Health at a Glance 2007

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Foreword

This latest edition of Health at a Glance *illustrates the progress that has been made in measuring the performance of health systems since the first-ever meeting of OECD Health Ministers in May 2004. At that time, Health Ministers gave a clear mandate for the OECD to work with national administrations to improve the evidence base for comparing health system performance by: 1) ensuring that* OECD Health Data *would be timely and accurate; 2) continuing the implementation of health accounts in order to improve the availability and comparability of health expenditure and financing data; and 3) developing indicators of quality of care in collaboration with national experts. Meaningful progress has been achieved in all of these areas since 2004, as reflected in the broader range of indicators of inputs, outputs and outcomes of health systems presented in this publication.*

The production of Health at a Glance *would not have been possible without the contribution of OECD Health Data National Correspondents, Health Accounts Experts, and experts involved in the Health Care Quality Indicators Project in the 30 OECD countries. The OECD gratefully acknowledges their effort to supply most of the data and qualitative information contained in this publication. The OECD also acknowledges the contribution of other international organisations, especially the World Health Organisation and Eurostat, for sharing some of the data presented in this report.*

This publication was prepared by a team from the OECD Health Division under the co-ordination of Gaetan Lafortune. Chapter 1 was prepared by David Morgan; Chapter 2 by Gaetan Lafortune and Michael de Looper (from the Australian Institute of Health and Welfare); Chapter 3 by Franco Sassi; Chapter 4 by Jeremy Hurst, Francesca Colombo, Rie Fujisawa, Maria Hofmarcher, Pierre Moïse, Valérie Paris and Gaëlle Balestat; Chapter 5 by David Morgan and Sandra Hopkins; and Chapter 6 by Sandra Garcia-Armesto, Niek Klazinga and Soeren Mattke (from RAND). The charts and tables in the first five chapters were prepared by Gaëlle Balestat, Caroline Berchet and David Morgan, while the charts and tables for Chapter 6 were prepared by Maria Luisa Gil Lapetra and Lihan Wei. This publication benefited from many comments and suggestions by Elizabeth Docteur and Peter Scherer.

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Introduction

Health at a Glance 2007 allows readers to compare health systems and their performance across a number of key dimensions, using a core set of indicators of health and health systems that were selected for their policy relevance as well as on the basis of the availability and comparability of data.

The OECD has long been an international leader in the development of tools and collection of data for assessing the performance of health systems. Over the past 15 years, *OECD Health Data* has served as the most authoritative source of comparable statistics on health and health systems in OECD countries. All the data and meta-data presented in this publication, with the exception of the new chapter on health care quality indicators, are extracted from *OECD Health Data 2007*.

Policy context

Health expenditure accounted for about 4% of GDP when the OECD was founded in 1960, but the average across OECD countries is now 9%, and it is close to or above 11% in several large national economies. The health sector of national economies has grown dramatically in importance over time, yet great cross-country variation persists, and not only in spending.

Although health systems differ widely in their design, in the inputs they use and the outcomes they attain, policy makers in all OECD countries share the common overall goal of achieving high-performing health systems (OECD, 2004a). These policy objectives include:

- improving population health status and health outcomes of medical interventions;
- fostering adequate and equitable access to care;
- increasing health-system responsiveness;
- increasing the efficiency of health systems; and
- ensuring sustainable costs and financing.

Health at a Glance 2007 provides information on how health systems are performing with respect to several of these policy objectives as well as some of the contextual information necessary to understand cross-country differences and changes in performance over time. Although gaps persist in information on health systems and in the technical ability to assess and compare performance across a range of dimensions, the OECD is working with data and performance measurement experts in its member states to fill these gaps. Notably, this 2007 edition of *Health at a Glance* includes, for the first time, a chapter on health care quality, developed in response to growing policy interest in assessing, comparing and improving the quality of care provided to patients, thereby ensuring good value for money spent on health.

Structure of the publication

Health at a Glance 2007 is organised as follows:

Chapter 1 provides some indicators of the demographic and economic context within which health systems operate in different OECD countries.

Chapter 2 on *Health Status* highlights evidence of large variations across countries in life expectancy and other measures of population health status.

Chapter 3 on *Non-medical Determinants of Health* focuses on selected risk factors related to modifiable lifestyles and behaviours.

Chapter 4 on *Health Care Resources and Utilisation* compares the supply of health care providers and the number of new medical and nursing graduates, in a context of growing concerns that current or future shortages of health professionals may impede access to care. It also presents indicators providing some partial measures of efficiency in health service delivery, such as the annual number of consultations per doctor, average length of stays in hospitals for different conditions, and the extent to which high-volume procedures such as cataract surgeries are now performed without an overnight stay in hospitals in different countries.

Chapter 5 on *Health Expenditure and Financing* assesses how much OECD countries spend on health overall and for different types of health services and goods, as well as how these health services and goods are paid for in different countries (*i.e.*, the mix between public funding, private health insurance where it exists, and out-of-pocket payments by patients). It also includes new information on the extent to which populations benefit from health coverage (publicly financed and private insurance), an important determinant of access to care and financial protection.

Chapter 6 on *Quality of Care* presents a first set of indicators of quality of care. Reflecting progress made in the development of indicators for use in making cross-country comparisons, it focuses on quality with respect to acute care, cancer care, care related to chronic diseases and care related to communicable diseases. This new chapter includes a number of outcomes measures such as survival rates following heart attack, stroke and cancer.

Presentation of indicators

Text and charts

Each of the topics covered in the different chapters of this publication is presented over two pages. The first provides a brief commentary highlighting the key findings conveyed by the data, defines indicators and discloses any significant national variations from that definition which might affect data comparability. On the facing page is a set of charts. These charts typically show current levels of the indicator and, where possible, trends over time. In some cases, an additional chart relating the indicator to another variable is included. Where an OECD average is included in a chart, it is the unweighted average of the countries presented, unless otherwise specified in the accompanying notes.

Tables

Additional data are presented in the statistical annex (Annex A) at the end of this publication. Where data for individual countries are not available for the years selected, the tables present the most recent data available, normally up to the previous or following three years.

The tables contain up to two summary statistics. The **consistent average** refers to the unweighted average of only those countries for which data are available over all the considered time periods, in order to present information for a consistent group of countries over time. Countries omitted from the average (due to data gaps) are listed under the table. In addition to the consistent average over time, the **latest average** is presented in most cases. This latest average relates to the average for the latest year available only, for as many countries as possible.

Unless otherwise specified, expenditure data are presented in US dollars adjusted for differences in the purchasing power of national currency in order to remove the effect of differences in price levels between countries. For growth rates, nominal expenditures are deflated using price indices. In the absence of widely available and reliable health price indices, an economy-wide (GDP) price index is used in this publication (see Annex B for additional information regarding the use of purchasing power parities and real growth rates).

Missing, not applicable or not available data are noted in the table by ". ." and series breaks are marked by a "|" between columns. Any further methodological notes are included directly under the relevant table.

Data limitations

Limitations in data comparability are indicated both in the text (in the box related to "Definition and deviations") as well as in footnotes to charts and tables. Readers should exercise particular caution when considering time trends for Germany. Data for Germany up to 1990 generally refer to West Germany and data for subsequent years refer to unified Germany.

Readers interested in using the data presented in this publication for further analysis and research are encouraged to consult the full documentation of definitions, sources and methods contained in *OECD Health Data 2007*. *OECD Health Data 2007* can be ordered on line at SourceOECD (*www.sourceOECD.org*) or through the OECD's online bookshop (*www.oecd.org/bookshop*).

Regarding the new chapter on health care quality indicators, more information on definitions, sources and methods is available at *www.oecd.org/health/hcqi*.

Population figures

The population figures presented in Chapter 1 and used to calculate rates per capita throughout this publication come mainly from the OECD Labour Force Statistics Database (as of May 2007), and refer to mid-year estimates. They are not necessarily exactly the same as the latest population figures released by national statistical offices of OECD member countries.

Note that for some countries such as France, the United Kingdom and the United States which have overseas colonies, protectorates and territories, these populations are generally excluded. The calculation of GDP per capita and other economic measures may, however, be based on a different population in these countries.

Country codes (ISO codes)

Australia	AUS	Hungary	HUN	Norway	NOR
Austria	AUT	Iceland	ISL	Poland	POL
Belgium	BEL	Ireland	IRL	Portugal	PRT
Canada	CAN	Italy	ITA	Slovak Republic	SVK
Czech Republic	CZE	Japan	JPN	Spain	ESP
Denmark	DNK	Korea	KOR	Sweden	SWE
Finland	FIN	Luxembourg	LUX	Switzerland	CHE
France	FRA	Mexico	MEX	Turkey	TUR
Germany	DEU	Netherlands	NLD	United Kingdom	GBR
Greece	GRC	New Zealand	NZL	United States	USA

1. DEMOGRAPHIC AND ECONOMIC CONTEXT

1.1. TOTAL POPULATION AND POPULATION STRUCTURE

The growth and composition of a country's population can have significant impacts on both government and individual spending on health and long-term care now and in future years. The natural increase in population (births minus deaths) has generally slowed since the 1960s across the member countries of the OECD, leading to a rise in the average age of the population. The changes in population have also been affected by migration.

By 2005, OECD countries accounted for around 18% of the world's total population of 6.5 billion. Within the OECD, the United States remained the most populous country approaching the 300 million mark. Japan and Mexico are the only other OECD countries with more than 100 million inhabitants. At the other end of the scale, Iceland and Luxembourg each have less than half a million population (Chart 1.1.1 and Tables A.1.1a and A.1.1b).

Since 1960, the total population of OECD countries has grown by more than 50% with the most pronounced growth occurring between 1960 and 1980, due to relatively high fertility rates in a number of countries and rapidly falling mortality rates. Since then, population growth has slowed significantly in many OECD countries, as fertility rates declined (see Indicator 1.2 "Fertility rates") and migration patterns have changed. Between 1990 and 2005, population growth rates for all OECD countries averaged a little over 0.6% per year, half the rate observed in the 1960s and 1970s (Chart 1.1.2). However, within this average, there have been large variations. Mexico and Turkey have continued to see the highest population growth, albeit significantly lower than the growth experienced in the 1970s. In Australia, Canada, New Zealand and the United States, population growth has remained relatively strong, at just over 1.0% per year, due to the contribution of higher fertility rates and net migration to these countries. In contrast, Hungary, the Czech Republic, Poland and the Slovak Republic have seen little growth, or even declines in their populations in recent years as a result of low fertility rates (and, in the case of Poland, external migration).

The demand for, and financing of, health and long-term care (as well as pensions and other social benefits) depend partly on how the demographic structure of a country changes. The percentage of the population that is 65 years or older has risen in all OECD countries and is expected to continue to do so in the coming decades. On average in OECD countries, close to 15% of the population is over 65 (Chart 1.1.3) with Japan, Italy and Germany at almost 20% above this age threshold. Countries with the "youngest" populations – Turkey, Mexico, and Korea – still count less than 10% of their populations over 65, although the latter has experienced one of the greatest proportional increases since 1960.

The elderly population as a proportion of the workforce, or so-called "old-age dependency ratio", is another useful way of assessing the effect of population ageing on the financing of health care and pensions. In 2005, this ratio varied from less than 10% in the case of Turkey and Mexico to levels approaching 30% in Japan, Italy and Germany. It stood at around 25% in a host of other European countries, including the United Kingdom and France. The current OECD average of just over 20% is expected to more than double by 2050, resulting in a ratio of around one elderly person to every two of working age. Since older populations tend to be in poorer health and thus in greater need of health and long-term care, population ageing can be expected to lead to increased public expenditure in these areas. In addition, the rise in the population that is inactive on the labour market and the decline in the labour supply are expected to result in a slowdown of GDP growth per capita in many OECD countries over the coming decades (Oliveira *et al.*, 2005).

Definition and deviations

Total population is defined as the resident population, that is, all nationals present in, or temporarily absent from, the country and foreigners who have a permanent place of residence in the country. For most OECD countries, population estimates are based on regular ten-yearly censuses, adjusted with administrative data for the intercensal years. Data on population come mainly from the OECD Labour Force Statistics Database (as of May 2007), and refer to mid-year estimates. They are not necessarily the same as the latest population figures released by national statistical offices of OECD member countries.

Note that for some countries such as France, the United Kingdom and the United States which have overseas colonies, protectorates and territories, these populations are generally excluded. This may in some cases not be the same population used in the calculation of GDP per capita and other economic measures.

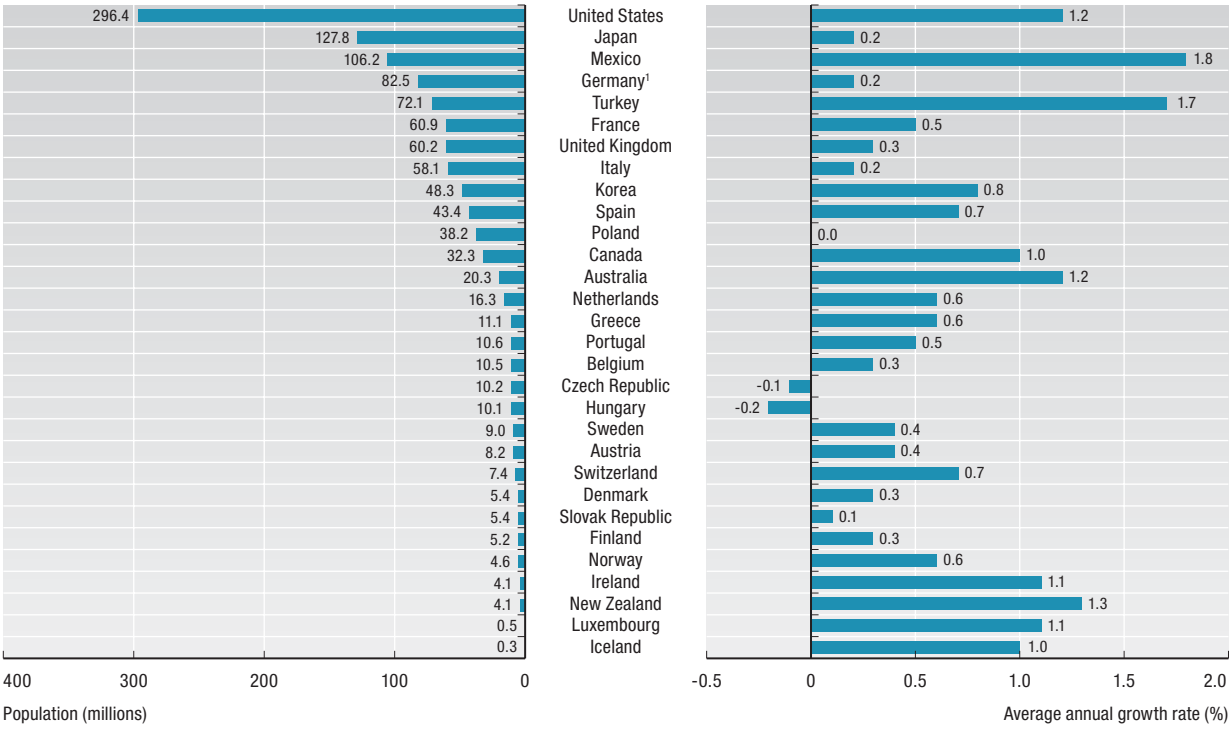
The old-age dependency ratio is defined as the population aged 65 and over compared to the population of working age, taken as age 15 to 64. The inclusion of the 15-19 age group is based on a general assumption that the fraction of adolescents under age 20 in the labour force is equal to the share of the population aged 65 and over still active in the labour market.

Note that population figures for Germany prior to 1991 refer to the former West Germany.

1.1. TOTAL POPULATION AND POPULATION STRUCTURE

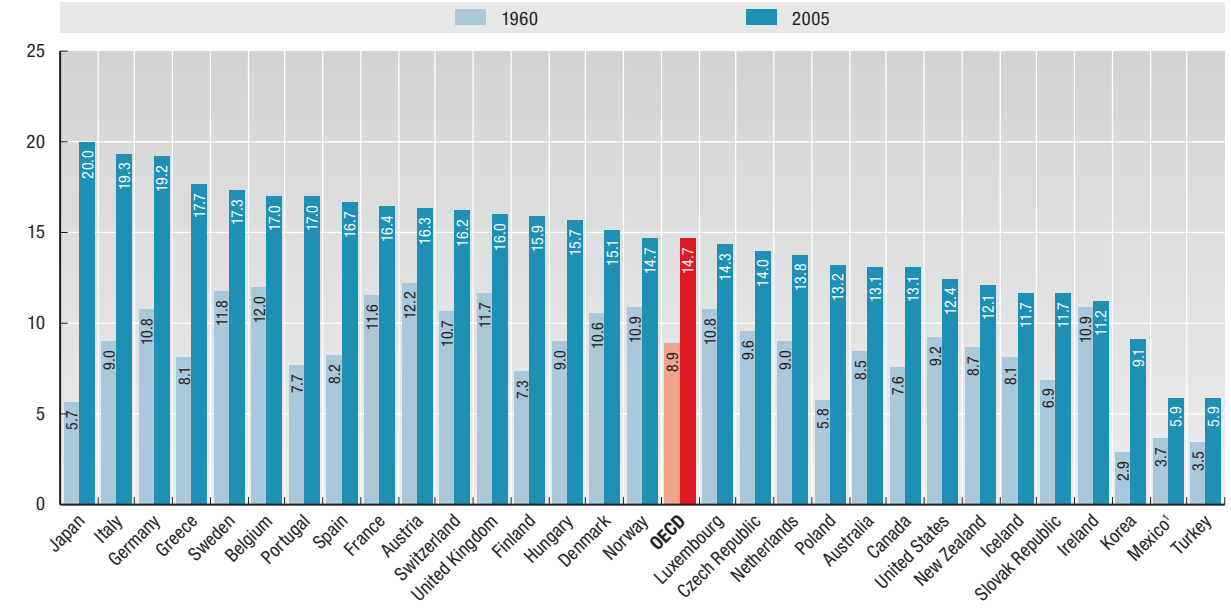
1.1.1. **Total population of OECD countries, in million, 2005**

1.1.2. **Average annual growth in population, 1990-2005**



1. Average annual growth rate refers to 1991-2005.

1.1.3. **Share of population aged 65 and over, 1960 and 2005**



1. 1970.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113121435865

1.2. FERTILITY RATES

Total fertility rates have been falling dramatically over recent decades in OECD countries and, along with declining mortality rates, have resulted in an ageing of the population (see Indicator 1.1 "Total population and population structure"). Countries may fall into long-term low birth rates because of the loss of reproductive potential caused by the fall in the number of women of childbearing age. Several OECD countries are looking at how their policies are directly or indirectly affecting birth rates, because of their impact on both the overall size of the population as well as the age structure.

All OECD countries have seen a drop in total fertility rates over recent decades, falling on average from 3.2 in 1960 to below 2.0 by the early 1980s to stand at just over 1.6 children per woman of childbearing age in 2005 (Chart 1.2.1). Mexico and Turkey are currently the only OECD countries with a fertility rate above 2.1 children, the "replacement level" required to ensure the broad stability of the population, assuming no net immigration and no change in mortality rates. However, even Turkey and Mexico have seen dramatic reductions in their fertility rates since the 1960s and 1970s when they were of the order of six or seven children.

The pace of decline has varied from country to country. Whereas fertility rates have fallen sharply and continue to decline in Japan and Korea – the latter showing a remarkable decline from six children in 1960 to 1.08, the lowest rate among OECD countries in 2005 – rates have shown some reversal in the United States and Denmark in the 1980s as well as France in the mid-1990s (Chart 1.2.2). Many other countries appear to be following suit with a stabilisation or mild reversal of the downward trend in recent years.

There are many interrelated factors affecting fertility rates, reflecting both individual lifestyle preferences as well as the social and historical influences within each country. The rapid increase in the availability of contraceptive methods in the second half of the twentieth century has been a major factor in the historical fall in fertility in many countries. Another important reason for the observed change in fertility has been the postponement of motherhood in many countries. The mean age of mothers at first childbirth has increased on average by one year per decade since 1970 (Chart 1.2.3) to stand at 27.6 years old in 2004. At the extreme, Germany has seen an increase from 24 years of age in 1970 to 29 by 2004. The effect of women delaying childbearing until later in life also increases the probability that women remain childless or have fewer children. This delay in childbearing can be related to a variety of individual and societal conditions – such as the role of women within society in combining family-life and career, changes in economic and financial security, and the changing links between nuptiality and maternity (D'Addio and Mira d'Ercole, 2005).

With past and future fertility rates affecting on the population structure, countries need to consider carefully policies which may impact on family size. Family-friendly policies allowing people to combine education and career with childrearing (through affordable childcare and parental leave, for example), and the effect of tax and family benefits, can all have an effect on changing the fertility rate (OECD, 2005d).

Definition and deviations

The fertility rate is the total number of children that would be born to each woman if she were to live to the end of her childbearing years (from 15 to 49) and give birth to children over that period at the prevailing age-specific fertility rates.

A fertility rate of 2.1 children per woman ensures broad stability of the population on the assumption of no net migration flows and no change in mortality rates.

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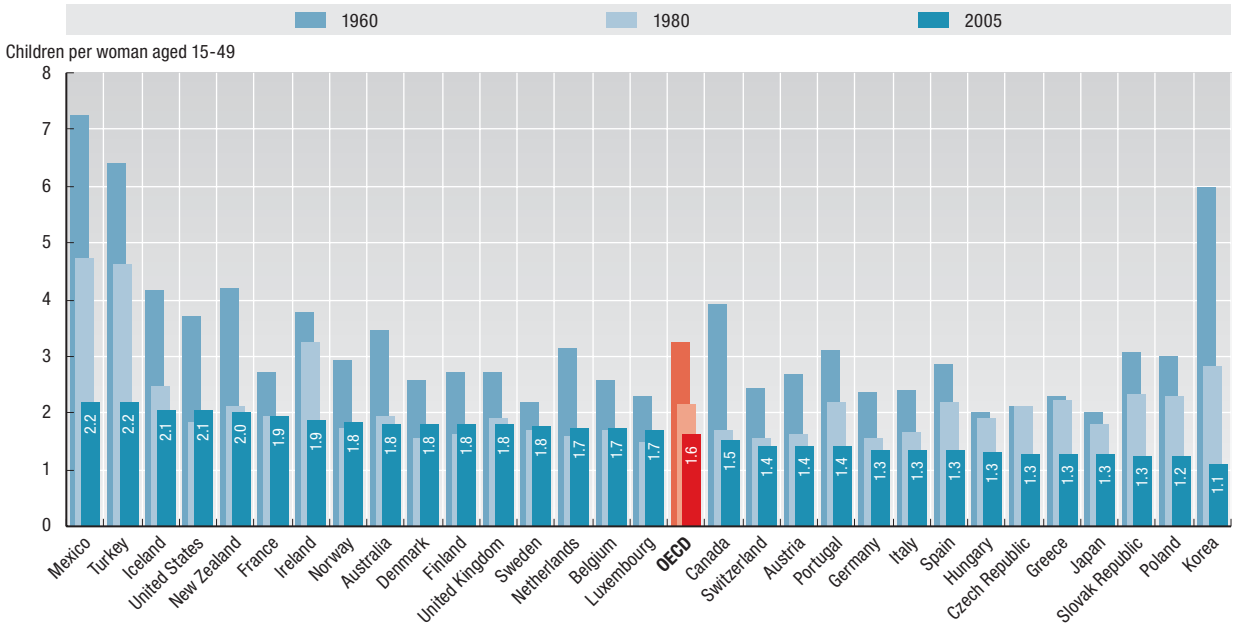
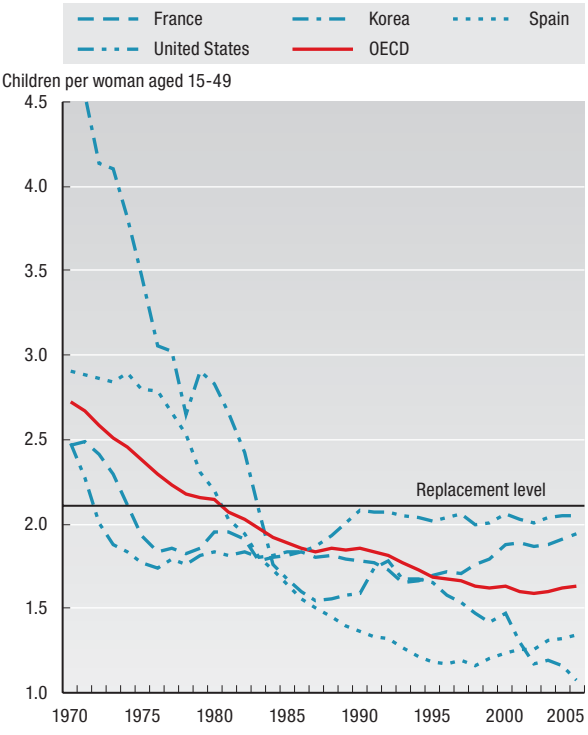
1.2. FERTILITY RATES

1.2.1. **Fertility rates, 1960, 1980 and 2005**

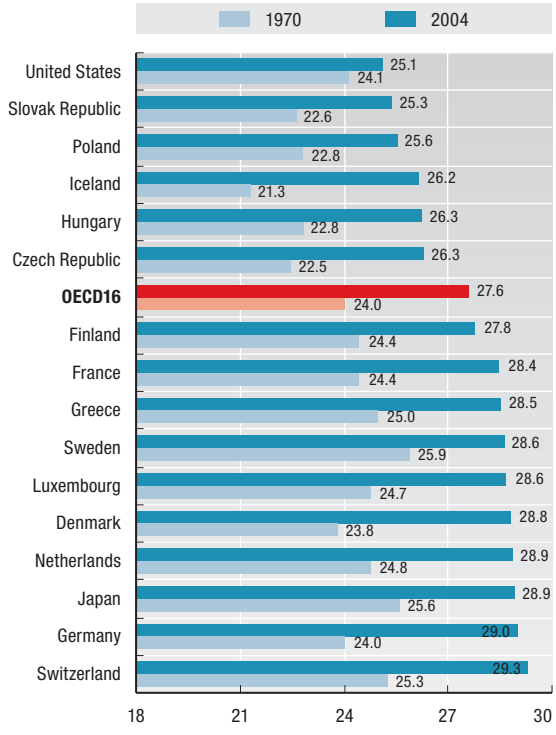


1.2.2. **Fertility rates, 1970 to 2005**



Source: OECD Health Data 2007.

1.2.3. **Mean age of mothers at first childbirth**



Source: D'Addio and Mira d'Ercole (2005), except for Denmark (Danish Registry of Birth) and Greece (National Statistical Service).

StatLink http://dx.doi.org/10.1787/113180167806

1.3. GROSS DOMESTIC PRODUCT AND INCOME INEQUALITY

Whereas GDP is a way of measuring the size of a country's economy by summing up the value of all the goods and services produced over a period of time, GDP per capita is a broad indicator of the prosperity of its population, given that the standard of living tends to increase as GDP per capita itself increases.

The OECD average GDP per capita was a little over USD 30 000 at PPP (purchasing power parities) in 2005, although with a ninefold difference between the highest and lowest ranked countries (Chart 1.3.1). Luxembourg apart (see "Definition and deviations" box below), the highest levels of GDP per capita are reported in Norway and the United States. At the other end of the scale, Turkey and Mexico have the lowest GDP per capita with 26% and 35% of the OECD average respectively. However, over half the OECD countries fall in a range of between USD 25 000 and 35 000 at PPP.

Over the past 15 years, real growth in GDP per capita has averaged 2.2% per year. Ireland and Korea have significantly outperformed the average with annual growth of 5.3% and 4.7% respectively. Poland, the Slovak Republic and Hungary have also posted GDP per capita growth above 3% per annum on average since 1990, after initially experiencing falls in real GDP in the early years of transition to market-based economies. By contrast, four of the major national economies – Japan, Italy, Germany and France – have all experienced slow growth at only half or less of the average OECD rate (Chart 1.3.2).

While higher GDP per capita is generally associated with better health status, the relationship is less pronounced at higher levels of national income and there are significant differences in health status between OECD countries with similar per capita incomes (see Indicator 2.1 "Life expectancy at birth"). In itself, GDP per capita provides only an average level of national income and does not measure the distribution of income across the population, which may have an effect on the health status of a country's population. Some analysts have found evidence of a relationship between life expectancy and income inequalities, with life expectancy being higher in those countries with less income inequalities (Wilkinson, 1996, 2000). Chart 1.3.3 shows a measure of the income inequality, expressed as the Gini coefficient, across the OECD and the change observed since the mid 1980s. While for most countries there is little or no significant change in income inequality over the period, for others there have been striking changes. Income distribution has become markedly more equal in Spain and Ireland, whereas the opposite can be said for New Zealand, Finland or Sweden – although the latter still shows one of the lowest income inequalities in the OECD. In 2000, the countries with the highest income inequalities were Mexico and Turkey, followed by Poland and the United States.

Definition and deviations

Gross domestic product (GDP) is the standard measure of the value of the goods and services produced by a country during a period. GDP can be measured in three different ways: as the difference between gross output and intermediate consumption: as the sum of labour incomes, net profits and depreciation; or as the sum of consumption expenditures, fixed capital formation (investment), changes in inventories and net exports (OECD, 2007b).

Each country calculates GDP in its own currency and it can be expressed in current prices (nominal GDP) or constant prices (real GDP). Real GDP measured by deflating the expenditure components by appropriate price indices is more appropriate for making comparison over time.

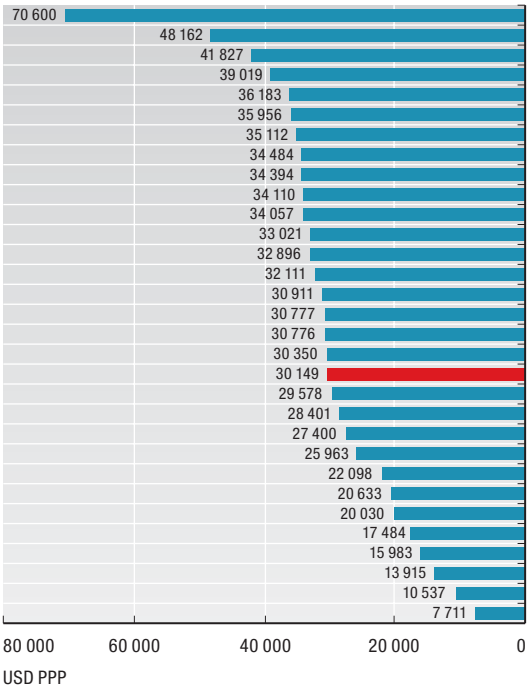
Comparisons of GDP between countries should only be made using PPPs (purchasing power parities) (see also Annex B, p. 191). Because of the statistical margins of error in both GDP and PPPs, it is generally considered that differences between countries in GDP per capita of 5% or less are not significant.

Virtually all OECD countries now follow the 1993 System of National Accounts. However, since Luxembourg and, to a lesser extent, Switzerland, have a relatively large number of frontier workers, their GDP per capita is overstated compared with other countries. A similar situation is seen for Ireland due to the influence of foreign companies operating in that country.

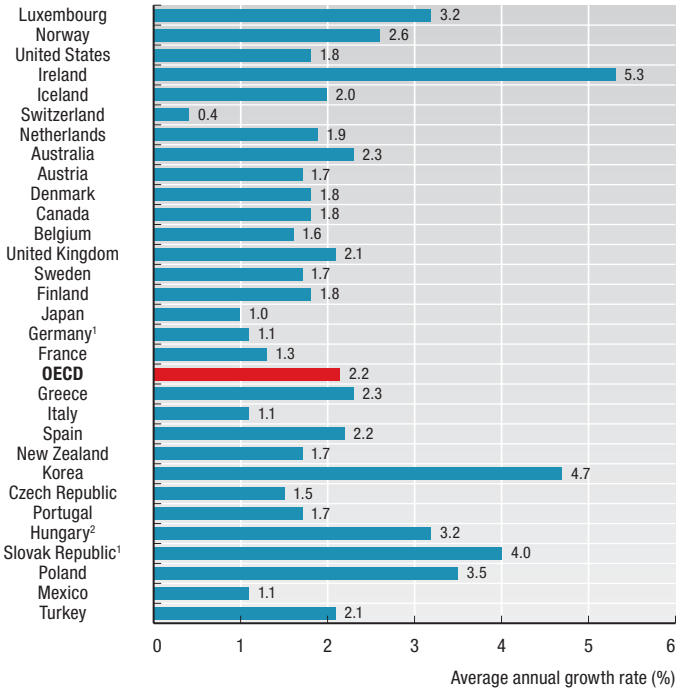
Income distribution is measured by the Gini coefficient. The Gini coefficient is defined as the area between the Lorenz curve (which plots cumulative shares of population, from the poorest to the richest, against the cumulative share of incomes that they receive) and the 45° line ("line of perfect equality"). The values range between 0 in the case of "perfect equality" and 100 in the case of "perfect inequality". An increase in the Gini coefficient thus represents an increase in inequality.

1.3. GROSS DOMESTIC PRODUCT AND INCOME INEQUALITY

1.3.1. GDP per capita, 2005



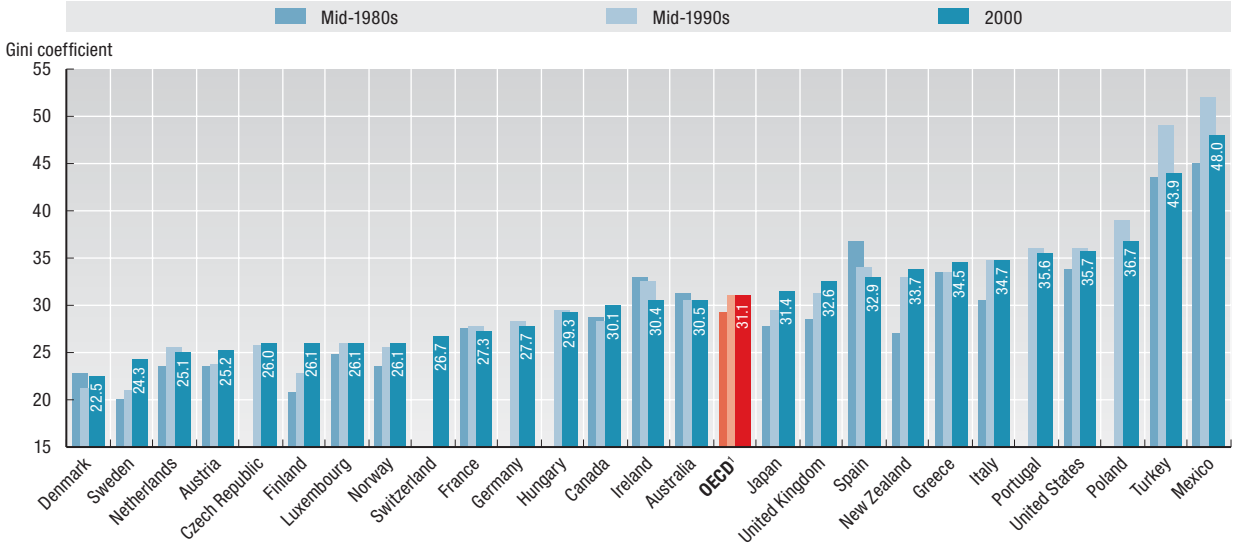
1.3.2. Annual growth rate in real GDP per capita, 1990 to 2005



1. Average annual growth rate 1992-2005
2. Average annual growth rate 1991-2005.

Source: *OECD Health Data 2007.*

1.3.3. Income inequality, Gini coefficient, mid-1980s, mid-1990s and 2000



Note: A higher Gini coefficient means greater income inequality.

1. OECD average includes listed countries for which data are available over the entire period.

Source: Förster and Mira d'Ercole (2005).

StatLink http://dx.doi.org/10.1787/113205342514

2. HEALTH STATUS

2.1. LIFE EXPECTANCY AT BIRTH

Life expectancy at birth has increased remarkably in OECD countries in recent decades, reflecting sharp reductions in mortality rates at all ages. These gains in longevity can be attributed to a number of factors, including rising living standards, improved lifestyle and better education, as well as greater access to quality health services. Other factors, such as better nutrition, sanitation and housing also played a role, particularly in countries with developing economies (OECD, 2004a).

On average across OECD countries, life expectancy at birth for the whole population reached 78.6 years in 2005, a full ten years greater than in 1960 (Chart 2.1.1). In one-third of OECD countries, life expectancy at birth exceeded 80 years in 2005. The country with the highest life expectancy was Japan, with a life expectancy for women and men combined of 82.1 years. At the other end of the scale, life expectancy in OECD countries was the lowest in Turkey, followed by Hungary. However, while life expectancy in Hungary has increased only modestly since 1960, it has increased sharply in Turkey, rapidly catching up with the OECD average.

The gender gap in life expectancy stood at 5.7 years on average across OECD countries in 2005, with life expectancy reaching 75.7 years among men and 81.4 years among women (Chart 2.1.2). This gender gap increased by half-a-year on average across countries between 1960 and 2005 (Tables A.2.1b and A.2.1c). But this result hides different trends between earlier and later decades. While the gender gap in life expectancy increased substantially in many countries during the 1960s and the 1970s, it narrowed during the past 25 years, reflecting higher gains in life expectancy among men than among women in most OECD countries. The narrowing of the gender gap in life expectancy over the past 25 years can be attributed at least partly to the narrowing of differences in risk-increasing behaviours, such as smoking, between men and women, accompanied by sharp reductions in mortality rates from cardio-vascular diseases among men.

It is difficult to estimate the relative contribution of the numerous non-medical and medical factors that might affect variations in life expectancy over time and across countries. Higher national income (as measured by GDP per capita) is generally associated with higher life expectancy at birth, although the relationship is less pronounced at higher levels of national income (Chart 2.1.3). There are also notable differences in life expectancy between OECD countries with similar income per capita. Japan and Spain have higher life expectancies than would be predicted by their GDP per capita alone, while the United States, Denmark and Hungary have lower life expectancies than would be predicted based on income alone.

Chart 2.1.4 shows the relationship between life expectancy at birth and health expenditure per capita across OECD countries. As for GDP per capita, higher health spending per capita is generally associated with higher life expectancy at birth, although this relationship tends to be less pronounced in countries with higher health spending per capita. Again, Japan and Spain stand out as having relatively high life expectancies, and the United States, Denmark and Hungary relatively low life expectancies, given their levels of health spending.

These simple correlations are interesting but deeper analysis is required. Variations in GDP per capita may influence *both* life expectancy and health expenditure per capita. Many other factors, beyond national income and total health spending, also need to be taken into account to explain variations in life expectancy across countries.

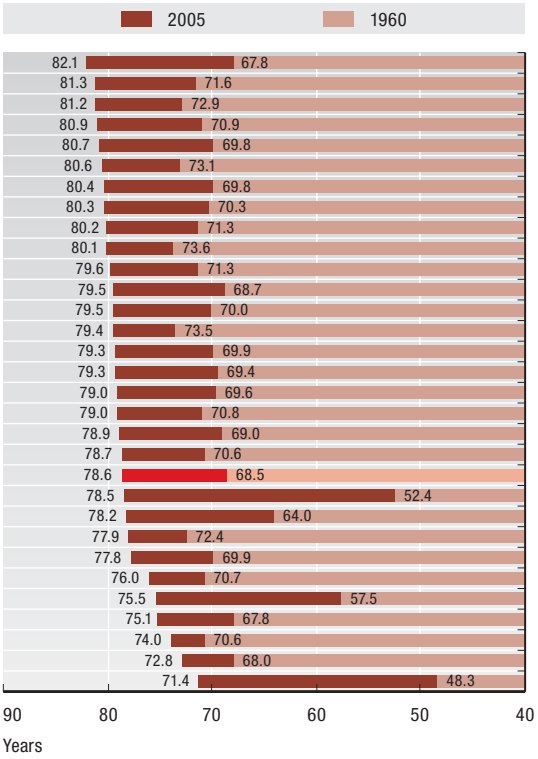
Definition and deviations

Life expectancy measures how long on average people would live based on a *given* set of age-specific death rates. However, the *actual* age-specific death rates of any particular birth cohort cannot be known in advance. If age-specific death rates are falling (as has been the case over the past decades in OECD countries), actual life spans will be higher than life expectancy calculated with current death rates.

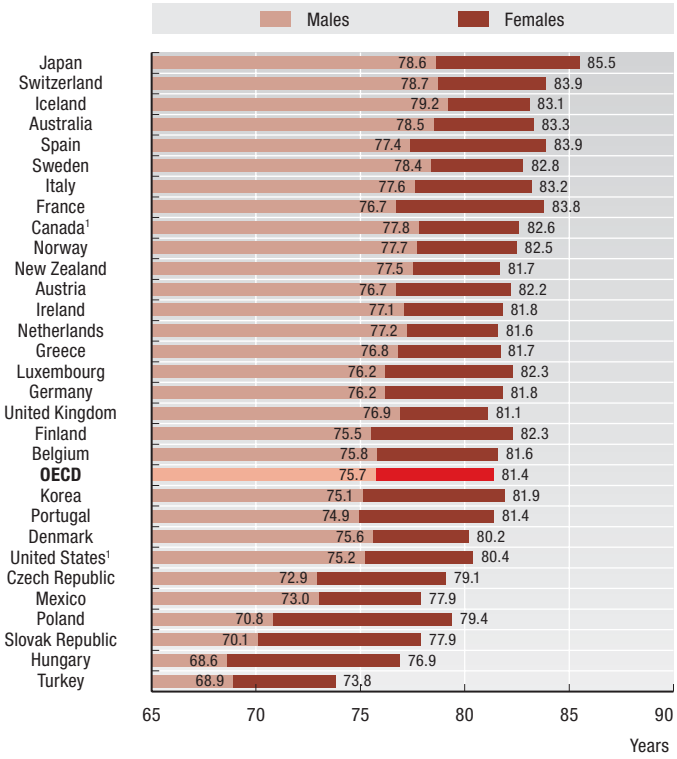
Each country calculates its life expectancy according to methodologies that can vary somewhat. These differences in methodology can affect the comparability of reported life expectancy estimates, as different methods can change a country's life expectancy estimates by a fraction of a year. Life expectancy at birth for the total population is calculated by the OECD Secretariat for all countries, using the unweighted average of life expectancy of men and women.

2.1. LIFE EXPECTANCY AT BIRTH

2.1.1. Life expectancy at birth, total population, 1960 and 2005

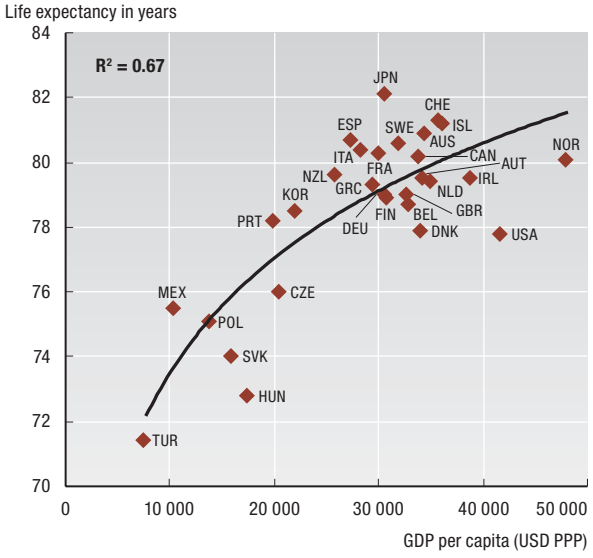


2.1.2. Life expectancy at birth, by gender, 2005

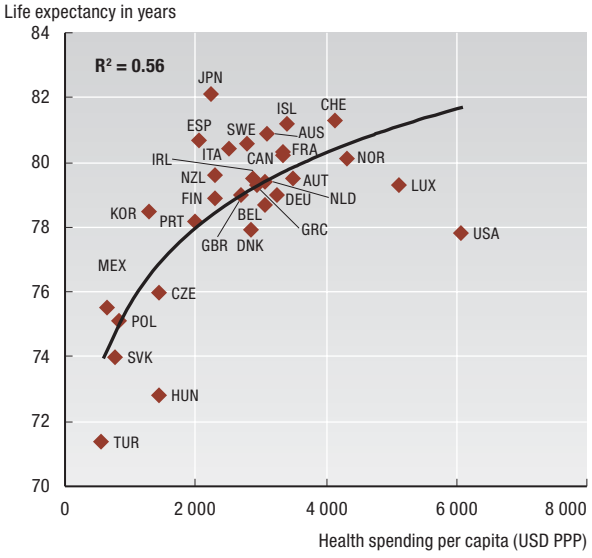


1. 2004.

2.1.3. Life expectancy at birth and GDP per capita, 2005



2.1.4. Life expectancy at birth and health spending per capita, 2005



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113221054683

2.2. LIFE EXPECTANCY AT AGE 65

Life expectancy at age 65 has increased significantly among both women and men over the past few decades in all OECD countries. Some of the factors explaining the gains in life expectancy at age 65 include advances in medical care combined with greater access to health care, healthier lifestyles and improved living conditions before and after people reach age 65.

In 2005, life expectancy at age 65 in OECD countries stood, on average, at close to 20 years for women and over 16 years for men (Chart 2.2.1; Tables A.2.2a and A.2.2b). This represents a gain of four years for women and 3.5 years for men on average across OECD countries since 1970. Hence, the gender gap in life expectancy at age 65 increased slightly in many countries between 1970 and 2005.

Similarly, life expectancy at age 80 also increased slightly more rapidly among women than among men on average in OECD countries over the past 25 years (Chart 2.2.2). In 2005, life expectancy for women at age 80 stood at 8.8 years (up from 6.5 years in 1970) on average in OECD countries, while the corresponding figure for men was 7.3 years (up from 5.7 years in 1970).

Japan registered particularly strong gains in life expectancy at age 65 in recent decades, with an increase of nearly eight years for women and 5.6 for men between 1970 and 2005. As a result of these large gains, Japanese women and men enjoyed the longest life expectancy at age 65 across all OECD countries in 2005, with respectively 23.2 and 18.1 remaining years of life (equalled in Australia for men). These gains in Japan can be explained at least partly by a marked reduction in death rates from heart disease and cerebro-vascular disease (stroke) among elderly people. Many other OECD countries have also registered significant reductions in mortality from cardio-vascular and cerebro-vascular diseases among elderly populations over the past decades (OECD, 2003a; Moon *et al*., 2003).

Gains in longevity at older ages in recent decades in OECD countries, combined with the trend reduction in fertility rates, are contributing to a steady rise in the proportion of older persons in OECD countries (see Indicator 1.1 "Total population and population structure" and Indicator 1.2 "Fertility rates").

Life expectancy at age 65 is expected to continue to increase in coming decades. Based on the United Nations/ World Bank population database, life expectancy at age 65 is projected to reach 21.6 years for women and 18.1 years for men in 2040 on average in OECD countries (OECD, 2007e).

Whether longer life expectancy is accompanied by good health and functional status among ageing populations has important implications for health and long-term care systems. Recent OECD work found that although there is a declining trend in severe disability among elderly populations in some countries (*e.g*., in the United States, Italy and the Netherlands), this is not universally true (Chart 2.2.3). In some other countries (*e.g*., in Australia and Canada), the (age-adjusted) rate of severe disability is stable, and in yet other countries (*e.g*., in Sweden and Japan) it appears to have risen over the past five to ten years. Combined with population ageing, these trends suggest that there will be an increasing need for long-term care in most, if not all, OECD countries in coming decades (Lafortune *et al*., 2007).

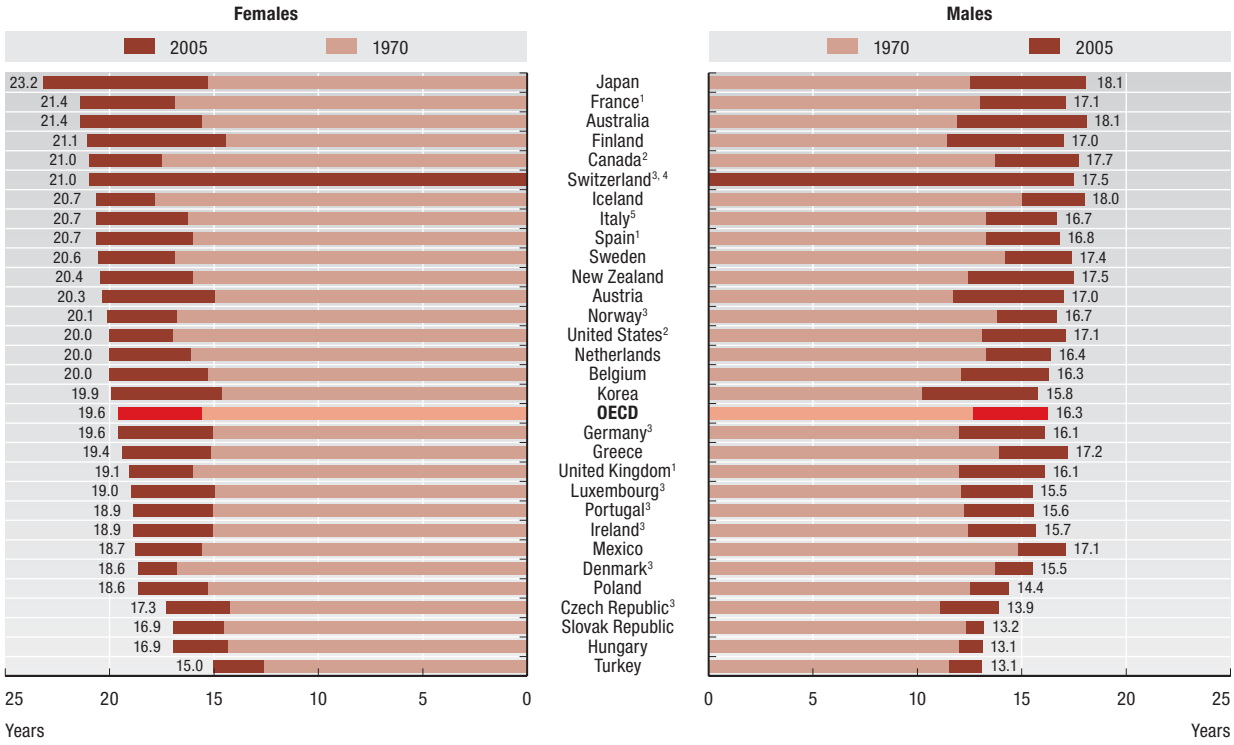
Definition and deviations

Life expectancy measures how long on average people at a particular age would live based on a *given* set of age-specific death rates. However, the *actual* age-specific death rates of any particular birth cohort cannot be known in advance. If age-specific death rates are falling (as has been the case over the past decades in OECD countries), actual life spans will be higher than life expectancy calculated with current death rates.

Each country calculates its life expectancy according to methodologies that can vary somewhat. These differences in methodology can affect the comparability of reported life expectancy estimates, as different methods can change a country's life expectancy estimates by a fraction of a year.

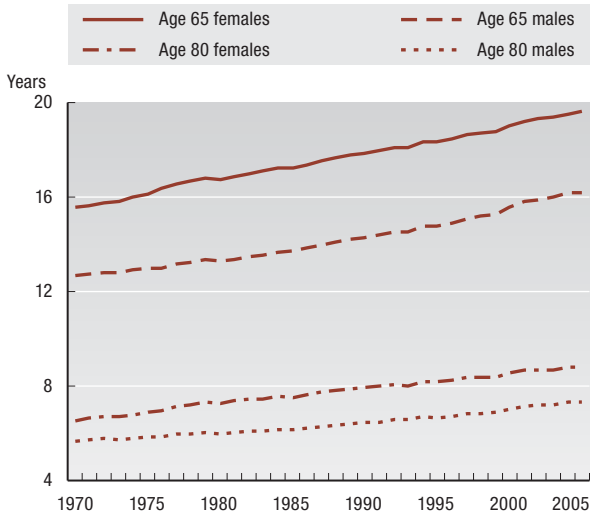
2.2. LIFE EXPECTANCY AT AGE 65

2.2.1. **Life expectancy at age 65 by gender, 1970 and 2005**



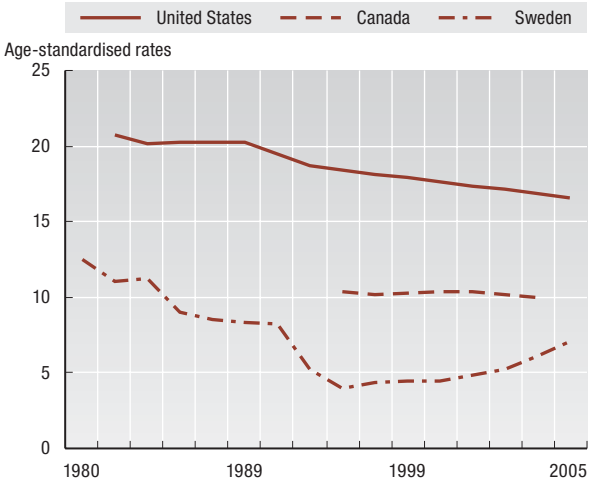
1. 2002. 2. 2004. 3. 2003.
4. No data available for 1970.
5. 2001.

2.2.2. **Trends in life expectancy at age 65 and at age 80, males and females, OECD average, 1970-2005**



Source: OECD Health Data 2007.

2.2.3. **Trends in severe disability among the population aged 65 and over, selected OECD countries, 1980-2005**



Note: For Sweden, the data relate only to the population aged 65-84.
Source: Lafortune, Balestat *et al.* (2007).

StatLink http://dx.doi.org/10.1787/113331002474

2.3. PREMATURE MORTALITY

Premature mortality, measured in terms of potential years of life lost (PYLL), focuses on deaths among the younger age groups of the population. PYLL values are heavily influenced by infant mortality and deaths from diseases and injuries affecting children and younger adults.

Across OECD countries, premature mortality has been cut by more than half on average since 1970 (Chart 2.3.1). The downward trend in infant mortality has been a major factor contributing to the decrease during the earlier years (see Indicator 2.8 "Infant mortality"). More recently, the decline in deaths from heart disease among adults has contributed to the overall reduction in premature mortality in many countries (see Indicator 2.4 "Mortality from heart disease and stroke").

Portugal has seen premature mortality rates among both males and females decline rapidly since 1970. The sharp reduction in infant mortality rates has been an important contributing factor. In contrast, premature mortality has declined more slowly in Hungary, particularly among males. This is largely attributed to persistently high levels of mortality from circulatory disease (currently 2.5 times greater than the OECD average) and from liver cirrhosis/disease (nearly five times greater than the OECD average). These are believed to reflect unhealthy lifestyles in relation to alcohol and tobacco consumption among males in Hungary. High suicide rates among males in Hungary also contribute to high premature mortality.

The United States also reports premature mortality rates above the OECD average, 28% above in the case of men and 42% above in the case of women (Chart 2.3.2). In the case of men, half (and in women almost a third) of these higher-than-average premature mortality rates can be attributed to deaths resulting from external causes, including accidents, suicides and homicides. Premature death from homicides in the United States is over five times higher than the OECD average.

On average across OECD countries, the main causes of potential years of life lost before age 70 among men are external causes including accidents and violence (29%), followed by cancer (21%) and circulatory diseases (18%). For women, the principal causes are cancer (31%), external causes (17%), and circulatory diseases (13%).

Definition and deviations

Potential years of life lost (PYLL) is a summary measure of premature mortality providing an explicit way of weighting deaths occurring at younger ages. The calculation for PYLL involves adding age-specific deaths occurring at each age and weighing them by the number of remaining years to live up to a selected age limit, defined here as age 70. For example, a death occurring at five years of age is counted as 65 years of PYLL. The indicator is expressed per 100 000 females and males.

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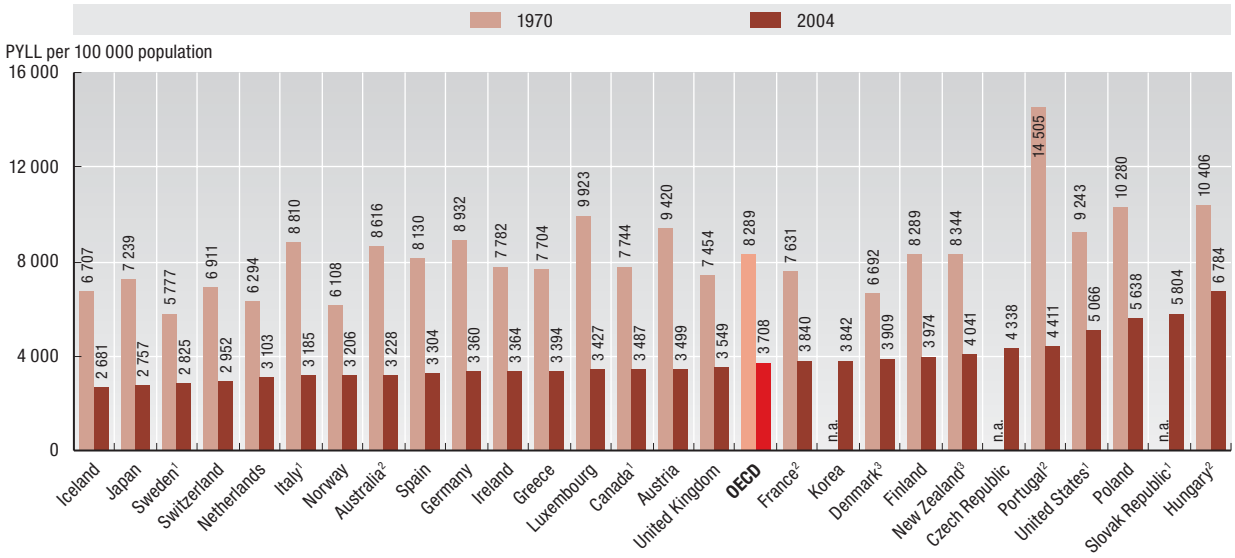
2.3. PREMATURE MORTALITY

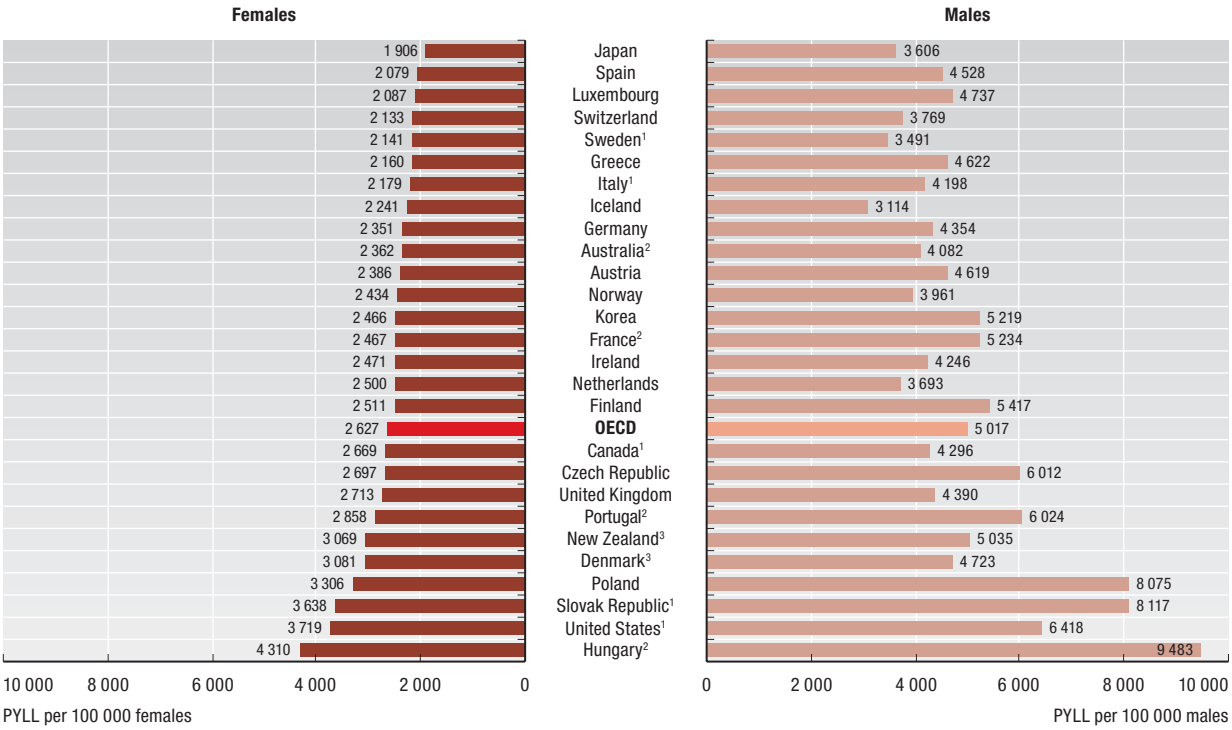
2.3.1. **Reduction in potential years of life lost (PYLL), females and males combined, 1970-2004**



1. 2002. 2. 2003. 3. 2001.

2.3.2. **Potential years of life lost (PYLL), females and males, 2004**

Countries are ranked from lowest to highest rates for females



1. 2002. 2. 2003. 3. 2001.

Source: *OECD Health Data 2007*. The raw mortality data are extracted from the WHO Mortality Database.

StatLink http://dx.doi.org/10.1787/113345281845

2.4. MORTALITY FROM HEART DISEASE AND STROKE

Together, ischemic heart disease (or heart attack) and stroke accounted for one-quarter of all deaths in OECD countries in 2004.

Ischemic heart disease (IHD) is caused by the accumulation of fatty deposits lining the inner wall of a coronary artery, restricting blood flow to the heart. IHD alone was responsible for 16% of all deaths in OECD countries in 2004. Mortality from IHD varies considerably however across OECD countries (Chart 2.4.1). The Slovak Republic reports the highest IHD mortality rate among both males and females, followed by Hungary and the Czech Republic. IHD mortality rates are also relatively high in Finland, New Zealand and the United States, with rates several times higher than those in Japan and Korea, the countries with the lowest IHD mortality rates. There is a clear regional pattern to the variability in IHD mortality rates. Following the two OECD Asian countries with the lowest IHD mortality rates are four countries located in southern Europe (France, Spain, Portugal and Italy) and the Netherlands. This supports the commonly held hypothesis that there are underlying risk factors, such as diet, which explain differences in IHD mortality across countries.

A significant gender gap exists in IHD mortality; death rates are much higher for men than for women in all countries (Chart 2.4.1). On average across OECD countries, IHD mortality rates in 2004 were nearly two times greater for men than for women.

Since 1980, IHD mortality rates have declined in nearly all OECD countries (Table A.2.4). The decline has been most remarkable in Denmark, Sweden, Australia, the Netherlands and Canada, with IHD mortality rates being cut by more than half. A number of factors are responsible for declining IHD mortality rates. Declining tobacco consumption has contributed to reducing the incidence of IHD, consequently reducing IHD mortality rates. Significant improvements in medical care for treating IHD have also contributed to reducing IHD mortality rates (see Indicator 4.11 "Cardio-vascular procedures" and Indicator 6.1 "In-hospital case-fatality rate following AMI").

Stroke is another important cause of mortality in OECD countries, accounting for about 10% of all deaths in 2004. Stroke is caused by the disruption of the blood supply to the brain. In addition to being an important cause of mortality, the disability burden from stroke is substantial (Moon *et al.*, 2003). There are large variations in stroke mortality rates across countries (Chart 2.4.2). The rates are highest in Hungary, Portugal, Greece and the Czech Republic. They are the lowest in Switzerland, France and Canada.

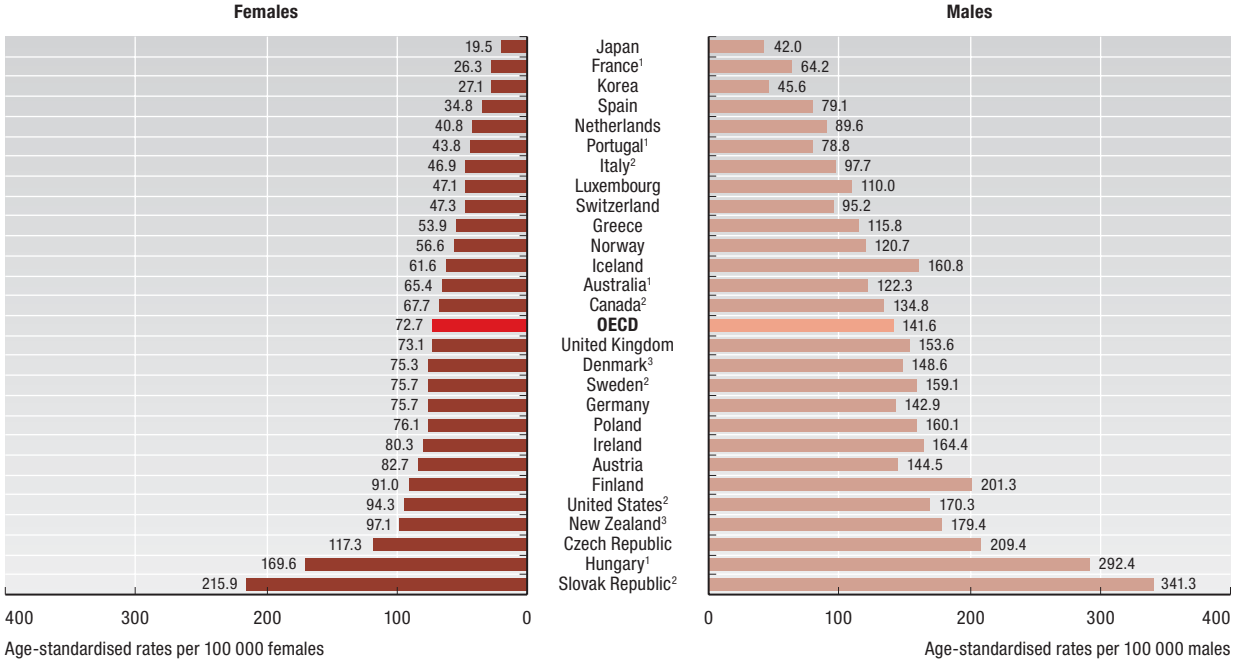
Looking at trends over time, stroke mortality has decreased in all OECD countries (except Poland) since 1980 (Table A.2.4). As for IHD, the reduction in stroke mortality can be attributed at least partly to a reduction in risk factors. Tobacco smoking and hypertension are the main modifiable risk factors for stroke (Stegmayr *et al.*, 1997). Improvements in medical treatment for stroke have also increased survival rates (see Indicator 6.2 "In-hospital case-fatality rate following stroke").

Definition and deviations

Mortality rates are based on the crude number of deaths according to selected causes as provided in the *WHO Mortality Database*. Mathers *et al.* (2005) have provided a general assessment of the coverage, completeness and reliability of WHO data on causes of death. Mortality rates have been age-standardised to the 1980 OECD population structure, to remove variations arising from differences in age structures across countries and over time within each country.

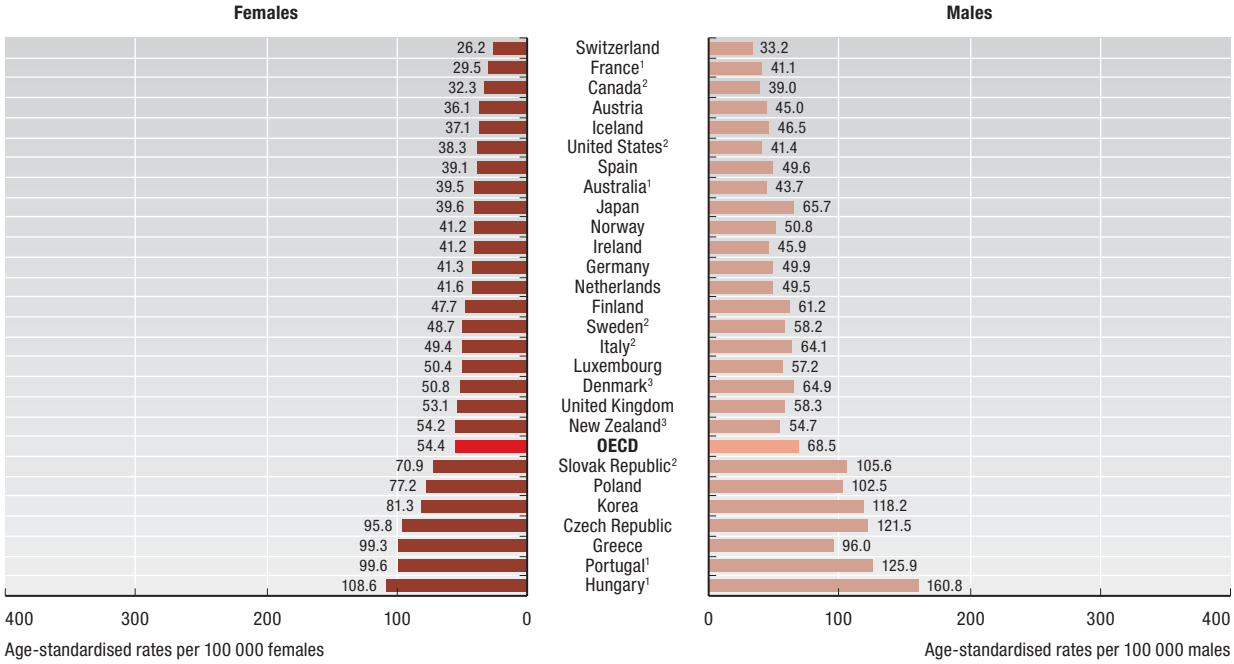
2.4. MORTALITY FROM HEART DISEASE AND STROKE

2.4.1. **Ischemic heart disease, mortality rates, 2004**



1. 2003. 2. 2002. 3. 2001.

2.4.2. **Stroke, mortality rates, 2004**



1. 2003. 2. 2002. 3. 2001.

Source: *OECD Health Data 2007*. The raw mortality data have been extracted from the WHO Mortality Database, and age-standardised to the 1980 OECD population.

StatLink http://dx.doi.org/10.1787/113384677718

2.5. MORTALITY FROM CANCER

Cancer is the second leading cause of mortality in OECD countries after diseases of the circulatory system, accounting for 27% of all deaths on average in 2004.

In 2004, cancer mortality rates for males and females taken together, were lowest in Nordic countries (with the exception of Denmark), Switzerland and Japan. They were highest in Hungary, the Czech and Slovak Republics, and Poland (Chart 2.5.1 and Table A.2.5a). Denmark also reports relatively high mortality rates from cancer for both males and females. Differences in death rates from cancer across countries can be explained both by non-medical factors, including the population's exposure to risk factors (such as smoking), and medical factors, including early diagnosis and effective treatment of different types of cancer (see the section on cancer care in Chapter 6 on quality of care).

Cancer mortality rates are higher for men than for women in all OECD countries (Chart 2.5.1). In 2004, the gender gap in death rates from cancer was particularly wide in Japan, Korea, France, Luxembourg, Spain and the Slovak Republic, with mortality rates more than two times higher for men than for women in these countries. The gender gap in cancer mortality rates can be explained at least partly by the greater prevalence of risk factors among men, as well as the lesser availability or use of screening programmes for different types of cancers affecting men, leading to lower survival rates after diagnosis.

Focussing on specific types of cancer, lung cancer still accounts for the greatest number of cancer deaths among men in all OECD countries (except Sweden), while it is also one of the main causes of cancer mortality among women. Tobacco smoking is the most important risk factor for lung cancer. In 2004, death rates from lung cancer among men were the highest in central and eastern European countries (Hungary, Poland, the Czech and Slovak Republics), the Netherlands, Greece and Korea (Chart 2.5.2). These are all countries where smoking rates among men have traditionally been, and continue to be, relatively high. Death rates from lung cancer among men are the lowest in Sweden, one of the countries with the lowest male smoking rate (see Indicator 3.1 "Tobacco consumption").

Breast cancer is the most common form of cancer among women in all OECD countries (IARC, 2004). In many countries, it accounts for 30% or more of cancer incidence among women, and 15% to 20% of cancer deaths. While there has been an increase in measured incidence rates of breast cancer in most countries over the past decade, death rates from breast cancer have declined or remained stable in most countries, indicating increases in survival rates due to earlier diagnosis and/or better treatments (see section on cancer care in Chapter 6). In 2004, breast cancer mortality rates varied significantly across countries (Chart 2.5.3). The lowest mortality rates from breast cancer are in Korea and Japan, while the highest mortality rates are in Denmark, Hungary, Ireland and the Netherlands.

Prostate cancer has become the most common cancer among men in many OECD countries, particularly those over 65 years of age, although death rates from prostate cancer remain lower than for lung cancer in all countries except Sweden. The rise in the reported incidence of prostate cancer in many countries during the 1990s is due to a large extent to the greater use of prostate-specific antigen (PSA) diagnostic tests. Death rates from prostate cancer in 2004 varied from lows of less than 10 per 100 000 males in Korea and Japan, to highs of more than 34 per 100 000 males in Norway, Denmark and Sweden (Chart 2.5.4). The causes of prostate cancer are not well-understood. Some evidence suggests that environmental and dietary factors might influence the risk of prostate cancer (Institute of Cancer Research, 2003).

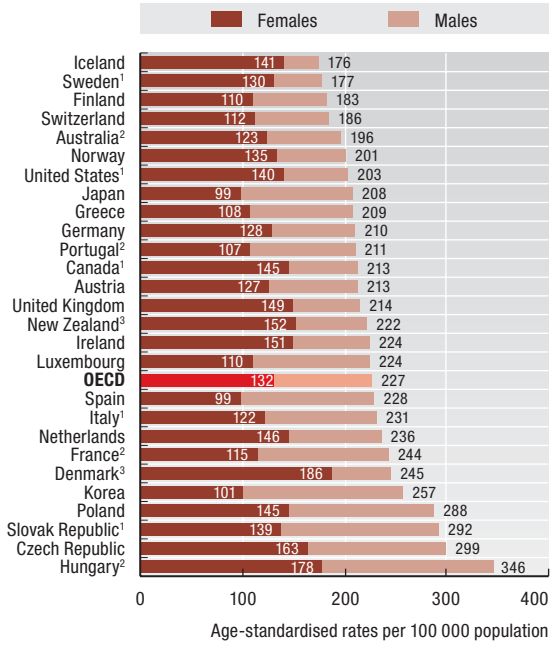
Overall, death rates from all types of cancer for males and females have declined at least slightly in most OECD countries since 1980, although the decline has been more modest than for cardio-vascular diseases, explaining why cancer accounts now for a larger share of all deaths. The exceptions to this declining pattern are Greece, Hungary, Poland and Spain, where death rates from cancer increased between 1980 and 2004 (Table A.2.5a).

Definition and deviations

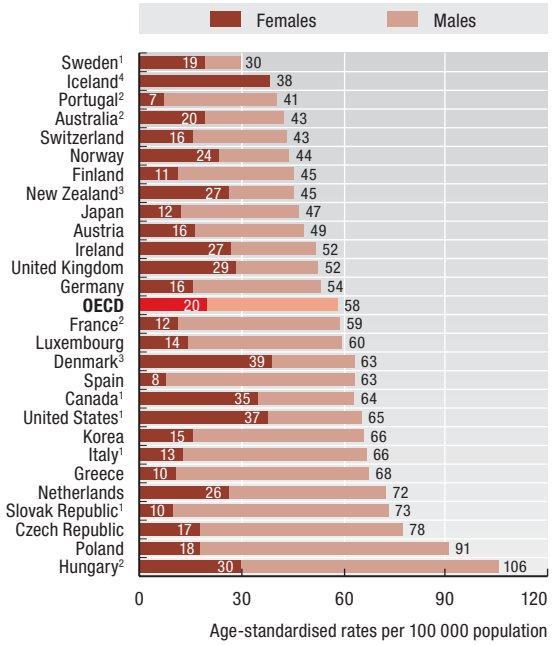
Cancer mortality rates are based on the crude number of deaths according to selected causes as provided in the *WHO Mortality Database*. Mathers *et al.* (2005) have provided a general assessment of the coverage, completeness and reliability of WHO data on causes of death. The international comparability of cancer mortality data can be affected by differences in medical training and practices as well as in death certification procedures across countries. Mortality rates have been age-standardised to the 1980 OECD population structure, to remove variations arising from differences in age structures across countries and over time within each country.

2.5. MORTALITY FROM CANCER

2.5.1. **All cancers, mortality rates, males and females, 2004**



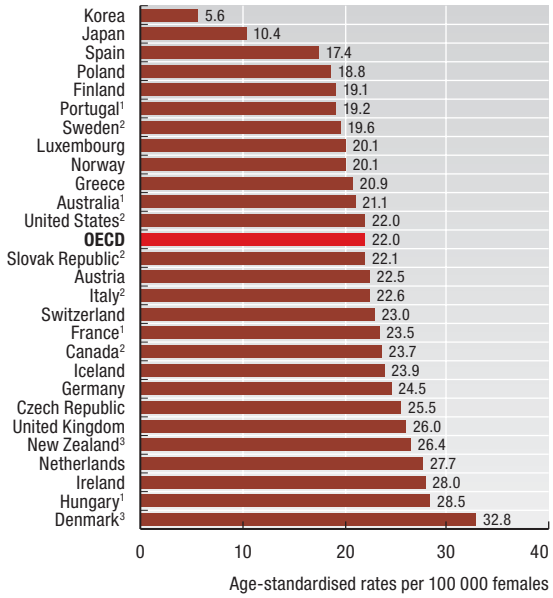
2.5.2. **Lung cancers, mortality rates, males and females, 2004**



1. 2002. 2. 2003. 3. 2001.

