Basic Characteristics of Health, Illness and Mortality
(Table 2)

Source: Life tables and demographic statistics of the Czech Statistical Office; the Institute of Health Information and Statistics of the CR

Healthy life expectancy at birth – Eurostat data for 2005. These are the latest available data and a different methodology has been applied than the one used in the previous booklet.

Life expectancy is derived from life tables compiled on the basis of age-specific mortality rates in the initial year (mortality rates by age). Life expectancy at x-years means the additional number of years to be lived by a man or a woman surviving to exact age x (provided that age-specific mortality rates by age are maintained at the level of the initial year). The average age at death is then determined by adding the age of x years to the life expectancy. Life expectancy should never be confused with the average age of population.

The indicator for "healthy life expectancy at birth" expresses how many years a neonatal child can expect to live in full health at current sickness and mortality rates. These data are not available before 2001. The probability of death between 15–60 years of age (the probability that a person will die between his or her fifteenth and sixteenth birthdays) is also derived from life tables. The infant mortality rate is calculated as the proportion of infants who die before the first year to every one thousand live births in the same year.

The data for incapacity for work concern newly reported cases of incapacity for work due to injury or disease. Due to the use of a different source of data (The Czech Statistical Office), on the basis of the changed methodology some values in times series have been recalculated. The average number of persons participating in sickness insurance schemes means the average number of persons who are covered by sickness insurance under Act No. 54/1956 Coll., on Sickness Insurance of Employees, as amended.

Data for those hospitalized are averages for the relevant year relative to 100,000 of the mid-year population.

Women live to a higher age than men. In 2007, life expectancy at birth for Czech women was about 6 years longer than for men. Women on the average also have the chance to live longer than men in good health. In contrast with men, however, they will live more years in worse health condition. While a difference in life expectancy at birth is relatively significant in

Table 2: Basic Characteristics of Health, Illness and Mortality

		1995		2004		2007	
		women	men	women	men	women	men
Life expectancy of age	0	77	70	79	73	80	77
	20	58	51	60	53	60	54
	40	38	32	40	34	40	35
	60	20	16	22	18	22	18
Healthy life expectancy at birth*)		–	–	–	–	57.9	59.9
Probability of dying between 15th and 60th birthday (%)		9	19	7	16	7	16
Infant mortality (‰)		6	9	3	4	3	4
Child mortality 1–4 years (‰)		0.3	0.4	0.2	0.2	0.2	0.2
Number of completed IFW per 100 healthy insurees		101.1	85.0	65.9	57.8	62.9	56.1
Average duration of 1 case of IFW (in days)		25.3	23.6	35.8	33.8	36.2	33.0
Hospitalized persons in Hospitals							
Cases of hospitalisation per 100 000 inhabitants		23 252	18 067	25 137	20 473	24 524	19 546
Average duration of stay in days		9.4	9.7	7.6	7.5	7.1	7.1

*) The latest data are available from 2005

favour of women, for healthy life expectancy at birth this difference is about 2 years.

The number of completed incapacity for work (IFW) per 100 health insurees has seen a downward trend for both men and women. In 1995, there were 100.1 women per 100 women covered by health insurance and 85.0 men per 100 men covered by health insurance. In respect of both sexes, till 2007 about 40% decline has been recorded, for women the downward trend was slightly less significant. In the monitored years, however, both men and women recorded a rise in the average duration of 1 case of incapacity for work (IFW). In 1995, for women the average duration of 1 case of incapacity for work was about 25.3 days, in 2004 35.8 days and in 2007 already 36.2 days. The duration of men's incapacity for work was on the average shorter than that of women (23.6 days on the average in 1995, 33.8 days in 2004 and 33 days in 2007).

Age-specific Mortality Rates

(Graph 7)

Source: Demographic statistics of the Czech Statistical Office – data for 2007

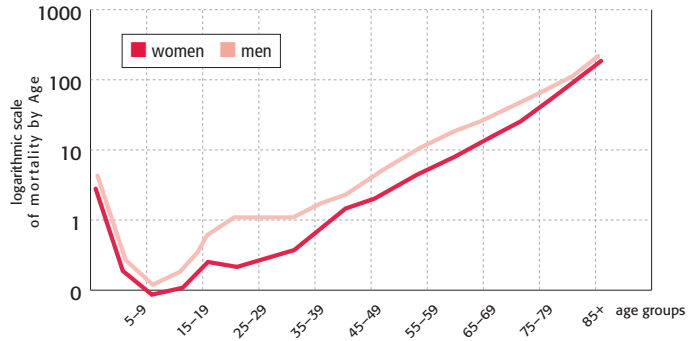
We calculate the mortality rate by age (so-called age-specific mortality rate) as the proportion of deceased in the relevant age per 1,000 persons of this age alive as at 1 July of the calendar year (so-called mid-year population).

Basically, in each five-year age group men's proportion of deaths is higher than that of women (these differences are very negligible at the child age from 1 to 14). Significant differences by sex were found on one hand in the 20–29 age group, where men's mortality rate is mainly due to injuries and accidents much higher than that of women, and in the 55–64 age group (which largely stems from their regimen).

