Social exclusion is a factor in and a characteristic of the spread of infection (EMCDDA, 2004). Hepatitis C is predicted to have considerable long-term effects in terms of both health care spending and personal suffering.

In England and Wales, limited local testing in drug-treatment centres, needle-exchange locations and outreach facilities in 2001 found that 32–46% of injecting drug users were infected with hepatitis C. In

Scotland, data from public health laboratories in 1997 found hepatitis C in 40–68% of injecting drug users being tested for HIV (EMCDDA, 2003).

TB

Between 1995 and 2001, tuberculosis (TB) notification rates decreased overall in western Europe. Drug resistance remains relatively low in reporting countries, indicating that TB control is in general effective (EuroTB, 2003). Between 2001 and 2002, however, rates increased in Portugal and the United Kingdom. Higher rates are typically found in pockets of risk populations (such as immigrants and refugees from areas with high TB incidence) and among the indigenous poor, homeless people and prison inmates. Higher rates are also associated with HIV. In the United Kingdom, micro-epidemics have been reported in defined communities.

From 1995 to 2002, the incidence of TB increased by about 10% in the United Kingdom, while the average for Eur-A dropped by about 26%. Between 2001 and 2002, the rate in the United Kingdom jumped 14%, to be about 7% higher than the Eur-A average: 11.63 and 10.9 per 100 000 population, respectively.

TB incidence in the United Kingdom and Eur-A[a],
1980 to latest available year
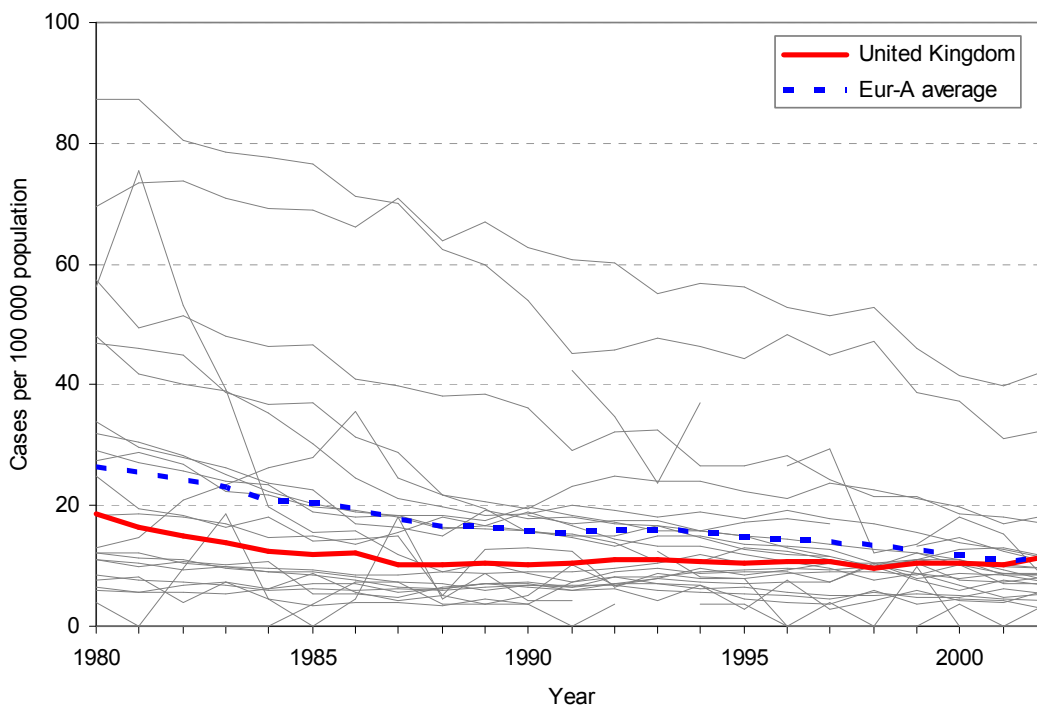
[a] Including Andorra and Monaco.

Self-reported health

People are usually well informed about their health status, the positive and negative effects of their behaviour on their health and their use of health care services. Yet their perceptions of their health can differ from what administrative and examination-based data show about levels of illness within populations. Thus, survey results based on self-reporting at the household level complement other data on health status and the use of services.

In the United Kingdom, 74% of adults rated their health as good or very good.

