



EUROPE

# Highlights on health in Poland 2005

*Highlights on health* give an overview of a country's health status, describing recent data on mortality, morbidity and exposure to key risk factors along with trends over time. The reports link country findings to public health policy considerations developed by the WHO Regional Office for Europe and by other relevant agencies. *Highlights on health* are developed in collaboration with Member States and do not constitute a formal statistical publication.

Each report also compares a country, when possible, to a reference group. This report uses the 25 countries with low child mortality and low or high adult mortality, designated Eur-B+C by WHO, as the reference group. Eur-B+C comprises Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Russian Federation, Serbia and Montenegro, Slovakia, Tajikistan, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.

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

## Keywords

HEALTH STATUS  
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## Summary: findings and policy considerations

### Life expectancy

WHO estimates that a person born in Poland in 2002 can expect to live 75 years on average: 79 years if female and 70 years if male. Life expectancy in Poland is more than five years longer than the Eur-B+C average for males and females; however, it is below the average for the very low mortality countries in Eur-A: by three years for females and five years for males. People in Poland spend on average nine years (12% of life expectancy) with illness and injuries, among the higher percentages in the Region.

In 1996, life expectancy in Romania was two years shorter for males than in 1984, and female life expectancy was the same as in 1986. Since 1996, both males and females in Romania have surpassed the average increases in life expectancy witnessed in Eur-A and Eur-B+C countries. However, the positive trends stopped in recent years, leaving males, for example, at the same level as in the mid-1970s. WHO also estimates that Romanians spend on average 12% (8 years) of their lives with illness and disability.

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

*Ageing and employment policies* (OECD, 2004)

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

### Infant mortality

In Poland, the rates for infant mortality and both its components, neonatal and post neonatal mortality, remain below Eur-B+C averages; however, they are well above the Eur-A average rates.

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

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

*The WHO reproductive health library, version 6* (WHO, 2003b)

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

*What is the effectiveness of antenatal care? (Supplement)* (Health Evidence Network, 2005)

### Main causes of death

In general, mortality rates among males and females in Poland are much lower than Eur-B+C average rates (more than 30% for males and females), yet they are well above the average rates for the very low mortality countries of the Eur-A group (45% for males and 30% for females).

In 2002, the main noncommunicable diseases accounted for about 81% of all deaths in Poland; external causes for about 7%; and communicable diseases for less than 1%. In total 46% of all deaths were caused by diseases of the circulatory system (higher than the Eur-A average of 38%) and 24% by cancer (lower than the Eur-A average of 28%). Poles have a 20% higher risk of dying from cancer than the average person in Eur-A.

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

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

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

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

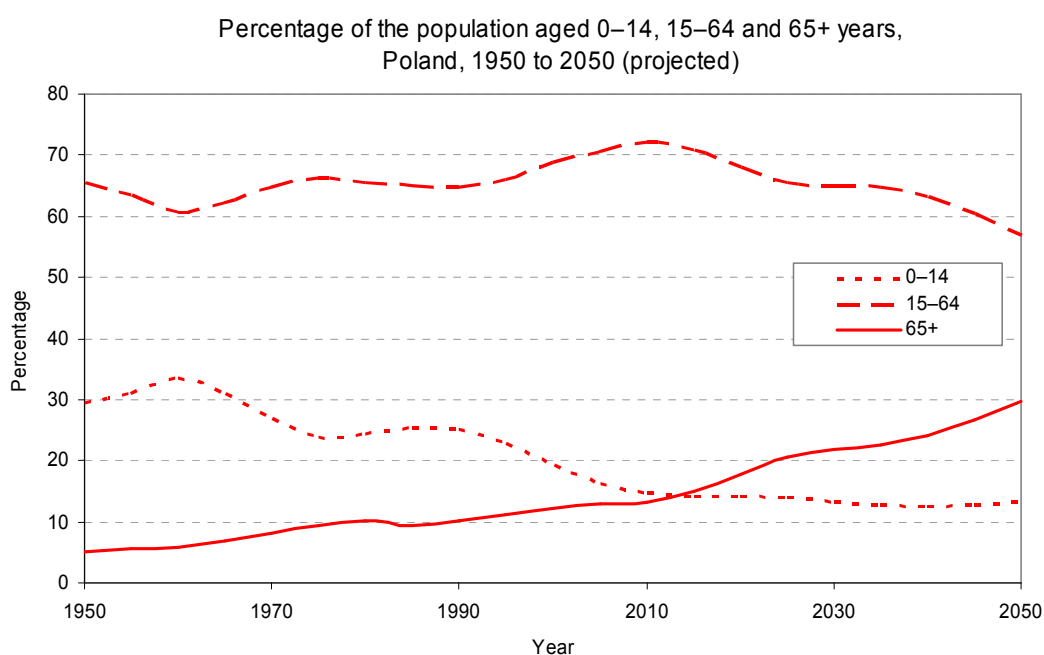
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## Selected demographic and socioeconomic information

### Population profile

In mid-2003, Poland had about 39 million people. About 62% of them lived in urban areas, slightly less than the Eur-B+C average that year.

The percentage of the population 0–14 years old was relatively steady during the 1980s, but fell from about 25% in 1990 to 18% by 2003. This percentage is below the Eur-B+C average for this age group. Also, the percentage of Poland's population over 65 years old is above the Eur-B+C average. By 2030, an estimated 22% of Poland's population will be 65 years of age and older (Annex. Age pyramid).



The birth rate in Poland was at the low end of Eur-A countries in 2003. Also, the natural population growth and net migration in Poland have negative values. These indicators are lower than the corresponding Eur-A and Eur-B+C averages for 2003.

Selected demographic indicators in Poland and Eur-B+C,  
2002 or latest available year

Indicators	Poland	Eur-B+C		
	Value	Average	Minimum	Maximum
Population (in 1000s) <sup>a</sup>	38588.0	–	–	–
0–14 years (%)	18.1	–	–	–
15–64 years (%)	69.2	–	–	–
65+ years (%)	12.7	–	–	–
Urban population (%)	61.8	63.7	25.0	73.3
Live births (per 1000)	9.3	12.8	8.6	27.1
Natural population growth (per 1000)	–0.1	0.8	–7.5	23.0
Net migration (per 1000)	–0.4	1.8	–6.6	2.1

<sup>a</sup> 2003.

Sources: Council of Europe (2005), WHO Regional Office for Europe (2005).

## Socioeconomic indicators

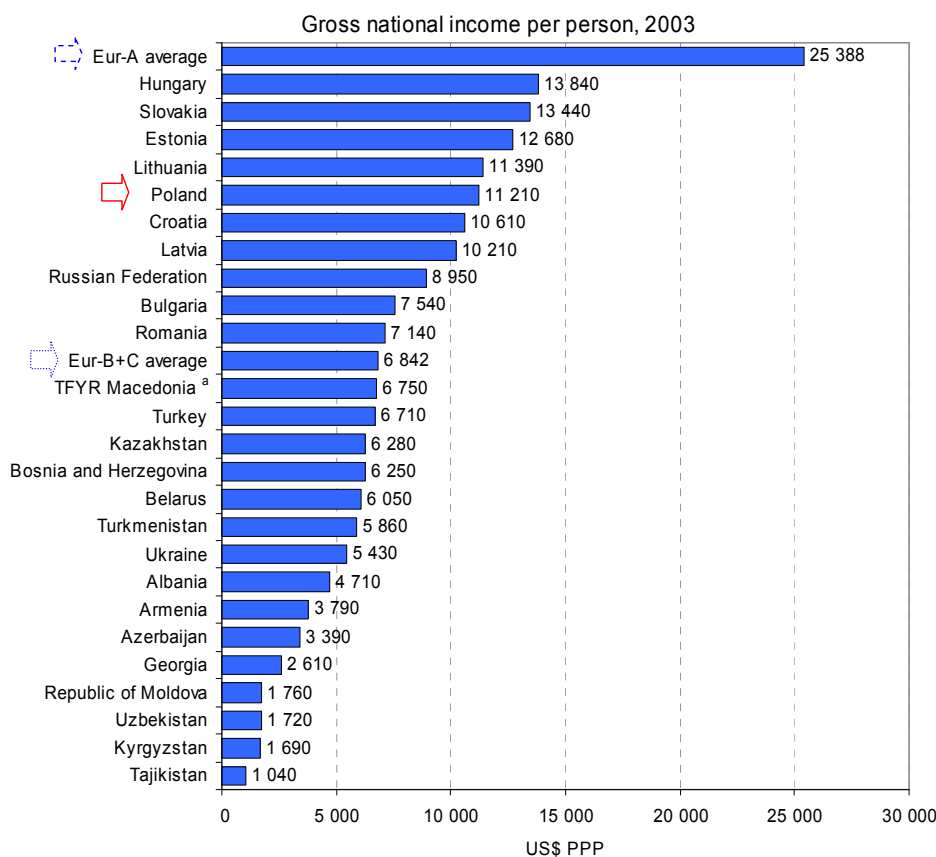
Health outcomes are influenced by various factors that operate at individual, household and community levels. Obvious factors are, for example, diet, health behaviour, access to clean water, sanitation and health services. However, underlying health determinants of a socioeconomic nature also play a role in causing vulnerability to health risks. Here, the key factors are income, education and employment. Though moderately correlated and interdependent, each of these three determinants captures distinctive aspects of the socioeconomic background of a population and they are not interchangeable. Various indicators represent the key socioeconomic determinants of health.

### ***Income: absolute poverty, relative poverty and income distribution***

There is an income gradient affecting health: the poor generally suffer worse health and die younger than people with higher incomes. For instance, the latter are better able to afford the goods and services that contribute to health, for example, better food and living conditions.

People are considered to be in absolute poverty if their incomes are not sufficient to purchase very minimal goods and services. The World Bank currently uses an absolute poverty line of US\$ 2.15 and US\$ 4.30 income per capita per day to measure poverty in low- and middle-income countries of the WHO European Region (using 1993 international prices adjusted for purchasing power parity). While there is no certainty that the poverty lines measure the same degree of need across countries, the World Bank uses them as a constant to permit comparison. Many countries in the Region calculate their national poverty lines on the basis of a minimum consumption basket selected and priced according to the specific circumstances of the country.

In Poland, per person gross national income, adjusted for purchasing power parity (PPP), was US\$ 11 210 in 2003, the fifth highest per person income in the Eur-B+C reference group.



<sup>a</sup> The former Yugoslav Republic of Macedonia  
Source: World Bank (2005).

Annual household survey information on poverty in Poland, from the World Bank, is available from 1985 to 2001. Using the World Bank's recommended benchmarks to measure absolute poverty in

Europe, the survey in 1985 found that 19.5% of Poland's population lived on US\$ 4.30 per day or less. A survey in late 1992 found the rate jumped to 38.2%. By 1999, it had dropped to 14.6%. In 2001, less than 2% of the population reported they were living on US\$ 2.15 or less per day (World Bank, 2005).

Relative poverty is an indicator of income level below a given proportion (typically 50%) of the average national income. In high-income countries, there are far more pockets of relative poverty than of absolute poverty.

In 2002, 17% of the population in Poland lived in relative poverty – that is, below the risk-of-poverty threshold set at 60% of the national median equivalent disposable income (after social redistribution). That same year, across the nine Eur-B+C countries with data, 16% of the population, on average, lived in relative poverty; across the 17 Eur-A countries with comparable data, an average of 14% of the people lived in relative poverty in 2001 (Eurostat, 2005).

Another measure of relative poverty in terms of income is the Gini index. This presents the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

The Gini indices for 15 Eur-B+C countries for 2000 to 2002 range from 26.2 for Bosnia and Herzegovina (2001) to 37.2 for Estonia (2000). The latest available estimate for Poland is for 2002, at 34.1 (World Bank, 2005).

There is a proven association between poverty in childhood and marked and measurable disadvantages in later life, including health status. Poverty in children is monitored on the basis of family income. A child is considered relatively poor if the income available to the child (assuming a fair distribution of resources within a family and making allowances for family size and composition) is less than half the median income available to an average child growing up in the same society (UNICEF, 2005).

In 1999, 12.7% of Polish children lived in relative poverty, meaning they lived in households with an income below 50% of the national median income. From about 1991/1992 to 1999, child poverty rates in Poland increased 4.3%. Poland is one of 17 of 24 OECD countries with child poverty data that saw the percentage of their children living in poverty increase in the 1990s. Norway is the only OECD country where child poverty is very low and continues to fall (UNICEF, 2005).

### **Education**

Education tends to enhance an individual's job opportunities. In so doing, it can improve income, which in turn affects health positively. Education can also give more access to knowledge about healthy behaviour and increase the tendency to seek treatment when needed. A lower level of education – independent of individual income – is correlated with the inability to cope with stress, with depression and hostility and with adverse effects on health.

School enrolment is an indicator of access to education. The secondary school net enrolment represents the percentage of the total population of official school age (defined nationally) that is enrolled in secondary schools.

In 2000, the percentage of school age children enrolled in secondary schools in Poland was above the average percentage for Eur-B+C countries with data for that year: at 90.8% of the school age population, compared with an 81.2% average for Eur-B+C countries. Poland's rate in 2000 was also higher than the average rate in Eur-A countries that year – 88.5% (UNESCO, 2005).