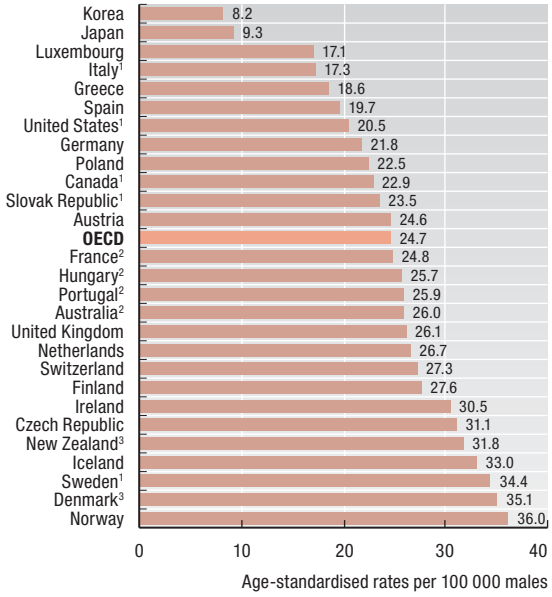
4. For Iceland, the mortality rate from lung cancer is similar for women and men.

2.5.3. **Breast cancers, mortality rates, females, 2004**



1. 2003. 2. 2002. 3. 2001.

2.5.4. **Prostate cancers, mortality rates, males, 2004**



1. 2002. 2. 2003. 3. 2001.

Source: OECD Health Data 2007. The raw mortality data have been extracted from the WHO Mortality Database, and age-standardised to the 1980 OECD population.

StatLink http://dx.doi.org/10.1787/113450104303

2.6. MORTALITY FROM ROAD ACCIDENTS

World wide, an estimated 1.2 million people are killed in road accidents each year, and as many as 50 million people are injured. In OECD countries alone, road accidents were responsible for more than 120 000 deaths in 2004. Mortality from road accidents is the leading cause of death among young men in many countries. Road accident injury and mortality remains a serious public health concern.

Death rates from road accidents vary widely across OECD countries. Taking death rates for males and females together, they were the highest in 2004 in Korea and Portugal, followed by Greece, the United States, Poland and Hungary (Chart 2.6.1). They were the lowest in the Netherlands, Sweden and the United Kingdom. Deaths from road accidents are much higher for men than for women in all OECD countries, with disparities in rates ranging from 2.2 times higher among men in Iceland to 4.2 times higher in Switzerland (Chart 2.6.2).

Much road accident injury and mortality is preventable. Road security has improved over the past decades in many countries through improvements of road systems, education and prevention campaigns, the adoption of new laws and regulations and the enforcement of these new laws through more traffic controls. As a result, death rates due to road accidents have been cut by more than half on average in OECD countries since 1970 (Chart 2.6.3). Germany, the Netherlands and Switzerland have seen the largest declines in death rates, with a reduction of about 75% since 1970, although vehicle kilometers travelled increased by 2.6 times on average in western European countries in the same period (ECMT, 2007). Death rates have also declined in the United States, but at a slower pace, and therefore remain above the OECD average. In Greece and Poland, there have been significant increases in death rates from road accidents since 1970 (Chart 2.6.4).

Based on past trends, projections from the World Bank indicate that between 2000 and 2020, road traffic deaths may decline further by about 30% in high-income countries, but may increase substantially in low- and middle-income countries if no additional road safety counter-measures are put in place (Peden *et al*., 2004).

Definition and deviations

Mortality rates are based on the crude number of deaths according to selected causes as provided in the *WHO Mortality Database*. Mathers *et al*. (2005) have provided a general assessment of the coverage, completeness and reliability of WHO data on causes of death. Mortality rates have been age-standardised to the 1980 OECD population structure, to remove variations arising from differences in age structures across countries and over time within each country.

Mortality rates from road traffic accidents in Luxembourg are biased upward because of the large volume of traffic in transit, resulting in a significant proportion of *non-residents* killed.

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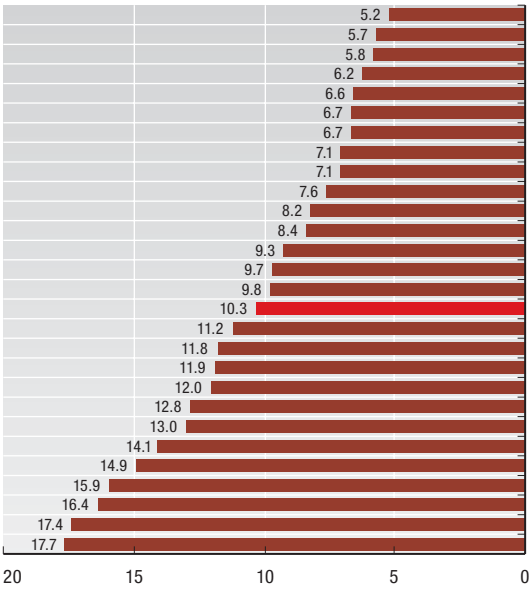
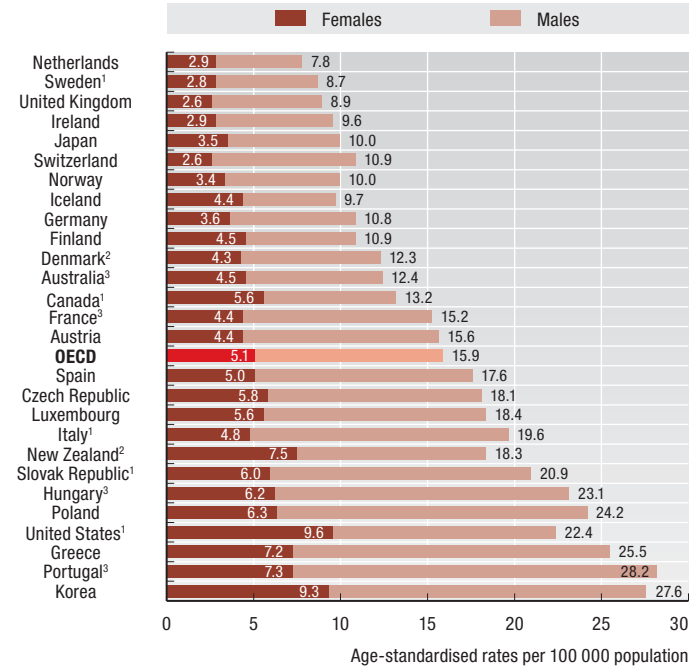
2.6. MORTALITY FROM ROAD ACCIDENTS

2.6.1. **Road accidents, mortality rates, total population, 2004**

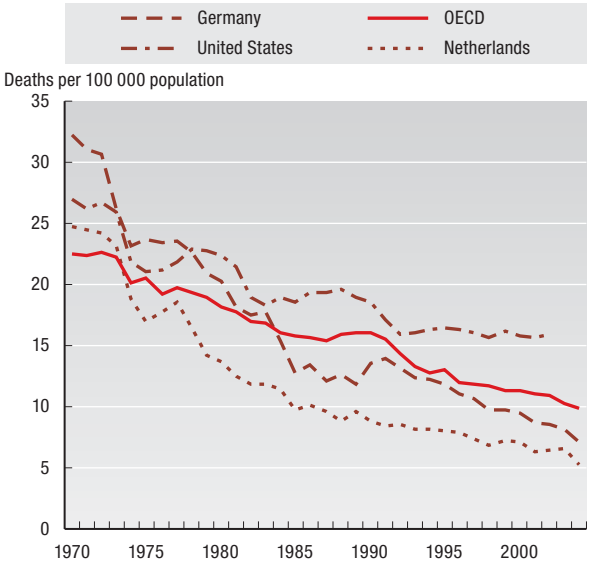


2.6.2. **Road accidents, mortality rates, males and females, 2004**

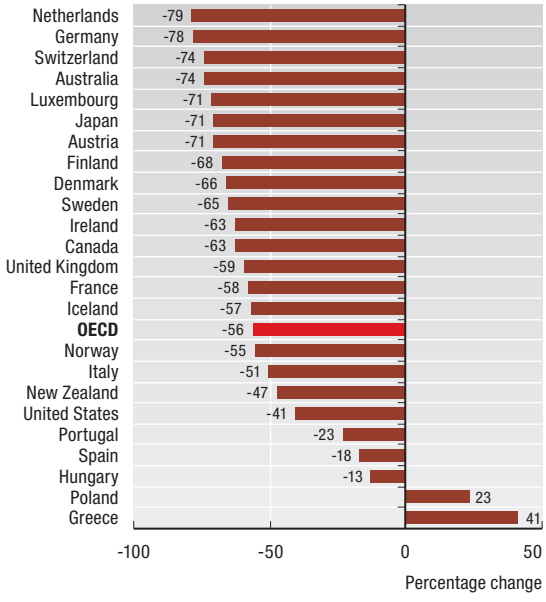


1. 2002. 2. 2001. 3. 2003

2.6.3. **Trends in road accident mortality rates, selected OECD countries, 1970-2004**



2.6.4. **Change in road accident mortality rates, 1970-2004 (or nearest year)**



Source: OECD Health Data 2007. The raw mortality data have been extracted from the WHO Mortality Database, and age-standardised to the 1980 OECD population.

StatLink http://dx.doi.org/10.1787/113524161632

2.7. SUICIDE

The intentional killing of oneself is evidence not only of personal breakdown, but also of a deterioration of the social context in which an individual lives. Suicide may be the end-point of a number of different contributing factors. It is more likely to occur during crisis periods associated with divorce, alcohol and drug abuse, unemployment, clinical depression and other forms of mental illness. Because of this, suicide is often used as a proxy indicator of the mental health status of a population. However, the number of suicides in certain countries may be underestimated because of the stigma associated with the act.

Suicide is a significant cause of death in many OECD countries, accounting for over 130 000 deaths in 2004. Suicide rates vary considerably across OECD countries (Chart 2.7.1). In 2004, they were the lowest in southern European countries (Greece, Italy and Spain) and in the United Kingdom, at seven deaths or less per 100 000 population. They were highest in Korea, Hungary, Japan and Finland, at 18 or more deaths per 100 000 population.

Since 1980, suicide rates have decreased in many OECD countries, with pronounced declines of 40% or more in Denmark, Hungary, Germany and Switzerland (Chart 2.7.3). Despite this progress, Hungary still has one of the highest rates among OECD countries. On the other hand, death rates from suicides have increased the most since 1980 in Spain and Ireland, although they remain at relatively low levels. In Korea and Japan, suicide rates have increased since 1990 and now stand well above the OECD average (Chart 2.7.4). Male suicide rates in Korea tripled from 12 per 100 000 in 1990 to 36 in 2004, and suicide rates among women are the highest among OECD countries, at 14 per 100 000. The stresses of rapid modernisation and the erosion of the traditional family support base have been implicated in Korea's recent increase in suicide rates (Park *et al.*, 2003; Ra *et al.*, 2006).

In general, death rates from suicides are three to four times greater for men than for women across OECD countries (Chart 2.7.2), and this gender gap has been fairly stable over time. The gender gap is narrower for attempted suicides, reflecting the fact that women tend to use less fatal methods than men.

Suicide is also related to age, with young people aged under 25 and the elderly especially at risk. While suicide rates among the elderly have generally declined over the past two decades, almost no progress has been observed among younger people.

Preventing suicides is not an easy task. Since suicides are, in the vast majority of cases, linked with depression and alcohol and other substance abuse, the early detection of these psycho-social problems by families, social workers and health professionals must be part of suicide prevention campaigns, together with the provision of effective support and treatment. In Finland and Iceland, suicide prevention programmes have been based on efforts to promote strong multisectoral collaboration and networking (NOMESCO, 2007).

Definition and deviations

The World Health Organisation defines "suicide" as an act deliberately initiated and performed by a person in the full knowledge or expectation of its fatal outcome.

Mortality rates are based on the crude number of deaths according to selected causes as provided in the *WHO Mortality Database*. Mathers *et al.* (2005) have provided a general assessment of the coverage, completeness and reliability of WHO data on causes of death. Mortality rates have been age-standardised to the 1980 OECD population structure, to remove variations arising from differences in age structures across countries and over time within each country.

Comparability of suicide data between countries is affected by a number of reporting criteria, including how a person's intention of killing themselves is ascertained, who is responsible for completing the death certificate, whether a forensic investigation is carried out, and the provisions for confidentiality of the cause of death. Caution is required therefore in interpreting variations across countries.

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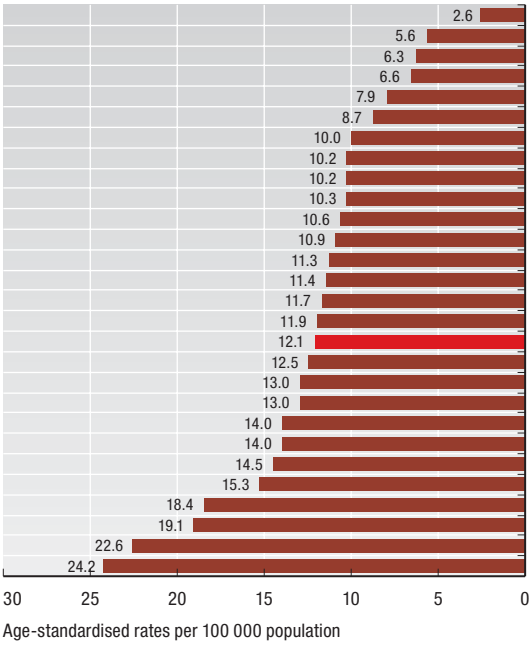
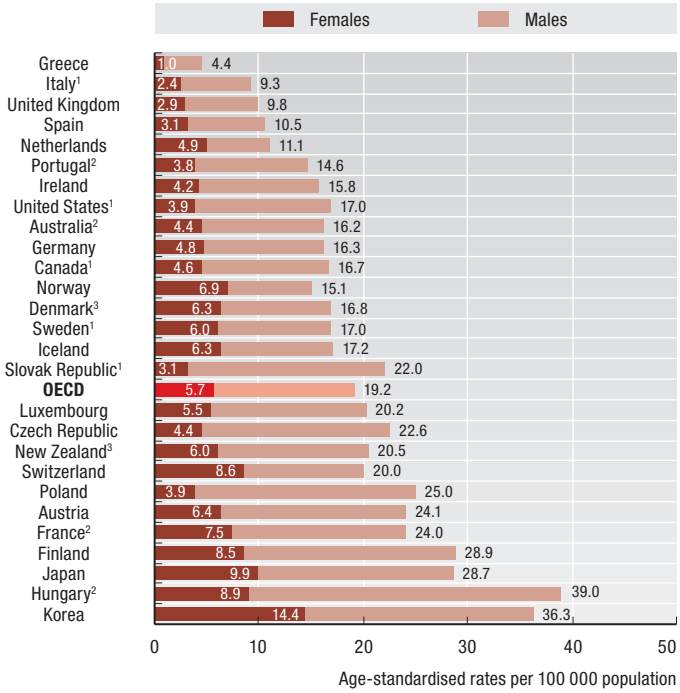
2.7.1. **Suicide, mortality rates, total population, 2004**

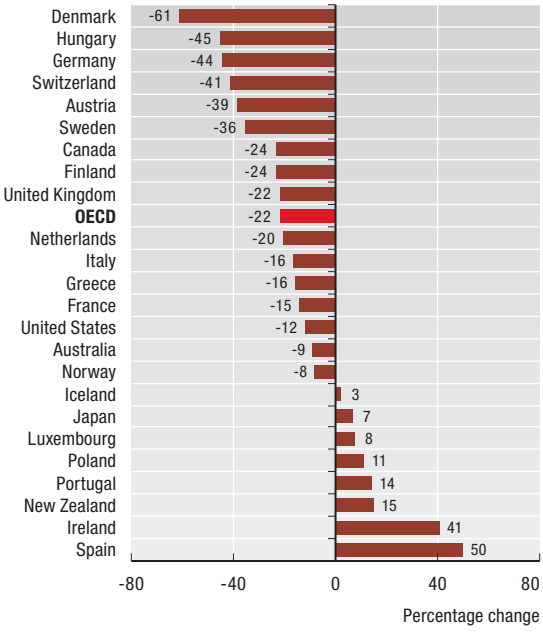


2.7.2. **Suicide, mortality rates, males and females, 2004**

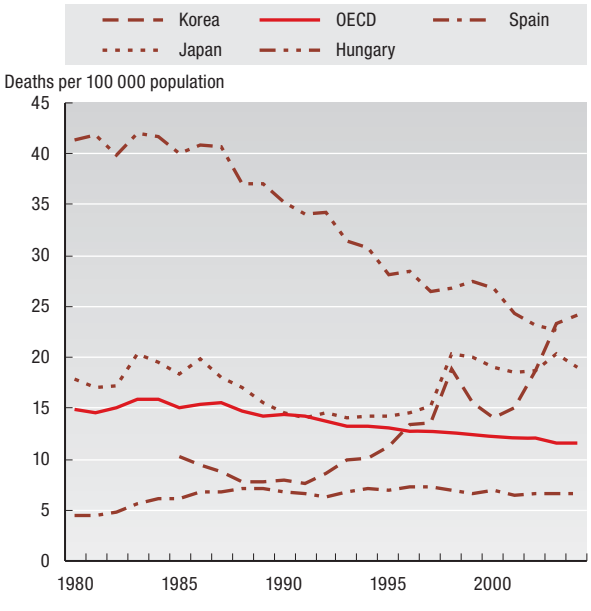


1. 2002. 2. 2003. 3. 2001.

2.7.3. **Change in suicide rates, 1980-2004 (or nearest year)**



2.7.4. **Trends in suicide rates, selected OECD countries, 1980-2004**



Source: OECD Health Data 2007. The raw mortality data have been extracted from the WHO Mortality Database, and age-standardised to the 1980 OECD population.

StatLink http://dx.doi.org/10.1787/113587303211

2.8. INFANT MORTALITY

The infant mortality rate, the rate at which babies of less than one year of age die, reflects the effect of economic and social conditions on the health of mothers and newborns as well as the effectiveness of health systems.

In 2005, infant mortality rates in OECD countries ranged from a low of two to three deaths per 1 000 live births in Japan, Nordic countries (with the exception of Denmark) and Luxembourg, up to a high of 19 and 24 deaths per 1 000 live births in Mexico and Turkey respectively (Chart 2.8.1). Infant mortality rates were also relatively high (more than six deaths per 1 000 live births) in the United States and in some eastern and central European countries. The average across OECD countries was 5.4 in 2005.

Around two-thirds of the deaths that occur during the first year of life are neonatal deaths (*i.e.*, during the first four weeks). Congenital malformations, prematurity and other conditions arising during pregnancy are the principal factors contributing to neonatal mortality in developed countries. With an increasing number of women deferring childbearing and the rise in multiple births linked with fertility treatments, the number of pre-term births has tended to increase (see Indicator 2.9 "Infant health: low birth weight"). In a number of higher-income countries, this has contributed to a leveling-off of the downward trend in infant mortality rates over the past few years. Indeed, the increase in the birth of very small infants was cited as the main reason for the first increase since the 1950s in infant mortality rates in the United States between 2001 and 2002 (CDC, 2003). For deaths beyond a month (post neonatal mortality), there tends to be a greater range of causes – the most common being SIDS (Sudden Infant Death Syndrome), birth defects, infections and accidents.

All OECD countries have achieved remarkable progress in reducing infant mortality rates from the levels of 1970, when the average was approaching 30 deaths per 1 000 live births (Chart 2.8.3). This equates to a cumulative reduction of over 80% since 1970. Portugal has seen its infant mortality rate reduced by nearly 8% per year on average since 1970, moving from the country with the highest rate in Europe to one with an infant mortality rate among the lowest in the OECD in 2005 (Chart 2.8.2). Large reductions in infant mortality rates have also been observed in Korea. On the other hand, the reduction in infant mortality rates has been slower in the Netherlands and the United States. Infant mortality rates in the United States used to be below the OECD average (and median), but they are now above average (Chart 2.8.3).

Numerous studies have taken infant mortality rates as a health outcome to examine the effect of a variety of medical and non-medical determinants of health. Although most analyses show an overall negative relationship between infant mortality and health spending, the fact that some countries with a high level of health expenditure do not necessarily exhibit low levels of infant mortality, has led some researchers to conclude that more health spending is not necessarily required to obtain better results (Retzlaff-Roberts *et al.*, 2004). A body of research also suggests that many factors beyond the quality and efficiency of the health system, such as income inequality, the social environment, and individual lifestyles and attitudes, influence infant mortality rates (Kiely *et al.*, 1995).

Definition and deviations

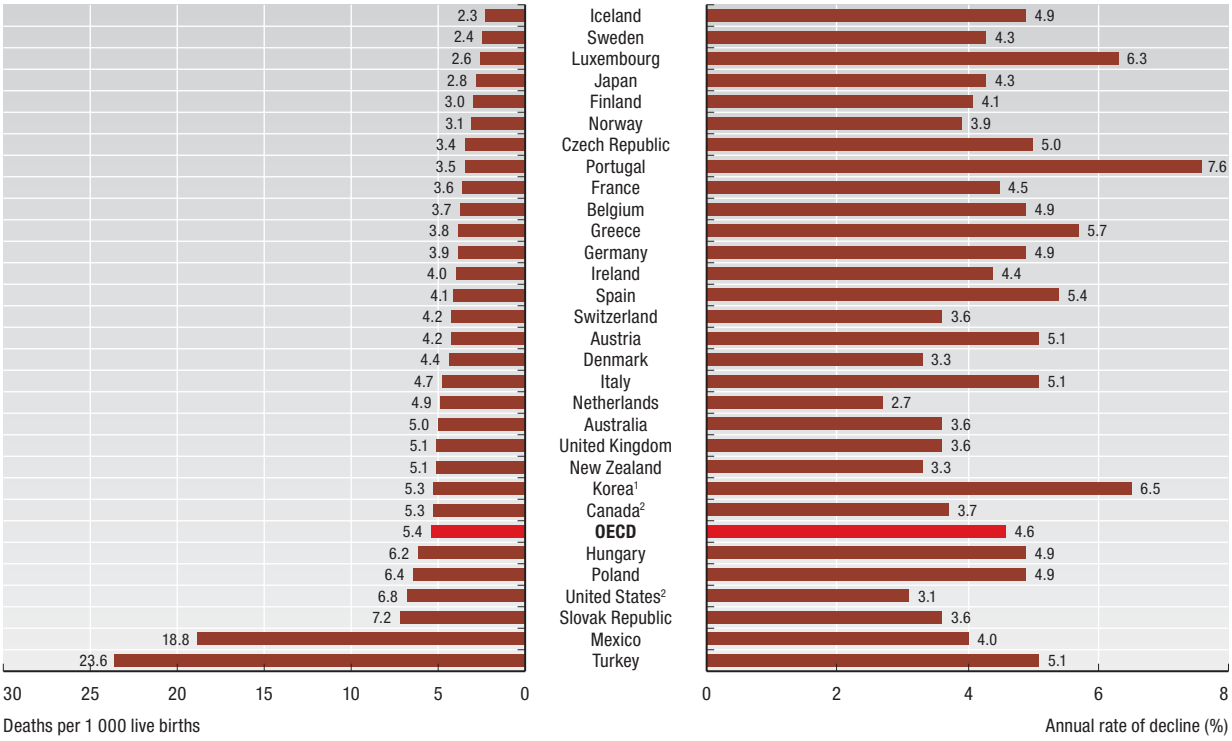
The infant mortality rate is the number of deaths of children under one year of age in a given year, expressed per 1 000 live births. Neonatal mortality refers to the death of children under 28 days.

Some of the international variation in infant and neonatal mortality rates may be due to variations among countries in registering practices of premature infants (whether they are reported as live births or fetal deaths). In several countries, such as in the United States, Canada, Japan and the Nordic countries, very premature babies with relatively low odds of survival are registered as live births, which increases mortality rates compared with other countries that do not register them as live births (Sachs *et al.*, 1995).

2.8. INFANT MORTALITY

2.8.1. **Infant mortality rates, 2005**

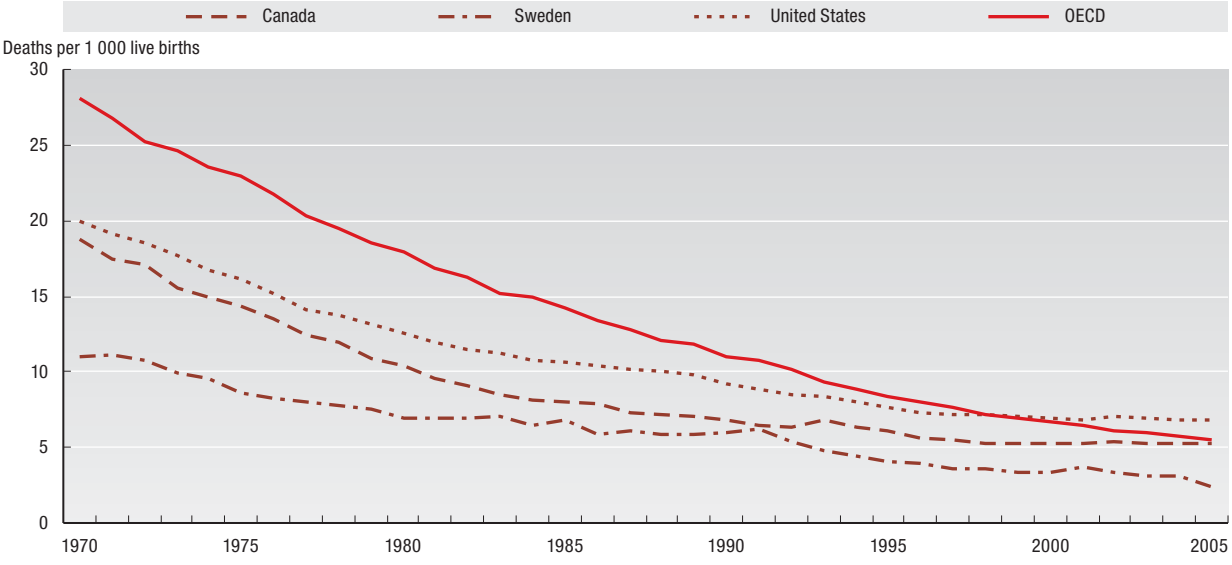
2.8.2. **Decline in infant mortality rates, 1970-2005**



Note: In Canada, Japan, the United States and some of the Nordic countries, very premature babies with a low chance of survival are registered as live births, resulting in higher reported rates compared to countries that do not do so.
1. 2002. 2. 2004.

2.8.3. **Infant mortality rates, 1970-2005**

Canada, Sweden, United States and OECD average



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113588610054

2.9. INFANT HEALTH: LOW BIRTH WEIGHT

Low birth weight – defined here as newborns weighing less than 2 500 grams – is an important indicator of infant health because of the close relationship between birth weight and infant morbidity and mortality. There are two categories of low birth weight babies: those occurring as a result of restricted foetal growth and those resulting from pre-term birth. Low birth weight infants have a greater risk of poor health or death, require a longer period of hospitalisation after birth, and are more likely to develop significant disabilities (UNICEF and WHO, 2004). Risk factors for low birth weight include low parental socio-economic status, increased maternal age and multiple fertility, harmful behaviours such as smoking, excessive alcohol consumption and poor nutrition, as well as a poor level of pre-natal care.

In 2005, the Nordic countries (Iceland, Finland, Sweden, Norway and Denmark), along with Korea, Luxembourg and Ireland reported the smallest proportions of low weight births with 5% or less of live births defined as low birth weight. Turkey, Japan, Greece, Mexico, Hungary and the United States are at the other end of the scale, with rates of low birth weight infants above 8% (Chart 2.9.1). These figures compare with an overall OECD average of 6.6%.

Since 1980, the prevalence of low birth weight infants has increased in a number of OECD countries (Chart 2.9.2 and Table A.2.9). There may be several reasons for this rise. First, the number of multiple births, with the increased risks of pre-term births and low birth weight, has risen steadily, partly as a result of the rise in fertility treatments. Other factors which may have influenced the rise in low birth weight are older age at childbearing and increases in the use of delivery management techniques such as induction of labour and caesarean delivery.

Japan and Spain, historically amongst the group of countries with a low proportion of low birth weight, have seen great increases in the past 25 years. As a result, the proportion of low birth weight babies in these two countries is now above the OECD average (Chart 2.9.3). In the case of Japan, a number of risk factors have been cited as contributing to this increase, including the rising prevalence in smoking among younger women from the 1970s onwards together with a significant move towards later motherhood (Jeong and Hurst, 2001; and Ohmi *et al.*, 2001). Despite the increase in low birth weight babies, Japanese medical care for newborns has been particularly successful in reducing infant mortality.

Chart 2.9.4 shows some correlation between the percentage of low birth weight infants and infant mortality rates. In general, countries reporting a low proportion of low birth weight infants also report relatively low infant mortality rates. This is the case for instance for the Nordic countries. Japan, however, is an exception, reporting the highest proportion of low birth weight infants but one of the lowest infant mortality rates.

Comparisons of different population groups within countries suggest that the proportion of low birth weight infants might also be influenced by differences in education, income and associated living conditions. In the United States, marked differences between ethnic groups in the proportion of low birth weight infants have been observed, with black infants having a rate almost double that of white infants (CDC, 2003). Similar differences have also been observed among the indigenous and non-indigenous populations in Australia (Laws *et al.*, 2006) and Mexico, reflecting the disadvantaged living conditions of many of these mothers.

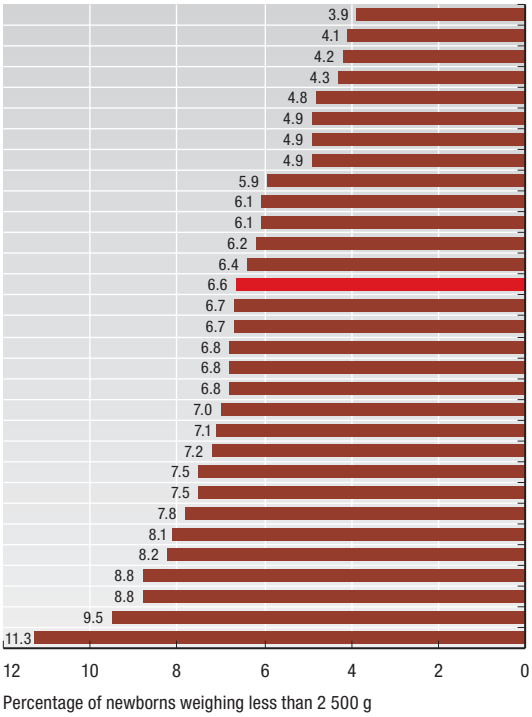
Definition and deviations

Low birth weight is defined by the World Health Organisation (WHO) as the weight of an infant at birth of less than 2 500 grams (5.5 pounds) irrespective of the gestational age of the infant. This is based on epidemiological observations regarding the increased risk of death to the infant and serves for international comparative health statistics. The number of low birth weight births is then expressed as a percentage of total live births.

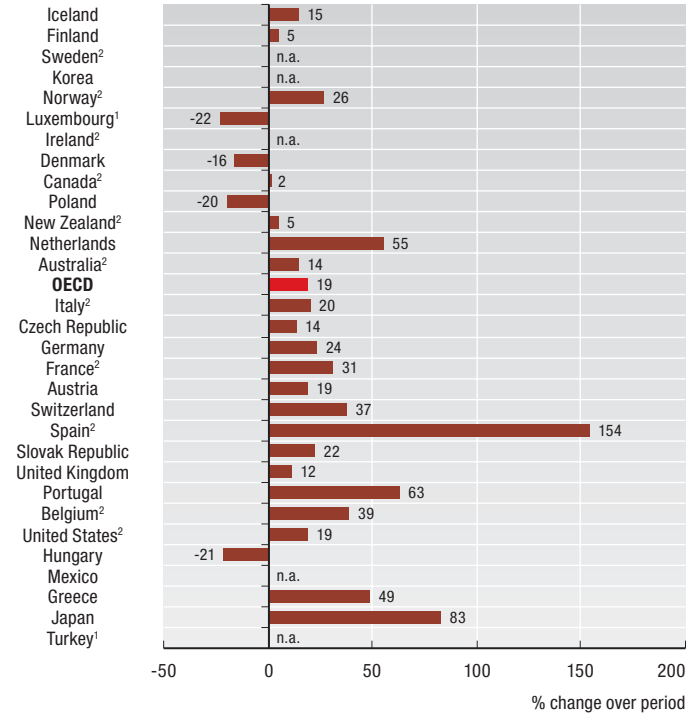
The majority of the data comes from birth registers, however in the case of the Netherlands, the source is a national health interview survey.

2.9. INFANT HEALTH: LOW BIRTH WEIGHT

2.9.1. Low birth weight infants, 2005

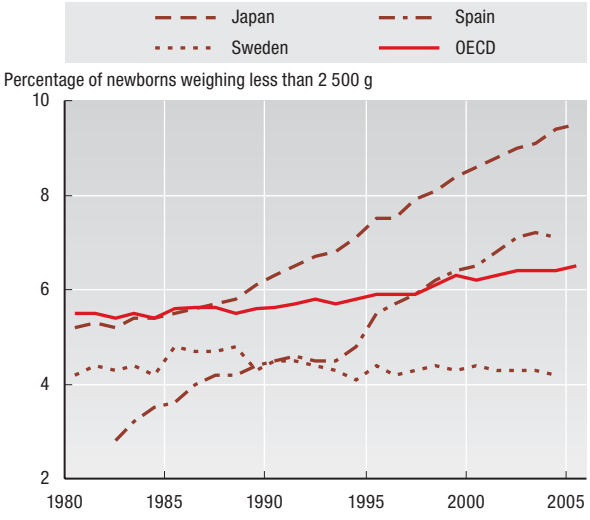


2.9.2. Change in proportion of low birth weight infants, 1980 to 2005

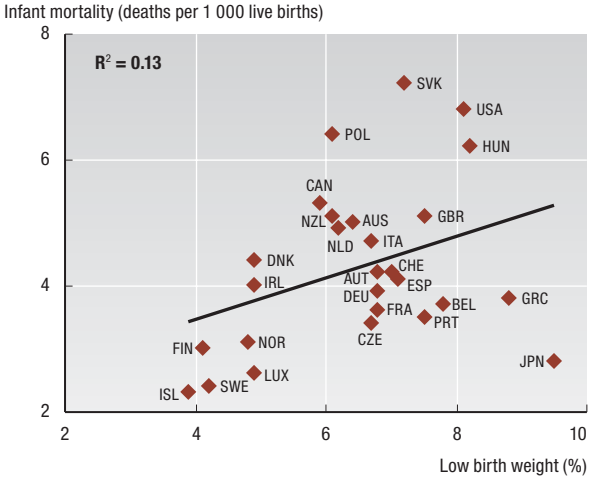


1. 2003. 2. 2004.

2.9.3. Trends in low birth weight infants, selected OECD countries, 1980-2005



2.9.4. Low birth weight and infant mortality, 2005



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113636302586

2.10. DENTAL HEALTH AMONG CHILDREN

Dental problems, mostly in the form of caries (tooth decay) and gum disease, are common in developed countries, affecting 60-90% of school children and the vast majority of adults (WHO, 2003). Dental and other oral diseases thus represent a major public health problem. Dental diseases are highly related to lifestyle factors, which include a high sugar diet, while also reflecting whether or not protective measures such as exposure to fluoride and good oral hygiene are present. Persons with poor oral health may experience pain and discomfort, functional impairment, low self-esteem and dissatisfaction with their appearance. Much of the burden of dental disease falls on disadvantaged and socially marginalised populations (WHO, 2003). Treatment of dental disease in developed countries is often costly.

In 2003, or the closest available year, 12-year-old children in Germany, the United Kingdom, the Netherlands, Switzerland, Luxembourg and Denmark had an average of less than one decayed, missing or filled permanent tooth (DMFT) (Chart 2.10.1). In contrast, children in Poland, Hungary, the Czech Republic and Portugal had three DMFT or more. Most OECD countries had between one and three DMFT for 12-year-old children.

The past 25 years have seen substantial falls in the DMFT index across OECD countries, declining from an average 4.5 in 1980, to 2.6 in 1990, and 1.4 in 2003 for a consistent group of countries with long time series (Table A.2.10 and Chart 2.10.3). During that period, 16 of the 19 OECD countries for which data are available saw declines in DMFT of 50% or more (Chart 2.10.2). This is a substantial public health achievement. A vast majority of countries were able to meet the World Health Organisation target of no more than three DMFT by the year 2000 (WHO, 2003).

Reductions in caries and other dental problems were achieved through numerous public health measures such as community water fluoridation, along with changing living conditions, disease management and improving oral hygiene.

Chart 2.10.4 shows little association between the number of DMFT among children and the number of dentists per capita. There are substantial differences in DMFT index scores among countries that have the same number of dentists per capita, indicating that many other factors affect dental health beyond the availability of dentists.

There is cause for concern among some countries which have seen a slowing of the decline, or even an increase in DMFT in recent years (Table A.2.10).

Definition and deviations

A common measure of dental health is the DMFT index. It describes the amount of dental caries in an individual through calculating the number of decayed (D), missing (M) or filled (F) permanent teeth. The sum of these three figures forms the DMFT index. In this instance, the data are for 12-year-old children. A DMFT index of less than 1.2 is judged to be very low, 1.2-2.6 is low, 2.7-4.4 is moderate, and 4.5 or more is high.

Norway provides an MFT index, which does not include decayed teeth. Sweden provides a DFT index, excluding a measure of missing teeth. The average age for New Zealand children may be slightly above 12, since Year 8 school children are surveyed.

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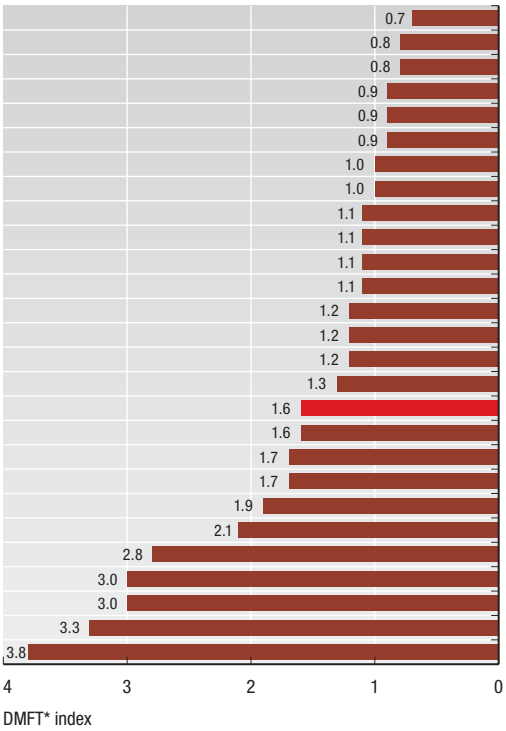
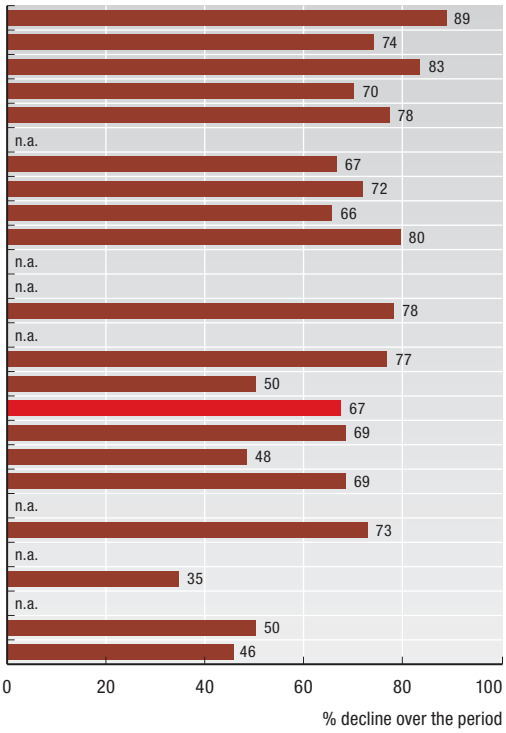
2.10. DENTAL HEALTH AMONG CHILDREN

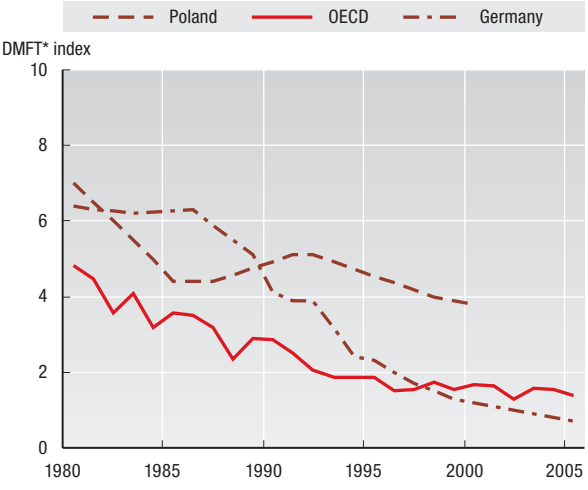
2.10.1. Average number of decayed, missing or filled teeth, 12-year-old children, 2003 (or latest year available)



2.10.2. Decline in average number of decayed, missing or filled teeth, 12-year-old children, 1980 to 2003



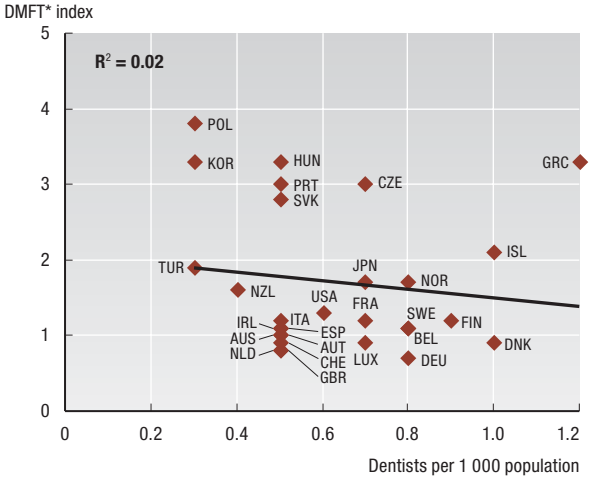
2.10.3. Average number of decayed, missing, or filled teeth, 12-years-old children, selected OECD countries, 1980-2005



* DMFT: Decayed, missing or filled teeth.

Source: OECD Health Data 2007.

2.10.4. Average number of decayed, missing, or filled teeth, 12-years-old children, and dentists per 1 000 population, 2003



StatLink http://dx.doi.org/10.1787/113668240747

2.11. PERCEIVED HEALTH STATUS

Most OECD countries are conducting regular health interview surveys which allow respondents to report on different aspects of their health. A commonly asked question relates to perceived health status, of the type: "How is your health in general?". Despite the general and subjective nature of this question, indicators of perceived health status have been found to be a good predictor of people's future health care use and mortality (for instance, see Miilunpalo *et al.*, 1997). For the purpose of international comparisons however, cross-country differences in perceived health status are difficult to interpret because responses may be affected by differences in the formulation of survey questions and responses, and by cultural factors.

Keeping these limitations in mind, in half of OECD countries, nearly three-quarters or more of the adult population rate their health to be good or very good or excellent (Chart 2.11.1). The United States, Canada and New Zealand are the three countries that have the highest percentage of people assessing their health to be good or very good, with about nine out of ten people reporting to be in good health. But the response categories offered to survey respondents in these three countries are different from those used in European countries and in OECD Asian countries, which introduces an upward bias in the results (see box on "Definition and deviations" below).

In Spain and Finland, about two-thirds of the adult population rate their health to be good or very good. At the lower end of the scale, less than half of the adult population in the Slovak Republic, Hungary, Portugal, Japan and Korea rate their health to be good or very good.

Focusing on within-country differences, in the majority of countries, men are more likely than women to rate their health as good or better (Chart 2.11.2). Unsurprisingly, people's positive rating of their own health tends to decline with age. In many countries, there is a particularly marked decline in a positive rating of one's own health after age 45 and a further decline after age 65. In all OECD countries, people with a lower level of education and people with a lower level of income do not rate their health as positively as people with a higher level of education or income.

The percentage of the adult population rating their health as being good or very good has remained generally stable over the past 25 years in those countries where such long time series are available (Chart 2.11.3). The same is generally true for the population aged 65 and over. One possible interpretation of the coexistence of relatively stable rates of perceived health status among the adult population with the steady rise in life expectancy over the past 25 years may be that people in these countries are living longer now, but possibly not healthier. Another possible interpretation of the relative stability of the indicator of perceived general health may be related to how it is measured specifically, that is, based on a bounded variable (*i.e.* respondents are asked to rank their health on a five-point scale that is unchanged over time), whereas life expectancy is measured without any such limit.

Definition and deviations

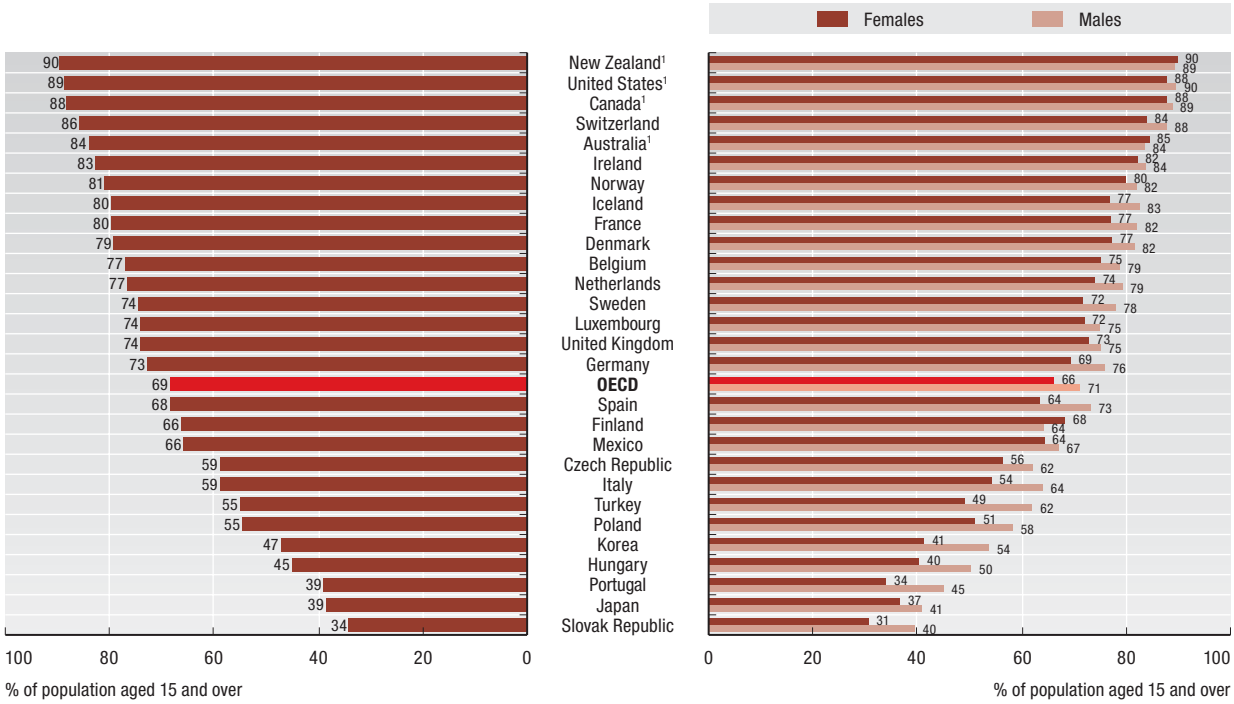
Perceived health status reflects people's overall perception of their health, including physical and psychological dimensions. Typically, survey respondents are asked a question such as: "How is your health in general? Very good, good, fair, poor, very poor". *OECD Health Data* provides figures related to the proportion of people rating their health to be "good/very good" combined.

Caution is required in making cross-country comparisons of perceived health status, for at least two reasons. First, people's assessment of their health is subjective and can be affected by a number of factors beyond their "real" health status, such as cultural background and national traits. Second, there are variations in the question and answer categories used to measure perceived health across surveys/countries. In particular, the response scale used in the United States, Canada, New Zealand and Australia is *asymmetric* (skewed on the positive side), including the following response categories: "excellent, very good, good, fair, poor". The data reported in *OECD Health Data* refer to respondents answering one of the three positive responses ("excellent, very good or good"). By contrast, in most other OECD countries, the response scale is *symmetric*, with response categories being: "very good, good, fair, poor, very poor". The data reported from these countries refer only to the first two categories ("very good, good"). Such a difference in response categories biases upward the results from those countries that are using an asymmetric scale compared with those using a symmetric scale.

2.11. PERCEIVED HEALTH STATUS

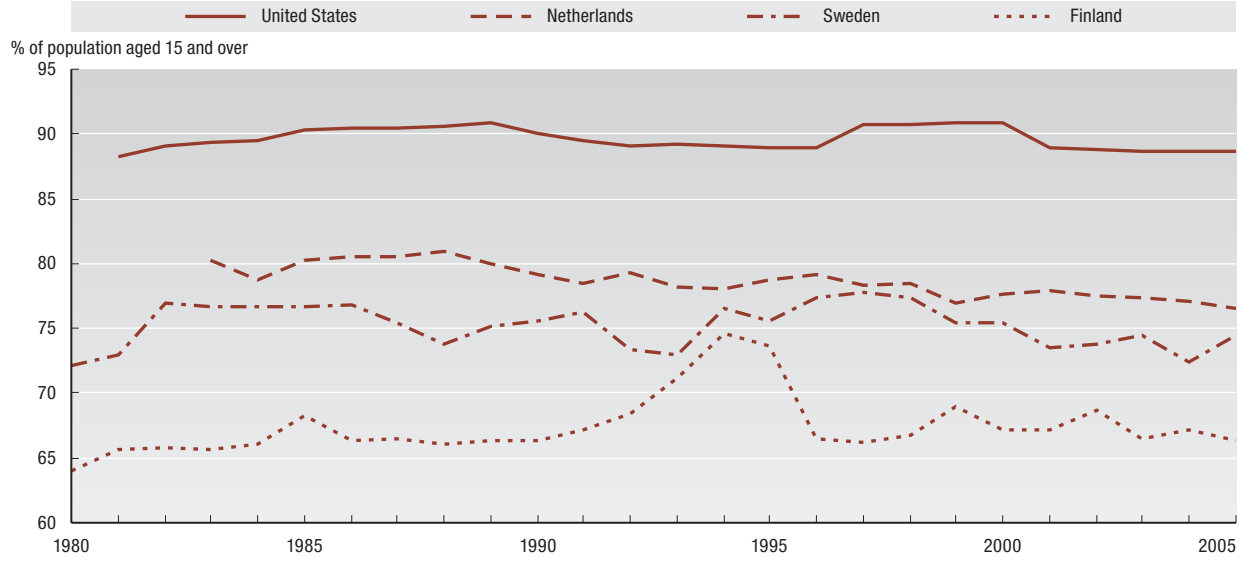
2.11.1. **Percentage of adults reporting to be in good health, females and males combined, 2005 (or latest year available)**

2.11.2. **Gender differences in the percentage of adults reporting to be in good health, 2005 (or latest year available)**



1. Results for these countries are not directly comparable with those for other countries, due to methodological differences in the survey questionnaire resulting in an upward bias.

2.11.3. **Trends in the percentage of adults reporting to be in good health, selected OECD countries, 1980 to 2005**



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113710855475

2.12. AIDS INCIDENCE

The first cases of Acquired Immunodeficiency Syndrome (AIDS) were diagnosed a quarter of a century ago. The onset of AIDS is normally caused as a result of HIV (human immunodeficiency virus) infection and can manifest itself as any number of different diseases, such as pneumonia and tuberculosis, as the immune system is no longer able to defend the body. There is a time lag between HIV infection, AIDS diagnosis and death due to HIV infection that can be any number of years depending on the treatment administered. Despite worldwide research however, there is no cure presently available.

In 2005, the number of reported new cases of AIDS stood at approximately 55 000 across the OECD area as a whole, representing an unweighted average incidence rate of 18.8 per million population (Chart 2.12.1 and Table A.2.12). Since the first reporting of AIDS cases in the early 1980s, the number of cases rose rapidly to reach an average of more than 44 new cases per million population across OECD countries at its peak in the first half of the 1990s, more than double current incidence rates (Chart 2.12.2). Public awareness campaigns contributed to steady declines in reported cases through the second half of the 1990s. In addition, the development and greater availability of antiretroviral drugs, which reduce or slow down the development of the disease, led to a sharp decrease in incidence between 1996 and 1997.

The United States has consistently shown the highest AIDS incidence rates among OECD countries, although it is important to note that the case reporting definitions were expanded in 1993 and subsequently differ from the definition used across Europe and other OECD countries. The change in definition also explains the large increase in cases in the United States in 1993 (Chart 2.12.2). In Europe, Spain reported the highest incidence rates in the first decade following the outbreak, although there has been a sharp decline since 1994, leaving Portugal currently with the highest rate among European countries. Central European countries such as the Czech and Slovak Republics and Hungary, along with Korea and Japan, report the lowest incidence rates of AIDS among OECD countries.

In the United States, racial and ethnic minorities continue to be disproportionately affected by the AIDS epidemic. In Canada, aboriginal people are over-represented. In most OECD countries, the main risk factor for HIV infection remains unprotected sex between men (UNAIDS, 2006). At the same time, approximately 75% of heterosexually acquired HIV infection in western and central Europe are among immigrants and migrants.

In recent years, the overall decline in AIDS cases has slowed down. This reversal in progress has been accompanied by evidence of a resurgence in new HIV infection rates. This has been attributed to complacency regarding the effectiveness of treatment and a waning of public awareness regarding drug use and sexual practice. Further inroads in AIDS incidence rates will require more intensive HIV prevention programmes that are focused and adapted to reach those most at risk of HIV infection.

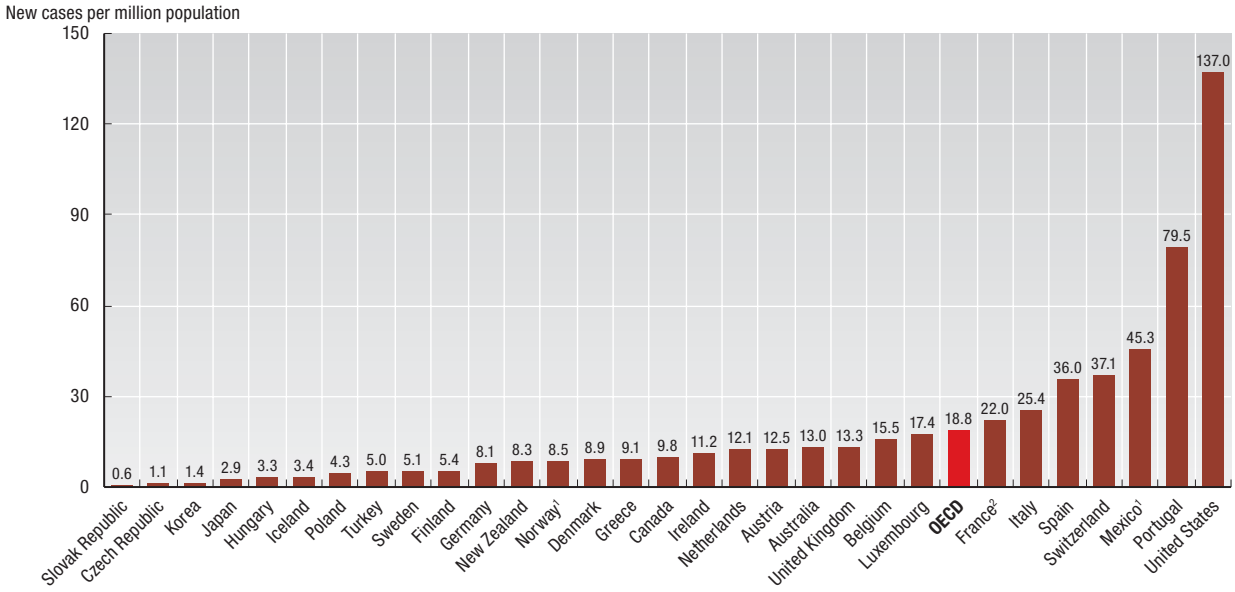
Definition and deviations

The incidence rate of AIDS is the number of new cases per million population at year of diagnosis. Note that data for recent years are provisional due to reporting delays, which sometimes can be for several years depending on the country.

The United States expanded their AIDS surveillance case definition in 1993 to include T-lymphocyte count criteria. This broadening of the definition led to a large increase in the number of new cases in the United States in 1993 and explains some of the current variations in AIDS incidence between the United States and other OECD countries.

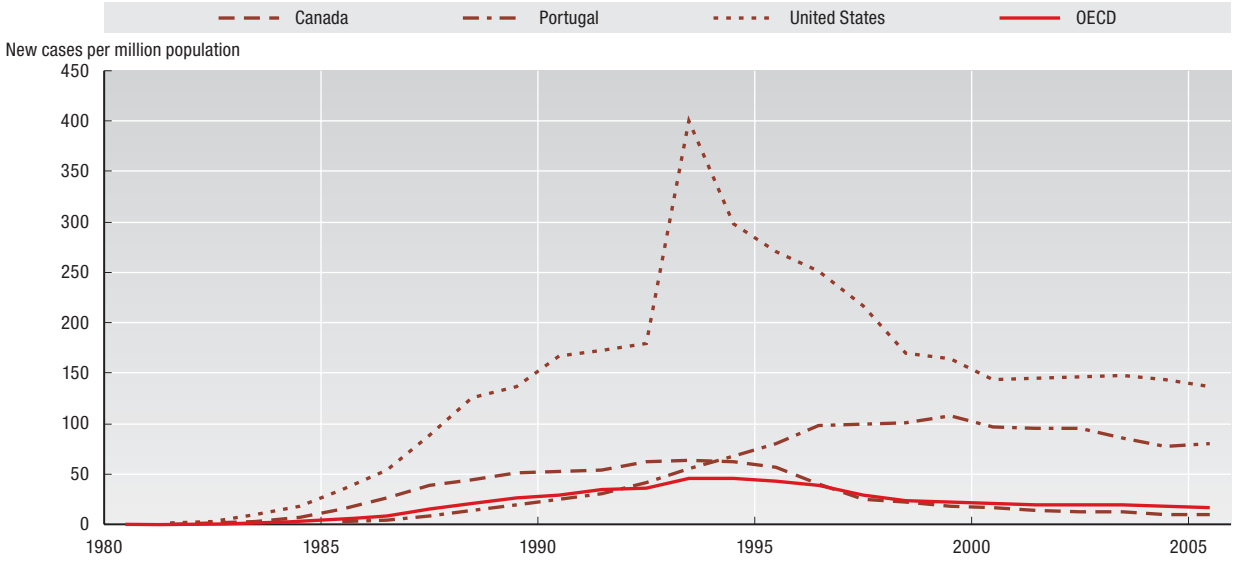
2.12. AIDS INCIDENCE

2.12.1. **AIDS incidence rates, 2005**



1. 2003. 2. 2004.

2.12.2. **Trends in AIDS incidence rates, 1980-2005**



Note: The United States expanded their AIDS surveillance case definition in 1993.
Data for European countries are extracted from the European Center for the Epidemiological Monitoring of AIDS.
Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113724174126


JANUARY
1
JANUARY

3. NON-MEDICAL DETERMINANTS OF HEALTH

3.1. TOBACCO CONSUMPTION

According to the World Health Organisation, tobacco is the second major cause of death in the world, and is directly responsible for about one in ten adult deaths world wide, equating to about 5 million deaths each year (WHO, 2002a). It is a major risk factor for at least two of the leading causes of premature mortality – circulatory diseases and a range of cancers. In addition, it is an important contributory factor for respiratory diseases, while smoking among pregnant women can lead to low birth weight and illnesses among infants. It remains the largest avoidable risk to health in OECD countries.

The proportion of daily smokers among the adult population varies greatly across OECD countries, even between neighboring countries (Chart 3.1.1). Smoking rates are lowest in North America, Australia, and in countries as diverse as Sweden and Portugal. On average, smoking rates have decreased by almost 3 percentage points in OECD countries since 2000, consistently in men and women. Major contributors to such decrease include Belgium (31% to 20%), Canada (22% to 17%), Denmark (30% to 26%), Korea (30% to 25%) and Luxembourg (30% to 23%). Greece maintains the highest level of smoking, and is the only OECD country where smoking appears to be on the increase (35% to 39%) in both men and women.

In the post-war period, most OECD countries tended to follow a general pattern marked by very high smoking rates among men (50% or more) through to the 1960s and 1970s, while the 1980s and the 1990s were characterised by a marked downturn in tobacco consumption. Much of this decline can be attributed to policies aimed at reducing tobacco consumption through public awareness campaigns, advertising bans and increased taxation, in response to rising rates of tobacco-related diseases (World Bank, 1999). In addition to government policies, actions by anti-smoking interest groups were very effective in reducing smoking rates by changing beliefs about the health effects of smoking, particularly in North America (Cutler and Glaeser, 2006).

Although large disparities remain, smoking rates across most OECD countries have shown a marked decline over recent decades (Chart 3.1.3). Smoking prevalence among men continues to be higher than among women in all OECD countries except Sweden. Female smoking rates keep declining in most OECD countries, in some cases at an even faster pace than male rates. In only four countries female smoking rates appear to have been increasing over the last 15 years (Greece, Germany, Mexico and Spain), but in these countries women still lag significantly behind men in smoking. In 2005, the gender gap in smoking rates was particularly large in Korea, Japan and Turkey and, to a lesser extent, in Mexico, Portugal, Greece and Poland (Chart 3.1.2).

Chart 3.1.4 shows the correlation between tobacco consumption (as measured by grams per capita) and incidence of lung cancer across OECD countries, with a time lag of two decades. Higher tobacco consumption at the national level is also generally associated with higher mortality rates from lung cancer one or two decades later across OECD countries.

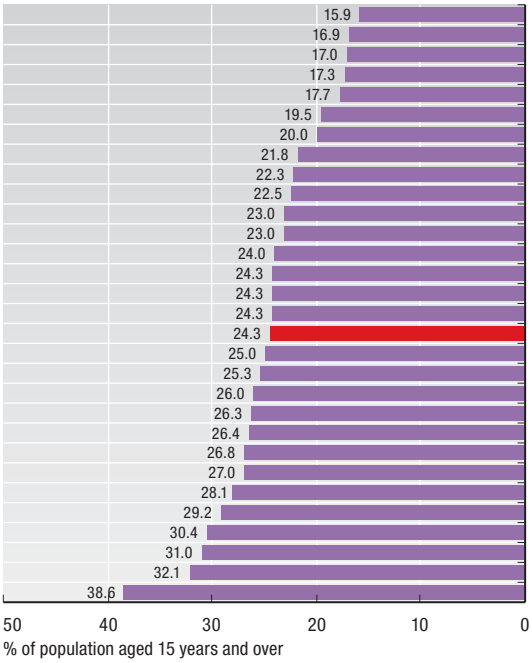
Definition and deviations

The proportion of daily smokers is defined as the percentage of the population aged 15 years and over reporting smoking every day.

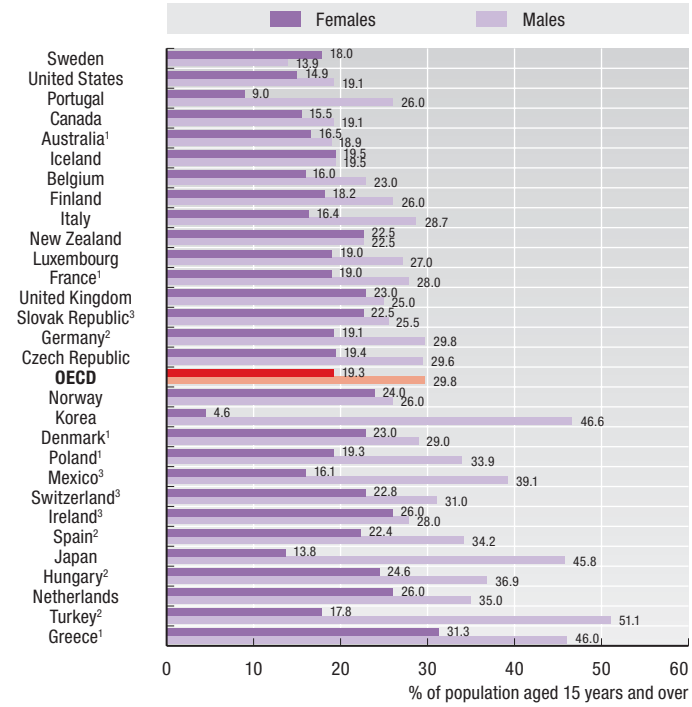
International comparability is limited due to the lack of standardisation in the measurement of smoking habits in health interview surveys across OECD countries. Variations remain in the wording of questions, response categories and survey methodologies.

3.1. TOBACCO CONSUMPTION

3.1.1. Percentage of adult population smoking daily, 2005

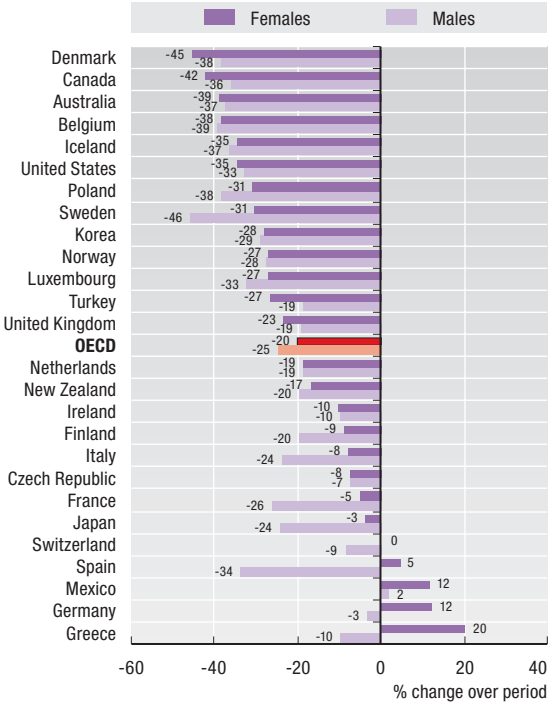


3.1.2. Percentage of females and males smoking daily, 2005

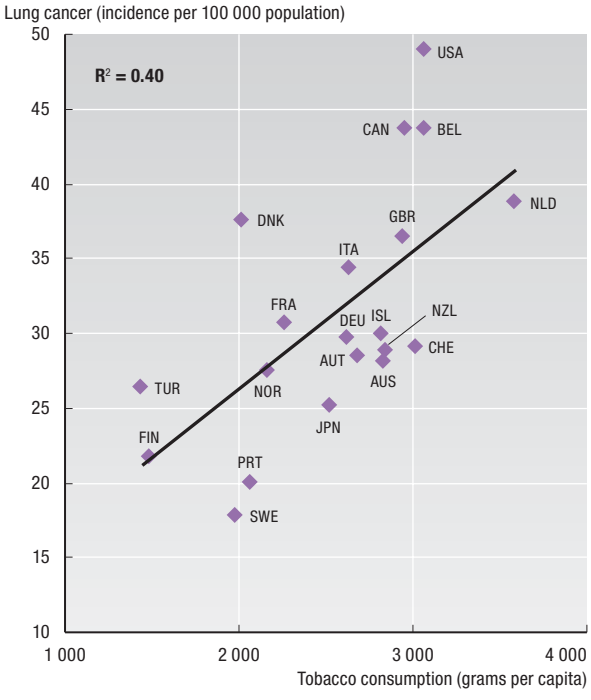


1. 2004. 2. 2003. 3. 2002.

3.1.3. Change in smoking rates by gender, 1990 to 2005 (or nearest year available)



3.1.4. Tobacco consumption, 1980 and incidence of lung cancer, 2002



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113773816887

3.2. ALCOHOL CONSUMPTION

Excessive alcohol consumption is associated with numerous harmful health effects. High alcohol intake increases the risk for heart, stroke and vascular diseases, as well as liver cirrhosis and certain cancers. Foetal exposure to alcohol increases the risk of congenital malformations and mental retardation. Alcohol also contributes to death and disability through accidents and injuries, assault, violence, homicide and suicide.

Alcohol consumption, as measured by annual sales, stands on average across OECD countries at 9.5 litres per adult, using the most recent data available. There is, however, much variation across countries. Leaving aside Luxembourg, given the high volume of purchases by non-residents in that country, Ireland, Hungary, France and the Czech Republic reported the highest consumption of alcohol, with 12 litres or more per adult per year in 2005 (or 2004). At the other end of the scale, Turkey, Mexico and some of the Nordic countries (Norway, Sweden and Iceland) reported relatively low levels of alcohol consumption, ranging from 1.3 to 7.1 litres per adult (Chart 3.2.1).

Although average alcohol consumption has gradually fallen in many OECD countries over the past two decades, it has risen in some others (Chart 3.2.2). There has been a degree of convergence in drinking habits across the OECD, with wine consumption increasing in many traditional beer-drinking countries and *vice versa*. The traditional wine-producing countries of Italy, France and Spain have seen their alcohol consumption per capita drop substantially since 1980 (Charts 3.2.2 and 3.2.3). On the other hand, alcohol consumption per capita in Iceland, Ireland and Mexico rose by as much as 40% or more since 1980 although, in the case of Iceland and Mexico, it started from a very low level and therefore remains relatively low.

Variations in alcohol consumption across countries and over time reflect not only changing drinking habits but also the policy responses to control alcohol use. Curbs on advertising, sales restrictions and taxation have all proven to be effective measures to reduce alcohol consumption (Bennett, 2003). Strict controls on sales and high taxation are mirrored by overall lower consumption in most Nordic countries, while falls in consumption in France, Italy and Spain may be associated with the voluntary and statutory regulation of advertising, partly following a 1989 European directive.

Although adult alcohol consumption per capita gives useful evidence of long-term trends, it does not identify sub-populations at risk from harmful drinking patterns. The consumption of large quantities of alcohol at a single session, termed "binge drinking", is a particularly dangerous pattern of consumption (Institute of Alcohol Studies, 2007), which is on the rise in some countries and social groups (particularly young males). Unfortunately, information on drinking patterns is usually unavailable from large health surveys and can only be obtained from detailed surveys of drinking habits.

Chart 3.2.4 shows the relationship between alcohol consumption in 1990 and deaths from liver cirrhosis in 2004. In general, countries with high levels of alcohol consumption tend to experience higher death rates from liver cirrhosis 10 to 15 years later compared with countries with lower levels of consumption. In most OECD countries, death rates from liver cirrhosis have fallen over the past two decades, following quite closely the overall reduction in alcohol consumption.

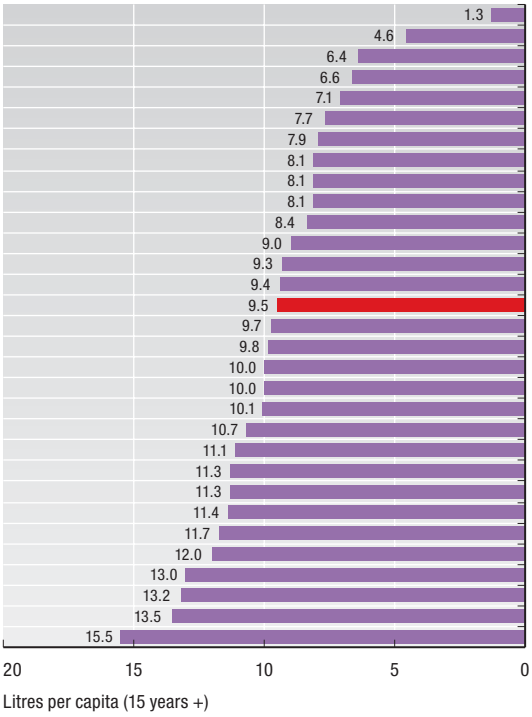
Definition and deviations

Alcohol consumption is defined as annual sales of pure alcohol in litres per person aged 15 years and over. The methodology to convert alcohol drinks to pure alcohol may differ across countries.

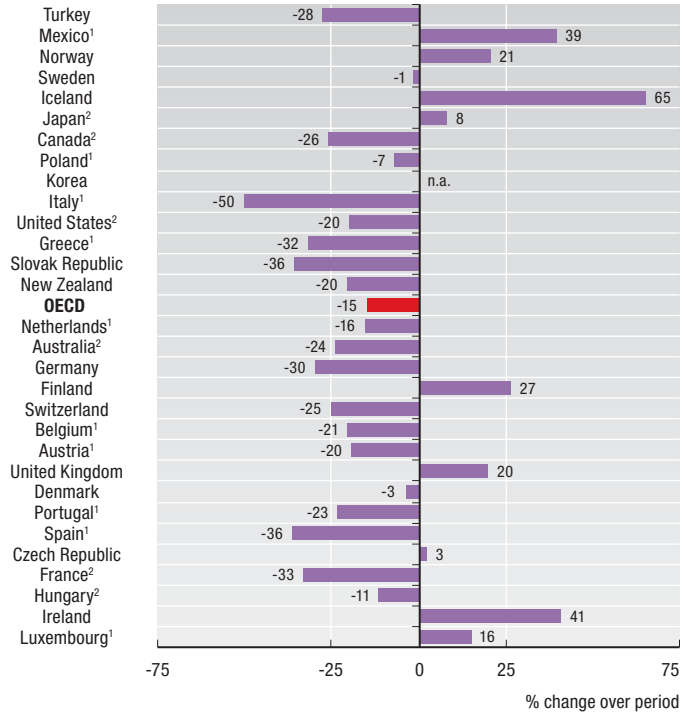
In some countries (*e.g.* Luxembourg), national sales do not accurately reflect actual consumption by residents, since purchases by non-residents may create a significant gap between national sales and consumption.

3.2. ALCOHOL CONSUMPTION

3.2.1. Alcohol consumption in litres per capita, population 15 years and over, 2005

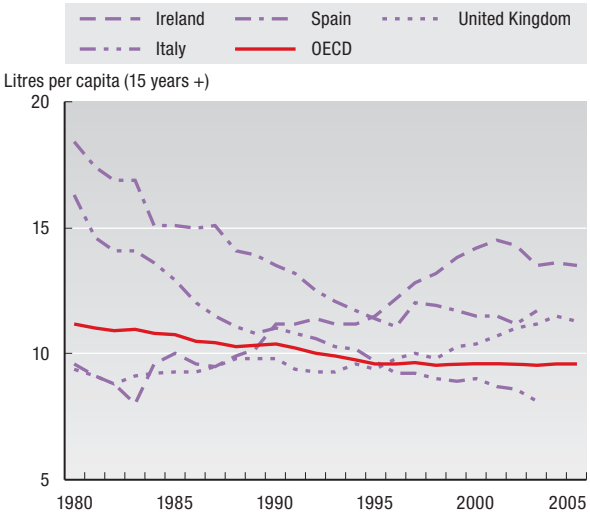


3.2.2. Change in alcohol consumption per capita, population 15 years and over, 1980 to 2005

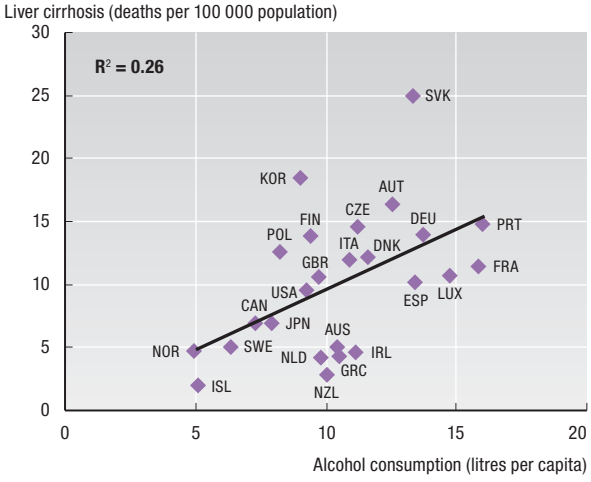


1. 2003. 2. 2004.

3.2.3. Trends in alcohol consumption, selected OECD countries, 1980 to 2005



3.2.4. Liver cirrhosis deaths, 2004 and alcohol consumption, 1990



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113804155542

3.3. OVERWEIGHT AND OBESITY

In many OECD countries, the growth in overweight and obesity rates among children and adults is rapidly becoming a major public health concern. Obesity is a known risk factor for numerous health problems, including hypertension, high cholesterol, diabetes, cardiovascular diseases, respiratory problems (asthma), musculoskeletal diseases (arthritis) and some forms of cancer. In the United States, where more than three out of ten adults are now obese, a recent study estimated that the cost related to obesity now exceeds the cost related to both smoking and excessive drinking combined for a set of chronic health problems (Sturm, 2002).

Half or more of the adult population is now defined as either being overweight or obese in no less than 15 OECD countries: Mexico, the United States, the United Kingdom, Australia, Greece, New Zealand, Luxembourg, Hungary, the Czech Republic, Canada, Germany, Portugal, Finland, Spain and Iceland (Table A.3.3). In contrast, overweight and obesity rates are much lower in the OECD's two Asian countries (Japan and Korea) and in some European countries (France and Switzerland), although overweight and obesity rates are also increasing in these countries. Focussing only on obesity (which presents greater health risks than being overweight), the prevalence of obesity among adults varies tenfold among OECD countries, from a low of 3% in Japan and Korea, to over 30% in the United States and Mexico (Charts 3.3.1 and 3.3.2).

Using consistent measures of obesity over time, the rate of obesity has more than doubled over the past 20 years in the United States, while it has almost tripled in Australia and more than tripled in the United Kingdom (Chart 3.3.3). Some 21-23% of adults in the United Kingdom, Greece, Australia and New Zealand are now defined as obese, about the same rate as in the United States in the early 1990s. Obesity rates in many western European countries have also increased substantially over the past decade.

In many countries, the rise in obesity has affected all population groups, regardless of sex, age, race, income or education level. Evidence from the United States, Canada and the United Kingdom indicates that obesity tends to be more common among individuals in disadvantaged socio-economic groups than in more affluent groups (Statistics Canada and CDC, 2004). This is particularly true in women, while the gradient is absent, or much less pronounced, in men.

Because obesity is associated with higher risks of chronic illnesses, it is linked to significant additional health care costs. At a macro level, it has been estimated that health care costs which might be attributed to obesity accounted for about 5-7% of total health spending in the United States in the late 1990s, and 2 to 3.5% of health spending in other countries like Canada, Australia and New Zealand (Thompson and Wolf, 2001). At a microlevel, estimates from the United States indicate that the cost of health care services is 36% higher, and the cost of medications 77% higher, for obese people than for people of normal weight (Sturm, 2002). There is a time lag of several years between the onset of obesity and related health problems, suggesting that the rise in obesity over the past two decades observed in most OECD countries will mean higher health care costs in the future.