People who perceive their health as good or very good,
selected countries in Eur-A, 1997–2000

Country	Percentage
Ireland	85.8
Switzerland	82.9
Iceland	82.0
Germany	81.8
Norway	79.6
Belgium	78.2
Denmark	77.9
Netherlands	77.2
Sweden	74.7
United Kingdom	74.0
Austria	73.5
Eur-A average	72.9
France	69.3
Spain	68.4
Finland	66.0
Italy	56.2
Portugal	38.6
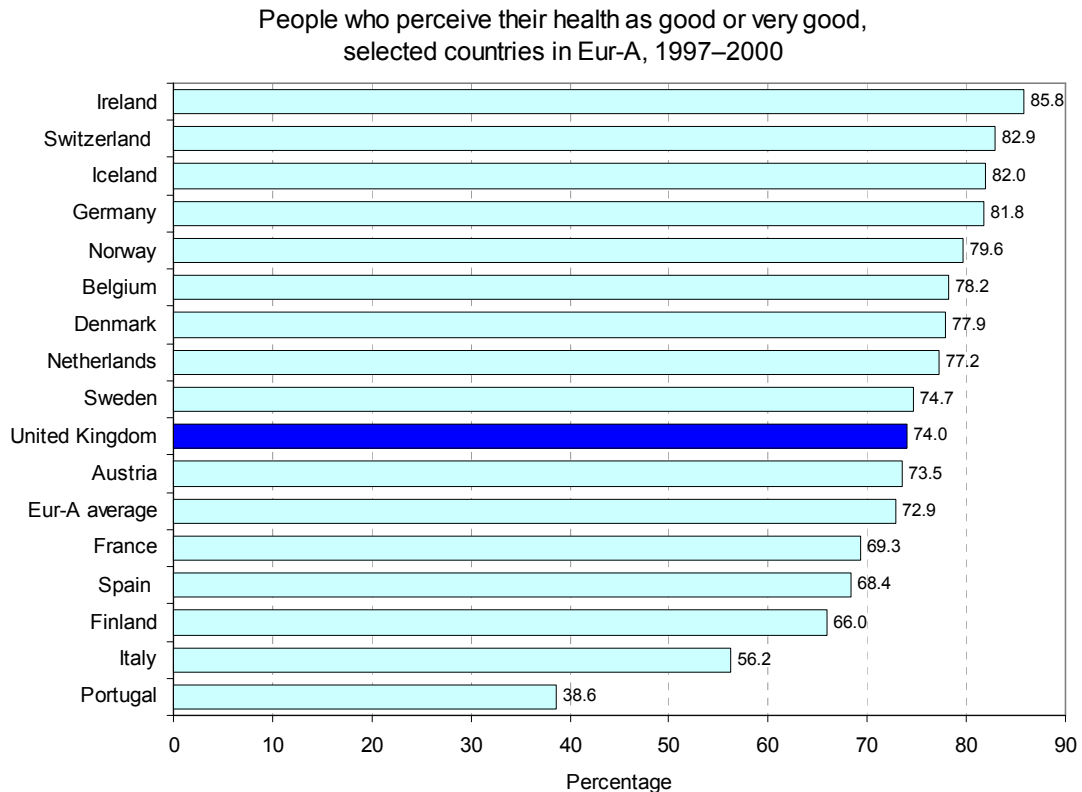
Sources: European Commission (2003) and Kasmel et al. (2004) for data on Finland.

In a 2001 census, nine in ten people in private households in England and Wales reported good or fairly good health. The age-standardized rates for all ages were similar for men and women, but reported health status varied substantially by occupation.

Among employed people, those in higher managerial and professional occupations reported the lowest rates of "not good" health. The corresponding rates for those in routine occupations and the unemployed were much higher: more than twice and three times as high, respectively. People who had never been employed reported the highest rate of "not good" health: six times the rate for those in the higher managerial and professional occupations.

In addition, age-standardized rates of good or fairly good health revealed considerable geographical clustering. The highest rates were found in counties in southern of England; the lowest rates were found in Wales, northern England and one area of London. (Office for National Statistics, 2004b).

Health system[1]

Organizational structure of the health system

The United Kingdom has devolved responsibility for health care to its constituent countries. They mainly fund health care through national taxation, deliver services through public providers and have devolved purchasing responsibilities to local bodies: primary care trusts (PCTs) in England, primary care partnerships in Northern Ireland, health boards in Scotland and local health boards (LHBs) in Wales.

Coverage is available to 100% of the population. All legal residents of the United Kingdom, residents of the European Economic Area and citizens of other countries with which the United Kingdom has reciprocal agreements are covered under the United Kingdom National Health Service (NHS). As such, the uptake of private medical insurance is quite low: 11.5% of the population in 2001.

Although NHS benefits are comprehensive, they are not explicitly defined. In England and Wales since 1999, the National Institute for Clinical Excellence (NICE) has given recommendations to the Secretary of State for Health and the Welsh Assembly Government as to whether particular services are both effective and cost-effective and should be made available to all or part of the population. The implementation of approved NICE guidance is mandatory, although early indications suggest that it has been variable.

Health care financing and expenditure

The NHS is mainly funded through general taxation: direct taxes, value-added tax and employee income contributions. Local taxation provides further funding for social services. Private funding can be broken down into out-of-pocket payments for prescription drugs, ophthalmic and dental services and private medical insurance premiums. In 2003, the Government announced that an extra 1% of income was to be levied as an earmarked tax through national health insurance. Services are mostly free at the point of use.