### **Employment**

Being employed tends to be better for health than being unemployed, except in circumstances where employment exposes the individual to physical injury or psychological stress. National unemployment rates and rates for particular sub-populations are monitored to assess the extent to which people have or lack access to opportunities that would enable them to earn an income and feel secure. Vulnerability to health risk is increased by long-term unemployment, that is, continuous periods without work, usually for a year or longer; the socioeconomic status of an individual and of his/her dependents can slide as the period of unemployment increases.

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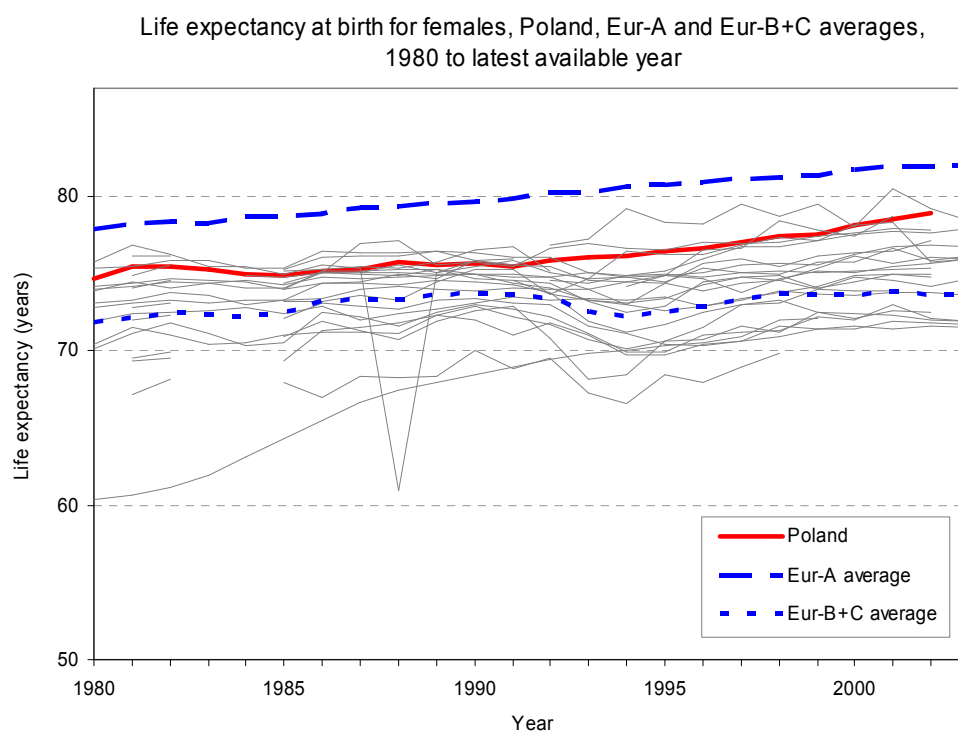
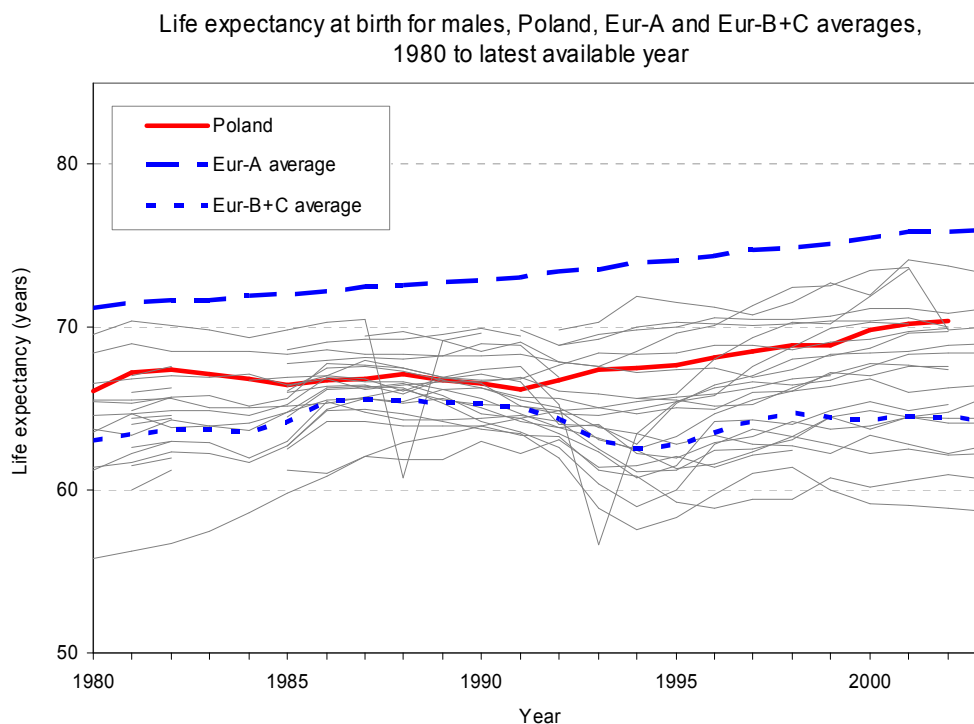
In 2001, the total unemployment rate in Poland was 18.2%, compared with the Eur-B+C average of 12.9%, keeping in mind that national rates are based on estimates of people available and seeking employment and that countries have different definitions of labour force and unemployment. In 2002, Poland's unemployment rate was 19.9% (ILO, 2005). During the period 2000–2002, 48.4% of those unemployed had been so for a year or longer (World Bank, 2005).

Unemployment among young Polish people aged 15–24 years is dramatically higher than the national averages: 41.0% in 2001 and 43.9% in 2002. In comparison, the average youth unemployment rate for Eur-B+C in 2001 was 25.2% (ILO, 2005).

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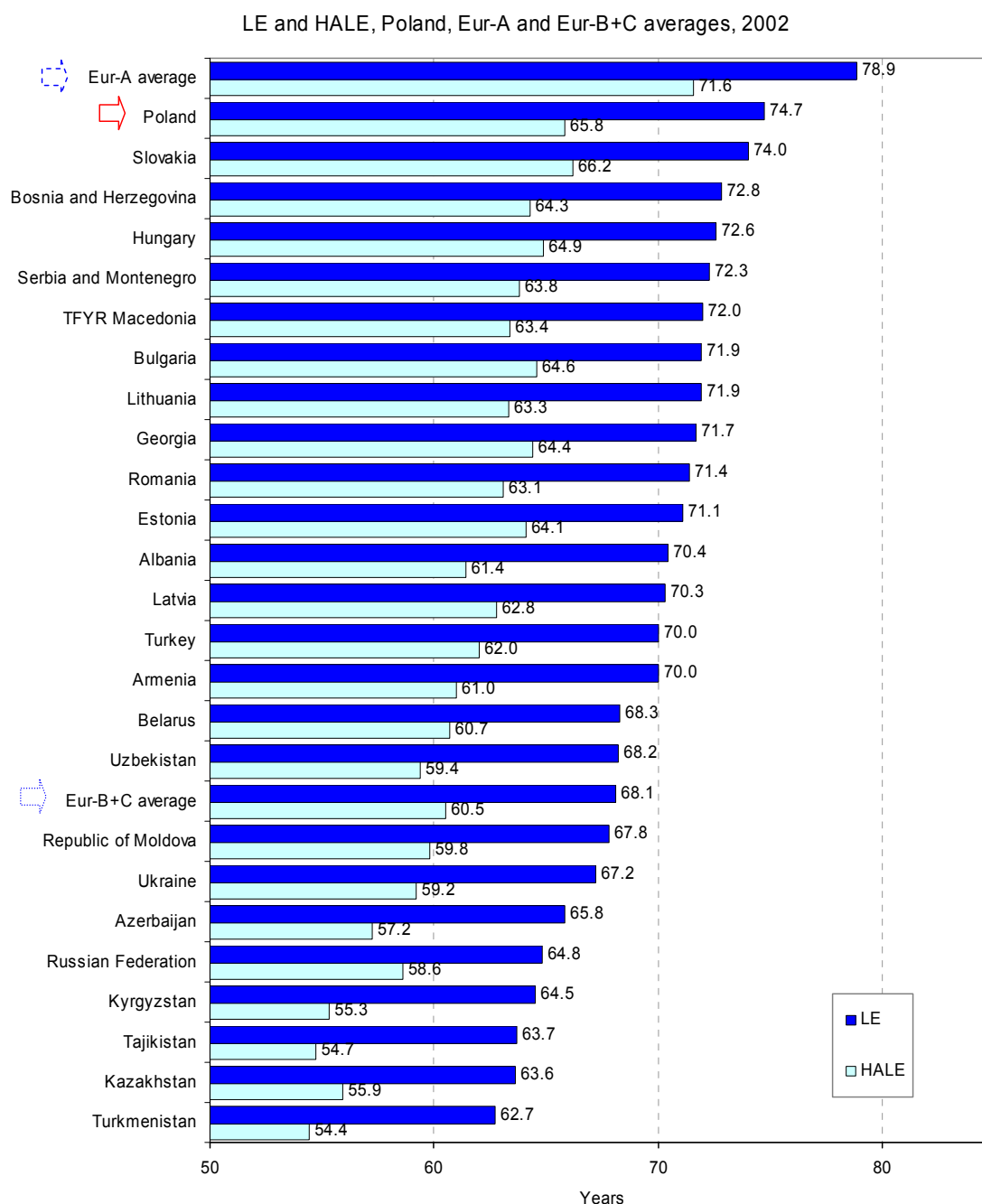
## Life expectancy (LE) and healthy life expectancy (HALE)

According to WHO (WHO, 2003c) estimates, a person born in Poland in 2002 can expect to live 74.7 years on average: 78.9 years if female and 70.4 years if male. Life expectancy (LE) in Poland is more than five years longer than the Eur-B+C average for males and females, though it is below the average for the very low mortality countries of the Eur-A group: by three years for females and five years for males.



In the 1980s, Polish LE stagnated and even deteriorated some. Since 1991, however, Poles have gained 4.0 years in LE, with a greater gain for males (4.2 years) than for females (3.5 years). For the same period of time, Eur-B+C average LE was practically unchanged, and the gains in Eur-A were smaller: by 1.3 years, both for males and females.

In addition to LE, it is increasingly important to know the expected length of life spent in good health. WHO uses a relatively new indicator for this purpose – healthy life expectancy (HALE), subtracting estimated years of life spent with illness and disability from estimated LE. For Poland, WHO (WHO, 2003c) estimates that people can expect to be healthy for about 88% of their lives. They lose an average of 8.9 years to illness – the difference between LE and HALE. This loss is above the average for Eur-B+C countries (7.6 years) and for the Eur-A countries (7.3 years).



Since females live longer and since the possibility of deteriorating health increases with age, females lose more healthy years of life (10.2 years) than males (7.5 years). Nevertheless, the longer LE

for females in Poland gives them somewhat over five more years of healthy life, compared with males. At the age of 60 years, this difference reduces to 3.3 years: 16.1 years for women compared with 12.8 years for men.

## Burden of disease

The burden of disease in a population can be viewed as the gap between current health status and an ideal situation in which everyone lives into old age, free of disease and disability. Causing the gap are premature mortality, disability and certain risk factors that contribute to illness. The analysis that follows elaborates on the burden of disease in the population. The disability-adjusted life-year (DALY) is a summary measure that combines the impact of illness, disability and mortality on population health.

### Main conditions

The table shows the top 10 conditions (disability groups), in descending order, that account for approximately 90% of the burden of disease among males and females in Poland. Cardiovascular diseases (CVD) and neuropsychiatric conditions account for the highest burden of disease among both males and females. Because mortality from neuropsychiatric conditions is minor, disability in daily living comprises the bulk of their burden on the population's health.

Ten leading disability groups as percentages of total DALYs for both sexes in Poland (2002)

Rank	Males		Females	
	Disability groups	Total DALYs (%)	Disability groups	Total DALYs (%)
1	Cardiovascular diseases	22.3	Neuropsychiatric conditions	25.7
2	Neuropsychiatric conditions	19.4	Cardiovascular diseases	19.3
3	Malignant neoplasms	15.7	Malignant neoplasms	15.8
4	Unintentional injuries	12.8	Musculoskeletal diseases	7.4
5	Digestive diseases	5.7	Sense organ diseases	7.2
6	Intentional injuries	4.8	Digestive diseases	5.4
7	Sense organ diseases	4.2	Unintentional injuries	4.8
8	Musculoskeletal diseases	3.8	Respiratory diseases	2.3
9	Respiratory diseases	2.8	Diabetes mellitus	1.8
10	Infectious and parasitic diseases	1.4	Infectious and parasitic diseases	1.7

Source: Background data from WHO (2003c).

### Main risk factors

The table shows the top 10 risk factors with their relative contributions (percentage of total DALYs), in descending order, to the burden of disease in the male and female populations of Poland. According to the DALYs, tobacco and alcohol place the greatest burden of disease on Poland's male population, and high blood pressure and tobacco place the greatest burden of disease on females.