A number of behavioural and environmental factors have contributed to the rise in overweight and obesity rates in industrialised countries, including falling real prices of food and more time spent being physically inactive. Overweight and obesity are also rising fast in children, having reached double-figure rates in most OECD countries, with highs of one-third of children aged 13-14 in Spain (2000-02); 29% of children aged 5-17 in England (2004); and about one-fourth of children aged 5-17 in Italy (1993-2001) and 5-15 in Belgium (1998-99) (International Association for the Study of Obesity, 2007).

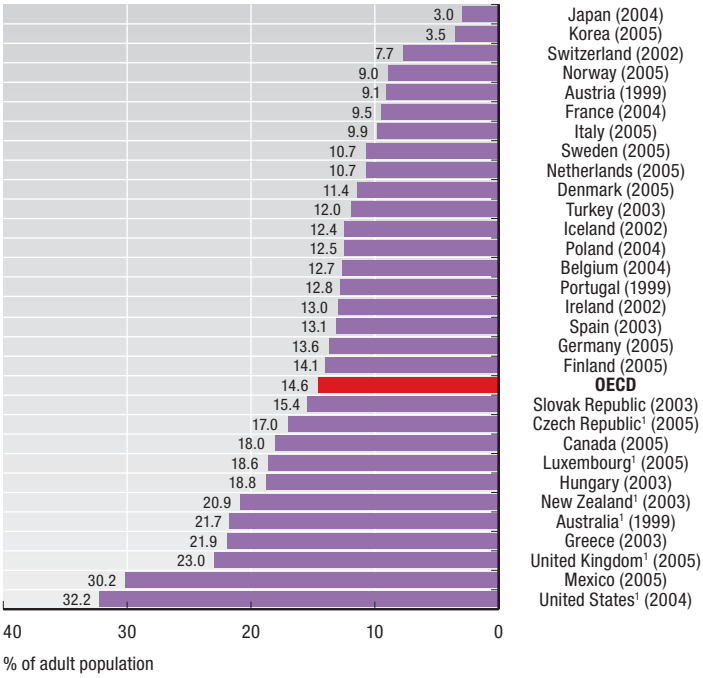
Definition and deviations

Overweight and obesity are defined as excessive weight presenting health risks because of the high proportion of body fat. The most frequently used measure of overweight and obesity is based on the body mass index (BMI), which is a single number that evaluates an individual's weight status in relation to height (weight/height^2, with weight in kilograms and height in metres). Based on the WHO current classification (WHO, 1997), adults with a BMI between 25 and 30 are defined as overweight, and those with a BMI over 30 as obese. This classification may not be suitable however for all ethnic groups, who may have equivalent levels of risk at lower BMI (for example, Asians) or higher BMI (AIHW, 2004). The thresholds for adults are also not suitable to measure overweight and obesity among children.

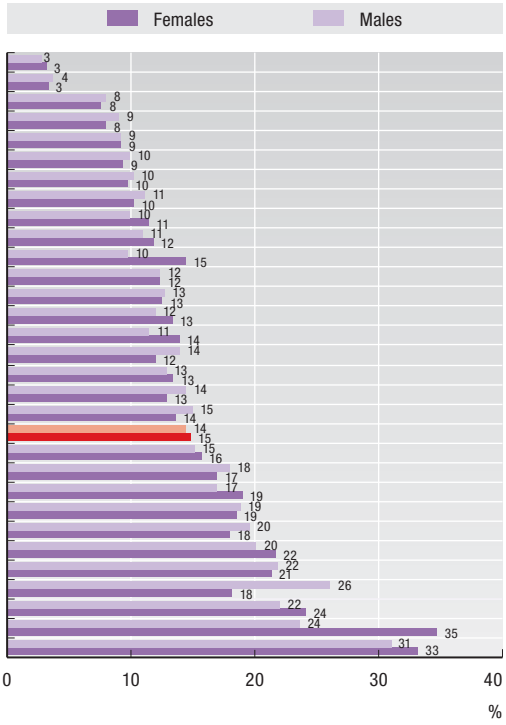
For most countries, estimates of overweight and obesity rates are self-reported through estimates of height and weight from population-based health interview surveys. The exceptions are Australia, the Czech Republic (2005), Luxembourg, New Zealand, the United Kingdom and the United States, where estimates are derived from health examinations whereby actual measures are taken of people's height and weight. These differences in data collection methodologies seriously limit data comparability. Estimates from health examinations are generally higher and more reliable than those coming from health interviews. For instance, in the United States, the adult obesity rate based on face-to-face interviews was 22% in 1999, compared with 31% in that same year based on actual measurements. Health examination surveys are only conducted regularly in a few countries.

3.3. OVERWEIGHT AND OBESITY

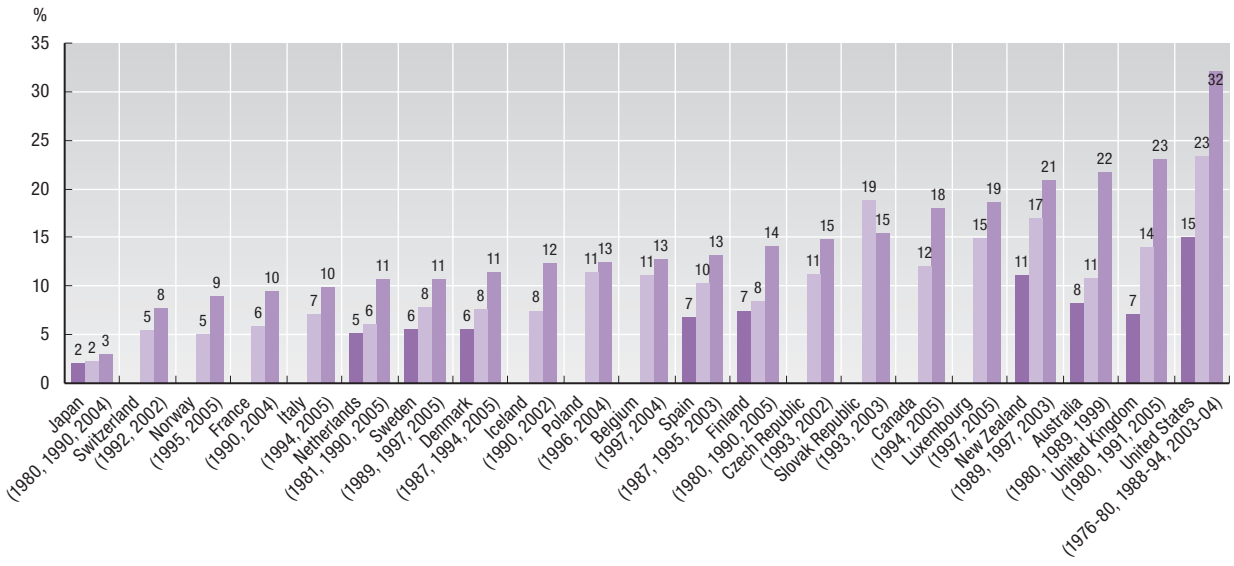
3.3.1. Percentage of adult population with Body Mass Index over 30 (obese population), 2005 (or latest year available)



3.3.2. Percentage of females and males with Body Mass Index over 30 (obese population), 2005 (or latest year available)



3.3.3. Increasing obesity rates among the adult population in OECD countries



1. For Australia, the Czech Republic (2005), Luxembourg, New Zealand, the United Kingdom and the United States, figures are based on health examination surveys, rather than health interview surveys.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113882465568

4. HEALTH CARE RESOURCES AND UTILISATION

4.1. MEDICAL AND NURSING GRADUATES

Maintaining or growing a professional health workforce requires either investment in training new staff or recruitment of trained staff from abroad, particularly as the baby boom generation of doctors and nurses approaches retirement.

Matching supply to demand is complicated by the lags involved in training health professionals. If it takes, say, ten years to train a doctor, then a sudden, unanticipated increase in demand can be met only by recruiting qualified doctors from abroad, unless there are unemployed doctors at home. Conversely, a sudden fall in demand may mean that new graduates, in particular, struggle to find vacant posts at home.

The institutional arrangements for training medical and nursing staff differ significantly across OECD countries. In some countries, the number to be trained is decided centrally and the training is mainly publicly funded and takes place mainly in public institutions. In other countries, the number to be trained is decided in a decentralised way and is partly privately funded and takes place partly in private institutions.

Charts 4.1.1 and 4.1.2 show the reported graduation rates of new doctors and nurses, respectively, across OECD countries in 2005. There was considerable variation in both indicators across countries. Countries with high graduation rates in 2005 (such as Korea and Austria, in the case of doctors, and Finland and Portugal in the case of nurses) had seen rapid growth in the number of practising doctors and nurses in the period 1990-2005 (see Chart 4.2.2 in Indicator 4.2 "Practising physicians" and Chart 4.3.2 in Indicator 4.3 "Practising nurses"). The opposite tended to be true for many countries with low graduation rates (such as France, Portugal and Canada, in the case of doctors, and Australia and Canada – where nurse density had shrunk – in the case of nurses). It is likely that current training rates are sensitive to past and anticipated changes in demand, to some extent. However, it is also likely that both current and past training rates and the recent growth in staff density have been decided partly on the supply side in many countries. Korea and Austria, at the top of the medical graduation table, do not control entry to medical schools centrally. In contrast, most of the countries with medical graduation rates below the OECD average in 2005, do control entry to medical schools (Simoens and Hurst, 2006).

The average graduation rate for doctors was 35 per 1 000 practising doctors and that for nurses was 46 across the OECD area in 2005. This difference in graduation rates across the two professions is not surprising, since the average working life for a nurse tends to be significantly shorter than for a doctor, partly because the two professions have a different gender mix.

Charts 4.1.3 and 4.1.4 show trends in graduation rates for doctors and nurses respectively, for selected OECD countries in the period 1985-2005. There has been a pronounced decline in the average rate of graduation of doctors across the OECD and in individual countries – with a few countries showing signs of a modest upturn in rates in the second half of the period, or more recently. This decline was associated with a reduction in the rate of growth of physician density itself in the period 1990-2005 compared with 1975-90 (see Indicator 4.2 "Practising physicians"). It is difficult to say to what extent this decline in graduation rates was driven by changes in demand and to what extent both it and the decline in the rate of growth of physician density, were determined on the supply side, by the adoption or tightening of controls on entry to medical schools, in some countries.

Turning to nurses, there is less sign of a downward trend in graduation rates in the selected countries. What is striking, however, is that there are signs of periodic fluctuations in nurse graduation rates over an approximately ten-year period in several countries. This is likely due to lags in the response of supply to changes in demand (Simoens *et al.*, 2005).

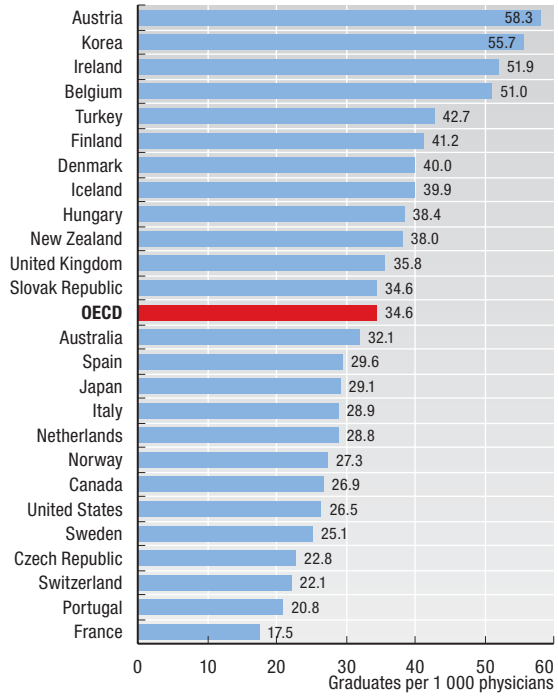
Definition and deviations

Medical graduates are defined as the number of students who have graduated from medical schools or similar institutions in a given year. Dental, public health and epidemiology graduates are excluded. Nursing graduates are defined as the number of students who have obtained a recognised nursing qualification, required to become a licensed or registered nurse, in a given year. Graduate midwives are included.

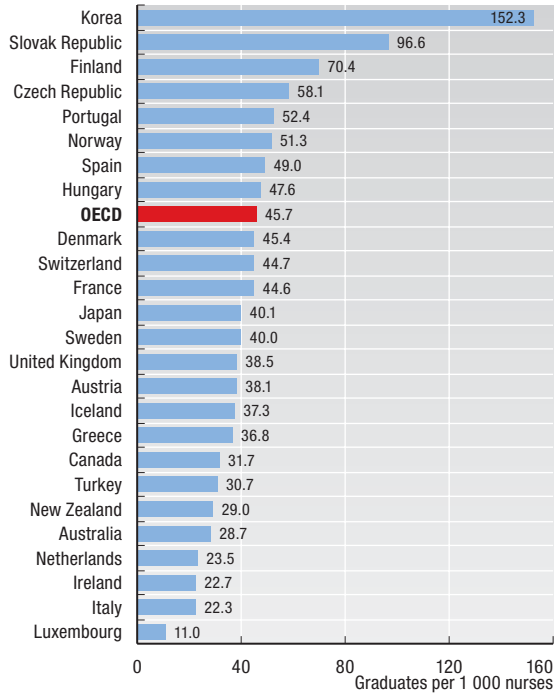
In the case of medical graduates, the Czech Republic and the United Kingdom exclude foreign graduates. Some other countries include such students. In the case of nursing graduates, the United Kingdom excludes graduates from overseas.

4.1. MEDICAL AND NURSING GRADUATES

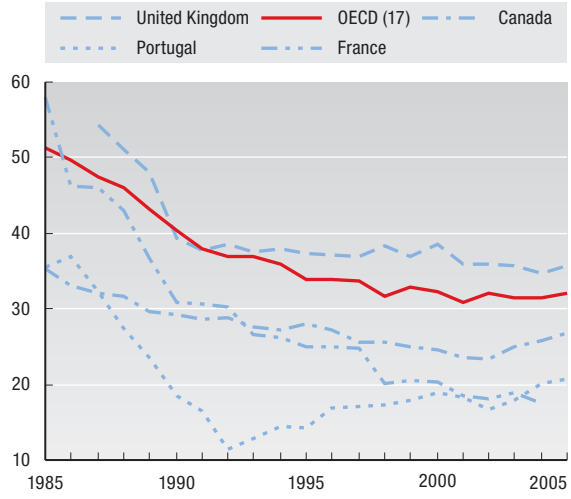
4.1.1. Medical graduates per 1 000 physicians, 2005 (or latest year available)



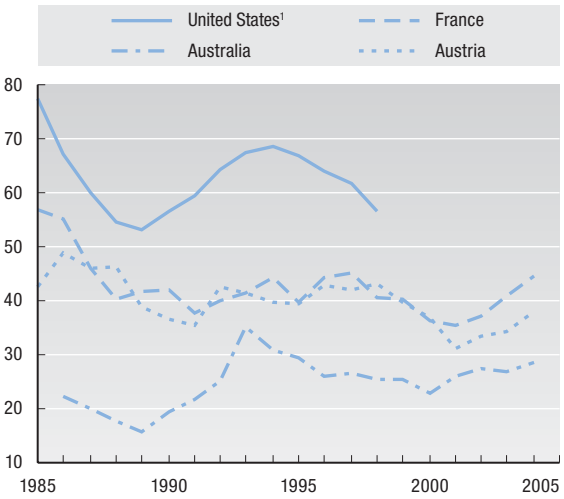
4.1.2. Nursing graduates per 1 000 nurses, 2005 (or latest year available)



4.1.3. Number of medical graduates per 1 000 physicians, selected OECD countries, 1985 to 2005



4.1.4. Number of nursing graduates per 1 000 nurses, selected countries, 1985 to 2005



Note: Due to limitation in data availability, the OECD average is not available.

1. For the United States, the data are only available until 1998 because the data collection on licensed practical nurses graduates was discontinued afterwards.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/113884058288

4.2. PRACTISING PHYSICIANS

An adequate supply of well-trained and geographically well-distributed doctors is critical for providing patients with access to high-quality medical care. And because physicians make many of the key decisions about the diagnosis and treatment of patients, they orchestrate the demand for human and other resources in health care, which costs far more than the price of the doctors' own time, as reflected in physicians' fees and salaries.

There continued to be large variations in the number of practising doctors per 1 000 population (physician "density") across OECD countries in 2005, ranging from 4 or more per 1 000 population in Belgium and Greece, to below 2 per 1 000 in Korea, Mexico and Turkey (Chart 4.2.1). The OECD average was 3 per 1 000.

Physician "density" has grown significantly in the past 30 years in all OECD countries, but at a declining rate in nearly all of them. Thus, physician density grew at an average rate of 3% per annum between 1975 and 1990 in those OECD countries for which such long time series are available, but at an average rate of only 1.6% per annum between 1990 and 2005 in the same countries (Chart 4.2.2). Only Austria and the United Kingdom reported higher growth rates in the latter period, compared with the former. Cost containment efforts played a part in this declining rate of increase in physician density in many countries. It is widely believed that physicians can induce demand for medical care, especially when they are paid by fee-for-service. A number of countries adopted controls on medical school intake (so-called *numerus clausus* policies) or tightened existing controls on medical school intake in the 1980s and 1990s (OECD, 2006a).

Chart 4.2.3 presents data on specialist and generalist density across OECD countries. It should be noted that in some countries not all practising physicians are included in these two categories (see below). Specialists greatly outnumber generalists on average across OECD countries. On average, specialist density is 1.7 whereas general practitioner (GP) density is only 0.8. However, Australia and Belgium report more GPs than specialists, and France, Portugal, New Zealand and Turkey report equal numbers of GPs and specialists. Although both health policy and health research tend to emphasise the importance and cost-effectiveness of generalist primary care (Starfield *et al.*, 2002 and 2005), the advance of medical technology seems to drive ever greater specialisation in medicine. On average, the specialist/GP ratio increased from 1.5 to 2 between 1990 and 2005 in the OECD countries for which data are available.

The indirect cost consequences of doctors' diagnostic and treatment decisions seem to have been growing steadily in most OECD countries. Chart 4.2.4 depicts real health expenditure (in USD million at constant PPP currency conversion rates and constant GDP prices) per practising physician in a selection of OECD countries and for a consistent OECD average from 1990 to 2005. Health expenditure per doctor in the United States was six-and-a-half times that in Poland in 2005. It has been rising over this period in nearly all the countries for which data are available and on average it rose by about one-third over this period. Retrospective analysis by the OECD suggests that rising national income and advances in medical technology have been more important than the ageing of populations in driving rises in health expenditure in the past 20 years (OECD, 2006b). An increase in the price of medical care relative to GDP has played a part in these trends, also.

Rising physician density, increasing specialisation and rising expenditure per doctor seems to have coincided with improvements in the technical quality of health care for selected conditions in some countries (see Chapter 6 on quality of care).

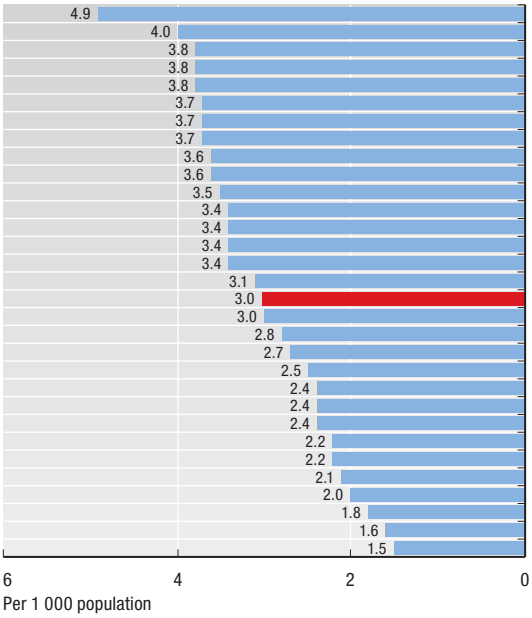
Definition and deviations

Practising physicians are defined as the number of doctors who are actively practising medicine in public and private institutions. In many countries (but not all), the numbers include interns and residents (doctors in training). The numbers are based on head counts, except in Norway which reported full-time equivalents prior to 2002. Ireland, the Netherlands, New Zealand and Portugal report the number of physicians entitled to practice (resulting in an overestimation). Data for Spain include dentists and stomatologists (overestimation).

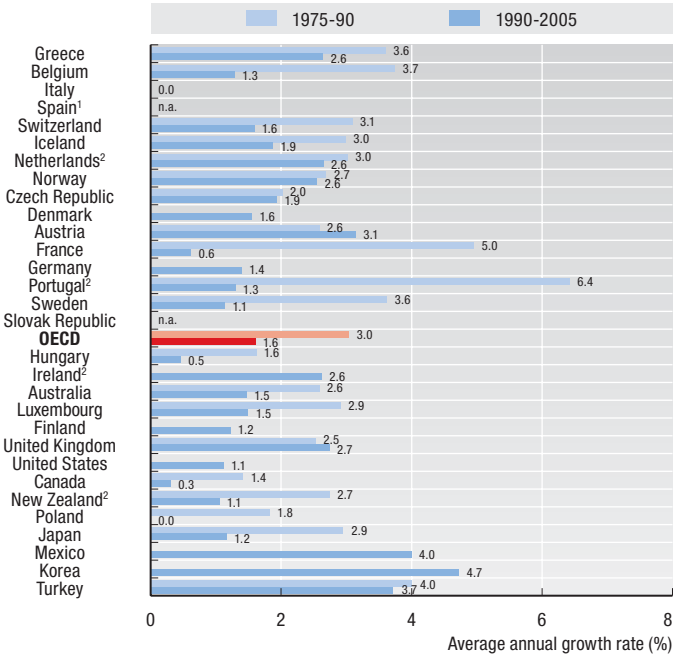
Not all countries are able to report all their practising physicians in the two broad categories of specialists and generalists (for instance, because specialty-specific figures are not available for doctors in training in some countries, or for those working in private practice in others).

4.2. PRACTISING PHYSICIANS

4.2.1. Practising physicians per 1 000 population, 2005 (or latest year available)

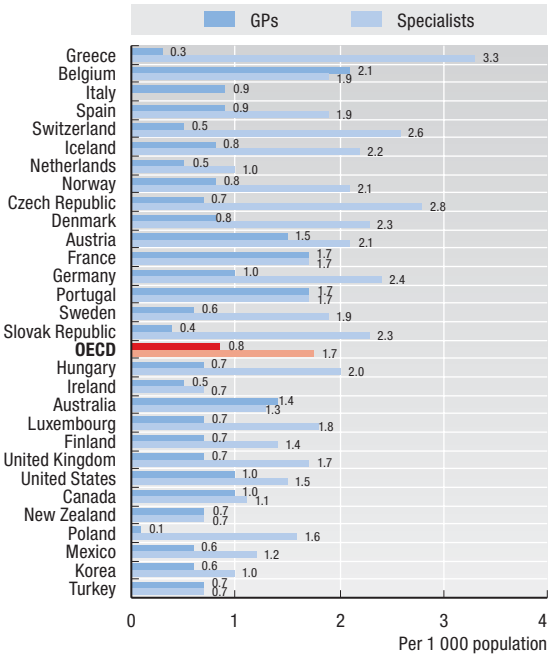


4.2.2. Growth in practising physician density, 1975-90 and 1990-2005



1. Data for Spain include dentists and stomatologists.
2. Ireland, the Netherlands, New Zealand and Portugal provide the number of all physicians entitled to practise rather than only those practising.

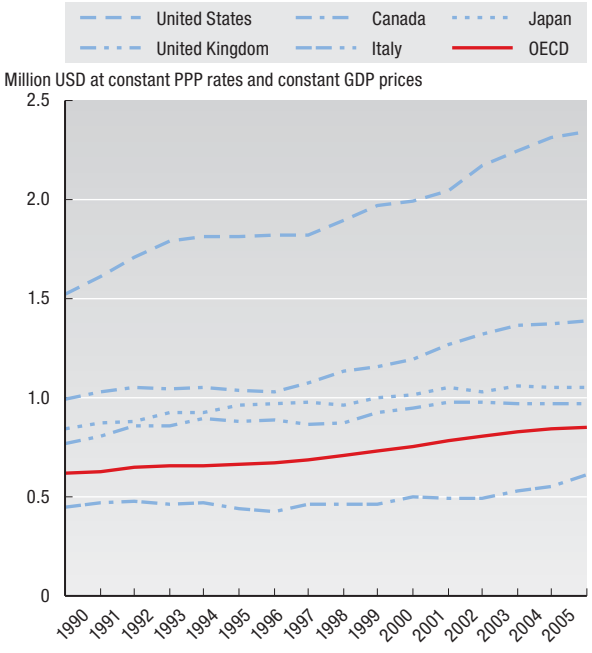
4.2.3. General practitioners and specialists per 1 000 population, 2005 (or latest year available)



Note: Some countries are unable to report all their practising doctors in these two categories of GPs and specialists.

Source: OECD Health Data 2007.

4.2.4. Real health expenditure per practising physician, 1990 to 2005



Note: The OECD average also includes countries that report breaks in their series on health expenditure due to methodological changes.

StatLink http://dx.doi.org/10.1787/114007335156

4.3. PRACTISING NURSES

Nurses are usually the most numerous health profession in OECD countries, outnumbering physicians by about three to one. Nurses play a critical role in providing health care not only in traditional settings such as hospitals and long-term care institutions but increasingly in primary care (especially in offering care to the chronically ill) and in domiciliary settings. There has been concern in a number of countries about shortages of nurses and these concerns may well intensify in the future as the demand for nurses continues to increase and the ageing of the "baby boom" generation precipitates a wave of retirements among nurses.

In 2005, there continued to be substantial variations in the number of nurses per 1 000 population ("nursing density") reported across OECD countries, ranging from over 15 in Ireland and Norway to under two in Korea and Turkey (Chart 4.3.1). The OECD average was 8.9 nurses per 1 000 population.

Looking at trends through time, nursing density rose at an average rate of 1.1% per annum between 1990 and 2005 across the OECD countries for which data are available (Chart 4.3.2). Again, there were substantial variations in the reported rates of change across countries. In three countries, Australia, Canada and Poland, nursing numbers per capita actually declined over the past 15 years.

There was also wide variation in the ratio of practising nurses to practising doctors, or nurse/physician "skill mix", across OECD countries (Chart 4.3.3) both in 1990 and 2005. In 2005, the nurse/doctor ratio ranged from over five nurses per doctor in Ireland and Luxembourg to under one nurse per doctor in Greece.

Interestingly, more countries reported declining nurse/doctor ratios than reported increasing nurse/doctor ratios between 1990 and 2005 (Chart 4.3.3). On average, the nurse/doctor ratio declined slightly from 3.1 to 2.9 across OECD countries, suggesting that "skill mix" defined in this crude way has been increasing. A possible explanation is that advances in medical technology and rising activity rates continued to drive the demand for doctors and part of the demand for nurses upwards, whereas at the same time they reduced another part of the demand for nurses, because less invasive surgery and better drugs and anaesthetics raised day surgery rates, reduced hospital length of stay, reduced hospital beds, and enabled growing numbers of patients with chronic illnesses to be cared for in primary care settings.

Definition and deviations

Practising nurses are defined as the number of actively practising nurses employed in all public and private settings, including self-employed nurses. The data should include both fully qualified nurses (with post-secondary education in nursing) and vocational/associate/auxiliary/practical nurses, with a lower level of nursing skills but usually also registered or licensed. Midwives, nursing assistants without nursing qualifications, and nurses working in administration should in theory be excluded. However, about half of OECD countries include midwives in their figures and a number include non-practising nurses (resulting in an overestimation). On the other hand, Austria reports only nurses working in hospitals (resulting in an underestimation).

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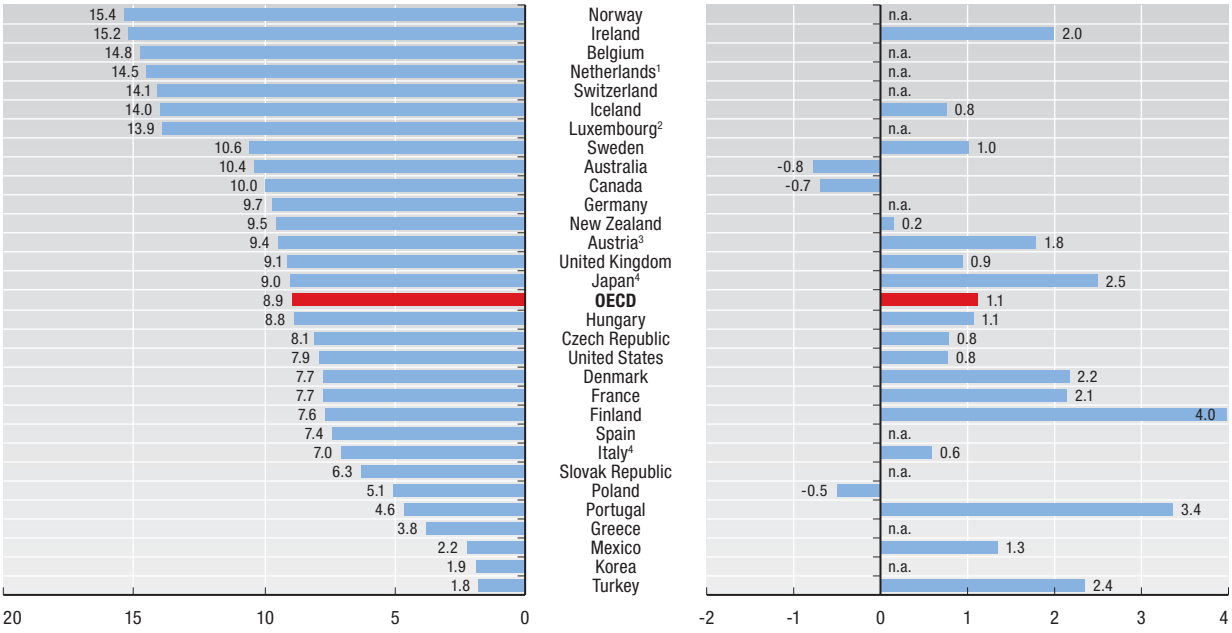
4.3. PRACTISING NURSES

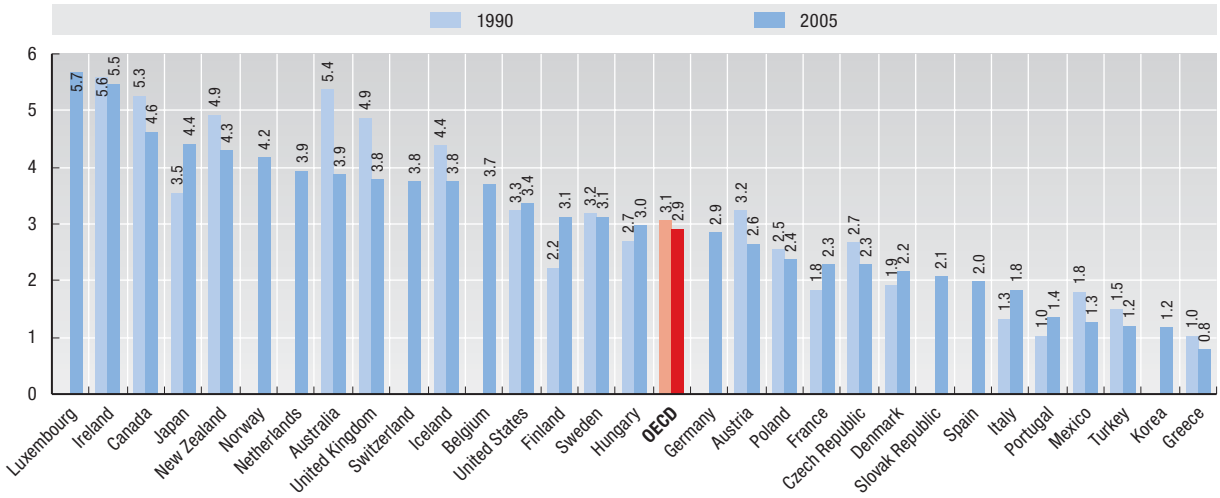
4.3.1. Practising nurses per 1 000 population, 2005 (or latest year available)

4.3.2. Change in the number of practising nurses per 1 000 population, 1990 to 2005



1. The Netherlands reports all nurses entitled to practise rather than those practising only.
2. Luxembourg includes nursing aids.
3. Austria reports only nurses employed in hospitals.
4. The calculation of average annual growth rate for Japan and Italy is based on a slightly different time period to avoid break in series resulting from methodological changes.

4.3.3. Ratio of practising nurses to practising physicians, 1990 to 2005 (or nearest year)



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114024163335

4.4. REMUNERATION OF HEALTH PROFESSIONALS (PHYSICIANS AND NURSES)

Given that labour cost is an important component of total health expenditure, variations in remuneration levels can provide some insights into cross-country variations in health spending. Comparative data on remuneration levels may also help national authorities to identify some benchmarks for fee and salary negotiation purposes. In addition, information on remuneration levels may be useful in understanding the migration of health professionals across countries (OECD, 2007c).

However, gathering comparable data on the remuneration of doctors and nurses is difficult. Countries collect data on various types of remunerations and for different categories of physicians and nurses, and they also use a variety of data sources and calculation methods (see the box below on "Definition and deviations"). Hence, data on remunerations should be interpreted with caution.

The relative income of *self-employed* specialists varies considerably across countries, ranging from 2.3 to 8.4 times GDP per capita. It is relatively high in the Netherlands, Belgium and the United States (Chart 4.4.1; left panel). The relative income of *salaried* specialists tends to be lower than that of *self-employed* specialists, ranging between 1.6 and 4.8 times the average national income. It is high in the United States and the United Kingdom, and low in the Czech Republic, Norway and Hungary.

The remuneration of GPs ranges from 1.7 times GDP per capita for *salaried* GPs in Hungary to 4.4 times the average national income for *self-employed* GPs in the United States (Chart 4.4.1; right panel). In nearly all countries, GP's remunerations are lower than those for specialists. In Iceland, however, GPs appear to earn more than specialists partly because GPs in relatively less populated areas work longer hours and sometimes need to deal with emergency cases. Another reason is that even though salaried specialists often have private practices, the data for salaried specialists does not include additional incomes from these practices.

Regarding nurses, based on data from 16 countries, the relative income of hospital nurses is on average 1.2 times GDP per capita. Remuneration relative to the average national income is highest in Portugal, followed by the United States and Australia (Chart 4.4.3). It is lower than the average national income in the Czech Republic, Hungary and Norway.

In general across countries, lower density of a certain category of health professionals tend to be associated with higher relative remuneration levels. Chart 4.4.2 shows the correlation for specialists. For a given level of specialists per capita, the remuneration of those who are salaried tends to be lower than for those who are self-employed. Also, for a given specialist-to-population ratio, remuneration levels can vary significantly across countries. Thus, variation in relative remuneration cannot be explained only by the number of practising health professionals. It is also influenced by a number of other factors.

Definition and deviations

Data on health professionals' remuneration refers to average *gross* annual income, which includes social security contributions and income taxes payable by the employee. Remuneration should normally include all extra formal payments, such as bonuses and payments for night shifts, on-call and overtime, but it should exclude practice expenses for self-employed doctors. Remuneration levels are expressed in relation to GDP per capita as a proxy for average national income. In Ireland and Luxembourg however, GDP per capita underestimates significantly average national income; hence estimates of gross national income per capita have been used instead.

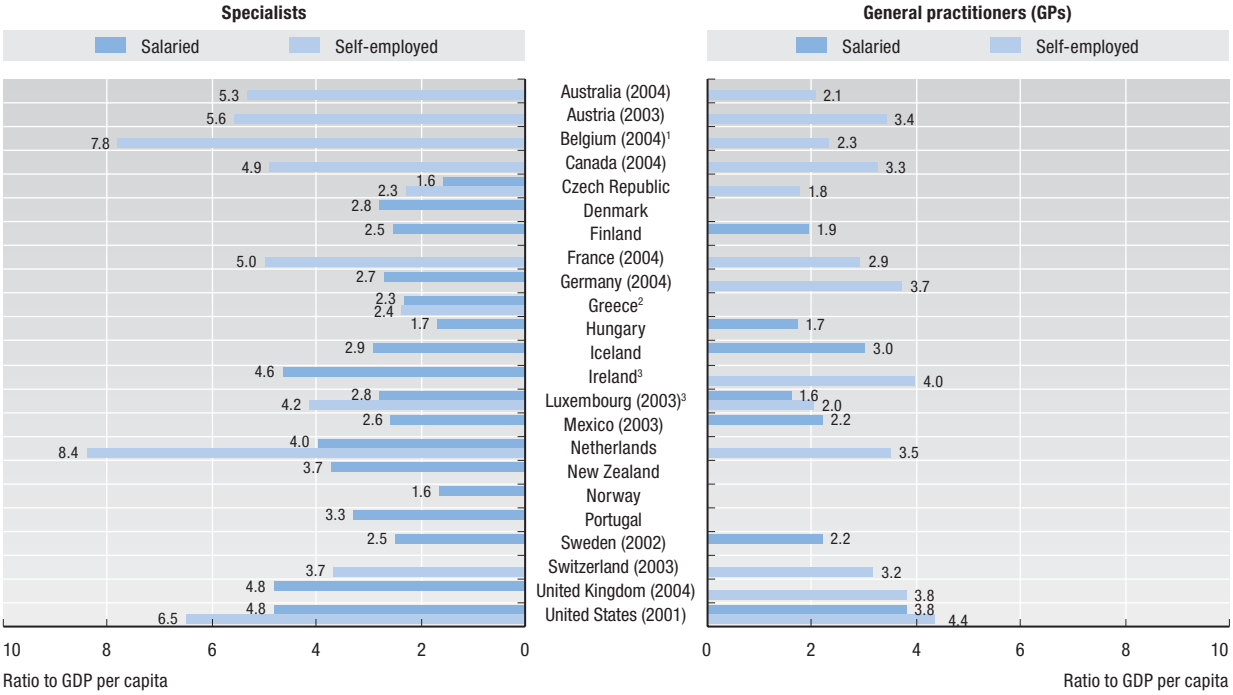
Several factors contribute to an underestimation of remuneration levels. Firstly, remuneration data for some countries exclude overtime payments and other payments related for instance to evening and weekend work. Secondly, in a few countries, the data do not represent the entire income, excluding for instance incomes from private practices for salaried doctors or remuneration from salaried jobs for those who are mainly self-employed. Also, informal payments are not a negligible source of income for health professionals in Greece and Hungary but the data do not include such payments. Thirdly, data for several countries come from self-reported income declaration or survey, which often result in an underestimation.

In addition, the data for some countries relate to headcounts which include remuneration for part-time workers, which results in an underestimation compared with data based on full-time equivalents. Furthermore in a few countries, such as the Czech Republic, Denmark, Finland, Norway and Portugal, the remuneration of some categories of GPs is included in the remuneration of specialists. Lastly, data from some countries relate only to public sector employees who tend to receive lower remuneration than those working in the private sector.

On the other hand, some other factors result in an overestimation. For GPs and specialists, data from Belgium include practice expenses. For hospital nurses, higher-paid nurse managers are included in the data for some countries.

4.4. REMUNERATION OF HEALTH PROFESSIONALS (PHYSICIANS AND NURSES)

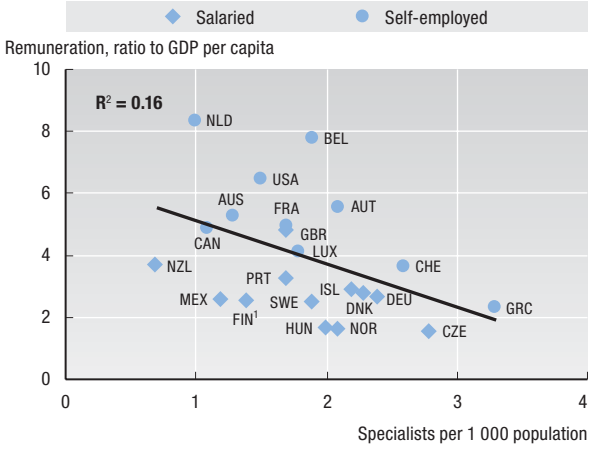
4.4.1. **Physicians' remuneration, ratio to GDP per capita, 2005 (or latest year available)**



1. Data for specialists and GPs include practice expenses resulting in an overestimation.
2. Remuneration of salaried specialists is for 2005 and the income of self-employed specialists is for 2004.
3. Given that GDP per capita overstates the average income, remuneration is presented as a ratio to the gross national income.

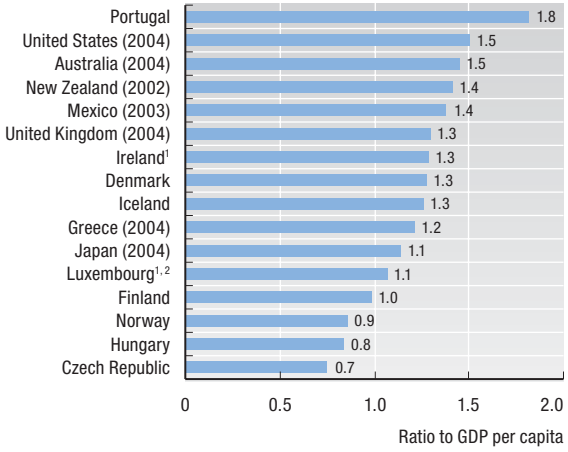
See footnotes for Tables A.4.4a and A.4.4b for more information about sources and methods.

4.4.2. **Relative remuneration of specialists and density of specialists, 2005 (or latest year available)**



1. The number of specialists only includes those in the public sector.

4.4.3. **Hospital nurses' remuneration, ratio to GDP per capita, 2005 (or latest year available)**



1. Given that GDP per capita overstates the average income, remuneration is presented as a ratio to the gross national income.
2. Luxembourg includes nursing aids.

See footnotes for Table A.4.4c for more information about sources and methods.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114035685730

4.5. ACUTE CARE HOSPITAL BEDS, AVAILABILITY AND OCCUPANCY RATES

The number of acute care hospital beds provides a measure of the resources available for delivering acute care services to inpatients in hospitals. It does not capture, however, the capacity of hospitals to furnish same-day emergency or elective interventions, nor does it take into account beds allocated for non-acute care purposes (*e.g.*, for long-term care).

The number of acute care beds per capita varies largely across OECD countries. In 2005, it was the highest in Japan, followed by Korea, Germany and Austria, with all these countries reporting over six acute care beds per 1 000 population (Chart 4.5.1). It was the lowest (less than 2.5 per 1 000) in Mexico, Turkey and Sweden. Both Japan and Korea evidence phenomena of "social admission", that is, some "acute care" beds may be devoted to long-term care use (Jeong and Hurst, 2001; Hurst, 2007).

Most OECD countries show a long-term trend towards decline in the number of acute care beds. On average across a consistent group of 24 countries, the number of acute care hospital beds dropped from 5.1 per 1 000 population in 1990 to 3.9 in 2005. Only in Korea has the number of acute care beds grown rapidly between 1990 and 2005 – from 2.7 to 6.5 per 1 000 population. This can be explained by the use of acute care beds for long-term care treatment, the lack of capacity planning for hospital beds and investment incentives in the private, profit-oriented hospital system of Korea (OECD, 2003b).

The reduction in acute care hospital beds per capita in most countries has been driven, at least partly, by progress in medical technology reducing the need for in-hospital care and enabling a shift to the use of day surgery (OECD, 2004a). Health reforms have also often directed cost containment efforts to the inpatient sector, which remain the largest health spending category in nearly all OECD countries (Docteur and Oxley, 2003) (see Indicator 5.3 "Health expenditure by function"). The reduction of hospital beds per capita might have been associated with three possible changes in terms of activity (Kroneman and Siegers, 2004). First, rates of hospital admissions/discharges requiring overnight stays declined at least slightly over the past decade in some countries (see Indicator 4.9 "Hospital discharges"). Second, the average length of stay for acute care patients has decreased significantly since 1990 in nearly all countries (see Indicator 4.10 "Average length of stay in hospitals"). Third, bed occupancy rates increased in many countries as the number of acute care beds per capita decreased (Chart 4.5.2).

The average occupancy rate of acute care beds in OECD countries was 75% in 2005, slightly above the 1990 level. This average hides considerable cross-country variations (Chart 4.5.2). Canada, Norway, Switzerland, Ireland and the United Kingdom – all of which display acute care beds per capita below the OECD average – had the highest occupancy rates (at around 85% or more). In all these countries, occupancy rates have increased and acute care beds have decreased over time. At the other end of the spectrum, Mexico, the Netherlands, Turkey and Luxemburg featured occupancy rates between 61 and 66% in 2005. In Mexico and Turkey, both of which have a low and stable number of beds per capita, occupancy rates have increased over time in line with growing demand for hospital admissions. The Netherlands contrasts, however, in that the number of acute care beds per capita has decreased over time and so have occupancy rates. This may be due, to some extent at least, to the fact that the Netherlands and also Luxembourg include beds for day care in the number of acute care beds, while occupancy rates only take into account inpatient stays.

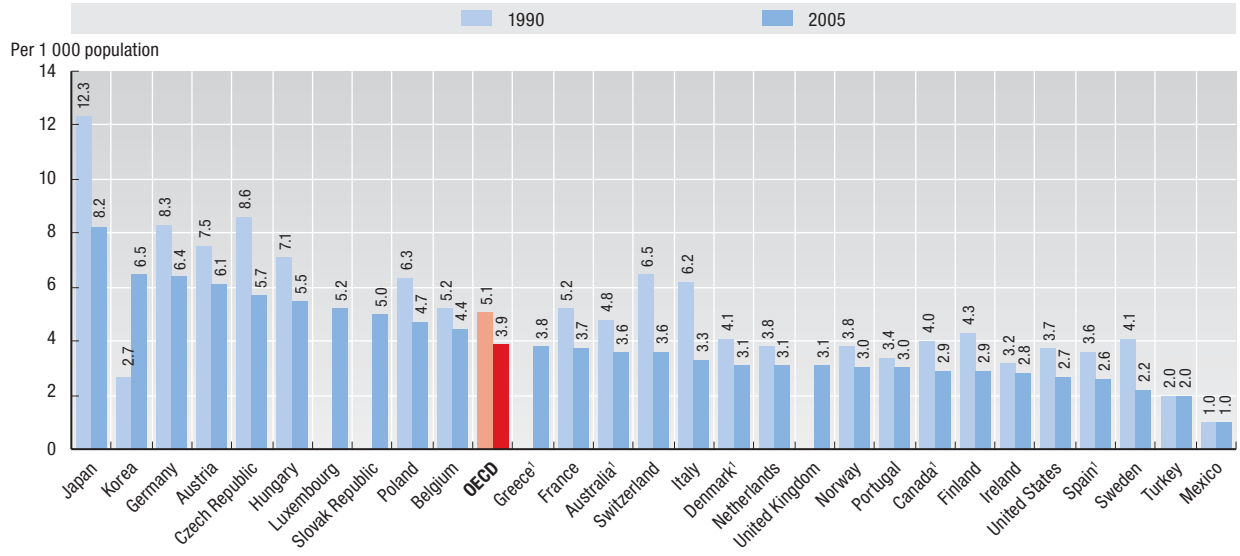
Definition and deviations

Acute care hospital beds should, in theory, only include beds available for "curative care" as defined in the SHA Manual (OECD, 2000a). However, the functions of care included/excluded in "acute care" vary across countries and across time – for example the extent to which beds allocated for long-term care, rehabilitation and palliative care are excluded – thereby limiting data comparability. A number of countries (*e.g.*, Australia, Austria, Canada, Germany, Ireland, Luxembourg, the Netherlands, Poland, Portugal, Spain, Switzerland, Turkey and the United States) report as acute beds all beds located in "general" or "acute care" hospitals. Also, some acute care beds may be used for purposes such as long-term care (*e.g.*, in Japan and Korea). Private sector beds are not included, or are only partially included, in Hungary and Ireland. Data for Finland are not based on an actual count of beds, but rather are estimated by dividing the number of hospital days for acute care by the total number of days in the year (365); this leads to an underestimation, given that occupancy rate is lower in reality than the assumed 100% rate.

The occupancy rate for acute care beds is defined as the number of hospital beddays related to acute care divided by the number of available acute care beds multiplied by the number of days (365).

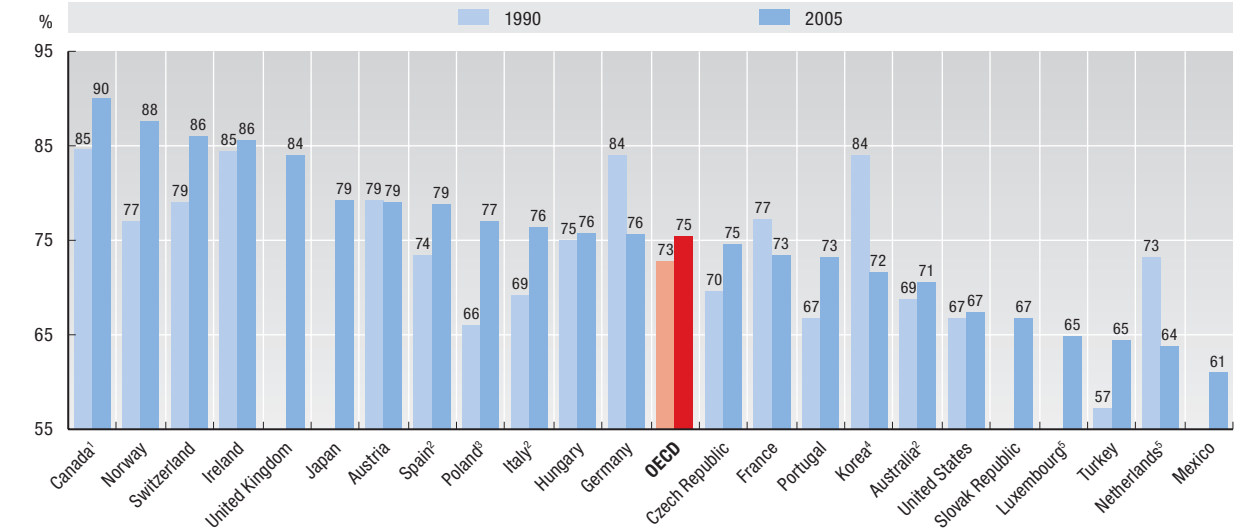
4.5. ACUTE CARE HOSPITAL BEDS, AVAILABILITY AND OCCUPANCY RATES

4.5.1. **Acute care hospital beds per 1 000 population, 1990 and 2005**



1. 2004.

4.5.2. **Occupancy rate of acute care hospital beds, 1990 and 2005**



1. 1995-2004. 2. 2004. 3. 2002. 4. 2003.
5. In the Netherlands and Luxembourg, occupancy rates are slightly underestimated, as the number of beddays in hospital only include inpatients while the number of acute care beds (the denominator) also include beds available for day care.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114043378703

4.6. LONG-TERM CARE BEDS IN HOSPITALS AND NURSING HOMES

The number of long-term care (LTC) beds in hospitals and in nursing homes provides a measure of the physical capacity available for people requiring ongoing health and nursing care. Care provided in each institutional setting is often a mix of health and social services.

Long-term care beds are, for the most part, used to care for elderly people with chronic illness and disability. Chart 4.6.1 shows the number of long-term care beds in hospitals and nursing homes, as a proportion of the population aged 65 and over, in OECD countries in 2005. On average, countries had about 40 LTC beds per 1 000 people aged 65 and over, of which the vast majority were provided in nursing homes. There is wide variation however across countries in the overall number of LTC beds, and this number also varies widely by care setting. Switzerland and Sweden have about five times more LTC beds in nursing homes per person aged 65 and over than Japan and Italy. However, in Japan, more than half of LTC beds are in hospitals, although the number of beds in nursing homes has been growing. Finland, the Czech Republic and Ireland also have a relatively high proportion of their long-term care beds in hospitals (or in health centres in Finland).

Many OECD countries have re-organised the delivery of LTC services over the past decade (OECD, 2005c), with the aim of moving away from long and costly stays in hospitals to supporting the development of places in nursing homes where needed and, more generally, to providing better support for home-based care options. Chart 4.6.2 shows that many OECD countries have reduced the number of LTC beds in hospitals (as a proportion of people aged 65 and over) over the past five to ten years, with the exception of the Czech Republic. In some countries such as Iceland and Ireland, the reduction in the number of LTC beds in hospitals has been accompanied by an increase of LTC beds in nursing homes. In other countries such as Sweden and Finland, there has been a reduction in both the number of LTC beds in hospitals and in nursing homes when compared with the overall size of the elderly population. In the case of Sweden at least, the overall reduction of LTC beds in hospital and nursing homes over the past decade was accompanied by a rising share of elderly people who are receiving long-term care at home (OECD, 2007d).

In Japan and Luxembourg, there has been a rapid increase in the number of nursing homes beds in recent years. Germany had a similar increase between 1997 and 1999. The provision of more beds in this setting has coincided with the introduction of a comprehensive long-term care insurance programme in these three countries. Moreover, nursing home bed capacity has converged in recent years reflecting efforts to balance increasing demand with cost of care provided in different settings.

Building-up or maintaining long-term care bed capacity in nursing homes has come at a cost. Total nursing home expenditure per nursing home bed rose at an average rate of 3.8% per year in real terms between 1995 and 2005, although growth rates differ across countries (Chart 4.6.3). The rise in spending may reflect partly changes in the case mix of nursing homes, with a greater proportion of severely disabled residents requiring more medical and nursing assistance. For example, in Switzerland, the decrease in the number of beds in nursing homes has been accompanied by an increase in the number of elderly people receiving home-based care. At the same time, real expenditure per nursing home bed rose steadily, possibly indicating that more severe cases are being cared for in nursing homes.

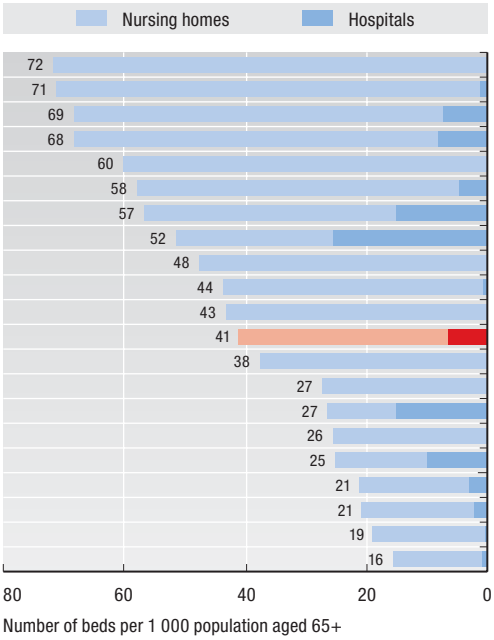
Definition and deviations

Long-term care beds are defined as beds allocated for people who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence in activities of daily living. The total number of long-term care beds is the sum of such beds in hospitals and in nursing homes. Care provided in each institutional setting can be a mix of health and social services. A number of countries do not report the number of long-term care beds in hospitals (*e.g.* Australia, Denmark, Norway and Switzerland), resulting in an underestimation of their total number of long-term care beds. There is currently no information available about the public-private mix of long-term care beds in hospitals and nursing homes.

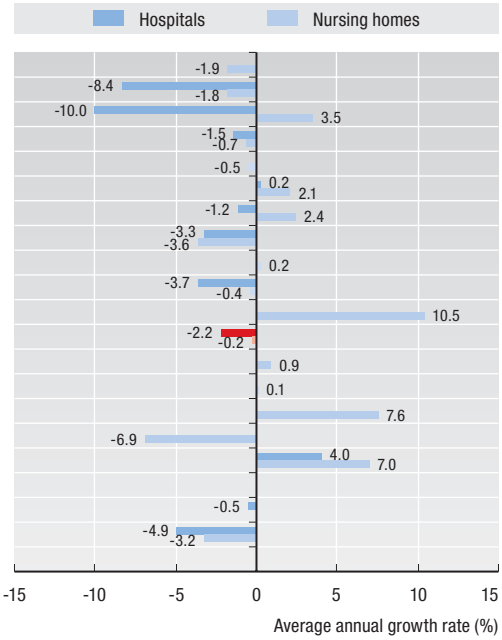
Current expenditure on services of nursing and residential care facilities reflect the value of health services provided by nursing and residential care facilities. In many cases, information about investment cost or other capital cost is not available and where it is, the allocation of that item to different providers is difficult. Comparability across countries is therefore limited as boundaries between current expenditure and expenditure on capital and goods may be blurred.

4.6. LONG-TERM CARE BEDS IN HOSPITALS AND NURSING HOMES

4.6.1. Long-term care beds in hospitals and nursing homes, per 1 000 population aged 65 and over, 2005 (or latest year available)



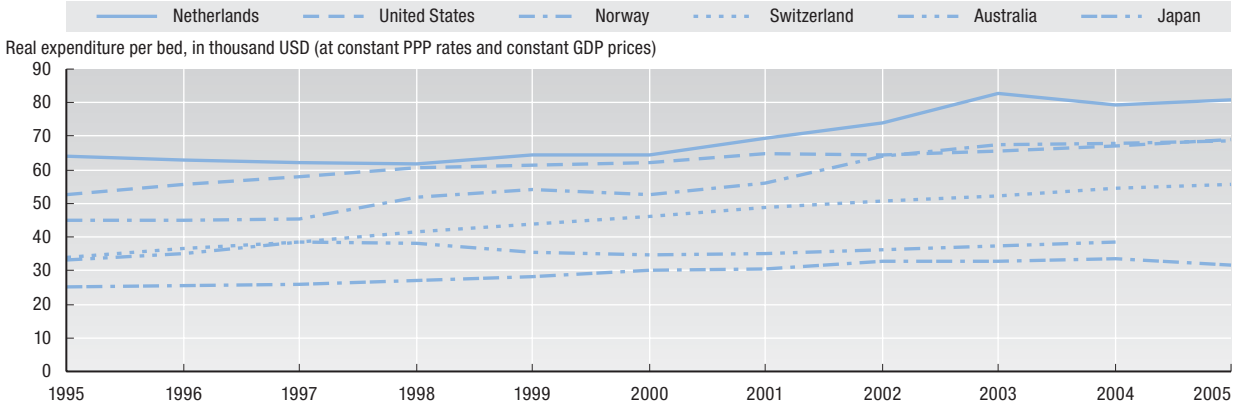
4.6.2. Change in the number of long-term care beds in hospitals and nursing homes per 1 000 population aged 65 and over



Note: Shorter time periods have been selected for a few countries (*e.g.* Germany, Luxembourg and the Czech Republic) in order to avoid breaks in time series due to changing sources or methodologies.

1. Data on LTC beds in hospitals are not available for Australia, Denmark, Norway and Switzerland.
2. In Iceland, the number of LTC beds in hospitals does not include beds in geriatric units, which have increased in recent years.
3. The OECD average excludes all countries that have not supplied complete data.
4. Data for Denmark do not include beds in residential facilities for elderly persons, which are aimed for people with only mild disabilities. The number of beds in these facilities has increased rapidly in recent years.

4.6.3. Rising expenditure per long-term care bed in nursing homes, 1995 to 2005



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114046261863

4.7. MEDICAL TECHNOLOGIES

The diffusion of modern medical technologies is one main driver of rising health expenditure across OECD countries. This section presents data on the availability of three diagnostic technologies – computed tomography (CT) scanners, magnetic resonance imaging (MRI) units and mammographs – and one therapeutic technology, radiation therapy equipment. Data indicate the overall availability of these equipments but do not show the extent to which they are actually used.

CT (or "CAT", for computed axial tomography) scanners and MRI units help physicians diagnose conditions by producing cross-sectional views of the inside of the body being scanned. Unlike conventional radiography and CT scanning, newer imaging technology used in MRI units do not expose patients to ionising radiation. The availability of CT scanners and MRI units has increased in most OECD countries over the past 15 years. Japan has, by far, the highest number of MRI and CT scanners per capita, followed by the United States for MRI units and by Australia for CT scanners (Charts 4.7.1 and 4.7.2). Some analysts attributed the rapid increase in MRI units in Japan, at least partly, to the lack of formal assessment of efficiency or effectiveness in purchasing decisions (Hisashige, 1992). Earlier adoption and widespread application of technology makes the American health system another intensive user of MRI and medical technology generally. At the other end of the scale, not surprisingly given their high cost, the number of MRI units and CT scanners per capita was the lowest in Mexico, Hungary and Turkey.

Mammography helps to diagnose breast cancer, the most common cancer among women. Early diagnosis and intervention significantly increase survival rates from breast cancer (see Indicator 6.4 in Chapter 6). For example, mortality rates are lower in Swiss cantons with higher rates of mammography (OECD, 2006a). Among the 21 countries with available data, the number of mammographs per capita was the highest in France and Finland (Chart 4.7.3). Mexico, Turkey and the United Kingdom reported the lowest number per capita, although the availability of mammographs has rapidly increased in the past few years (Table A.4.7b). Rapid diffusion in many OECD countries coincided with the development of organised mammography screening programmes.

Radiation therapy (also called radiotherapy) is used for the treatment of many types of cancer. More than half of patients with cancer are treated with radiation therapy (National Cancer Institute, 2004; DREES, 2005). In 2005, the number of radiation therapy equipment per capita was the highest in Iceland (the absolute number of machines was small, however, the high rate per capita being due to the very small population base), followed by Switzerland and the Slovak Republic (Chart 4.7.4). The number of radiation therapy units has no bearing on cancer incidence and mortality across OECD countries (see Indicator 2.5 "Mortality from cancer").

National income and total health spending are important, but are not the sole factors influencing the diffusion of medical technologies. An analysis focussing on the diffusion of CT and MRI scanners across OECD countries, controlling for possible explanatory variables, found that "purchasing power" (as measured by health expenditure per capita) is positively correlated with the diffusion of these technologies (Eun-Hwan Oh *et al.*, 2005). More affluent countries are earlier adopters of new technologies, although the importance of income in explaining the long-term availability of medical technologies in OECD countries generally declines over time (Slade and Anderson, 2001). Both studies confirm the effects of reimbursement incentives, especially for purchases of diagnostic technologies. For example, hospital payment methods based on reimbursements on a per case or per diem basis are associated with a greater diffusion of CT and MRI scanners (Eun-Hwan Oh *et al.*, *op. cit.*).

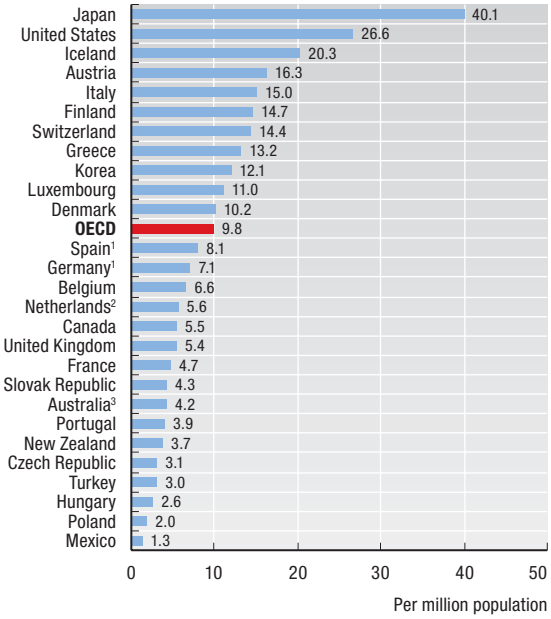
Definition and deviations

The figures relate to the number of medical technology devices per million population. Data on radiation therapy equipment include linear accelerators, cobalt-60 units, caesium-137 therapy units and low to orthovoltage x-ray units (brachytherapy units are often excluded). Data are collected from both the hospital and the ambulatory sector.

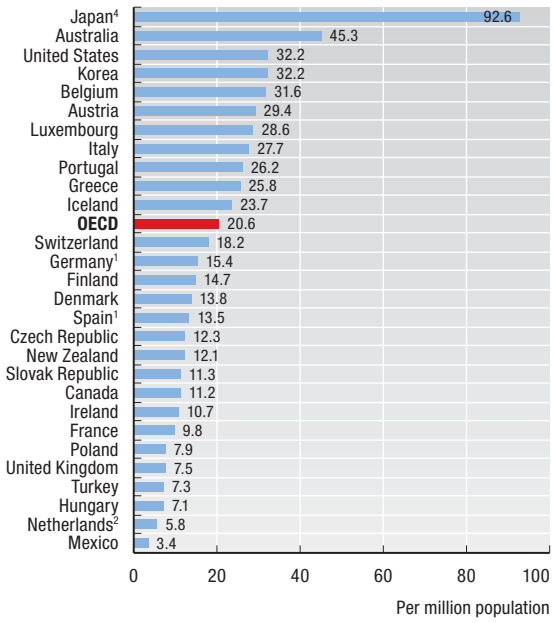
Data for some countries may be underestimated. Data on CT scan and MRI units are collected from hospital and non-hospital sites, but omission in the number of the latter are possible. For the United Kingdom, the data refer only to devices in the public sector. For Germany and Spain, the data relate only to devices available in hospitals. For Australia, the number of MRI units (from 1999), and of mammographs and radiation therapy equipment (from 2005) includes only those eligible for reimbursement under Medicare, the universal public health system. In 1999, 60% of total MRI units were eligible for Medicare reimbursement.

4.7. MEDICAL TECHNOLOGIES

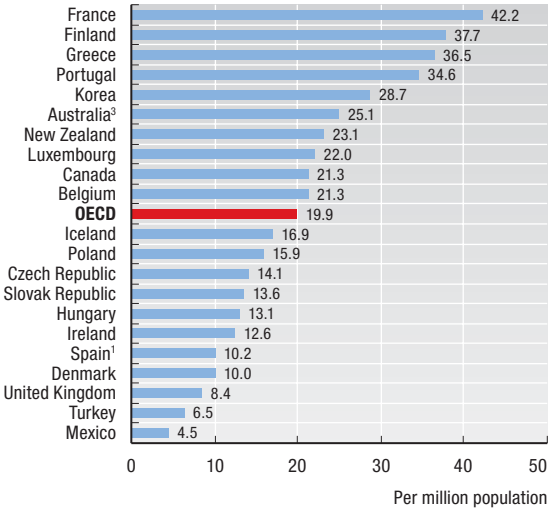
4.7.1. MRI units, number per million population, 2005 (or latest year available)



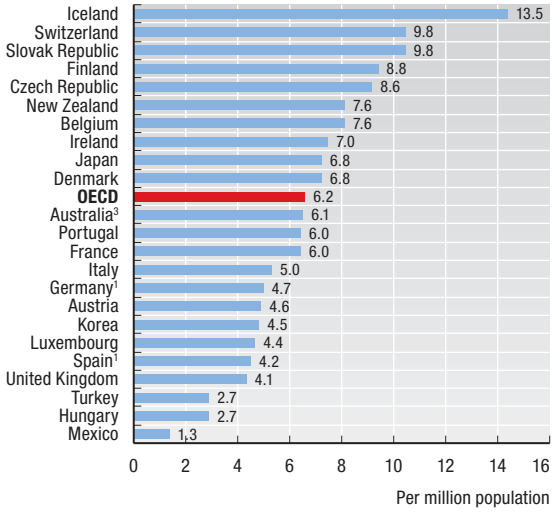
4.7.2. CT scanners, number per million population, 2005 (or latest year available)



4.7.3. Mammographs, number per million population, 2005 (or latest year available)



4.7.4. Radiation therapy equipment, number per million population, 2005 (or latest year available)



1. Data for Germany and Spain only include equipment in hospitals.
2. The figures for the Netherlands underestimate the real number of equipment, because they refer to the number of hospitals reporting to have at least one of these equipments rather than the total number of equipments in hospitals and in the ambulatory sector.
3. In Australia, data for MRI units, mammographs and radiation therapy equipment relate only to those eligible for reimbursement under Medicare.
4. In Japan, data for CT scanners relate to 2002 rather than 2005, because the 2005 data is more limited in terms of coverage of institutions and type of CT scanners.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114048434454

4.8. CONSULTATIONS WITH DOCTORS

Consultations with doctors can take place in doctors' own offices/clinics, in hospital outpatient departments or, in some cases, in patients' own homes. In some countries (such as Australia, Canada, Denmark, the Netherlands and the United Kingdom) patients are required, or given incentives, to consult a general practitioner (GP) "gatekeeper" about any new episode of illness. The GP may then refer them to a specialist, if indicated. In other countries (such as Belgium, Japan or Switzerland) patients may approach specialists directly.

The reported number of consultations with all doctors per capita varied greatly across OECD countries in 2005, ranging from over eleven in Japan and Korea, and in the Czech Republic, Hungary and the Slovak Republic, to less than three in Mexico and Sweden (Chart 4.8.1). The OECD average was nearly seven consultations per year. Although differences in health status and economic factors such as out-of-pocket payments, physician density and the way that doctors are paid, are likely to play a part in determining these variations, it seems likely that cultural factors also play an important role. Japan and Hungary are among the countries with the highest consultation rates but they report very different levels of health status and have very different physician density. There are some signs that countries which pay their doctors mainly by fee-for-service tend to have above-average consultation rates, and countries which pay their doctors mainly by salary and capitation tend to have below-average consultation rates. However, other countries, such as Switzerland and the United States which pay mainly by fee-for-service, have below-average rates.

Consultation rates rose in most countries which reported data over the period 1990-2005. However, they fell modestly in Belgium, Canada, the Netherlands and the United Kingdom (Chart 4.8.2). Turkey reported the steepest rise in consultations per capita, at nearly 7% per annum, presumably as a result of a fairly rapid rate of increase in physician density (see Indicator 4.2 "Practising physicians"), a sharp increase in public expenditure on health care over part of this period (see Indicator 5.1 "Health expenditure per capita") and improved access to health care for patients on low incomes under the Green Card system (Savas *et al.*, 2002). The average yearly increase across all the OECD countries reporting data was 0.7%.

Information on consultations can be used to estimate annual numbers of consultations per doctor across OECD countries. Chart 4.8.3 shows the variation in this statistic across OECD countries in 2005. It should *not* be taken as a measure of doctors' productivity, partly because consultations can vary in length and in effectiveness and partly because it excludes the work doctors do on inpatients, on administration and on research. Also, it is subject to the comparability limitations reported in the box below on "Definitions and deviations". Nevertheless, this statistic varies nearly ninefold across OECD countries. Again, it is possible that some cultural factors play a part, because there is clustering of the two OECD Asian countries and the central and eastern European member countries at the top of the table. On average, there are about 2 500 consultations per doctor per year across the OECD area, or about ten per working day.

Consultations per doctor fell between 1990 and 2005 in most OECD countries which reported data, because doctor numbers have been rising faster than consultations (Chart 4.8.4). On average, consultations per doctor fell by 0.9% per annum across OECD countries which reported data. Falling consultations per doctor have coincided with rising expenditure per doctor in many countries (see Indicator 4.2 "Practising physicians") and with some evidence that the technical quality of health care may have been rising for selected conditions (see Chapter 6 on quality of care).

Definition and deviations

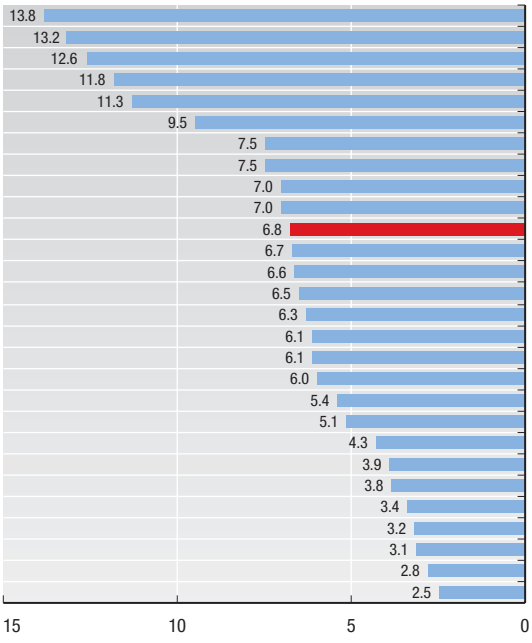
Consultations with doctors refer to the number of ambulatory contacts with physicians (both generalists and specialists). Consultations may take place in doctors' offices or clinics, in hospital outpatient departments and, in some cases, inpatients' own homes.

Estimates reported in *OECD Health Data* come from administrative sources in most countries but in some (Italy, the Netherlands, New Zealand, Spain, Switzerland, as well as data on GP consultations for the United Kingdom) they come from health interview or household surveys (that is, they are self-reported). Estimates obtained from administrative sources tend to be higher than those obtained from surveys because of incorrect recall and non-response rates.

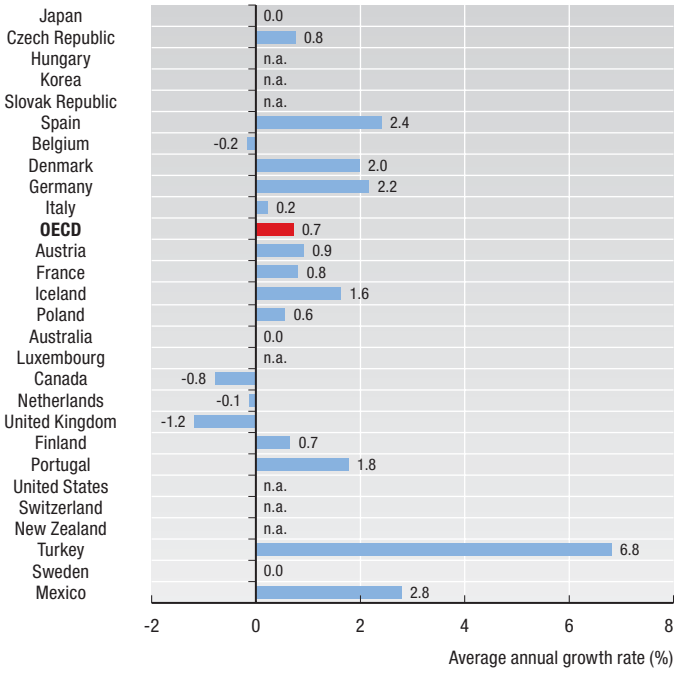
The figures for the Netherlands exclude contacts for maternal and child care. The data for Portugal and Turkey exclude visits to private practitioners and those for the United Kingdom exclude private consultations with specialists.

4.8. CONSULTATIONS WITH DOCTORS

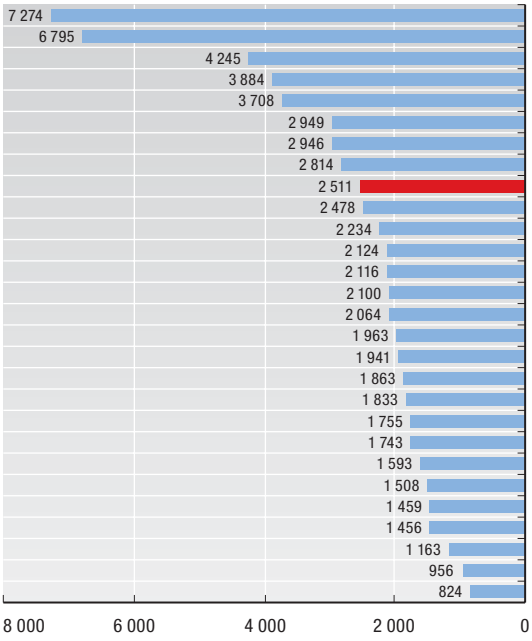
4.8.1. Doctors consultations per capita, 2005 (or latest year available)



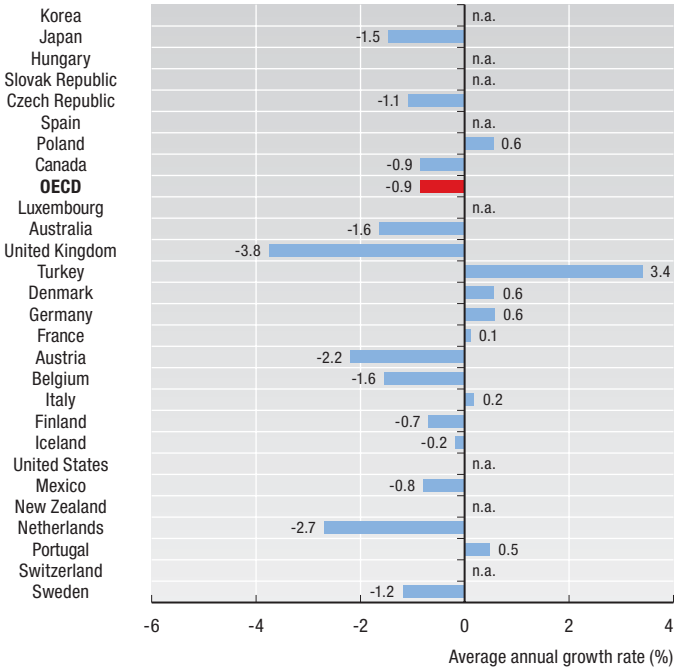
4.8.2. Average annual growth rate in number of doctors consultations per capita, 1990 to 2005



4.8.3. Number of consultations per physician, 2005 (or latest year available)



4.8.4. Average annual growth rate in number of consultations per physician, 1990 to 2005



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114051107728

4.9. HOSPITAL DISCHARGES

Discharge rates are an important measure of hospital activity. However, limits to data comparability make it difficult to analyse cross-country variation. Some countries include treatments not requiring overnight stays (same-day separations) and others report transfers across hospital units (see the box below on "Definition and deviations"). In addition, hospital discharge rates do not take into account differences in case-mix (the mix of the conditions leading to hospitalisation).

In 2005, discharge rates were the highest in Austria (Chart 4.9.1). Four of the next highest five countries included same-day separations (France, Finland and the United Kingdom) or transfers to other care units within the same institution (Czech Republic) in their data. Discharge rates were also high in Hungary and Germany. They were the lowest in Mexico and Turkey.