Total health expenditure in the United Kingdom has remained quite low relative to the Eur-A average: 7.7% and 9.0%, respectively, of gross domestic product (GDP) in 2002. Public sources were estimated to provide funds for 83% of total expenditure. Health care expenditure per capita was US$ 2160, below the Eur-A average of US$ 2348 (Annex. Total expenditure on health).

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[1] This section is based on publications of the European Observatory on Health Care Systems and Policies (1999, 2002a–c).

Total public and private expenditure on health as share of GDP
in selected countries in Eur-A, 2002

Country	Public expenditure	Private expenditure
Germany	8.6	2.3
Iceland	8.3	1.6
Sweden	7.9	1.3
France	7.4	2.3
Norway	7.4	1.3
Denmark	7.3	1.5
Czech Republic	6.8	0.6
Switzerland	6.5	4.7
Portugal	6.5	2.8
Belgium	6.5	2.6
Italy	6.4	2.1
United Kingdom	6.4	1.3
Israel	6.1	2.6
Ireland	5.5	1.8
Finland	5.5	1.8
Austria	5.4	2.3
Spain	5.4	2.2
Luxembourg	5.3	0.9
Greece	5.0	4.5

Percentage

Sources: OECD (2004b); data for Israel are 2001 estimates from WHO (2004c).

In England, budgets for health care are set every three years through negotiations between the Chancellor of the Exchequer and Department of Health. In the rest of the United Kingdom, the devolved administrations set budgets separately. LHBs and PCTs, covering populations of 50 000–250 000, are the main purchasers of health services. The central Government uses a weighted capitation formula to allocate funding to them.

General practitioners (GPs) are self employed. On 1 April 2004, remuneration of their services moved from a system mainly based on capitation and fixed allowances to one that combines capitation and quality points. With most of the population concentrated in urban areas, there are problems with access to and sustainability of services in remote and rural areas.

Hospitals receive activity-based and contract financing. Hospital staff are mainly salaried, but consultants are also permitted to earn money in the private sector.

Health care provision

In the United Kingdom, GPs in group practices (with an average of three per practice) provide primary care. To register with a GP, a patient must be a resident of the designated practice area. In England in 2002, a GP served about 1800 members of the local community. There are also a small number of NHS walk-in clinics. GPs act as gatekeepers in the system, and a referral is required to gain access to specialist services.

In 2002, the United Kingdom had 3.9 acute hospital beds per 1000 population (Annex. Selected health care resources). In 2004, 209 NHS trusts provided secondary care in the English NHS, and 23 mental health trusts provided specialist mental health services in hospitals and the community. There are about 240 private acute hospitals, accounting for less than 5% of total beds.

In 2001, there were 0.6 GPs per 1000 population, compared to an average of almost 1 per 1000 for Eur-A. Skilled staff are considered to be in short supply in the NHS. Accordingly, the Government set growth targets for NHS staff in England, to be met by 2004: for example, an additional 2000 GPs. Similarly, the Welsh Assembly Government set targets to increase the numbers of doctors, nurses and dentists in Wales.

The organizational structures for health service administration and delivery vary between United Kingdom countries. In England, for example, personnel with public health functions can be found in the central and regional departments of Health, the strategic health authorities and the PCTs. In Wales, a national public health service has been established to provide services and support to the LHBs, other NHS organizations and local authorities.

Developments and issues

In the United Kingdom, although difficult to measure, the funding system based on national taxation is indicated to be mildly progressive.

Improving the efficiency, responsiveness and equity of the system has recently become an important issue (Wanless D et al., 2004; Department of Health of the United Kingdom, 2004a). Through the Delivering the NHS Plan, patients in England will have wider choice of hospitals, although their choice of treatment will remain limited. In particular, from summer 2004, all patients having waited six months for surgery should benefit from the opportunity to move to another hospital or provider. Agreements have been made with the private sector to deliver treatment where necessary or even to send patients abroad. National service frameworks have been developed to ensure that a common approach to prevention, treatment and rehabilitation is adopted across the country, while the independent Healthcare Commission is responsible for monitoring the clinical and financial performance of NHS trusts, and determining whether NICE guidance is being implemented.

Further, initial legislation has been passed for NHS foundation trusts in England, and 20 trusts have already been granted foundation status, So-called foundation hospitals remain within the NHS, but have greater management and financial responsibilities and freedoms. Such measures have been introduced to reach particular aims, including reducing waiting lists, improving the quality of care provision, increasing funding and staff numbers, encouraging innovation and extending patient choice.

In addition, a recent review of public expenditure on health recommended greater investment in health promotion and public health interventions. Subsequently, a consultation paper on the future of public health proposed banning smoking in most public places (including restaurants and pubs serving food) and a new so-called traffic-light system for labelling food according to its nutritional quality.