Ten leading risk factors as causes of disease burden measured in DALYs in Poland (2002)

Rank	Males		Females	
	Risk factors	Total DALYs (%)	Risk factors	Total DALYs (%)
1	Tobacco	23.5	High blood pressure	10.1
2	Alcohol	13.9	Tobacco	7.9
3	High blood pressure	10.7	High BMI	7.8
4	High cholesterol	7.9	High cholesterol	5.6
5	High BMI	6.6	Alcohol	3.1
6	Low fruit and vegetable intake	3.9	Physical inactivity	2.8
7	Physical inactivity	3.3	Unsafe sex	2.7
8	Illicit drugs	1.5	Low fruit and vegetable intake	2.5
9	Lead	1.2	Childhood sexual abuse	1.2
10	Occupational risk factors for injuries	1.1	Lead	0.8

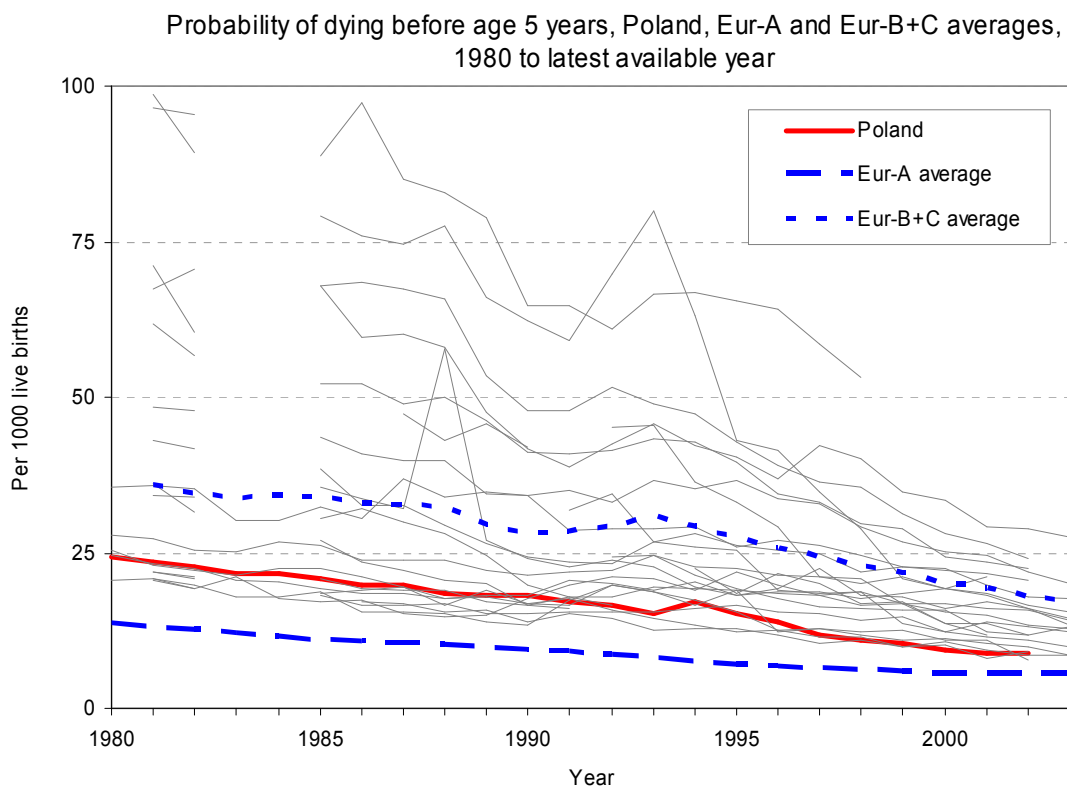
Source: Background data from WHO (2003c).

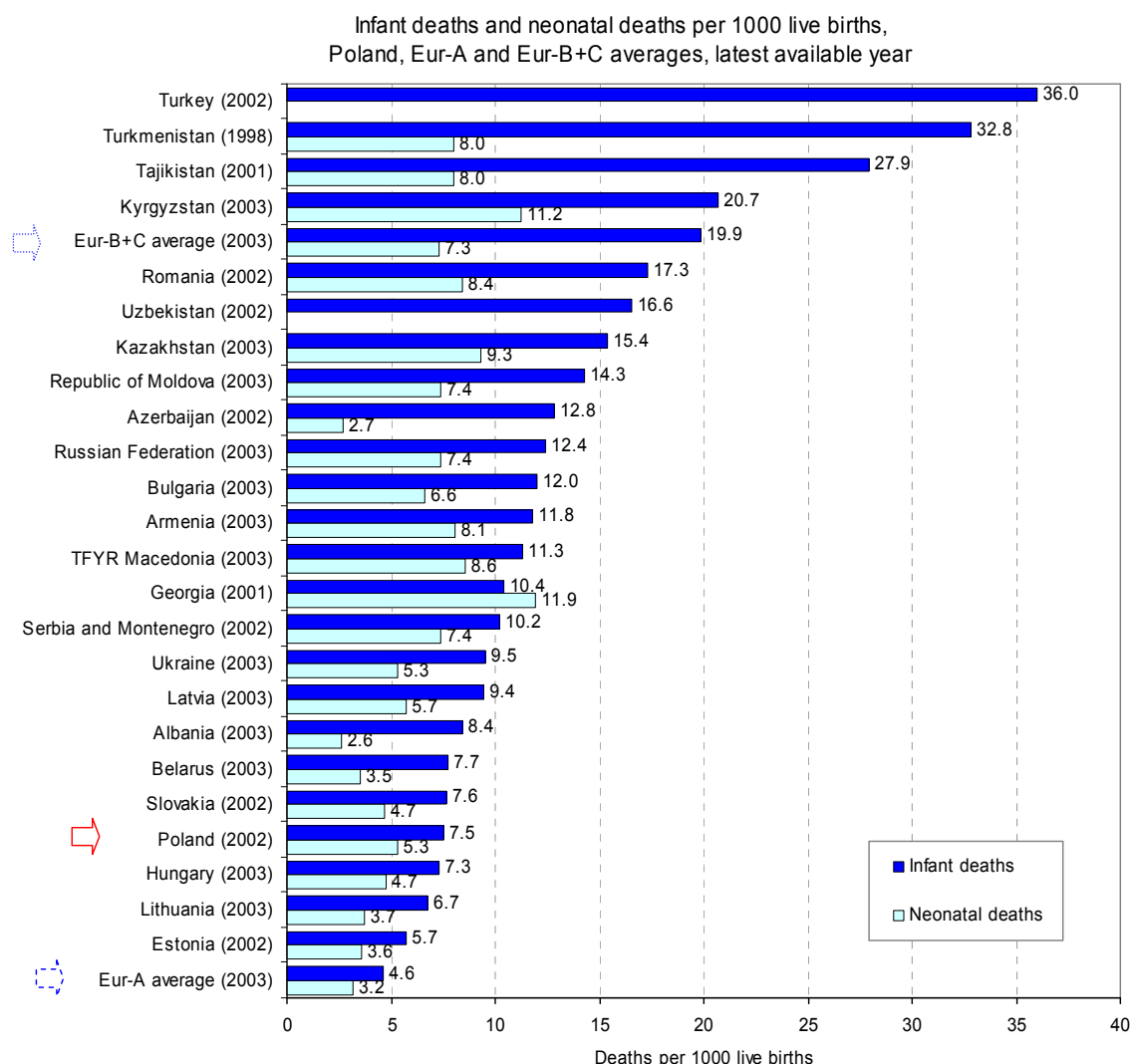
## Mortality

### Infant, neonatal and child mortality

In Poland, the rates for infant mortality and both its components, neonatal and post-neonatal mortality, remain below the Eur-B+C average, though they are well above the Eur-A average rates. The excess infant mortality, in comparison with the Eur-A average, has been declining since the mid-1990s.

Nationally reported data and WHO estimates for 2002 show that of every 1000 live births in Poland, about 8–9 children die before the age of 5 years, which is already below the Millennium Development Goal target of 15 under-5 deaths per 1000 live births. Poland's rate is among the lowest in Eur-B+C, though it is more than 50% higher than the Eur-A average rate. The lowest WHO estimates for the Eur-B+C countries are for Estonia and Slovakia, each at 8 deaths per 1000 live births.





## Maternal mortality

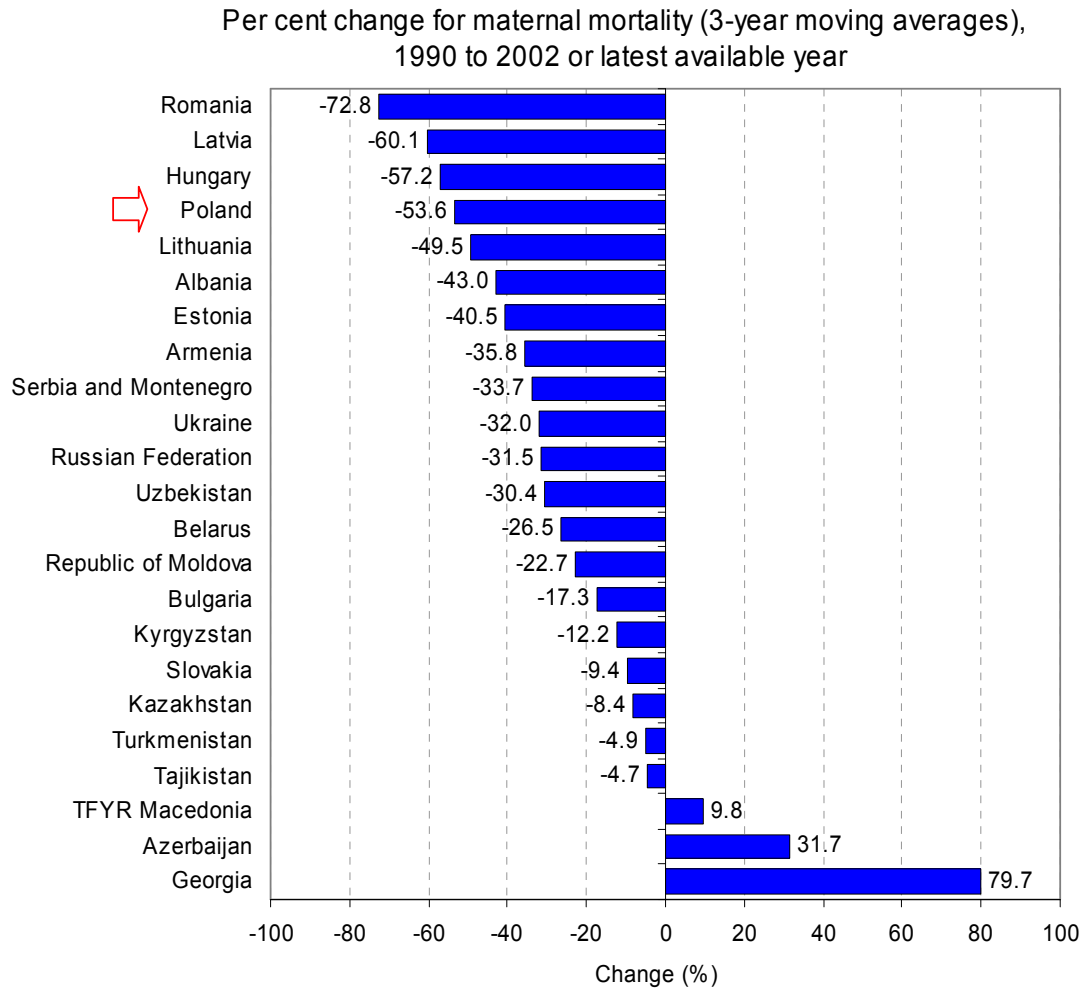
### **Maternal mortality rates (MMR) and the Millennium Development Goal (MDG)**

Despite the difficulties in accurately measuring MMR, nationally reported figures are accepted at face value relative to the MDG to improve maternal health – to reduce the MMR by 75% between 1990 and 2015. In some countries, the 2015 target may be equal to or lower than the average current MMR for high income countries in the European Region (the Eur-A 2001 average of five maternal deaths per 100 000 live births). Countries with 2015 targets lower than the current Eur-A average can be judged as having achieved or being likely to achieve the MDG (World Bank, 2004).

However, in some countries, MMR were higher in 2002 than they had been in 1990. Applying the 75% reduction to the 1990 baseline in these countries creates, in some cases, a 2015 MDG target that requires dramatic reductions in MMR before 2015. In these cases, more important than reaching maternal mortality targets is taking concrete action to provide women with access to adequate care during pregnancy and childbirth, initiatives that have proven to bring down MMR.

The maternal mortality rate for Poland is rather low, close to the Eur-A average. Of the 82 maternal deaths reported for the period 1999-2002, 11 (13%) were attributed to abortion.