Discharge rates have increased over time in all the countries reporting same-day separations in the rate (Chart 4.9.2 and Table A.4.9a). In over half of the countries where same-day separations are excluded, discharge rates increased at least slightly between 1995 and 2005. The increase was particularly strong in Korea and Turkey, which started with relative low levels in 1995. It was also relatively strong in Norway and Germany. Discharge rates remained fairly stable in Portugal, Luxembourg and the Netherlands, while they fell in Canada, Ireland, Sweden, Iceland and Australia.

Trends in hospital discharges reflect several factors that are not easily disentangled. Demand for hospitalisation may grow as populations age. Elderly populations account for a disproportionately high percentage of overall hospital discharges in all countries; for example, in the United States, 24% of all hospital discharges in 2004 concerned people aged 75 years and over, up from 18% in 1990 (NCHS, 2006). Ageing is expected to drive an increase in demand for hospital inpatient services in the United States during the next ten years by almost 1% annually (Strunk *et al.*, 2006). However, population ageing may be a less important factor than changing practice patterns attributable to advancing medical technology. For example, hospital stays involving an angioplasty performed on persons aged 75 and over rose from 3.7 to 8.3 per 1 000 population between 1991-92 and 2001-02 in the United States (NCHS, 2006). Caution is nonetheless required in interpreting trends in discharge rates. The development and diffusion of new technology may drive a rise in hospitalisation but also a reduction if it entails a shift from overnight to same-day procedures (Nallamothu *et al.*, 2007). It is not possible to predict how hospitalisation would have evolved in the absence of such new treatments.

The main conditions leading to hospital discharges in OECD countries in 2005 were circulatory (cardio-vascular) diseases, pregnancy and childbirth, diseases of the digestive system, external causes (*e.g.*, accidents, violence and poisoning), and cancers (Chart 4.9.3 and Table A.4.9b). Discharge rates for circulatory diseases, the highest volume diagnostic category, have increased since 1995 in many countries (Chart 4.9.4). This could be partly explained by the expansion of revascularisations (see Indicator 4.11 on "Cardiac procedures").

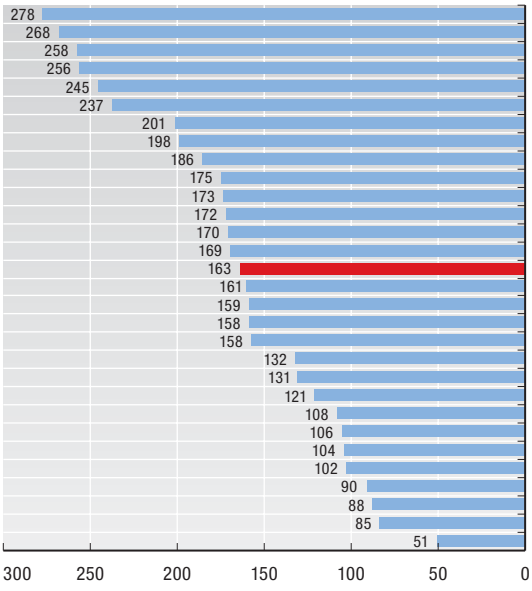
Definition and deviations

Discharge is defined here as the release of an inpatient from an acute care institution after admission for a period of hospitalisation. It normally includes deaths in hospital following inpatient care. Same-day separations are usually excluded, with the exceptions of the following countries which include same-day separations for all or part of the period: Austria (for the period 1989-2002), the Czech Republic (before 1995), Finland, France, Hungary (before 2004), Italy (after 2004), the United Kingdom and the United States. Transfers to other care units within the same institution are generally excluded, with the exception of the Czech Republic and Japan where these are included.

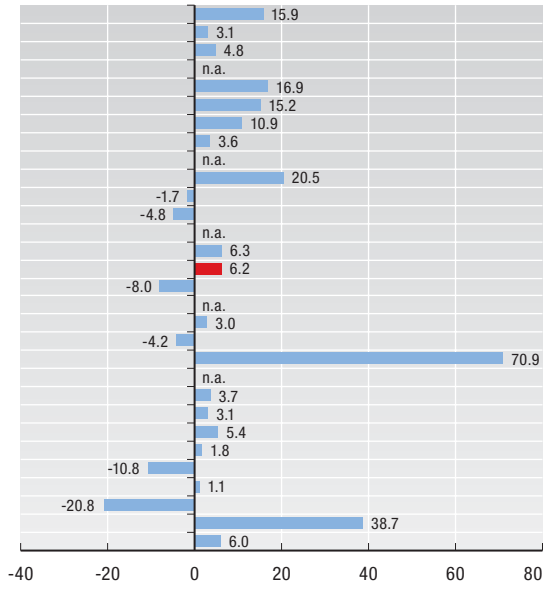
There are a few other limitations in the comparability of data on hospital discharges. Some countries do not cover the whole of the health service. For instance, data for Denmark, Ireland, Mexico, Poland and the United Kingdom are restricted to public or publicly funded hospitals only. Data for Portugal relate only to hospitals in mainland (excluding the Islands of Azores and Madeira), and data on Spain cover only 85% of all hospitals. Ireland excludes discharges related to pregnancy and childbirth and certain conditions originating in the perinatal period. Healthy babies born in hospitals are excluded completely (or almost completely) in some countries (*e.g.*, Canada, Germany before 2004, the Unites States). The source of the information can also differ, although most data come from hospital administrative records.

4.9. HOSPITAL DISCHARGES

4.9.1. Hospital discharges per 1 000 population, 2005 (or latest year available)

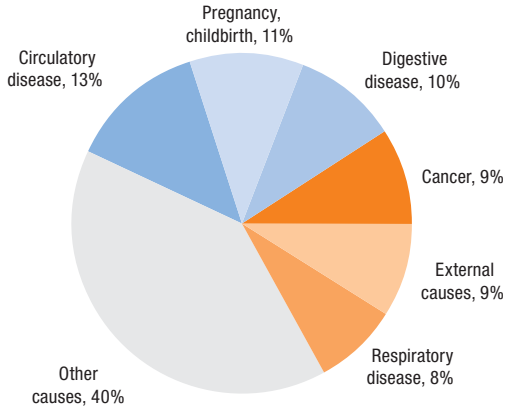


4.9.2. Percentage change in hospital discharges, per 1 000 population, 1995 to 2005

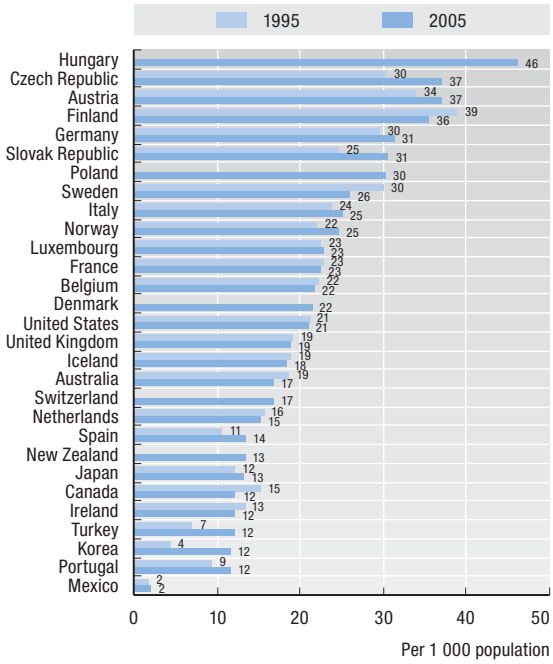


1. Includes same-day separations.
2. Excludes discharges of healthy babies born in hospital.
3. Includes transfers from one hospital unit to another.

4.9.3. Hospital discharges by diagnostic category, OECD, 2005



4.9.4. Hospital discharges for circulatory disease per 1 000 population, 1995 and 2005



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114053220373

4.10. AVERAGE LENGTH OF STAY IN HOSPITALS

The average length of stay in hospitals (ALOS) is often treated as an indicator of efficiency. All other things being equal, a shorter stay will reduce the cost per discharge and shift care from inpatient to less expensive post-acute settings. However, shorter stays tend to be more service intensive and more costly per day. Too short stays could also cause adverse effect on health outcomes, or reduce the comfort and recovery of the patient. If this leads to a rising readmission rate, costs per episode of illness may fall little, or even rise.

In 2005, OECD countries showed large variation in ALOS for acute care. This was relatively low (less than five days) in some Nordic countries (Denmark, Finland, Sweden) and Mexico, and relatively high (more than eight days) in Japan, Korea, Germany and Switzerland (Chart 4.10.1). Several factors can explain cross-country differences. Short stays in Finland are linked, at least partly, to the availability of beds for convalescent patients in health centres (OECD, 2005a). Conversely, the high ALOS for acute care in Korea can be explained partly by the use of "acute care" beds for chronically ill patients (OECD, 2003b). Abundant supply of beds might have provided hospitals with incentives to keep patients longer in Japan (Jeong *et al.*, 1994) (see Indicator 4.5 "Acute care hospital beds"). Financial incentives inherent in hospital payment methods can also influence length of stay. For example, predominant bed-day payments in Switzerland have encouraged long stays in hospitals (OECD, 2006a).

Average length of stay for acute care has fallen in nearly all OECD countries – from 8.7 days in 1990 to 6.3 days in 2005 for the 25 countries for which consistent data over time are available (Chart 4.10.1). ALOS fell particularly quickly in countries which started with relatively high levels in 1990 (Germany, Poland, Switzerland and the Czech Republic). Several factors explain this decline, including the use of less invasive surgical procedures, changes in hospital payment methods to prospective pricing systems, and the expansion of early discharge programmes which enable patients to return to their home to receive follow-up care.

Focusing on ALOS for specific diseases or conditions can remove some of the heterogeneity arising from potentially different mix and severity of acute care conditions across countries. Chart 4.10.3 shows ALOS following a normal delivery ranging between 2 or less days in Mexico, the United Kingdom, Turkey, Canada and the United States, and 5 days or more in Hungary, the Slovak Republic, Switzerland and the Czech Republic. ALOS for normal delivery has become shorter in all countries over the past decade, dropping from 4.2 days in 1995 to 3.3 days in 2005 on average across OECD countries (Table A.4.10b). Premature discharge for maternity care has become a concern in some OECD countries.

Lengths of stay following acute myocardial infarction (AMI) also declined over the past decade. In 2005, ALOS following AMI was the lowest in Nordic countries (Norway, Denmark and Sweden) and the United States (less than six days), while it stood at over ten days in Finland and Ireland (Chart 4.10.2). Care is however required in making cross-country comparisons; for example, ALOS in Finland may include patients originally admitted for AMI but who are no longer receiving acute care, and might therefore be considered long-term care patients (Moïse *et al.*, 2003a).

Definition and deviations

Average length of stay (ALOS) for acute care refers to the average number of days (with an overnight stay) that patients spend in an acute-care inpatient institution. It is generally measured by dividing the total number of days stayed by all patients in acute-care inpatient institutions during a year by the number of admissions or discharges.

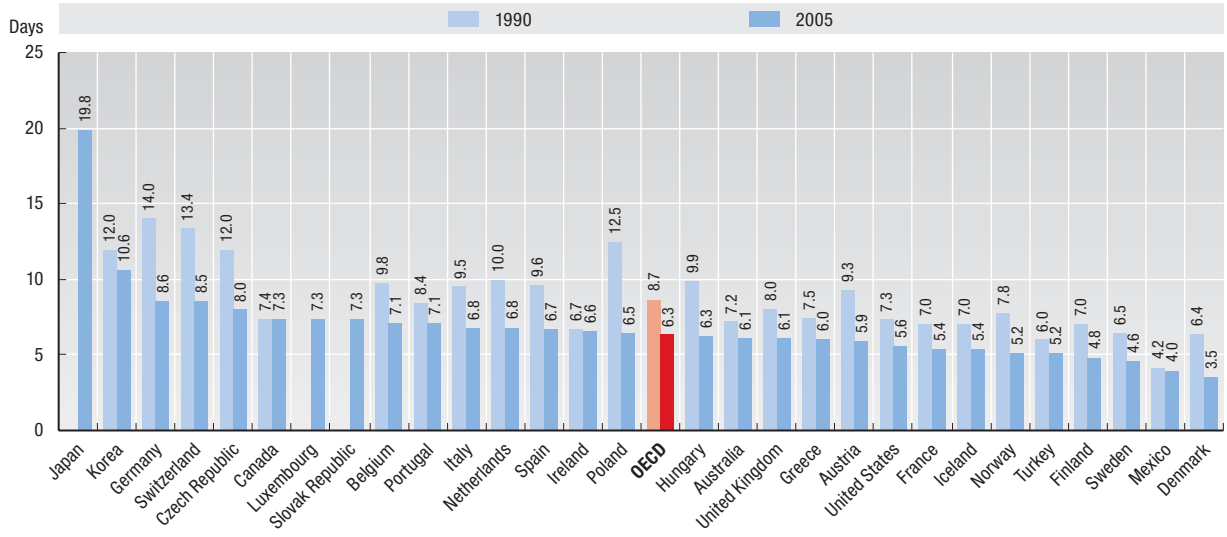
The proposed definition of "acute care" includes all the functions of care covered under "curative care" as defined in the System of Health Accounts Manual (OECD, 2000a). However, there are variations across countries in the functions of care included/excluded in "acute care", thereby limiting data comparability (*e.g.*, whether or not beds for rehabilitation, palliative care and long-term care are included).

Also, in the calculation of ALOS, days and discharges of healthy babies born in hospitals are excluded or only partially counted in some countries (*e.g.,* Canada, Germany before 2004 and the United States). Including healthy newborns would reduce the ALOS in these countries (*e.g.*, by about half-a-day in Canada).

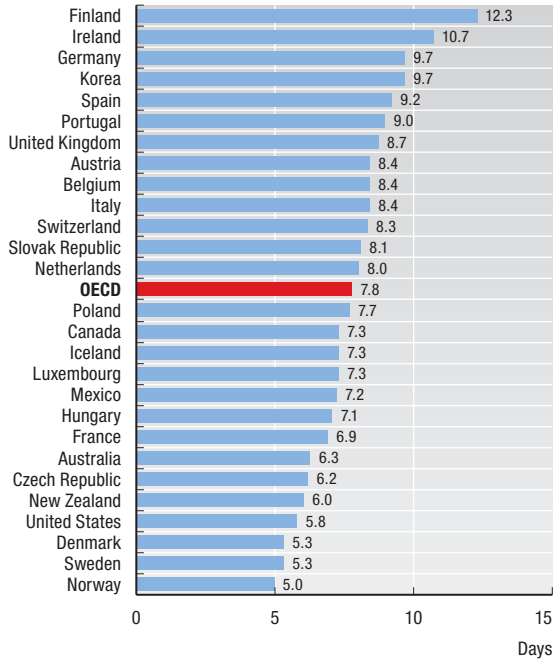
Cross-country comparisons should therefore be interpreted with caution.

4.10. AVERAGE LENGTH OF STAY IN HOSPITALS

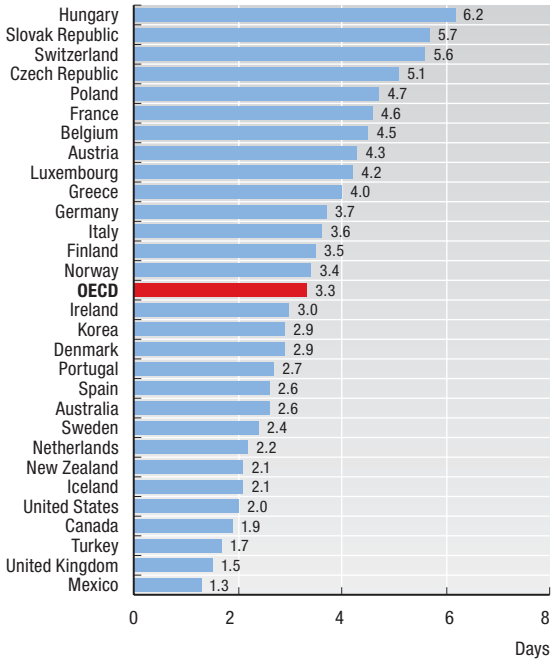
4.10.1. **Average length of stay for acute care, 1990 and 2005 (or nearest year)**



4.10.2. **Average length of stay following acute myocardial infarction (AMI), 2005 (or latest year available)**



4.10.3. **Average length of stay for normal delivery, 2005 (or latest year available)**



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114103308441

4.11. CARDIO-VASCULAR PROCEDURES

Heart diseases are a leading cause of hospitalisation and death in OECD countries (see Indicator 2.4 "Mortality from heart diseases and stroke"). Coronary artery bypass graft and coronary angioplasty are two revascularisation procedures that have revolutionised the treatment of heart diseases in recent decades.

There is considerable variation across countries in the use of both coronary bypass and coronary angioplasty (Chart 4.11.1). The United States is the most prolific user of coronary angioplasties, with 433 per 100 000 population performed in 2004, closely followed by Belgium. Both countries are also at the top for coronary artery bypass grafts per capita; there were 152 coronary bypasses per 100 000 population performed in Belgium in 2004, compared to 145 in the United States. At the other extreme, there were only two coronary bypasses and two coronary angioplasties performed for every 100 000 people in Mexico in 2004; this was significantly lower than the next lowest country, Portugal.

As shown in Chart 4.11.1, there is also considerable variation across countries in the composition of revascularisation procedures. In most countries, coronary angioplasties comprise between 65% and 80% of total revascularisations. Canada and New Zealand are exceptions with coronary angioplasties accounting for 60 and 56% respectively of revascularisations performed on inpatients. It is possible, however, that a larger number of angioplasties are carried out as day surgeries in these two countries.

The utilisation of coronary angioplasty has increased rapidly over the past decade in most OECD countries, overtaking bypass surgery as the preferred method of revascularisation around the mid-1990s (Chart 4.11.2) – about the same time that the first published trials of the efficacy of coronary stenting began to appear (Moïse, 2003a). This trend has accelerated in recent years, with the introduction of drug-eluting stents and the decreased use of coronary bypass in most OECD countries. These data suggest a substitution of coronary angioplasty for coronary bypass surgery over time. Cutler and Huckman (2003) estimated that between 25 and 35% of coronary angioplasties were substitutes for coronary bypasses – although not perfect substitutes since bypass surgery is still the preferred method for treating multiple-vessel obstructions.

The determinants of the utilisation of revascularisation procedures are not straightforward. Moïse (2003a) showed that GDP per capita was a stronger determinant of utilisation rates for revascularisation procedures than the underlying rate of heart disease, using IHD mortality rates as a proxy measure. However, the relationship between these two determinants and utilisation rates for revascularisation procedures changes when revascularisation is separated into its two constituent components. On the one hand, GDP per capita is not a significant determinant of the use of coronary bypass surgery, whereas it is for coronary angioplasty. On the other hand, the underlying level of heart disease is a significant explanatory factor for the use of coronary bypass, but not for coronary angioplasty (Moïse, 2003b).

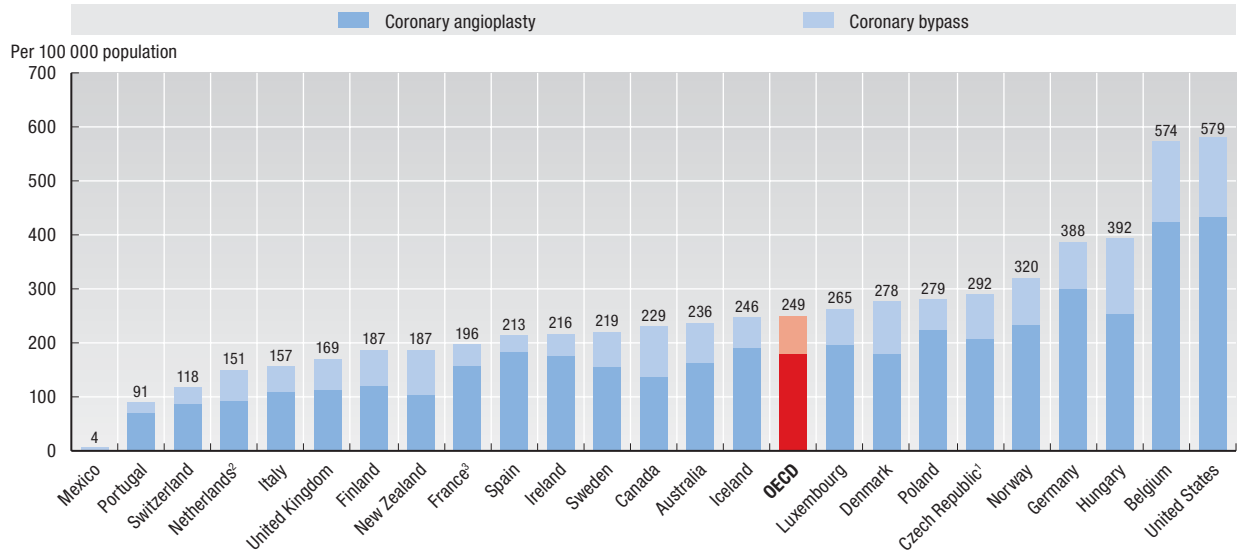
Definition and deviations

A coronary bypass is the grafting of veins and/or arteries to bypass an obstructed coronary artery. It may involve bypassing the obstruction of only one coronary artery, but multiple coronary artery bypasses are most common. Coronary angioplasty involves the threading of a catheter with a balloon attached to the tip through the arterial system, usually started in the femoral artery in the leg, into the diseased coronary artery. The balloon is inflated to distend the coronary artery at the point of obstruction. The placement of a stent (an expandable wire mesh support designed to keep the artery open) accompanies the majority of angioplasties. A recent development, drug-eluting stents (a stent that gradually releases drugs into the immediate area), are increasingly being used to stem the growth of scar-like tissue surrounding the stent.

The data relate to the number of inpatient procedures, normally counting *all* procedures per inpatient stay – although some countries might report only the *main* procedure or the number of *patients* receiving one or more procedures. The data do not include coronary angioplasties performed on an ambulatory basis – a growing share of overall activity rates in many countries.

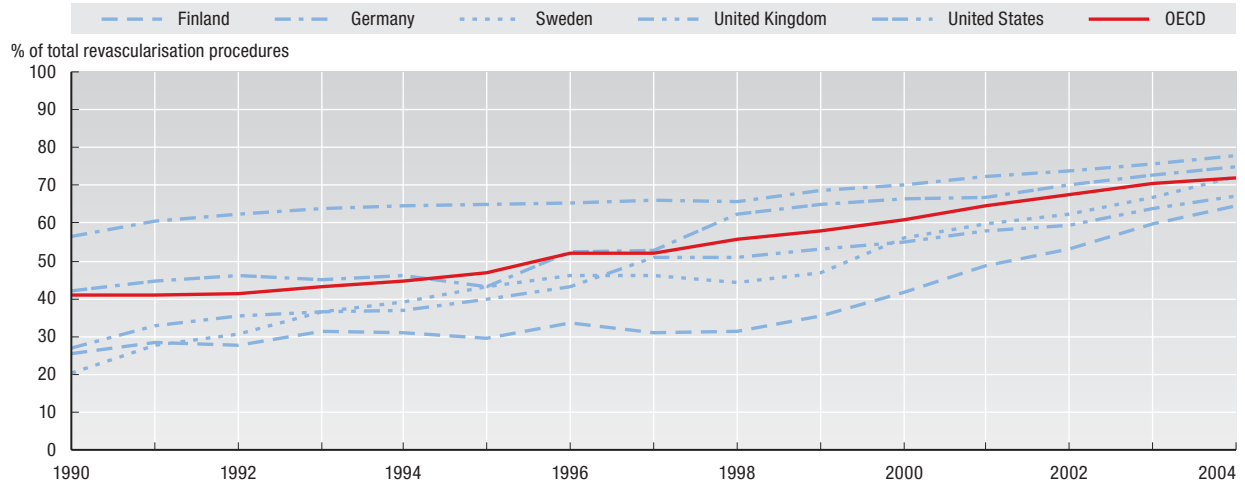
4.11. CARDIO-VASCULAR PROCEDURES

4.11.1. **Coronary revascularisation procedures, per 100 000 population, 2004**



1. 2005. 2. 2003. 3. 2001.

4.11.2. **Coronary angioplasty as a percentage of total revascularisation procedures, 1990-2004**



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114110746116

4.12. TREATMENT OF RENAL FAILURE (DIALYSIS AND KIDNEY TRANSPLANTS)

End-stage renal failure (ESRF) is a condition in which the kidneys are permanently impaired and can no longer function normally. Some of the main risk factors for end-stage renal failure include diabetes and hypertension, two conditions which are generally becoming more prevalent in OECD countries. In the United States, diabetes and hypertension alone accounted for 60% of the primary diagnoses for all ESRF patients (36% for diabetes and 24% for hypertension) (USRDS, 2006). When patients reach end-stage renal failure, they require treatment either in the form of dialysis or through kidney transplants. Treatment in the form of dialysis tends to be more costly and results in a poorer quality of life for patients than a successful kidney transplant, because of the recurrent and uncomfortable nature of dialysis.

Taking into account both types of treatment, the proportion of people treated for end-stage renal failure has increased at a rate of more than 6% per year on average across OECD countries over the past two decades (Chart 4.12.2). This translates into a more than threefold increase in the prevalence of treatment for ESRF in 2005 compared with 1985. In 2005, Japan and the United States reported the highest rates, with more than 160 ESRF patients per 100 000 population (Chart 4.12.1), followed by Portugal which registered the highest growth rate since 1985. It is not clear why these countries report such strong rates of treatment for ESRF, but it does not seem to be solely or mainly related to a higher prevalence of diabetes, which is not particularly higher in these countries compared with other OECD countries (IDF, 2006).

In most OECD countries, a majority of ESRF patients are being treated through dialysis as opposed to receiving a kidney transplant. This can be attributed to the fact that while the prevalence of people suffering from end-stage renal failure has strongly increased in many countries, the number of transplants has remained limited by the number of donors. The exceptions are Finland, Iceland and the Netherlands which have a relatively low level of ESRF patients overall.

Focussing on the main type of treatment presently provided to ESRF patients, the proportion of people undergoing dialysis is much higher in Japan and, to a lesser extent, in the United States, than in other countries (Chart 4.12.3). In Japan, this is partly related to the fact that rates of kidney transplants are the lowest among OECD countries, which means that nearly all Japanese ESRF patients are treated through dialysis. In all countries, there has been a large rise in the number of persons undergoing dialysis over the past 20 years.

Given the supply constraints, kidney transplants are normally performed on patients with end-stage renal failure when these persons cannot live without long and hard dialysis sessions. When successful, these transplants allow people to live again almost normally, without strict diet and activity limitation. Advances in surgical techniques and the development of new drugs preventing rejection have made it possible to carry out more transplants, and to improve their rate of success, than was the case 20 years ago. The prevalence of people living with a functioning kidney transplant has regularly increased since 1985 in all countries with available data. The OECD average rose from eight to 32 people with a functioning kidney transplant per 100 000 population between 1985 and 2005 (Chart 4.12.4). In 2005, the United States followed by Austria, Finland, Spain and France, reported the highest rate, with more than 40 people with a functioning kidney transplant per 100 000 population. On the other hand, the proportion of people having received a kidney transplant was the lowest in Japan, followed by Korea and the Slovak Republic.

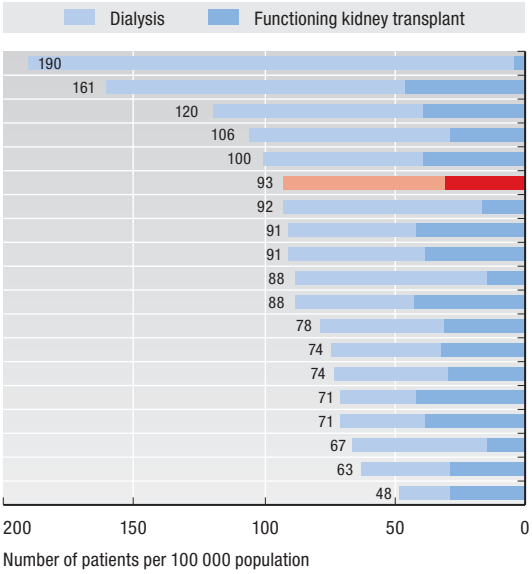
The main constraint to further increasing the number of transplants remains the number of donors. In many countries, waiting lists to receive a kidney transplant have increased, as the demand for transplants has outpaced greatly the number of donors. The rate of transplants is also affected by cultural factors and traditions; transplants may still be less accepted in certain countries such as Japan.

Definition and deviations

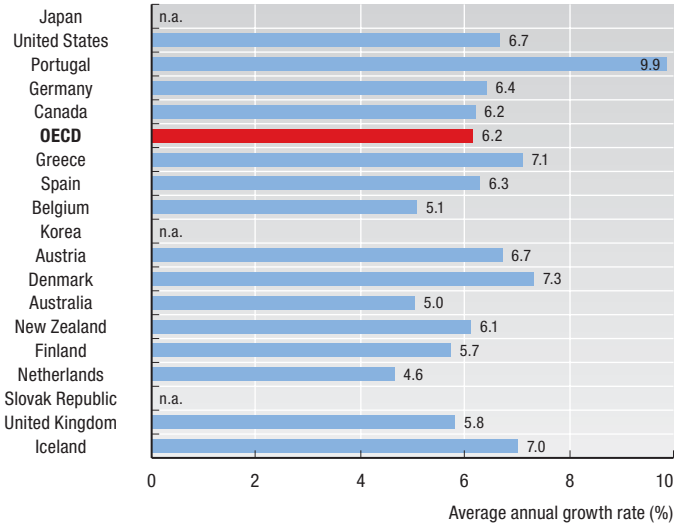
The number of patients treated for end-stage renal failure refers to the number of patients at the end of the year who are receiving different forms of renal replacement therapy: haemodialysis/haemofiltration, intermittent peritoneal dialysis, continuous ambulatory peritoneal dialysis, continuous cyclical peritoneal dialysis, or living with a functioning kidney transplant.

4.12. TREATMENT OF RENAL FAILURE (DIALYSIS AND KIDNEY TRANSPLANTS)

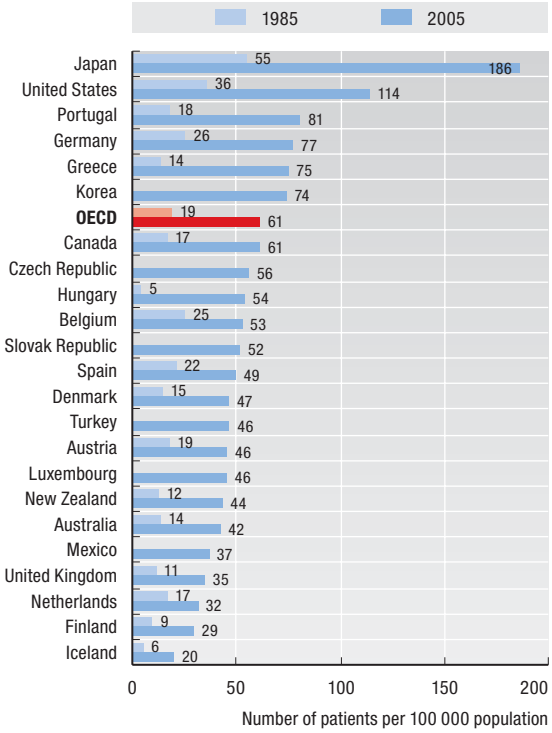
4.12.1. Patients treated for end-stage renal failure, by type of treatment, 2005 (or latest year available)



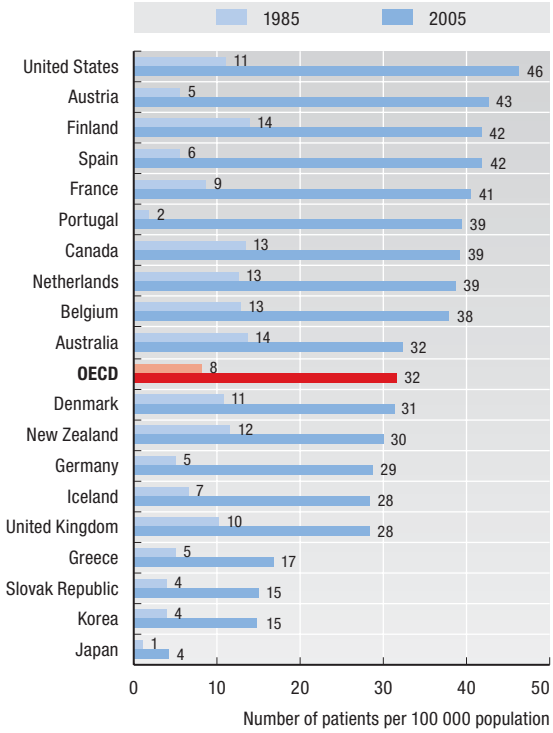
4.12.2. Rise in the prevalence of people treated for end-stage renal failure, 1985 to 2005



4.12.3. Prevalence of patients undergoing dialysis, 1985 to 2005 (or nearest year)



4.12.4. Prevalence of patients living with a functioning kidney transplant, 1985 to 2005 (or nearest year)



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114130838154

4.13. CAESAREAN SECTIONS

Caesarean rates as a percentage of all live births have grown in all OECD countries over the past decades. The increase reflects not only medical risk factors (such as the age of the mother, multiple births, having had a previous caesarean section and a gestation period lasting beyond the normal term) but also changes in the practice of health professionals and mothers' preferences. This has raised questions of whether the costs – financial and to the health of the mother and the infant – of some of these caesareans might more than exceed the benefits.

In 2004, the rate of caesarean sections as a percentage of all live births varied significantly across OECD countries (Chart 4.13.1), ranging from less than one in five in the Netherlands, the Czech Republic, Nordic countries, France, Belgium and the Slovak Republic, to over one in three in Korea, Italy and Mexico. Several factors explain high rates in this second group of countries. Higher fees for caesarean sections compared to normal deliveries have encouraged doctor to perform more caesarean sections in Korea (OECD, 2003b). Similarly, doctors operating in the private sector of Mexico have greater financial incentives to programme caesareans (Secretaria de Salud, 2003). In Italy, anecdotal evidence suggests that the high rates of caesarean sections might reflect patients' choices (based partly on a belief that caesareans are generally safer than normal deliveries) together with changes in the practice of doctors favouring caesarean sections (because they can be performed more quickly and planned in advance).

Caesarean section rates have increased over time in all OECD countries and, in some cases, the rise has been quite rapid (Chart 4.13.2). On average across a common group of 20 OECD countries, caesarean rates accounted for 14% of all births in 1990; by 2004, this share had increased to 22%. The growth rate since 1990 has been particularly rapid in Ireland, the Slovak Republic and the Czech Republic. On the other hand, the rate of growth has been much slower in Nordic countries.

Not all of these procedures might have been performed following medical indication. In the United States, a study by Declercq and colleagues (2005) analysed the rise in caesarean sections between 1996 and 2001, controlling for the most important risk factors. The study found that the proportion of "no indicated risk" caesareans (defined as mothers having a single baby at full term, who did not have any caesarean before and were not reported to have any medical risk factors, and for whom no complication of labour or delivery were listed on the birth certificate) increased to 5.5% of births in 2001, up from 3.7% in 1996.

The relative benefits of vaginal delivery compared with caesarean births for normal uncomplicated pregnancy continue to be debated. Caesarean sections carry lower risk in developed countries compared to the developing world (WHO, 2005). However, they are more costly than normal delivery and unnecessary interventions tend to be associated with more health problems for the mother and the infant than vaginal delivery (Bewley and Cockburn, 2002; Victora and Barros, 2006). Unnecessary caesareans mean therefore that costly interventions are performed with higher risks.

Definition and deviations

Caesarean section rate is the number of caesareans per 100 live births. In Portugal, the denominator is only the number of live births which took place in National Health Service Hospitals in Mainland (resulting in an overestimation of caesarean rates).

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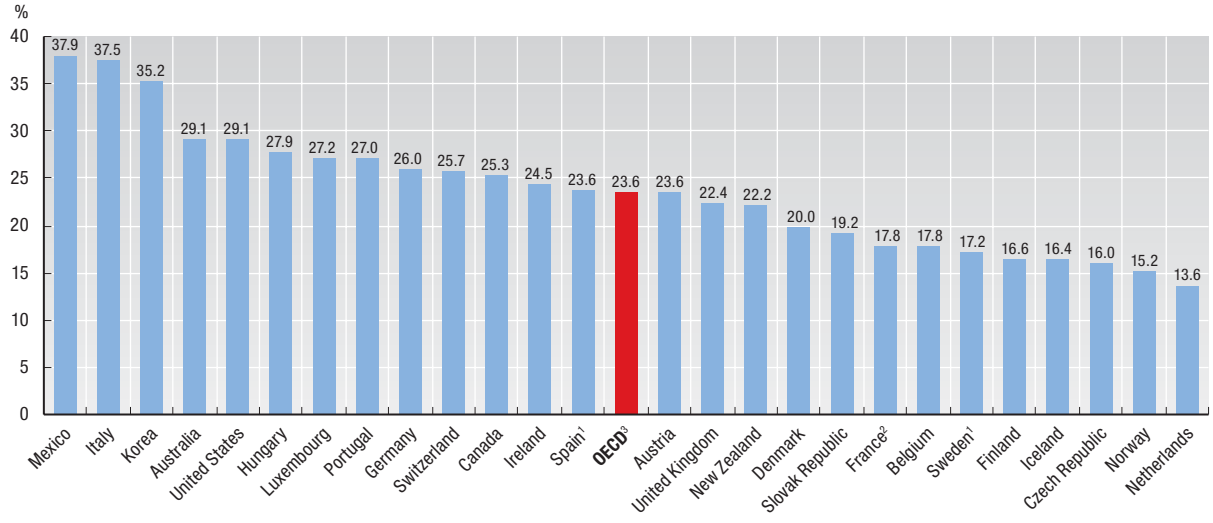
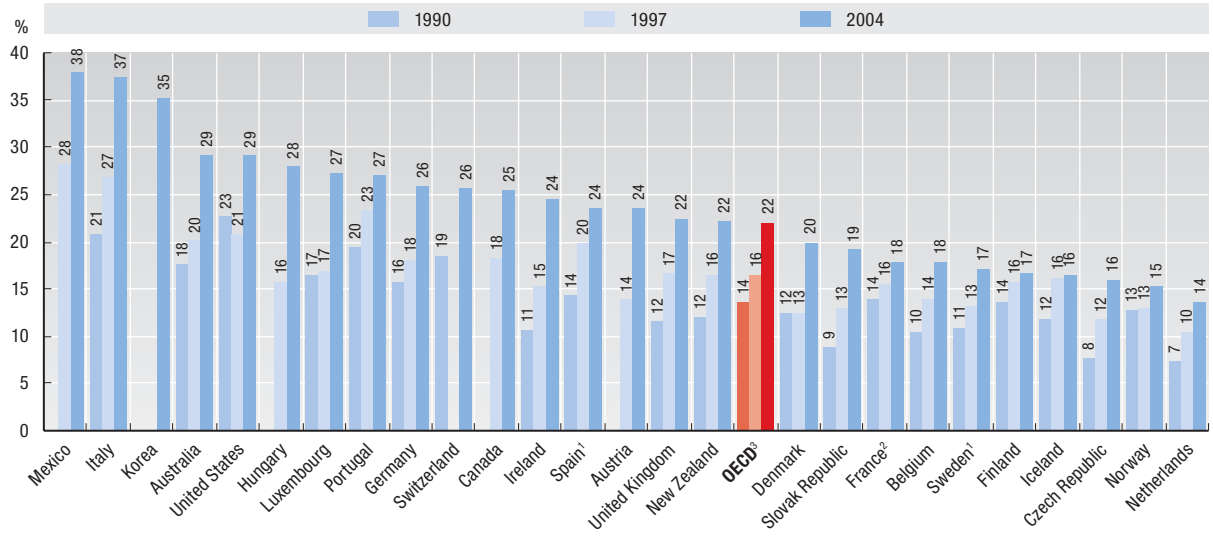
4.13. CAESAREAN SECTIONS

4.13.1. **Caesarean sections per 100 live births, 2004**



1. 2003. 2. 2001.
3. The OECD average consists of the latest available data for 26 OECD countries.

4.13.2. **Rise in caesarean sections per 100 live births, 1990 to 2004**



1. 2003. 2. 2001.
3. The OECD average is the consistent average for a common group of 20 countries.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114145806578

4.14. CATARACT SURGERIES, AMBULATORY AND INPATIENT

In the past 20 years, the number of surgical procedures carried out on an ambulatory basis (also called day cases) has steadily grown in OECD countries. Advances in medical technologies, particularly the diffusion of less invasive surgical interventions, and better anaesthetics have made this possible. These innovations have improved effectiveness and brought considerable benefits to patients' safety. They also help to reduce the unit cost of such interventions by shortening the length of stay. However, the impact on overall health cost will depend on the relative magnitude of changes in unit cost and volume of procedures, the impact on downsizing of hospital bed capacity, as well as the cost of post-acute care and community health services.

Cataract surgery has now become the most frequent surgical procedure in most OECD countries. It provides a good example of a high volume surgery which is now carried out predominantly on an ambulatory basis in most OECD countries.

The number of cataract surgeries performed per capita in 2004 (or for the latest year available) shows huge variations across the 19 countries reporting data on both inpatient and ambulatory procedures (Chart 4.14.1). The rate ranges from a low of 51 cataract surgeries per 100 000 population in Mexico to a high of 1 600 per 100 000 population in Belgium. Both "demand" factors (*e.g.*, an older population structure) and "supply" factors (*e.g.*, capacity to perform the intervention on an ambulatory or inpatient basis) might explain such cross-country variations. However, different recording practices for cataract surgeries limit data comparability (see the box below on "Definition and deviations").

The volume of cataract surgeries has grown over recent years in most OECD countries (Chart 4.14.1). Changes in underlying demand as population ages are likely to have encouraged this trend, but the proven success, safety and cost-effectiveness of cataract surgery as a day care procedure has probably been a more important factor (Fedorowicz *et al.*, 2004). Over the past seven years, the growth in ambulatory surgeries has exceeded the reduction in cataract surgeries requiring an overnight stay in hospital in Belgium, Denmark, Finland, Ireland, Italy, the Netherlands and the United Kingdom (Table A.4.14), revealing both a "substitution" effect (replacing inpatient procedures) and an "expansion" effect (increasing the total volume).

Cataract surgeries are now predominantly performed on an ambulatory basis in most OECD countries. Day surgery accounts for 90% or more of all cataract surgeries in half of the countries for which data are available (Canada, Sweden, Denmark, Finland, the United Kingdom, Australia and New Zealand) (Chart 4.14.2). However, the diffusion of day surgery is still relatively low in some other countries, which could result, among other factors, from more advantageous reimbursement for inpatient stays, national regulations, and obstacles to changing individual practices of surgeons and anaesthetists (Castoro *et al.*, 2007). The share of cataract surgeries involving a hospital stay still represents around half or more of all surgeries in Luxembourg, France, Ireland and Portugal.

In France, it has been estimated that between 77% and 90% of all cataract surgeries in 1999 could have been performed on an ambulatory basis (Sourty Le Gellec, 2001). While the percentage of cataract surgery performed on a same-day basis in France did increase from 27% in 1999 to 36% in 2001, there was great potential for the further development of this more efficient way of treating cataract problems.

Definition and deviations

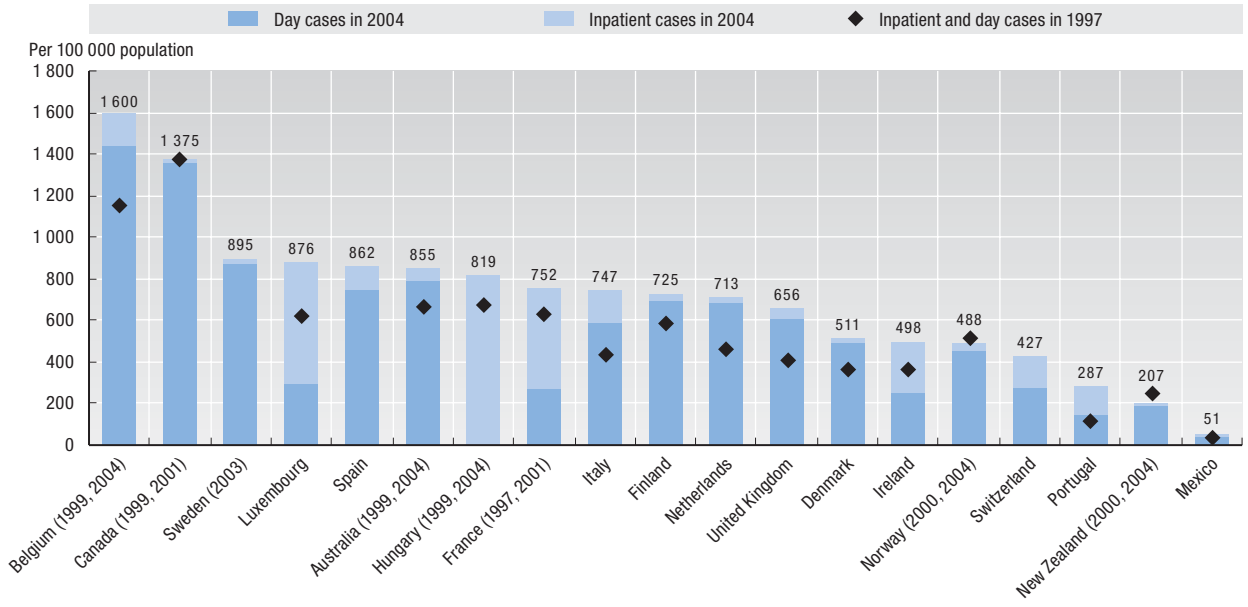
Cataract surgeries consist of removing the lens of the eye, because of the presence of cataracts which are partially or completely clouding the lens, and replacing it with an artificial lens.

The surgery may be carried out on a same-day basis or require an overnight stay. Ambulatory (or day case) surgery refers to patients who are given surgical treatment (usually elective, non-emergency), which is performed in a dedicated surgical unit in a hospital or in a clinic, and which lead to discharge on the day of the operation. Equivalent terms used in some countries include same-day (or day) surgery and outpatient surgery. Inpatient surgery applies to those patients who are given surgical treatment and spend at least one night in an institution.

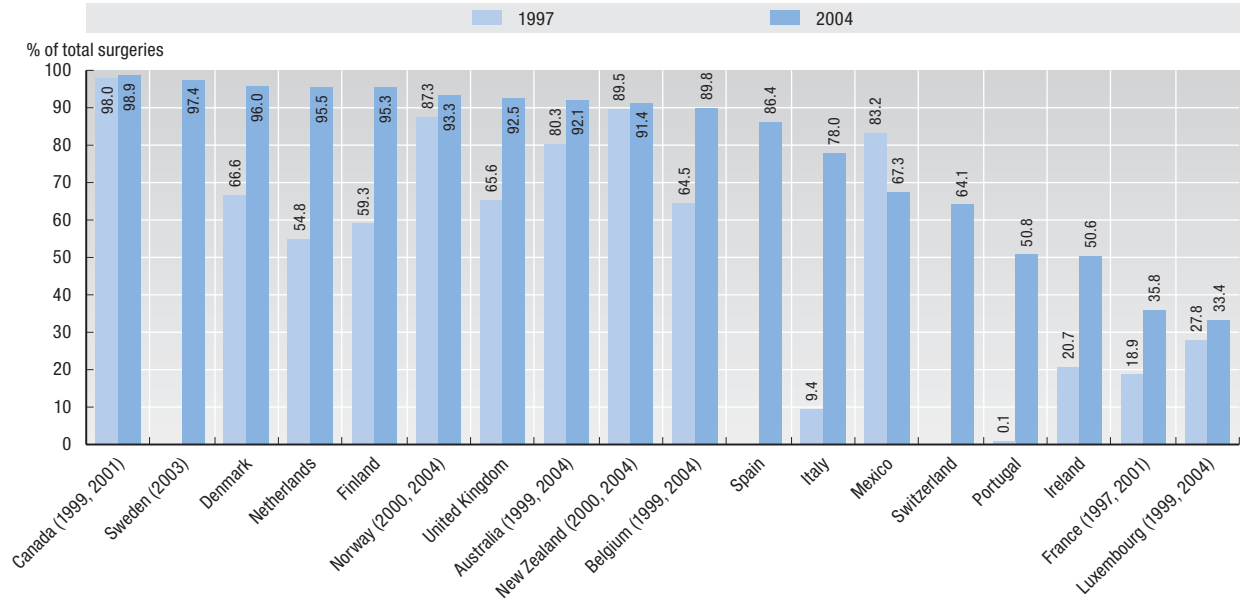
Caution is required in making cross-country comparisons. Current health information systems in several countries remain incomplete in their coverage of day surgeries, especially those carried out in ambulatory settings outside hospitals or in the private sector (*e.g.*, in private clinics). Data for Spain, for instance, do not include procedures carried out in the private sector. Registration practices for cataract surgeries also vary across countries, for instance whether they are counted as one intervention involving at least two steps (removal or the lens and replacement with an artificial lens) or as two separate interventions.

4.14. CATARACT SURGERIES, AMBULATORY AND INPATIENT

4.14.1. **Number of cataract surgeries, inpatient and day cases, per 100 000 population, 1997 and 2004**



4.14.2. **Share of cataract surgeries carried out as day cases, 1997 and 2004**



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114217366870

4.15. PHARMACEUTICAL CONSUMPTION

The consumption of pharmaceutical drugs is increasing across OECD countries not only in terms of expenditure (see Indicator 5.4 "Pharmaceutical expenditure"), but also in terms of the volume (or quantity) of drugs consumed. One of the factors contributing to the rise in pharmaceutical consumption is the ageing of the population in most OECD countries, which comes with growing demand for drugs to treat or at least control different ageing-related diseases. But the rise in pharmaceutical consumption is also observed even in countries where the population ageing process is less advanced, indicating that other factors such as the introduction of new drugs are also playing a role.

This section provides information on the current level and changes over the past five years in the volume of consumption of four out of the 28 categories of pharmaceuticals for which data are available in *OECD Health Data*: antidiabetics, antidepressants, anticholesterols and antibiotics. The volume of consumption of these drugs is measured consistently across countries through the use of the "defined daily dose" (DDD) unit, which is recommended by the WHO Collaborating Center for Drug Statistics (see the box on "Definition and deviations" below).

Starting with drugs used for treatment of diabetes, there are substantial variations across countries in the current volume of consumption of these drugs, with the consumption in Iceland and Denmark being half of that in Greece and Finland (Chart 4.15.1). Between 2000 and 2005, the consumption of antidiabetics increased in all countries. The growth rate was particularly strong in the Slovak Republic (with consumption rising at a rate of nearly 30% per year, although it started from a relatively low level in 2000), Greece (14% per year) and Luxembourg (about 10% per year). The rise in consumption can be attributed to a rising prevalence of diabetes as well as increases in the proportion of people treated and in the average dosages used in treatments (Melander *et al.*, 2006).

The consumption of antidepressants also varies considerably across OECD countries, with Iceland reporting the highest level, followed by Australia, the other Nordic countries, Belgium and France (Chart 4.15.2). Central and eastern European countries (the Slovak Republic, Hungary and the Czech Republic) have the lowest level of consumption, although consumption of antidepressants in these countries has grown rapidly over the past five years.

The consumption of anticholesterols ranges from a high of 182 DDDs per 1 000 people per day in Australia to a low of 65 in Germany (Chart 4.15.3). While this might reflect at least partly differences across countries in the prevalence of high bad cholesterol levels in the population, these differences can also be attributed to differences in clinical guidelines for the control of cholesterol. For instance, guidelines in Australia target lower cholesterol levels than those in European countries; and differences also exist in target levels within Europe (National Heart Foundation of Australia *et al.*, 2005; Hockley and Gemmill, 2007). Both the epidemiological context (for instance, growing obesity) and increased screening and treatment explain the very rapid growth in the consumption of anticholesterols in recent years across all OECD countries for which data are available. Between 2000 and 2005, consumption increased at an annual rate of 13% in Sweden, up to nearly 30% per year in Portugal and the Czech Republic.

The consumption of antibiotics also varies widely across OECD countries, from a low of 11 DDDs per 1 000 people per day in the Netherlands to a high of 35 in Greece (Chart 4.15.4). As over-consumption of antibiotics has been acknowledged to create bacterial resistance, many countries have recently launched information campaigns targeting physicians and/or patients in order to reduce antibiotic consumption. As a result, consumption has stabilised in many countries and even decreased in some others such as France and Poland. By contrast, some countries, such as Portugal and Greece, have registered substantial growth in the consumption of antibiotics between 2000 and 2005.

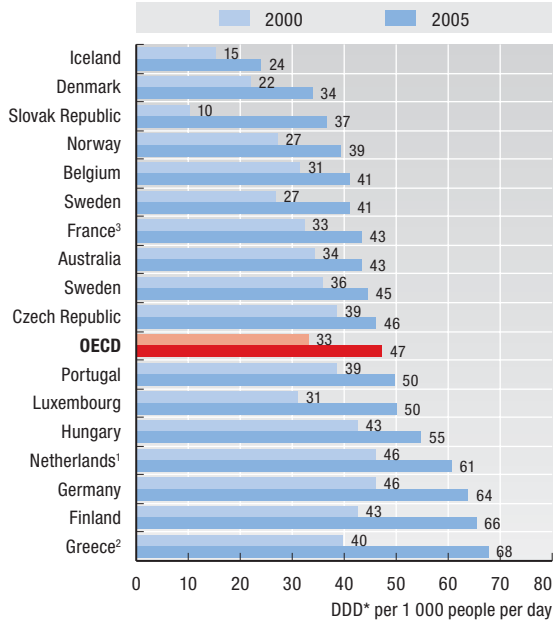
Definition and deviations

Defined daily dose (DDD) is defined as the *assumed average maintenance dose per day for a drug used on its main indication in adults*. DDDs are assigned to each active ingredient or combination of active ingredients in a given therapeutic class by international expert consensus. For instance, the DDD for oral aspirin equals 3 grams, which is the assumed maintenance daily dose to treat pain in adults. DDDs do not necessarily reflect the average daily dose actually used in a given country but is a standard unit allowing the measurement of drug consumption. DDDs can be aggregated within and across therapeutic classes of the Anatomic-Therapeutic-Classification (ATC). For more details, see *www.whocc.no/atcddd*.

Data generally refers to outpatient consumption except for the Czech Republic, Denmark, Finland, Hungary, and Sweden, where data include hospital consumption. Data do not include drugs not covered by health insurance in Belgium, Germany, Ireland, the Netherlands and Portugal. However, these caveats should not affect comparisons in these therapeutic classes since most of the products are generally covered by health insurance. Greek figures may include parallel exports.

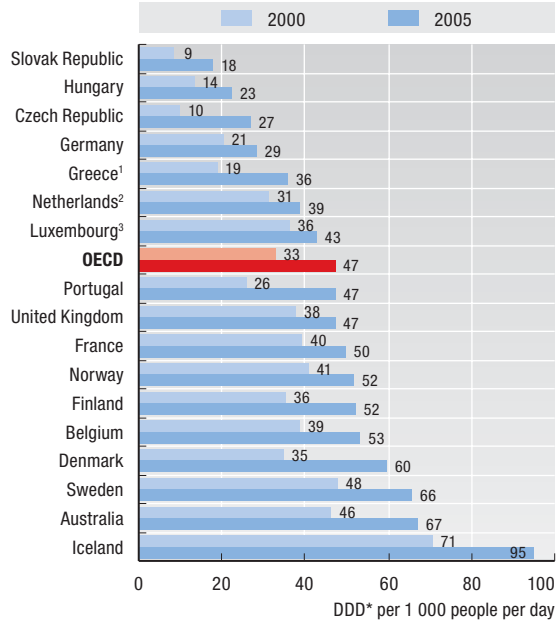
4.15. PHARMACEUTICAL CONSUMPTION

4.15.1. **Antidiabetics consumption, DDD* per 1 000 people per day, 2000 and 2005**



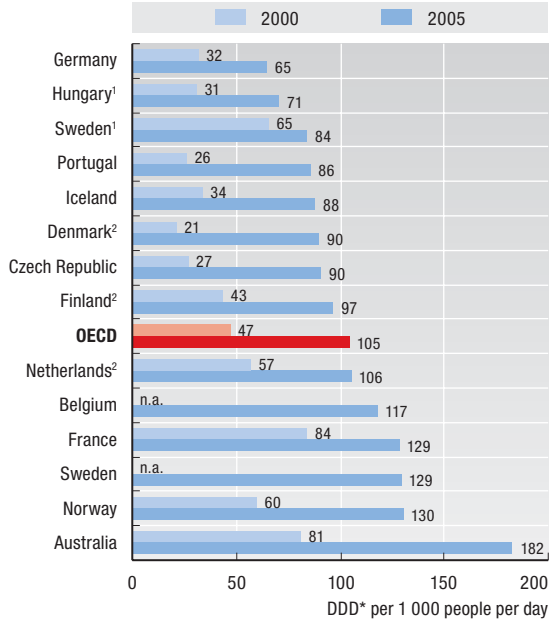
1. 2001-05. 2. 2000-04.
3. Only represent 88% of consumption.

4.15.2. **Antidepressants consumption, DDD* per 1 000 people per day, 2000 and 2005**



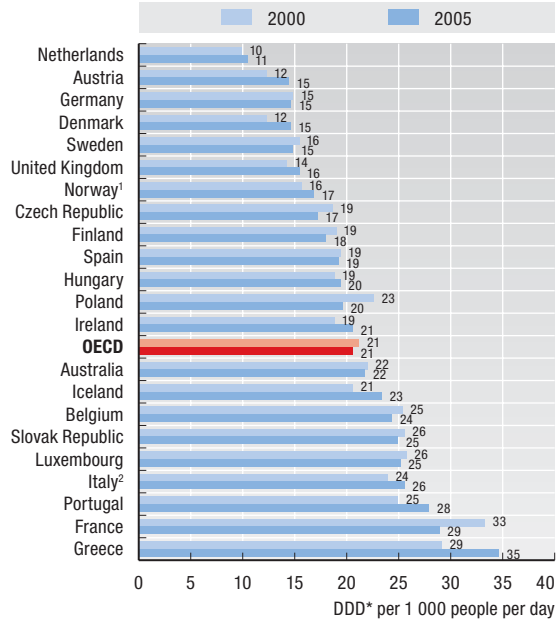
1. 2000-04. 2. 2001-05. 3. 2003-05.

4.15.3. **Anticholesterols consumption, DDD* per 1 000 people per day, 2000 and 2005**



1. 2003-05. 2. 2001-05.
* Defined daily dosage.
Source: OECD Health Data 2007.

4.15.4. **Antibiotics consumption, DDD* per 1 000 people per day, 2000 and 2005**



1. 2001-04. 2. 2000-03.

StatLink http://dx.doi.org/10.1787/114233716434

5. HEALTH EXPENDITURE AND FINANCING

5.1. HEALTH EXPENDITURE PER CAPITA

Total per capita spending on health shows considerable variation across the OECD. Such differences in spending levels can reflect a wide array of market and social factors as well as the diverse financing and organisational structures of the health system in each country.

In 2005, the highest spending country of the OECD was the United States, devoting 6 401 USD PPP (see box below on "Definition and deviations") per capita to health (Chart 5.1.1 and Table A.5.1a). This equated to more than two and a quarter times the average of OECD countries. After the United States was Luxembourg (which also includes expenditure on non-residents), followed by Norway and Switzerland with around two-thirds the level of spending per capita of the United States, but still more than 50% above the OECD average. Around half the OECD countries are then clustered in a band between USD 2 500 and USD 3 500 at PPP, representing between 90% and 125% of the OECD average. At the other end of the scale there is a group of five countries (Turkey, Mexico, Poland, the Slovak Republic and Korea), each with health expenditure per capita at a level of less than half the OECD average.

Chart 5.1.1 also shows total spending on health divided into public and private expenditure (see also Indicator 5.5 "Financing of health care"). The variation in the levels of public spending on health is of a similar magnitude to that observed for total spending. Countries with a high public share, such as Denmark, Sweden and the United Kingdom, tend to rank higher in terms of public spending per capita. However, the public share of spending does not in itself determine this rank: although the United States is predominantly privately funded, the level of public expenditure per capita was third behind Norway and Luxembourg in 2005 and more than 40% above the OECD average.

Between 1995 and 2005, spending on health expenditure per capita, on average across the OECD, is estimated to have grown by around 4% on an annual basis in real terms (Chart 5.1.2 and Table A.5.1c). This compares with average economic growth over the same period of 2.5%, resulting in an increasing share of the economy devoted to health (see Indicator 5.2 "Health expenditure in relation to GDP"). However, behind this OECD average, significant variations can be observed both between countries and over time.

In general, the countries that have experienced the highest growth over this period, such as Korea and Ireland, have been those countries that started out with relatively lower health expenditures per capita in the mid-1990s. Health expenditure growth in these two countries (as well as in Luxembourg) has been almost two times greater the OECD average over this period. By contrast, countries such as Germany and France have experienced moderate (below average) health expenditure growth of around 2% per year between 1995 and 2005, partly as a result of cost-containment measures and slow economic growth during this period. Therefore, by 2005, expenditure on health per capita in Germany and France was only around 20% higher, in real terms, than the levels in 1995, compared to an OECD average closer to 50% higher.

Chart 5.1.3 shows the different growth rates of expenditure on health in comparison to overall economic growth over the past decade. In nearly all OECD countries (including Germany and France), health expenditure grew faster than the economy, resulting in an increase in the ratio of health spending to GDP (see Indicator 5.2 "Health expenditure in relation to GDP").

Definition and deviations

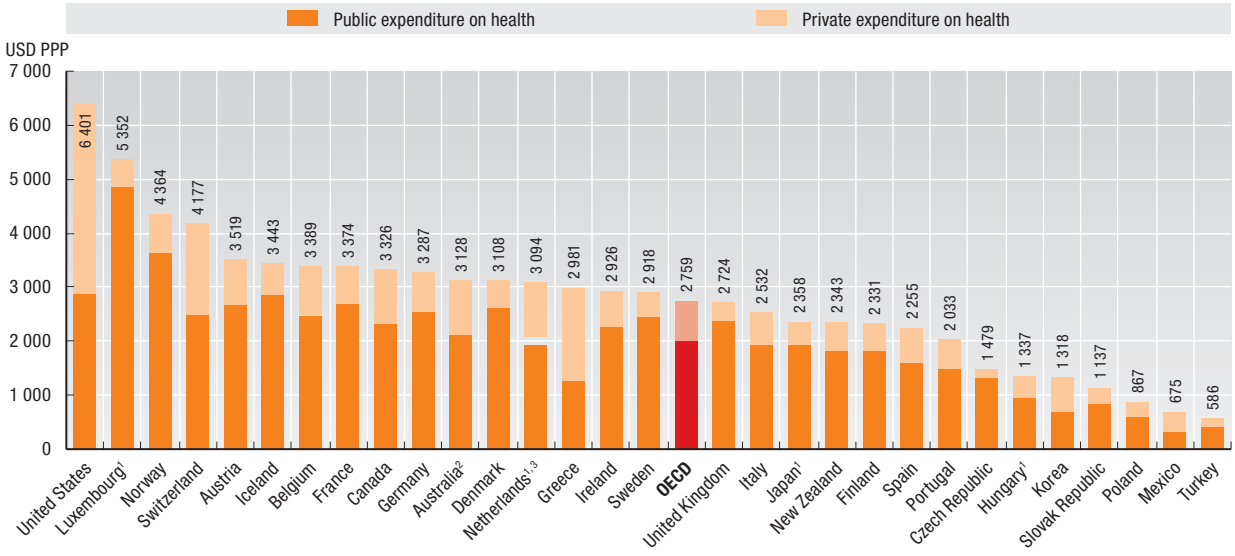
Total expenditure on health measures the final consumption of health goods and services (*i.e.* current health expenditure) plus capital investment in health care infrastructure. This includes spending by both public and private sources (including households) on medical services and goods, public health and prevention programmes and administration. Excluded are health-related expenditure such as training, research and environmental health. The two major components of total current health expenditure are: expenditure on personal health care and expenditure on collective services.

To compare the overall level of consumption of health goods and services across countries at a given point in time, health expenditure per capita is converted to a common currency (US dollar) and adjusted to take account of the different purchasing power of the national currencies in each country. Economy-wide (GDP) PPPs are used as the most available and reliable conversion rates. For further information about the definition of health expenditure and comparisons of health expenditure across countries, see Annex B.

The growth rates presented in Charts 5.1.2 and 5.1.3 (and Tables A.5.1c to A.5.1e) have been adjusted to take account of the many series breaks that are present in the health expenditure series. These series breaks are in most cases due to the methodological changes resulting from implementation of the *System of Health Accounts* (see Annex B). The revision of the health sector boundary usually results in a level shift in health expenditure at the point of implementation. To attempt to remove this effect, the real growth in the year of the series break has been assumed to be the average growth of the preceding and following years.

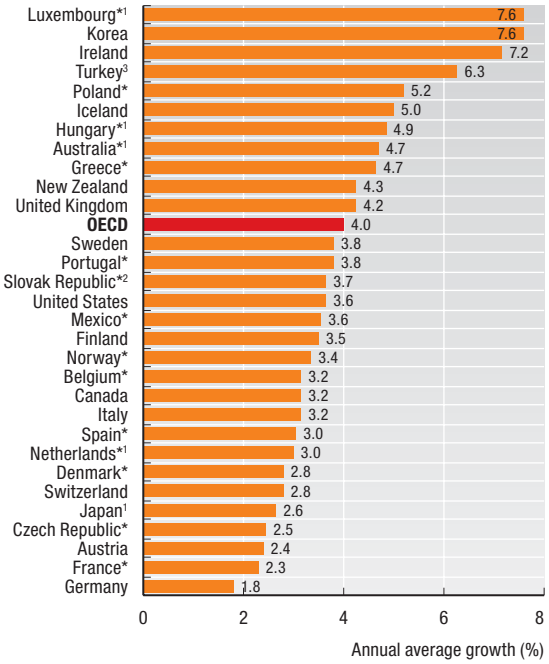
5.1. HEALTH EXPENDITURE PER CAPITA

5.1.1. **Health expenditure per capita, public and private, 2005**

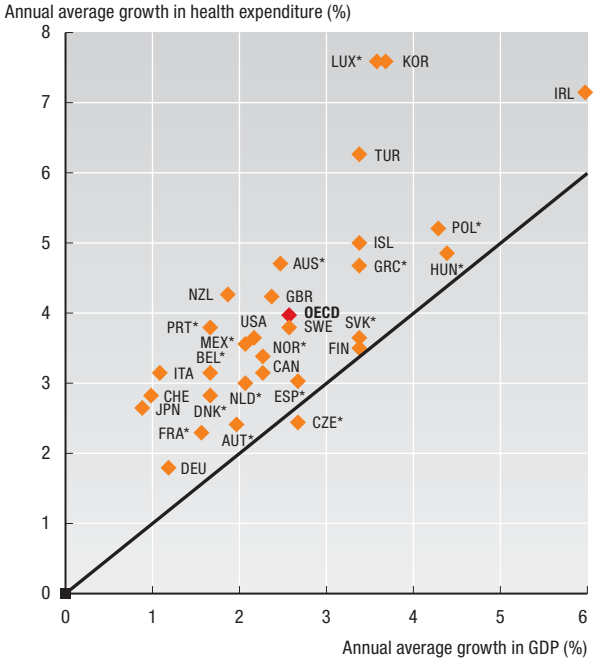


1. 2004. 2. 2004-05.
3. Public and private expenditures are current expenditures (excluding investments).

5.1.2. **Annual average growth rate in real health expenditure per capita, 1995-2005**



5.1.3. **Annual average growth in real per capita expenditure on health and GDP, 1995 to 2005**



* Growth rates adjusted. See box "Definition and deviations".
1. 1995-2004. 2. 1997-2005. 3. 1998-2005.
Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114254751864

5.2. HEALTH EXPENDITURE IN RELATION TO GROSS DOMESTIC PRODUCT (GDP)

In 2005, the average share of GDP that OECD countries devoted to health spending reached 9%. However, this share varied considerably across OECD countries, ranging from around 6% in Korea, Poland and Mexico up to 15.3% of GDP in the case of the United States (Chart 5.2.1 and Table A.5.2a). The number of countries now spending more than 10% of their GDP on health goods and services stood at eight in 2005, compared with four in 2000 and only two countries in 1995. Concerning public expenditure as a share of GDP, there was an almost threefold difference between the highest and lowest countries. Public spending on health in France accounted for 8.9% of GDP in 2005, while in Korea, where health care is evenly split between public and private financing, public financing of health equated to 3.2% of GDP.

However, to make a more comprehensive assessment of health spending in a country, both the health spending to GDP ratio and health spending per capita (see Indicator 5.1 "Health expenditure per capita") should be considered together. Countries having a relatively high health spending to GDP ratio might have relatively low health expenditure per capita, and conversely, countries with a relatively low health expenditure to GDP ratio might have relatively high expenditure per capita. For example, Austria and Portugal both spent just over 10% of their GDP on health; however, per capita spending (adjusted to USD PPP) was over 70% higher in Austria. Also, Greece and Ireland reported similar health spending per capita in 2005. However, this represented more than 10% of GDP in Greece compared with only 7.5% of GDP in Ireland (Chart 5.2.1).

Changes over time in the ratio of health expenditure to GDP reflect the combined effect of trends in both GDP and health expenditure (Chart 5.2.3). Nearly all OECD countries have experienced an increase in the proportion of the national economy devoted to health over the past ten years. In the United States, Canada and Switzerland, health expenditure growth outpaced by a wide margin overall economic growth between 2000 and 2003. On the other hand, the increase in the share of GDP devoted to health has been more modest over the past ten years in Germany and Japan, where low economic growth overall has been matched by low growth in health spending.

Chart 5.2.4 shows the positive association between GDP per capita and health expenditure per capita across OECD countries. While there is an overall tendency for countries with higher GDP to spend a greater proportion of their GDP on health, there is wide variation since GDP is not the sole factor influencing health expenditure levels. The association is stronger among OECD countries with low GDP per capita than among countries with a higher GDP per capita. For countries with similar levels of GDP per capita there are substantial differences in health expenditure at a given level of GDP. For example, despite Japan and Germany having the same GDP per capita, their health spending per capita differs considerably with Japan spending less than 75% of the level of Germany on health.

Total health expenditure measures the final consumption of health goods and services plus investment in health care infrastructure. An alternative measure is to show the share of health services and goods (that is, current health expenditure excluding investment) as a share of all the goods and services in the economy consumed by, or on behalf of, individuals (that is, actual final consumption expenditure). This ratio is notably higher than the health spending to GDP ratio for all OECD countries (Chart 5.2.2). The average share of actual final consumption allocated to health across OECD countries is almost 13%, with almost two-thirds of OECD countries devoting more than 12% of final consumption to health.

Definition and deviations

By definition, Gross Domestic Product (GDP) = final consumption + gross capital formation + net exports. Actual final consumption of households includes those goods and services used by households or the community in order to satisfy their individual wants and social needs. (Actual final consumption expenditure includes final consumption expenditure of households, general government and non-profit institutions serving households.)

The differences in the relative positions of countries according to the ratio of total health expenditure to GDP and current health expenditure to actual final consumption expenditure are due to differences in the level of investments (in the economy as a whole, and in the health sector) and differences in the balance of foreign trade across countries. This is particularly the case for countries such as Luxembourg and Ireland.

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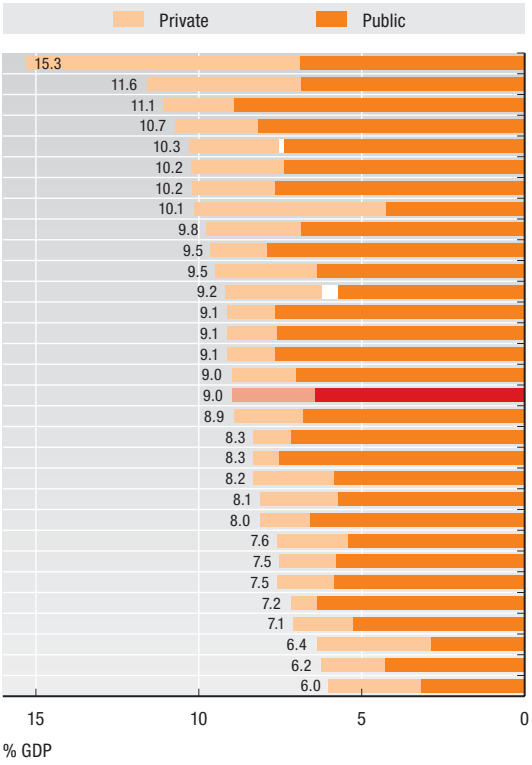
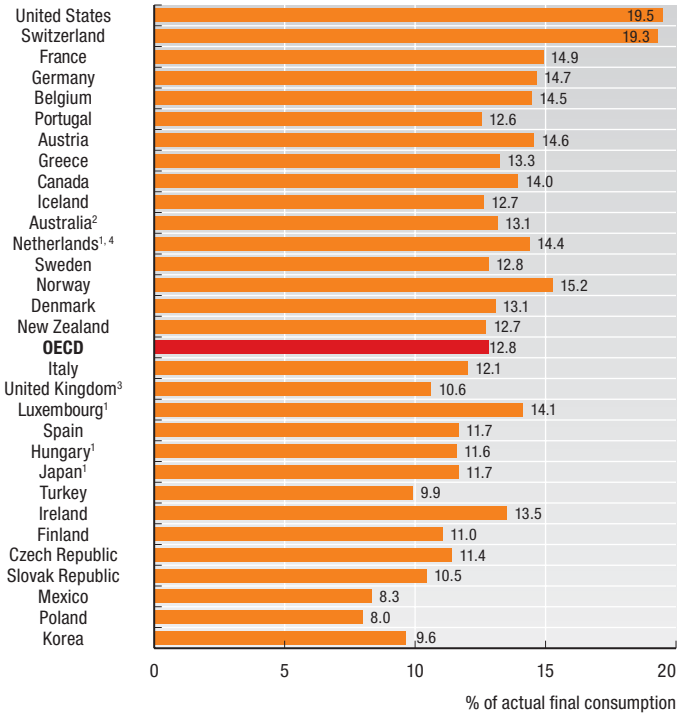
5.2. HEALTH EXPENDITURE IN RELATION TO GROSS DOMESTIC PRODUCT (GDP)

5.2.1. **Total health expenditure as a share of GDP, 2005**



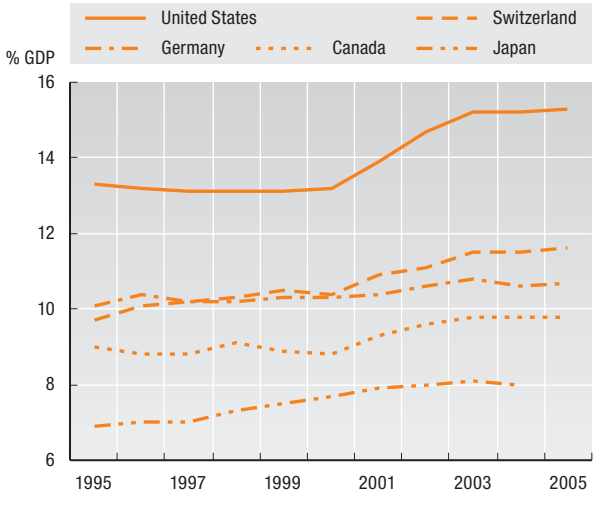
5.2.2. **Current health expenditure as a share of actual final consumption, 2005**



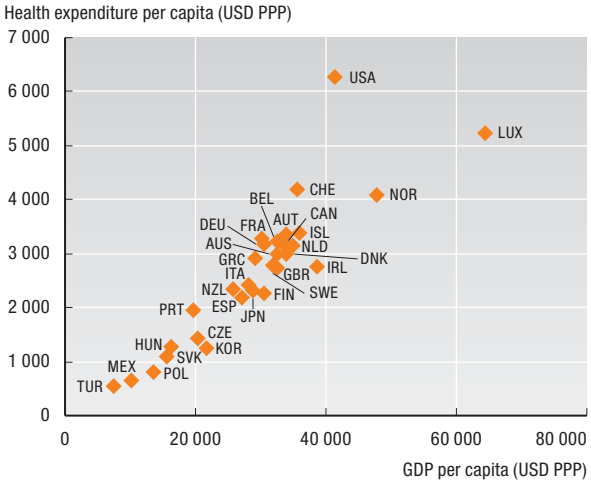
1. 2004. 2. 2004-05.
3. Total expenditure on health in both charts.
4. Public and private expenditures are current expenditures (excluding investments).

5.2.3. **Total health expenditure as a share of GDP, 1995-2005**

Selected OECD countries



5.2.4. **Health expenditure per capita and GDP per capita, 2005**



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114276458350

5.3. HEALTH EXPENDITURE BY FUNCTION

The share of health spending allocated to different types of services and medical goods varies considerably across OECD countries and is influenced by a number of factors, such as differences in capacities (availability of hospital beds and physicians), financial incentives for providers and the nature of the disease burden.

In 2005, personal medical services, comprising curative-rehabilitative care, long-term care and ancillary services (provided to outpatients) accounted for more than 70% of current health spending, on average, across OECD countries (Chart 5.3.1 and Table A.5.3). This ranged from typically 50-60% of health spending in the central and eastern European countries to over 80% in Norway, Denmark, Iceland and Switzerland. Curative-rehabilitative care itself accounted for the greater part of this, with 57% of health spending on average across OECD countries. Long-term care expenditure accounted for another 11% on average with ancillary services (including laboratory tests and diagnostic imaging) a further 4%. Of the remaining health spending, a little over 20% was spent on medical goods (see Indicator 5.4 "Pharmaceutical expenditure"), albeit ranging from lows of between 11 and 14% in Luxembourg, the United States and Switzerland, up to around 35-40% of all health spending in Hungary and the Slovak Republic. Collective expenditure, covering public health and prevention as well as the centralised expenses of health administration and insurance, accounted for the remaining 7% of health spending.