Devolution is increasingly leading to reform taking quite different directions across the United Kingdom. In Scotland, major differences include the funding of personal as well as nursing care for people in long-term care, and the decision not only to reject foundation trusts but also to abolish hospital trusts, reorganize primary care and develop community health partnerships. Northern Ireland, in contrast to the rest of the United Kingdom, has always had integrated health and social care services.

In Wales, the Welsh Assembly Government has reformed the NHS by setting up LHBs to plan and commission services to meet most health needs, while an all-Wales body commissions specialist hospital services. Preventing ill health and reducing health inequalities are increasingly emphasized. Developments include adjusting the way resources are allocated to the NHS to take account of the needs of disadvantaged areas, and creating an Inequalities in Health Fund, to help people to reduce their risks of heart disease and to address inequities in access to health services. The Assembly Government has also announced the phased elimination of co-payments for prescriptions for all, regardless of income, over a five-year period beginning in 2004.

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Annexes

Annex. Age pyramid

Age pyramid for the United Kingdom
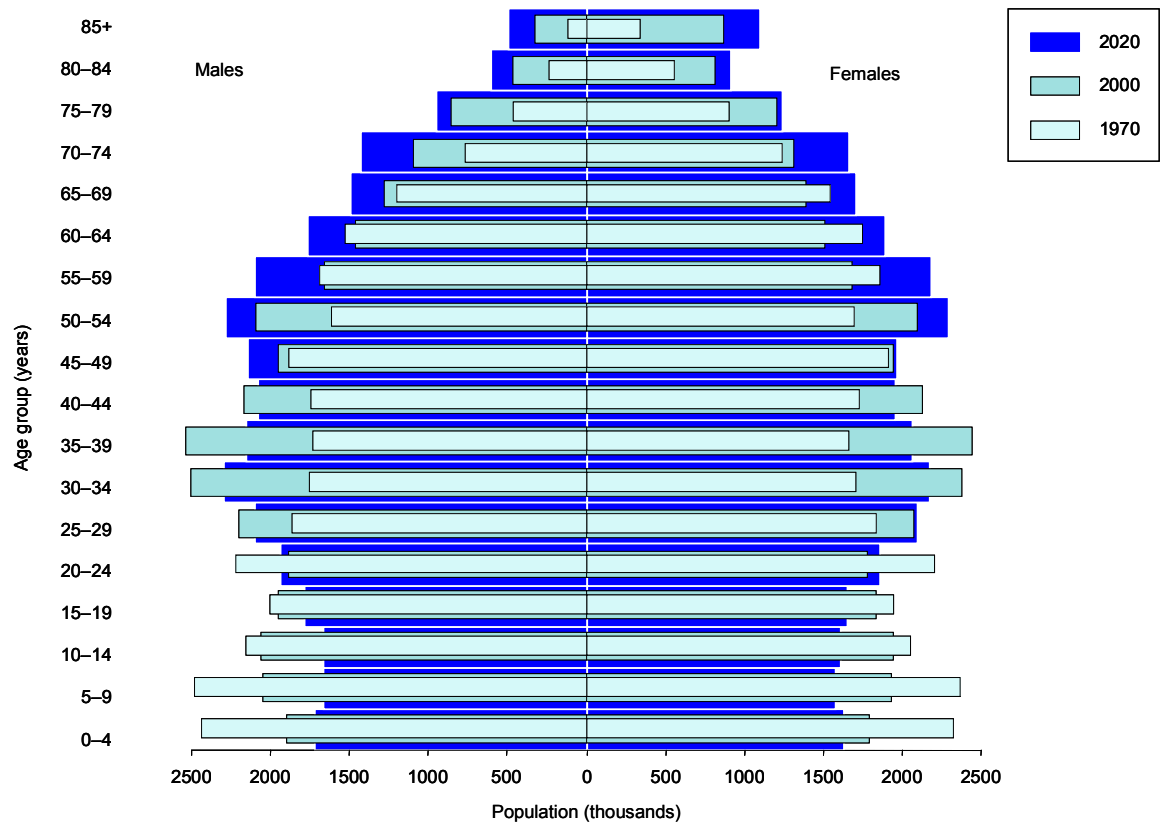
Sources: WHO Regional Office for Europe (2004c) and United Nations (2002).