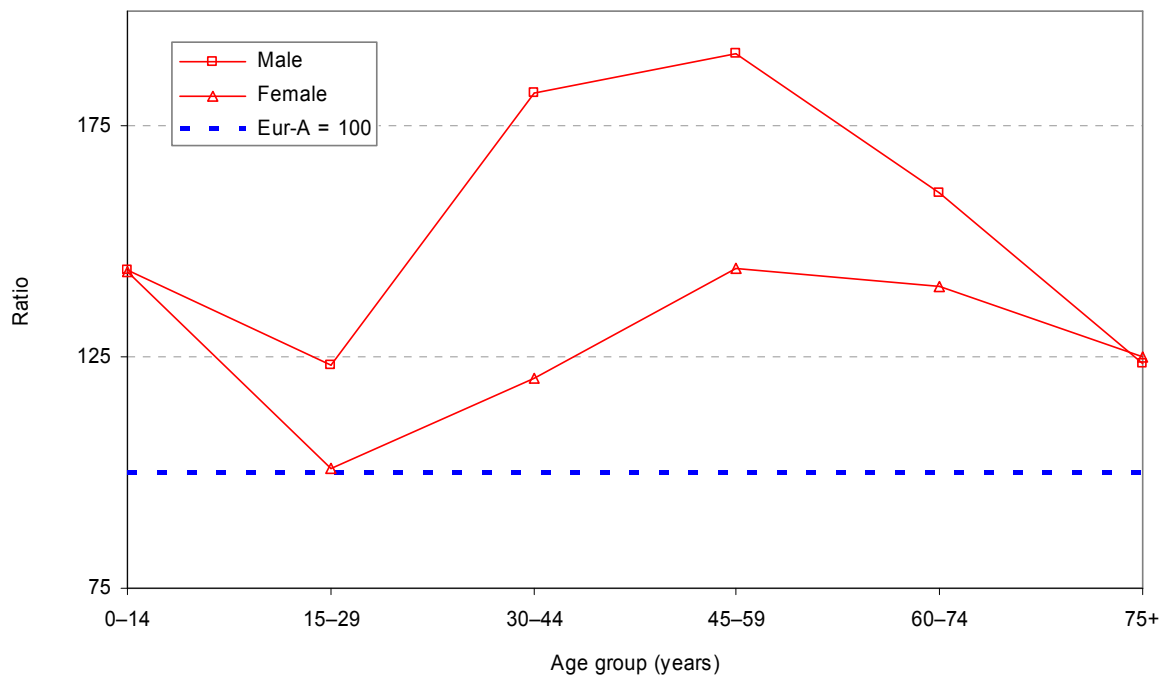
In 1990, Poland had the second lowest maternal mortality rate among the Eur-B+C countries with data. By 2001, its rate had fallen by 54%, the lowest rate among Eur-B+C countries for that year, and close to the Eur-A 2001 average. Its MDG target is well below the current Eur-A average.



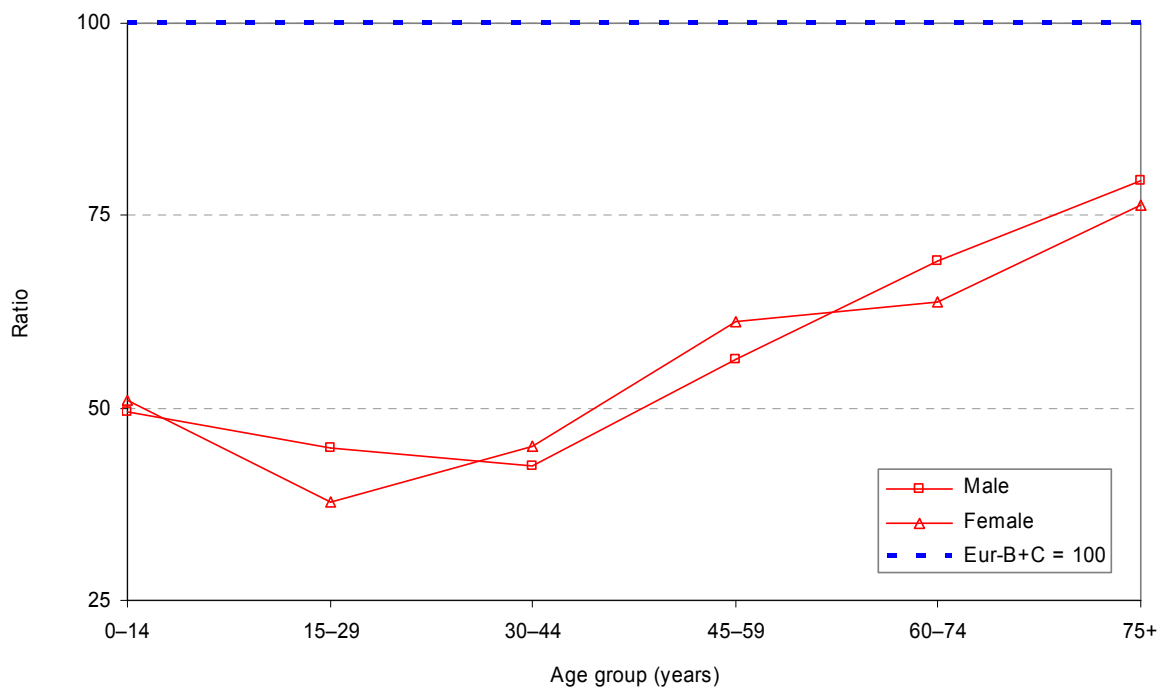
### Excess mortality

In general, mortality rates for males and females place Poland in the middle of the European countries. They are much lower than the Eur-B+C average rates (more than 30% for males and females), yet they are well above the average rates for the very low mortality countries of the Eur-A group (45% for males and 30% for females). The excess mortality in Poland, in comparison with the countries of Eur-A, is very age dependent, even though it is present across all age groups. For males, the largest difference is in the age groups 45–59 and 30–44 years, while for females those below 15 years of age and those in the age groups 45–59 and 60–74 years are in the worst situation.

Total mortality by sex and age group in Poland  
in comparison with Eur-A (Eur-A = 100), 2003



Total mortality by sex and age group in Poland  
in comparison with Eur-B+C (Eur-B+C = 100), 2003



### Main causes of death

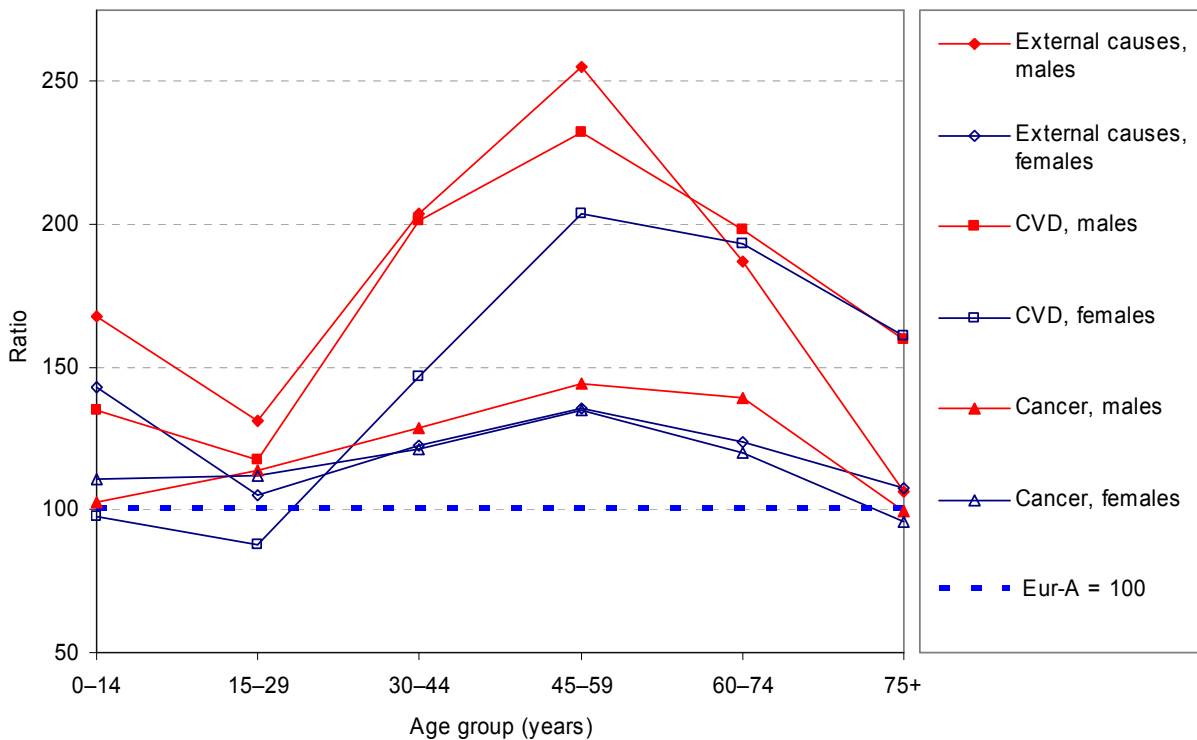
In 2002, the main noncommunicable diseases accounted for about 81% of all deaths in Poland; external causes for about 7%; and communicable diseases for less than 1%. In total, 46% of all deaths were



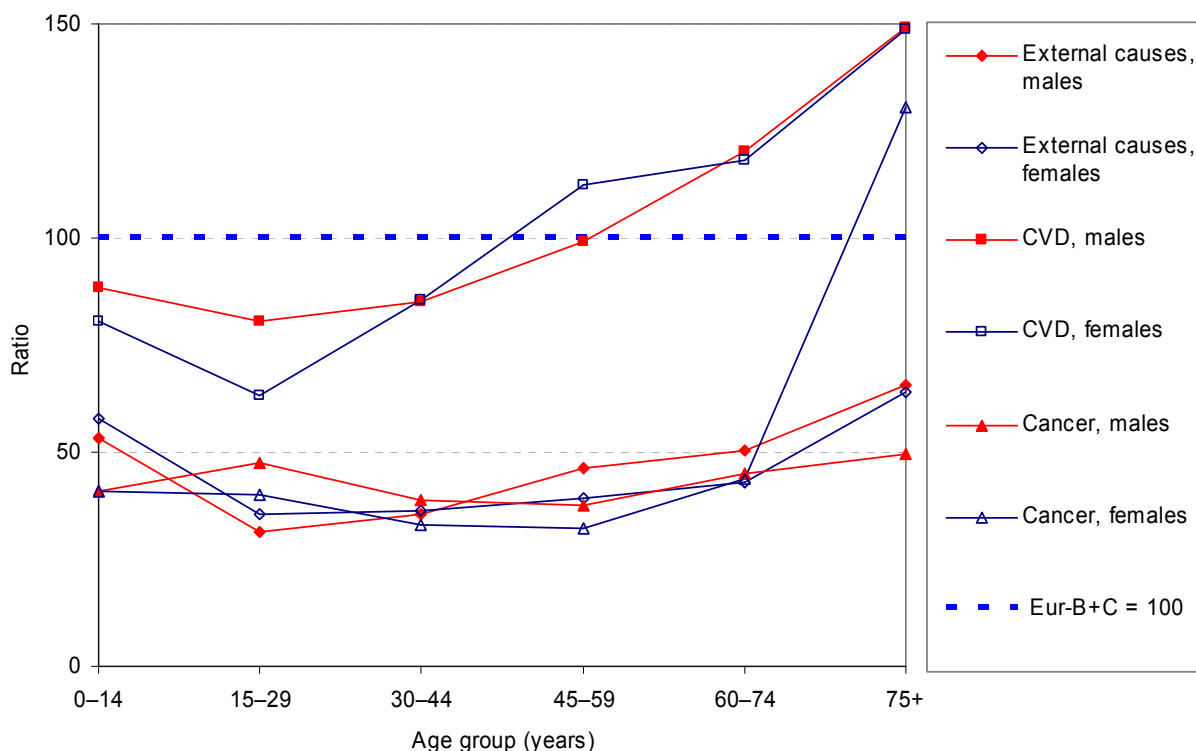
caused by diseases of the circulatory system (more than the Eur-A average: 38%) and 24% by cancer (less than the Eur-A average: 28%) (Annex. Selected mortality; Annex. Mortality data).

Poles have a lower risk of dying from CVD than the average person in Eur-B+C (by more than 40%), though the risk is much higher than the Eur-A average risk (by 70% excess). Also, the risk of dying from cancer in Poland is lower than the Eur-B+C average risk for males below 60 years of age and for females below 45 years, though it is above the Eur-A average risk for all age groups but the oldest (aged 75 years and more). Polish females, and even more so males, have a higher risk of death from external causes than people in Eur-A on average (overall by almost 60%). However, when compared with the Eur-B+C average risk, only the oldest Polish women have a higher risk of death.