The mortality rate of both women and men up to the age of 9 is falling (in this period, it is highest immediately in the first year of their life), from the 10th year of their life onwards, it rises in direct proportion to the increasing age.

When we examine excess mortality of men, it is obvious that it is falling up to the age of 9, then an upward trend follows up to the age of 24, after

Graph 7: Age-Sex-Specific Mortality Rates in 2007



the fall an upward trend is resumed again after the age of 45. From the age of 60 onwards, the mortality rates of men and women are getting closer, the closest mortality proportions in terms of mortality rates are in the highest 85 and over age group

Death Rates for Most Significant Causes of Death by Age

(Graph 8)

Source: Demographic statistics of the Czech Statistical Office (data for 2007)

We calculate the cause-specific death rate (mortality rates broken down by cause of death) by age (age-specific death rates) as the proportion of the number of deaths to the relevant cause of death in 2007 per 100,000 people of the relevant age (mid-year – as at 1 July 2007). Codes for the categories of cause of death have been taken from the tenth revision of the International Statistical Classification of Diseases and Related Health Problems (MKN-10). For the sake of simplicity, the names of causes of death have not been used directly in the graph.

The codes have the following meanings (in order of frequency):

IX *Diseases of the Circulatory System*
II *Neoplasms*
XX *External Causes of Death*
X *Diseases of the Respiratory System*
XI *Diseases of the Digestive System*

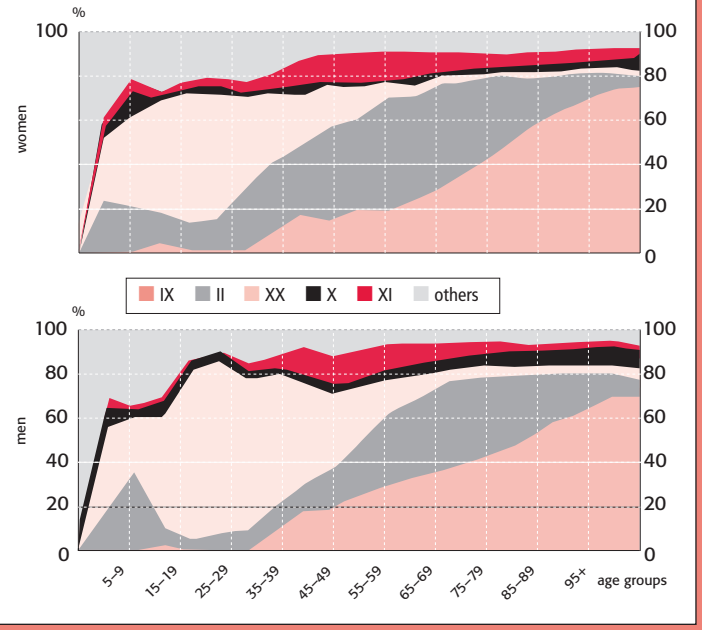
Men and women died most frequently of diseases of the circulatory system, the second most common cause of death for both sexes were neoplasms.

The death rate of men is usually higher than that of women. The sole exception is the death rate related to diseases of the circulatory system.

The third most common cause of death for men were external causes. Already in the 10–14 age group, but in particular from the 15–19 age group to 40–44 age group, precisely external causes of death are primarily responsible for the death rate per 100,000 living men. Among women, the death rate for external causes is lower in all monitored age groups, while it is significantly lower in the 15–44 age group.

Diseases of the respiratory system were the third most common cause of death for women.

Graph 8: Death Rates for Most Significant Causes of Death by Age (for 2007)



Development of Lethality and Incidence of Malign Neoplasms
(Graph 9)

Source: IHIS CR – mandatory report – "Report on Neoplasms", maintained in the National Oncological Register.

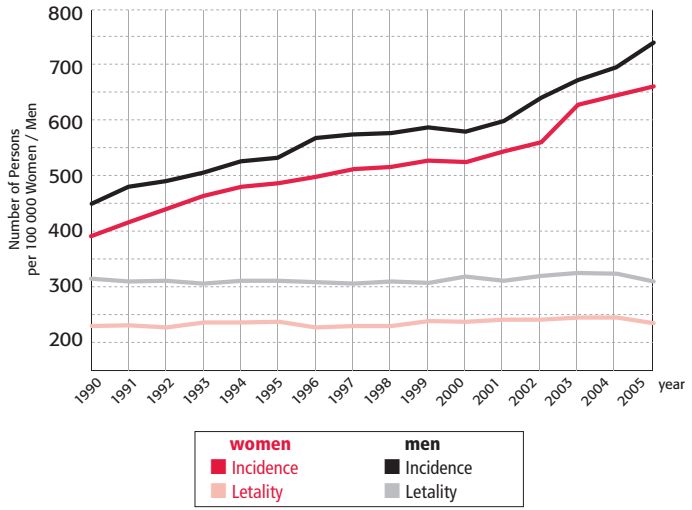
Incidence rates are calculated as the proportion of ill people to 100,000 living people in the relevant calendar year. Lethality (death) rates are calculated in the same way (numbers of deceased from malignant neoplasms as a proportion of 100,000 living people in the relevant year). Because the rates are calculated as a proportion of two values changing in time, the value for incidence rates and lethality rates cannot be confused with absolute numbers of ill (deceased) people.