Annex. Selected mortality

Selected mortality in the United Kingdom compared with Eur-A averages

Condition	SDR per 100 000		Excess mortality in the United Kingdom (%)	Total deaths in the United Kingdom (%)	Total deaths in Eur-A (%)
	The United Kingdom (2002)	Eur-A average (2001)			
Selected noncommunicable conditions	571.1	519.5	9.9	84.3	79.9
Cardiovascular diseases	250.7	246.3	1.8	37.0	37.9
Ischaemic heart disease	128.5	97.3	32.1	19.0	15.0
Cerebrovascular disease	66.9	62.0	7.9	9.9	9.5
Diseases of pulmonary circulation and other heart disease	29.0	57.0	− 49.1	4.3	8.8
Malignant neoplasms	189.9	181.8	4.5	28.0	28.0
Trachea/bronchus/lung	42.0	37.0	13.7	6.2	5.7
Female breast	30.1	27.1	11.1	4.4	4.2
Colon/rectal/anal	19.1	20.7	− 7.5	2.8	3.2
Prostate	27.0	25.0	8.0	4.0	3.8
Respiratory diseases	79.8	47.7	67.1	11.8	7.3
Chronic lower respiratory diseases	32.3	20.0	61.6	4.8	3.1
Pneumonia	34.3	16.5	108.6	5.1	2.5
Digestive diseases	33.5	30.7	8.9	4.9	4.7
Chronic liver disease and cirrhosis	10.4	12.8	− 18.3	1.5	2.0
Neuropsychiatric disorders	17.2	13.0	32.3	2.5	2.0
					0.0
Selected communicable conditions	6.1	8.1	− 25.0	0.9	1.2
HIV/AIDS	0.4	0.9	− 56.2	0.1	0.1
External causes	27.3	39.5	− 30.8	4.0	6.1
Selected unintentional causes	9.0	16.1	− 44.1	1.3	2.5
Motor vehicle traffic injuries	5.3	10.0	− 46.8	0.8	1.5
Falls	3.7	6.1	− 39.7	0.5	0.9
Selected intentional causes	7.5	11.4	− 34.3	1.1	1.8
Self-inflicted (suicide)	6.6	10.5	− 36.6	1.0	1.6
Violence (homicide)	0.9	1.0	− 9.4	0.1	0.1
Ill-defined conditions	13.1	21.3	− 38.4	1.9	3.3
All causes	677.5	650.1	4.2	100.0	100.0

Annex. Mortality data

Mortality data

Table 1. Selected mortality data for the group aged 1–14 years by sex in the United Kingdom and Eur-A:
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	The United Kingdom (2002)		Eur-A (2001)			
		Rate	Change (%)	Average	Change (%)	Minimum	Maximum
All causes	Both	15.8	– 16.9	17.0	– 20.4	12.9	28.2
	M	17.8	– 16.8	19.2	– 20.3	12.6	32.2
	F	13.8	– 17.0	14.8	– 20.4	4.9	24.1
Cardiovascular diseases	M	0.8	– 27.6	0.9	– 26.0		1.8
	F	0.7	– 34.3	1.0	– 21.8		1.6
Ischaemic heart disease	M	0.0			– 75.0		0.6
	F	0.0			– 66.7		0.2
Cerebrovascular disease	M	0.2	– 38.2	0.2	– 44.4		0.4
	F	0.2	– 28.0	0.2	– 39.4		0.7
Malignant neoplasms	M	3.6	2.3	3.3	– 15.4		5.1
	F	2.7	4.7	2.7	– 10.4		4.9
Lung cancer	M	0.0			– 80.0		0.2
	F	0.0					0.3
Breast cancer	F	0.0			– 100.0		0.1
Respiratory diseases	M	1.1	– 14.3	0.8	– 13.7		3.0
	F	1.1	– 19.7	0.7	– 11.9		2.4
Digestive diseases	M	0.4	– 4.5	0.3	– 21.6		0.7
	F	0.6	22.0	0.2	– 25.0		2.6
External causes	M	4.2	– 38.7	6.4	– 30.7	3.5	20.3
	F	2.7	– 20.1	4.0	– 24.3		7.0
Motor vehicle traffic injuries	M	1.6	– 42.4	2.7	– 30.3		8.0
	F	0.9	– 27.6	1.8	– 29.3		4.1
Suicide	M	0.1	– 36.4	0.4	– 11.9		0.7
	F	0.1		0.1	0.0		0.6

NA = not applicable. Blank = rate < 0.1

Table 2. Selected mortality data for the group aged 15–24 years by sex in the United Kingdom and Eur-A:
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	The United Kingdom (2002)		Eur-A (2001)			
		Rate	Change (%)	Average	Change (%)	Minimum	Maximum
All causes	All	47.2	– 10.6	53.1	– 13.2	37.4	69.7
	M	67.5	– 11.0	77.8	– 13.0	59.4	110.2
	F	26.6	– 6.9	27.7	– 13.2	13.9	34.8
Cardiovascular diseases	M	3.1	– 13.6	3.3	– 12.1		5.7
	F	2.4	7.1	1.8	– 13.1		2.9
Ischaemic heart disease	M	0.0		0.3	– 15.0		1.6
	F	0.3		0.1	– 7.7		0.7
Cerebrovascular disease	M	0.7	– 15.6	0.7	– 13.6		1.4
	F	0.5	– 5.5	0.4	– 24.1		1.4
Malignant neoplasms	M	6.1	11.2	5.4	– 7.9		15.5
	F	3.8	– 9.5	3.7	– 7.9		7.0
Lung cancer	M	0.0		0.1	– 50.0		0.3
	F	0.1		0.0	– 33.3		0.3
Breast cancer	F	0.0		0.1	– 16.7		0.3
Respiratory diseases	M	1.7	– 19.5	1.1	– 25.7		4.5
	F	1.2	– 0.8	0.8	– 18.8		2.0
Digestive diseases	M	0.8	27.4	0.5	– 28.8		1.2
	F	0.5	26.8	0.3	– 30.4		1.1
External causes	M	40.1	– 16.0	54.9	– 12.0	33.0	96.5
	F	10.3	– 16.7	14.3	– 14.8	6.9	23.5
Motor vehicle traffic injuries	M	17.1	– 5.5	30.2	– 9.3	14.9	71.1
	F	4.3	– 18.0	8.1	– 10.7	2.6	14.3
Suicide	M	8.3	– 22.1	11.2	– 11.5		36.7
	F	2.4	9.5	2.5	– 24.3		7.5