Main causes of mortality by sex and age group in Poland in comparison with Eur-A (Eur-A = 100), 2003



Main causes of mortality by sex and age group in Poland  
in comparison with Eur-B+C (Eur-B+C = 100), 2003

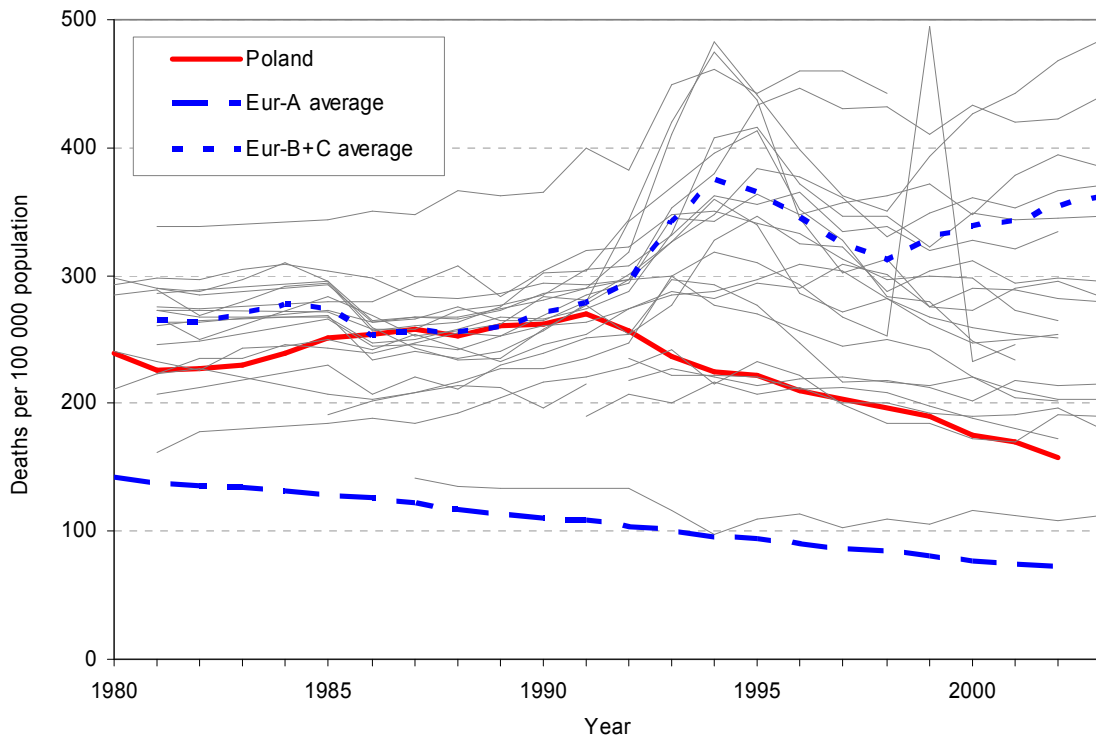


## CVD

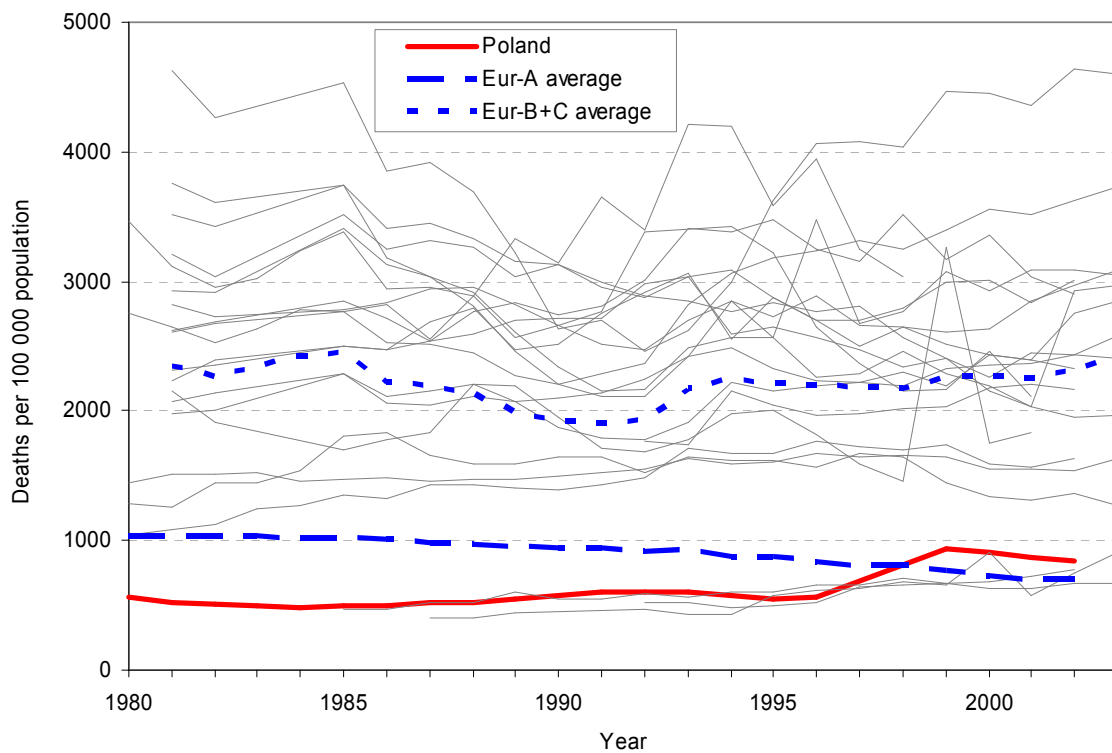
Mortality from CVD has been decreasing in Poland since 1991, while in Eur-A it has been decreasing for much longer. Nevertheless, during the period 1991–2002, mortality rates declined in Poland faster than the average mortality rates for Eur-A, especially for Poles aged 15–44 years.

Ischaemic heart disease is the single biggest killer in Poland, and it caused 14% of all deaths in 2002, which is similar to the Eur-A average (15%). Nevertheless, the risk of Poles dying from this cause is about 30% higher than the average risk for people in Eur-A. Yet, the largest excess mortality in Poland in comparison with Eur-A, particularly for the middle-aged population, is for cerebrovascular diseases and diseases of the pulmonary circulation and other heart diseases. Unfortunately, it is impossible to compare the progress in declining mortality for the subgroups of CVD in Poland, as it is with other countries, because of the new coding system for causes of death that has been in use since 1997. This new coding system has significantly affected the time series of the mortality rates, particularly in the case of diseases of the circulatory system. As a consequence of this change, there was an increase in mortality rates for ischaemic heart disease and cerebrovascular diseases and a plunge in mortality rates for atherosclerosis, particularly in older age groups. In addition, in 1997 and 1998, mortality rates by cause were substantially underestimated because doctors went on strike and did not fill in the cause of death in about 20% of the death registration forms.

Standardized death rates (SDR) for CVD in people aged 25–64 years, Poland, Eur-A and Eur-B+C averages, 1980 to latest available year



SDR for ischaemic heart disease in people aged 65+ years, Poland, Eur-A and Eur-B+C averages, 1980 to latest available year



**Cancer**

In 2002, cancer accounted for 24% of all deaths in Poland, which is less than the average in Eur-A (28%), yet the risk of dying from cancer is higher in Poland, by about 20%. When it comes to cancer,

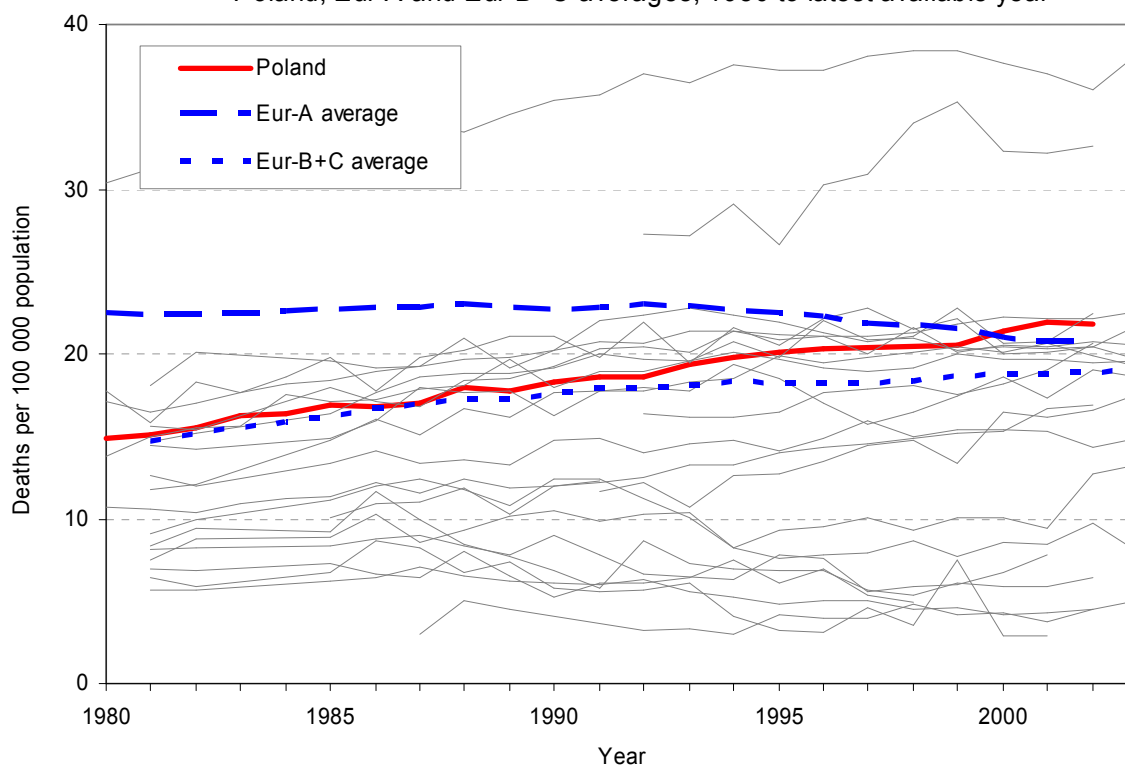
males are less favoured than females. Also, the decline in the mortality rates over time in the Polish population below 45 years of age is faster than the average in Eur-A. On the other hand, in Poland, since 1993, mortality rates have increased in those aged 65 years and more, especially in men, while the average rates for Eur-A have been declining for the same period.

The risk of dying from stomach cancer and cancer of the liver and intrahepatic bile duct is declining in Poland. For cancer of the liver and intrahepatic bile duct, the recent trend in Eur-A averages shows an increase, and the mortality rates for males in Poland are now below Eur-A averages. The mortality rates for cancer of the colon, rectum and anus, bladder cancer, and prostate cancer are increasing in Poland, while in Eur-A the corresponding average rates have been declining in recent years. The rates for cancer of the colon, rectum and anus and for bladder cancer are above the corresponding Eur-A average rates and, moreover, the risk of dying from bladder cancer for males in Poland is the fourth highest in Europe.

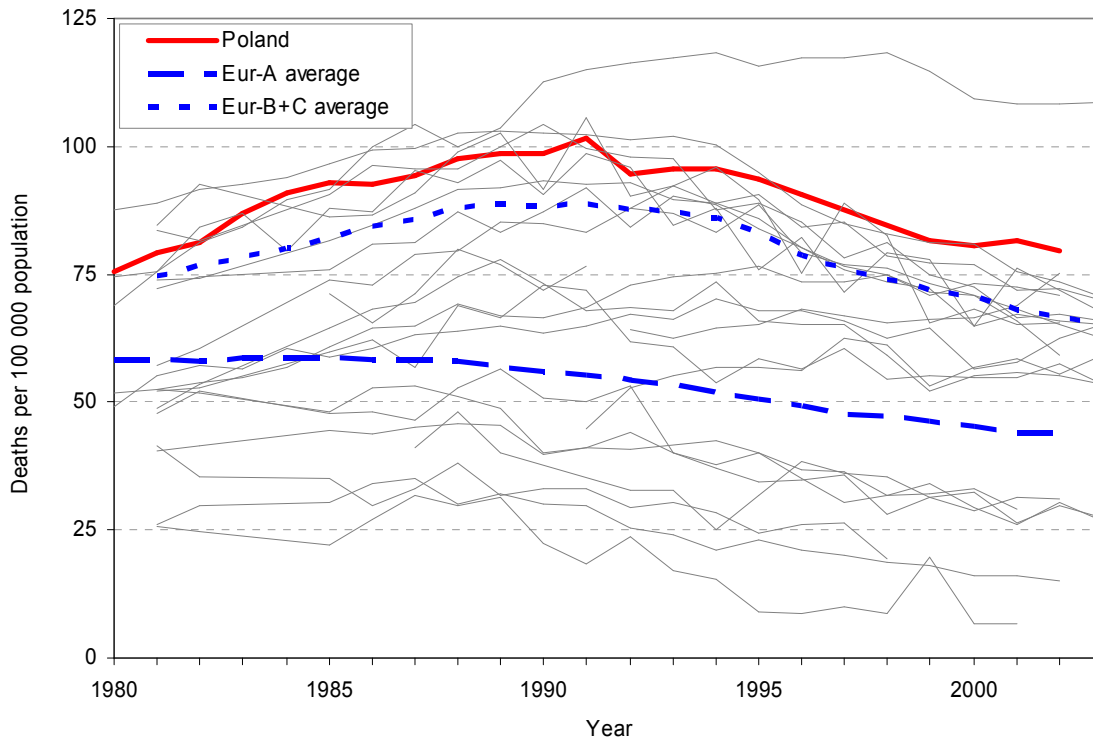
In females, the mortality rates for breast cancer have been below Eur-A average rates, while the rates for cancer of the uterine cervix are more than three times higher than average rates in Eur-A. The mortality rates for cancer of other parts of the uterus and for cancer of the ovary are also higher in Poland than the corresponding average rates in Eur-A, by about a fifth.

Mortality from cancer of the trachea, bronchus and lung (TBL) differs for Polish males and females. For all Polish males, the mortality rate is the third highest in Europe. In Polish males below 60 years of age, it is decreasing faster than Eur-A average rate, while in males aged 65 years and more it has been increasing, which is contrary to the trend in the corresponding Eur-A averages. For Polish females, the mortality rate is above the Eur-A average and is increasing faster than that average.