Curative-rehabilitative care covers medical services delivered not only in an inpatient setting, such as a hospital, but also those services provided either as day-care, or as an outpatient service in hospitals or in the ambulatory sector, or in a patient's own home. Changes in medical practice and innovations in medical technology, as well as moves towards a more efficient allocation of health care resources, can all affect the balance between these different types of care delivery. For example, there has been a trend to move some health services away from inpatient services to outpatient and home care. Out of total spending on curative-rehabilitative care, typically around half is accounted for by spending on inpatient care (Chart 5.3.2). A number of countries are still unable to quantify spending separately on day-care in hospitals or other institutions (often it is included with inpatient care); where reported, it can account for up to 6 or 7% of curative-rehabilitative spending, for example in Canada and Norway. Outpatient services in hospitals and in the ambulatory sector account for over a third of curative care expenditure on average across OECD countries. About 10% of total curative care is allocated to dental care (above 15% in Hungary and Canada). Finally, home care accounts for 1 to 2% of curative care, although often the distinction of this care from long-term care delivered at the patient's residence is difficult.

Chart 5.3.3 shows the share of public expenditure allocated to public health and prevention activities. On average, OECD countries allocated just over 3% of their public spending on health to a wide range of activities such as vaccination programmes and public health campaigns on alcohol abuse and smoking. The wide variation reflects to a great extent the national organisation of prevention campaigns. Where such initiatives are carried out at the primary care level, as in Spain, the prevention function is not captured separately and is more generally included under the spending on curative care. Other countries adopting a more centralised approach to public health and prevention campaigns can better identify spending on these programmes.

Definition and deviations

The *System of Health Accounts* proposes a consistent functional approach in order to define the boundaries of the health system and examine the allocation of resources. Following the framework of the *System of Health Accounts*, total health expenditure consists of current health expenditure and gross capital formation. Current health expenditure comprises personal health services and goods provided directly to the individual and collective services, covering tasks of public health such as health promotion and disease prevention services and health administration. Personal health services comprise services of curative care, rehabilitative services, services of long-term care, ancillary services to health care, and medical goods dispensed to outpatients. The basic functions of care (curative, rehabilitative and long-term care) can also be classified by the mode of production (inpatient, outpatient in hospitals or in the ambulatory sector, and home care.)

The most important factor limiting the comparability of functional structure across countries is the difference in estimating long-term care expenditure. Another important issue is that in some countries, inpatient expenditure is still linked to hospital expenditure (*i.e.*, it includes other services, such as outpatient care, delivered in hospitals). For similar reasons, ancillary services may be included in either inpatient or outpatient expenditure. (For a more detailed discussion of methodological issues, see Orosz and Morgan, 2004.)

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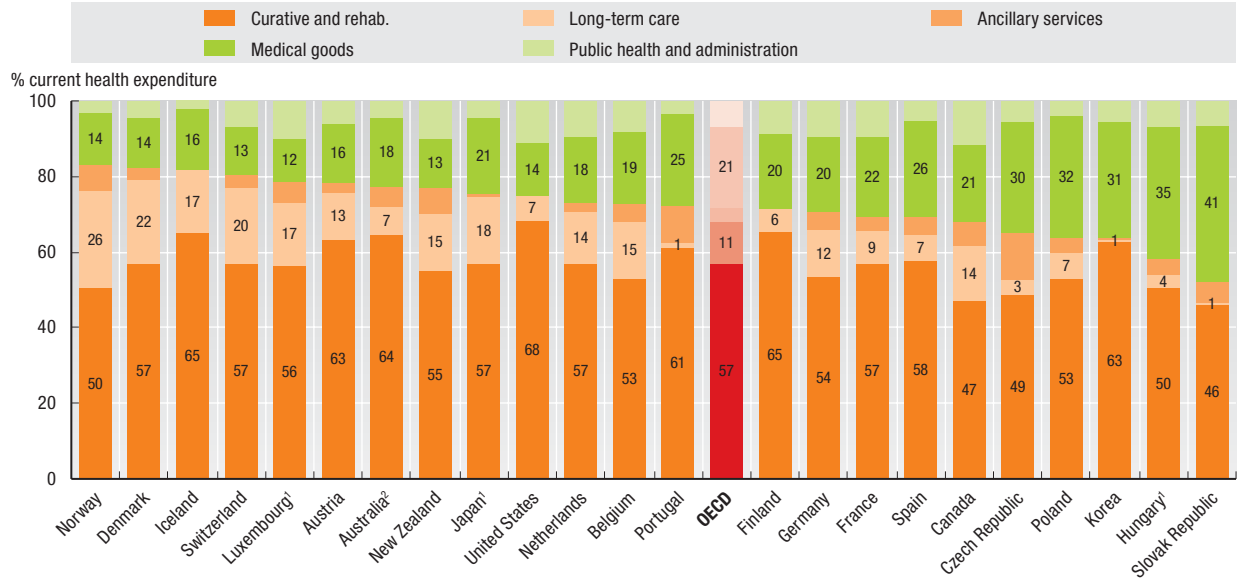
5.3. HEALTH EXPENDITURE BY FUNCTION

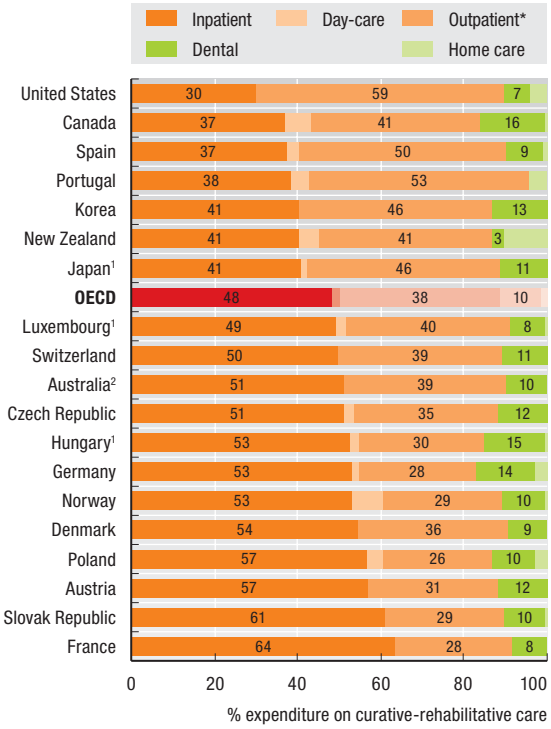
5.3.1. **Current health expenditure by function of health care, 2005**

Countries are ranked by medical services as a share of current expenditure on health



1. 2004. 2. 2004-05.

5.3.2. **Curative-rehabilitative expenditure by mode of production, 2005**

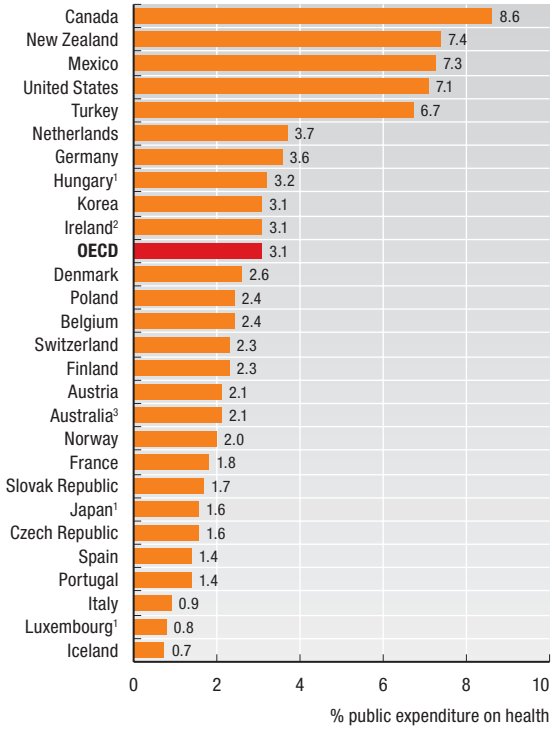


* Excluding dental care.

1. 2004. 2. 2004-05.

Source: OECD Health Data 2007.

5.3.3. **Share of public expenditure allocated to public health and prevention, 2005**



1. 2004. 2. 2003. 3. 2004-05.

StatLink http://dx.doi.org/10.1787/114280543620

5.4. PHARMACEUTICAL EXPENDITURE

Spending on medical goods, and in particular pharmaceuticals, has risen rapidly across most OECD countries, consuming an increasing share of overall health expenditure. Increased consumption of pharmaceuticals, due to the ageing of populations and the introduction and diffusion of new drugs (see Indicator 4.15 "Pharmaceutical consumption"), has been a major factor pushing up pharmaceutical expenditure and thus overall heath expenditure over recent years. However, the relationship is a complex one, in that increased expenditure on pharmaceuticals to tackle diseases otherwise needing costly hospitalisation and intervention may lead to a reduction in overall expenditure now or in the future.

Total OECD spending on pharmaceuticals in 2005 is estimated to have grown to more than USD 550 billion. On average, spending per capita on pharmaceuticals has risen by more than 50% in real terms since 1995. Across the OECD however, there are considerable differences in pharmaceutical spending, reflecting differences in volume, structure of consumption and price level (Chart 5.4.1 and Table A.5.4a). In 2005, the United States was the highest per capita spender on drugs, spending 86% above the OECD average. The United States was followed by Canada, France, Spain and Italy. At the other end of the scale, Mexico spent only around a third and Poland and Denmark around 60% of the OECD average. In terms of overall health spending, pharmaceuticals consume on average around 17%. As a proportion of GDP, the average across OECD countries was 1.5%, ranging from below 1% in countries such as Norway, Denmark and Ireland, up to more than 2% in Portugal, the Slovak Republic and Hungary (Chart 5.4.2 and Table A.5.4b).

Since 1995, growth in pharmaceutical spending in real terms has averaged 4.6% per year, higher than the 4.0% annual rise in overall total health spending over the same period (Chart 5.4.3). In fact, the majority of OECD countries have seen pharmaceutical spending outpace total health spending over this period. Of the current big pharmaceutical spenders, the United States, Canada and Spain have experienced pharmaceutical spending growth significantly above the average of OECD countries, although the United States, in particular, has seen a slowing in the most recent years. Spending on pharmaceuticals has also increased strongly over the past five to ten years in Hungary and the Slovak Republic. Although other high spenders such as France and Germany have seen growth in pharmaceutical spending below the OECD average, the growth has still been significantly faster than the overall rise in health spending.

On average across OECD countries, 60% of pharmaceutical expenditure is borne by public funds (Chart 5.4.1), the remainder being met by out-of-pocket payments and, to a lesser extent, private insurance. However, this average hides a wide variation, ranging from lows of public funding of pharmaceuticals of 11% in Mexico and 24% in the United States, up to more than 80% in Ireland and Luxembourg (see Indicator 5.5 "Financing of health care").

Definition and deviations

Pharmaceutical expenditure covers spending on prescription medicines and self-medication, often referred to as over-the-counter products, as well as other medical non-durable goods. It also includes pharmacists' remuneration when the latter is separate from the price of medicines. Pharmaceuticals consumed in hospitals are excluded. Final expenditure on pharmaceuticals includes wholesale and retail margins and value-added tax.

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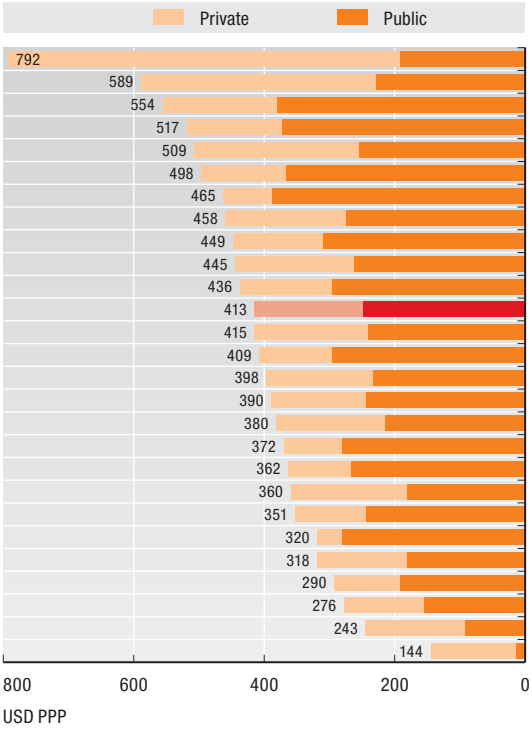
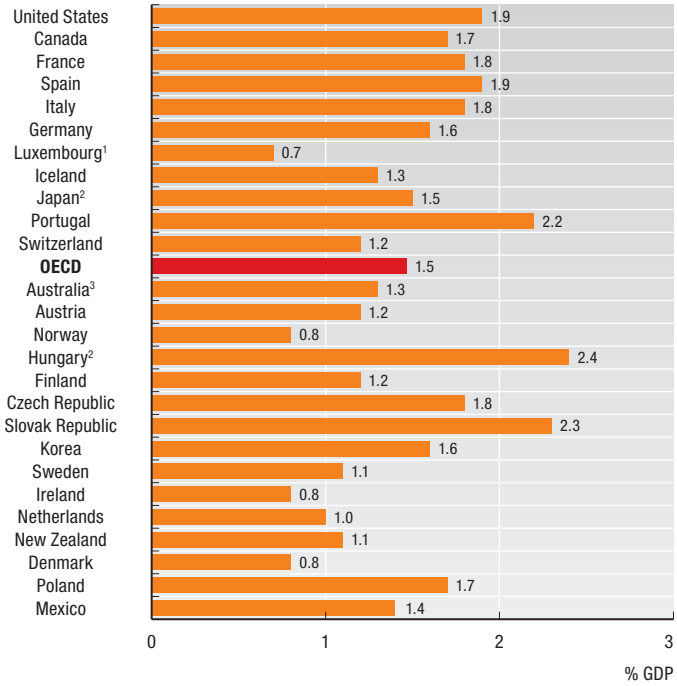
5.4. PHARMACEUTICAL EXPENDITURE

5.4.1. **Pharmaceutical expenditure per capita, 2005**

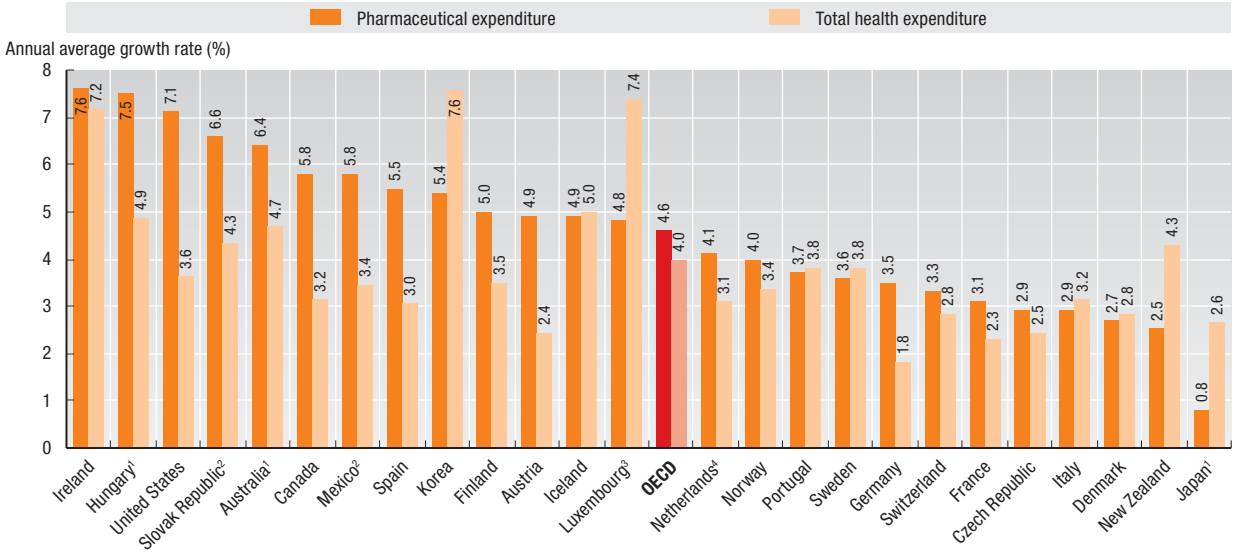


5.4.2. **Pharmaceutical expenditure as a share of GDP, 2005**



1. Prescribed medicines only.
2. 2004. 3. 2004-05.

5.4.3. **Real annual growth in pharmaceutical spending and total health expenditure per capita, 1995-2005**



1. 1995-2004. 2. 1999-2005. 3. 1995-2003. 4. 1995-2002.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114324150124

5.5. FINANCING OF HEALTH CARE

Different methods of financing health care can affect the level and distribution of health expenditure, and access to services across the population. OECD countries use a mix of public and private financing. Public financing is either confined to government revenues in countries where central and/or local governments are responsible for financing health services directly (*e.g.*, Spain and Norway), or comprises both general government revenues and social contributions in countries with social insurance based funding (*e.g.*, France and Germany). Private financing, on the other hand, comprises out-of-pocket payments of households, third-party payment arrangements effected through various forms of private health insurance (sponsored by employers and subsidised in some countries), health services such as occupational health care directly provided by employers, and other direct benefits provided by charities and the like.

Chart 5.5.1 shows the public share of health financing across OECD countries in 2005. The public sector continued to be the main source of health financing in all OECD countries, apart from Mexico, the United States and Greece. On average, the public share of health spending was 73% in 2005. In Luxembourg, the Czech Republic, many Nordic countries, the United Kingdom and Japan, public financing accounted for more than 80% of all health expenditure. In general, there has been a convergence of the public share of health spending among OECD countries over recent decades. Many of those countries with a relatively high public share in the early 1990s, such as Poland and Hungary, have had a decrease in this share, while other countries which historically had a relatively low level (*e.g.* Portugal, Turkey) have had an increase in the public share, reflecting health system reforms and the expansion of public coverage.

The fact that, for most countries, the whole health system is primarily public funded does not imply that the public sector plays the dominant role in every area of health care. Chart 5.5.2 shows the public share of financing separately for medical services and medical goods. The public sector continues to play a dominant role in paying for medical services in most countries, although a further sub-division of medical services shows an increasingly important role of private financing in the area of outpatient services (Orosz and Morgan, 2004). In the financing of medical goods (which consist mainly of pharmaceuticals), however, private payments are more important, and account in fact for a much greater share than public payments in a number of countries, including Mexico, Canada and the United States.

The size and composition of private funding for all health services and goods differ considerably across countries (Colombo and Morgan, 2006). On average, around two-thirds of the remaining 27% in private funding is accounted for by out-of-pocket payments (including the households' share of any cost-sharing arrangement). In some of the central and eastern European countries, the practice of unofficial supplementary payments means that the level of out-of-pocket spending is probably underestimated. While private health insurance represents only between 6-7% of total health expenditure on average across OECD countries (Chart 5.5.3), for some countries it plays a significant financing role. It provides primary coverage for certain population groups in Germany, and for a large proportion of the non-elderly population in the United States, where private health insurance accounted for 37% of health expenditure. In countries such as France and Canada, private health insurance finances between 12-13% of overall spending, but provides respectively complementary and supplementary coverage in a public system with universal reach (see Indicator 5.6 "Health insurance coverage"). In general across OECD countries, there is no clear pattern of substitution between out-of-pocket spending and financing through private health insurance (OECD, 2004c; Colombo and Tapay, 2004).

The aggregate impact of out-of-pocket spending on households can also be measured by its share of final household consumption. In several countries, including the Netherlands and France, less than 2% of the total consumption of households was spent on out-of-pocket health services in 2005, while in Switzerland and Greece, such spending represented more than 6% of total household consumption. The United States, with almost 3% of consumption being spent on out-of-pocket health services, is close to the average.

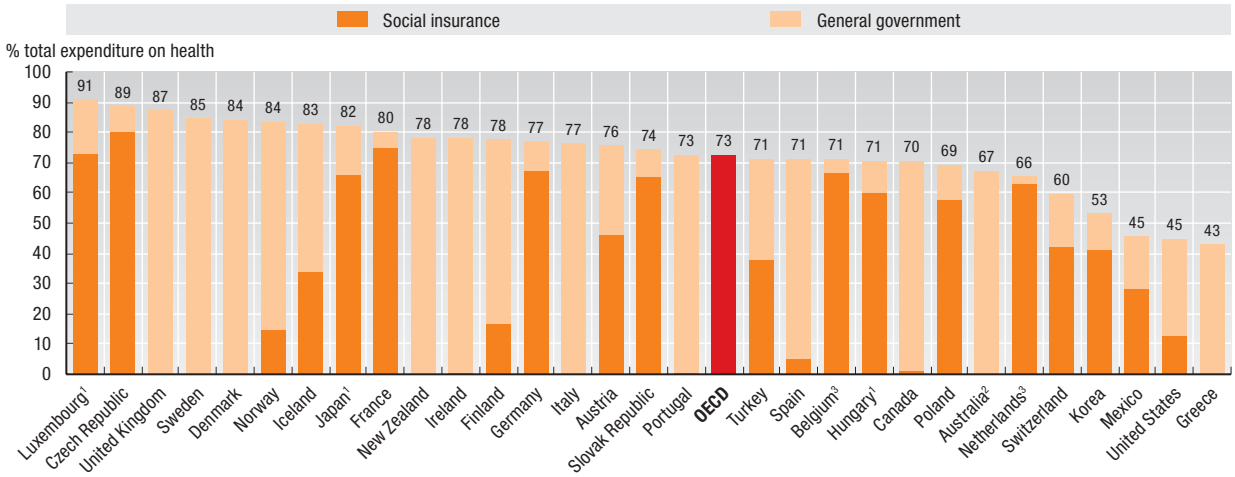
Definition and deviations

There are three important elements of health care financing – namely ultimate sources of funding (households, employers and the state), financing schemes/arrangements (*e.g.*, compulsory insurance or voluntary insurance, etc.) and financing agents (organisations managing the financing schemes). Here "Financing" is used in the sense of financing arrangements as defined in the *System of Health Accounts*. Public sources include general government revenues and social security funds. Private sources cover out-of-pocket payments of households, private health insurance and other private funds, such as from non-governmental organisations and private companies funding occupational health care.

Out-of-pocket payments are expenditures borne directly by a patient without the benefit of insurance. They include cost-sharing and, in certain countries, estimations of informal payments to health care providers.

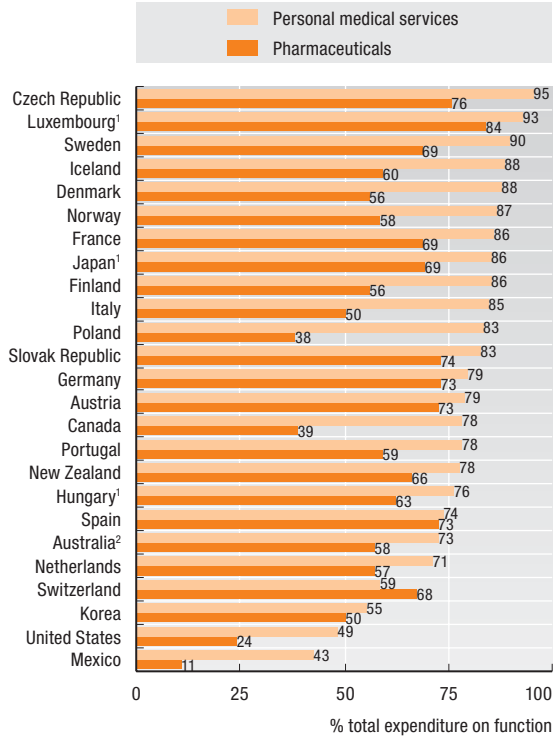
5.5. FINANCING OF HEALTH CARE

5.5.1. Public share of total expenditure on health, 2005



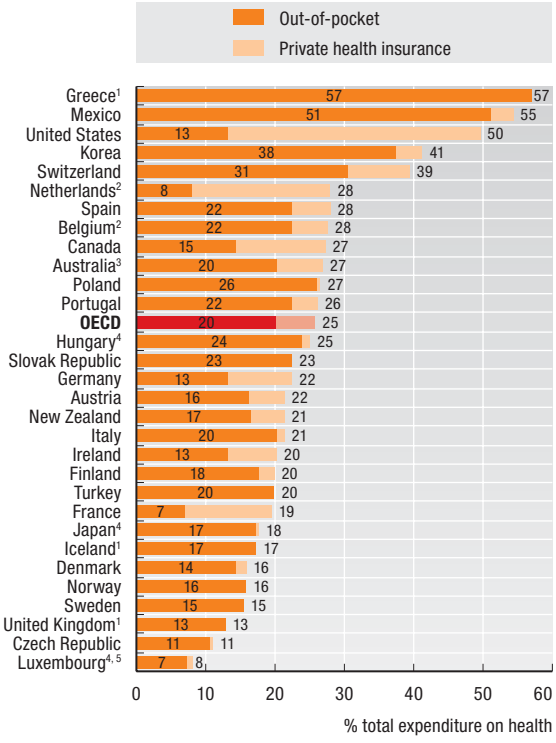
1. 2004. 2. 2004-05.
3. Share of current expenditure (*i.e.* excluding investments).

5.5.2. Public share of expenditure on medical services and pharmaceuticals, 2005



1. 2004. 2. 2004-05.

5.5.3. Out-of-pocket and private health insurance spending as a share of total health expenditure, 2005



1. Separate estimates of PHI not available.
2. Share of current expenditure.
3. 2004-05. 4. 2004.
5. Only covers cost-sharing element of out-of-pocket spending.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114324554454

5.6. HEALTH INSURANCE COVERAGE (PUBLIC AND PRIVATE)

Health coverage is important to promote access to medical goods and services. Coverage provides financial security against the cost of unexpected or serious illness, as well as improved accessibility to innovative treatments and preventive services (OECD, 2004a). Total population coverage (both public and private) is however an imperfect indicator of accessibility, as accessibility also depends on the generosity of the package of health goods and services included in the cover and on the degree of cost-sharing applied to those services.

By 2005, most OECD countries had achieved universal or quasi-universal coverage of health-care costs for a core set of services (Chart 5.6.1). A large majority has granted universal access to publicly financed services (Table A.5.6a). Germany achieves universal coverage through a combination of publicly financed insurance for 90% of the population and private health insurance for high-income groups that opt out of the public system (10% of the population). In the Netherlands, high-income groups were not eligible for social health insurance until 2005 and nearly all of them purchased private cover (36% of the population). In 2006, the Dutch government implemented a universal mandatory health insurance system with regulated competition across multiple private insurers, thereby eliminating the division between public and private insurance for basic population cover. Switzerland had similarly mandated the purchase of basic health insurance to the entire resident population since 1996 (OECD, 2006a).

Three OECD countries have not attained universal (or near-universal) health coverage yet. In the United States, only the elderly, poor and disabled – representing 27% of the population – are entitled to publicly financed coverage. Another 59% had primary private health insurance in 2005, leaving 14% of the population without health coverage. Half of the Mexican population is not part of the social security system and this "uninsured" population relies on medical services provided by state health facilities (OECD, 2005b). Public coverage in Turkey was available for only two-thirds of the population in 2003.

The share of the population covered by private health insurance varies considerably across the OECD (Chart 5.6.2). Of the 23 countries for which data are available, only five (the Netherlands, France, the United States, Canada and Ireland) report private coverage for over half of the population in 2005. Private health insurance in Belgium and Australia reached over 40% of the population, and nearly a third in New Zealand and Switzerland. Several OECD countries have a negligible share of their population covered by private health insurance, if any (*e.g.*, Turkey, the Czech Republic, Hungary, Norway, Poland and the Slovak Republic).

Private health insurance plays a diversity of roles in the health system (Table A.5.6b and Chart 5.6.3). Besides being a *primary* cover for certain population groups in the United States, Netherlands and Germany, it offers to 87% of the French population *complementary* insurance to cover cost sharing applied in the social security system. Canada has the largest *supplementary* market (66% of the population), whereby private insurance pays for prescription drugs and dental care that are not publicly reimbursed. *Duplicate* markets providing faster private-sector access to medical services where there are waiting times in public systems are the largest in Ireland (52%), Australia (43%) and New Zealand (33%).

The importance of private health insurance is not linked to the level of economic development of a country. Other factors are more important to explain market development, including gaps in the scope, choice and speed of access of publicly financed services, the way private providers are financed, government interventions directed at private health insurance markets, and historical development (OECD, 2004c; Colombo and Tapay, 2004). The level of population covered by private health insurance is positively correlated to the share of total health spending accounted for by private health insurance (see Indicator 5.5 "Financing of health care").

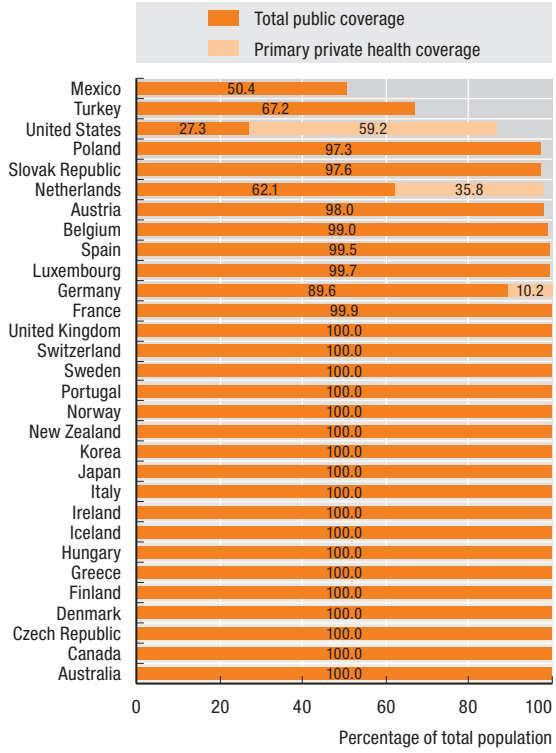
Definition and deviations

Population coverage is the share of the population eligible for a defined set of health care goods and services under public programmes and under private health insurance. Data include individuals covered in their own name and dependents. Public coverage refers to both government programmes, generally financed by taxation, and social health insurance, generally financed by payroll taxes. Take up of private health insurance is often voluntary, although it may be mandatory by law or compulsory for employees as part of their working conditions. Premia are generally non-income-related, although the purchase of private cover can be subsidised by the government. Coverage in both public and private health insurance is independent of the scope of cost-sharing.

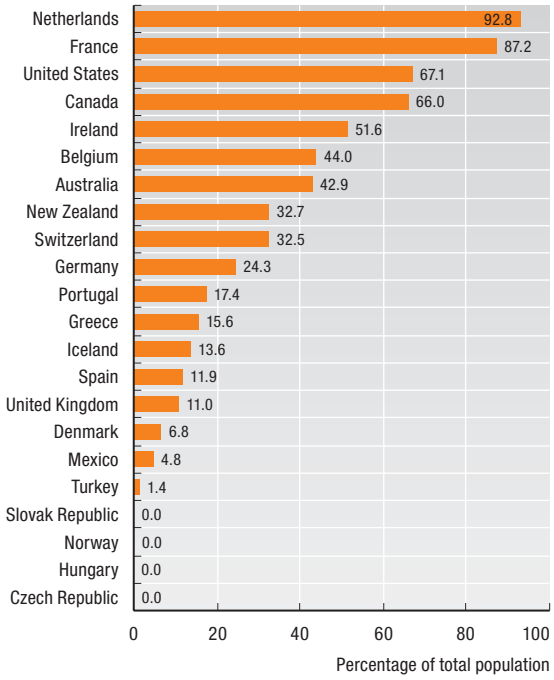
Data on coverage must be interpreted with caution. The boundaries between public and private coverage are sometimes difficult to draw. Total private coverage mixes insurance types that have different functions relative to public systems and it does not show if a person has multiple covers. For some countries, private health insurance plays several roles even if data are attributed to the most prominent role (*e.g.*, Belgium, Portugal, Iceland, France). Some countries with small private insurance markets do not report data (*e.g.*, Japan, Luxembourg, Sweden).

5.6. HEALTH INSURANCE COVERAGE (PUBLIC AND PRIVATE)

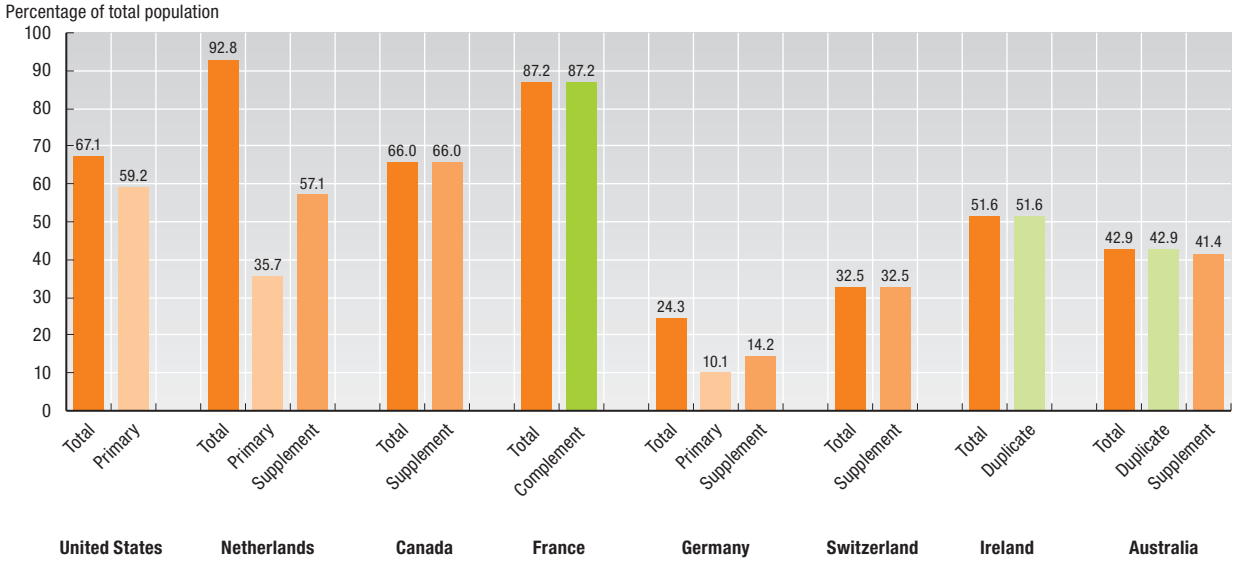
5.6.1. **Health insurance coverage for a core set of services, 2005 (or latest year available)**



5.6.2. **Population covered by private health insurance, 2005 (or latest year available)**



5.6.3. **Coverage by different private health insurance types in selected countries, 2005 (or latest year available)***



* Countries where private health insurance accounts for over 6% of total health spending. Countries ranked by decreasing share of private health insurance in total health expenditure.

Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114348073674

6. QUALITY OF CARE

Introduction

For the first time, a chapter on the quality of medical care is included in *Health at Glance*. Measuring and improving quality of care is a high priority in many countries. It is directly linked to discussions as to whether increasing spending for health services is justified by improvements in health gains.

As acknowledged in the conceptual framework adopted under the OECD Health Care Quality Indicators (HCQI) project, health care services are only one of the determinants of health status (Kelley and Hurst, 2006; Lalonde, 1973). Nonetheless, there is extensive literature showing that the contribution of medical services to health is considerable and growing (Mackenbach, 1996), and that the quality of care between and within countries varies substantially (Wennberg and Wennberg, 2003; Mc Glynn *et al.*, 2003). To shed further light on variations across countries in quality of care, efforts have been made over the past five years under the OECD HCQI project to develop and implement a series of indicators on quality of care that would help signal potential quality differences (Mattke *et al.*, 2006a).

Quality can be assessed for many different domains of care (IOM, 2001). The HCQI project has so far focused on the technical quality of care. Technical quality can be expressed by measures of structure, process or outcome. Structure measures represent the characteristics of the health care system or the adequacy of inputs to the production of services, such as hospital beds and staffing.* Process measures reflect whether universally accepted and evidence-based practices are followed, such as whether children are immunised appropriately or whether patients' blood pressure is regularly checked. Outcome measures, such as rates of hospital-acquired infections or rates of one-year survival following a cardiac arrest, capture health improvement (or deterioration) related to medical care. Together with responsiveness to patient needs and expectations, technical quality reflects the value that a health care system produces. Combined with data on resource use, measures of technical quality can be used to derive indicators of the efficiency of a health care system or the value for money that it delivers. However, several issues need to be addressed before firm conclusions can be drawn from such indicators, including the need to implement a more comprehensive and balanced set of measures, the need to adjust where appropriate and possible for differences in patient risk profiles across countries and the need to account as much as possible for non-medical factors that also influence health outcomes.

Thus far, only a limited set of health care quality indicators are available for cross-national comparisons, and they have to be used in the light of continuing caveats related to persisting comparability limitations. The indicators cover a spectrum of services ranging from preventive services (*i.e.*, vaccination and screening), to acute care services and care related to the management of chronic diseases. These indicators attempt to cover the quality of care related to major diseases (*e.g.*, cardiovascular diseases and cancer) and care for different age groups (*e.g.*, vaccination for children and flu vaccination for the elderly). They also cover both processes and outcomes of care for different conditions.

* Since structure measures are already available at the international level, for example in *OECD Health Data* (as illustrated in Chapter 4 of this publication), and as they represent necessary but not sufficient conditions for high-quality care, the HCQI project concentrates on process and outcome measurement.

In this chapter, the indicators are structured in four sections presenting the initial results from the data collection on respectively: the quality of care for certain acute conditions (acute myocardial infarction and stroke); the quality of cancer care (colorectal cancer, breast cancer and cervical cancer); the quality of care related to chronic conditions (asthma, diabetes); and the prevention of communicable diseases (vaccination and the incidence of vaccine preventable diseases).

	Process measures	Outcome measures
Care for acute conditions		AMI case fatality rate Ischemic stroke case fatality rate Hemorrhagic stroke case fatality rate
Cancer care	Mammography rate Cervical cancer screening rate	Breast cancer relative survival rate Cervical cancer relative survival rate Colorectal cancer relative survival rate
Care for chronic conditions	Annual retinal exam for diabetics	Asthma mortality rate Adult asthma hospital admission rate
Preventive care for communicable diseases	Coverage for basic childhood vaccination programme (two indicators) Coverage for influenza vaccination for people over 65 years old	Incidence of vaccine preventable diseases (two indicators)

Care for acute conditions *(see Indicators 6.1 and 6.2)*

Advances in diagnosis and treatment have led to dramatic improvements in the prognosis of patients with acute, life-threatening conditions, such as traumatic injuries, infections and acute cardiovascular events. The ability to transport patients rapidly to the hospital with advanced life support *en route*, improved surgical and medical interventions and, in particular, modern intensive care medicine have greatly reduced the risk of death and disability. Yet health care providers, researchers and policy makers continue to seek further improvements in the treatment of these conditions with the current focus being on shortening the time between diagnosis and treatment as well as increasing the reliability with which recommended services are delivered. The quality of care for acute conditions is measured in this section by the rates of death following hospital admissions for acute myocardial infarction (AMI) and stroke, two of the most common causes of death and disability in OECD countries.

Care for cancer *(see Indicators 6.3, 6.4 and 6.5)*

Medical progress in recent decades has greatly improved the prognosis of people with cancer. While "winning the war on cancer" remains an elusive goal, improved screening methods combined with awareness campaigns have increased the chances for several cancers to be detected at an early, curable stage. Advances in surgical techniques, radiation therapy and chemotherapy offer new treatment options. In some areas, progress has been dramatic, as patients with acute childhood leukaemia or testicular cancer now have cure rates above 90%, even when diagnosed at advanced stages. In other areas, such as pancreatic or oesophageal cancer, however, survival remains low. This section presents information on survival rates for three common types of cancer: colorectal, breast and cervical cancer. They are similar in that screening tests exist that allow for early diagnosis and that available treatment options improve survival even at advanced stages.

Care for chronic conditions *(see Indicators 6.6 and 6.7)*

Preventing and managing chronic conditions remain a challenge for health policy in OECD countries, as diseases like heart failure and diabetes account for an ever increasing share of health care costs and care for these conditions often remains suboptimal. An important underlying reason for this quality gap is that much of the structure of today's health care systems developed in an era where the main concern was acute illnesses, in particular infections, which require short and intense treatment. The resulting systems that deliver care predominantly during the immediate encounter of the physician with a patient proved very successful for acute conditions, but are less well suited for the needs of people with chronic conditions who require ongoing monitoring, education and advice. Many countries are now experimenting with innovations to bridge this gap. Germany and the United States, for example, are testing disease management approaches. Other countries, like the United Kingdom and Sweden, are attempting to implement strong primary care models. All systems share the hope that better management of chronic diseases could potentially reduce costs (or at least the growth rate) and improve quality of care and health outcomes. The indicators of quality of care for chronic conditions presented in this section relate to asthma, the most common chronic disease in childhood, and diabetes, one of the most common conditions in adults.

Care for communicable diseases *(see Indicators 6.8 and 6.9)*

While improvements in hygiene, nutrition and treatment have dramatically decreased the burden of infectious diseases in industrialised countries, the control of communicable conditions remains an important responsibility of health policy, in particular in light of modern epidemics, such as HIV/AIDS, and the risk of new ones such as avian flu, and the threat of bioterrorism. It also continues to be a thorny issue for health policy makers as it commonly requires finding the proper balance between individual rights and the public interest. Communicable disease control requires the collaboration of various parts of the public health and the medical care system, ranging from government health departments to providers of preventive care services, such as general paediatricians and family doctors, to providers of institution-based care, such as hospitals and nursing homes. Countries use different approaches to organise these services and to balance legal requirements and educational campaigns. The current trend is largely toward relying on the medical care sector for provision of services and on the public health sector for surveillance and education. Several of the current measures under the HCQI project capture how well countries prevent the spread of communicable diseases. These include: vaccination rates for influenza in people 65 years and over and for childhood diseases, as process measures, and the incidence rates of these vaccine-preventable diseases, as outcome measures.

Interpretation and use of the data

It is important to point out that the indicators presented in this chapter should be treated as investigational at this early stage of their development. While they are based on evidence and have been used for research and analysis *within* countries, it is not yet fully understood how they relate to health outcomes or why they vary *across* countries. Although efforts have been made to gather data that are as comparable as possible across countries, as with other indicators in *OECD Health Data* presented in other chapters of this publication, some differences in definitions, sources and methods remain and are noted.

One important issue is the lack of age-standardisation for several of the outcome measures. At this stage, only a limited number of countries were able to deliver age-standardised rates according to the reference OECD population. Although the differences reported within these countries between the crude and age-standardised rates are not substantial, the impact on comparability across countries is still unclear; work is ongoing to derive age-standardised rates for a larger number of countries.

For these reasons the indicators should be looked at as raising questions about the quality of care in different countries rather than providing definitive answers. The information provided should be considered as a starting point for a better understanding of variations in quality of care and promote further analysis of and learning from different national experiences.

Future priority areas

With the continuous collaboration of national experts, the OECD HCQI project aims to improve and expand the current set of indicators in order to provide a more comprehensive assessment of the comparative performance of health care systems in OECD countries. At present, the priority areas for further indicator development include: mental health care, patient safety, prevention and primary care, and responsiveness (or patient experience). The development of indicators in these priority areas should help enrich this chapter in future editions of *Health at a Glance*.

6.1. IN-HOSPITAL CASE-FATALITY RATE FOLLOWING ACUTE MYOCARDIAL INFARCTION

Importance of the indicator

While coronary artery disease (CAD) remains the leading cause of death in industrialised countries, CAD mortality rates have been in decline since the 1970s (Weisfeldt and Zieman, 2007). Much of the reduction in mortality can be attributed to lower mortality from acute myocardial infarction (AMI) due to better treatment in the acute phase (Capewell *et al.*, 2000; McGovern *et al.*, 2001). Care for AMI has changed dramatically in the last decades, first with the introduction of coronary care units in the 1960s and then with the advent of treatment aimed at rapidly restoring coronary blood flow in the 1980s (Gil *et al.*, 1999). The success in reducing mortality is all the more remarkable as data suggest that the incidence of AMI has not declined during that period (Goldberg *et al.*, 1999). Nonetheless, a considerable proportion of AMI patients do not receive adequate care in a timely manner, suggesting that there is still substantial room for improvement (McGlynn *et al.*, 2003). AMI accounts for about half of the deaths from CAD, with the cost of care for CAD accounting for as much as 10% of health care expenditures in industrialised countries (OECD, 2003a).

Scientific soundness of the indicator

A substantial body of evidence links processes of care for AMI that are aimed at restoring blood flow, such as thrombolysis and early treatment with aspirin, or reduce complications, such as treatment with beta-blockers, to survival improvements (Davies *et al.*, 2001). Quality of care for AMI should be associated with low case-fatality rates and a decreasing trend in this indicator would signal improvement. Given the variety of services and system devices that need to be mobilised to provide care for this illness, AMI in-hospital fatality rate is regarded as a good outcome measure of acute care quality. Currently, AMI case-fatality rates have been used for hospital benchmarking by the US Agency for Healthcare Research and Quality (Davies *et al.*, 2001), the UK's National Health Service, and a variety of hospital associations and quality monitoring groups in the United States. It has also been employed for international comparisons in the OECD Ageing-Related Diseases project (OECD, 2003a) and the WHO MONICA project (Tunstall-Pedoe, 2003)

Findings

The average mortality rate within 30 days after hospital admissions for AMI is now around 10% among countries that have reported data (Chart 6.1.1). This is a substantial improvement, as case fatality rates used to be typically around 20% in the 1980s (Weisfeldt and Zieman, 2007). Although the trend data shown in Chart 6.1.2 should be interpreted with care given the different time periods that are covered, the trend for most countries is favourable.

In 2005 (or latest year available), Australia and New Zealand had particularly low rates of in-hospital mortality rates following AMI. The Scandinavian countries also had low rates, with the exception of Finland. Across OECD countries, substantial variation remains, ranging from 5.4% in New Zealand to 24.5% in Mexico. Even for neighbouring countries with similar economic development and similar health system structure, substantial differences can be observed. For example, the in-hospital fatality rate in Austria is approximately 50% higher than in France (12.0% vs. 7.6%). It should be kept in mind, however, that the data have not been adjusted for differences in patient risk or age structure across countries. Hence, one cannot tell to what degree differences in case-fatality rates are the consequences of differences in care or are due to differences in disease severity or age of patients.

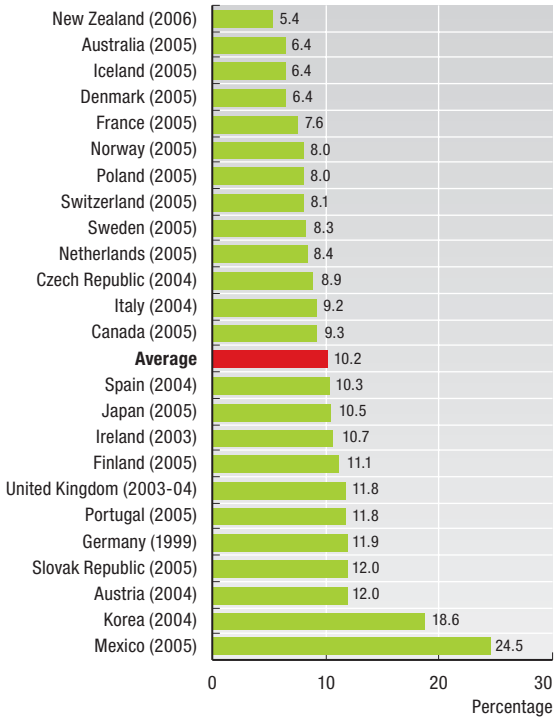
Differences in 30-day mortality rates in hospitals following AMI do not seem to be related to the degree of utilisation of revascularisation procedures, such as percutaneous coronary interventions and coronary artery bypass grafting (Charts 6.1.3 and 6.1.4). Combined with evidence that well-supported medical interventions in AMI care are often underutilised (McGlynn *et al.*, 2003), the data would suggest that there is room for improving AMI survival rates through a more reliable delivery of simple and cost-effective treatments.

Definition and deviations

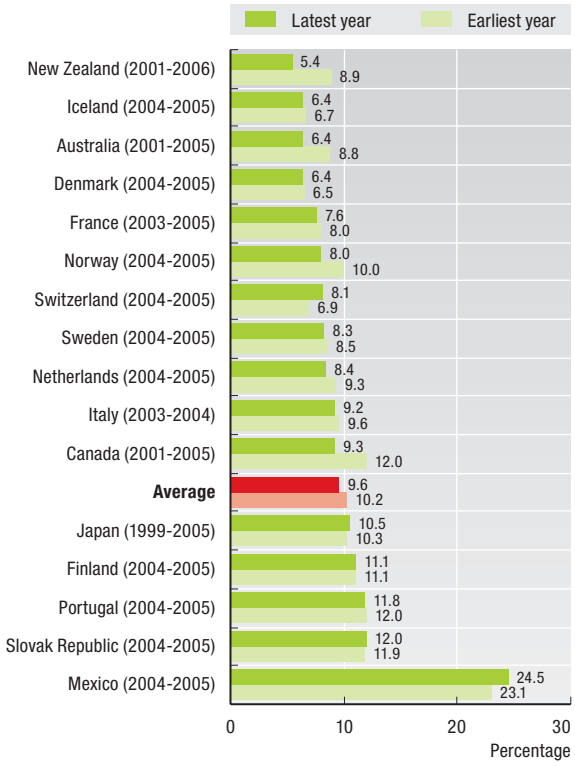
Case-fatality rates measures the proportion of patients with a given diagnosis, here acute myocardial infarction (AMI), who die within a specified time period, here 30 days. Ideally, the case-fatality rates would be based on each individual patient who would be tracked for at least 30 days. However, as most countries do not have unique patient identifiers and the ability to track patients after hospital discharge, the indicator is based on unique hospital admissions and restricted to mortality within the hospital. Thus, differences in practices in discharging and transferring patients may influence the findings. The definitions of AMI in the ICD-10 classification system are also slightly different from the earlier ICD-9 version, which may influence the comparisons between countries using two different versions of the ICD.

6.1. IN-HOSPITAL CASE-FATALITY RATE FOLLOWING ACUTE MYOCARDIAL INFARCTION

6.1.1. **In-hospital case-fatality rates within 30 days after admission for AMI, 2005**

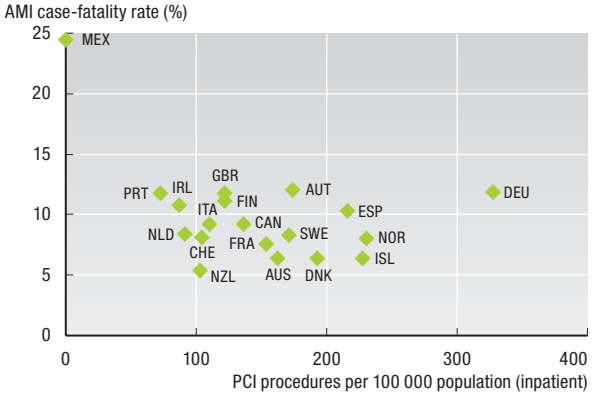


6.1.2. **Change in in-hospital case-fatality rates within 30 days after admission for AMI**

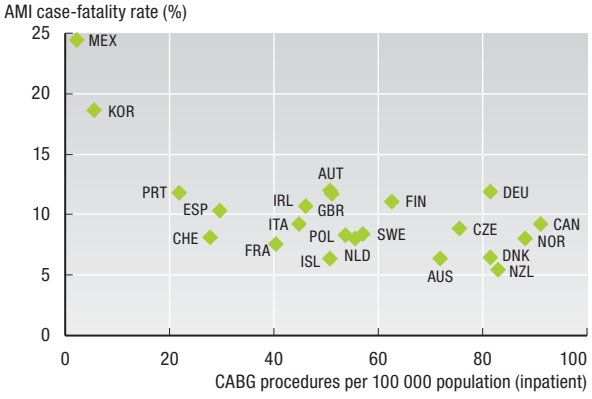


Source: Health Care Quality Indicators Project, OECD 2007.

6.1.3. **In-hospital case-fatality rates within 30 days after admission for AMI and percutaneous coronary intervention rates, 2005**



6.1.4. **In-hospital case-fatality rates within 30 days after admission for AMI and coronary artery bypass graft surgery rates, 2005**



Note: PCI and CABG procedures rates refer to 2005, except for Australia, Canada, Ireland, Italy, New Zealand and Norway to 2004; Netherlands to 2003; France to 2001; Austria to 2000.

Source: Health Care Quality Indicators Project, OECD 2007. *OECD Health Data 2007* (PCI and CABG rates).

StatLink http://dx.doi.org/10.1787/114351572657

6.2. IN-HOSPITAL CASE-FATALITY RATE FOLLOWING STROKE

Importance of the indicator

Stroke is the third most common cause of death and disability in industrialised countries (WHO, 2002b). Estimates suggest that it accounts for 2-4% of health care expenditure and also for significant cost outside of the health care system due to its impact on disability (OECD, 2003b). Two types of stroke should be distinguished. In ischemic stroke, representing about 85% of cases, the blood supply to a part of the brain is interrupted, leading to major brain tissue damage of the affected part. In hemorrhagic stroke, the rupture of a blood vessel causes bleeding into the brain, presenting symptoms that are similar to ischemic stroke, though usually causing more widespread damage.

Treatment for ischemic stroke has changed dramatically over the last decade. Until the 1990s, it was largely thought that the damage to the brain was irreversible and treatment focused on prevention of complications and rehabilitation. But following the spectacular improvements in AMI survival rates that were achieved with early thrombolysis (dissolving blood clots), clinical trials, starting in Japan in the early 1990s, demonstrated clear benefits of thrombolytic treatment for ischemic stroke (Mori *et al.*, 1992). Dedicated stroke units, modelled after the very successful cardiac care units, were introduced in many countries, particularly in Scandinavia, to facilitate timely and aggressive therapy of stroke victims. As a result, case-fatality rates for ischemic stroke have declined in many countries (Sarti *et al.*, 2003).

Scientific soundness of the indicator

A solid evidence base exists that links health care services to stroke outcomes. Evidence mainly from European countries has linked the existence of dedicated stroke units in hospitals with improved outcomes (Stroke Unit Trialists Collaboration, 1997). Large randomised clinical trials in the United States (*e.g.* NINDS, 1995) and Europe (*e.g.* Hacke *et al.*, 1995) have unambiguously demonstrated the impact of thrombolytic therapy for ischemic stroke on survival and disability. However, adoption of this practice is met with resistance due to factors related to the organisation of health services (Wardlaw *et al.*, 2003). Stroke case-fatality rates have been used for hospital benchmarking within and between countries (Davies *et al.*, 2001; OECD, 2003a; and Sarti *et al.*, 2003).

Findings

The HCQI data confirm the more severe nature of hemorrhagic stroke, with an average mortality rate 30 days after hospital admission of 25.1%, compared to 10.1% for ischemic stroke (Charts 6.2.1 and 6.2.2). Wide variation in in-hospital mortality rates exists, in particular for ischemic stroke. For example, Mexico reports a rate that is seven times higher than Japan. Even for neighbouring countries with similar economic development, there are substantial differences: Ireland's rate of 11.3% is more than twice the rate in the United Kingdom of 5.5%. Although the trend data should be interpreted with care given the various time periods over which data are reported, the overall trend seems to be favourable with some exceptions such as Mexico. It should be cautioned, however, that the data have not been adjusted for differences in patient risk across countries nor in age structure. Hence, one cannot tell to what degree differences in case-fatality rates are the consequences of differences in care or differences in disease severity or age structure of patients.

As Chart 6.2.3 shows, case-fatality rates for ischemic and hemorrhagic stroke are closely correlated, that is, countries that achieve better survival on one type of stroke also do well on the other. This is quite plausible, as the initial steps of care, which include timely diagnosis, rapid transfer to the hospital and immediate access to CT scan to guide acute treatment decisions, are identical for both types of stroke. The mere availability of technology does not seem to impact survival, given that the rates of CT scanners per 1 million population are uncorrelated with case-fatality rates (Chart 6.2.4), suggesting that the organisation of health care services appears to be more important than the available infrastructure.

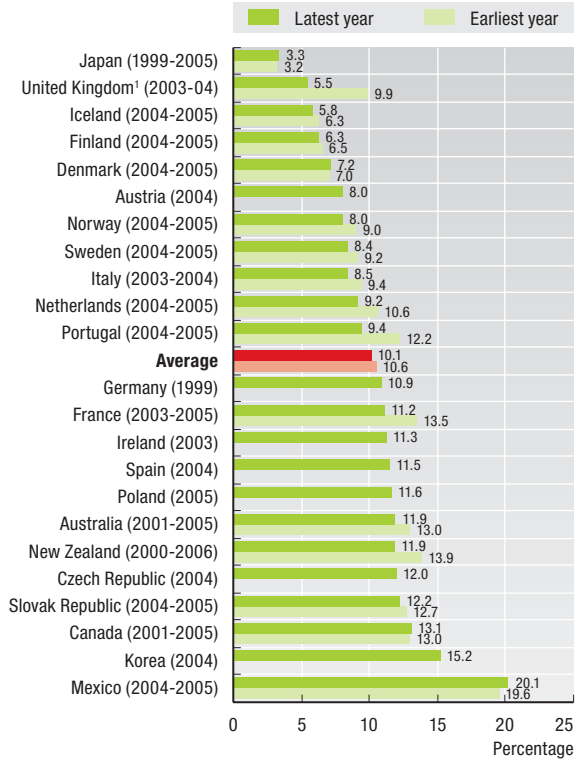
Further evidence regarding the importance of the organisation of services comes from the low case-fatality rates that the Scandinavian countries, in particular Iceland and Finland, achieve. These countries have been at the forefront of establishing dedicated stroke units in hospitals, a proven practice to improve survival and neurological functioning (Stroke Unit Trialists Collaboration, 2001). About 70% of stroke victims in these countries were treated in stroke units as early as 1998 (OECD, 2003a).

Definition and deviations

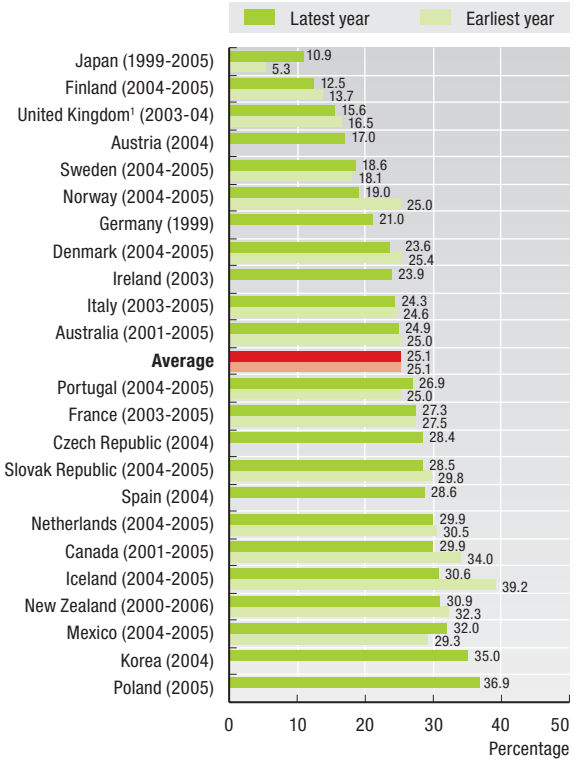
Case-fatality rates measures the proportion of patients with a given diagnosis, here stroke, who die within a specified time period, here 30 days. Ideally, the case-fatality rates would be based on each individual patient who would be tracked for at least 30 days. However, as most countries do not have unique patient identifiers and the ability to track patients after hospital discharge, the indicator is based on unique hospital admissions and restricted to mortality within the hospital. Thus, differences in practices in discharging and transferring patients may influence the findings. The definitions for acute stroke in the ICD-10 classification system are slightly different from the earlier ICD-9 version, which may influence the comparisons between countries using these two different versions of ICD.

6.2. IN-HOSPITAL CASE-FATALITY RATE FOLLOWING STROKE

6.2.1. In-hospital case-fatality rates within 30 days after admission for *ischemic stroke*, 2005 and earlier year



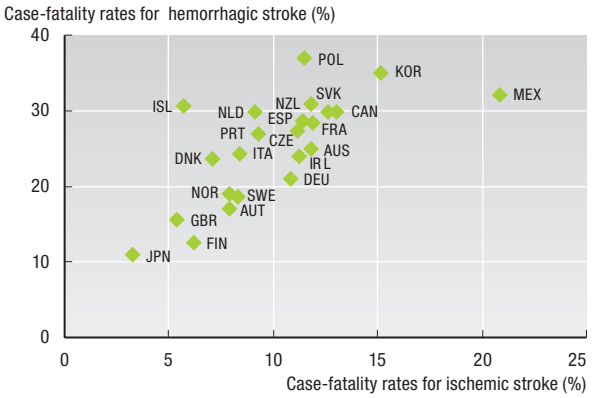
6.2.2. In-hospital case-fatality rates within 30 days after admission for *hemorrhagic stroke*, 2005 and earlier year



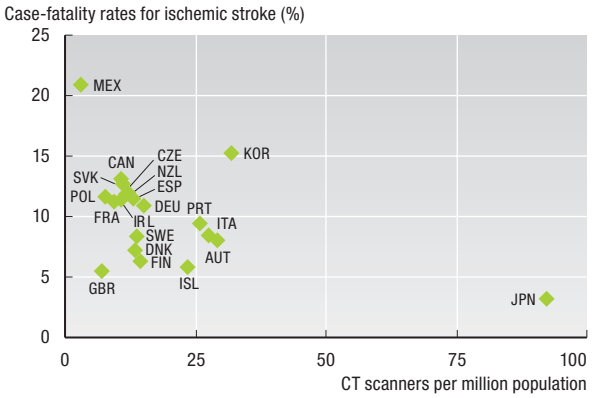
1. 2002-03/2003-04.

Source: Health Care Quality Indicators Project, OECD 2007.

6.2.3. Correlation of in-hospital case-fatality rates after admission for *ischemic stroke* and *hemorrhagic stroke*, 2005



6.2.4. In-hospital case-fatality rates within 30 days after admission for *ischemic stroke* and number of CT scanners, 2005



Note: See previous two charts for data years on stroke for each country. Figures for CT scanners refer to 2005 except New Zealand to 2004 and Sweden to 1999.

Source: Health Care Quality Indicators Project, OECD 2007. *OECD Health Data 2007* (CT scanners).

StatLink http://dx.doi.org/10.1787/114353285671

6.3. SURVIVAL FOR COLORECTAL CANCER

Importance of the indicator

Colorectal cancer is the third most common form of cancer in both women (after breast and lung cancer) and men (after prostate and lung cancer). It is estimated that approximately USD 8.4 billion is spent in the United States each year on the treatment of colorectal cancer (Brown *et al.*, 2002). Advances in diagnosis and treatment have increased survival over the last decades. Better screening with stool tests for occult blood and, more recently, routine colonoscopy have increased the number of cases that are diagnosed at a pre-cancerous or early stage (Midgley and Kerr, 1999), although there is still active debate in many countries about the most cost-effective approach to screening. Better anaesthesia and surgical techniques have allowed the resection of tumours in more patients, even at advanced stages. Improved radiation treatment and chemotherapy protocols and, more recently, the discovery of biological and cytotoxic agents that specifically attack cancer cells provide additional treatment options (Natarajan and Shuster, 2006). Historical data from France suggest the five-year survival rate between 1976 and 1988 increased from 33% to 55%, which could be attributed to a higher resection rate with lower post-operative mortality, earlier diagnosis and increasing use of chemotherapy (Faivre-Finn *et al.*, 2002). These findings are consistent with results from other European countries (Gatta *et al.*, 1998a) and the United States (SEER, 2006).

Scientific soundness of the indicator

Solid evidence exists that demonstrates the clinical benefit of screening both with routine colonoscopy and with stool tests for occult blood (USPSTF, 2002) as well as various treatment modalities, such as surgery (Govindarajan *et al.*, 2006) and chemotherapy (CCCG, 2000), even for advanced stages. The same literature also suggests that screening and treatment options are not sufficiently utilised. Colorectal cancer survival rates have been used to compare European countries in the EUROCARE study (Quinn *et al.*, 1998), in comparisons between European countries and the United States (Gatta *et al.*, 2000), and in national reporting activities in many countries.

Findings

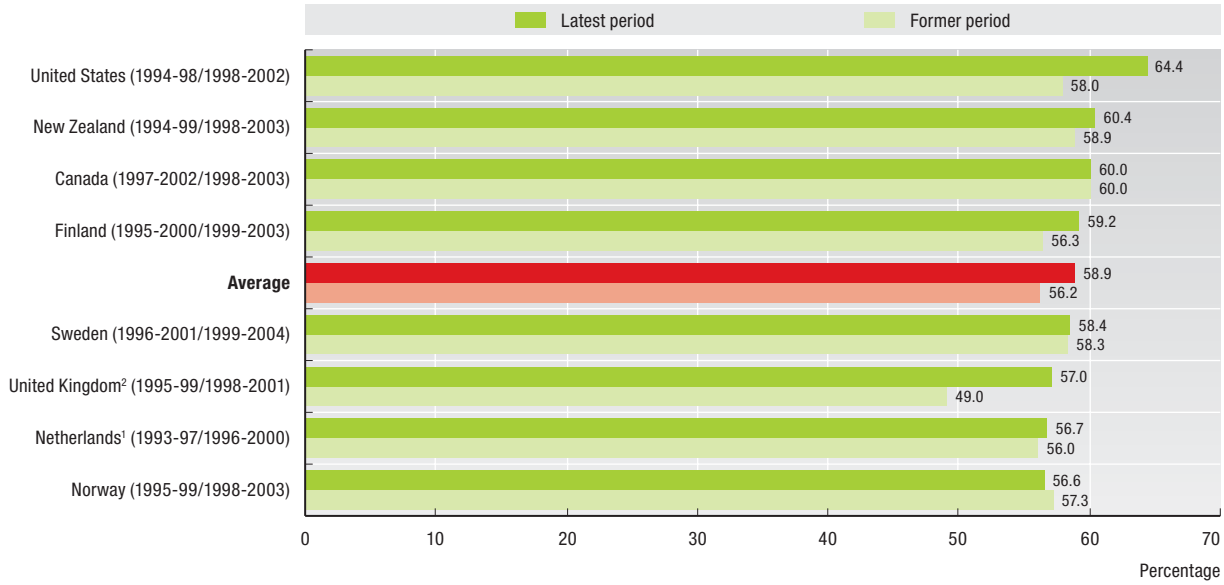
As Chart 6.3.1 shows, the relative five-year survival rates, which capture the excess mortality that can be attributed to a diagnosis of colorectal cancer, improved slightly over time in most countries. Particularly high rates of 64.4% are reported for the United States. While the data suggest substantial differences in the reporting countries, comparability is sometimes limited because of different reporting timeframes. For example, the survival rates for France and Germany appear lower than the average across reporting countries, but it should be borne in mind that their data are five to eight years older than the majority of reporting countries.

Definition and deviations

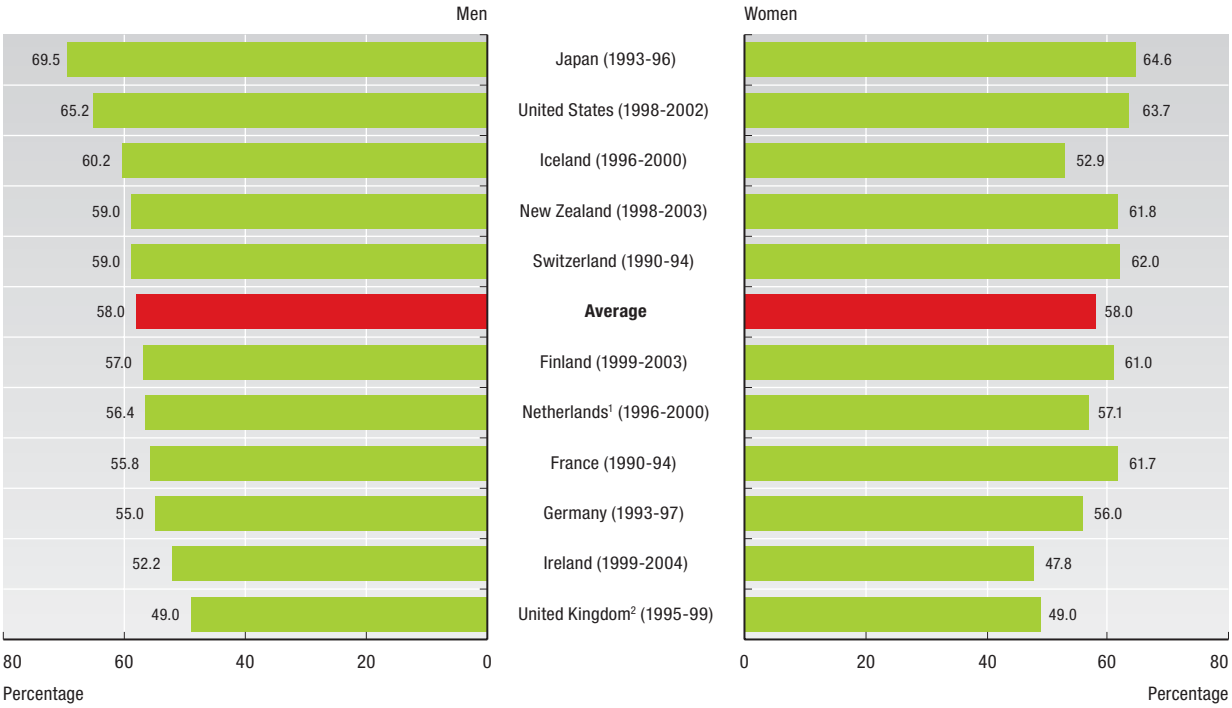
The delay between diagnosis and death in cancer is commonly calculated in years, whereas for other diseases such as stroke or acute myocardial infarction, delay may be counted in days (if at all, since diagnosis and death may be simultaneous). Relative cancer survival rates reflect the proportion of patients with a certain type of cancer who are still alive after a specified time period (commonly five years) compared to a non-diseased comparison group of similar age structure. This means that relative survival rates capture the excess mortality that can be attributed to a diagnosis. To illustrate, a relative survival rate of 80% does not mean that 80% of the cancer patients are still alive after five years, but that 80% of the patients that were expected to be alive after five years, given their age at diagnosis, are in fact still alive. Countries use different methods to calculate such relative survival rates, which may affect the results. Countries report data for different time periods, which may influence their rates, as cancer survival tends to improve over time. The survival rates are not adjusted for tumor stage at diagnosis, making it impossible to distinguish the relative impact of early detection and better treatment. Finally, there are slight differences in how countries handle patients lost in the follow-up period.

6.3. SURVIVAL FOR COLORECTAL CANCER

6.3.1. **Change over time in colorectal cancer five-year relative survival rates, men and women combined**



6.3.2. **Colorectal cancer, five-year relative survival rates, by gender, latest period available**



Note: For both charts, rates are crude, except for France which reports age-standardised rates according to the Eurocare-3 population. Differences between crude and age-standardised rates in countries range from 2 to 4 points.

1. In the Netherlands, the data for 1993-97 refers to rectal cancer. The survival rate for colon cancer was 60%, for the same period. The data for 1996-2000 refers to colorectal cancer.
2. The figures refer to colon cancer.

Source: Health Care Quality Indicators Project, OECD 2007.

StatLink http://dx.doi.org/10.1787/114356157385

6.4. SURVIVAL AND SCREENING FOR BREAST CANCER

Importance of the indicators

Breast cancer is the most common form of cancer in women, with a lifetime incidence of about 11% and a lifetime mortality rate of about 3% (Feuer *et al.*, 2003). In other words, one in nine women will acquire breast cancer at some point in her life and 1 in 30 will die from the disease. Overall spending for breast cancer care typically amounts to about 0.5-0.6% of total health care expenditure (OECD, 2003a).

Breast cancer is a cancer where the combination of public health interventions and improved medical technology has contributed to substantial improvements in survival. Greater awareness of the disease and the promotion of self-examination and screening mammography have led to the detection of the disease at earlier stages. While the debate on the cost-effectiveness of regular mammography screening has not fully settled (Goetzsche and Nielsen, 2006), many countries have opted to make screening widely available. Technological improvements, such as the introduction of combined breast conserving surgery with radiation therapy and of routine adjuvant treatment with tamoxifen or chemotherapy, have greatly increased survival as well as quality of life of survivors (Sant *et al.*, 2001).

Scientific soundness of the indicators

Numerous clinical studies have demonstrated the effectiveness of breast cancer screening and treatment in improving survival. But it is also known that resources for and patterns of care vary substantially across OECD countries (OECD, 2003). Breast cancer survival rates have been used to compare European countries in the EUROCARE study (Quinn *et al.*, 1998), in comparisons between European countries and the United States (Gatta *et al.*, 2000), and in national reporting activities in many countries.

Findings

As Chart 6.4.1 shows, there are still substantial differences in the relative five-year survival rates, which capture the excess mortality that can be attributed to a diagnosis of breast cancer in OECD countries. To illustrate, a tenth more women with breast cancer will live as long as their non-affected peers in Iceland than in Ireland. On the other hand, survival rates for breast cancer have increased in almost all countries that have some trend data (Chart 6.4.2).

Chart 6.4.3 shows that more than half of women aged 50 to 69 are going through mammography screening on an annual basis in most countries. Results from the EUROCARE study indicate that higher survival rates are usually found in countries with earlier detection (Sant *et al.*, 2003). Given the limited time series on mammography screening rates, it is not possible to assess the strength of the relationship between screening rates and survival rates with data presently available. The availability of equipment for radiation therapy and mammography is not strongly associated with five-year survival rates, suggesting that processes of care may have greater impact than mere infrastructure (Chart 6.4.4).

National differences in surgical therapy practices also do not appear to be related to survival rates. As Table A.6.4 in Annex A shows, in most countries there are about twice as many hospital admissions for breast conserving surgery as for radical mastectomy, without a clear relationship to survival rates. The main exception is the United States, where the very low number of hospital admissions for breast conserving surgery reflects the fact that these surgeries are mostly performed on an outpatient basis in that country (AHRQ, 2006).

Definition and deviations

See the definition of relative survival rates and general comparability limitations under Indicator 6.3 "Survival for colorectal cancer".

Mammography screening rates measure the proportion of women of a given age (here generally 50 to 69) who have received a mammography over the past year. As policies regarding target age groups and screening periodicity differ across countries, the rates may be based on each country's specific policy. An important consideration is that some countries measure screening rates based on surveys while others measure them based on programme data, which may influence the results. If a country has an organised screening programme, but women receive care outside of the programme, rates may be underreported. At the same time, surveys may underestimate rates due to recall bias.

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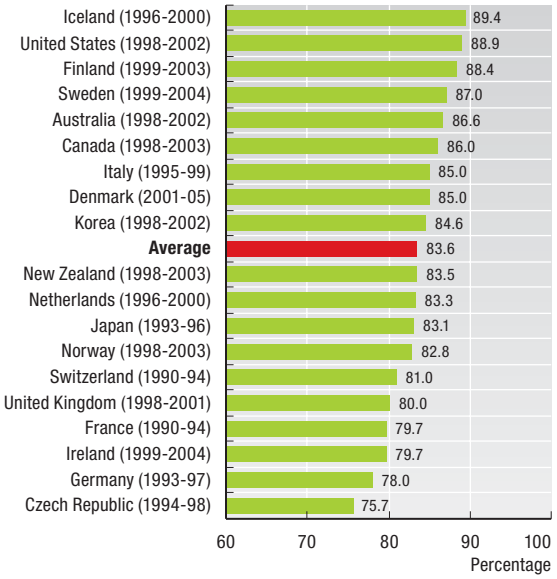
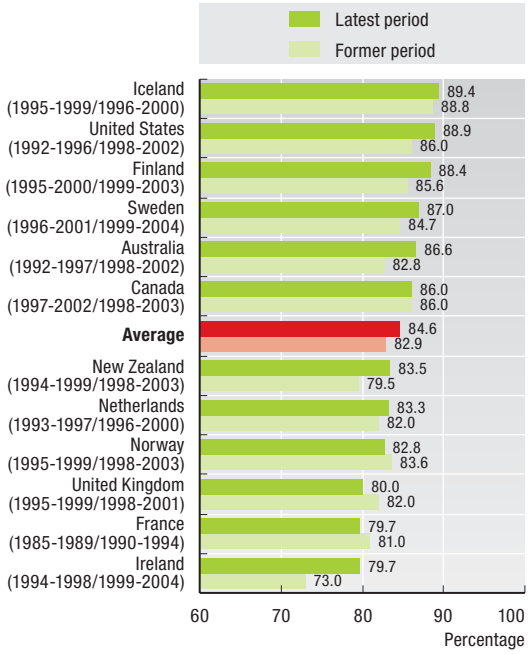
6.4. SURVIVAL AND SCREENING FOR BREAST CANCER

6.4.1. **Breast cancer, five-year relative survival rates, latest period available**

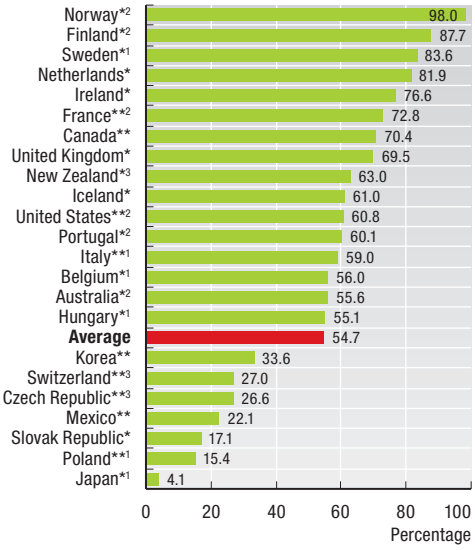


6.4.2. **Change over time in breast cancer five-year relative survival rates**



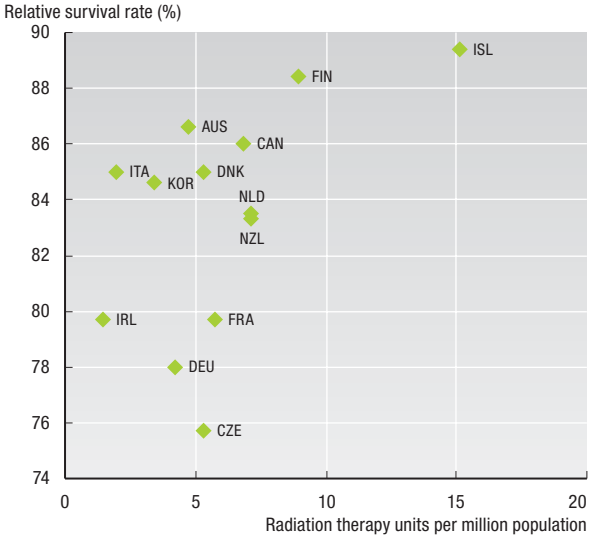
Note: Breast cancer survival rates are crude rates, except for France which reports age-standardised rates according to the Eurocare-3 population. Differences between crude and age-standardised rates in countries range from 2 to 4 points.