NA = not applicable. Blank = rate < 0.1

Mortality data contd

Table 3. Selected mortality data for the group aged 25–64 years by sex in the United Kingdom and Eur-A:
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	The United Kingdom (2002)		Eur-A (2001)			
		Rate	Change (%)	Average	Change (%)	Minimum	Maximum
All causes	All	310.1	− 13.0	315.4	− 13.1	218.8	449.7
	M	386.3	− 13.3	425.4	− 14.3	276.0	661.7
	F	235.8	− 12.5	208.4	− 11.0	128.0	322.5
Cardiovascular diseases	M	122.5	− 27.9	110.6	− 20.8	72.2	225.0
	F	47.7	− 25.5	38.2	− 21.3	23.4	74.7
Ischaemic heart disease	M	82.5	− 33.1	59.8	− 24.6	35.2	108.6
	F	21.6	− 35.1	13.6	− 28.0	5.4	28.6
Cerebrovascular disease	M	17.1	− 18.5	17.4	− 22.0	7.5	56.6
	F	13.4	− 18.3	10.5	− 20.2	5.2	27.0
Malignant neoplasms	M	124.8	− 11.7	148.8	− 9.8	91.0	217.2
	F	114.6	− 13.6	102.4	− 7.7	76.1	155.2
Lung cancer	M	32.0	− 19.6	43.9	− 12.8	18.5	71.0
	F	19.3	− 3.2	13.3	11.7	6.9	32.8
Breast cancer	F	29.6	− 21.5	27.5	− 14.3	14.7	37.2
Respiratory diseases	M	22.0	− 25.8	15.8	− 19.2	8.5	29.7
	F	15.8	− 19.2	7.9	− 12.3	3.7	22.6
Digestive diseases	M	31.8	50.5	31.8	− 9.6	3.1	67.0
	F	17.9	34.4	13.4	− 7.5	4.2	26.2
External causes	M	43.8	− 1.4	59.9	− 10.5	28.2	120.7
	F	13.6	− 1.9	17.8	− 10.6		33.1
Motor vehicle traffic injuries	M	8.7	11.2	15.8	− 7.8	6.5	34.0
	F	2.0	− 13.3	4.3	− 14.4		7.4
Suicide	M	15.6	− 1.1	21.2	− 9.0	6.6	56.4
	F	4.1	3.0	6.8	− 11.1		15.8

NA = not applicable. Blank = rate < 0.1

Table 4. Selected mortality data for the group aged 65+ years by sex in the United Kingdom and Eur-A:
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	The United Kingdom (2002)		Eur-A (2001)			
		Rate	Change (%)	Average	Change (%)	Minimum	Maximum
All causes	All	4498.1	− 11.6	4199.5	− 11.5	3714.4	6010.0
	M	5431.0	− 15.9	5328.5	− 13.2	4658.1	7580.8
	F	3852.1	− 8.7	3460.2	− 11.5	2937.7	5088.6
Cardiovascular diseases	M	2277.9	− 21.5	2232.9	− 23.4	1614.4	4272.2
	F	1568.9	− 17.8	1613.4	− 21.7	1027.5	3314.3
Ischaemic heart disease	M	1255.2	− 28.5	948.2	− 20.3	517.5	1702.7
	F	686.4	− 27.4	539.5	− 17.4	244.7	1084.7
Cerebrovascular disease	M	555.4	− 8.5	536.2	− 35.9	324.8	1302.3
	F	510.2	− 8.9	457.0	− 32.6	170.4	1018.5
Malignant neoplasms	M	1488.5	− 9.5	1482.9	− 12.1	1175.1	1900.6
	F	907.7	− 2.6	749.8	− 9.4	589.1	1088.5
Lung cancer	M	374.0	− 21.1	371.8	− 22.0	196.0	615.4
	F	178.3	− 2.4	81.7	15.6	13.8	213.2
Breast cancer	F	131.3	− 9.7	113.9	− 10.1	83.3	164.1
Respiratory diseases	M	80.6	− 2.0	545.9	− 13.6	371.8	1115.6
	F	62.6	4.2	266.5	− 13.9	157.9	716.3
Digestive diseases	M	8.7	− 28.1	205.0	− 10.5	117.8	342.9
	F	4.9	− 35.7	143.3	− 20.3	77.8	196.0
External causes	M	9.4	− 28.7	152.6	2.0	80.6	282.8
	F	3.5	− 25.9	91.0	0.7	41.3	157.3
Motor vehicle traffic injuries	M	784.7	− 31.8	20.4	− 15.3	8.7	46.0
	F	536.9	− 24.5	7.9	5.4	0.0	15.5
Suicide	M	193.8	7.7	34.3	− 13.5	8.8	86.1
	F	171.7	12.9	9.9	− 17.6	1.1	23.6