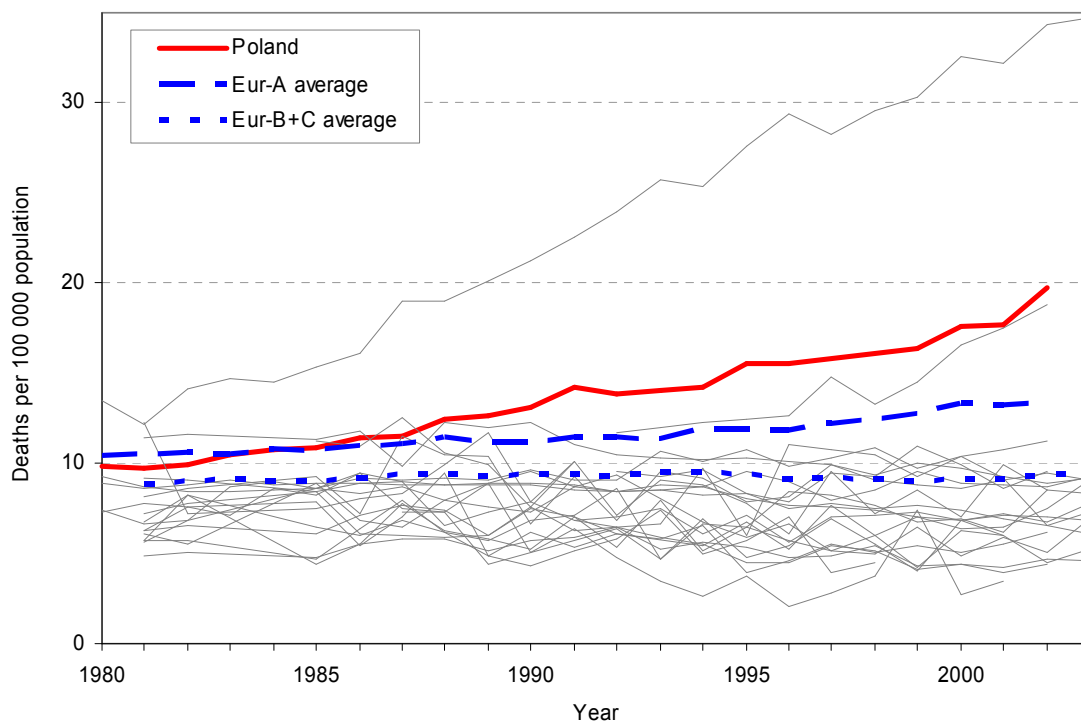
SDR for colon, rectum and anus cancer in people of all ages,  
Poland, Eur-A and Eur-B+C averages, 1980 to latest available year

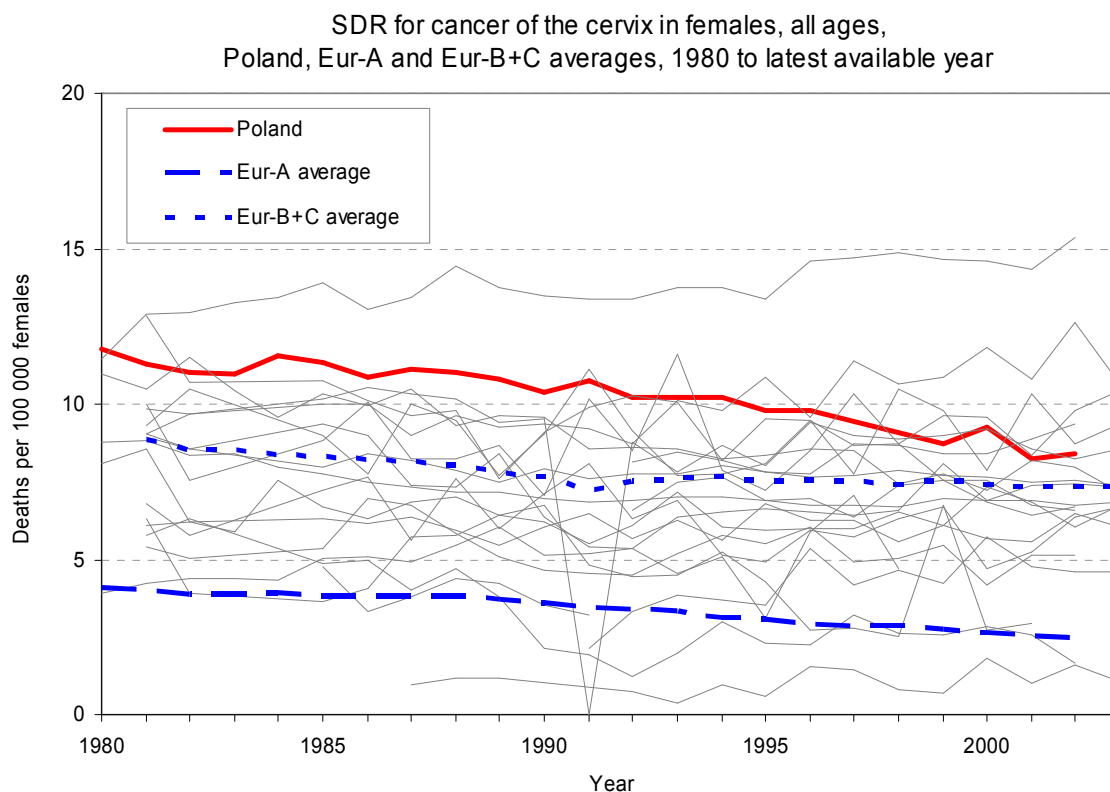


SDR for trachea, bronchus and lung cancer in males aged 25–64 years, Poland, Eur-A and Eur-B+C averages, 1980 to latest available year



SDR for trachea, bronchus and lung cancer in females aged 25–64 years, Poland, Eur-A and Eur-B+C averages, 1980 to latest available year





### **Respiratory diseases**

In 2002, respiratory diseases accounted for 4% of all deaths in Poland. Male and female mortality rates in Poland for respiratory diseases are lower than the corresponding Eur-A average rates, though the rates for Polish males under 65 years of age are higher for these diseases than they are for their peers in Eur-A. For the last several years, the mortality rate for chronic lower respiratory diseases has been lower in Poland than the average rate for Eur-A, the difference being larger in females than in males. Also, in recent years, mortality from pneumonia in Polish males has been slightly higher than that in males in Eur-A countries, while in 2002 the mortality rate in Polish females was at the Eur-A average rate.

### **Digestive diseases**

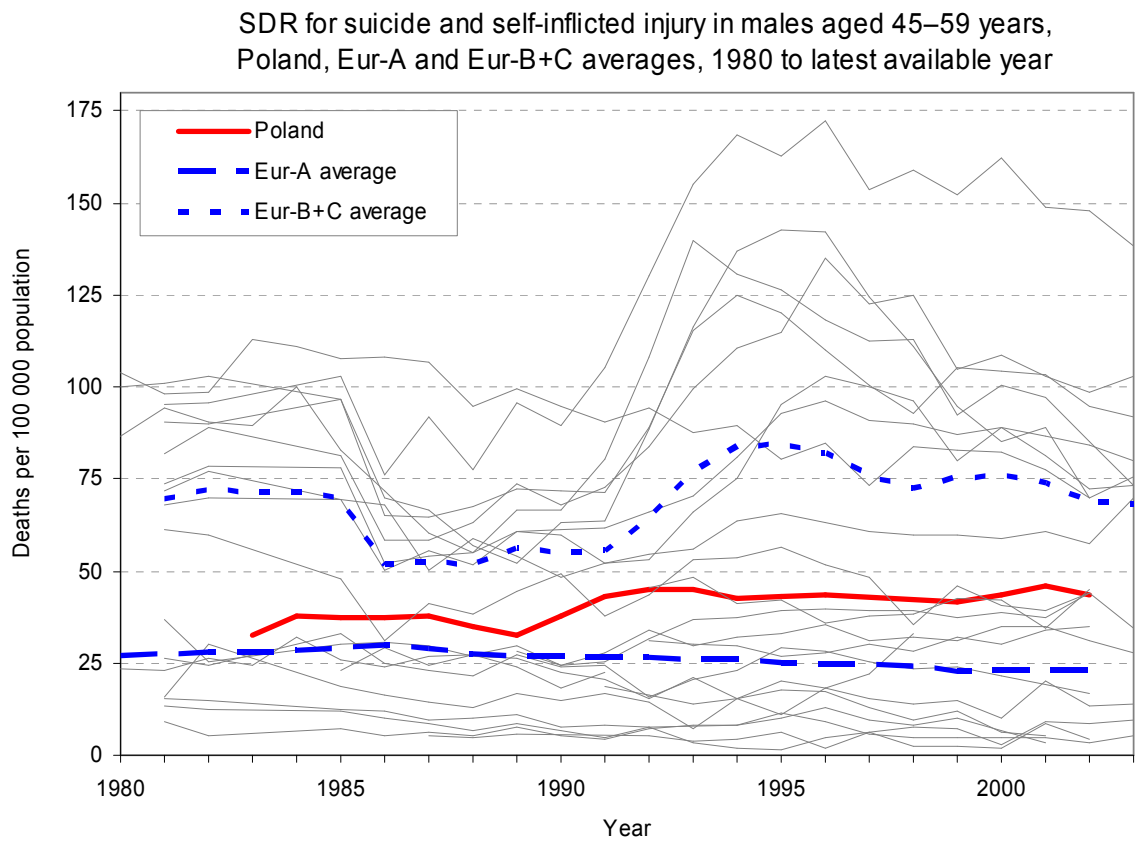
The mortality rate in Poland for diseases of the digestive system in 2002 (4% of all deaths in Poland) is similar to that for respiratory diseases. Mortality rates in Poland since 2001 for diseases of the digestive system are higher than the average rates in Eur-A for the same period (in males, they are higher since 1991). It is difficult to assess the recent trend in the rates in Poland because the increase in the rates between 1996 and 1999 could have been caused partly by the modification of the coding system for the causes of death. Nevertheless there is a clear long-term decline in the mortality rate for chronic liver disease and cirrhosis in the population aged 65 years and more, and the rate in Poland for this age group has been lower than the Eur-A average rate for years.

### **External causes**

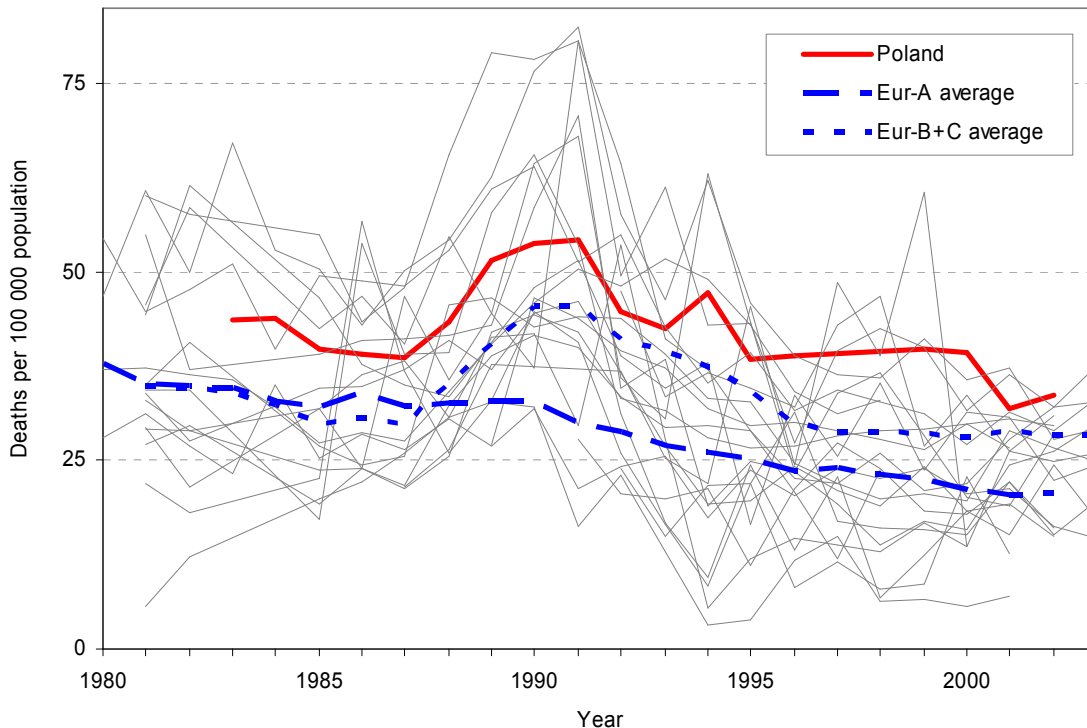
The mortality rates for external causes in Poland have been decreasing since 1991, slightly faster than the Eur-A average rates, yet in 2002 the rate was higher than the Eur-A average rate: by 75% for males and 25% for females.