6.4.3. **Mammography screening, percentage of women aged 50- 69 screened, 2005**



* Programme data.
** Survey data.
1. 2004. 2. 2003. 3. 2002.

6.4.4. **Breast cancer, five-year relative survival rates and number of radiation therapy units (assessed two years earlier where available)**



Note: The figures for radiation therapy units refer to the following years: Ireland to 1981, France to 1988, the Czech Republic and Germany to 1991, Iceland and Italy to 1993, the Netherlands to 1994, Australia, Canada, Finland, Korea and New Zealand to 1996 and Denmark to 2000.

Source: Health Care Quality Indicators Project, OECD 2007. *OECD Health Data 2007* (mammography screening and RT units).

StatLink http://dx.doi.org/10.1787/114364435748

6.5. SURVIVAL AND SCREENING FOR CERVICAL CANCER

Importance of the indicators

While cervical cancer is no longer among the most common forms of cancer or cancer-related deaths in women in industrialised countries, it is of great interest to health policy makers because it is largely preventable. Screening by regular pelvic exam and pap smears can identify premalignant lesions, which can be effectively treated. Regular screening also increases the probability of diagnosing early stages of manifest malignant disease, which improves survival and may allow curative treatment without full removal of the uterus (Gatta *et al.*, 1998b). OECD countries have instituted screening programmes, but the periodicity and target groups vary. In addition, the discovery that cervical cancer is caused by certain forms of the Human Papilloma Virus has led to the development of promising cancer preventing vaccines (Harper, 2006). This would have important implications particularly for resource-poor settings in which the maintenance of comprehensive screening programmes is challenging.

Scientific soundness of the indicators

Numerous clinical studies have conclusively demonstrated the effectiveness of cervical cancer screening and treatment in improving survival. But it is also known that resources for and patterns of care vary substantially across OECD countries (OECD, 2003a). Thus, measuring and comparing survival rates may provide insight into the effectiveness of different health care systems. Cervical cancer survival rates have been used to compare European countries in the EUROCARE study (Gatta *et al.*, 1998b), in comparisons between European countries and the United States (Gatta *et al.*, 2000), and in national reporting activities in many countries.

Findings

As Chart 6.5.1 shows, the relative five-year survival rates, which capture the excess mortality that can be attributed to a diagnosis of cervical cancer, show substantial differences in the reporting countries.

Longitudinal data from Australia (Taylor *et al.*, 2001) and the United Kingdom (Peto *et al.*, 2004) have demonstrated a substantial effect of screening programmes on cervical cancer survival. Chart 6.5.3 illustrates that a majority of women in most OECD countries have received cervical cancer screening over the past three years. Effective screening programmes may appear to worsen survival rates, since screening allows for early detection and definite treatment of pre-cancerous lesions which may not be reported to cancer registries. The cases which are reported will then mostly represent more aggressive forms of cervical cancer, leading to an apparent decline in survival rates.

While the countries with the highest survival rates (*e.g.*, New Zealand and Iceland) tend to have high screening rates, Japan with the lowest reported screening rate of 23.7% and the United States with the highest reported screening rate of 82.6% both have similar survival rates.

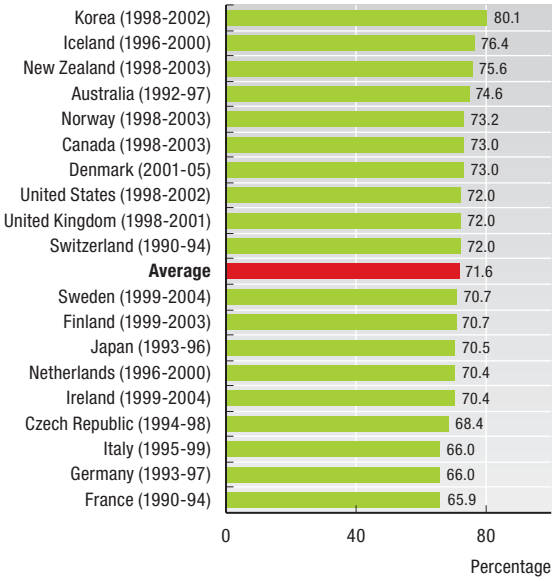
Definition and deviations

See the definition of relative survival rates and general comparability limitations under Indicator 6.3 "Survival for colorectal cancer".

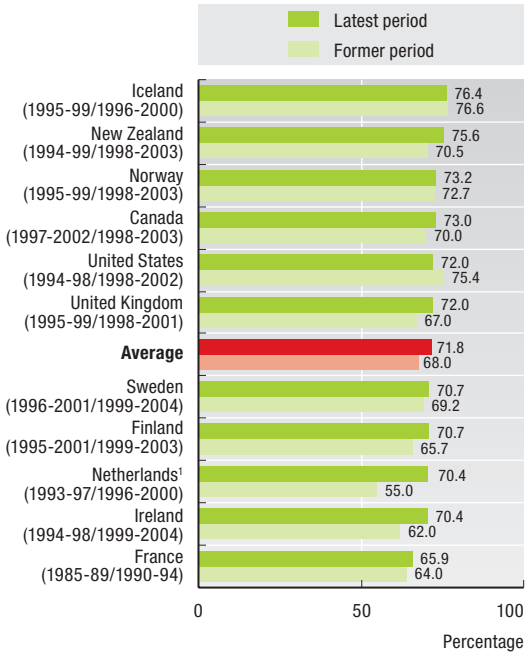
Screening rates for cervical cancer reflect the proportion of women of a given age (here generally 20 to 69) who have received a screening test within a given period of time (generally three years). However, as policies regarding screening periodicity and age groups differ across countries, the rates may be based on each country's specific policy. An important consideration is that some countries measure screening based on surveys and other based on programme data, which may influence the results. If a country has an organised screening programme, but women receive care outside of the programme, rates may be underreported. At the same time, surveys may underestimate rates due to recall bias.

6.5. SURVIVAL AND SCREENING FOR CERVICAL CANCER

6.5.1. **Cervical cancer, five-year relative survival rates, latest period available**



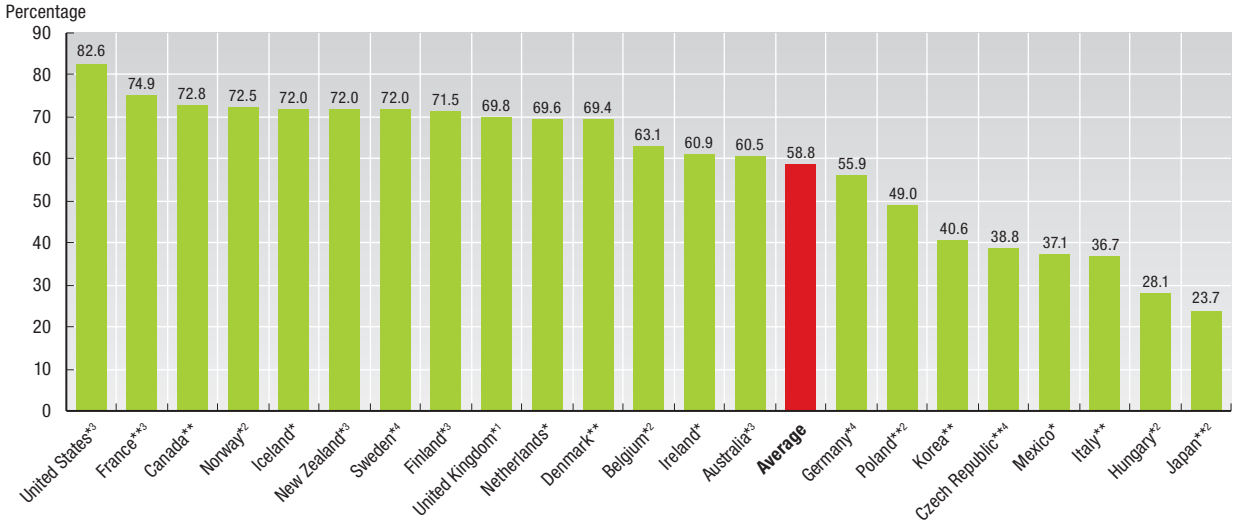
6.5.2. **Change over time in cervical cancer five-year relative survival rates**



Note: These are crude rates, except for France which reports age-standardised rates according to the Eurocare-3 population. Differences between crude and age-standardised rates in countries range from 2 to 4 points.

1. In the Netherlands the data for 1993-97 refers to people over 60 years of age. The relative survival rate for women under 60 years of age was 76%.

6.5.3. **Cervical screening rates, percentage of women aged 20-69 screened, 2005**



* Programme data.

** Survey data.

1. 2006. 2. 2004. 3. 2003. 4. 2002.

Source: Health Care Quality Indicators Project, OECD 2007. *OECD Health Data 2007* (cervical screening).

StatLink http://dx.doi.org/10.1787/114387285660

6.6. AVOIDABLE HOSPITAL ADMISSION AND MORTALITY RATE FOR ASTHMA

Importance of the indicators

Asthma is the most common chronic disease in childhood, with increasing prevalence in recent decades. Research suggests that asthma may in fact be a collection of different diseases with similar symptoms (Wenzel, 2006). Asthma is an inherently treatable disease through appropriate medical care.

In 2002, the estimated annual cost of treating asthma in the United States was USD 14 billion, of which hospital care accounted for almost a third of direct costs (NHLBI, 2002). Estimates for the European Union suggest annual medical costs of EUR 17.7 billion and productivity losses of EUR 9.8 billion (ERS, 2003). The cost of asthma treatments accounts for close to 2% of annual expenditures for medical care in Japan (Tanihara and Kobayashi, 2004).

Scientific soundness of the indicators

Primary care should be able to effectively manage both adults and children with asthma. Treatment with anti-inflammatory agents, such as inhaled corticosteroids and leukotriene inhibitors, are largely able to prevent exacerbation and, when it occurs, systemic corticosteroids and bronchodilators should preclude any need for hospitalisation. While current protocols and guidelines provide clear guidance for the treatment of asthma, studies suggest that treatment often falls short of recommended care (Mattke *et al.*, 2006; Halterman, 2001; and AAFA, 2005).

As a consequence of insufficient treatment, patients with asthma may need to be hospitalised. Admission rates for asthma and asthma mortality rates have been used to assess quality of care. For example, the UK National Health Service has designated asthma admission as a High Level Performance Indicator, and both paediatric and adult admission rates are part of the US National Healthcare Quality Report (AHRQ, 2006). Asthma mortality rates have been used as an indicator to assess the quality of care for health system comparison in the European Community, United Kingdom, Australia, and several other countries (Charlton *et al.*, 1983; Holland *et al.*, 1997; Manuel and Mao, 2002; AIHW, 2003).

Findings

Chart 6.6.2 shows that hospital admission rates for asthma vary substantially across OECD countries. While on average 6 out of 10 000 adults are admitted for asthma in a given year, there is a wide variation across countries. Relatively high rates are reported in Finland (13) and the United States (12), while the lowest rates are reported in Mexico (2) and Sweden (3).

Chart 6.6.1 shows considerable variation in asthma mortality rates across countries. Mortality is highest in the United Kingdom and Australia and lowest in Iceland, Finland and Switzerland. The numbers are consistent with data reported by the GINA Project that have shown high asthma prevalence in North America, the United Kingdom, Ireland, Australia and New Zealand (Massoli *et al.*, 2004). Trend data show overall improvement, with the exceptions of Canada and Sweden where the mortality rates remain however comparably low.

Hospital admission rates for asthma are generally correlated with asthma mortality rates, as shown in Chart 6.6.3.

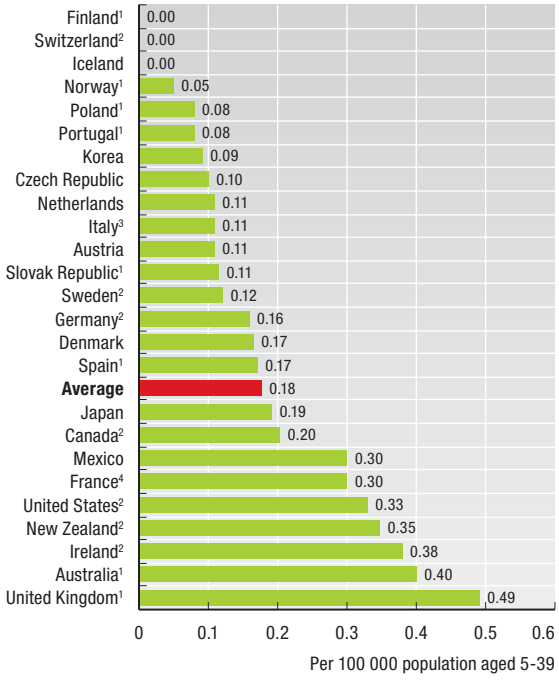
Definition and deviations

Asthma mortality rate is calculated as the number of deaths per 100 000 population per year in the age group between 5 and 39 years. Rates in countries with low populations should be viewed with caution, in light of the fact that asthma deaths are relatively rare which may lead to unstable rates from year-to-year. As causes of death are derived from death certificates, coding inaccuracies may affect the results. However, initial analyses showed no evidence of systematic differences in coding across the reporting countries (Mattke *et al.*, 2006). Whereas asthma mortality rates would be influenced by differences in prevalence of the disease, the assumption behind this indicator is that, given today's treatment options, no asthma death should occur at young ages.

Asthma hospital admission rate is defined as the number of hospital admissions of people aged 18 years and over per 10 000 population in that age group per year. Comparability may be limited by differences in coding practices across countries. Whereas asthma admission rates may be influenced by differences in prevalence of the disease, the assumption behind this indicator is that, given today's treatment options to prevent acute exacerbations, no hospital admission should be necessary.

6.6. AVOIDABLE HOSPITAL ADMISSION AND MORTALITY RATE FOR ASTHMA

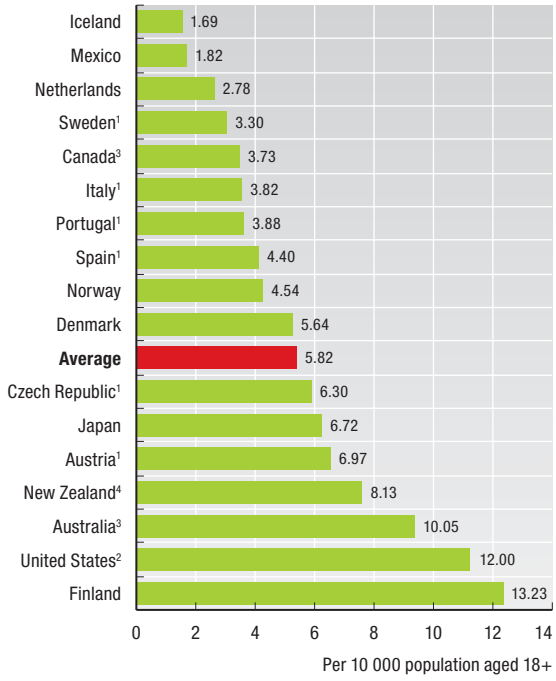
6.6.1. **Asthma mortality rates, per 100 000 population aged 5-39, 2005**



1. 2004. 2. 2003. 3. 2002. 4. 2001.

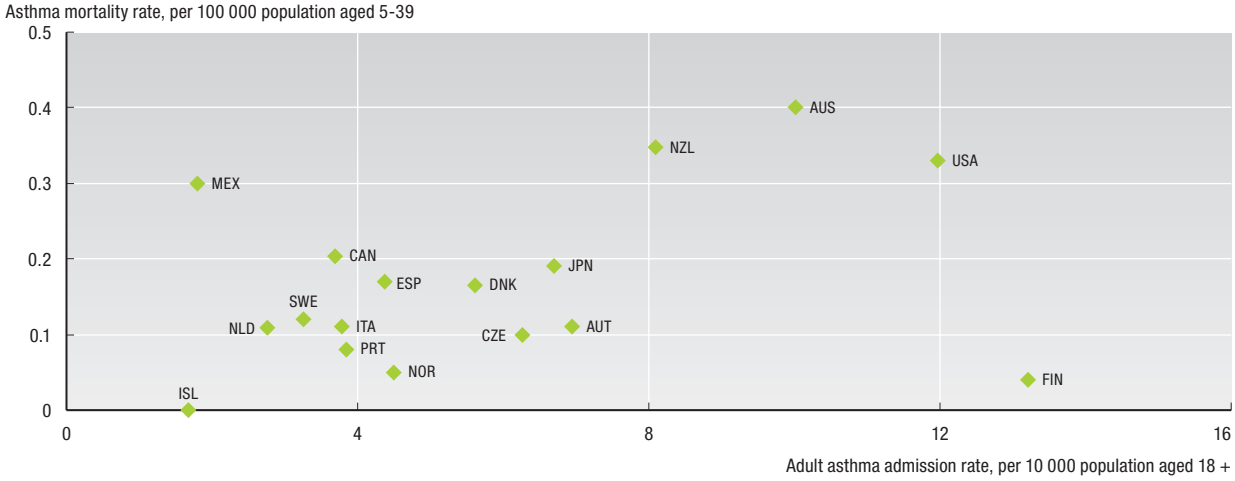
Source: Health Care Quality Indicators Project, OECD 2007.

6.6.2. **Adult asthma admission rates, per 10 000 population aged 18 and over, 2005**



1. 2004. 2. 2002. 3. 2004-05. 4. 2005-06.

6.6.3. **Asthma mortality rates, population aged 5-39 and adult asthma admission rates, population aged 18+, 2005**



Note: See previous two charts for data years for each country.

Source: Health Care Quality Indicators Project, OECD 2007.

StatLink http://dx.doi.org/10.1787/114402175055

6.7. ANNUAL EYE EXAMS FOR DIABETICS

Importance of the indicator

Diabetes has become one of the most important public health challenges of the 21st century. Over 150 million adults are affected world wide with the number expected to double in the next 25 years (King *et al.*, 1998; Zimmet *et al.*, 2001). This rise is fuelled largely by the rise in obesity (see Indicator 3.3 "Overweight and obesity"). The epidemic of diabetes requires resources to be devoted to the management of diabetes and its complications. Diabetes is the leading cause of blindness in industrialised countries (Ghafour *et al.*, 1983) and the most common cause of end-stage renal disease in the United States, Europe, and Japan (see Indicator 4.12 "Treatment of renal failure"). Individuals with type II diabetes have a 2-4 times greater risk of cardiovascular disease compared with people who do not have diabetes (Haffner, 2000). Non-traumatic amputations are 15 times more frequent in diabetic patients than in the general population (Ollendorf *et al.*, 1998). While recent medical advances have led to a reduction in mortality from cardiovascular disease in OECD countries, such a positive trend has not been documented for diabetic patients, suggesting that these advances may be less effective for diabetics (Gu *et al.*, 1999).

In 2002, the cost of diabetes in the United States was an estimated USD 92 billion in medical expenditures and USD 40 billion in lost productivity (ADA, 2003). According to projections by the International Diabetes Federation, countries will be spending 7-13% of their healthcare budgets on diabetes care by the year 2025 (IDF, 2003).

Much of the burden of diabetes could be reduced if current medical knowledge were better translated into treatment and secondary prevention. There is convincing evidence that lifestyle changes, such as weight loss and increased physical activity, can prevent diabetes in high-risk individuals (Tuomilehto *et al.*, 2001). It is well established that better glycaemia control reduces organ damage and vascular complications over time (Diabetes Control and Complications Trial Research Group, 1996). Evidence also suggests that these measures can reduce costs within 1-2 years (Wagner *et al.*, 2001). Empirical data, however, reveals that such practices are underutilised (McGlynn *et al.*, 2003).

Scientific soundness of the indicator

A great deal of progress has been made in the development, specification, and field-testing of measures for the quality of diabetes care in the United States (Fleming *et al.*, 2001; NDQIA, 2005). Parallel efforts have been carried out in Italy (Pellegrini *et al.*, 2003) and by the CODE-2 investigation group across eight European countries (Jonsson, 2002). Given the frequency of ophthalmologic complications in diabetics, annual eye exams are one of the most simple and universally accepted practices of care for diabetics. Thus, diabetic eye exam is one of the process indicators on quality of care recommended for the comparison of diabetes care at the international level (Greenfield *et al.*, 2004).

Findings

Chart 6.7.1 shows that slightly more than half of the diabetic patients in reporting countries receive annual eye exams, but there are large variations across countries. Even in the United Kingdom as the best-performing country on this measure, almost a sixth of people with diabetes do not undergo this simple and beneficial test. As depicted in Chart 6.7.2, testing rates are not strongly correlated to prevalence estimates. For instance, Germany, which has the highest reported prevalence of about 10%, has an about average rate of eye exams.

Definition and deviations

Annual eye exam rate in type I and II diabetics expresses the proportion of diabetic patients that receives a comprehensive eye exam in a given year. An important consideration is that some countries ascertain screening based on surveys and others based on encounter data which may influence the results. Countries use different methods to determine the number of eligible diabetics. Some countries use lab tests of representative samples, some rely on survey data and others on information on diagnoses documented based on encounters with the health care system. These different methods may influence the denominator of the indicator and thus the results. Finally, some countries did not use nationally representative samples to calculate this indicator and the true national rate may differ from the reported rate.

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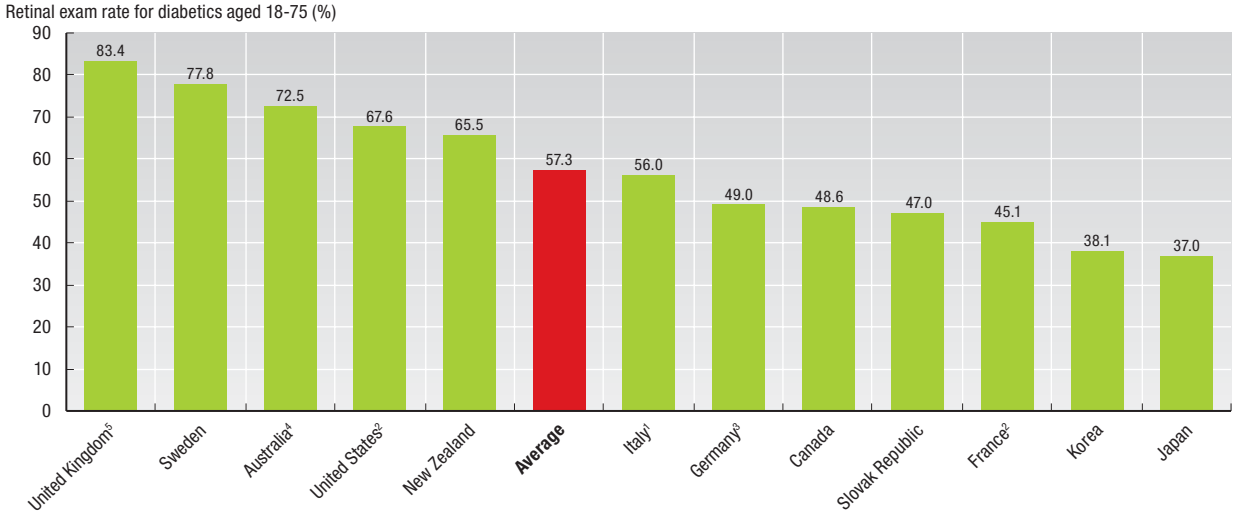
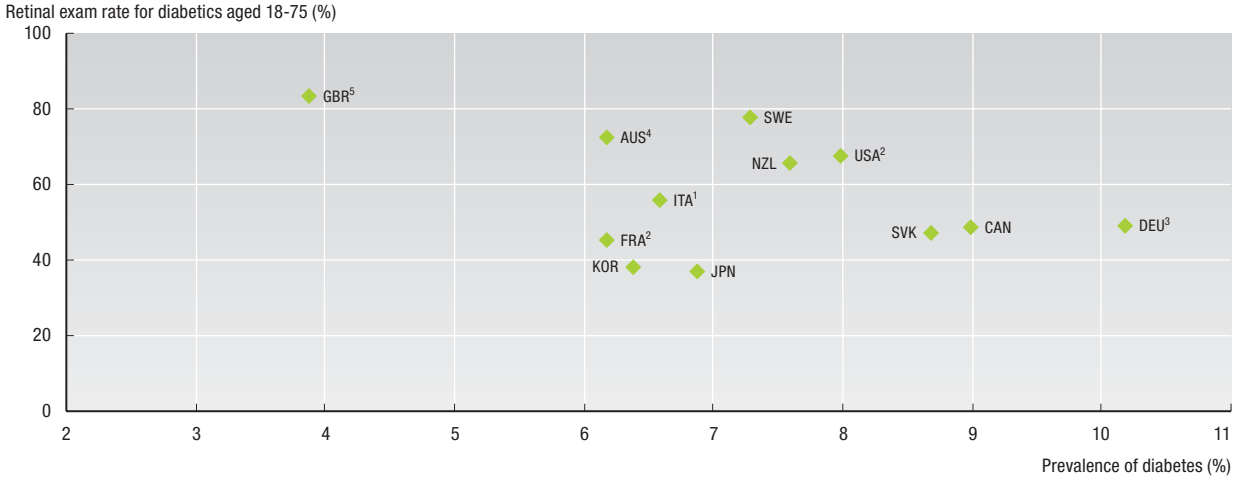
6.7. ANNUAL EYE EXAMS FOR DIABETICS

6.7.1. **Retinal exams in diabetics aged 18-75, 2005**



Note: Italy's figure refers to diabetic patients attending specialised clinics (estimated 60% of total diabetic population).
1. 2003. 2. 2002. 3. 1998. 4. 1999-2000. 5. 2004-05.

6.7.2. **Retinal exams in diabetics, 2005 (or latest year available) and diabetes prevalence, 2003**



Note for retinal exams: Italy's figure refers to diabetic patients attending specialised clinics (estimated 60% of total diabetic population).
1. 2003. 2. 2002. 3. 1998. 4. 1999-2000. 5. 2004-05.
Source: Health Care Quality Indicators Project, OECD 2007. Estimates of diabetes prevalence are taken from International Diabetes Federation (2003), *Diabetes Atlas*, 2nd edition.

StatLink http://dx.doi.org/10.1787/114425350130

6.8. INFLUENZA VACCINATION FOR ELDERLY PEOPLE

Importance of the indicator

Influenza is a common infectious disease world wide and affects persons of all ages. Each year, there are an estimated 20 to 30 million cases of influenza in the United States (CDC, 2006). Most people with the illness recover quickly, but the elderly and those with chronic medical conditions are at higher risk for complications and even death. Between 1979 and 2001, influenza accounted for 54 000 to 430 000 hospitalisations per epidemic and an average of 36 000 deaths per year in the United States (CDC, 2006). The impact of influenza on the employed population is substantial even though most influenza morbidity and mortality occurs among the elderly and those with chronic conditions (Keech *et al.*, 1998). Particularly virulent strains of the virus, similar to the H5N1 avian influenza subtype, could cause pandemics with a much wider impact.

Scientific soundness of the indicator

Immunisation against influenza (or flu) among elderly people has become increasingly widespread in OECD countries over the past decade, as a way to prevent illness, hospitalisation and mortality among this population group which has a greater risk of developing serious complications from flu. Influenza vaccination for the elderly and patients with chronic conditions is strongly recommended in Europe, the United States and other countries (Nicholson, 1995).

Findings

Influenza vaccination in the elderly has become more widely adopted over the last decade, with the average rate across a consistent group of countries increasing from 50% in 1996 to about 60% in 2005 (Chart 6.8.2). Vaccination rates during that period increased in all reporting countries, with the exception of the Slovak Republic. In Denmark and Finland, where rates used to be low, they doubled between 2001/02 and 2005. A number of factors have contributed to the increase in influenza immunisation rates in OECD countries, including: greater acceptance of preventive health services by patients and practitioners, improved public insurance coverage for such vaccines, and wider delivery of this service by health care providers other than physicians (Singleton *et al.*, 2000). In Finland, one of the main factors behind the strong rise in recent years has been a change in the entitlement for free vaccination, expanding from just those with chronic illness to cover everyone over 65 years old.

A number of barriers may still need to be overcome if countries wish to further increase coverage rates. In the United States, the reasons most frequently cited by elderly people for not receiving influenza vaccine were, firstly, ignorance that influenza vaccination was needed and, secondly, concerns that vaccination might cause influenza or side effects (CDC, 2004). Vaccine shortage or unavailability may also be an important reason for non-vaccination in the United States and in other countries in a given year.

Definition and deviations

Influenza immunisation rate refers to the number of people aged 65 and over who have received an annual influenza vaccination, divided by the total number of people over 65 years of age. The main limitation in terms of data comparability arises because of the use of different data sources which are susceptible to different types of errors and biases. In many countries, the data come from population-based surveys, which may suffer from incorrect recall. Survey data may also exclude the institutionalised population in certain countries. In some countries the data come from administrative sources, which may only capture vaccination delivered under the payment system covered by the data. It is unknown to what extent the use of administrative data in certain countries may bias downward (or upward) the reported immunisation rates compared with those countries using survey data.

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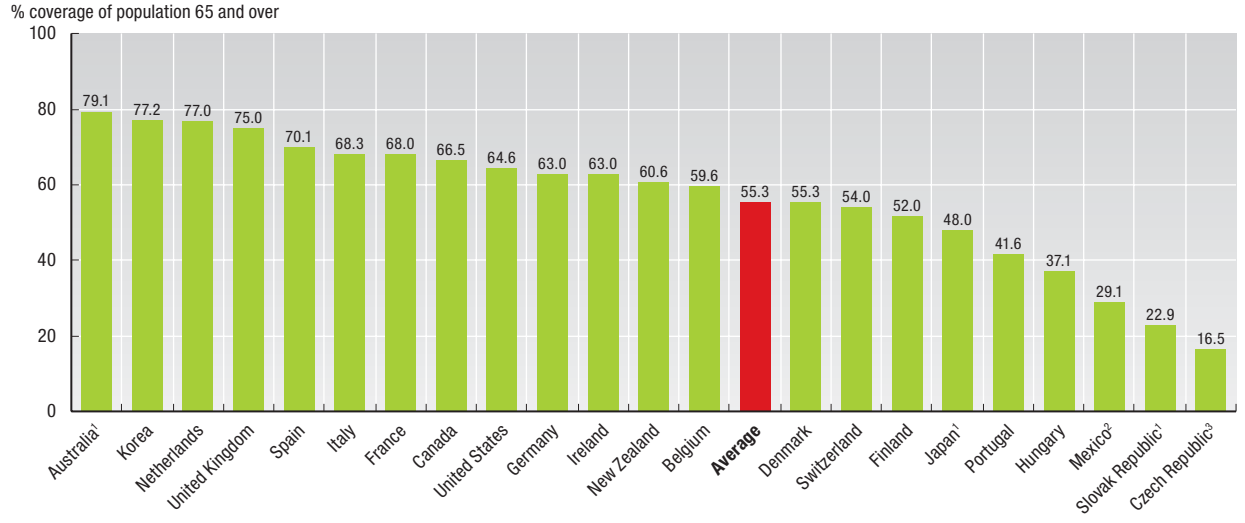
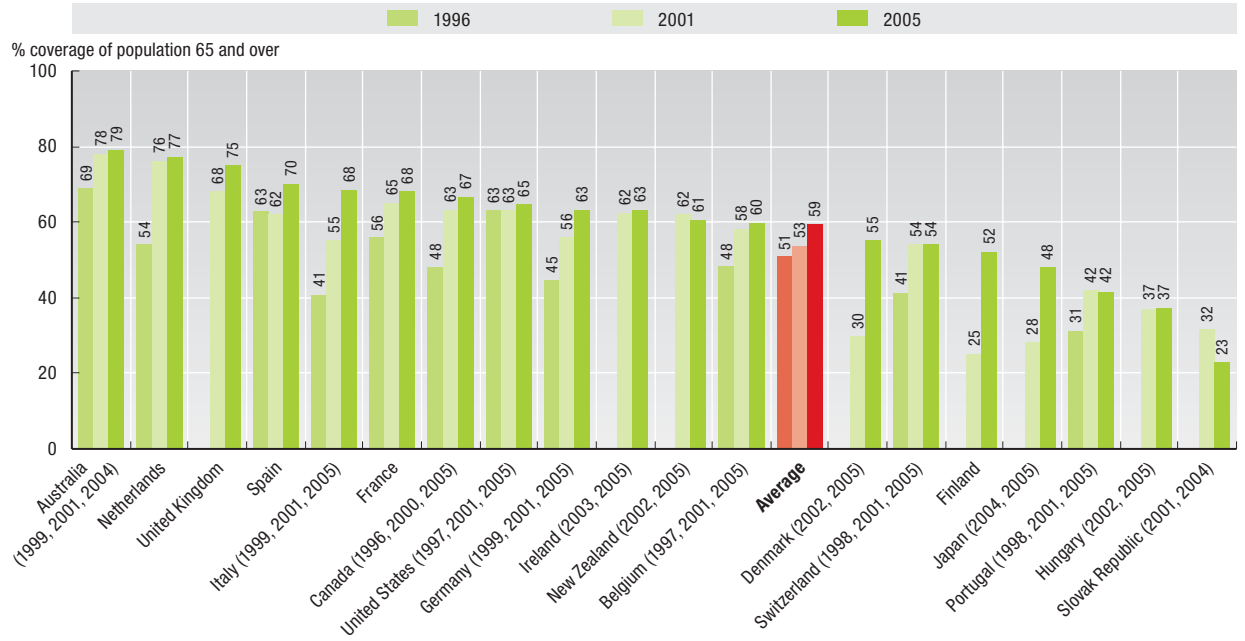
6.8. INFLUENZA VACCINATION FOR ELDERLY PEOPLE

6.8.1. **Influenza vaccination coverage among people aged 65 and over, 2005**



1. 2004. 2. 2003. 3. 2002.

6.8.2. **Increasing rates of influenza vaccination among people aged 65 and over, 1996 to 2005**



Source: OECD Health Data 2007.

StatLink http://dx.doi.org/10.1787/114441560660

6.9. CHILDHOOD VACCINATION PROGRAMMES

Importance of the indicators

Childhood vaccination continues to be one of the most cost-effective health policy interventions. All OECD countries have instituted comprehensive vaccination programmes with continued expansion. Through mass vaccination, polio and diphtheria have been, for all intents and purposes, eradicated as childhood diseases across the OECD. In Europe, as a whole, the gradual uptake of the measles vaccine has meant that measles incidence is around ten times less than the rate of the early 1990s.

Scientific soundness of the indicators

All OECD countries or, in some cases, sub-national jurisdictions have established vaccination programmes based on their interpretation of the risks and benefits of each vaccine. Vaccination against pertussis (often administered in connection with vaccination against diphtheria and tetanus) and measles is part of almost all programmes, and reviews of the evidence supporting the efficacy of vaccines against these diseases have concluded that the respective vaccines are highly effective.

Findings

The data suggest that overall vaccination rates of children against pertussis and measles are high in OECD countries (Charts 6.9.1 and 6.9.2, left panel). On average, more than 80% of children receive the recommended vaccines and rates are commonly well above 90%. The exceptions are Canada for vaccination against pertussis with a rate below 80% in 2004, and Austria for vaccination against measles with only three-quarters of children vaccinated in 2004.

In general, vaccination rates against measles tend to be lower than for pertussis in many countries. This is likely related to concerns that the measles vaccine is linked to autism, even though there is no evidence for this association (Demicheli *et al.*, 2005). In 2006, the resulting reduced rates of vaccination caused the most severe measles outbreak in the United Kingdom in the last 20 years, with the first death in 14 years (BBC, 2006). As shown in Chart 6.9.2 (right panel), other countries, like Ireland, France, Japan, Italy and Switzerland have experienced similar outbreaks. This raises serious concerns as measles is the most dangerous of the childhood disease and highly contagious. This evidence may point towards the need to re-emphasise the importance of meales vaccination in these countries.

Nevertheless, the successful implementation of childhood vaccination programmes has largely eliminated the targeted diseases in OECD countries, as illustrated in Charts 6.9.1 and 6.9.2 (right panel). Pertussis has also become a rare disease in most OECD countries. However, the variation in reported rates is much larger than for measles. Also, the incidence of pertussis does not seem to be closely related to vaccination rates, as Norway, for example, reported 120 cases per 100 000 population in spite of a high vaccination rate of over 90%.

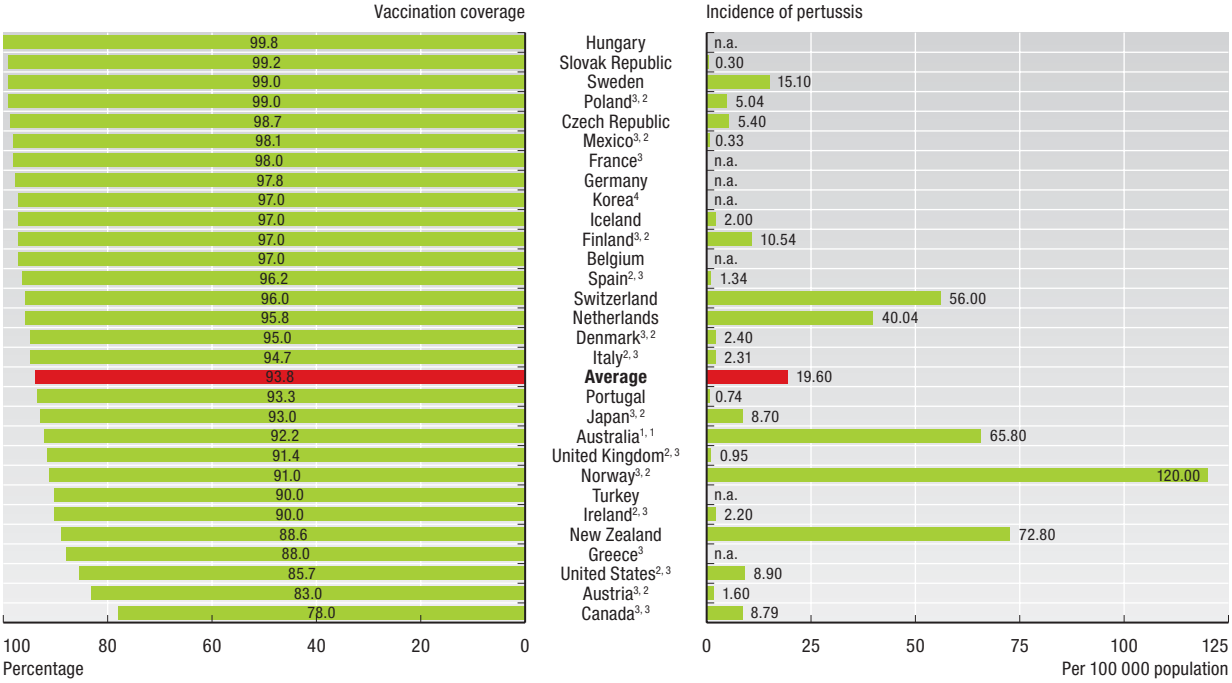
Definition and deviations

Vaccination rates reflect the percentage of the population that receives the respective vaccination in the recommended timeframe. Childhood vaccination policies differ slightly across countries. Thus, this indicator is based on the actual policy in a given country (or sub-national jurisdiction). Some countries ascertain vaccinations based on surveys and other based on encounter data, which may influence the results.

The incidence of vaccine-preventable diseases (pertussis and measles) measures the number of reported cases per 100 000 population. Rates in countries with low populations should be viewed with caution, given that cases are rare and may lead to unstable rates from year-to-year. In addition, reporting practices differ across countries regarding whether reporting is mandatory or voluntary and whether suspected or only confirmed cases must be reported. However, initial analyses suggested no systematic differences in the incidence of vaccine-preventable diseases based on country reporting requirements, although further research is necessary (Mattke *et al.*, 2006).

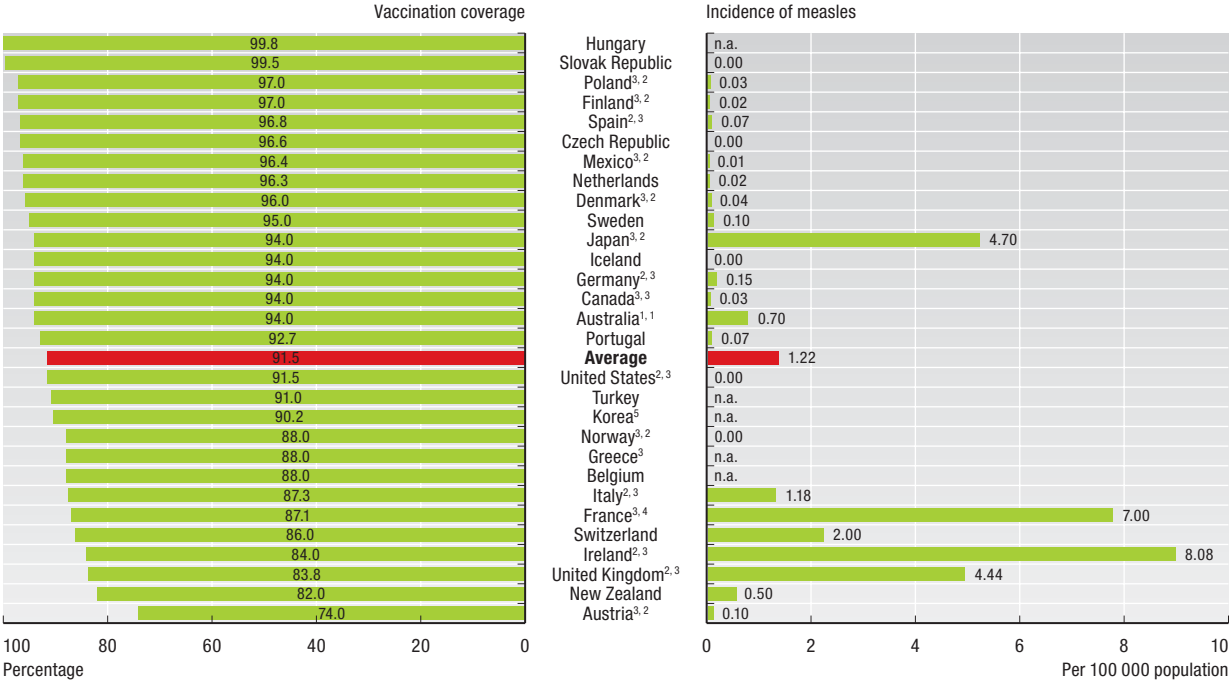
6.9. CHILDHOOD VACCINATION PROGRAMMES

6.9.1. **Vaccination rates for pertussis, children aged two, and incidence of pertussis among the total population, 2005**



Note: The first note refers to the left-hand side chart while the second refers to the chart on the right.
1. 2006. 2. 2005. 3. 2004. 4. 2003.

6.9.2. **Vaccination rates for measles, children aged two, and incidence of measles among the total population, 2005**



Note: The first note refers to the left-hand side chart while the second refers to the chart on the right.
1. 2006. 2. 2005. 3. 2004. 4. 2003. 5. 1999.
Source: Health Care Quality Indicators Project, OECD 2007. *OECD Health Data 2007* (vaccination coverage).

StatLink http://dx.doi.org/10.1787/114516366626

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ANNEX A

Statistical Annex

Table A.1.1a. **Total population, mid-year, thousands, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	10 275	12 507	14 695	17 065	19 153	20 329
Austria	7 047	7 467	7 549	7 718	8 110	8 233
Belgium	9 153	9 656	9 859	9 967	10 251	10 479
Canada	17 870	21 297	24 516	27 698	30 689	32 271
Czech Republic	9 660	9 805	10 327	10 362	10 272	10 221
Denmark	4 581	4 929	5 123	5 141	5 340	5 416
Finland	4 430	4 606	4 779	4 986	5 176	5 246
France	45 684	50 772	53 880	56 709	59 013	60 873
Germany[a]	55 585	60 651	61 566	63 254	82 160	82 466
Greece	8 327	8 793	9 642	10 089	10 917	11 104
Hungary	9 984	10 338	10 711	10 374	10 211	10 087
Iceland	176	205	228	255	281	296
Ireland	2 834	2 950	3 401	3 503	3 790	4 131
Italy	48 967	52 771	55 657	56 737	57 189	58 135
Japan	94 302	104 665	117 060	123 611	126 926	127 757
Korea	25 012	32 241	38 124	42 869	47 008	48 294
Luxembourg	315	340	365	384	436	455
Mexico	. .	48 225	66 847	81 250	98 658	106 203
Netherlands	11 486	13 039	14 150	14 951	15 926	16 320
New Zealand	2 377	2 820	3 144	3 363	3 858	4 099
Norway	3 585	3 879	4 086	4 241	4 491	4 623
Poland	29 561	32 526	35 578	38 119	38 256	38 161
Portugal	9 077	8 663	9 819	9 873	10 229	10 563
Slovak Republic	3 994	4 528	4 984	5 298	5 401	5 387
Spain	30 256	33 859	37 527	38 851	40 264	43 398
Sweden	7 480	8 043	8 311	8 559	8 872	9 030
Switzerland	5 328	6 181	6 319	6 712	7 184	7 437
Turkey	27 506	35 321	44 439	56 156	67 420	72 064
United Kingdom	52 373	55 632	56 330	57 237	58 886	60 227
United States	180 671	205 052	227 225	249 623	282 194	296 410
Total OECD	**717 896**	**851 761**	**946 241**	**1 024 955**	**1 128 561**	**1 169 715**

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a) Note that population figures for Germany prior to 1991 refer to West Germany.
Source: OECD Health Data 2007.

Table A.1.1b. **Share of the population aged 65 and over, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	8.5	8.3	9.6	11.1	12.4	13.1
Austria	12.2	14.1	15.4	15.1	15.5	16.3
Belgium	12.0	13.4	14.3	14.9	16.8	17.0 *2002*
Canada	7.6	8.0	9.4	11.3	12.6	13.1
Czech Republic	9.6	12.1	13.5	12.5	13.8	14.0
Denmark	10.6	12.3	14.4	15.6	14.8	15.1
Finland	7.3	9.1	12.0	13.4	14.9	15.9
France	11.6	12.9	13.9	14.1	16.1	16.4
Germany	10.8	13.2	15.5	15.3	17.2	19.2
Greece	8.1	11.1	13.1	14.0	16.6	17.7 *2003*
Hungary	9.0	11.5	13.4	13.4	15.1	15.7
Iceland	8.1	8.9	9.9	10.6	11.6	11.7
Ireland	10.9	11.2	10.7	11.4	11.2	11.2
Italy	9.0	10.5	12.9	14.6	17.7	19.3
Japan	5.7	7.1	9.1	12.0	17.3	20.0
Korea	2.9	3.1	3.8	5.1	7.2	9.1
Luxembourg	10.8	12.6	13.6	13.4	14.1	14.3
Mexico	. .	3.7	3.8	4.2	5.3	5.9 *2004*
Netherlands	9.0	10.2	11.5	12.8	13.6	13.8 *2003*
New Zealand	8.7	8.4	9.7	11.1	11.8	12.1
Norway	10.9	12.9	14.8	16.3	15.2	14.7
Poland	5.8	8.2	10.1	10.1	12.2	13.2
Portugal	7.7	9.5	11.4	13.6	16.4	17.0
Slovak Republic	6.9	9.2	10.5	10.3	11.4	11.7
Spain	8.2	9.6	11.2	13.6	16.8	16.7
Sweden	11.8	13.7	16.3	17.8	17.3	17.3
Switzerland	10.7	11.8	14.3	15.0	15.8	16.2 *2004*
Turkey	3.5	4.4	4.7	4.5	5.4	5.9
United Kingdom	11.7	13.0	15.0	15.7	15.8	16.0 *2004*
United States	9.2	9.8	11.3	12.5	12.4	12.4
Latest average[a]	. .	. .	. .	. .	. .	**14.4**
Consistent average (29)[b]	**8.9**	**10.3**	**11.9**	**12.8**	**14.1**	**14.7**

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a) Average of the latest available data for all 30 OECD countries.
b) Excludes Mexico.
Source: OECD Health Data 2007.

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Table A.1.2. **Fertility rate, number of children per woman 15-49, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	3.5	2.9	1.9	1.9	1.8	1.8
Austria	2.7	2.3	1.6	1.5	1.3	1.4
Belgium	2.6	2.3	1.7	1.6	1.7	1.7
Canada	3.9	2.3	1.7	1.7	1.5	1.5
Czech Republic	2.1	1.9	2.1	1.9	1.1	1.3
Denmark	2.6	2.0	1.6	1.7	1.8	1.8
Finland	2.7	1.8	1.6	1.8	1.7	1.8
France	2.7	2.5	2.0	1.8	1.9	1.9
Germany	2.4	2.0	1.6	1.5	1.4	1.3
Greece	2.3	2.4	2.2	1.4	1.3	1.3
Hungary	2.0	2.0	1.9	1.8	1.3	1.3
Iceland	4.2	2.8	2.5	2.3	2.1	2.1
Ireland	3.8	3.9	3.3	2.1	1.9	1.9
Italy	2.4	2.4	1.6	1.3	1.2	1.3
Japan	2.0	2.1	1.8	1.5	1.4	1.3
Korea	6.0	4.5	2.8	1.6	1.5	1.1
Luxembourg	2.3	2.0	1.5	1.6	1.8	1.7
Mexico	7.3	6.8	4.7	3.4	2.7	2.2
Netherlands	3.1	2.6	1.6	1.6	1.7	1.7
New Zealand	4.2	3.3	2.1	2.1	2.0	2.0
Norway	2.9	2.5	1.7	1.9	1.9	1.8
Poland	3.0	2.2	2.3	2.0	1.3	1.2
Portugal	3.1	2.8	2.2	1.6	1.6	1.4
Slovak Republic	3.1	2.4	*2.3*	2.1	1.3	1.3
Spain	2.9	2.9	2.2	1.4	1.2	1.3
Sweden	2.2	1.9	1.7	2.1	1.5	1.8
Switzerland	2.4	2.1	1.6	1.6	1.5	1.4
Turkey	6.4	5.0	4.6	3.1	2.3	2.2
United Kingdom	2.7	2.4	1.9	1.8	1.7	1.8
United States	3.7	2.5	1.8	2.1	2.1	2.1
Average (30)	**3.2**	**2.7**	**2.1**	**1.9**	**1.6**	**1.6**

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Source: OECD Health Data 2007.

Table A.1.3. **GDP per capita in 2005 and annual average growth rates, 1970 to 2005**

	GDP per capita in USD PPP	Annual average growth rate			
	2005	1970-80	1980-90	1990-2000	2000-05
Australia	34 484	1.3	1.4	2.4	2.1
Austria	34 394	3.5	2.0	2.0	1.1
Belgium	33 021	3.2	1.9	1.9	1.0
Canada	34 057	2.6	1.6	1.9	1.5
Czech Republic	20 633	. .	. .	0.3	3.7
Denmark	34 110	1.9	2.0	2.2	1.1
Finland	30 911	3.3	2.6	1.6	2.3
France	30 350	3.0	1.9	1.5	1.0
Germany	30 776	2.7	2.1	0.3	0.6
Greece	29 578	3.7	0.2	1.5	4.0
Hungary	17 484	. .	. .	. .	4.6
Iceland	36 183	5.3	1.6	1.5	3.1
Ireland	39 019	3.3	3.3	6.3	3.4
Italy	28 401	3.3	2.2	1.5	0.4
Japan	30 777	3.3	3.4	1.0	1.2
Korea	22 098	5.4	7.5	5.1	3.9
Luxembourg	70 600	1.9	4.4	3.7	2.2
Mexico	10 537	3.3	0.1	1.5	0.3
Netherlands	35 112	2.1	1.7	2.5	0.7
New Zealand	25 963	0.7	1.2	1.4	2.2
Norway	48 162	4.1	2.1	3.1	1.6
Poland	13 915	. .	. .	3.7	3.1
Portugal	20 030	3.5	3.2	2.5	0.1
Slovak Republic	15 983	. .	. .	. .	4.6
Spain	27 400	2.6	2.6	2.4	1.7
Sweden	32 111	1.6	1.9	1.6	2.0
Switzerland	35 956	1.0	1.6	0.4	0.4
Turkey	7 711	. .	. .	1.7	2.9
United Kingdom	32 896	1.8	2.5	2.1	2.0
United States	41 827	2.2	2.3	2.0	1.4
Average	**30 149**	**2.8**	**2.3**	**2.2**	**1.7**

StatLink http://dx.doi.org/10.1787/114558220602

Source: OECD Health Data 2007.

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Table A.2.1a. **Life expectancy at birth, total population, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	70.9	70.8	74.6	77.0	79.3	80.9
Austria	68.7	70.0	72.6	75.5	78.1	79.5
Belgium	70.6	71.0	73.4	76.1	77.8	78.7
Canada	71.3 *1961*	72.9	75.3	77.6	79.3	80.2 *2004*
Czech Republic	70.7	69.6	70.3	71.5	75.0	76.0
Denmark	72.4	73.3	74.3	74.9	76.9	77.9
Finland	69.0	70.8	73.4	74.9	77.6	78.9
France	70.3	72.2	74.3	76.9	79.0	80.3
Germany	69.6	70.4	72.9	75.2	78.0	79.0
Greece	69.9	72.0	74.5	77.1	78.0	79.3
Hungary	68.0	69.2	69.1	69.4	71.7	72.8
Iceland	72.9	74.3	76.7	78.0	80.1	81.2
Ireland	70.0	71.2	72.9	74.9	76.5	79.5
Italy	69.8 *1961*	72.0 *1971*	74.0	76.9	79.6	80.4
Japan	67.8	72.0	76.1	78.9	81.2	82.1
Korea	52.4	62.2	65.9	71.4	76.0	78.5
Luxembourg	69.4	70.3	72.5	75.4	78.0	79.3
Mexico	57.5	60.9	67.2	71.2	74.1	75.5
Netherlands	73.5	73.7	75.9	77.0	78.0	79.4
New Zealand	71.3	71.5	73.2	75.4	78.7	79.6
Norway	73.6	74.2	75.8	76.6	78.7	80.1
Poland	67.8	70.0	70.2	70.7	73.9	75.1
Portugal	64.0	67.5	71.5	73.9	76.6	78.2
Slovak Republic	70.6	69.8	70.6	71.0	73.3	74.0
Spain	69.8	72.0	75.6	76.8	79.2	80.7
Sweden	73.1	74.7	75.8	77.6	79.7	80.6
Switzerland	71.6	73.8	76.2	77.4	79.8	81.3
Turkey	48.3	54.2	58.1	66.1	70.5	71.4
United Kingdom	70.8	71.9	73.2	75.7	77.8	79.0
United States	69.9	70.9	73.7	75.3	76.8	77.8 *2004*
Average (30)	**68.5**	**70.3**	**72.7**	**74.9**	**77.3**	**78.6**

StatLink http://dx.doi.org/10.1787/114581074130

Note: Methodology used to calculate life expectancy can vary between countries, affecting comparability (different methods can change a country's life expectancy estimates by a fraction of a year). Life expectancy at birth for the total population is calculated by the OECD Secretariat for all countries, using the unweighted average of life expectancy of men and women.

Source: OECD Health Data 2007. (For the 22 European countries, the Eurostat NewCronos Database is the main data source for 1985 onwards.)

Table A.2.1b. **Life expectancy at birth, females, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	73.9	74.2	78.1	80.1	82.0	83.3
Austria	71.9	73.4	76.1	78.8	81.1	82.2
Belgium	73.5	74.2	76.8	79.4	80.9	81.6
Canada	74.2 *1961*	76.4 *1971*	78.9	80.8	81.9	82.6 *2004*
Czech Republic	73.4	73.0	73.9	75.4	78.4	79.1
Denmark	74.4	75.9	77.3	77.7	79.3	80.2
Finland	72.5	75.0	77.6	78.9	81.0	82.3
France	73.6	75.9	78.4	80.9	82.7	83.8
Germany	72.4	73.6	76.1	78.4	81.0	81.8
Greece	72.4	73.8	76.8	79.5	80.5	81.7
Hungary	70.1	72.1	72.7	73.7	75.9	76.9
Iceland	75.0	77.3	79.7	80.5	81.8	83.1
Ireland	71.9	73.5	75.6	77.6	79.1	81.8
Italy	72.3 *1961*	74.9 *1971*	77.4	80.1	82.5	83.2
Japan	70.2	74.7	78.8	81.9	84.6	85.5
Korea	53.7	65.6	70.0	75.5	79.6	81.9
Luxembourg	72.2	73.4	75.9	78.5	81.1	82.3
Mexico	59.2	63.2	70.2	74.1	76.5	77.9
Netherlands	75.4	76.5	79.2	80.1	80.5	81.6
New Zealand	73.9	74.6	76.3	78.3	81.1	81.7
Norway	75.8	77.3	79.2	79.8	81.4	82.5
Poland	70.6	73.3	74.4	75.2	78.0	79.4
Portugal	66.8	70.8	75.2	77.4	80.0	81.4
Slovak Republic	72.7	72.9	74.3	75.4	77.4	77.9
Spain	72.2	74.8	78.6	80.3	82.5	83.9
Sweden	74.9	77.1	78.8	80.4	82.0	82.8
Switzerland	74.5	76.9	79.6	80.7	82.6	83.9
Turkey	50.3	56.3	60.3	68.3	72.8	73.8
United Kingdom	73.7	75.0	76.2	78.5	80.2	81.1
United States	73.1	74.7	77.4	78.8	79.5	80.4 *2004*
Average (30)	**71.0**	**73.3**	**76.0**	**78.2**	**80.3**	**81.4**

StatLink http://dx.doi.org/10.1787/114581074130

Note: Methodology used to calculate life expectancy can vary between countries, affecting comparability (different methods can change a country's life expectancy estimates by a fraction of a year).
Source: OECD Health Data 2007. (For the 22 European countries, the Eurostat NewCronos Database is the main data source for 1985 onwards.)

Table A.2.1c. **Life expectancy at birth, males, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	67.9	67.4	71.0	73.9	76.6	78.5
Austria	65.4	66.5	69.0	72.2	75.1	76.7
Belgium	67.7	67.8	70.0	72.7	74.6	75.8
Canada	68.4 *1961*	69.3 *1971*	71.7	74.4	76.7	77.8 *2004*
Czech Republic	67.9	66.1	66.8	67.6	71.6	72.9
Denmark	70.4	70.7	71.2	72.0	74.5	75.6
Finland	65.5	66.5	69.2	70.9	74.2	75.5
France	67.0	68.4	70.2	72.8	75.3	76.7
Germany	66.9	67.2	69.6	72.0	75.0	76.2
Greece	67.3	70.1	72.2	74.6	75.5	76.8
Hungary	65.9	66.3	65.5	65.1	67.4	68.6
Iceland	70.7	71.2	73.7	75.4	78.4	79.2
Ireland	68.1	68.8	70.1	72.1	73.9	77.1
Italy	67.2 *1961*	69.0 *1971*	70.6	73.6	76.6	77.6
Japan	65.3	69.3	73.4	75.9	77.7	78.6
Korea	51.1	58.7	61.8	67.3	72.3	75.1
Luxembourg	66.5	67.1	69.1	72.3	74.8	76.2
Mexico	55.8	58.5	64.1	68.3	71.6	73.0
Netherlands	71.5	70.8	72.5	73.8	75.5	77.2
New Zealand	68.7	68.3	70.0	72.4	76.3	77.5
Norway	71.3	71.0	72.3	73.4	76.0	77.7
Poland	64.9	66.6	66.0	66.2	69.7	70.8
Portugal	61.2	64.2	67.7	70.4	73.2	74.9
Slovak Republic	68.4	66.7	66.8	66.6	69.1	70.1
Spain	67.4	69.2	72.5	73.3	75.8	77.4
Sweden	71.2	72.2	72.8	74.8	77.4	78.4
Switzerland	68.7	70.7	72.8	74.0	76.9	78.7
Turkey	46.3	52.0	55.8	63.8	68.1	68.9
United Kingdom	67.9	68.7	70.2	72.9	75.4	76.9
United States	66.6	67.1	70.0	71.8	74.1	75.2 *2004*
Average (30)	**66.0**	**67.2**	**69.3**	**71.6**	**74.3**	**75.7**

StatLink http://dx.doi.org/10.1787/114581074130

Note: Methodology used to calculate life expectancy can vary between countries, affecting comparability (different methods can change a country's life expectancy estimates by a fraction of a year).

Source: OECD Health Data 2007. (For the 22 European countries, the Eurostat NewCronos Database is the main data source for 1985 onwards.)

Table A.2.2a. **Life expectancy at age 65, females, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	15.6	15.6	17.9	19.0	20.4	21.4
Austria	14.7	14.9	16.3	17.8	19.4	20.3
Belgium	14.8	15.3	16.9	18.5	19.6	20.0
Canada	16.1 *1961*	17.5 *1971*	18.9	19.9	20.4	21.0 *2004*
Czech Republic	14.5	14.2	14.3	15.2	17.1	17.3 *2003*
Denmark	15.3	16.7	17.6	17.8	18.3	18.6 *2003*
Finland	13.7	14.4 *1971*	16.5	17.7	19.6	21.1
France	15.6	16.8	18.2	19.8	21.2	21.4 *2002*
Germany	14.6	15.0	16.7	17.6	19.4	19.6 *2003*
Greece	14.6	15.2	16.8	18.0	18.3	19.4
Hungary	13.8	14.3	14.6	15.3	16.5	16.9
Iceland	16.8 *1963*	17.8 *1973*	19.1	19.5	19.7	20.7
Ireland	14.4	15.0	15.7	16.9	17.8	18.9 *2003*
Italy	15.3 *1961*	16.2 *1971*	17.1	18.8	20.4	. .
Japan	14.1	15.3	17.7	20.0	22.4	23.2
Korea	. .	14.6	15.1	16.3	18.2	19.9
Luxembourg	14.5	14.9	16.0	18.2	19.7	19.0 *2003*
Mexico	14.6	15.6	17.0	18.0	18.3	18.7
Netherlands	15.3	16.1	18.0	18.9	19.2	20.0
New Zealand	15.6	16.0	17.0	18.3	20.0	20.4
Norway	16.0	16.7	18.0	18.5	19.7	20.1 *2003*
Poland	14.9	15.3	15.5	16.1	17.5	18.6
Portugal	15.3	15.0	16.5	17.0	18.7	18.9 *2003*
Slovak Republic	14.6	14.5	15.4	15.7	16.5	16.9
Spain	15.3	16.0	17.9	19.0	20.4	20.7 *2002*
Sweden	15.3	16.8	17.9	19.0	20.0	20.6
Switzerland	. .	. .	18.3 *1982*	19.4	20.7	21.0 *2003*
Turkey	12.1	12.6	12.8	13.9	14.6	15.0
United Kingdom	15.1	16.0	16.6	17.9	18.9	19.1 *2002*
United States	15.8	17.0	18.3	18.9	19.2	20.0 *2004*
Consistent average (28)[a]	**14.9**	**15.6**	**16.8**	**17.9**	**19.0**	**19.6**

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Note: Methodology used to calculate life expectancy can vary between countries, affecting comparability (different methods can change a country's life expectancy estimates by a fraction of a year).

a) Excludes Korea and Switzerland. The 2005 OECD average includes the latest year available for Italy (2001).

Source: OECD Health Data 2007. (For the 22 European countries, the Eurostat NewCronos Database is the main data source for 1985 onwards.)

Table A.2.2b. **Life expectancy at age 65, males, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	12.5	11.9	13.7	15.2	16.9	18.1
Austria	12.0	11.7	12.9	14.3	16.0	17.0
Belgium	12.4	12.1	13.0	14.3	15.5	16.3
Canada	13.5 *1961*	13.7 *1971*	14.5	15.7	16.8	17.7 *2004*
Czech Republic	12.5	11.1	11.2	11.6	13.7	13.9 *2003*
Denmark	13.7	13.7	13.6	14.0	15.2	15.5 *2003*
Finland	11.5	11.4 *1971*	12.5	13.7	15.6	17.0
France	12.5	13.0	13.6	15.5	16.7	17.1 *2002*
Germany	12.4	12.0	13.0	14.0	15.7	16.1 *2003*
Greece	13.4	13.9	14.6	15.7	16.2	17.2
Hungary	12.3	12.0	11.6	12.0	12.7	13.1
Iceland	15.0 *1963*	15.0 *1973*	15.8	16.2	18.1	18.0
Ireland	12.6	12.4	12.6	13.3	14.6	15.7 *2003*
Italy	13.4 *1961*	13.3 *1971*	13.3	15.1	16.5	. .
Japan	11.6	12.5	14.6	16.2	17.5	18.1
Korea	. .	10.2	10.5	12.4	14.3	15.8
Luxembourg	12.5	12.1	12.3	14.2	15.5	15.5 *2003*
Mexico	14.2	14.8	15.4	16.2	16.8	17.1
Netherlands	13.9	13.3	13.7	14.4	15.3	16.4
New Zealand	13.0	12.4	13.2	14.7	16.7	17.5
Norway	14.5	13.8	14.3	14.6	16.0	16.7 *2003*
Poland	12.7	12.5	12.0	12.4	13.6	14.4
Portugal	13.0	12.2	12.9	13.9	15.3	15.6 *2003*
Slovak Republic	13.2	12.3	12.3	12.2	12.9	13.2
Spain	13.1	13.3	14.8	15.4	16.6	16.8 *2002*
Sweden	13.7	14.2	14.3	15.3	16.7	17.4
Switzerland	. .	. .	14.6 *1982*	15.3	16.9	17.5 *2003*
Turkey	11.2	11.5	11.7	12.4	12.9	13.1
United Kingdom	11.9	12.0	12.6	14.0	15.7	16.1 *2002*
United States	12.8	13.1	14.1	15.1	16.3	17.1 *2004*
Consistent average (28)[a]	**12.9**	**12.8**	**13.4**	**14.3**	**15.6**	**16.2**

StatLink http://dx.doi.org/10.1787/114621347642

Note: Methodology used to calculate life expectancy can vary between countries, affecting comparability (different methods can change a country's life expectancy estimates by a fraction of a year).

a) Excludes Korea and Switzerland. The 2005 OECD average includes the latest year available for Italy (2001).

Source: OECD Health Data 2007. (For the 22 European countries, the Eurostat NewCronos Database is the main data source for 1985 onwards.)

Table A.2.3a. **Potential years of life lost (PYLL), all causes, females, 1970 to 2004**

	1970	1980	1990	2000	2004
Australia	6 311	4 267	3 294	2 605	2 362 *2003*
Austria	6 803	4 950	3 456	2 638	2 386
Belgium	6 176	4 807	3 574	3 053 *1987*	. .
Canada	5 646	4 385	3 317	2 676	2 669 *2002*
Czech Republic	. .	. .	4 415	3 019	2 697
Denmark	5 169	4 523	3 989	3 055	3 081 *2001*
Finland	5 177	3 363	3 312	2 603	2 511
France	5 358	4 206	3 210	2 609	2 467 *2003*
Germany	6 673	4 702	3 539	2 606	2 351
Greece	6 189	4 411	3 215	2 352	2 160
Hungary	8 019	6 908	6 262	4 772	4 310 *2003*
Iceland	4 029	2 948	2 938	2 117	2 241
Ireland	6 321	4 780	3 731	3 085	2 471
Italy	6 867	4 324	3 022	2 307	2 179 *2002*
Japan	5 555	3 382	2 490	2 068	1 906
Korea	. .	. .	3 980	2 940	2 466
Luxembourg	7 389	5 261	3 814	2 747	2 087
Mexico	17 634	10 577 *1981*	8 029	. .	. .
Netherlands	4 680	3 579	3 163	2 842	2 500
New Zealand	6 275	5 518	4 206	3 108	3 069 *2001*
Norway	4 110	3 289	3 101	2 561	2 434
Poland	7 682	5 996	5 227	3 705	3 306
Portugal	11 811	6 308	4 399	3 166	2 858 *2003*
Slovak Republic	. .	. .	4 539 *1992*	3 587	3 638 *2002*
Spain	6 350 *1969*	3 933	3 184	2 325	2 079
Sweden	4 345	3 429	2 937	2 191	2 141 *2002*
Switzerland	4 910	3 704	3 016	2 399	2 133
Turkey	. .	. .	. .	. .	. .
United Kingdom	5 756	4 667	3 559	2 947 *1999*	2 713
United States	6 679	5 125	4 338	3 772	3 719 *2002*
Latest average[a]	**. .**	**. .**	**3 836**	**2 852**	**2 627**
Consistent average (24)[b]	**6 171**	**4 498**	**3 613**	**2 802**	**2 589**

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a) Average comprises all countries for which recent data are available.
b) Excludes Belgium, the Czech Republic, Korea, Mexico, the Slovak Republic and Turkey.
Source: OECD Health Data 2007. Raw mortality data are extracted from the WHO Mortality Database (accessed in April 2007).

Table A.2.3b. **Potential years of life lost (PYLL), all causes, males, 1970 to 2004**

	1970	1980	1990	2000	2004
Australia	10 869	7 946	6 016	4 618	4 082 *2003*
Austria	12 301	9 771	6 836	5 139	4 619
Belgium	10 566	8 592	6 505	5 576 *1987*	. .
Canada	9 830	8 130	6 122	4 456	4 296 *2002*
Czech Republic	. .	. .	9 690	6 581	6 012
Denmark	8 207	7 380	6 537	4 953	4 723 *2001*
Finland	11 697	8 465	7 714	5 682	5 417
France	9 929	8 717	7 184	5 608	5 234 *2003*
Germany	11 385	8 600	6 809	4 984	4 354
Greece	9 257	7 241	5 728	5 140	4 622
Hungary	12 881	12 766	13 288	10 520	9 483 *2003*
Iceland	9 318	7 133	5 607	4 526	3 114
Ireland	9 209	7 914	6 151	5 505	4 246
Italy	10 816	7 942	6 029	4 368	4 198 *2002*
Japan	9 012	5 913	4 602	3 932	3 606
Korea	. .	. .	8 706	6 388	5 219
Luxembourg	12 534	7 829	7 013	5 211	4 737
Mexico	22 909	17 383 *1981*	12 916	. .	. .
Netherlands	7 938	6 298	5 231	4 256	3 693
New Zealand	10 395	8 495	7 361	5 208	5 035 *2001*
Norway	8 086	6 799	5 940	4 711	3 961
Poland	13 026	12 717	11 969	8 698	8 075
Portugal	17 404	11 987	9 064	7 130	6 024 *2003*
Slovak Republic	. .	. .	10 683 *1992*	8 739	8 117 *2002*
Spain	10 044 *1969*	7 265	6 884	5 142	4 528
Sweden	7 178	6 258	5 041	3 661	3 491 *2002*
Switzerland	8 966	7 074	5 991	4 400	3 769
Turkey	. .	. .	. .	. .	. .
United Kingdom	9 208	7 502	5 934	4 820 *1999*	4 390
United States	11 937	9 516	8 262	6 478	6 418 *2002*
Latest average[a]	**. .**	**. .**	**7 442**	**5 587**	**5 017**
Consistent average (24)[b]	**10 476**	**8 319**	**6 971**	**5 381**	**4 838**

StatLink http://dx.doi.org/10.1787/114641652540

a) Average comprises all countries for which recent data are available.
b) Excludes Belgium, the Czech Republic, Korea, Mexico, the Slovak Republic and Turkey.
Source: OECD Health Data 2007. Raw mortality data are extracted from the WHO Mortality Database (accessed in April 2007).

Table A.2.4. **Ischemic heart disease and stroke, age-standardised mortality rate, per 100 000 females, males and total population, 1980 and 2004**

	Ischemic heart disease						Stroke					
	1980			2004			1980			2004		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Australia	164.9	341.5	242.5	65.4	122.3	91.3 *2003*	104.5	116.0	110.7	39.5	43.7	41.7 *2003*
Austria	100.5	219.3	147.1	82.7	144.5	108.3	133.1	168.7	146.7	36.1	45.0	40.1
Belgium	80.4	186.7	126.0	. .	. .	. .	89.8	111.5	98.7	. .	. .	. .
Canada	159.1	322.0	231.8	67.7	134.8	97.2 *2002*	64.1	78.1	70.2	32.3	39.0	35.3 *2002*
Czech Republic	. .	. .	. .	117.3	209.4	155.6	. .	. .	. .	95.8	121.5	106.5
Denmark	179.6	366.1	261.2	75.3	148.6	106.4 *2001*	68.6	88.7	77.0	50.8	64.9	56.9 *2001*
Finland	168.9	411.4	265.2	91.0	201.3	137.2	100.4	122.1	108.9	47.7	61.2	53.7
France	47.3	108.0	73.5	26.3	64.2	42.5 *2003*	78.2	111.7	91.8	29.5	41.1	34.5 *2003*
Germany	107.6	249.7	162.2	75.7	142.9	104.2	115.3	145.9	126.8	41.3	49.9	45.4
Greece	44.2	114.5	76.3	53.9	115.8	82.9	151.8	143.9	148.9	99.3	96.0	98.5
Hungary	156.1	298.0	217.0	169.6	292.4	219.7 *2003*	189.1	243.0	211.7	108.6	160.8	129.5 *2003*
Iceland	136.7	325.1	224.5	61.6	160.8	106.0	67.0	67.0	67.0	37.1	46.5	41.1
Ireland	177.2	367.3	264.9	80.3	164.4	118.4	127.3	132.0	129.7	41.2	45.9	43.7
Italy	86.9	169.6	123.2	46.9	97.7	68.5 *2002*	104.0	133.9	116.7	49.4	64.1	55.4 *2002*
Japan	39.5	65.7	50.9	19.5	42.0	29.5	148.1	203.8	172.3	39.6	65.7	50.7
Korea	. .	. .	. .	27.1	45.6	34.9	. .	. .	. .	81.3	118.2	95.8
Luxembourg	96.5	191.0	137.7	47.1	110.0	72.5	159.5	203.8	177.0	50.4	57.2	53.4
Mexico	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Netherlands	106.1	246.2	167.2	40.8	89.6	61.5	73.6	89.5	80.4	41.6	49.5	45.2
New Zealand	193.3	386.3	277.2	97.1	179.4	133.4 *2001*	116.0	126.0	120.2	54.2	54.7	55.1 *2001*
Norway	125.2	293.4	200.6	56.6	120.7	84.6	86.7	106.6	95.4	41.2	50.8	45.4
Poland	57.5	160.7	101.5	76.1	160.1	110.9	69.3	82.1	75.1	77.2	102.5	88.1
Portugal	64.2	124.3	89.6	43.8	78.8	59.4 *2003*	250.1	306.2	273.9	99.6	125.9	111.2 *2003*
Slovak Republic	. .	. .	. .	215.9	341.3	266.8 *2002*	. .	. .	. .	70.9	105.6	84.9 *2002*
Spain	49.1	108.7	75.1	34.8	79.1	54.5	121.2	142.4	130.3	39.1	49.6	44.0
Sweden	187.7	388.5	276.8	75.7	159.1	112.0 *2002*	69.6	83.4	75.9	48.7	58.2	53.1 *2002*
Switzerland	71.5	175.7	115.6	47.3	95.2	67.5	80.3	98.1	87.4	26.2	33.2	29.2
Turkey	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
United Kingdom	162.0	366.6	247.7	73.1	153.6	108.7	107.4	122.8	114.1	53.1	58.3	55.9
United States	168.5	330.2	237.1	94.3	170.3	127.6 *2002*	65.1	76.7	70.0	38.3	41.4	39.9 *2002*
Latest average[a]	**. .**	**. .**	**. .**	**72.7**	**141.6**	**102.3**	**. .**	**. .**	**. .**	**54.4**	**68.5**	**60.5**
Consistent average (24)[b]	**118.8**	**255.4**	**177.8**	**67.0**	**134.8**	**96.3**	**110.4**	**133.0**	**119.9**	**50.9**	**62.7**	**56.1**

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Note: All mortality rates are standardised to the OECD standard population (1980).

a) Average comprises all countries for which recent data are available (2001+).

b) Excludes Belgium, the Czech Republic, Korea, Mexico, the Slovak Republic and Turkey.

Source: OECD Health Data 2007. Raw mortality data are extracted from the WHO Mortality Database (accessed in April 2007).