Annex. Total expenditure on health per capita

**Total public and private expenditure on
health per capita,
in selected countries in Eur-A, 2002**

Country	Expenditure (US$ purchasing power parity)
Austria	2220
Belgium	2515
Czech Republic	1118
Denmark	2580
Finland	1943
France	2736
Germany	2817
Greece	1814
Iceland	2807
Ireland	2367
Israel	1622
Italy	2166
Luxembourg	3065
Netherlands	2643
Norway	3083
Portugal	1702
Spain	1646
Sweden	2517
Switzerland	3445
United Kingdom	2160
Eur-A average	2348

Sources: OECD (2004b) and WHO Regional Office for
Europe (2004c) for 2001 data on Israel.

Annex. Selected health care resources

Selected health care resources per 100 000 population in Eur-A, latest available year

Eur-A	Nurses		Physicians		Acute hospital beds	
	Number	Year	Number	Year	Number	Year
Andorra	316.1	2002	304.2	2002	283.2	2002
Austria	587.4	2001	332.8	2002	609.5	2002
Belgium	1075.1	1996	447.8	2002	582.9	2001
Croatia	501.6	2002	238.3	2002	367.3	2002
Cyprus	422.5	2001	262.3	2001	406.6	2001
Czech Republic	971.1	2002	350.5	2002	631.3	2002
Denmark	967.1	2002	364.6	2002	340.2	2001
Finland	2166.3	2002	316.2	2002	229.9	2002
France	688.6	2002	333.0	2002	396.7	2001
Germany	973.1	2001	335.6	2002	627.0	2001
Greece	256.5	1992	453.3	2001	397.1	2000
Iceland	898.2	2002	363.6	2002	368.2	1996
Ireland	1676.2	2000	238.3	2001	299.5	2002
Israel	598.4	2002	371.3	2002	218.0	2002
Italy	296.2	1989	612.1	2001	397.9	2001
Luxembourg	779.3	2002	259.3	2002	558.7	2002
Malta	551.1	2002	267.2	2002	348.8	2002
Monaco	1621.4	1995	664.3	1995	1553.6	1995
Netherlands	1328.2	2001	314.9	2002	307.4	2001
Norway	2055.7	2001	364.5	2002	308.9	2001
Portugal	384.0	2001	322.9	2001	330.8	1998
San Marino	507.7	1990	251.7	1990	–	–
Slovenia	717.9	2002	224.2	2002	414.3	2002
Spain	367.2	2000	324.3	2000	296.4	1997
Sweden	975.1	2000	304.1	2000	228.3	2002
Switzerland	830.0	2000	361.6	2002	398.3	2002
United Kingdom	497.2	1989	210.0	2002	390.0	2002
Eur-A average	819.8	2001	354.1	2002	409.6	2001

Sources : WHO Regional Office for Europe (2004c) and OECD (2004b) for data on physicians and acute hospital beds for the United Kingdom.

Technical notes

Calculation of averages

In general, the average annual or ten-year percentage changes have been estimated using linear regression. This gives a clearer indication of the underlying changes than estimates based on the more straightforward percentage change between two fixed points over a period.

To smooth out fluctuations in annual rates caused by small numbers, three-year averages have been used, as appropriate. For example, maternal mortality, usually a small number, has three-year moving averages calculated for all countries.

Data sources

To make the comparisons as valid as possible, data for each indicator have, as a rule, been taken from one common international source or from the Statistical Office of the European Communities (EUROSTAT) to ensure that they have been harmonized in a reasonably consistent way. Unless otherwise noted, the source of data for figures and tables is the January 2004 version of the WHO Regional Office for Europe's European health for all database.

Disease coding

Case ascertainment, recording and classification practices (using the ninth and tenth revisions of the International Statistical Classification of Diseases and Related Health Problems: ICD9 and ICD10, respectively), along with culture and language, can influence data and therefore comparability across countries.

Healthy life expectancy (HALE) and disability-adjusted-life-years (DALYs)

HALE and DALYs are summary measures of population health that combine information on mortality and non-fatal health outcomes to represent population health in a single number. They complement mortality indicators by estimating the relative contributions of different causes to overall loss of health in populations.