Suicide is the main external cause of death among Polish males, since 2000, and is followed by motor vehicle traffic accidents, which were the leading cause between 1988 and 1999. Among Polish females, accidental falls have been responsible for the largest number of deaths for years. In Poland, all subgroups of external causes, such as motor vehicle traffic accidents, accidental falls, accidental drownings, exposure to smoke, fire and flames, accidental poisonings and homicide, pose a higher risk of death than the corresponding average risk in Eur-A. The only exception is the mortality rate for suicide in Polish females, which is lower than the corresponding average rate in Eur-A, while the mortality rate for

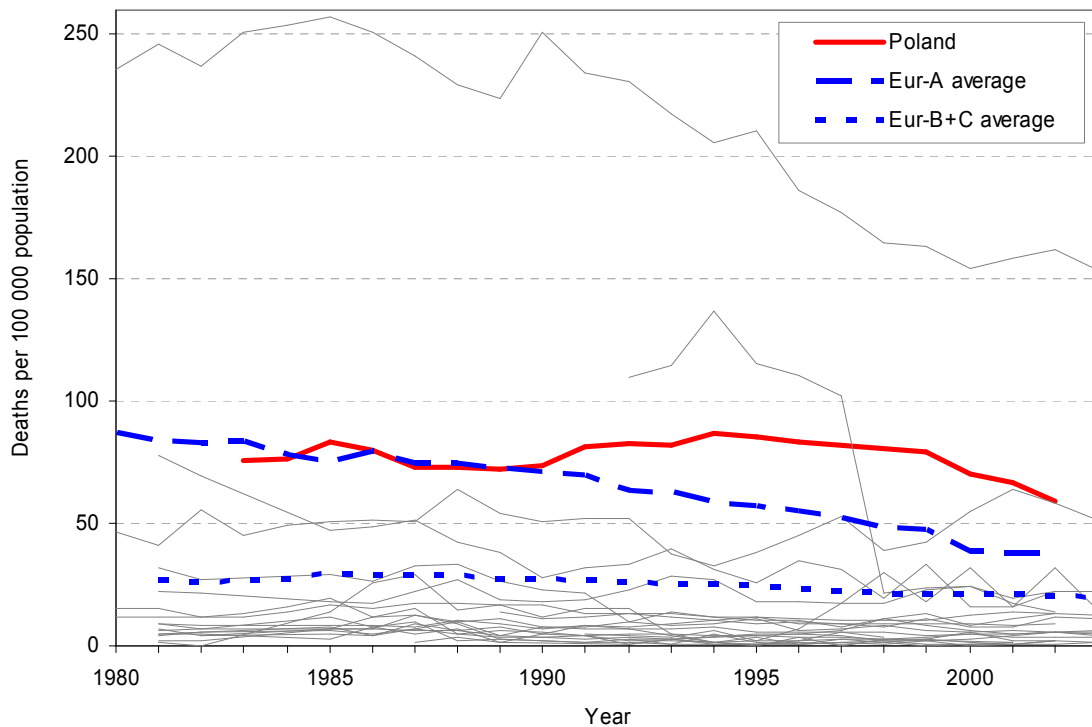
suicide in males is higher than the Eur-A average, and the gap is increasing. Also, the mortality rate for motor vehicle traffic accidents in people aged 65 years and more is the fourth highest in European countries.



SDR for motor vehicle traffic accidents in males aged 65+ years, Poland, Eur-A and Eur-B+C averages, 1980 to latest available year



SDR for accidental falls in females aged 65+ years, Poland, Eur-A and Eur-B+C averages, 1980 to latest available year





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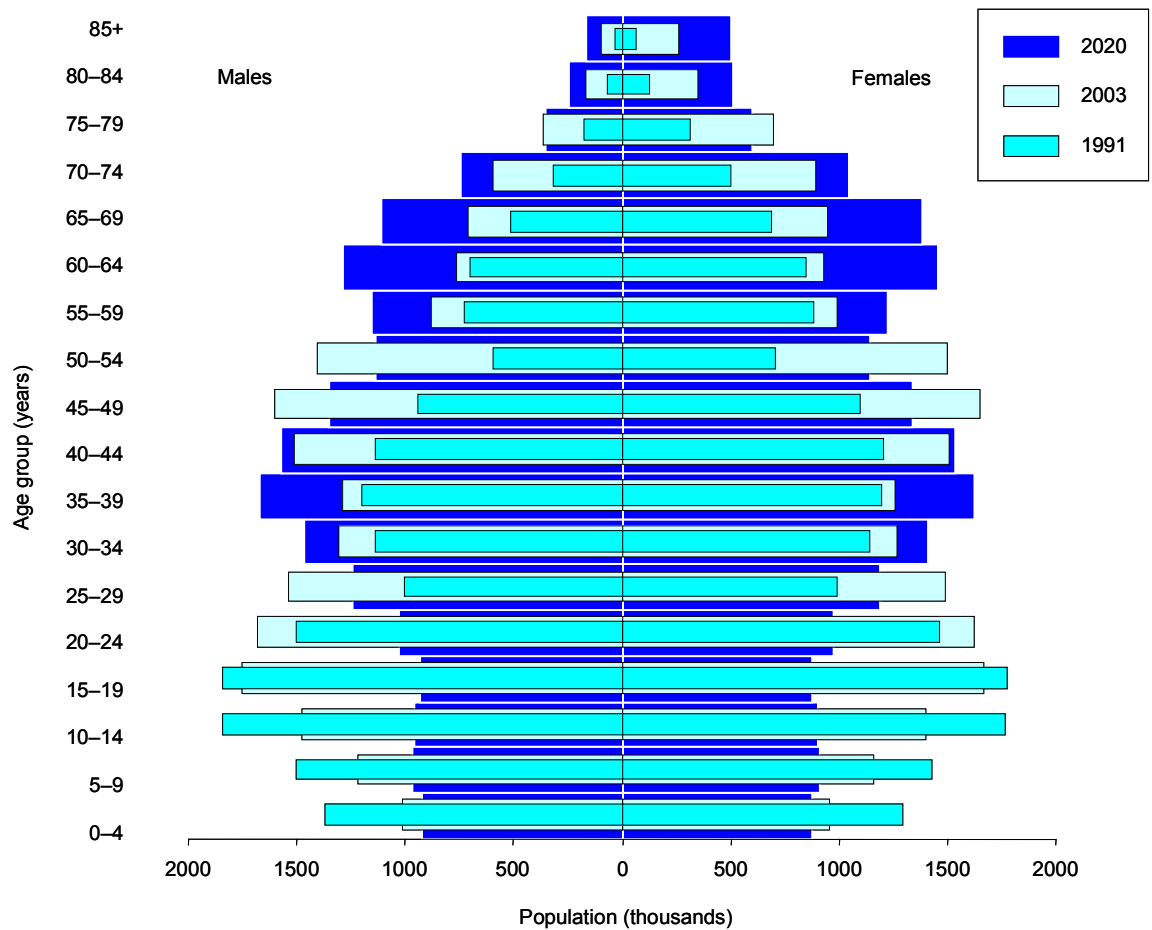
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## Annexes

### Annex. Age pyramid

#### Age pyramid for Poland



Sources: WHO Regional Office for Europe (2005) and United Nations (2005).

## Annex. Selected mortality

## Selected mortality in Poland compared with B+C averages

Condition	SDR per 100 000		Excess mortality in Poland (%)	Total deaths in Poland (%)	Total deaths in Eur-B+C (%)	Eur-A average	Excess Poland to Eur-A (%)	Total deaths in Eur-A (%)
	Poland (2002)	Eur-B+C average (2003)						
<b>Selected non-communicable conditions</b>	718.4	1044.9	-31.2	80.6	79.6	533.8	34.6	82.4
<i>Cardiovascular diseases</i>	413.9	741.8	-44.2	46.4	56.5	243.4	70.0	37.6
Ischaemic heart disease	125.8	362.7	-65.3	14.1	27.6	95.9	31.2	14.8
Cerebrovascular diseases	98.6	221.7	-55.5	11.1	16.9	61.1	61.4	9.4
Diseases of pulmonary circulation and other heart disease	94.9	68.9	37.7	10.6	5.3	56.6	67.7	8.7
<i>Malignant neoplasms</i>	216.7	172.0	26.0	24.3	13.1	181.5	19.4	28.0
Trachea/bronchus/lung cancer	53.2	33.9	56.9	6.0	2.6	37.1	43.4	5.7
Female breast cancer	21.4	22.1	-3.2	2.4	1.7	27.0	-20.7	4.2
Colon/rectal/anal cancer	21.8	19.0	14.7	2.4	1.4	20.7	5.3	3.2
Prostate	23.1	14.3	61.5	2.6	1.1	25.1	-8.0	3.9
<i>Respiratory diseases</i>	37.6	63.1	-40.4	4.2	4.8	47.8	-21.3	7.4
Chronic lower respiratory diseases	16.4	31.2	-47.4	1.8	2.4	20.2	-18.8	3.1
Pneumonia	16.9	23.6	-28.4	1.9	1.8	16.2	4.3	2.5
<i>Digestive diseases</i>	36.7	52.3	-29.8	4.1	4.0	30.8	19.2	4.8
Chronic liver disease and cirrhosis	13.0	32.0	-59.4	1.5	2.4	12.6	3.2	1.9
<i>Neuropsychiatric disorders</i>	13.5	15.7	-14.0	1.5	1.2	30.3	-55.4	4.7
<b>Communicable conditions</b>	6.2	20.8	-70.2	0.7	1.6	8.4	-26.2	1.3
AIDS/HIV	0.3	0.8	-62.5	0.0	0.1	1.1	-72.7	0.2
<b>External causes</b>	64.2	139.6	-54.0	7.2	10.6	40.3	59.3	6.2
<i>Unintentional</i>	47.5	102.2	-53.5	5.3	7.8	28.7	65.5	4.4
Road traffic injuries	14.2	14.7	-3.4	1.6	1.1	9.9	43.4	1.5
Falls	9.3	7.5	24.0	1.0	0.6	6.1	52.5	0.9
<i>Intentional</i>	16.7	37.4	-55.3	1.9	2.9	11.6	44.0	1.8
Self-inflicted (suicide)	14.9	23.2	-35.8	1.7	1.8	10.6	40.6	1.6
Violence (homicide)	1.8	14.2	-87.3	0.2	1.1	1.0	80.0	0.2
<b>Ill-defined conditions</b>	60.9	64.0	-4.8	6.8	4.9	20.9	191.4	3.2
<b>All causes</b>	891.6	1312.2	-32.1	100.0	100.0	647.8	37.6	100.0

## Annex. Mortality data

Table 1. Selected mortality for the group 0–14 years by sex in Poland and Eur-B+C:  
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	Poland (2002)		Eur-A (2002)		Eur-B+C (2003)	
		Rate	Annual change (%)	Average	Annual change (%)	Average	Average annual change (%)
<b>All causes</b>	Both	76.0	-5.4	49.4	-2.4	151.7	-3.8
	M	84.4	-5.4	55.3	-2.5	170.5	-3.9
	F	67.2	-5.5	43.3	-2.4	131.9	-3.8
<i>Infectious and parasitic diseases</i>	M	3.1	-7.1	1.4	-1.1	10.9	-7.0
	F	2.5	-4.9	1.1	-3.0	9.5	-6.6
Intestinal infectious diseases	M	0.1	-9.1	0.2	-0.7	5.1	-8.2
	F	0.0	-12.7	0.1	-7.3	4.7	-7.9
<i>Malignant neoplasms</i>	M	4.5	-2.2	3.3	-1.8	5.1	-1.9
	F	3.4	-2.8	2.6	-1.8	4.2	-1.9
<i>Cardiovascular diseases</i>	M	1.7	-4.0	1.4	-3.1	3.3	1.1
	F	1.5	-2.2	1.3	-2.5	2.6	0.1
<i>Respiratory diseases</i>	M	2.2	-7.8	1.4	-4.3	35.9	-5.0
	F	1.7	-7.7	1.0	-4.2	30.7	-5.0
Pneumonia	M	1.7	-8.2	0.5	-6.0	20.9	-4.9
	F	1.5	-7.2	0.4	-5.1	17.9	-4.7
<i>Certain conditions originating in perinatal period</i>	M	430.8	-6.2	255.3	-2.1	607.6	-2.7
	F	335.5	-6.8	202.3	-1.6	427.5	-2.7
Congenital malformations & chromosomal abnormalities	M	20.8	-4.9	11.6	-2.9	24.2	-2.8
	F	19.8	-4.6	10.0	-3.3	21.0	-2.6
<i>Ill-defined causes</i>	M	3.3	-0.3	5.0	-3.9	5.6	-0.6
	F	2.3	-2.6	3.4	-4.2	4.6	-1.0
<i>External causes of injury &amp; poisoning</i>	M	11.9	-4.6	7.0	-4.0	29.0	-3.4
	F	7.4	-4.4	4.6	-3.2	18.1	-3.1
Road traffic injuries	M	4.0	-4.6	2.5	-4.5	4.7	-2.6
	F	3.1	-2.1	1.7	-4.8	3.0	-1.6

Table 2. Selected mortality for the group 15–29 years by sex in Poland and Eur-B+C:  
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	Poland (2002)		Eur-A (2002)		Eur-B+C (2003)	
		Rate	Annual change (%)	Average	Annual change (%)	Average	Average annual change (%)
<b>All causes</b>	Both	69.8	-2.5	56.0	-2.3	161.0	-0.9
	M	108.4	-2.4	82.0	-2.3	241.7	-1.0
	F	29.8	-2.9	29.3	-2.2	79.0	-0.6
<i>Infectious and parasitic diseases</i>	M	1.5	1.3	1.2	1.5	12.3	3.0
	F	0.6	2.1	0.8	1.9	5.1	2.5
<i>Malignant neoplasms</i>	M	7.1	-2.7	6.2	-1.0	8.8	-1.9
	F	4.8	-3.4	4.7	-1.4	7.7	-1.9
<i>Cardiovascular diseases</i>	M	5.5	-4.7	4.1	-2.4	17.6	0.0
	F	2.6	-5.0	2.3	-2.0	7.3	-0.9
<i>Respiratory diseases</i>	M	1.3	-1.8	1.4	-3.6	6.9	0.2
	F	1.1	-1.3	0.9	-2.7	3.8	-1.1
<i>Digestive diseases</i>	M	2.1	-3.1	0.9	-3.5	8.0	3.0
	F	0.6	-6.5	0.5	-3.8	3.7	3.1
<i>Ill-defined causes</i>	M	7.9	-0.5	4.0	-3.1	11.6	7.1
	F	1.8	2.6	1.4	-1.3	3.3	5.8
<i>External causes</i>	M	77.5	-2.2	58.3	-1.4	162.4	-1.6
	F	14.8	-2.3	14.4	-1.6	36.9	-0.2
Road traffic injuries	M	28.0	-3.4	28.5	-1.3	27.8	-1.5
Accidental drowning	F	7.0	-0.9	7.3	-1.4	8.0	0.3
	M	5.2	-5.0	1.3	-2.2	10.8	-3.9
Accidental poisoning	F	0.5	-5.6	0.2	-2.1	1.9	-2.2
	M	2.5	-4.2	2.8	0.0	19.1	3.3
Self-inflicted (suicide)	F	0.6	-8.3	0.7	0.8	4.4	2.5
	M	21.4	1.7	12.7	-1.8	36.8	0.0
	F	2.5	-1.8	3.1	-2.2	5.8	-1.3