Incidence rates of malignant neoplasms and lethality rates for this cause of death show steadily rising trend, while for men both indicators are higher than for women.

Among men, since 2001 incidence rates of malignant neoplasms sharply rose from 602.3 to 737.7 in 2005. Among women, incidence rates of malignant neoplasms between 2002 and 2003 relatively sharply rose (the 2003/2002 chain index was 112.1, i.e. rose by 12.1 %.), till 2005 the incidence rate of malignant neoplasms among women only slightly rose. When using basic indices, with the basis in 1990, it is obvious that still in 2002, an increase in the incidence rate for men and women was very similar compared to the initial year (43.2 % for women, 42.2 % for men). In 2003, the situation has changed (60.6% increase compared to 1990 for women, 49.3% increase for men). In 2005, the incidence rate of malignant neoplasms rose by 67.9% for women and by 62.9 % for men, compared to the initial year.

As regards the lethality rate, for the whole monitored period, relatively low values and stagnation trend were observed. Women recorded a slight fall in the lethality rate of malignant neoplasms compared to 1990 only in 1992, 1996 and 1998, men, on the other hand, in all monitored years, except for 2000 and 2002–2004.

Graph 9: Development of Letality and Incidence of Malign Neoplasms (per 100 000 Women / Men)



Development of Number of Diabetics under Treatment
(Graph 10)

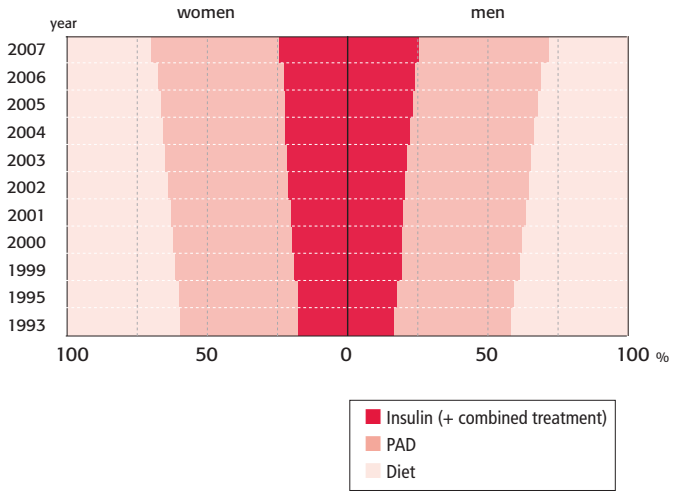
Source: IHIS CR (Annual Report on activities of healthcare establishments for diabetology)

The Report is completed separately by each diabetology practice, including the specialized out-patients' departments in hospitals, regardless of their founder, and since 1995 also practices of general practitioners for adults. General practitioners only report on those diabetics who are under their active treatment. Till 1999, information is reported excluding healthcare establishments of other central authorities, since 2000 for the healthcare sector as a whole.

Over the last decade, the number of diabetics has been rising, both among women and among men (the proportion of women among diabetics is higher than that of men, for all types of treatment). For both sexes, the proportion of persons treated by insulin and PAD (peroral antidiabetics, including the combined treatment, that means by insulin and PAD) rose and the proportion of persons treated by diet fell.

In 1993, there were about a half million diabetics, while in 2007, more than three quarter million. The number of female diabetics rose from 1993 to 2007 (in 1993, there were more than 274,000 women – diabetics) almost by one and a half. Among men, this rise was even a little bit higher (in the aggregate, however, there are less male diabetics than female diabetics). The lowest rise for both sexes was recorded for diabetics treated by diet and conversely, the highest rise, for both sexes more than double, was recorded in the number of diabetics dependent on insulin treatment.

Graph 10: Development of Number of Diabetics under Treatment by Sex (Structure by type of treatment) (Source: IHIS CR)



Cause of Health Handicapped by Sex of the Respondents
(Graph 11)

Source: Results of a sample survey of health handicapped persons (persons with disabilities) for 2007, cooperation between IHIS CR and the Czech Statistical Office

Under the project focused on obtaining information about health handicapped persons (persons with disabilities), a total of 2,330 general practitioners and pediatricians were contacted. For more information, see: http://www.czso.cz/csu/2008edicniplan.nsf/p/3309-08.

Both men and women identified illness as the most common cause of a health handicap (disability). Congenital malformations and age-related health handicaps (disabilities), were the second most common cause of health handicaps (disabilities) for men and women, respectively.

Among the respondents identifying congenital malformations and injuries as the cause of health handicap (disability), men predominated, among the respondents ascribing their health handicap (disability) to age-related illnesses and diseases, women predominated.

More than 40 % of male respondents and more than 40 % of female respondents considered their handicap to be medium-serious and about one third (of both women and men) considered their handicap to be serious.

Graph 11: Cause of Health Handicapped by Sex, 2007