DALYs are based on cause-of-death information for each WHO region and on regional assessments of the epidemiology of major disabling conditions. The regional estimates were disaggregated to Member State level for the highlights reports.

National estimates of HALE are based on the life tables for each member state, population representative sample surveys assessing physical and cognitive disability and general health status, and on detailed information on the epidemiology of major disabling conditions in each country.

More explanation is provided in the statistical annex and explanatory notes of *The world health report 2003*.[1]

Household surveys

Household surveys are currently the only source of evidence of health status at the individual level. The information generated is subjective and self reported. It complements the official aggregated statistics on death rates, life expectancy and morbidity. Tools are available for both designing the surveys and analytically estimating health, adjusted for differences in cultural norms and expectations of health, so that survey results become comparable across populations and groups.

Limitations of national-level data

National-level averages, particularly when they indicate relatively good positions or trends in health status, as is the case in most developed countries, hide pockets of problems. Unless the health status of a small population is so dramatically different from the norm that it influences a national indicator, health risks and poorer health outcomes for small groups will only become evident through subnational data.

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[1] *The world health report 2003 – Shaping the future.* Geneva, World Health Organization, 2003 (http://www.who.int/whr/2003/en/, accessed 25 May 2004).

Ranking

A special case of comparison gives each country a rank order. Although useful as a summary measure, ranking can be misleading and should be interpreted with caution, especially if used alone, as the rank is sensitive to small differences in the value of an indicator. Also, when used to assess trends (as in the table at the start of the section on health status), ranking can hide important absolute changes in the level of an individual country. Graphs have usually been used to show time trends from 1970 onwards. These graphs present the trends for all the reference countries and for the EU-15, as appropriate. Only the country in focus and the appropriate group average are highlighted, and identified in the legend. This enables the country's trends to be followed in relation to those of all the reference countries, and performance in relation to observable clusters and/or the main trend or average to be recognized more easily.

Reference groups for comparison

When possible, international comparisons are used as one means of assessing a country's comparative strengths and weaknesses and to provide a summary assessment of what has been achieved so far and what could be improved in the future. Differences between countries and average values allow the formulation of hypotheses of causation or imply links or remedies that encourage further investigation.

The country groups used for comparison are called reference groups and comprise:

- countries with similar health and socioeconomic trends or development; and/or

- geopolitical groups such as the European Union (EU), the newly independent states or the central Asian republics.

The fifteen-member EU (EU-15) is the reference group comprising Austria, Belgium, Denmark, Germany, Greece, Finland, France, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

Comparisons should preferably refer to the same point in time, but the countries' latest available data are not all for the same year. This should be kept in mind, as a country's position may change when more up-to-date data become available.

Glossary

Causes of death	*ICD-10 code*
Cerebrovascular diseases	I60–I69
Chronic liver disease and cirrhosis	K70, K73, K74, K76
Chronic obstructive pulmonary disease	J40–J47
Colon/rectal/anal cancer	C18–C21
Diseases of pulmonary circulation and other heart disease	I26–I51
Falls	W00–W19
Female breast cancer	C50
Ischaemic heart disease	I20–I25
Pneumonia	J12–J18
Prostate cancer	C61
Neuropsychiatric disorders	F00–99, G00–99, H00–95
Road traffic injuries	V02–V04, V09, V12–V14, V19–V79, V82–V87, V89
Self-inflicted (suicide)	X60–X84
Trachea/bronchus/lung cancer	C33–C34
Violence	X85–Y09

Technical terminology	
Disability-adjusted life-year (DALY)	The DALY combines in one measure the time lived with disability and the time lost owing to premature mortality. One DALY can be thought of as one lost year of healthy life.
GINI index	The GINI index measures inequality over the entire distribution of income or consumption. A value of 0 represents perfect equality; a value of 100, perfect inequality. Low levels in the WHO European Region range from 23 to 25; high levels range from 35 to 36[1].
Healthy life expectancy (HALE)	HALE summarizes total life expectancy into equivalent years of full health by taking account of years lived in less than full health due to diseases and injuries.
Income poverty line (50% of median income)	The percentage of the population living below a specified poverty line: in this case, with less than 50% of median income.
Life expectancy at birth	The average number of years a newborn infant would live if prevailing patterns of mortality at the time of birth were to continue throughout the child's life.
Natural population growth	The birth rate less the death rate.
Neuropsychiatric conditions	Mental, neurological and substance-use disorders.
Population growth	(The birth rate less the death rate) + (immigration less emigration).
Standardized death rate (SDR)	The age-standardized death rate calculated using the direct method: that is, it represents what the crude rate would have been if the population had the same age distribution as the standard European population.

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[1] WHO Regional Office for Europe (2002). *The European health report 2002.* Copenhagen, WHO Regional Office for Europe:156 (http://www.euro.who.int/europeanhealthreport, accessed 28 May 2004).