Table 3. Selected mortality for the group 30–44 years by sex in Poland and Eur-B+C:  
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	Poland (2002)		Eur-A (2002)		Eur-B+C (2003)	
		Rate	Annual change (%)	Average	Annual change (%)	Average	Average annual change (%)
<b>All causes</b>	Both	198.1	-3.4	120.3	-2.5	453.8	-0.7
	M	297.9	-3.4	161.6	-2.6	700.0	-0.8
	F	97.1	-3.4	78.5	-2.1	215.6	-0.2
<i>Malignant neoplasms</i>	M	34.2	-2.9	27.6	-2.3	40.2	-2.8
	F	37.5	-2.9	31.3	-2.0	43.8	-1.4
Trachea/bronchus/lung cancer	M	6.9	-4.7	5.0	-3.4	7.3	-4.2
Female breast cancer	F	3.2	-1.8	2.8	-0.6	2.2	-1.0
<i>Cardiovascular diseases</i>	F	8.2	-3.2	10.0	-2.6	10.0	-2.3
	M	56.1	-5	26.1	-2.5	158.6	-0.4
Ischaemic heart disease	F	16.4	-4.6	10.4	-2.1	45.3	0.0
	M	21.2	-6.5	11.8	-3.1	73.7	-2.2
Cerebrovascular diseases	F	3.0	-7.1	2.4	-2.7	14.4	-1.3
	M	10.6	-3.1	4.4	-3.2	24.6	-0.4
<i>Respiratory diseases</i>	F	6.6	-2.0	3.6	-2.5	10.6	-1.3
	M	6.1	-2.0	3.9	-3.5	34.3	0.9
<i>Digestive diseases</i>	F	1.9	-6.0	2.2	-2.0	9.8	0.8
	M	24.4	-0.4	12.6	-2.4	50.2	1.4
<i>External causes</i>	F	5.8	-2.1	5.4	-1.7	19.4	4.1
	M	116.8	-3.1	58.8	-1.2	299.5	-1.9
Road traffic injuries	F	19.4	-2.5	15.1	-1.8	58.9	-1.0
	M	26.4	-3.8	16.0	-0.5	31.4	-1.7
Self-inflicted (suicide)	F	5.4	0.0	3.9	-2.0	7.1	-0.5
	M	35.2	-0.1	21.2	-1.5	54.9	-2.4
	F	5.2	-2.4	5.8	-2.2	7.9	-2.5

Table 4. Selected mortality for the group 45–59 years by sex in Poland and Eur-B+C:  
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	Poland (2002)		Eur-A (2002)		Eur-B+C (2003)	
		Rate	Annual change (%)	Average	Annual change (%)	Average	Average annual change (%)
<b>All causes</b>	Both	758.9	-2.2	435.6	-1.3	1294.9	-0.6
	M	1117.1	-2.5	580.1	-1.4	1981.7	-0.6
	F	428.5	-1.6	293.3	-1.0	698.9	-0.5
<i>Malignant neoplasms</i>	M	320.7	-1.7	218.2	-1.2	323.2	-1.9
	F	209.3	0.1	155.0	-1.0	186.1	-0.5
Trachea/bronchus/lung cancer	M	116.1	-2.6	65.9	-1.5	101.4	-2.9
Female breast cancer	F	33.9	5.2	21.8	3.4	15.4	1.0
<i>Cardiovascular diseases</i>	F	39.5	-1.1	44.0	-2.2	45.3	0.1
	M	367.9	-1.3	156.4	-2.6	793.1	-0.1
Ischaemic heart disease	F	107.1	-4.2	50.9	-2.5	271.7	-0.6
	M	167.5	-3.8	86.2	-3.3	435.3	-0.7
Cerebrovascular diseases	F	31.1	-4.5	17.8	-3.4	111.1	-0.6
	M	70.5	-0.6	23.7	-2.6	168.6	-0.9
<i>Respiratory diseases</i>	F	37.4	0.5	14.5	-2.1	88.4	-1.4
	M	26.6	-1.8	20.3	-1.7	108.7	-1.4
<i>Digestive diseases</i>	F	9.5	-0.7	10.2	-1.3	24.5	-0.7
	M	72.1	0.8	49.6	-0.8	129.7	0.7
<i>External causes</i>	F	22.7	0.5	20.3	-0.7	57.3	1.9
	M	153.8	-2.6	62.8	-1.0	409.2	-0.9
Road traffic injuries	F	28.6	-1.0	20.9	-0.9	89.1	-1.1
	M	28.1	-3.5	13.0	-1.3	28.5	-1.8
Self-inflicted (suicide)	F	5.4	-3.7	4.1	-2.1	7.5	-1.4
	M	43.4	0.0	23.1	-1.1	68.1	-2.4
	F	8.8	2.0	8.5	-1.2	10.2	-3.4

Table 5. Selected mortality for the group 60–74 years by sex in Poland and Eur-B+C:  
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	Poland (2002)		Eur-A (2002)		Eur-B+C (2003)	
		Rate	Annual change (%)	Average	Annual change (%)	Average	Average annual change (%)
<b>All causes</b>	Both	2324.5	-2.3	1570.9	-1.9	3411.7	-0.1
	M	3447.1	-2.0	2156.9	-2.1	4996.4	0.1
	F	1491.0	-3.0	1069.2	-1.9	2339.0	-0.6
<i>Malignant neoplasms</i>	M	1203.6	0.0	851.3	-1.4	1002.5	-0.8
	F	518.2	-0.4	439.8	-1.1	438.9	-0.7
Trachea/bronchus/lung cancer	M	455.6	-0.4	261.8	-1.9	321.7	-1.5
Female breast cancer	F	70.1	2.0	59.0	0.2	37.1	-1.4
<i>Cardiovascular diseases</i>	F	62.2	-1.0	79.7	-1.6	68.7	1.3
	M	1459.3	-3.7	744.9	-3.6	2903.0	0.6
Ischaemic heart disease	F	650.1	-4.8	335.7	-3.9	1507.8	-0.3
	M	585.6	-0.7	381.3	-4.2	1582.2	1.2
Cerebrovascular diseases	F	205.7	-1.4	133.5	-4.6	731.4	0.5
	M	329.1	1.5	143.3	-3.7	833.7	0.2
<i>Respiratory diseases</i>	F	194.5	0.3	86.7	-4.1	528.9	-0.8
	M	169.0	-1.6	144.0	-3.5	303.0	-2.4
<i>Digestive diseases</i>	F	49.6	-0.5	62.5	-2.4	68.6	-3.6
	M	136.3	0.2	111.6	-1.6	193.0	0.1
<i>External causes</i>	F	63.0	-1.6	54.1	-1.7	94.2	0.2
	M	144.4	-0.9	79.3	-1.4	320.0	1.0
Road traffic injuries	F	38.9	-2.5	32.1	-2.1	88.7	-0.5
	M	27.8	-2.7	14.8	-3.0	24.3	-1.5
Self-inflicted (suicide)	F	10.2	-2.7	5.9	-3.4	9.5	-1.0
	M	34.8	1.0	24.5	-1.6	60.5	-0.8
	F	8.1	0.0	8.7	-2.6	12.7	-3.1

Table 6. Selected mortality for the group 75+ years by sex in Poland and Eur-B+C:  
SDR per 100 000 population and percentage changes from 1995 to latest available year

Causes of death	Sex	Poland (2002)		Eur-A (2002)		Eur-B+C (2003)	
		Rate	Annual change (%)	Average	Annual change (%)	Average	Average annual change (%)
<b>All causes</b>	Both	9696.8	-1.9	8059.6	-1.0	12338.8	0.0
	M	11808.0	-1.5	9832.0	-1.1	14838.0	0.1
	F	8721.3	-2.1	7112.5	-0.9	11421.7	0.0
<i>Malignant neoplasms</i>	M	2220.4	3.5	2231.1	-0.4	1489.3	1.2
	F	1073.9	1.7	1136.2	-0.4	721.7	0.8
Trachea/bronchus/lung cancer	M	529.7	3.3	457.1	-0.7	323.5	1.0
Female breast cancer	F	95.6	3.8	102.7	1.5	55.6	0.5
<i>Cardiovascular diseases</i>	F	106.5	0.7	159.6	-0.4	92.0	3.1
	M	6734.6	-2.6	4356.2	-2.1	10221.2	0.4
Ischaemic heart disease	F	5625.3	-2.3	3577.9	-1.9	8805.6	0.4
	M	1842.0	12.0	1708.0	-2.2	4925.6	1.4
Cerebrovascular diseases	F	1331.5	18.4	1150.0	-2.2	4028.6	1.2
	M	1441.0	8.0	1119.8	-2.5	3004.4	0.7
<i>Respiratory diseases</i>	F	1361.8	6.8	1026.9	-2.4	2967.6	0.5
	M	853.1	3.5	1156.5	-2.4	824.1	-2.1
<i>Digestive diseases</i>	F	365.7	3.8	591.9	-2.1	302.3	-3.2
	M	352.9	2.2	340.3	-1.1	270.4	0.3
<i>External causes</i>	F	291.8	3.1	279.8	-0.4	175.0	1.1
	M	299.7	-0.5	275.0	-0.6	604.2	0.1
Road traffic injuries	F	225.5	-2.8	187.8	-1.2	172.4	-1.2
	M	41.2	-1.4	28.1	-2.2	34.6	-3.1
Self-inflicted (suicide)	F	16.9	-6.3	10.0	-3.1	14.7	-1.7
	M	30.6	-1.0	49.5	-1.6	86.6	-1.1
	F	7.7	3.2	11.8	-3.2	22.4	-1.9

## Technical notes

### Calculation of averages

Averages for the reference group, when based on data in the European health for all database of the WHO Regional Office for Europe, are weighted by population. Some countries with insufficient data may be excluded from the calculation of averages. Otherwise, for data from other sources, simple averages have been calculated where required.

To smooth out fluctuations in annual rates caused by small numbers, three-year averages have been used, as appropriate. For example, maternal mortality, usually a small number, has three-year moving averages calculated for all countries. When extreme fluctuations are known to be due to population anomalies, data have been deleted, as appropriate.

### Data sources

To make the comparisons as valid as possible, data for each indicator have, as a rule, been taken from one source to ensure that they have been harmonized in a reasonably consistent way. Unless otherwise noted, the source of data for figures and tables in this report is the January 2005 version of the European health for all database of the WHO Regional Office for Europe. The health for all database acknowledges the various primary sources of the data.

In cases where current census data for national population are unavailable, coupled with ongoing migrations of people in and out of countries, UN estimates or provisional figures supplied by the country are used to approximate national population. Such population figures create uncertainty in standardized death rates.

### Disease coding

Case ascertainment, recording and classification practices (using the ninth and tenth revisions of the International Statistical Classification of Diseases and Related Health Problems: ICD-9 and ICD-10, respectively), along with culture and language, can influence data and therefore comparability across countries.

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

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

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

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

More explanation is provided in the statistical annex and explanatory notes of *The world health report 2003*<sup>1</sup>.

### Limitations of national-level data

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

### Reference groups for comparison

When possible, international comparisons are used as one means of assessing a country's comparative strengths and weaknesses and to provide a summary assessment of what has been achieved so far and

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<sup>1</sup> WHO (2003). *The world health report 2003 – Shaping the future*. Geneva, World Health Organization (<http://www.who.int/whr/2003/en>, accessed 10 June 2005).

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what could be improved in the future. Differences between countries and average values allow the formulation of hypotheses of causation or imply links or remedies that encourage further investigation.

The country groups<sup>1</sup> used for comparison are called reference groups and comprise:

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

The 27 countries with very low child mortality and very low adult mortality are designated Eur-A by WHO. Eur-A comprises Andorra, Austria, Belgium, Croatia, Cyprus, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. However, data for most indicators are unavailable for two of the 27 countries: Andorra and Monaco. Therefore, unless otherwise indicated, Eur-A and averages for Eur-A refer to the 25 countries for which data are available.

The 25 countries with low child mortality and low or high adult mortality are designated Eur-B+C by WHO. Eur-B+C comprises Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Russian Federation, Serbia and Montenegro, Slovakia, Tajikistan, Tajikistan, Turkey, Turkmenistan, Ukraine, and Uzbekistan. Unless otherwise indicated, Eur-B+C and averages for Eur-B+C refer to these countries.

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

Graphs have usually been used to show time trends from 1980 onwards. These graphs present the trends for all the reference countries as appropriate. Only the country in focus and the group average are highlighted and identified in the legend. This enables the country's trends to be followed in relation to those of all the reference countries, and performance in relation to observable clusters and/or the main trend or average to be recognized more easily.

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<sup>1</sup> WHO (2004). *The world health report 2004 – Changing history*. Geneva, World Health Organization (<http://www.who.int/whr/2004/en>, accessed 26 August 2004).

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## Glossary

### Causes of death

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

### Technical terminology

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

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