Table A.2.5a. **All cancers, age-standardised mortality rate, per 100 000 females, males and total population, 1960, 1980 and 2004**

	1960			1980			2004		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Australia	132.9	192.5	158.5	136.4	239.1	179.1	123.2	195.7	155.0 *2003*
Austria	182.6	277.0	220.0	162.9	274.0	203.0	127.4	212.9	161.4
Belgium	174.3	242.8	204.4	158.5	310.0	220.4	. .	. .	. .
Canada	156.4	200.1	177.3	146.5	238.5	185.8	145.3	212.6	173.2 *2002*
Czech Republic	. .	. .	. .	. .	. .	. .	162.9	299.1	218.0
Denmark	198.6	230.2	213.0	187.2	267.0	219.7	186.2	245.0	209.3 *2001*
Finland	159.0	268.1	202.2	132.8	264.2	180.2	110.1	182.7	137.8
France	147.6	234.9	182.0	128.4	281.1	192.0	115.4	244.0	170.2 *2003*
Germany	179.3	236.3	203.1	162.2	266.9	200.0	127.6	210.1	161.2
Greece	96.1	151.4	120.5	109.8	195.5	148.3	108.3	208.8	153.7
Hungary	165.1	210.2	184.1	176.9	299.1	227.0	177.9	345.7	244.8 *2003*
Iceland	217.8	211.1	213.2	140.3	191.8	162.6	140.6	176.3	154.8
Ireland	150.1	182.6	165.5	169.1	237.9	199.3	150.5	223.7	180.7
Italy	137.6	191.2	161.2	135.2	256.0	187.0	121.6	231.0	167.3 *2002*
Japan	127.6	185.6	153.5	116.9	208.5	156.1	99.3	207.5	145.1
Korea	. .	. .	. .	. .	. .	. .	100.8	256.8	162.3
Luxembourg	152.2	199.4	174.6	182.0	289.2	225.1	109.5	223.9	156.8
Mexico	. .	. .	. .	. .	. .	. .	. .	. .	. .
Netherlands	170.5	228.0	197.5	149.9	297.0	210.8	146.1	235.6	182.2
New Zealand	147.3	191.3	166.6	165.8	247.9	198.6	151.8	222.3	181.0 *2001*
Norway	143.9	180.0	159.7	137.4	207.5	166.1	134.5	201.0	161.2
Poland	110.4	148.0	125.1	139.8	244.7	182.3	145.0	287.9	201.4
Portugal	104.8	140.0	119.0	119.7	200.0	152.5	106.7	211.4	151.3 *2003*
Slovak Republic	. .	. .	. .	. .	. .	. .	139.1	291.8	200.0 *2002*
Spain	120.8	173.3	142.7	112.6	211.2	153.9	99.1	228.2	155.3
Sweden	155.6	189.5	170.5	150.1	212.7	175.5	130.1	176.7	148.8 *2002*
Switzerland	161.7	238.4	193.9	142.0	250.7	185.7	111.7	185.6	142.3
Turkey	. .	. .	. .	. .	. .	. .	. .	. .	. .
United Kingdom	156.4	248.3	193.3	168.7	273.0	208.1	148.6	214.1	175.6
United States	145.9	197.5	169.3	144.4	234.2	180.7	140.2	203.0	166.3 *2002*
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**131.8**	**227.2**	**171.0**
Consistent average (24)[b]	**150.8**	**204.4**	**173.6**	**146.5**	**245.3**	**186.6**	**131.5**	**220.2**	**168.2**

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Note: All mortality rates are standardised to the OECD standard population (1980).

a) Average comprises all countries for which recent data are available (2001+).

b) Excludes Belgium, the Czech Republic, Korea, Mexico, the Slovak Republic and Turkey.

Source: OECD Health Data 2007. Raw mortality data are extracted from the WHO Mortality Database (accessed in April 2007).

Table A.2.5b. **Lung cancers, age-standardised mortality rate, per 100 000 females, males and total population, 1960, 1980 and 2004**

	1960			1980			2004		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Australia	4.6	35.9	19.0	13.0	70.8	38.2	19.5	42.5	30.0 *2003*
Austria	7.3	65.5	31.2	10.4	72.5	34.0	16.3	48.5	30.0
Belgium	5.1	48.5	24.8	8.4	110.6	51.7	. .	. .	. .
Canada	4.8	33.9	19.2	17.2	75.0	42.9	35.1	63.5	47.4 *2002*
Czech Republic	. .	. .	. .	. .	. .	. .	17.4	77.5	42.7
Denmark	8.1	38.2	22.3	18.8	75.2	43.5	39.0	62.9	49.0 *2001*
Finland	3.8	76.1	33.0	8.7	94.2	41.1	11.3	45.1	25.1
France	4.5	28.2	14.6	5.2	57.1	27.6	11.5	59.1	32.7 *2003*
Germany	6.0	45.2	22.7	8.1	70.8	31.9	15.7	53.5	31.9
Greece	6.1	32.6	18.1 *1961*	8.3	59.7	31.7	10.3	67.7	36.6
Hungary	8.5	35.6	20.5	14.0	79.5	41.7	29.5	105.5	60.5 *2003*
Iceland	16.5	12.6	15.1	29.7	24.5	27.0	38.5	37.3	37.8
Ireland	7.3	32.0	19.5	19.8	62.9	39.7	27.3	51.8	38.1
Italy	5.2	26.4	14.9	8.2	71.8	36.3	12.5	66.4	35.7 *2002*
Japan	4.6	13.4	8.6	10.2	35.7	21.1	11.8	46.9	26.6
Korea	. .	. .	. .	. .	. .	. .	15.3	66.3	35.1
Luxembourg	. .	. .	. .	10.6	96.5	46.8	14.3	59.6	33.5
Mexico	. .	. .	. .	7.0	18.4	12.2 *1981*	. .	. .	. .
Netherlands	4.6	53.9	28.0	8.1	113.0	52.9	26.0	72.2	45.4
New Zealand	6.1	37.6	20.7	17.6	71.6	41.1	26.6	45.2	34.6 *2001*
Norway	3.6	16.2	9.5	7.6	33.8	19.3	23.7	44.3	32.7
Poland	4.2	22.5	11.8	9.5	72.6	36.0	17.8	91.0	47.8
Portugal	2.9	11.4	6.4	5.0	28.7	15.0	7.0	40.7	21.8 *2003*
Slovak Republic	. .	. .	. .	. .	. .	. .	9.8	73.0	35.5 *2002*
Spain	5.1	22.5	12.7	5.4	46.1	22.9	7.5	63.4	32.5
Sweden	4.9	19.1	11.6	9.9	35.8	21.4	19.2	29.9	23.8 *2002*
Switzerland	4.2	41.5	20.6	7.4	66.3	32.6	15.5	43.4	27.6
Turkey	. .	. .	. .	. .	. .	. .	. .	. .	. .
United Kingdom	10.4	82.0	40.9	23.8	103.7	56.1	28.7	52.4	39.0
United States	6.0	40.7	22.4	22.1	77.2	45.5	37.3	65.0	49.3 *2002*
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**20.2**	**58.3**	**36.4**
Consistent average (23)[b]	**6.1**	**35.8**	**19.3**	**12.5**	**65.2**	**34.8**	**21.2**	**56.4**	**36.3**

StatLink http://dx.doi.org/10.1787/114678208856

Note: All mortality rates are standardised to the OECD standard population (1980).

a) Average comprises all countries for which recent data are available (2001+).

b) Excludes Belgium, the Czech Republic, Korea, Luxembourg, Mexico, the Slovak Republic and Turkey.

Source: OECD Health Data 2007. Raw mortality data are extracted from the WHO Mortality Database (accessed in April 2007).

Table A.2.5c. **Breast and prostate cancers, age-standardised mortality rates, 1960, 1980 and 2004**

	Breast cancer per 100 000 females			Prostate cancer per 100 000 males		
	1960	1980	2004	1960	1980	2004
Australia	24.4	24.9	21.1 *2003*	25.9	26.3	26.0 *2003*
Austria	20.3	26.5	22.5	23.2	27.1	24.6
Belgium	26.7	33.0	. .	23.8	29.7	. .
Canada	30.4	29.5	23.7 *2002*	22.1	24.2	22.9 *2002*
Czech Republic	. .	. .	25.5	. .	. .	31.1
Denmark	31.9	34.6	32.8 *2001*	23.2	28.9	35.1 *2001*
Finland	17.3	20.4	19.1	20.5	30.2	27.6
France	20.7	23.5	23.5 *2003*	26.2	26.5	24.8 *2003*
Germany	21.4	27.0	24.5	19.9	27.1	21.8
Greece	6.0 *1961*	18.3	20.9	7.3 *1961*	12.8	18.6
Hungary	15.3	26.2	28.5 *2003*	17.9	26.8	25.7 *2003*
Iceland	26.6	15.9	23.9	14.1	13.0	33.0
Ireland	24.7	35.7	28.0	15.2	25.3	30.5
Italy	18.7	24.2	22.6 *2002*	13.3	18.1	17.3 *2002*
Japan	4.7	6.6	10.4	2.3	4.5	9.3
Korea	. .	. .	5.6	. .	. .	8.2
Luxembourg	. .	30.2	20.1	. .	31.2	17.1
Mexico	. .	8.1 *1981*	. .	. .	12.6 *1981*	. .
Netherlands	32.0	33.3	27.7	23.1	28.3	26.7
New Zealand	25.8	34.0	26.4 *2001*	21.9	30.2	31.8 *2001*
Norway	22.0	23.0	20.1	27.7	37.3	36.0
Poland	7.2	18.3	18.8	6.0	14.5	22.5
Portugal	15.2	18.8	19.2 *2003*	15.6	24.5	25.9 *2003*
Slovak Republic	. .	. .	22.1 *2002*	. .	. .	23.5 *2002*
Spain	10.6	17.2	17.4	16.5	22.0	19.7
Sweden	25.7	25.2	19.6 *2002*	28.7	35.0	34.4 *2002*
Switzerland	29.8	31.1	23.0	26.9	32.2	27.3
Turkey	. .	. .	. .	. .	. .	. .
United Kingdom	30.4	35.9	26.0	20.4	21.6	26.1
United States	27.5	27.9	22.0 *2002*	22.9	25.3	20.5 *2002*
Latest average[a]	**. .**	**. .**	**22.0**	**. .**	**. .**	**24.7**
Consistent average (23)[b]	**21.2**	**25.1**	**22.7**	**19.2**	**24.4**	**25.6**

StatLink http://dx.doi.org/10.1787/114678208856

Note: All mortality rates are standardised to the OECD standard population (1980).

a) Average comprises all countries for which recent data are available (2001+).

b) Excludes Belgium, the Czech Republic, Korea, Luxembourg, Mexico, the Slovak Republic and Turkey.

Source: OECD Health Data 2007. Raw mortality data are extracted from the WHO Mortality Database (accessed in April 2007).

Table A.2.6. **Road accidents, age-standardised mortality rates per 100 000 population, 1960 to 2004**

	1960	1970	1980	1990	2000	2004
Australia	28.1	32.8	24.6	14.4	10.2	8.4 *2003*
Austria	27.6	33.3	25.5	18.3	11.2	9.8
Belgium	19.2	29.8	24.9	18.1	. .	. .
Canada	21.8	25.0	22.1	13.9	9.6	9.3 *2002*
Czech Republic	. .	. .	. .	14.5	14.1	11.8
Denmark	17.1	24.2	13.5	11.2	9.1	8.2 *2001*
Finland	18.1	23.7	11.4	13.8	7.5	7.6
France	18.1	23.2	20.4	17.5	12.5	9.7 *2003*
Germany	25.6	32.2	20.3	13.6	9.5	7.1
Greece	4.8	11.6	17.1	21.2	18.2	16.4
Hungary	6.7	16.3	19.1	26.9	13.3	14.1 *2003*
Iceland	5.3	16.6	10.1	11.1	11.7	7.1
Ireland	9.0	16.6	17.9	13.9	10.5	6.2
Italy	17.8	24.3	19.2	14.9	12.2	12.0 *2002*
Japan	15.9	22.5	11.4	11.9	8.5	6.6
Korea	. .	. .	. .	36.1	27.0	17.7
Luxembourg	23.8	41.6	29.6	18.7	18.7	11.9
Mexico	. .	9.3	33.8 *1981*	21.7	. .	. .
Netherlands	17.6	24.8	13.7	8.8	7.1	5.2
New Zealand	16.5	24.2	19.8	22.3	13.4	12.8 *2001*
Norway	8.6	15.0	9.1	8.1	8.6	6.7
Poland	4.7	12.1	19.9 *1983*	24.8	16.7	14.9
Portugal	9.1	22.5	29.4	28.0	13.0	17.4 *2003*
Slovak Republic	. .	. .	. .	20.6 *1992*	14.4	13.0 *2002*
Spain	8.5	13.6 *1969*	17.1	19.9	14.6	11.2
Sweden	14.4	16.5	10.5	8.8	6.3	5.7 *2002*
Switzerland	22.0	26.1	18.5	13.1	8.2	6.7
Turkey	. .	. .	. .	. .	. .	. .
United Kingdom	14.3	14.2	12.1	9.8	5.8 *1999*	5.8
United States	22.6	27.0	22.4	18.5	15.8	15.9 *2002*
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**. .**	**10.3**
Consistent average (24)[b]	**15.8**	**22.5**	**18.1**	**16.0**	**11.3**	**9.9**

StatLink http://dx.doi.org/10.1787/114742443718

Note: All mortality rates are standardised to the OECD standard population (1980).

a) Average comprises all countries for which recent data are available (2001+).

b) Excludes Belgium, the Czech Republic, Korea, Mexico, the Slovak Republic and Turkey.

Source: OECD Health Data 2007. Raw mortality data are extracted from the WHO Mortality Database (accessed in April 2007).

Table A.2.7. **Suicides, age-standardised mortality rates per 100 000 population, 1960 to 2004**

	1960	1970	1980	1990	2000	2004
Australia	11.3	13.3	11.2	12.5	11.8	10.2 *2003*
Austria	21.2	23.0	23.7	20.5	16.5	14.5
Belgium	13.3	15.1	20.2	16.6	. .	. .
Canada	8.8	12.4	13.9	12.0	10.8	10.6 *2002*
Czech Republic	. .	. .	. .	17.8	13.8	13.0
Denmark	19.7	20.4	29.2	20.5	11.4	11.3 *2001*
Finland	21.6	21.4	24.1	27.8	20.4	18.4
France	15.0	14.7	17.9	17.7	15.6	15.3 *2003*
Germany	17.5	20.2	18.5	14.5	11.0	10.3
Greece	4.1	3.1	3.1	3.1	3.0	2.6
Hungary	25.6	32.9	41.4	35.3	26.8	22.6 *2003*
Iceland	9.5	14.9	11.4	15.9	18.0	11.7
Ireland	3.0	1.9	7.1	10.1	11.8	10.0
Italy	6.2	5.6	6.7	6.5	5.8	5.6 *2002*
Japan	25.1	17.4	17.9	14.5	19.1	19.1
Korea	. .	. .	. .	7.9	14.1	24.2
Luxembourg	8.7	13.6	11.6	16.0	12.8	12.5
Mexico	. .	1.7	2.3 *1981*	3.0	. .	. .
Netherlands	7.3	8.5	9.9	8.7	8.2	7.9
New Zealand	10.7	10.7	11.3	13.4	12.0	13.0 *2001*
Norway	6.2	8.1	11.9	14.4	11.6	10.9
Poland	8.9	11.7	12.6 *1979*	12.9	13.8	14.0
Portugal	9.8	8.9	7.6	8.0	4.1	8.7 *2003*
Slovak Republic	. .	. .	. .	14.6 *1992*	12.4	11.9 *2002*
Spain	6.0	4.6 *1969*	4.4	6.8	6.9	6.6
Sweden	15.9	20.4	17.7	15.0	10.9	11.4 *2002*
Switzerland	18.6	18.2	23.8	19.1	16.2	14.0
Turkey	. .	. .	. .	. .	. .	. .
United Kingdom	9.7	7.3	8.1	7.4	6.9 *1999*	6.3
United States	11.4	12.3	11.6	11.9	9.8	10.2 *2002*
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**. .**	**12.1**
Consistent average (24)[b]	**12.6**	**13.6**	**14.9**	**14.4**	**12.3**	**11.6**

StatLink http://dx.doi.org/10.1787/114752758282

Note: All mortality rates are standardised to the OECD standard population (1980).

a) Average comprises all countries for which recent data are available (2001+).

b) Excludes Belgium, the Czech Republic, Korea, Mexico, the Slovak Republic and Turkey.

Source: OECD Health Data 2007. Raw mortality data are extracted from the WHO Mortality Database (accessed in April 2007).

Table A.2.8. **Infant mortality rate, deaths per 1 000 live births, 1970 to 2005**

	1970	1980	1990	2000	2005
Australia	17.9	10.7	8.2	5.2	5.0
Austria	25.9	14.3	7.8	4.8	4.2
Belgium	21.1	12.1	6.5	4.8	3.7
Canada	18.8	10.4	6.8	5.3	5.3 *2004*
Czech Republic	20.2	16.9	10.8	4.1	3.4
Denmark	14.2	8.4	7.5	5.3	4.4
Finland	13.2	7.6	5.6	3.8	3.0
France	18.2	10.0	7.3	4.4	3.6
Germany	22.5	12.4	7.0	4.4	3.9
Greece	29.6	17.9	9.7	5.4	3.8
Hungary	35.9	23.2	14.8	9.2	6.2
Iceland	13.3	7.8	5.8	3.0	2.3
Ireland	19.5	11.1	8.2	6.2	4.0
Italy	29.0	14.6	8.2	4.5	4.7
Japan	13.1	7.5	4.6	3.2	2.8
Korea	45.0	17.0 *1981*	12.0 *1989*	6.2 *1999*	5.3 *2002*
Luxembourg	25.0	11.4	7.3	5.1	2.6
Mexico	79.4	51.0	36.2	23.3	18.8
Netherlands	12.7	8.6	7.1	5.1	4.9
New Zealand	16.7	13.0	8.4	6.1	5.1
Norway	12.7	8.1	6.9	3.8	3.1
Poland	36.7	25.5	19.3	8.1	6.4
Portugal	55.5	24.2	11.0	5.5	3.5
Slovak Republic	25.7	20.9	12.0	8.6	7.2
Spain	28.1	12.3	7.6	4.4	4.1
Sweden	11.0	6.9	6.0	3.4	2.4
Switzerland	15.1	9.1	6.8	4.9	4.2
Turkey	145.0	117.5	55.4	28.9	23.6
United Kingdom	18.5	12.1	7.9	5.6	5.1
United States	20.0	12.6	9.2	6.9	6.8 *2004*
Average (30)	**28.7**	**17.8**	**11.1**	**6.7**	**5.4**

StatLink http://dx.doi.org/10.1787/114756500755

Note: In Canada, Japan, the United States and some of the Nordic countries, very premature babies with a low chance of survival are registered as live births, which increases mortality rates compared with other countries that do not register them as live births.

Source: OECD Health Data 2007.

Table A.2.9. **Low birth weight, percentage of total live births, 1980 to 2005**

	1980	1990	2000	2005
Australia	5.6 *1983*	6.1	6.3	6.4 *2004*
Austria	5.7	5.6	6.3	6.8
Belgium	5.6 *1982*	6.1	7.3	7.8 *2004*
Canada	5.8	5.5	5.5	5.9 *2004*
Czech Republic	5.9	5.5	5.8	6.7
Denmark	5.8	5.2	4.7	4.9
Finland	3.9	3.6	4.3	4.1
France	5.2 *1981*	5.3	6.8	6.8 *2004*
Germany	5.5	5.7	6.4	6.8
Greece	5.9	6.0	8.1	8.8
Hungary	10.4	9.3	8.4	8.2
Iceland	3.4	2.9	3.9	3.9
Ireland	. .	4.2	4.8	4.9 *2004*
Italy	5.6	5.6	6.7	6.7 *2004*
Japan	5.2	6.3	8.6	9.5
Korea	. .	2.6 *1993*	3.8	4.3
Luxembourg	6.3	5.4	4.3 *2001*	4.9 *2003*
Mexico	. .	. .	9.7	8.8
Netherlands	4.0 *1979*	4.8	5.2	6.2
New Zealand	5.8	6.2	6.4	6.1 *2004*
Norway	3.8	4.6	5.0	4.8 *2004*
Poland	7.6	8.1	5.7	6.1
Portugal	4.6	5.6	7.1	7.5
Slovak Republic	5.9	5.8	6.7	7.2
Spain	2.8 *1982*	4.5	6.5	7.1 *2004*
Sweden	4.2	4.5	4.4	4.2 *2004*
Switzerland	5.1	5.5	6.3	7.0
Turkey	. .	. .	. .	11.3 *2003*
United Kingdom	6.7	6.7	7.5	7.5
United States	6.8	7.2	7.6	8.1 *2004*
Latest average[a]	**. .**	**. .**	**. .**	**6.6**
Consistent average (26)[b]	**5.5**	**5.7**	**6.2**	**6.5**

StatLink http://dx.doi.org/10.1787/114774032850

a) Average comprises all countries for which recent data are available (2003+).
b) Excludes Ireland, Korea, Mexico and Turkey.
Source: OECD Health Data 2007.

Table A.2.10. **Average number of decayed, missing and filled teeth, 12-years-old children, 1980 to 2003**

	1980	1985	1990	1995	2000	2003
Australia	3.6	2.1	1.4	1.0	0.8	1.0 *2001*
Austria	3.0	4.3	4.2	3.0 *1993*	1.0 *2002*	1.0 *2002*
Belgium	. .	3.2 *1986*	2.7	1.9 *1994*	1.1 *2001*	1.1 *2001*
Canada	3.2 *1982*	. .	. .	. .	. .	. .
Czech Republic	. .	3.3 *1987*	. .	3.1 *1994*	3.1	3.0
Denmark	. .	. .	1.3 *1991*	1.2	1.0	0.9
Finland	5.2 *1979*	2.8	1.2 *1991*	1.2 *1994*	1.2	1.2
France	. .	4.2 *1987*	3.0	2.1 *1993*	1.9 *1998*	1.2 *2006*
Germany	6.4	6.3 *1986*	4.1	2.3	1.2	0.7 *2005*
Greece	. .	4.7	4.4	2.5	2.7 *1998*	. .
Hungary	6.6	5.0	4.3 *1991*	3.8 *1996*	3.3 *2001*	3.3 *2001*
Iceland	7.8 *1983*	6.6 *1986*	3.4 *1991*	1.5 *1996*	. .	2.1 *2005*
Ireland	5.4	2.9	2.7	1.5 *1996*	1.1 *2002*	1.1 *2002*
Italy	5.5	4.0	4.0	2.1 *1996*	. .	1.2
Japan	5.4 *1981*	4.9 *1987*	3.6 *1993*	3.6 *1993*	2.4 *1999*	1.7 *2005*
Korea	. .	. .	. .	3.1	3.3	. .
Luxembourg	4.0 *1982*	3.3	2.7	2.3 *1994*	1.2 *2001*	0.9
Mexico	. .	. .	. .	. .	. .	. .
Netherlands	4.8	2.4	1.5	0.7 *1996*	1.1	0.8 *2002*
New Zealand	5.1	3.2	2.0	1.4	1.6	1.6
Norway	3.3 *1982*	3.4	2.4	1.9	1.5	1.7
Poland	7.0	4.4	5.1 *1991*	4.0 *1998*	3.8	3.8 *2000*
Portugal	4.6 *1979*	3.8	3.2	. .	3.0	3.0 *2000*
Slovak Republic	. .	. .	. .	. .	3.2 *2001*	2.8
Spain	. .	4.2	3.5 *1989*	2.3 *1994*	1.1	. .
Sweden	3.2 *1982*	3.1	2.0	1.4	1.0	1.1 *2002*
Switzerland	3.0	2.2 *1984*	1.6 *1988*	0.8 *1996*	0.9	0.9 *2005*
Turkey	. .	2.7 *1987*	2.7	. .	. .	1.9 *2004*
United Kingdom	3.1 *1983*	3.1 *1983*	1.6 *1988*	1.1 *1996*	0.9	0.8
United States	2.6	1.8 *1986*	1.3 *1991*	1.3 *1996*	1.2	1.3 *2004*
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**. .**	**1.6**
Consistent average (16)[b]	**4.5**	**3.5**	**2.6**	**2.0**	**1.5**	**1.4**

StatLink http://dx.doi.org/10.1787/114782440136

a) Average comprises all countries for which recent data are available (2000+).

b) Excludes Belgium, Canada, the Czech Republic, Denmark, France, Greece, Iceland, Italy, Korea, Mexico, Portugal, the Slovak Republic, Spain and Turkey.

Source: OECD Health Data 2007.

Table A.2.12. **AIDS incidence rates, per million population, 1985 to 2005**

	1985	1990	1995	2000	2005
Australia	8.0	39.0	45.0	14.0	13.0
Austria	3.0	21.4	26.2	10.5	12.5
Belgium	7.0	21.0	24.5	13.6	15.5
Canada	15.5	52.8	56.2	16.2	9.8
Czech Republic	0.1	0.5	1.3	1.4	1.1
Denmark	7.5	38.3	40.7	10.9	8.9
Finland	1.0	3.0	8.0	3.3	5.4
France	10.1	74.0	88.6	28.4	22.0 *2004*
Germany	4.0	23.0	22.9	9.6	8.1
Greece	1.4	14.1	20.7	11.8	9.1
Hungary	0.1	1.8	3.0	2.6	3.3
Iceland	4.1	11.8	15.0	3.6	3.4
Ireland	1.4	17.4	14.7	3.4	11.2
Italy	3.0	52.0	98.8	33.8	25.4
Japan	0.1	0.3	1.4	2.6	2.9
Korea	0.0	0.1	0.3	0.7	1.4
Luxembourg	8.0	24.0	36.6	23.0	17.4
Mexico	4.6	32.5	46.4	46.2	45.3 *2003*
Netherlands	4.6	28.0	34.5	15.6	12.1
New Zealand	3.7	21.0	16.9	6.5	8.3
Norway	3.0	14.0	15.4	8.4	8.5 *2003*
Poland	0.1	0.6	3.0	3.2	4.3
Portugal	2.9	25.5	79.4	97.2	79.5
Slovak Republic	0.0	0.0	0.4	0.9	0.6
Spain	4.3	96.8	178.1	69.3	36.0
Sweden	3.0	15.2	22.2	6.8	5.1
Switzerland	13.0	97.0	85.3	28.7	37.1
Turkey	0.0	0.3	0.4	0.7	5.0
United Kingdom	4.0	22.0	30.1	14.1	13.3
United States[a]	34.0	167.0	270.0	143.0	137.0
Average (30)	**5.1**	**30.5**	**42.9**	**21.0**	**18.8**

StatLink http://dx.doi.org/10.1787/114835427336

Note: Data for European countries are extracted from the European Center for the Epidemiological Monitoring of AIDS.

a) The United States expanded their AIDS surveillance case definition in 1993, resulting in higher reported incidence rates.

Source: OECD Health Data 2007.

Table A.3.1. **Tobacco consumption, daily smokers, population aged 15 and over, 1980 to 2005**

	1980			1990			2005		
	Females	Males	Total	Females	Males	Total	Females	Males	Total
Australia	31.1	41.1	36.0	27.0	30.2	28.6 *1989*	16.5	18.9	17.7 *2004*
Austria	. .	. .	. .	. .	. .	. .	. .	. .	. .
Belgium	28.4	52.6	40.5 *1982*	26.0	38.0	32.0	16.0	23.0	20.0
Canada	30.1	38.6	34.4 *1979*	26.7	29.8	28.2	15.5	19.1	17.3
Czech Republic	. .	. .	. .	21.0	31.9	26.1 *1993*	19.4	29.6	24.3
Denmark	44.0	57.0	50.5	42.0	47.0	44.5	23.0	29.0	26.0 *2004*
Finland	16.6	35.2	26.1	20.0	32.4	25.9	18.2	26.0	21.8
France	16.0	44.0	30.0	20.0	38.0	30.0	19.0	28.0	23.0 *2004*
Germany	21.2	48.4	34.8 *1978*	22.2	38.0	31.2 *1989*	19.1	29.8	24.3 *2003*
Greece	. .	. .	. .	26.0	51.0	38.5	31.3	46.0	38.6 *2004*
Hungary	. .	. .	. .	. .	. .	. .	24.6	36.9	30.4 *2003*
Iceland	. .	. .	. .	29.9	30.8	30.3	19.5	19.5	19.5
Ireland	. .	. .	. .	29.0	31.0	30.0	26.0	28.0	27.0 *2002*
Italy	16.7	54.3	35.5	17.8	37.8	27.8	16.4	28.7	22.3
Japan	14.4	70.2	42.3	14.3	60.5	37.4	13.8	45.8	29.2
Korea	. .	. .	. .	6.4	65.7	34.6 *1989*	4.6	46.6	25.3
Luxembourg	. .	. .	. .	26.0	40.0	33.0 *1992*	19.0	27.0	23.0
Mexico	. .	. .	. .	14.4	38.3	25.8 *1988*	16.1	39.1	26.4 *2002*
Netherlands	34.0	52.0	43.0	32.0	43.0	37.0	26.0	35.0	31.0
New Zealand	29.0	35.0	32.0 *1981*	27.0	28.0	28.0	22.5	22.5	22.5
Norway	30.0	42.0	36.0	33.0	36.0	35.0	24.0	26.0	25.0
Poland	. .	. .	. .	28.0	55.0	41.5 *1992*	19.3	33.9	26.3 *2004*
Portugal	. .	. .	. .	5.1	33.6	19.0 *1987*	9.0	26.0	17.0
Slovak Republic	. .	. .	. .	. .	. .	. .	22.5	25.5	24.3
Spain	. .	. .	. .	21.4	51.5	35.9 *1989*	22.4	34.2	28.1 *2003*
Sweden	28.7	36.3	32.4	25.9	25.8	25.8	18.0	13.9	15.9
Switzerland	. .	. .	. .	22.8	33.9	28.2 *1992*	22.8	31.0	26.8
Turkey	. .	. .	. .	24.3	62.8	43.6 *1989*	17.8	51.1	32.1 *2003*
United Kingdom	37.0	42.0	39.0	30.0	31.0	30.0	23.0	25.0	24.0
United States	29.3	37.6	33.5	22.8	28.4	25.6	14.9	19.1	16.9
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**19.3**	**29.8**	**24.3**
Consistent average (15)[b]	**27.1**	**45.8**	**36.4**	**25.8**	**36.3**	**31.1**	**19.1**	**26.0**	**22.5**

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a) Average comprises all countries for which recent data are available (2002+).
b) Excludes Austria, the Czech Republic, Greece, Hungary, Iceland, Ireland, Korea, Luxembourg, Mexico, Poland, Portugal, the Slovak Republic, Spain, Switzerland and Turkey.

Source: OECD Health Data 2007.

Table A.3.2. **Alcohol consumption in litres per capita, population aged 15 years and over, 1960 to 2005**

	1960	1970	1980	1990	2000	2005
Australia	9.4	11.6	12.9	10.5	9.8	9.8 *2004*
Austria	10.9	13.9	13.8	12.6	11.1	11.1 *2003*
Belgium	8.9	11.7	13.5	12.1	10.3	10.7 *2003*
Canada	7.0	8.8	10.7	7.4	7.7	7.9 *2004*
Czech Republic	. .	. .	11.7	11.3	11.8	12.0
Denmark	5.5	8.6	11.7	11.7	11.5	11.3
Finland	2.7	5.8	7.9	9.5	8.6	10.0
France	. .	20.4	19.5	15.9	14.0	13.0 *2004*
Germany	7.5	13.4	14.2 *1982*	13.8	10.5	10.0
Greece	. .	. .	13.2	10.6	9.5	9.0 *2003*
Hungary	8.2	11.5	14.9	13.9	12.0	13.2 *2004*
Iceland	2.5 *1961*	3.8	4.3	5.2	6.1	7.1
Ireland	4.9	7.0	9.6	11.2	14.2	13.5
Italy	16.6	17.8	16.3	11.0	9.0	8.1 *2003*
Japan	5.0 *1963*	6.1	7.1	8.0	7.6	7.7 *2004*
Korea	. .	. .	. .	9.1	8.9	8.1
Luxembourg[a]	13.1	12.8	13.4	14.8	15.4	15.5 *2003*
Mexico	. .	. .	3.3	4.9	4.8	4.6 *2003*
Netherlands	3.7	7.8	11.5	9.9	10.1	9.7 *2003*
New Zealand	5.3	9.8	11.8	10.1	8.9	9.4
Norway	3.4	4.7	5.3	5.0	5.7	6.4
Poland	6.3 *1961*	8.0 *1971*	8.7 *1981*	8.3	8.3	8.1 *2003*
Portugal	17.2 *1961*	17.8 *1969*	14.8	16.1	12.9	11.4 *2003*
Slovak Republic	6.9	12.8	14.5	13.4	8.9	9.3
Spain	14.6 *1962*	16.1	18.4	13.5	11.5	11.7 *2003*
Sweden	4.8	7.2	6.7	6.4	6.2	6.6
Switzerland	12.1	14.2	13.5	12.9	11.2	10.1
Turkey	0.9	1.1	1.8	1.4	1.5	1.3
United Kingdom	. .	7.1	9.4	9.8	10.4	11.3
United States	7.8	9.5	10.5	9.3	8.3	8.4 *2004*
Latest average[b]	**. .**	**. .**	**. .**	**. .**	**. .**	**9.5**
Consistent average (24)[c]	**7.7**	**10.1**	**11.2**	**10.3**	**9.5**	**9.5**

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a) In Luxembourg, national sales do not accurately reflect consumption by residents, due to significant levels of consumption by tourists and cross-border traffic of alcoholic beverages.
b) Average consists of the latest available data for all OECD countries.
c) Excludes the Czech Republic, France, Greece, Korea, Mexico and the United Kingdom.
Source: OECD Health Data 2007.

Table A.3.3. **Overweight or obesity rates, population aged 15 and over, latest year available**

		Overweight population 25 < BMI < 30			Obese population BMI ≥ 30			Overweight and obese population BMI > 25		
		Females	Males	Total	Females	Males	Total	Females	Males	Total
Australia[a]	1999	28.2	45.3	36.7	21.4	21.9	21.7	49.6	67.2	58.4
Austria	1999	21.3	54.3	37.0	9.1	9.1	9.1	30.4	63.4	46.1
Belgium	2004	24.4	38.7	31.4	13.4	11.9	12.7	37.8	50.6	44.1
Canada	2005	24.7	39.3	31.9	19.0	17.0	18.0	43.7	56.3	49.9
Czech Republic[a]	2005	29.0	42.0	35.0	17.0	18.0	17.0	46.0	60.0	52.0
Denmark	2005	26.4	40.9	33.2	11.8	11.0	11.4	38.2	51.9	44.6
Finland	2005	26.6	44.8	35.0	13.5	14.9	14.1	40.1	59.7	49.2
France	2004	19.6	31.1	25.1	9.3	9.8	9.5	29.0	40.5	34.6
Germany	2005	28.7	43.5	36.0	12.8	14.4	13.6	41.5	57.9	49.6
Greece	2003	29.9	41.1	35.2	18.2	26.0	21.9	48.1	67.1	57.1
Hungary	2003	29.8	38.7	34.0	18.0	19.6	18.8	47.8	58.3	52.8
Iceland	2002	28.0	44.6	35.9	12.4	12.4	12.4	40.4	57.0	48.3
Ireland	2002	25.0	41.0	34.0	12.0	14.0	13.0	37.0	55.0	47.0
Italy	2005	26.2	43.9	34.7	9.7	10.2	9.9	35.9	54.0	44.6
Japan	2004	16.9	24.5	20.3	3.2	2.8	3.0	20.1	27.3	23.3
Korea	2005	23.7	30.3	27.0	3.3	3.7	3.5	27.0	34.0	30.5
Luxembourg[a]	2005	25.4	41.1	34.6	18.5	18.8	18.6	43.9	59.9	53.3
Mexico	2005	36.6	42.6	39.1	34.7	23.7	30.2	71.3	66.4	69.2
Netherlands	2005	28.2	40.5	34.2	11.4	9.9	10.7	39.6	50.4	44.9
New Zealand[a]	2003	28.4	42.1	35.2	21.7	20.1	20.9	50.2	62.2	56.2
Norway	2005	26.0	43.0	34.0	8.0	9.0	9.0	34.0	52.0	43.0
Poland	2004	26.6	39.5	32.8	12.5	12.6	12.5	39.1	52.1	45.3
Portugal	1999	31.8	42.3	36.8	14.0	11.4	12.8	45.8	53.7	49.6
Slovak Republic	2003	24.9	42.0	32.2	15.6	15.2	15.4	40.5	57.2	47.6
Spain	2003	27.6	43.5	35.3	13.4	12.9	13.1	40.9	56.3	48.4
Sweden	2005	25.9	40.7	33.3	10.3	11.1	10.7	36.2	51.8	44.0
Switzerland	2002	21.8	37.5	29.4	7.5	7.9	7.7	29.3	45.4	37.1
Turkey	2003	28.9	33.6	31.6	14.5	9.7	12.0	43.4	43.3	43.4
United Kingdom[a]	2005	32.1	42.6	37.0	24.2	22.1	23.0	56.3	64.7	60.0
United States[a]	2004	28.6	39.7	34.1	33.2	31.1	32.2	61.8	70.8	66.3

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Note: Obesity rates are defined as the percentage of the population with a Body Mass Index (BMI) of 30 or more. Overweight rates are defined as the percentage of the population with a BMI between 25 and 30. The BMI is a single number that evaluates an individual's weight status in relation to height (weight/height^2, with weight in kilograms and height in metres).

a) For Australia, the Czech Republic, Luxembourg, New Zealand, the United Kingdom and the United States, figures are based on health examinations, rather than self-reported information. Obesity estimates derived from health examinations are generally higher and more reliable than those coming from self-reports, because they preclude any misreporting of people's height and weight. However, health examinations are only conducted regularly in a few countries.

Source: OECD Health Data 2007.

Table A.4.1a. **Number of medical graduates, per 1 000 physicians, 1985 to 2005**

	1985	1990	1995	2000	2005
Australia	46.2	28.6	30.8	29.6	32.1 *2004*
Austria	106.3	82.6	48.6	59.9	58.3 *2003*
Belgium	. .	. .	49.3	45.1	51.0 *2003*
Canada	35.3	29.2	28.1	24.5	26.9
Czech Republic	52.7	33.2	45.0	23.3	22.8
Denmark	41.2	32.8	20.1	25.2	40.0 *2004*
Finland	. .	46.4	67.4	36.9	41.2
France	57.9	30.8	24.9	20.3	17.5 *2004*
Germany	. .	44.0 *1991*	50.4	30.7	. .
Greece	29.2	. .	34.4	29.0 *2001*	. .
Hungary	37.4	30.8	32.8	29.5	38.4
Iceland	83.1	52.3	40.8	34.1	39.9
Ireland	. .	61.0 *1992*	61.4	64.7	51.9
Italy	. .	35.9 *1993*	30.8	27.6	28.9
Japan	45.0	40.3	36.9 *1994*	30.5	29.1 *2004*
Korea	. .	. .	. .	58.0	55.7
Luxembourg	. .	. .	. .	. .	. .
Mexico	. .	. .	. .	. .	. .
Netherlands	45.5	38.7	33.5 *1998*	27.8	28.8
New Zealand	45.2	45.1	36.5	37.5	38.0 *2004*
Norway	34.9	25.3 *1991*	26.3	31.8	27.3
Poland	. .	. .	. .	. .	. .
Portugal	35.6	18.5	14.3	19.0	20.8
Slovak Republic	. .	. .	. .	34.3	34.6 *2004*
Spain	. .	. .	47.1	33.2	29.6 *2003*
Sweden	38.9	27.5	29.2	28.3	25.1 *2004*
Switzerland	51.5	40.8	30.6	30.0	22.1
Turkey	59.4	88.7	60.8	60.3	42.7 *2004*
United Kingdom	54.4 *1987*	39.3	37.4	38.5	35.8
United States	. .	31.0 *1993*	30.5	27.8	26.5 *2004*
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**34.6**
Consistent average (21)[b]	**. .**	**40.9**	**36.5**	**33.7**	**33.1**

StatLink http://dx.doi.org/10.1787/115067578456

a) Average comprises all countries for which recent data are available (2003+).
b) Excludes Belgium, Germany, Greece, Korea, Luxembourg, Mexico, Poland, the Slovak Republic and Spain.
Source: OECD Health Data 2007.

Table A.4.1b. **Number of nursing graduates, per 1 000 nurses, 1985 to 2005**

	1985	1990	1995	2000	2005
Australia	22.4 *1986*	19.3	29.5	22.8	28.7 *2004*
Austria	42.5	36.5	39.5	36.9	38.1 *2004*
Belgium	. .	. .	. .	. .	. .
Canada[a]	43.3	36.7	30.3	20.2	31.7 *2004*
Czech Republic	60.5	62.4	85.2	55.8 *1999*	58.1
Denmark	58.7	64.4	49.7	50.0	45.4 *2004*
Finland	. .	136.0	233.8	113.3	70.4 *2003*
France	57.0	41.9	39.7	36.3	44.6 *2004*
Germany	. .	. .	. .	. .	. .
Greece	. .	. .	21.6	25.8	36.8 *2004*
Hungary	. .	65.7	67.4	57.1	47.6
Iceland	. .	. .	. .	. .	37.3
Ireland	. .	39.8	32.3	17.9 *2001*	22.7
Italy	. .	. .	. .	18.3 *2002*	22.3
Japan[b]	. .	. .	. .	. .	40.1
Korea	. .	. .	. .	165.6	152.3
Luxembourg	. .	. .	. .	17.9 *2003*	11.0
Mexico	. .	. .	. .	. .	. .
Netherlands	. .	. .	28.0 *1997*	21.8	23.5
New Zealand	. .	. .	40.9 *1996*	32.0	29.0 *2003*
Norway	. .	. .	66.9 *1997*	68.0	51.3
Poland	. .	. .	. .	. .	. .
Portugal	38.9	35.2	55.4	35.1	52.4
Slovak Republic	. .	. .	118.6	72.5	96.6 *2004*
Spain	. .	. .	. .	. .	49.0 *2003*
Sweden	49.0	45.7	18.8	32.6	40.0 *2004*
Switzerland	. .	. .	. .	44.6	44.7 *2004*
Turkey	. .	. .	. .	22.5	30.7 *2004*
United Kingdom	. .	. .	. .	33.2 *2003*	38.5
United States[c]	77.4	56.7	66.8	56.7 *1998*	. .
Latest average[d]	**. .**	**. .**	**. .**	**. .**	**45.7**
Consistent average (16)[e]	**. .**	**. .**	**59.9**	**43.6**	**44.8**

StatLink http://dx.doi.org/10.1787/115067578456

a) The low rate in 2000 for Canada may be due to a particularly low response to the survey to collect data from nursing schools.

b) For Japan, the number of nursing graduates refers to 2005 while the number of nurses refers to 2004.

c) For the United States, the data are only available until 1998, because the data collection on licensed practical nurses graduates was discontinued afterwards.

d) Average comprises all countries for which recent data are available (2003+).

e) Excludes Belgium, Germany, Iceland, Italy, Japan, Korea, Luxembourg, Mexico, Poland, Spain, Switzerland, Turkey, the United Kingdom and the United States.

Source: OECD Health Data 2007.

Table A.4.2. **Density of practising physicians per 1 000 population, 1970 to 2005**

	1970	1980	1990	2000	2005
Australia	1.3	1.8	2.2	2.5	2.7 *2004*
Austria	1.4	1.6	2.2	3.1	3.5
Belgium	1.6 *1969*	2.3	3.3	3.9	4.0
Canada[a]	1.5	1.8	2.1	2.1	2.2
Czech Republic	1.8	2.3	2.7	3.4	3.6
Denmark	. .	2.3	2.9	3.3	3.6 *2004*
Finland	. .	. .	2.0	2.3	2.4
France[a]	1.2	1.9	3.1	3.3	3.4
Germany	. .	. .	2.8 *1991*	3.3	3.4
Greece	1.6	2.4	3.4	4.3	4.9 *2004*
Hungary	2.0	2.3	2.8	3.1	3.0
Iceland[a]	1.4	2.1	2.8	3.4	3.7
Ireland[a, b]	. .	. .	2.0 *1992*	2.2	2.8
Italy	. .	. .	3.8 *1993*	4.1	3.8
Japan	1.1	1.3	1.7	1.9	2.0 *2004*
Korea	. .	0.5 *1981*	0.8	1.3	1.6
Luxembourg[a]	1.1	1.7	2.0	2.1	2.5
Mexico	. .	. .	1.0	1.6	1.8
Netherlands[a, b]	1.2	1.9	2.5	3.2	3.7
New Zealand[a, b]	1.1 *1971*	1.6	1.9	2.2	2.2 *2004*
Norway[c]	1.4	2.0	2.6 *1991*	2.9	3.7
Poland[a]	1.4	1.8	2.1	2.2	2.1
Portugal[b]	0.9	1.9	2.8	3.1	3.4
Slovak Republic[a]	. .	. .	. .	3.1	3.1 *2004*
Spain[d]	. .	. .	. .	3.2	3.8
Sweden	1.3	2.2	2.9	3.1	3.4 *2004*
Switzerland	1.5	2.5	3.0	3.5	3.8
Turkey[a]	0.4	0.6	0.9	1.3	1.5 *2004*
United Kingdom	0.9	1.3	1.6	2.0	2.4
United States	. .	. .	2.1 *1993*	2.3	2.4
Latest average[e]	**. .**	**. .**	**. .**	**2.8**	**3.0**
Consistent average (20)[f]	**1.3**	**1.9**	**2.4**	**2.8**	**3.1**

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a) Data for Canada, France, Iceland, Ireland, Luxembourg (before 2000), the Netherlands, New Zealand, Poland (before 2004), the Slovak Republic and Turkey include physicians working in industry, administration and research (not only those in contacts with patients).

b) Ireland, the Netherlands, New Zealand and Portugal provide the number of all physicians entitled to practise rather than only those practising.

c) In Norway, data from 1997 to 2001 refer to full time equivalents (FTE), while the other years refer to head counts.

d) Data for Spain include dentists and stomatologists.

e) Average comprises all OECD countries.

f) Excludes Denmark, Finland, Germany, Ireland, Italy, Korea, Mexico, the Slovak Republic, Spain and the United States.

Source: OECD Health Data 2007.

Table A.4.3. **Density of practising nurses per 1 000 population, 1970 to 2005**

	1970	1980	1990	2000	2005
Australia	6.7	10.3	11.6	10.5	10.4 *2004*
Austria[a]	3.4	5.4	7.2	9.2	9.4
Belgium	. .	. .	. .	. .	14.8
Canada	7.0	9.6	11.1	10.1	10.0
Czech Republic	5.2	5.9	7.2	7.6	8.1
Denmark	. .	4.9	5.7	7.5	7.7 *2004*
Finland	. .	. .	4.4	6.1	7.6 *2004*
France	3.1 *1971*	4.7	5.6	6.7	7.7
Germany	. .	. .	. .	9.4	9.7
Greece	1.4	1.9	3.4	3.2	3.8 *2004*
Hungary	. .	. .	7.5	7.8	8.8
Iceland	4.2	8.9	12.5	13.3	14.0
Ireland	. .	. .	11.3	14.0	15.2
Italy	. .	. .	5.0 *1993*	5.2	7.0
Japan	2.5	4.1	5.8	7.6	9.0 *2004*
Korea	. .	. .	. .	1.4	1.9
Luxembourg[b]	. .	. .	. .	12.3 *2003*	13.9
Mexico	. .	. .	1.8	2.2	2.2
Netherlands[c]	. .	. .	. .	13.4	14.5
New Zealand	. .	6.1	9.3	9.6	9.5 *2004*
Norway	. .	. .	. .	10.3	15.4
Poland	3.0	4.4	5.5	5.0	5.1
Portugal	1.8 *1971*	2.3	2.8	3.7	4.6
Slovak Republic	. .	. .	. .	7.4	6.3 *2004*
Spain	. .	. .	. .	6.4	7.4
Sweden	4.3	7.0	9.2	9.9	10.6 *2004*
Switzerland	. .	. .	. .	12.9	14.1 *2004*
Turkey	. .	1.0	1.3	1.7	1.8 *2004*
United Kingdom	. .	. .	7.9	8.4	9.1
United States	3.7	5.6	7.2	8.0	7.9 *2002*
Latest average[d]	**. .**	**. .**	**. .**	**. .**	**8.9**
Consistent average (15)[e]	**. .**	**5.5**	**7.0**	**7.6**	**8.0**

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a) Austria reports only nurses employed in hospitals.
b) Luxembourg includes nursing aids.
c) The Netherlands reports all nurses entitled to practise rather than only those practising.
d) Average comprises all OECD countries.
e) Excludes Belgium, Finland, Germany, Hungary, Ireland, Italy, Korea, Luxembourg, Mexico, the Netherlands, Norway, the Slovak Republic, Spain, Switzerland and the United Kingdom.

Source: OECD Health Data 2007.

Table A.4.4a. **Remuneration of specialists, salaried and self-employed, ratio to GDP per capita**

	Salaried						Self-employed					
	2000	2001	2002	2003	2004	2005	2000	2001	2002	2003	2004	2005
Australia[a]							5.20	5.21	5.37	5.31	5.30	
Austria[b]							5.44	5.37	5.27	5.57		
Belgium[c]							7.44	7.61	7.23	7.43	7.81	
Canada[d]								5.15	5.12	5.03	4.89	
Czech Republic[e]	1.39	1.46	1.60	1.65	1.57	1.56	2.22	2.49	2.44	2.42	2.21	2.28
Denmark[f]	2.65	2.71	2.77	2.86	2.90	2.79						
Finland[g]		2.36	2.59	2.62	2.53	2.54						
France[h]							4.59	4.65	4.79	4.92	4.98	
Germany[i]					2.68							
Greece[j]						2.30			2.60	2.66	2.36	
Hungary[k]				1.74	1.68	1.69						
Iceland[l]						2.89						
Ireland[m]					4.65	4.65						
Luxembourg[n]				2.77						4.15		
Mexico[o]				2.58								
Netherlands[p]				4.11	4.02	3.96				7.94	8.64	8.38
New Zealand[q]	3.87	3.77	3.78	3.74	3.60	3.70						
Norway[r]		1.69	1.77	2.00	1.81	1.65						
Portugal[s]	3.51	3.47	3.48	3.42	3.31	3.28						
Sweden[t]			2.50									
Switzerland[u]								3.74	3.80	3.65		
United Kingdom[v]	4.44		4.73		4.82							
United States		4.82						6.49				

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a) Data are per headcount. The OECD Secretariat has deducted practice expenses by applying the average across OECD countries (30% of gross remuneration). Salary and sessional payments are not included.
b) Data are per headcount.
c) Data are per headcount. Data include at least partly practice expenses.
d) Data are based on fee-for-service payments for specialists who billed the provincial medical care plans at least CAD 60 000. Data do not include incomes from alternative modes of payments.
e) For salaried specialists, salaried general practitioners (GPs), physicians in training (both GPs and specialists) and dentists are included. In addition, wages and salaries in kind and incomes from private practices are not included. For the self-employed, any salary from hospital is not included.
f) Data include physicians with a specialisation in general medicine. Incomes from private practices are not included.
g) Data include specialist GPs and head of a hospital or a health centre. Remuneration is based on the salary and additional earnings for those working more than 90% of the general working time in the collective agreement.
h) Data exclude remuneration for physicians who begin or stop their practices in the year and who are older than 65 years old. Data are based on fee-for-service payments and do not include salary payments. Data also include remuneration for stomatologists.
i) Data refer to the public sector only. Data on average overtime payments are not available. Incomes from private practices are not included.
j) For salaried specialists, data are for specialists in the middle level of the hierarchy at the "Agia (Saint) Sofia" Children Hospital. It is considered that the data are representative for all salaried specialists in the public sector. For the self-employed, data are declared income per headcount. Informal payments are not included in the data for both types of specialists and they are more common for salaried specialists.
k) Data refer to the public sector only. Gratuity, informal payments and incomes from private practices are not included.
l) Data refer to the public sector only and incomes from private practices are not included.
m) Remuneration is based on the average gross salary for a 33 hour clinical week. The figures exclude emergency call-out and on-call payments except for the minimum flat annual payment of EUR 3 500. Specialists are not paid overtime. Data refer to the public sector only and incomes from private practices are not included. Given that GDP per capita overstates the average income, remuneration is presented as a ratio to the gross national income.
n) Figures do not include physicians whose annual income is less than the minimum social salary, EUR 16 425 in 2003 (specialists who begin or stop their practices in the year are not included). Given that GDP per capita overstates the average income, remuneration is presented as a ratio to the gross national income.
o) Data refer to the public sector only.
p) Salaried specialists include those working in general hospitals and academic hospitals. Remuneration data for general hospital employees do not include bonuses and overtime and other additional payments.
q) Data cover specialists employed by the District Health Board but do not cover those employed by the Boards on individual employment agreements. Data exclude reimbursement of work-related expenses and continuing medical education expenses, payments for hours worked in excess of 40 hours per week, allowance for being on an after-hours' roster or any other special enhancements (*e.g.* recruitment and retention payments) but holiday allowances are included. Incomes from private practices are not included.
r) Data include GPs. Data refer to the public sector only. Holiday pay supplement is not included.
s) Data include all categories of GPs and specialists working in the National Health Service. Additional incomes such as payments for working evenings, nights and weekends and overtime and bonuses are not included, but Christmas bonus and holiday payments are included. Data refer to the public sector only and incomes from private practices are not included.
t) Overtime payments are not included. Data refer to the public sector only and incomes from private practices are not included.
u) Data are per headcount. Remuneration for physicians over 65 years old is excluded.
v) Data refer to the public sector only and incomes from private practices are not included. Data are for England only.

Source: OECD Health Data 2007.

Table A.4.4b. **Remuneration of general practitioners, salaried and self-employed, ratio to GDP per capita**

	Salaried						Self-employed					
	2000	2001	2002	2003	2004	2005	2000	2001	2002	2003	2004	2005
Australia[a]							2.25	2.31	2.08	1.96	2.06	
Austria[b]							3.68	3.63	3.59	3.42		
Belgium[c]							2.08	2.07	2.09	2.25	2.32	
Canada[d]								3.47	3.42	3.35	3.26	
Czech Republic							1.89	2.02	1.99	2.12	2.02	1.78
Finland[e]		1.88	1.97	1.95	1.87	1.95						
France[f]							2.84	2.80	2.95	3.11	2.91	
Germany[g]											3.74	
Hungary[h]				1.71	1.60	1.72						
Iceland[i]						3.01						
Ireland[j]							2.66	3.06				3.98
Luxembourg[k]				1.61						2.04		
Mexico[l]				2.21								
Netherlands[m]										3.55	3.57	3.51
Sweden[n]			2.20									
Switzerland[o]								3.33	3.28	3.20		
United Kingdom[p]							3.35	3.35	3.49	3.60	3.79	
United States		3.81						4.36				

StatLink http://dx.doi.org/10.1787/115112605515

a) Data are per headcount. The OECD Secretariat has deducted practice expenses by applying the average across OECD countries (30% of gross remuneration). Salary and sessional payments are not included.
b) Data are per headcount.
c) Data are per headcount. Data include at least partly practice expenses.
d) Data are based on fee-for-service payments for general practitioners (GPs) who billed the provincial medical care plans at least CAD 60 000. Data do not include incomes from alternative modes of payments.
e) Remuneration is based on the salary and additional earnings for those working more than 90% of the general working time in the collective agreement.
f) Data cover GPs and "médecin généraliste à exercice particulier" (MEP). The MEP category includes physicians with specific activities such as acupuncturists or homoeopathists. Data exclude remuneration for physicians who begin or stop their practices in the year and who are older than 65 years old. Data are based on fee-for-service payments and do not include salary payments.
g) Data refer to payments from the social health insurance and incomes from private patients.
h) Data refer to the public sector only. Gratuity, informal payments and incomes from private practices are not included.
i) Data refer to the public sector only. Remuneration for GPs working in health centres administered by municipalities or privately are excluded.
j) Data are per headcount. The OECD Secretariat has deducted practice expenses by applying the average across OECD countries (30% of gross remuneration). Payments by Primary Community and Continuing Care (PCCC) Local Health Areas are not included. Given that GDP per capita overstates the average income, remuneration is presented as a ratio to the gross national income.
k) Figures do not include physicians whose annual income is less than the minimum social salary, EUR 16 425 in 2003 (GPs who begin or stop their practices in the year are not included). Given that GDP per capita overstates the average income, remuneration is presented as a ratio to the gross national income.
l) Data refer to the public sector only.
m) Data are based on remuneration for a norm practice (2 350 patients).
n) Data refer to the public sector only. Payments for on-call and overtime are not included.
o) Data are per headcount. Remuneration for physicians over 65 years old is excluded.
p) Data are per headcount. Figures are for GPs on a 'General Medical Services (GMS) contract' and exclude GP registrars, salaried GPs, GP assistants, GP retainers and Personal Medical Services (PMS) GPs. Data refer to the public sector only and incomes from private practices and additional incomes from working in hospitals are not included. Data refer to Great Britain.

Source: OECD Health Data 2007.

Table A.4.4c. **Remuneration of salaried hospital nurses, ratio to GDP per capita**

	2000	2001	2002	2003	2004	2005
Australia[a]	1.46	1.48	1.49	1.47	1.45	
Czech Republic[b]	0.67	0.73	0.79	0.82	0.77	0.75
Denmark[c]	1.29	1.30	1.32	1.33	1.33	1.29
Finland[d]		0.94	0.96	0.96	0.96	0.99
Greece[e]					1.22	
Hungary[f]				0.88	0.84	0.84
Iceland[g]						1.26
Ireland[h]					1.32	1.30
Japan[i]			1.17		1.14	
Luxembourg[j]					1.11	1.07
Mexico[k]				1.38		
New Zealand[l]			1.41			
Norway[m]		0.88	0.96	0.96	0.92	0.86
Portugal[n]	1.72	1.70	1.87	1.84	1.77	1.82
United Kingdom[o]	1.40		1.39		1.34	
United States[p]	1.38				1.51	

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a) Data cover all levels of registered nurses employed in public acute and psychiatric hospitals.
b) Data include both nurses and midwives working in general hospitals and specialised therapeutic institutes (excluding balneologic institutes). Wages and salaries in kind are not included.
c) Data cover all levels of registered nurses.
d) Practical nurses are not included. Remuneration is based on the salary and additional earnings for those working more than 90 % of the general working time in the collective agreement.
e) Data are for salaried hospital nurses in the middle level of the hierarchy at the "Agia (Saint) Sofia" Children Hospital. It is considered that the data are representative for all salaried hospital nurses in the public sector.
f) Data refer to the public sector only. Data do not include gratuity payments from private practices.
g) Data refer to the public general hospitals and public health centres.
h) Data refer to the public sector only. Remuneration is based on a 39 hour week and overtime payments are not included. Given that GDP per capita overstates the average income, remuneration is presented as a ratio to the gross national income.
i) Data are per headcount. Data are based on OECD calculations, using monthly wage and additional income data and the numbers of nurses and assistant nurses provided by the Ministry of Health, Labour and Welfare. Figures are weighted average of annual remuneration for nurses and assistant nurses.
j) Data include assistant nurses and only cover nurses working in acute care facilities. Data are calculated by dividing the total annual gross salary by full-time equivalent (FTE) nurses. Given that GDP per capita overstates the average income, remuneration is presented as a ratio to the gross national income.
k) Data refer to the public sector only.
l) Data refer to the public sector only. Data are calculated by dividing total payments for nurses by total FTE nurses.
m) Data refer to the public sector only. Holiday pay supplement is not included.
n) Data refer to the public sector only. Data do not include additional incomes such as payments for working evenings, nights, weekends and overtime and bonuses but include Christmas bonus and holiday payments.
o) Data refer to the public sector only and in England. Data are calculated by dividing total payments for nurses by total FTE nurses.
p) Data do not include licensed practical nurses (LPNs) and licensed vocational nurses (LVNs). They include nurse managers.

Source: OECD Health Data 2007.

Table A.4.5a. **Acute care hospital beds per 1 000 population, 1980 to 2005**

	1980	1985	1990	1995	2000	2005
Australia	6.4	5.3	4.8 *1989*	4.1	3.6	3.6 *2004*
Austria	. .	8.3	7.5	6.8	6.3	6.1
Belgium	. .	. .	5.2	5.0	4.7	4.4
Canada	4.6	4.4	4.0	4.1	3.2	2.9 *2004*
Czech Republic	8.7	8.8	8.6	7.3	6.1	5.7
Denmark	5.3	4.7	4.1	3.9	3.5	3.1 *2004*
Finland	4.9	4.8	4.3	4.0	3.2	2.9
France	6.2	5.7	5.2	4.6	4.1	3.7
Germany	. .	. .	8.3 *1991*	7.5	6.8	6.4
Greece	4.9	4.3	. .	3.9	3.8	3.8 *2004*
Hungary	6.6	6.8	7.1	6.5	5.8	5.5
Iceland	. .	. .	4.3	3.8	. .	. .
Ireland	4.3	4.1	3.2	3.1	2.8	2.8
Italy	8.0	7.0	6.2	5.6	4.1	3.3
Japan	. .	. .	12.3 *1993*	12.0	9.6	8.2
Korea	. .	. .	2.7	3.8	5.2	6.5
Luxembourg	. .	. .	. .	5.8 *1998*	5.7	5.2
Mexico	. .	. .	1.0	1.1	1.0	1.0
Netherlands	. .	. .	3.8	3.4	3.1	3.1
New Zealand	. .	. .	. .	. .	. .	. .
Norway	5.2	4.7	3.8	3.3	3.1	3.0
Poland	5.6	5.7	6.3	5.8	5.2	4.7
Portugal	4.1	3.5	3.4	3.3	3.2	3.0
Slovak Republic	. .	. .	. .	6.3 *1996*	5.8	5.0
Spain	3.8	3.7	3.6	3.5	2.8	2.6 *2004*
Sweden	5.1	4.6	4.1	3.0	2.4	2.2
Switzerland	7.2	6.8	6.5	5.5	4.1	3.6
Turkey	1.5	1.6	2.0	2.1	2.2	2.0
United Kingdom	. .	. .	. .	4.1	3.3	3.1
United States	4.4	4.2	3.7	3.4	2.9	2.7
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**. .**	**3.9**
Consistent average (24)[b]	**. .**	**. .**	**5.1**	**4.7**	**4.1**	**3.9**

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Note: The definition of "acute care" beds may vary from one country to other. Cross-country variations should therefore be interpreted with caution.

a) Average comprises all countries for which recent data are available (2004+).

b) Excludes Greece, Iceland, Luxembourg, New Zealand, the Slovak Republic and the United Kingdom.

Source: OECD Health Data 2007.

Table A.4.5b. **Occupancy rate of acute care hospital beds, in percentage, 1980 to 2005**

	1980	1985	1990	1995	2000	2005
Australia	66.3	69.0	68.8 *1989*	69.5	70.4	70.6 *2004*
Austria	80.8 *1982*	79.9	79.3	76.9	77.3	79.0
Belgium	77.7	83.3 *1986*	81.9	79.7	79.9 *1998*	. .
Canada	80.4	83.4	78.6	84.6	91.2	90.0 *2004*
Czech Republic	81.8	80.8	69.6	72.6	70.5	74.6
Denmark	75.3	78.9	78.5	78.6	85.0	. .
Finland	. .	76.2	74.2	74.0	. .	. .
France	79.0	79.1	77.3	76.0	75.0	73.4
Germany	. .	. .	84.1 *1991*	82.1	81.9	75.6
Greece	66.0	66.0	63.2	66.4	78.1	. .
Hungary	83.3	80.6	74.9	72.6	73.2	75.7
Iceland	. .	. .	. .	. .	. .	. .
Ireland	82.2	75.9	84.5	82.5	84.5	85.6
Italy	69.0	67.9	69.3	70.7	75.6	76.4 *2004*
Japan	. .	. .	. .	81.6	81.8	79.2
Korea	60.8 *1981*	61.0	83.9	66.3	67.2	71.6 *2003*
Luxembourg[a]	. .	. .	. .	67.9 *1998*	66.5	64.7
Mexico	. .	. .	48.4 *1993*	50.1	57.4	61.0
Netherlands[a]	83.5	79.1	73.3	73.3	65.7	63.9
New Zealand	. .	. .	. .	. .	. .	. .
Norway	79.3	82.0	77.0	79.4	85.2	87.6
Poland	85.0	77.0	66.0	67.3	74.0	77.0 *2002*
Portugal	. .	67.7	66.7	72.6	71.3	73.2
Slovak Republic	. .	. .	. .	79.6 *1996*	70.6	66.7
Spain	. .	72.2	73.5	76.4	77.1	78.8 *2004*
Sweden	72.1	75.3	72.2	75.9	. .	. .
Switzerland	77.9	80.0	79.0	77.7 *1994*	84.8	86.1
Turkey	44.0 *1979*	52.1	57.2	55.4	58.7	64.5
United Kingdom	. .	76.1	. .	77.1	82.2	83.9
United States	75.4	64.8	66.8	62.8	63.9	67.4
Latest average[b]	**. .**	**. .**	**. .**	**. .**	**. .**	**75.1**
Consistent average (19)[c]	**. .**	**. .**	**72.5**	**72.0**	**73.9**	**75.4**

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a) In the Netherlands and Luxembourg, occupancy rates are slightly underestimated, as the number of beddays in hospital only include inpatients while the number of acute care beds (the denominator) also include beds available for day care.

b) Average comprises all countries for which recent data are available (2002+).

c) Excludes Belgium, Denmark, Finland, Greece, Iceland, Japan, Luxembourg, New Zealand, the Slovak Republic, Sweden and the United Kingdom.

Source: OECD Health Data 2007.

Table A.4.6. **Long-term care beds in hospitals and nursing homes, per 1 000 population aged 65 and over, 1995, 2000 and 2005**

	Hospitals			Nursing homes		
	1995	2000	2005	1995	2000	2005
Australia	. .	. .	. .	34.7	35.9	37.5 *2004*
Austria	8.4	7.6	2.8	. .	. .	. .
Belgium	1.1	1.1	1.2 *2002*	. .	. .	. .
Canada	2.7	1.7	1.6 *2004*	. .	. .	. .
Czech Republic	4.9	8.2	10.0	8.3	10.6	14.9
Denmark[a]	. .	. .	. .	52.2	42.9	25.5
Finland	34.7 *1996*	28.9	25.6	36.3 *1996*	31.2	26.1
France	9.0 *1996*	8.8	8.1 *2003*	63.4 *1996*	. .	60.3 *2003*
Germany	. .	. .	. .	22.9	46.7 *1999*	47.8
Greece	6.7	5.3	5.0 *2003*	. .	. .	. .
Hungary	4.7	4.5	4.8	43.3	48.4	53.1
Iceland[b]	17.4 *1996*	12.7	7.5	46.4 *1996*	51.4	61.0
Ireland	17.2	16.6	15.2	32.6	37.8	41.4
Italy	. .	1.0 *2001*	0.9 *2003*	. .	13.0 *2001*	14.8 *2003*
Japan	. .	12.0	15.0	5.6	10.6	11.6
Korea	. .	2.1 *2003*	5.8	. .	. .	. .
Luxembourg	. .	1.2	0.0	. .	26.4	43.4
Mexico	. .	. .	. .	. .	. .	. .
Netherlands	. .	. .	0.0 *2003*	27.1	26.9	27.4 *2003*
New Zealand	. .	. .	. .	. .	. .	. .
Norway	. .	. .	. .	63.2	63.0	60.3
Poland	. .	3.2 *2003*	3.0	. .	18.2 *2003*	18.3
Portugal	. .	. .	. .	. .	. .	. .
Slovak Republic	9.8 *1996*	10.0	8.1	. .	. .	. .
Spain	2.1	1.9	2.0	. .	. .	18.9
Sweden	3.6	2.1	1.5	84.2	82.7	69.9
Switzerland	. .	. .	. .	81.8 *1997*	74.1	71.7 *2004*
Turkey	. .	. .	5.1	. .	. .	. .
United Kingdom	0.6 *1997*	0.5	0.4 *2004*	24.3 *1997*	22.0	18.7 *2004*
United States	1.0 *1998*	0.9	0.8 *2004*	44.1 *1998*	43.6	43.1 *2004*
Latest average[c]	**. .**	**. .**	**5.7**	**. .**	**. .**	**38.3**

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a) Data for Denmark do not include beds in residential facilities for elderly persons, which are aimed for people with only mild disabilities. The number of beds in these facilities has increased rapidly in recent years.

b) In Iceland since 2000, the number of LTC beds in hospitals does not include beds in geriatric units, which have increased in recent years.

c) Average comprises all countries for which recent data are available.

Source: OECD Health Data 2007.

Table A.4.7a. **Medical technologies: number of CT scanners and MRI units per million population, 1990 to 2005**

	CT scanners				MRI units			
	1990	1995	2000	2005	1990	1995	2000	2005
Australia[a]	13.8	20.5	26.1	45.3 *2004*	0.6	2.9	3.5	4.2
Austria	11.7	23.9 *1996*	25.8	29.4	1.2 *1989*	7.4 *1996*	10.9	16.3
Belgium	16.1	16.7 *1994*	21.8	31.6 *2004*	2.0	3.3	6.0	6.6
Canada	7.1	8.0	9.8 *2001*	11.2	0.7	1.4	2.5	5.5
Czech Republic	2.1 *1991*	6.7	9.6	12.3	0.2 *1991*	1.0	1.7	3.1
Denmark	4.3	7.3	11.4	13.8	2.5	. .	5.4	10.2 *2004*
Finland	9.8	11.7	13.5	14.7	1.8	4.3	9.9	14.7
France	6.7	9.2	9.5	9.8	0.8	2.1	2.6	4.7
Germany[b]	6.4 *1991*	9.0	12.7	15.4	1.1 *1991*	2.3	4.9	7.1
Greece[c]	6.5	13.5 *1997*	17.1 *2002*	25.8	0.4	1.9 *1997*	1.9 *1998*	13.2
Hungary	1.9	4.6	5.7	7.1	0.1	1.0	1.8	2.6
Iceland	11.8	18.7	21.3	23.7	3.9	7.5	10.7	20.3
Ireland	4.3	. .	. .	10.7	. .	. .	. .	. .
Italy	6.0	12.1 *1994*	21.0	27.7	1.3	2.6 *1994*	7.7	15.0
Japan[d]	55.2	74.7 *1996*	84.4 *1999*	92.6 *2002*	6.1	18.8 *1996*	23.2 *1999*	40.1
Korea	12.2 *1993*	15.5	28.4	32.2	1.4 *1992*	3.9	5.4	12.1
Luxembourg	5.2	26.6	25.2	28.6	2.6	2.4	2.3	11.0
Mexico	. .	. .	2.5 *2001*	3.4	. .	. .	1.1 *2001*	1.3
Netherlands[e]	7.3	9.0 *1993*	. .	5.8	0.9	3.9	. .	5.6
New Zealand	3.6	7.5 *1996*	8.8	12.1 *2004*	. .	2.7 *1996*	2.6 *1998*	3.7 *2003*
Norway	. .	. .	. .	. .	. .	. .	. .	. .
Poland	. .	3.5 *1998*	4.4	7.9	. .	. .	0.9 *2002*	2.0
Portugal[c]	4.6	12.4 *1997*	12.8 *2003*	26.2	0.8	2.8 *1997*	3.9 *2003*	3.9 *2003*
Slovak Republic	. .	. .	8.7 *2003*	11.3	. .	. .	2.0 *2003*	4.3
Spain	4.4 *1988*	8.3	12.0	13.5	0.7 *1988*	2.7	4.8	8.1
Sweden	10.5	13.8 *1993*	14.2 *1999*	. .	1.5	6.8	7.9 *1999*	. .
Switzerland	. .	18.3 *1997*	18.5	18.2	. .	12.4 *1997*	12.9	14.4
Turkey	1.6	2.9 *1994*	7.1 *1999*	7.3 *2003*	. .	0.6 *1996*	3.0 *1998*	3.0 *2004*
United Kingdom[f]	. .	. .	4.5	7.5	. .	. .	4.7	5.4
United States	. .	24.1 *1997*	25.1 *1999*	32.2 *2004*	11.5 *1993*	12.3	15.4 *1999*	26.6 *2004*
Latest average[g]	**. .**	**. .**	**. .**	**20.6**	**. .**	**. .**	**. .**	**9.8**
Consistent average (20, 18)[h]	**9.6**	**15.5**	**19.2**	**24.0**	**2.1**	**4.5**	**6.6**	**12.0**

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a) In Australia, data from 2000 on the number of MRI units relate only to those eligible for reimbursement under Medicare (60% of the total in 1999).
b) Data for Germany only include equipment installed in the hospital sector though there is additional equipment in the ambulatory sector.
c) Data for Greece and Portugal include the private sector since 2005.
d) In Japan, data on MRI units include only those in hospitals before 2002. Since 2002, they include those in hospitals and general clinics.
e) The 2005 figures for the Netherlands underestimate the real number of equipment, because they refer to the number of hospitals reporting to have at least one of these equipments rather than the total number of equipments in hospitals and in the ambulatory sector.
f) Raw numbers for England and Great Britain up to 2003 have been increased pro rata to provide estimates for the United Kingdom. The private sector is not included.
g) Average comprises all countries for which recent data are available (2002+).
h) The average for CT scanners excludes Ireland, Mexico, the Netherlands, Norway, Poland, the Slovak Republic, Sweden, Switzerland, the United Kingdom and the United States. The average for MRI units excludes Denmark, Ireland, Mexico, the Netherlands, New Zealand, Norway, Poland, the Slovak Republic, Sweden, Switzerland, Turkey and the United Kingdom.

Source: OECD Health Data 2007.

Table A.4.7b. **Medical technologies: number of mammographs and radiation therapy equipment per million population, 1990 to 2005**

	Mammographs				Radiation therapy equipment			
	1990	1995	2000	2005	1990	1995	2000	2005
Australia[a]	15.9 *1989*	. .	. .	25.1	2.9	4.4	5.2	6.1
Austria	. .	. .	. .	. .	. .	3.2 *1996*	4.2	4.6
Belgium	. .	. .	20.5 *2002*	21.3 *2004*	6.1 *1991*	6.1	6.4 *1997*	7.6
Canada	. .	. .	19.3 *2001*	21.3	5.6 *1993*	6.9	7.1 *1997*	. .
Czech Republic	3.8 *1991*	8.4	10.6	14.1	5.4 *1991*	4.9	8.5	8.6
Denmark	. .	. .	. .	10.0	. .	. .	5.4	6.8
Finland	29.3	37.6	36.4 *1999*	37.7	10.0	8.6	8.7	8.8
France	23.8	42.0	42.6	42.2 *2002*	6.0	6.2	6.1	6.0 *2002*
Germany[b]	. .	. .	. .	. .	4.3 *1991*	4.5	4.8	4.7
Greece[c]	. .	. .	27.9 *2002*	36.5	5.4	5.7	4.0 *1999*	. .
Hungary	. .	6.8 *1997*	9.4	13.1	1.5	1.7 *1992*	2.3	2.7
Iceland	15.7	18.7	17.8	16.9	23.5	15.0	14.2	13.5
Ireland	. .	. .	. .	12.6	. .	. .	. .	7.0
Italy	. .	. .	. .	. .	1.3	2.1 *1994*	3.7	5.0
Japan	. .	. .	. .	. .	. .	. .	6.6 *2002*	6.8
Korea	. .	. .	13.3	28.7	4.5 *1992*	4.1	5.3	4.5
Luxembourg	25.3 *1992*	24.2	22.9	22.0	. .	. .	4.6	4.4
Mexico	. .	. .	2.8 *2001*	4.5	. .	. .	1.2 *2001*	1.3
Netherlands	. .	. .	. .	. .	6.5 *1992*	7.1	7.2 *1997*	. .
New Zealand	. .	17.2 *1997*	19.3 *1999*	23.1 *2004*	. .	7.2 *1996*	9.9	7.6 *2004*
Norway	. .	. .	. .	. .	. .	. .	. .	. .
Poland	. .	. .	11.0	15.9	. .	. .	. .	. .
Portugal[c]	. .	3.6 *1997*	11.6 *2003*	34.6	. .	2.9 *1997*	3.3 *2003*	6.0
Slovak Republic	. .	. .	13.0 *2003*	13.6	. .	. .	7.1 *2003*	9.8
Spain	. .	. .	10.0 *2003*	10.2 *2004*	2.9 *1988*	3.3	3.7	4.2
Sweden	. .	. .	. .	. .	. .	. .	. .	. .
Switzerland	. .	. .	. .	. .	. .	11.1 *1997*	10.4	9.8
Turkey	. .	1.9 *1996*	4.5 *1999*	6.5 *2003*	0.3 *1988*	0.6 *1996*	1.4 *1999*	2.7 *2003*
United Kingdom[d]	. .	5.0	6.1	8.4	. .	. .	3.9 *2002*	4.1
United States	. .	. .	. .	. .	. .	. .	. .	. .
Latest average[e]	**. .**	**. .**	**. .**	**19.9**	**. .**	**. .**	**. .**	**6.2**
Consistent average (10,16)[f]	**. .**	**16.5**	**18.1**	**21.9**	**. .**	**5.4**	**6.1**	**6.4**

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a) In Australia, data from 2005 relate only to those eligible for reimbursement under Medicare.
b) Data for Germany only include equipment installed in the hospital sector though there is additional equipment in the ambulatory sector.
c) Data for Greece (mammographs) and Portugal include the private sector since 2005.
d) Raw numbers on radiation therapy equipment for England and Wales have been increased pro rata to provide estimates for the United Kingdom. The private sector is not included.
e) Average comprises all countries for which recent data are available (2002+).
f) The average for mammographs excludes Australia, Austria, Belgium, Canada, Denmark, Germany, Greece, Ireland, Italy, Japan, Korea, Mexico, the Netherlands, Norway, Poland, the Slovak Republic, Spain, Sweden, Switzerland and the United States. The average for radiation therapy equipment excludes Canada, Denmark, Greece, Ireland, Japan, Luxembourg, Mexico, the Netherlands, Norway, Poland, the Slovak Republic, Sweden, the United Kingdom and the United States.

Source: OECD Health Data 2007.

Table A.4.8. **Doctors consultations per capita, 1980 to 2005**

	1980	1990	2000	2005
Australia	4.0	6.1	6.4	6.1
Austria	5.4	5.9	6.7	6.7 *2004*
Belgium	7.1	7.7	7.9	7.5
Canada	5.6	6.7	6.3	6.0 *2004*
Czech Republic	12.4	11.8	12.6	13.2
Denmark[a]	5.0	5.7	6.9	7.5 *2004*
Finland	3.2	3.9	4.3	4.3
France	4.2	5.9	6.8	6.6 *2004*
Germany[b]	. .	5.3 *1991*	7.3	7.0 *2004*
Greece	2.6	2.5	2.5 *1998*	. .
Hungary	. .	. .	11.1	12.6
Iceland	. .	5.1	5.8	6.5
Ireland	. .	. .	. .	. .
Italy[c]	. .	6.8 *1991*	6.1	7.0
Japan	. .	13.8	14.4	13.8 *2004*
Korea	. .	. .	8.8 *1999*	11.8
Luxembourg	. .	. .	6.1	6.1
Mexico	1.3	1.7	2.5	2.5 *2004*
Netherlands[c, d]	4.9	5.5	5.9	5.4
New Zealand[c]	3.7	. .	4.4 *2001*	3.2 *2003*
Norway	. .	. .	. .	. .
Poland	6.5	5.8	5.4	6.3
Portugal[e]	3.7	3.0	3.5	3.9
Slovak Republic	. .	. .	15.0	11.3
Spain[c]	. .	6.5 *1987*	8.7 *2001*	9.5 *2003*
Sweden	2.6	2.8	2.8	2.8
Switzerland[c]	. .	. .	3.4 *2002*	3.4 *2002*
Turkey[e]	1.2	1.5 *1993*	2.5	3.1 *2004*
United Kingdom[a, f]	5.2	6.1	5.3	5.1
United States	. .	. .	3.7	3.8 *2004*
Latest average[g]	**. .**	**. .**	**. .**	**6.8**
Consistent average (20)[h]	**. .**	**5.9**	**6.4**	**6.5**

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a) Denmark and the United Kingdom include consultations by telephone; it is therefore not limited to physician visits.
b) The German figures represent the number of cases of physicians' treatment according to reimbursement regulations under the Social Health Insurance Scheme. One case of treatment only counts the first contact in three months even if the patient consults his/her doctor more often.
c) For Italy, the Netherlands, New Zealand (2003), Spain and Switzerland, data come from health interview surveys.
d) The Netherlands do not include contacts for maternal and childcare.
e) Portugal and Turkey exclude visits to private practitioners.
f) The United Kingdom does not include consultations with specialists in the independent sector or consultations with specialists outside hospital outpatient departments.
g) Average comprises all countries for which recent data are available (2002+).
h) The average excludes: Greece, Hungary, Ireland, Korea, Luxembourg, New Zealand, Norway, the Slovak Republic, Switzerland and the United States.

Source: OECD Health Data 2007.

Table A.4.9a. **Hospital discharge rates for all causes, per 100 000 population, 1990 to 2005**

	1990	1995	2000	2005
Australia[a]	16 483 *1993*	16 482	15 813	15 786 *2004*
Austria[b]	22 704	23 955	28 449	27 765
Belgium	15 720 *1993*	15 884	17 329	16 887 *2004*
Canada[a]	12 899	11 047	9 401	8 751 *2004*
Czech Republic[c]	. .	20 568	20 953	23 690
Denmark[d]	. .	. .	17 220	17 013
Finland[a, b]	21 745	24 566	26 663	25 751
France[b]	. .	25 967 *1997*	26 802	26 780 *2004*
Germany	. .	18 163	19 559	20 149 *2004*
Greece[a]	12 688	14 078	16 076	. .
Hungary[b]	. .	. .	24 071	25 623
Iceland	17 641	18 116	18 190	17 244
Ireland[a]	. .	11 463	10 858	10 227
Italy[b]	. .	15 362 *1996*	15 632	15 822 *2004*
Japan[c]	9 682 *1993*	10 009 *1996*	10 434 *2001*	10 551
Korea[a]	6 536	7 710 *1994*	9 593 *2001*	13 173
Luxembourg[a]	. .	17 618 *1998*	18 075	17 327
Mexico[a, d]	. .	4 838	5 165	5 129
Netherlands	10 212	10 230	9 265	10 414
New Zealand	. .	. .	14 058	13 075
Norway[a]	14 542 *1993*	14 544	15 408	17 519
Poland[d]	. .	. .	17 406 *2003*	18 599
Portugal	. .	8 903	8 620	9 004
Slovak Republic	. .	19 112	19 607	19 804
Spain[a]	9 501	10 512	11 183	10 838 *2004*
Sweden[a]	17 884	17 457	16 458	16 052
Switzerland	. .	. .	15 297 *2002*	15 898
Turkey	5 674	6 092	7 416	8 451 *2004*
United Kingdom[b]	17 338	20 971	22 362	24 516
United States[a, b]	12 423	11 661	11 380	12 093 *2004*
Latest average[e]	**. .**	**. .**	**. .**	**16 342**
Consistent average (24)[f]	**. .**	**15 051**	**15 609**	**15 988**

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a) Data for Australia, Canada, Finland, Greece, Ireland, Korea, Luxembourg, Mexico, Norway, Spain, Sweden and the United States exclude discharges of healthy babies born in hospital.

b) Austria (before 2003), Finland, France, Hungary (before 2004), Italy (from 2004), the United Kingdom and the United States include same-day separations whereas other countries exclude them.

c) The Czech Republic and Japan include transfers from one hospital unit to another while these are excluded in other countries.

d) Data for Denmark, Mexico and Poland are restricted to public hospitals only.

e) Average comprises all countries for which recent data are available (2004+).

f) Excludes Denmark, Greece, Hungary, New Zealand, Poland and Switzerland.

Source: OECD Health Data 2007.

Table A.4.9b. **Hospital discharge rates for selected causes, per 100 000 population, 1995 to 2005**

	Circulatory diseases		Respiratory diseases		Digestive diseases	
	1995	2005	1995	2005	1995	2005
Australia	1 854	1 688 *2004*	1 512	1 371 *2004*	1 590	1 513 *2004*
Austria[a]	3 382	3 698	1 761	1 796	2 164	2 440
Belgium	2 235	2 179 *2004*	1 319	1 277 *2004*	1 768	1 704 *2004*
Canada	1 533	1 224 *2004*	1 072	778 *2004*	1 282	931 *2004*
Czech Republic[b]	3 039	3 712	1 751	1 559	2 153	2 214
Denmark[c]	. .	2 161	. .	1 438	. .	1 372
Finland[a]	3 891	3 552	2 387	1 903	1 817	1 873
France[a]	2 286 *1997*	2 251 *2004*	1 496 *1997*	1 242 *2004*	2 997 *1997*	3 080 *2004*
Germany	2 955	3 126 *2004*	1 223	1 231 *2004*	1 766	2 080 *2004*
Greece	2 010	. .	1 169	. .	1 561	. .
Hungary[a]	. .	4 606	. .	2 193	. .	1 996
Iceland	1 902 *1998*	1 830	1 289 *1998*	983	. .	1 351
Ireland	1 349	1 224	1 578	1 341	1 311	1 200
Italy[a]	2 381 *1996*	2 508 *2004*	1 100 *1996*	1 157 *2004*	1 782 *1996*	1 477 *2004*
Japan[b]	1 210 *1996*	1 330	894 *1996*	956	1 078 *1996*	1 069
Korea	437 *1994*	1 171	633 *1994*	956	895 *1994*	1 196
Luxembourg	2 265 *1998*	2 286	1 779 *1998*	1 443	1 660 *1998*	1 673
Mexico[c]	182	211	244	250	369	471
Netherlands	1 589	1 528	704	731	890	916
New Zealand[a]	. .	1 345	. .	1 091	. .	980
Norway	2 194	2 467	1 158	1 531	1 006	1 238
Poland[c]	. .	3 024	. .	1 558	. .	1 766
Portugal	941	1 165	597	927	950	986
Slovak Republic	2 464	3 054	1 728	1 660	2 074	1 889
Spain	1 055	1 359 *2004*	873	1 053 *2004*	1 152	1 291 *2004*
Sweden	2 994	2 597	1 292	1 047	1 380	1 232
Switzerland	. .	1 680	. .	856	. .	1 323
Turkey	695	1 220 *2004*	688	1 113 *2004*	605	896 *2004*
United Kingdom[a]	1 907	1 886	1 468	1 458	2 166	2 481
United States[a]	2 121	2 101 *2004*	1 254	1 213 *2004*	1 138	1 219 *2004*
Latest average[d]	**. .**	**2 144**	**. .**	**1 245**	**. .**	**1 512**
Consistent average (23)[e]	**1 955**	**2 067**	**1 240**	**1 217**	**1 478**	**1 525**

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a) Austria (before 2003), Finland, France, Hungary (before 2004), Italy (from 2004), the United Kingdom and the United States include same-day separations whereas other countries exclude them.

b) The Czech Republic and Japan include transfers from one hospital unit to another while these are excluded in other countries.

c) Data for Denmark, Mexico and Poland are restricted to public hospitals only.

d) Average comprises all countries for which recent data are available (2004+).

e) Excludes Denmark, Greece, Hungary, Iceland, New Zealand, Poland and Switzerland.

Source: OECD Health Data 2007.

Table A.4.10a. **Average length of stay for acute care, all conditions, in days, 1990 to 2005**

	1990	1995	2000	2005
Australia	7.2 *1989*	6.5	6.1	6.1 *2004*
Austria[a]	9.3	7.9	6.9	5.9
Belgium	9.8 *1993*	9.4	7.7	7.1 *2004*
Canada	7.4 *1994*	7.2	7.2	7.3 *2004*
Czech Republic	12.0	10.2	8.7	8.0
Denmark[b]	6.4	4.1	3.8	3.5
Finland[a]	7.0	5.5	5.0	4.8
France[a]	7.0	6.2	5.6	5.4
Germany	14.0 *1991*	11.4	9.7	8.6
Greece	7.5	6.4	6.2	6.0 *2003*
Hungary[a]	9.9	9.2	7.1	6.3
Iceland	7.0	5.9	6.1	5.4
Ireland	6.7	6.6	6.4	6.6
Italy[a]	9.5 *1991*	8.4	7.0	6.8 *2004*
Japan	. .	33.2	24.8	19.8
Korea	12.0	11.0	11.0	10.6 *2003*
Luxembourg	. .	7.9 *1998*	7.5	7.3
Mexico[b]	4.2 *1993*	4.0	4.0	4.0
Netherlands[a]	10.0	8.8	7.7	6.8
New Zealand	. .	5.5 *1997*	4.9 *1998*	. .
Norway	7.8	6.5	6.0	5.2
Poland	12.5	10.8	8.9	6.5
Portugal	8.4	7.9	7.7	7.1
Slovak Republic	. .	10.5 *1996*	8.5	7.3
Spain	9.6	8.8	7.1	6.7 *2004*
Sweden	6.5	5.2	5.0	4.6
Switzerland	13.4	12.0	9.3	8.5
Turkey	6.0	5.7	5.4	5.2 *2002*
United Kingdom[a]	8.0 *1991*	7.1	7.0	6.1
United States[a]	7.3	6.5	5.8	5.6
Latest average[c]	**. .**	**. .**	**. .**	**6.9**
Consistent average (26)[d]	**8.7**	**7.7**	**6.9**	**6.3**

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a) Austria (before 2003), Finland, France, Hungary (before 2004), Italy (from 2004), the United Kingdom and the United States include same-day separations whereas other countries exclude them.
b) Data for Denmark and Mexico are restricted to public hospitals only.
c) Average comprises all countries for which recent data are available (2002+).
d) Excludes Japan, Luxembourg, New Zealand and the Slovak Republic.
Source: OECD Health Data 2007.

Table A.4.10b. **Average length of stay, specific conditions, in days, 1995 to 2005**

	Acute myocardial infarction (AMI)		Stroke		Pneumonia		Normal delivery	
	1995	2005	1995	2005	1995	2005	1995	2005
Australia	7.7	6.3 *2004*	14.0	11.1 *2004*	7.8	6.7 *2004*	3.5	2.6 *2004*
Austria	16.4	8.4	17.7	14.4	. .	9.9	6.5	4.3
Belgium	10.7	8.4 *2004*	19.6	14.3 *2004*	. .	11.8 *2004*	5.4	4.5 *2004*
Canada	9.0	7.3 *2004*	20.8	14.8 *2004*	8.1	7.6 *2004*	2.2	1.9 *2004*
Czech Republic	12.7	6.2	15.2	14.5	12.1	10.4	6.9	5.1
Denmark[a]	. .	5.3	. .	9.9	. .	7.0	. .	2.9
Finland	17.7	12.3	43.1	37.8	36.6 *1996*	24.2	4.1	3.5
France	8.1 *1997*	6.9 *2004*	11.7 *1997*	11.7 *2004*	10.2 *1997*	9.8 *2004*	5.3 *1997*	4.6 *2004*
Germany	17.0	9.7 *2004*	19.0	13.3 *2004*	. .	11.1 *2004*	5.8	3.7 *2004*
Greece	8.0	. .	13.0	. .	. .	. .	4.0	4.0 *2003*
Hungary	12.7	7.1	. .	8.1	. .	9.3	6.2	6.2
Iceland	9.8 *1994*	7.3	11.8 *1998*	11.1	. .	8.7	4.6 *1994*	2.1
Ireland	10.5	10.7	21.3	22.4	11.8	11.4	4.4	3.0 *2004*
Italy	13.6 *1994*	8.4 *2004*	16.1 *1994*	13.1 *2004*	. .	10.4 *2004*	5.3 *1994*	3.6 *2004*
Japan	. .	. .	. .	. .	. .	. .	. .	. .
Korea	12.6 *1996*	9.7	22.7 *1996*	32.5	7.8 *1996*	9.3	3.5 *1995*	2.9
Luxembourg	10.7 *1998*	7.3	16.1 *1998*	13.3	10.0 *1998*	9.8	4.5 *1998*	4.2
Mexico[a]	7.2	7.2	7.4	7.9	6.0	6.3	1.3	1.3
Netherlands	. .	8.0	22.6	12.6	. .	10.8	3.2	2.2
New Zealand	8.1	6.0	32.7 *1994*	8.9	. .	4.9	2.8	2.1
Norway	8.3	5.0	14.9	10.3	. .	7.7	4.4	3.4
Poland[a]	. .	7.7	. .	12.8	. .	10.8	. .	4.7
Portugal	11.0	9.0	12.5	10.4	10.6	10.6	3.1	2.7
Slovak Republic	15.5	8.1	16.3	11.5	13.6	10.2	7.8	5.7
Spain	12.4	9.2 *2004*	17.1	12.1 *2004*	11.4	9.3 *2004*	3.6	2.6 *2004*
Sweden	7.6	5.3	15.1	11.8	6.6 *1998*	6.4	3.1	2.4
Switzerland	12.8	8.3	. .	17.4	. .	11.3	6.2	5.6
Turkey	. .	. .	8.3	7.6 *2004*	. .	6.0 *2004*	1.9	1.7 *2003*
United Kingdom	8.7	8.7	30.2	23.4	. .	11.6	2.4	1.5
United States	6.6	5.8 *2004*	7.4	5.8 *2004*	6.7	5.5 *2004*	1.5	2.0 *2004*
Latest average[b]	**. .**	**7.8**	**. .**	**14.1**	**. .**	**9.6**	**. .**	**3.3**
Consistent average[c]	**11.1**	**7.9**	**18.1**	**14.4**	**11.4**	**9.8**	**4.2**	**3.3**

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a) Data for Denmark, Mexico and Poland are restricted to public hospitals only.
b) Average comprises all countries for which recent data are available (2003+).
c) Includes those countries for which data are available for both 1995 and 2005.
Source: OECD Health Data 2007.

Table A.4.11. **Cardio-vascular surgeries, per 100 000 population, 1990 to 2005**

	Coronary artery bypass grafts (CABG)				Coronary angioplasties			
	1990	1995	2000	2005	1990	1995	2000	2005
Australia	61.1	94.9	89.4	72.3 *2004*	28.7	62.8	114.4	163.4 *2004*
Austria	. .	55.3 *1997*	56.7	51.2	. .	121.1 *1997*	174.8	. .
Belgium	. .	. .	158.9 *2002*	152.1 *2004*	. .	97.8	262.1	421.8 *2004*
Canada	. .	. .	. .	91.4 *2004*	. .	. .	. .	137.6 *2004*
Czech Republic	. .	23.0	64.3	75.9	. .	. .	. .	207.1
Denmark	20.1	41.5	120.0	82.0	17.5 *1992*	29.8	106.8	193.6
Finland	38.4	84.9	93.1	63.1	13.1	35.3	66.4	123.6
France	. .	36.0 *1993*	40.5	. .	. .	34.8 *1993*	146.2	. .
Germany	41.3	71.9	93.6	81.7	53.4	133.3	219.5	328.6
Greece	18.9	59.6	. .	. .	23.4 *1993*	37.0	85.0	122.9 *2002*
Hungary	. .	. .	91.4	133.9	1.6 *1992*	6.4 *1993*	46.5	325.5
Iceland	54.2	72.9	60.8	51.0	51.4	127.2	160.7	229.5
Ireland	. .	25.9	34.2	46.4	. .	18.1	86.6	88.9
Italy	. .	33.8 *1996*	48.5	45.1 *2004*	. .	29.3 *1994*	87.7	111.6 *2004*
Japan	. .	. .	. .	. .	. .	. .	. .	. .
Korea	. .	. .	. .	5.9 *2004*	. .	. .	. .	. .
Luxembourg	. .	. .	40.8	62.4	. .	. .	125.6	179.3
Mexico	. .	0.5	1.3	2.6	. .	0.3	0.9	1.6
Netherlands	61.5	62.7	59.4	57.4	42.2 *1992*	64.6	69.1	92.6 *2003*
New Zealand	. .	68.4 *1996*	103.3	83.3 *2004*	. .	54.3 *1994*	73.9	104.0 *2004*
Norway	. .	72.7 *1996*	76.1	88.5 *2004*	. .	49.4 *1993*	117.2	231.8 *2004*
Poland	. .	8.0 *1993*	38.7 *2003*	56.0	4.4 *1992*	4.8 *1993*	19.0 *1997*	222.9
Portugal	13.6	19.6	22.9	22.3	4.7 *1993*	14.6	45.5	74.5
Slovak Republic	. .	. .	. .	. .	. .	. .	. .	. .
Spain	11.2	17.9	25.0	30.0	12.7 *1991*	31.4	93.4	218.1
Sweden	50.6	71.7	72.7	53.9	12.8	54.7	92.6	172.6
Switzerland	. .	. .	39.9 *2002*	28.1	45.7 *1992*	65.1 *1993*	77.8 *2002*	105.8
Turkey	. .	. .	. .	. .	. .	. .	. .	. .
United Kingdom	31.4	46.7	58.0	51.4	11.6	31.0	71.2	123.2
United States	157.1	215.2	183.8	145.4 *2004*	114.2	162.7	363.2	433.7 *2004*
Latest average[a]	**. .**	**. .**	**. .**	**65.3**	**. .**	**. .**	**. .**	**183.9**
Consistent average (11)[b]	**49.1**	**72.7**	**79.9**	**64.6**	**32.9**	**67.9**	**127.5**	**195.8**

StatLink http://dx.doi.org/10.1787/115306265080

Note: The data relate to the number of inpatient procedures only. They do not include coronary angioplasties performed on an ambulatory basis (a growing share of overall activity rates in many countries).

a) Average comprises all countries for which recent data are available (2002+).

b) Includes Australia, Denmark, Finland, Germany, Iceland, the Netherlands, Portugal, Spain, Sweden, the United Kingdom and the United States.

Source: OECD Health Data 2007.

Table A.4.13. **Caesarean sections per 100 live births, 1990 to 2005**

	1990	1995	2000	2005
Australia	17.5	19.2	23.1	29.1 *2004*
Austria	. .	12.4	17.2	24.4
Belgium	10.5	13.5	16.3	17.8 *2004*
Canada	. .	17.5	20.9	25.3 *2004*
Czech Republic	7.6	11.2	12.9	17.1
Denmark	12.4	12.5	14.7	19.4
Finland	13.7	15.8	16.0	16.4
France	13.9	15.2 *1993*	17.1	. .
Germany	15.7	17.2	20.9	26.7
Greece	. .	. .	. .	. .
Hungary	. .	13.6	20.1	29.1
Iceland	11.8	14.1	17.7	15.6
Ireland	10.5	13.4	20.7	24.5 *2004*
Italy	20.8	26.1	33.3	37.5 *2004*
Japan	. .	. .	. .	. .
Korea	. .	. .	39.6 *2001*	35.2 *2004*
Luxembourg	16.5	16.4	21.8	27.5
Mexico	. .	25.3	32.0	39.3
Netherlands	7.4	9.7	11.9	13.6 *2004*
New Zealand	12.1	15.1	20.2	22.2 *2004*
Norway	12.8	12.6	13.7	15.2 *2004*
Poland	. .	15.2	16.1 *1997*	. .
Portugal[a]	19.5 *1993*	21.6	23.9	27.8
Slovak Republic	8.7	11.5	14.7	20.7
Spain	14.2	18.8	21.5	23.6 *2003*
Sweden	10.8	12.0	15.2	17.2 *2003*
Switzerland	18.6	. .	24.2 *2002*	26.7
Turkey	. .	13.6 *1998*	13.6 *1998*	. .
United Kingdom	11.6	15.8	22.3	23.3
United States	22.7	20.8	22.9	29.1 *2004*
Latest average[b]	**. .**	**. .**	**. .**	**24.2**
Consistent average (19)[c]	**13.5**	**15.6**	**19.1**	**22.3**

StatLink http://dx.doi.org/10.1787/115317683027

a) In Portugal, births only include those taking place in public hospitals (in mainland), therefore resulting in an overestimation of caesarean rates.

b) Average comprises all countries for which data are available (2002+).

c) Excludes Austria, Canada, France, Greece, Hungary, Japan, Korea, Mexico, Poland, Switzerland and Turkey.

Source: OECD Health Data 2007.

Table A.4.14. **Number of cataract surgeries, inpatient and day cases, per 100 000 population, 1995 to 2005**

	1995			2000			2005		
	Inpatients	Day cases	Total	Inpatients	Day cases	Total	Inpatients	Day cases	Total
Australia	. .	. .	. .	113.4	599.8	713.1	67.4 *2004*	787.8 *2004*	855.3 *2004*
Austria	465.4 *1997*	. .	. .	571.8	. .	. .	697.9	. .	. .
Belgium	552.6	. .	. .	359.4	888.4	1 247.7	163.7 *2004*	1 436.3 *2004*	1 600.0 *2004*
Canada	99.3	. .	. .	22.3	1 414.4	1 436.6	7.5 *2004*	. .	. .
Czech Republic		. .	. .	331.5	. .	. .	410.6	. .	. .
Denmark	133.1 *1996*	222.2 *1996*	355.3 *1996*	85.1	327.8	412.9	19.7	502.4	522.2
Finland	304.8	152.5	457.3	116.3	529.5	645.8	29.9	764.6	794.5
France	388.2 *1993*	42.1 *1993*	430.3 *1993*	497.5	230.6	728.2	. .	. .	. .
Germany	. .	. .	. .	. .	. .	. .	. .	. .	. .
Greece	. .	. .	333.5 *1996*	. .	. .	611.9	. .	. .	878.9 *2003*
Hungary	. .	. .	. .	. .	. .	698.7	827.3	2.9	830.3
Iceland	. .	. .	. .	54.4 *1998*	204.9 *1998*	259.3 *1998*	. .	. .	740.2
Ireland	316.3	38.7	355.0	303.6	128.9	432.5	111.4	139.6	251.1
Italy	339.8 *1996*	20.5 *1996*	360.3 *1996*	415.9	250.6	666.5	164.3 *2004*	582.9 *2004*	747.2 *2004*
Japan	. .	. .	. .	. .	. .	. .	. .	. .	. .
Korea	. .	. .	. .	. .	. .	. .	. .	. .	444.6 *2004*
Luxembourg	. .	. .	589.5 *1996*	505.8	209.9	715.8	635.2	314.1	949.2
Mexico	2.5	24.0	26.4	7.2	30.7	37.8	17.5	37.3	54.7
Netherlands	274.4	115.9	390.3	95.4	457.9	553.3	25.4	736.5	761.9
New Zealand	. .	. .	. .	25.6	218.4	243.9	17.7 *2004*	188.8 *2004*	206.5 *2004*
Norway	. .	. .	. .	65.4	448.8	514.2	32.6 *2004*	455.1 *2004*	487.7 *2004*
Poland	. .	. .	. .	212.1 *2003*	. .	. .	304.4	. .	. .
Portugal	99.5	0.1	99.6	132.4	13.2	145.6	134.6	153.3	287.9
Slovak Republic	. .	. .	. .	. .	. .	. .	. .	. .	. .
Spain	362.8 *1997*	. .	. .	235.0	. .	. .	101.5	892.9	994.5
Sweden	33.5 *1998*	. .	. .	25.5 *2001*	614.9 *2001*	640.4 *2001*	22.9 *2003*	871.6 *2003*	894.5 *2003*
Switzerland	. .	. .	. .	225.5 *2002*	251.4 *2002*	476.9 *2002*	112.2	317.0	429.1
Turkey	. .	. .	. .	. .	. .	. .	. .	. .	. .
United Kingdom	196.1	141.9	338.0	95.3	451.7	546.9	43.1	583.8	626.9
United States	6.8	. .	. .	2.7	. .	. .	3.3 *2004*	. .	. .

StatLink http://dx.doi.org/10.1787/115360252350

Note: Cross-country variations should be interpreted with caution due to differences in how countries register cataract surgeries and incomplete coverage of health care facilities (in particular private hospitals and activities carried out in the ambulatory sector).
Source: OECD Health Data 2007.

Table A.5.1a. **Total expenditure on health per capita, USD PPP, 1980 to 2005**

	1980	1990	2000	2001	2002	2003	2004	2005
Australia	697	1 307	2 397	2 541	2 724	2 892	3 128	3 128 *2004-05*
Austria	769	1 327	2 825	2 898	3 018	3 236	3 418	3 519
Belgium	636	1 341	2 301	2 452	2 631	3 080	3 290e	3 389e
Canada	780	1 738	2 509	2 727	2 867	3 006	3 161	3 326
Czech Republic	. .	570	971	1 055	1 199	1 353	1 413	1 479
Denmark	883	1 521	2 381	2 561	2 656	2 793	2 972e	3 108e
Finland	582	1 392	1 717	1 861	2 012	2 045	2 202	2 331
France	677	1 499	2 487	2 649	2 795	3 011	3 191	3 374
Germany	950	1 933 *1992*	2 634	2 754	2 886	3 129	3 169	3 287
Greece	486	843	1 950	2 178	2 364	2 616	2 669	2 981
Hungary	. .	600 *1991*	857	977	1 115	1 291e	1 337e	1 337 *2004e*
Iceland	733	1 619	2 697	2 775	3 036	3 161	3 331	3 443
Ireland	519	796	1 822	2 151	2 368	2 536	2 742	2 926
Italy	. .	1 380	2078	2 188	2 278	2 281	2 437	2 532
Japan	583	1 121	1 967	2 080	2 138	2 243e	2 358e	2 358 *2004e*
Korea	159 *1983*	356	780	932	977	1 051	1 138	1 318
Luxembourg	640	1 532	2 984	3 270	3 729	4 727	5 352e	5 352 *2004e*
Mexico	. .	306	506	548	578	608	655	675
Netherlands	755	1 434	2 258	2 525	2 775	2 910e	3 094e	3 094 *2004e*
New Zealand	509	991	1 605	1 709	1 850	1 911	2 148e	2 343e
Norway	676	1 392	3 082	3 293	3 616	3 872	4 103	4 364
Poland	. .	296	590	647	734	754	814	867e
Portugal	292	673	1 625	1 685	1 783	1 832e	1 896e	2 033e
Slovak Republic	. .	. .	595	642	716	798	1 061	1 137
Spain	363	872	1 520	1 617	1 723	1 954	2 099e	2 255e
Sweden	938	1 581	2 272	2 409	2 593	2 760	2 827	2 918
Switzerland	1 030	2 028	3 181	3 371	3 650	3 861	4 045	4 177
Turkey	76	168	451	461	484	514	562	586
United Kingdom	482	989	1 859	2 034	2 228	2 328	2 560	2 724
United States	1 068	2 738	4 569	4 917	5 306	5 684	6 037	6 401
Latest average[a]	. .	. .	. .	. .	. .	. .	. .	**2 759**
Consistent average (24)[b]	**637**	**1 300**	**2 245**	**2 410**	**2 592**	**2 798**	**2 979**	**3 114**

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e: Preliminary estimate.

a) Average consists of the latest available data for all OECD countries.

b) Excludes the Czech Republic, Hungary, Italy, Mexico, Poland and the Slovak Republic.

Source: OECD Health Data 2007.

Table A.5.1b. **Public expenditure on health per capita, USD PPP, 1980 to 2005**

	1980	1990	2000	2001	2002	2003	2004	2005
Australia	439	877	1 640	1 715	1 839	1 952	2 110	2 110 *2004-05*
Austria	529	976	2 144	2 195	2 276	2 438	2 582	2 665
Belgium	. .	. .	1 750	1 878	1 979	2 205	2 404e	2 451e
Canada	590	1 296	1 766	1 909	1 994	2 110	2 220	2 337
Czech Republic	. .	555	877	947	1 085	1 215	1 259	1 310
Denmark	775	1 258	1 963	2 117	2 203	2 353	2 506e	2 614e
Finland	460	1 126	1 290	1 412	1 536	1 558	1 700	1 813
France	542	1 148	1 948	2 075	2 197	2 389	2 534	2 693
Germany	747	1 575 *1992*	2 098	2 184	2 286	2 462	2 437	2 527
Greece	270	453	862	1 032	1 111	1 214	1 190	1 277
Hungary	. .	534 *1991*	606	674	783	921e	942e	942 *2004e*
Iceland	647	1 402	2 211	2 273	2 512	2 607	2 746	2 842
Ireland	423	571	1 329	1 584	1 791	1 945	2 143	2 281
Italy	. .	1 097	1 507	1 633	1 697	1 703	1 847	1 938
Japan	416	870	1 599	1 699	1 742	1 828e	1 927e	1 927 *2004e*
Korea	41 *1983*	130	365	494	504	546	598	698
Luxembourg	594	1 426	2 665	2 874	3 367	4 281	4 851e	4 851 *2004e*
Mexico	. .	124	235	246	254	268	304	307
Netherlands	523	962	1 424	1 586	1 733	1 733 *2002*	1 733 *2002*	1 733 *2002*
New Zealand	448	816	1 252	1 306	1 441	1 497	1 665e	1 829e
Norway	576	1 153	2 542	2 752	3 019	3 241	3 428	3 647
Poland	. .	271	413	465	522	527	558	601e
Portugal	188	441	1 179	1 205	1 288	1 344e	1 358e	1 478e
Slovak Republic	. .	. .	532	574	638	705	782	846
Spain	290	687	1 089	1 151	1 228	1 373	1 487e	1 609e
Sweden	868	1 421	1 929	2 045	2 207	2 357	2 391	2 469
Switzerland	. .	1 062	1 769	1 926	2 113	2 258	2 367	2 493
Turkey	22	102	284	314	341	368	406	418
United Kingdom	431	827	1 503	1 687	1 857	1 993	2 209	2 371
United States	439	1 080	1 995	2 191	2 372	2 528	2 698	2 884
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**1 999**
Consistent average (22)[b]	**466**	**936**	**1 594**	**1 718**	**1 857**	**2 005**	**2 133**	**2 231**

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e: Preliminary estimate.

a) Average consists of the latest available data for all OECD countries.

b) Excludes Belgium, the Czech Republic, Hungary, Italy, Mexico, Poland, the Slovak Republic and Switzerland.

Source: OECD Health Data 2007.

Table A.5.1c. **Growth of total and public expenditure on health per capita, compared to GDP per capita growth, in real terms, 1995 to 2005**

	Total expenditure on health per capita		Public expenditure on health per capita		GDP per capita	
	Annual average growth rate	2005 real expenditure 1995 = 100	Annual average growth rate	2005 real expenditure 1995 = 100	Annual average growth rate	2005 real GDP 1995 = 100
Australia* (1995-2004)	4.7	151	4.2	145	2.5	125
Austria	2.4	127	3.0	134	2.0	121
Belgium*	3.2	136	2.8	132	1.7	119
Canada*	3.2	136	3.0	134	2.3	126
Czech Republic*	2.5	127	2.3	125	2.7	130
Denmark*	2.8	132	2.9	133	1.7	119
Finland	3.5	141	3.8	145	3.4	139
France*	2.3	126	2.4	127	1.6	118
Germany	1.8	119	1.2	113	1.2	113
Greece*	4.7	158	5.1	165	3.4	140
Hungary* (1995-2004)	4.9	153	3.6	137	4.4	148
Iceland	5.0	163	4.8	160	3.4	140
Ireland	7.2	200	8.0	217	6.0	178
Italy	3.2	136	4.0	148	1.1	111
Japan* (1995-2004)	2.6	126	2.5	125	0.9	108
Korea	7.6	208	11.9	308	3.7	144
Luxembourg* (1995-2004)	7.6	193	7.5	191	3.6	137
Mexico*	3.6	142	4.7	158	2.1	123
Netherlands*, [a] (1995-2004)	3.0	131	2.1	115	2.1	122
New Zealand	4.3	152	4.4	154	1.9	121
Norway*	3.4	139	3.7	144	2.3	126
Poland*	5.2	166	4.8	160	4.3	153
Portugal*	3.8	145	4.6	156	1.7	118
Slovak Republic* (1997-2005)	3.7	133	3.3	129	3.4	131
Spain*	3.0	135	3.1	136	2.7	130
Sweden	3.8	145	3.5	142	2.6	129
Switzerland	2.8	132	3.9	147	1.0	110
Turkey (1999-2005)	6.3	144	9.1	168	3.4	122
United Kingdom	4.2	151	4.6	157	2.4	127
United States	3.6	143	3.6	142	2.2	124
Average	**4.0**	**146**	**4.3**	**152**	**2.6**	**128**

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* The growth rates presented in Tables A.5.1c to A.5.1e have been adjusted to take account of the many series breaks that are present for the health expenditure series. These series breaks are in most cases due to methodological changes resulting from the implementation of the *System of Health Accounts* (see Annex B). The revision of the health sector boundary usually results in a level shift in health expenditure at point of implementation. To attempt to remove this effect, the real growth in the year of the series break has been assumed to be the average growth of the preceding and following years.

a) Public expenditure for the Netherlands corresponds to the period 1995-2002.

Source: OECD Health Data 2007.

Table A.5.1d. **Annual growth rate of total expenditure on health per capita, in real terms, 1995 to 2005**

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
Australia	4.8	4.3	4.9	5.3*	5.6	4.4	4.5	3.5	5.1	. .
Austria	2.5	3.8	5.6	2.8	1.0	1.2	2.0	1.9	2.6	0.8
Belgium	3.3	1.3	3.0	5.9	3.9	1.7	3.7	4.0*	4.2	0.7
Canada	–1.8	2.8	6.4	2.8	3.4	6.1	5.0	2.6	2.3	2.1
Czech Republic	–0.2	–1.3	–1.2	0.4	2.8*	5.1	8.2	5.0*	1.8	4.4
Denmark	3.3	2.0	3.9	4.0	0.7	4.0	2.5	3.0*	3.5	1.4
Finland	5.3	0.9	–0.7	2.2	1.9	4.6	6.0	5.7	4.1	5.1
France	0.6	0.4	2.3	3.3	2.6	2.4	3.3	3.2*	3.0	2.0
Germany	3.6	0.0	2.1	2.7	3.0	2.5	1.7	1.4	–0.8	1.8
Greece	1.2	1.6	1.9	6.0	8.0*	10.0	2.4	7.8	0.3	8.0
Hungary	–2.2	1.2	3.1*	5.0	2.3	7.6	10.4	14.2	3.0	. .
Iceland	3.7	3.3	11.9	11.9	1.5	0.9	7.7	5.0	3.6	1.1
Ireland	4.7	8.7	4.4	10.1	8.5	15.4	6.9	5.0	5.0	3.6
Italy	2.3	5.5	2.2	2.7	7.0	3.4	1.7	0.1	5.1	1.8
Japan	5.0	0.5	1.9	3.2	4.6	3.3	0.4	2.8	2.1	. .
Korea	9.7	3.0	–7.3	17.4	11.2	16.7	4.3	5.4	5.2	12.5
Luxembourg	2.4	3.5	6.5	9.9	7.9	10.3	9.3	9.4*	9.4	. .
Mexico	–6.1	7.9	7.3*	6.7	4.4	5.8	2.7	3.0	4.8	0.0
Netherlands	1.5	0.4	2.4*	4.3	1.5	5.5	6.3	2.9	2.5	. .
New Zealand	1.2	3.2	5.5	3.0	2.7	4.4	7.6	–0.2	10.2	5.5
Norway	3.9	8.2*	12.4	2.2	–7.4	6.1	12.3	2.7	–0.5	–4.3
Poland	13.9	2.1	10.6	1.4	1.4	7.4	4.9*	2.4	4.7	3.9
Portugal	7.0	4.2	1.4	6.9	4.0*	1.0	2.0	6.2	1.5	4.0
Slovak Republic	. .	. .	1.9	1.5	–3.4	4.0	6.2	8.9	6.5*	4.1
Spain	2.4	1.8	3.9	4.2	2.7	2.9	1.4	2.9*	4.3	3.9
Sweden	4.3	0.3	5.2	5.6	4.1	5.3	6.4	3.1	1.5	2.4
Switzerland	4.4	1.9	4.2	2.1	2.9	5.1	1.6	2.0	2.2	1.9
Turkey	. .	. .	. .	. .	8.6	3.0	5.3	7.0	9.6	4.3
United Kingdom	3.0	0.5	3.6	6.6	5.2	5.4	4.2	3.7	6.2	4.1
United States	2.1	2.2	3.0	3.4	3.6	5.1	6.0	4.9	3.3	2.9
Average	**3.1**	**2.6**	**3.9**	**4.9**	**3.5**	**5.4**	**4.9**	**4.3**	**3.9**	**3.1**

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* See note to Table A.5.1c.

Source: OECD Health Data 2007.

Table A.5.1e. **Annual growth rate of public expenditure on health per capita, in real terms, 1995 to 2005**

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
Australia	4.0	6.8	4.2	3.7*	3.1	3.0	4.5	3.4	5.1	. .
Austria	1.0	11.2	5.9	3.3	0.7	1.0	1.5	1.8	2.9	1.0
Belgium	4.5	–2.0	2.3	5.6	3.8	2.4	1.8	4.1*	6.4	–0.3
Canada	–2.5	1.9	7.1	1.8	3.9	5.6	4.3	3.6	2.3	2.2
Czech Republic	–0.4	–1.7	–1.0	0.4	2.5*	4.5	9.0	5.1*	1.1	3.8
Denmark	3.2	1.8	3.6	4.3	0.9	4.3	2.8	3.2*	3.6	1.1
Finland	5.6	1.3	–0.4	0.9	1.7	5.7	6.6	5.5	5.5	5.8
France	0.4	0.5	2.3	2.9	2.6	2.5	3.7	3.4*	3.0	2.6
Germany	4.4	–1.6	1.2	2.3	2.9	2.1	1.6	0.7	–3.1	1.8
Greece	3.0	1.4	0.4	8.8	13.4*	17.9	1.5	6.4	–3.6	3.8
Hungary	–5.0	0.8	1.3*	1.7	0.0	4.9	12.4	16.0	1.8	. .
Iceland	2.8	1.8	10.7	14.5	0.2	0.8	8.8	4.7	3.6	1.2
Ireland	3.8	12.5	4.1	8.9	8.8	16.4	9.8	6.5	6.9	3.4
Italy	2.0	5.9	1.5	3.2	9.7	6.4	1.5	0.3	6.7	2.8
Japan	4.7	–1.0	1.0	3.6	4.9	3.8	0.1	2.8	2.5	. .
Korea	19.4	9.8	4.4	18.0	11.0	32.1	1.6	6.0	6.6	13.3
Luxembourg	2.8	3.1	6.4	6.8	7.3	8.5	12.3	10.9*	9.5	. .
Mexico	–7.7	16.5	13.7*	10.8	1.7	2.0	0.4	3.6	10.1	–2.0
Netherlands	–5.4	2.9	2.5*	2.0	2.1	5.0	5.7	2.9	2.5	. .
New Zealand	0.6	4.0	5.1	3.6	3.4	2.3	9.6	0.4	9.1	6.2
Norway	3.8	8.8*	13.7	2.6	–7.5	7.4	12.2	3.0	–0.7	–4.2
Poland	14.7	0.1	0.5	10.4	–0.2	10.3	5.5*	0.6	2.7	5.0
Portugal	11.5	4.9	3.6	7.7	3.6*	–0.5	3.1	7.9	–0.9	5.5
Slovak Republic	. .	. .	1.8	–0.6	–3.7	3.9	5.9	8.0	6.5*	5.0
Spain	2.7	2.0	3.5	3.9	2.1	2.3	1.5	3.4*	5.2	4.6
Sweden	4.6	–1.0	5.1	5.5	3.1	5.3	6.7	3.4	0.5	2.4
Switzerland	6.2	2.8	3.6	2.9	3.4	7.9	3.0	3.0	2.3	4.0
Turkey	. .	. .	. .	. .	11.8	11.7	8.7	8.8	10.6	3.1
United Kingdom	1.9	–2.6	3.6	7.0	5.6	8.1	4.6	6.5	7.1	5.0
United States	2.2	1.5	0.6	2.2	4.0	7.2	6.4	4.4	3.8	3.7
Average	**3.2**	**3.3**	**3.9**	**5.1**	**3.6**	**6.5**	**5.2**	**4.7**	**4.0**	**3.2**

StatLink http://dx.doi.org/10.1787/115415475557

* See note to Table A.5.1c.

Source: OECD Health Data 2007.

Table A.5.2a. **Total expenditure on health, percentage of GDP, 1980 to 2005**

	1980	1990	2000	2001	2002	2003	2004	2005
Australia	6.8	7.5	8.8	8.9	9.1	9.2	9.5	9.5 *2004-05*
Austria	7.5	7.0	10.0	10.0	10.1	10.2	10.3	10.2
Belgium	6.3	7.2	8.6	8.7	9.0	10.1	10.2e	10.3e
Canada	7.0	8.9	8.8	9.3	9.6	9.8	9.8	9.8
Czech Republic	. .	4.7	6.5	6.7	7.1	7.4	7.3	7.2
Denmark	8.9	8.3	8.3	8.6	8.8	9.1	9.2e	9.1e
Finland	6.3	7.7	6.6	6.7	7.0	7.3	7.4	7.5
France	7.0	8.4	9.6	9.7	10.0	10.9	11.0	11.1
Germany	8.4	9.6 *1992*	10.3	10.4	10.6	10.8	10.6	10.7
Greece	5.1	5.8	9.3	9.8	9.7	10.0	9.6	10.1
Hungary	. .	7.0 *1991*	6.9	7.2	7.6	8.3e	8.1e	8.1 *2004e*
Iceland	6.3	7.8	9.3	9.2	10.0	10.3	10.0	9.5
Ireland	8.3	6.1	6.3	7.0	7.2	7.3	7.5	7.5
Italy	. .	7.7	8.1	8.2	8.3	8.3	8.7	8.9
Japan	6.5	6.0	7.7	7.9	8.0	8.1e	8.0e	8.0 *2004e*
Korea	4.1 *1983*	4.3	4.8	5.4	5.3	5.4	5.5	6.0
Luxembourg	5.2	5.4	5.8	6.4	6.8	7.8	8.3e	8.3 *2004e*
Mexico	. .	4.8	5.6	6.0	6.2	6.3	6.5	6.4
Netherlands	7.5	8.0	8.0	8.3	8.9	9.1e	9.2e	9.2 *2004e*
New Zealand	5.9	6.9	7.7	7.8	8.2	8.0	8.6e	9.0e
Norway	7.0	7.6	8.4	8.8	9.8	10.0	9.7	9.1
Poland	. .	4.8	5.5	5.9	6.3	6.2	6.2	6.2e
Portugal	5.3	5.9	8.8	8.8	9.0	9.7e	9.8e	10.2e
Slovak Republic	. .	. .	5.5	5.5	5.6	5.9	7.2	7.1
Spain	5.3	6.5	7.2	7.2	7.3	7.9	8.1e	8.2e
Sweden	9.0	8.3	8.4	8.7	9.1	9.3	9.1	9.1
Switzerland	7.4	8.3	10.4	10.9	11.1	11.5	11.5	11.6
Turkey	3.3	3.6	6.6	7.5	7.4	7.6	7.7	7.6
United Kingdom	5.6	6.0	7.3	7.5	7.7	7.8	8.1	8.3
United States	8.8	11.9	13.2	13.9	14.7	15.2	15.2	15.3
Latest average[a]	. .	. .	. .	. .	. .	. .	. .	**9.0**
Consistent average (24)[b]	**6.6**	**7.2**	**8.3**	**8.6**	**8.9**	**9.3**	**9.3**	**9.4**

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e: Preliminary estimate.

a) Average consists of the latest available data for all OECD countries.

b) Excludes the Czech Republic, Hungary, Italy, Mexico, Poland and the Slovak Republic.

Source: OECD Health Data 2007.

Table A.5.2b. **Public expenditure on health, percentage of GDP, 1980 to 2005**

	1980	1990	2000	2001	2002	2003	2004	2005
Australia	4.3	5.1	6.0	6.0	6.2	6.2	6.4	6.4 *2004-05*
Austria	5.1	5.1	7.6	7.6	7.6	7.7	7.8	7.7
Belgium	. .	. .	6.6	6.7	6.7	7.2	7.5e	7.4e
Canada	5.3	6.6	6.2	6.5	6.7	6.8	6.8	6.9
Czech Republic	. .	4.6	5.9	6.0	6.4	6.7	6.5	6.4
Denmark	7.9	6.9	6.8	7.1	7.3	7.7	7.8e	7.7e
Finland	5.0	6.2	4.9	5.1	5.4	5.6	5.7	5.9
France	5.6	6.4	7.5	7.6	7.9	8.6	8.7	8.9
Germany	6.6	7.8 *1992*	8.2	8.3	8.4	8.5	8.1	8.2
Greece	2.8	3.1	4.1	4.7	4.6	4.7	4.3	4.3
Hungary	. .	6.3 *1991*	4.9	4.9	5.3	5.9e	5.7e	5.7 *2004e*
Iceland	5.5	6.8	7.6	7.5	8.3	8.5	8.3	7.9
Ireland	6.8	4.4	4.6	5.1	5.4	5.6	5.8	5.8
Italy	. .	6.1	5.8	6.1	6.2	6.2	6.6	6.8
Japan	4.7	4.6	6.2	6.5	6.5	6.6e	6.6e	6.6 *2004e*
Korea	1.1 *1983*	1.6	2.2	2.9	2.7	2.8	2.9	3.2
Luxembourg	4.8	5.0	5.2	5.6	6.1	7.0	7.5e	7.5 *2004e*
Mexico	. .	2.0	2.6	2.7	2.7	2.8	3.0	2.9
Netherlands	5.2	5.4	5.0	5.2	5.5	5.5 *2002*	5.5 *2002*	5.5 *2002*
New Zealand	5.1	5.7	6.0	6.0	6.4	6.3	6.7e	7.0e
Norway	5.9	6.3	6.9	7.4	8.2	8.4	8.1	7.6
Poland	. .	4.4	3.9	4.2	4.5	4.4	4.3	4.3e
Portugal	3.4	3.8	6.4	6.3	6.5	7.1e	7.0e	7.4e
Slovak Republic	. .	. .	4.9	4.9	5.0	5.2	5.3	5.3
Spain	4.2	5.1	5.2	5.2	5.2	5.5	5.7e	5.9e
Sweden	8.3	7.5	7.1	7.4	7.8	7.9	7.7	7.7
Switzerland	. .	4.3	5.8	6.2	6.5	6.7	6.8	6.9
Turkey	1.0	2.2	4.2	5.1	5.2	5.4	5.6	5.4
United Kingdom	5.0	5.0	5.9	6.2	6.4	6.7	6.9	7.2
United States	3.6	4.7	5.8	6.2	6.6	6.7	6.8	6.9
Latest average[a]	. .	. .	. .	. .	. .	. .	. .	**6.4**
Consistent average (22)[b]	**4.9**	**5.2**	**5.9**	**6.2**	**6.4**	**6.6**	**6.7**	**6.7**

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e: Preliminary estimate.

a) Average consists of the latest available data for all OECD countries.

b) Excludes Belgium, the Czech Republic, Hungary, Italy, Mexico, Poland, the Slovak Republic and Switzerland.

Source: OECD Health Data 2007.

Table A.5.3. **Current health expenditure by function of health care, 2005**

	Personal medical services	*of which:*			Medical goods	Collective health	*of which:*	
		Curative-rehabilitative	Long-term care	Ancillary services			Prevention and public health	Health administration and insurance
Australia (2004-05)	77	*64*	*7*	*5*	18	4	*2*	*3*
Austria	78	*63*	*13*	*2*	16	6	*2*	*4*
Belgium	72	*53*	*15*	*4*	19	8	*2*	*6*
Canada[a]	68	*47*	*14*	*6*	21	11	*6*	*4*
Czech Republic	65	*49*	*3*	*12*	30	5	*2*	*3*
Denmark	82	*57*	*22*	*3*	14	4	*2*	*2*
Finland[b]	72	*65*	*6*	*0*	20	6	*4*	*2*
France	69	*57*	*9*	*4*	22	9	*2*	*7*
Germany	71	*54*	*12*	*5*	20	9	*3*	*6*
Greece	. .	. .	. .	. .	. .	. .	. .	. .
Hungary (2004)	58	*50*	*4*	*4*	35	7	*5*	*1*
Iceland	82	*65*	*17*	*0*	16	2	*1*	*2*
Ireland	. .	. .	. .	. .	. .	. .	. .	. .
Italy	78	. .	. .	. .	21	1	*1*	*0*
Japan (2004)	75	*57*	*18*	*1*	21	4	*2*	*2*
Korea	63	*63*	*1*	*0*	31	6	*2*	*4*
Luxembourg (2004)	79	*56*	*17*	*6*	12	10	*1*	*9*
Mexico[a]	62	. .	. .	. .	22	14	*3*	*11*
Netherlands	73	*57*	*14*	*2*	18	9	*5*	*5*
New Zealand	77	*55*	*15*	*7*	13	10	*6*	*4*
Norway	83	*50*	*26*	*7*	14	3	*2*	*1*
Poland	64	*53*	*7*	*4*	32	4	*2*	*2*
Portugal	72	*61*	*1*	*10*	25	3	*2*	*1*
Slovak Republic	52	*46*	*1*	*6*	41	6	*2*	*4*
Spain	69	*58*	*7*	*4*	26	5	*2*	*3*
Sweden	83	. .	. .	. .	15	1		*1*
Switzerland	80	*57*	*20*	*3*	13	7	*2*	*5*
Turkey	. .	. .	. .	. .	. .	. .	. .	. .
United Kingdom	. .	. .	. .	. .	. .	. .	. .	. .
United States	75	*68*	*7*	*0*	14	11	*4*	*8*
Consistent average (23)[c]	**72**	***57***	***11***	***4***	**21**	**7**	***3***	***4***

StatLink http://dx.doi.org/10.1787/115424851345

a) Current expenditure for Canada and Mexico also includes some unallocated expenditure.
b) Current expenditure for Finland also includes expenditure on environmental health.
c) Excludes Greece, Ireland, Italy, Mexico, Sweden, Turkey and the United Kingdom.
Source: OECD Health Data 2007.

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Table A.5.4a. **Pharmaceutical expenditure per capita, 2005 and average annual growth rate per capita, in real terms, 1995 to 2005**

	Per capita USD PPP, 2005			Average annual growth rate per capita, in real terms, 1995-2005		Pharmaceutical expenditure, in real terms 1995 = 100
	Total	Public	Private	Pharmaceutical expenditure	Total health expenditure	
Australia (2004-05)	415	239	176	6.4	4.7 *1995-2004*	175
Austria	409	297	111	4.9	2.4	161
Belgium	. .	. .	. .	. .	. .	. .
Canada	589	228	361	5.8	3.2	175
Czech Republic	372	281	91	2.9	2.5	134
Denmark	276	154	122	2.7	2.8	130
Finland	380	214	166	5.0	3.5	163
France	554	382	172	3.1	2.3	136
Germany	498	365	133	3.5	1.8	141
Greece	. .	. .	. .	. .	. .	. .
Hungary (2004)	390	244	145	7.5	4.9 *1995-2004*	192
Iceland	458	273	186	4.9	5.0	161
Ireland	320	281	39	7.6	7.2	209
Italy	509	255	254	2.9	3.2	132
Japan (2004)	449	311	138	0.8	2.6 *1995-2004*	108
Korea	360	181	179	5.4	7.6	169
Luxembourg (2003)	465	390	74	4.8	7.4 *1995-2003*	140
Mexico	144	16	128	5.8	3.4 *1999-2005*	140
Netherlands (2002)	318	182	136	4.1	3.1 *1995-2002*	132
New Zealand	290	192	99	2.5	4.3	128
Norway	398	232	165	4.0	3.4	147
Poland	243	92	151	. .	. .	. .
Portugal	445	262	183	3.7	3.8	144
Slovak Republic	362	266	96	6.6	4.3 *1999-2005*	147
Spain	517	375	142	5.5	3.0	172
Sweden	351	243	109	3.6	3.8	142
Switzerland	436	295	141	3.3	2.8	138
Turkey	. .	. .	. .	. .	. .	. .
United Kingdom	. .	. .	. .	. .	. .	. .
United States	792	191	601	7.1	3.6	199
Latest average[a]	**413**	**248**	**165**	. .	. .	. .
Consistent average (25)[b]	**420**	**254**	**166**	**4.6**	**3.9**	**153**

StatLink http://dx.doi.org/10.1787/115436250565

a) Average comprises all countries for which recent data are available.
b) Excludes Belgium, Greece, Poland, Turkey and the United Kingdom.
Source: OECD Health Data 2007.

Table A.5.4b. **Pharmaceutical expenditure as a share of total health expenditure and GDP, 1980 to 2005**

	Percentage of total health expenditure				Percentage of GDP			
	1980	1990	2000	2005	1980	1990	2000	2005
Australia	8.0	9.0	13.9	13.3 *2004-05*	0.5	0.7	1.2	1.3 *2004-05*
Austria	. .	. .	11.8	11.6	. .	. .	1.2	1.2
Belgium	17.4	15.5	16.5 *1997*	. .	1.1	1.1	1.4 *1997*	. .
Canada	8.5	11.5	15.9	17.7	0.6	1.0	1.4	1.7
Czech Republic	. .	21.0	23.4	25.1	. .	1.0	1.5	1.8
Denmark	6.0	7.5	8.8	8.9e	0.5	0.6	0.7	0.8e
Finland	10.7	9.4	15.5	16.3	0.7	0.7	1.0	1.2
France	16.0	16.9	18.2	16.4	1.1	1.4	1.7	1.8
Germany	13.4	14.3	13.6	15.2	1.1	1.2	1.4	1.6
Greece	18.8	14.3	14.4 *1999*	. .	1.0	0.8	1.1 *1999*	. .
Hungary	. .	27.6 *1991*	28.5 *2001*	31.1e	. .	1.9 *1991*	2.0 *2001*	2.3 *2004e*
Iceland	15.9	13.5	14.6	13.3	1.0	1.1	1.4	1.3
Ireland	10.9	12.2	10.6	10.9	0.9	0.7	0.7	0.8
Italy	. .	20.3	22	20.1	. .	1.6	1.8	1.8
Japan	21.2	21.4	18.7	19.0 *2004e*	1.4	1.3	1.4	1.5 *2004e*
Korea	34.6 *1983*	36.5	29.5	27.3	1.4 *1983*	1.6	1.4	1.6
Luxembourg	14.5	14.9	11	8.9 *2004e*	0.8	0.8	0.6	0.7 *2004e*
Mexico	. .	. .	19.4	21.3	. .	. .	1.1	1.4
Netherlands	8.0	9.6	11.7	11.5 *2002*	0.6	0.8	0.9	1.0 *2002*
New Zealand	11.9	13.8	14.4 *1997*	12.4e	0.7	0.9	1.1 *1997*	1.1e
Norway	8.7	7.2	9.5	9.1	0.6	0.6	0.8	0.8
Poland	. .	. .	28.4 *2002*	28.0e	. .	. .	1.8 *2002*	1.7e
Portugal	19.9	24.9	22.4	21.9e	1.1	1.5	2.0	2.2e
Slovak Republic	. .	. .	34	31.9	. .	. .	1.9	2.3
Spain	21.0	17.8	21.3	22.9e	1.1	1.2	1.5	1.9e
Sweden	6.5	8.0	13.8	12.0	0.6	0.7	1.2	1.1
Switzerland	. .	10.2	10.7	10.4	. .	0.8	1.1	1.2
Turkey	10.7 *1981*	20.4	24.8	. .	0.4 *1981*	0.7	1.6	. .
United Kingdom	12.8	13.5	15.8 *1997*	. .	0.7	0.8	1.1 *1997*	. .
United States	9.0	9.2	11.7	12.4	0.8	1.1	1.5	1.9
Latest average[a]	**. .**	**. .**	**. .**	**17.3**	**. .**	**. .**	**. .**	**1.5**
Consistent average (18)[b]	**13.6**	**14.3**	**15.3**	**15.0**	**0.9**	**1.0**	**1.2**	**1.4**

StatLink http://dx.doi.org/10.1787/115436250565

e: Preliminary estimate.

a) Average comprises all countries for which recent data are available.

b) Excludes Austria, Belgium, the Czech Republic, Greece, Hungary, Italy, Mexico, Poland, the Slovak Republic, Switzerland, Turkey and the United Kingdom.

Source: OECD Health Data 2007.

Table A.5.5. **Health expenditure by type of financing, 2005**

Total expenditure on health = 100

	Total public	*of which:*		Total private	*of which:*		
		General government	Social insurance		Private insurance	Out-of-pocket payments	All other funds[d]
Australia (2004-05)	67	*67*	*0*	33	*7*	*20*	*6*
Austria	76	*30*	*46*	24	*5*	*16*	*3*
Belgium[a]	71	*4*	*66*	29	*5*	*22*	*1*
Canada	70	*69*	*1*	30	*13*	*15*	*2*
Czech Republic	89	*9*	*80*	11	*0*	*11*	*0*
Denmark	84	*84*	*0*	16	*2*	*14*	*0*
Finland	78	*61*	*17*	22	*2*	*18*	*2*
France	80	*5*	*75*	20	*13*	*7*	*1*
Germany	77	*10*	*67*	23	*9*	*13*	*1*
Greece[b]	43	*43*	*0*	57		*57*	*0*
Hungary (2004)	71	*11*	*60*	29	*1*	*24*	*4*
Iceland[b]	83	*49*	*34*	17		*17*	*0*
Ireland	78	*77*	*1*	22	*7*	*13*	*2*
Italy	77	*76*	*0*	23	*1*	*20*	*2*
Japan (2004)[b]	82	*16*	*66*	18		*17*	*1*
Korea	53	*12*	*41*	47	*3*	*38*	*6*
Luxembourg[c] (2004)	91	*17*	*73*	9	*1*	*7*	*1*
Mexico	45	*17*	*28*	55	*3*	*51*	*0*
Netherlands[a]	66	*3*	*63*	34	*20*	*8*	*6*
New Zealand	78	*78*	*0*	22	*5*	*17*	*1*
Norway	84	*69*	*15*	16	*0*	*16*	*1*
Poland	69	*11*	*58*	31	*1*	*26*	*4*
Portugal	73	*72*	*1*	27	*4*	*22*	*1*
Slovak Republic	74	*9*	*65*	26	*0*	*23*	*3*
Spain	71	*66*	*5*	29	*6*	*22*	*1*
Sweden	85	*85*	*0*	15	*0*	*15*	*0*
Switzerland	60	*17*	*43*	40	*9*	*31*	*1*
Turkey	71	*34*	*38*	29	*0*	*20*	*9*
United Kingdom[b]	87	*87*	*0*	13		*13*	*0*
United States	45	*32*	*13*	55	*37*	*13*	*5*
OECD average	**73**	***41***	***32***	**27**	***6***	***20***	***2***

StatLink http://dx.doi.org/10.1787/115470000573

a) Share of current expenditure rather than total expenditure (*i.e.* excludes capital investment).
b) Separate estimates of private health insurance are not available.
c) Out-of-pocket spending for Luxembourg only covers the cost-sharing element.
d) Covers finance by non-profit institutions, corporations and external finance (rest of the world).
Source: OECD Health Data 2007.

Table A.5.6a. **Total public coverage, percentage of total population, 1970 to 2005**

	1970	1980	1990	2000	2005
Australia	85.0	100.0	100.0	100.0	100.0
Austria	91.0	99.0	99.0	99.0	98.0
Belgium	97.8	99.0	97.3	99.0	99.0
Canada	100.0	100.0	100.0	100.0	100.0
Czech Republic	100.0	100.0	100.0	100.0	100.0
Denmark	100.0	100.0	100.0	100.0	100.0
Finland	100.0	100.0	100.0	100.0	100.0
France	95.6	99.1	99.4	99.9	99.9
Germany	89.2	92.3	88.8	90.7	89.6
Greece	55.0	88.0	100.0	100.0	100.0 *2004*
Hungary	. .	100.0	100.0	100.0	100.0
Iceland	100.0	100.0	100.0	100.0	100.0
Ireland	85.0	100.0	100.0	100.0	100.0
Italy	93.0	100.0	100.0	100.0	100.0
Japan	100.0	100.0	100.0	100.0	100.0
Korea	. .	29.8	100.0	100.0	100.0
Luxembourg	99.6	99.8	98.8 *1993*	98.2	99.7 *2004*
Mexico	. .	. .	. .	51.0 *2002*	50.4
Netherlands	69.0	68.3	61.4	64.5	62.1
New Zealand	100.0	100.0	100.0	100.0	100.0
Norway	100.0	100.0	100.0	100.0	100.0
Poland	. .	. .	. .	. .	97.3
Portugal	40.0	100.0	100.0	100.0	100.0
Slovak Republic	. .	. .	. .	98.8	97.6
Spain	61.0	83.0	98.1 *1991*	98.9 *2001*	99.5 *2003*
Sweden	100.0	100.0	100.0	100.0	100.0
Switzerland	89.0	96.5	99.5	100.0	100.0
Turkey	26.9	38.4	55.1	66.0 *1997*	67.2 *2003*
United Kingdom	100.0	100.0	100.0	100.0	100.0
United States	. .	. .	24.5	24.7	27.3
Latest average[a]	**. .**	**. .**	**. .**	**. .**	**92.9**
Consistent average (27)[b]	**. .**	**. .**	**93.4**	**94.1**	**94.2**

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a) Average comprises all countries for which recent data are available.
b) Excludes Mexico, Poland and the Slovak Republic.
Source: OECD Health Data 2007.

Table A.5.6b. **Total private coverage by coverage type, percentage of total population, 2005 (or latest year available)**

	Total PHI	Primary PHI	Duplicate PHI	Complementary PHI	Supplementary PHI
Australia	42.9	0.0	42.9	0.0	41.4
Austria	. .	. .	0.0	. .	. .
Belgium	44.0	. .	0.0	44.0	. .
Canada	66.0	0.0	0.0	0.0	66.0
Czech Republic	0.0	0.0	0.0	0.0	0.0
Denmark	6.8	0.0	0.0	6.8	6.8
Finland	. .	0.0	. .	. .	. .
France	87.2	0.0	0.0	87.2	0.0
Germany	24.3	10.2	0.0	0.0	14.2
Greece	15.6	0.0	15.6	0.0	0.0
Hungary	0.0	0.0	0.0	0.0	0.0
Iceland	13.6	0.0	0.0	0.0	13.6
Ireland	51.6	0.0	51.6	0.0	0.0
Italy	. .	0.0	. .	0.0	. .
Japan	. .	0.0	. .	. .	. .
Korea	. .	0.0	0.0	. .	. .
Luxembourg	. .	0.0	0.0	. .	. .
Mexico	4.8	0.0	. .	0.0	. .
Netherlands	92.8	35.8	0.0	0.0	57.1
New Zealand	32.7	0.0	32.7	0.0	0.0
Norway	0.0	0.0	0.0	0.0	0.0
Poland	. .	0.0	0.0	0.0	0.0
Portugal	17.4	0.0	17.4	. .	. .
Slovak Republic	0.0	0.0	0.0	0.0	0.0
Spain	11.9	. .	. .	0.0	. .
Sweden	. .	0.0	0.0	. .	. .
Switzerland	32.5	0.0	0.0	0.0	32.5
Turkey	1.4	0.0	0.0	. .	. .
United Kingdom	11.0	0.0	11.0	0.0	0.0
United States	67.1	59.2	0.0	. .	. .

StatLink http://dx.doi.org/10.1787/115562572424

Note: Total private coverage shows the share of the population which is covered by at least one private health insurance product. For a given country, total private coverage is not necessarily the sum of coverage under different private health insurance types, because individuals may have more than one coverage type (*e.g.*, Australia). In some countries, private health insurance plays several roles but data are attributed to the most prominent coverage type (*e.g.*, Belgium, France, Portugal, Iceland).
PHI: Private health insurance.
Source: OECD Health Data 2007.

Table A.6.4. **Breast cancer survival rate and surgical procedures per 100 000 women, 2005 (or latest year available)**

	Breast cancer five-year relative survival rate	Breast-conserving surgery	Mastectomy	Ratio of breast conserving surgery to mastectomy
Iceland	89.4 *1996-2000*	96	41	2.3
United States	88.9 *1998-2002*	10 *2004*	55 *2004*	0.2
Finland	88.4 *1999-2003*	141	91	1.5
Sweden	87.0 *1999-2004*	79	83	1.0
Australia	86.6 *1998-2002*	100 *2004*	68 *2004*	1.5
Canada	86.0 *1998-2003*	49 *2004*	55 *2004*	0.9
Denmark	85.0 *2001-2005*	102	89	1.1
Italy	85.0 *1995-1999*	149 *2004*	60 *2004*	2.5
Korea	84.6 *1998-2002*	. .	. .	. .
New Zealand	83.5 *1998-2003*	112 *2004*	53 *2004*	2.1
Netherlands	83.3 *1996-2000*	110	83	1.3
Japan	83.1 *1993-1996*	. .	. .	. .
Norway	82.8 *1998-2003*	143 *2004*	65 *2004*	2.2
Switzerland	81.0 *1990-1994*	137	56	2.4
United Kingdom	80.0 *1998-2001*	133	80	1.7
France	79.7 *1990-1994*	253 *2001*	66 *2001*	3.8
Ireland	79.7 *1999-2004*	60	50	1.2
Germany	78.0 *1993-1997*	. .	. .	. .
Czech Republic	75.7 *1994-1998*	. .	. .	. .

StatLink http://dx.doi.org/10.1787/115585624022

Source: Health Care Quality Indicators Project, OECD 2007. *OECD Health Data 2007* (breast-conserving surgery and mastectomy rates).

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ANNEX B

Definition of Health Expenditure and Methodological Notes on Data Comparability

Definition of health expenditure

Total expenditure on health measures the final consumption of health care goods and services plus capital investment in health care infrastructure. This includes spending by both public and private sources (including households) on medical services and goods, public health and prevention programmes and administration. Excluded are health-related expenditure such as training, research and environmental health. Total expenditure on health does *not* include compensation for loss in income due to health problems (sick pay and disability allowances). For a more detailed definition, please see *A System of Health Accounts* (OECD, 2000a).

The following table presents major expenditure categories used in *OECD Health Data 2007* and the tables presented in this publication.

ICHA Code	Description
HC.1; HC.2	Services of curative and rehabilitative care (inpatient, outpatient and home care)
HC.3	Services of long-term nursing care (inpatient and home care)
HC.4	Ancillary services to health care
HC.1-HC.4	***Medical services***
HC.5	Medical goods dispensed to outpatients
HC.1-HC.5	*Total expenditure on personal health*
HC.6	Services of prevention and public health
HC.7	Health administration and health insurance
HC.6+HC.7	*Total expenditure on collective health*
HC.1-HC.7	***Total current expenditure on health***
HC.R.1	Capital formation (Investment) of health care provider institutions
HC.1-HC.7 + HC.R.1	***TOTAL EXPENDITURE ON HEALTH***

Comparison of health expenditure across countries

OECD countries are at varying stages of reporting total expenditure on health according to the boundary of health care proposed in the OECD manual *A System of Health Accounts* (SHA). This means that data reported in *OECD Health Data 2007* are at varying levels of comparability. The comparability of the functional breakdown of health expenditure data in *OECD Health Data* has improved over the past few years. However, limitations do remain (even among those countries where total expenditure is fairly

comparable), due to the fact that data reporting is connected to current administrative records of financing systems. For example, inpatient expenditure does not contain independent billing (office-based) of physicians' fees for inpatient care in Australia, Canada and the United States. Different practices regarding the inclusion of long-term care in health or social expenditure are also a major factor affecting data comparability.

Regarding the functional breakdown of health expenditure presented in this publication, outpatient expenditure is used in a broader sense to cover both outpatient care in a hospital setting as well as in the ambulatory sector. *OECD Health Data 2007* presents a more detailed breakdown (as shown in the table above).

For further information, please see the "Note on General Comparability of Health Expenditure and Finance Data" in *OECD Health Data 2007*.

Adjustment for differences in national currency

Health expenditure based on national currency units can be used for comparing some indicators, such as the ratio of health expenditure to GDP and health spending growth rates over time.

However, to make useful comparisons of health expenditure across countries at a given point in time, it is necessary to convert data from national currency units to a common currency, such as the US dollar (USD). It is also useful to take into account differences in the purchasing power of national currencies in each country. To calculate the conversion rate of national currencies into US dollar purchasing power parity (PPP), the same, fixed basket of goods and services across different countries is priced in the national currency, and then converted to US dollars. For example, if an identical basket of goods and services cost 140 Canadian dollars (CAD) in Canada and 100 USD in the United States, then the PPP conversion rate would be 1.4 CAD to one USD. The economy-wide (GDP) PPPs are used as the most available and reliable conversion rates. These are based on a broad basket of goods and services, chosen to be representative of all economic activity. The use of economy-wide PPPs means that the resulting variations in health expenditure across countries will reflect not only variations in the volume of health services, but also any variations in the prices of health services relative to GDP prices, across countries.

Health expenditure converted to USD PPP are not adjusted for price inflation; hence they are not suitable for comparison of real growth rates over time.

Correcting data for price inflation

To make useful comparison of real growth rates over time, it is necessary to deflate (remove inflation from) nominal health expenditure through the use of a suitable price index, and also to divide by population, to derive real spending per capita. Due to limited availability of reliable health price indices, an economy-wide (GDP) price index is used in this publication (2000 GDP price levels). It should be kept in mind that the health sector usually has a higher inflation than the economy as a whole in most countries.

ANNEX C

List of Variables in OECD Health Data 2007

Part 1. Health status

Mortality
- *Life expectancy*
- *Causes of mortality*
- *Maternal and infant mortality*
- *Potential years of life lost*

Morbidity
- *Perceived health status*
- *Infant health*
- *Dental health*
- *Communicable diseases (HIV/AIDS)*
- *Cancer*
- *Injuries*
- *Absence from work due to illness*

Part 2. Health care resources

Health education
Health employment
Remuneration of health professionals
Beds
- *Hospital beds*
- *Long-term care beds in nursing homes*

Employment-to-beds ratio
Medical technology

Part 3. Health care utilisation

Prevention (Immunisation)
Screening
Consultations (Doctors and dentists)
Inpatient utilisation
- *Acute care beddays*
- *Occupancy rate*
- *Turnover rate*

Average length of stay in hospitals
- *Average length of stay by diagnostic categories*

Hospital discharges
- *Discharge rates by diagnostic categories*

Surgical procedures
- *Total surgical procedures*
- *Surgical procedures by ICD-9-CM*
- *Transplants and dialyses*

Part 4. Expenditure on health

Total expenditure on health
- *Current expenditure on health*
- *Investment on medical facilities*

Expenditure on personal health care
- *Expenditure on medical services*
- *Expenditure on inpatient care*
- *Expenditure on day care*
- *Expenditure on outpatient care*
- *Expenditure on home care*
- *Expenditure on ancillary services*
- *Expenditure on medical goods*
- *Pharmaceuticals and other medical non-durables*
- *Therapeutic appliances and other medical durables*

Expenditure on collective health care
- *Expenditure on prevention and public health*
- *Expenditure on health administration and insurance*

Additional health expenditure aggregates
- *Preventive-curative health care*
- *Total long-term care expenditure*

Expenditure on health-related functions
Current health expenditure by provider
- *Expenditure on hospital services*
- *Expenditure on services of nursing and residential care facilities*
- *Expenditure on services of ambulatory health care providers*
- *Expenditure for retail sale and other providers of medical goods*
- *Expenditure on services of public health organisations*
- *Expenditure on services of health care administration*

Expenditure by age and gender
Price index

Part 5. Health care financing

Health expenditure by financing agent/scheme
- *General government revenues*
- *Social security schemes*
- *Out-of-pocket payments*
- *Private insurance*

Part 6. Social protection

Social expenditure
Health care coverage
- *Government/social health insurance*
- *Private health insurance*

Part 7. Pharmaceutical market

Pharmaceutical industry activity
Pharmaceutical consumption
- *Quantities consumed by selected pharmaceutical drugs*

Pharmaceutical sales
- *Sales by selected pharmaceutical drugs*

Part 8. Non-medical determinants of health

Life styles and behaviour
- *Food consumption*
- *Alcohol consumption*
- *Tobacco consumption*
- *Body weight and composition*

Environment: air quality

Part 9. Demographic references

General demographics
Population age structure
Labour force
Educational level

Part 10. Economic references

Macroeconomic references
Monetary conversion rates

Other tables

Long-term care recipients (at home and in institutions)

More information on *OECD Health Data 2007* is available at *www.oecd.org/health/healthdata*.

ANNEX D

Disease and Injury Categories and ICD Codes

The causes of death presented in *OECD Health Data 2007* are listed below with codes according to the 10th and 9th revisions of the International Classification of Diseases (ICD).

Disease and injury categories	ICD-10	ICD-9
0. All causes	A00-R99, V01-Y89	001-799, E800-E999
1. Certain infectious and parasitic diseases	A00-B99	001-139, 042-044
2. HIV disease	B20-B24	042-044
3. Malignant neoplasms (cancer)	C00-C97	140-208
4. Malignant neoplasm of colon, rectum, rectosigmoid junction and anus	C18-C21	153-154
5. Malignant neoplasm of trachea, bronchus, lung	C33-C34	162
6. Malignant neoplasm of female breast	C50	174
7. Malignant neoplasm of cervix uteri	C53	180
8. Malignant neoplasm of prostate	C61	185
9. Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50-D89	279-289
10. Endocrine, nutritional and metabolic diseases	E00-E89	240-279
11. Diabetes mellitus	E10-E14	250
12. Mental and behavioural disorders	F01-F99	290-319
13. Diseases of the nervous system and sense organs	G00-H95	320-389
14. Diseases of the circulatory system	I00-I99	390-459
15. Ischaemic heart disease	I20-I25	410-414
16. Acute myocardial infarction	I21,I22	410
17. Cerebrovascular diseases	I60-I69	430-438
18. Diseases of the respiratory system	J00-J98	460-519
19. Influenza and pneumonia	J10-J18	480-487
20. Bronchitis, emphysema and asthma	J40-J43, J45, J46	490-493
21. Disease of the digestive system	K00-K92	520-579
22. Chronic liver disease and cirrhosis	K70, K73 K74, K76	571
23. Diseases of the skin and subcutaneous tissue	L00-L98	680-709
24. Diseases of the musculoskeletal system and connective tissue	M00-M99	710-739
25. Diseases of the genitourinary system	N00-N99	580-629
26. Pregnancy, childbirth and the puerperium	O00-O99	630-676
27. Certain conditions arising in the perinatal period	P00-P96	760-779
28. Congenital anomalies	Q00-Q99	740-759
29. Symptoms, signs and abnormal clinical and laboratory findings, n.e.c.	R00-R99	780-799
30. External causes of mortality	V01-Y89	E800-E999
31. Land Transport Accidents	V01-V89	E810-E829
32. Accidental falls	W00-W19	E880-E888
33. Intentional self-harm (suicide)	X60-X84	E950-E959
34. Assault (homicide)	X85-Y09	E960-969
35. Drugs, medicaments and biological substances causing adverse effects in therapeutic use	Y40 -Y59	E930-E949
36. Misadventures to patients during surgical and medical care	Y60-Y84	E870-E879

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Health at a Glance 2007

OECD INDICATORS

Progress in the prevention and treatment of diseases has contributed to remarkable improvements in life expectancy and quality of life in OECD countries in recent decades. At the same time, spending on health care continues to climb, consuming an ever-increasing share of national income: health expenditure now accounts for 9% of GDP on average in OECD countries, up from just over 5% in 1970.

This fourth edition of *Health at a Glance* provides the latest comparable data and trends on different aspects of the performance of health systems in OECD countries. It provides striking evidence of large variations across countries in indicators of health status and health risks, as well as in the inputs and outputs of health systems. For the first time, this publication also includes a chapter on new comparable indicators of quality of care, showing variations across countries in measures such as survival rates after heart attack, stroke and cancer.

Each indicator in the book is presented in a user-friendly format, consisting of charts illustrating variations across countries and over time, brief descriptive analyses highlighting the key findings conveyed by the data, and a methodological box on the definition of the indicator. A statistical annex provides additional information for most indicators, often presenting time series going as far back as 1960.

This publication takes as its main basis *OECD Health Data 2007*, the most comprehensive set of statistics and indicators for comparing health systems across the 30 OECD member countries. *OECD Health Data 2007* is available on line at ***www.SourceOECD.org*** or on CD-ROM from the OECD's online bookshop (***www.oecd.org/bookshop***).

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