

24. HEALTH

Data on the state of health of the population and on activities of the health service providers are taken from the National Health Information System (hereinafter as the NHIS). The NHIS is established by Section 70 par 1 of the Act No 372/2011 Sb on health services and conditions the services are provided in. The fulfilment of the System tasks is ensured by the Institute of Health Information and Statistics of the CR (hereinafter as the IHIS CR), which is the NHIS administrator authorised for by the Ministry of Health.

The Czech Statistical Office measures data on new reported cases of incapacity for work due to disease or injury, selected indicators on the financial performance of health insurance companies and expenditure on health according to the System of Health Accounts. Information on health expenditure is derived from data of the Ministry of Finance, Ministry of Labour and Social Affairs, and of health insurance companies. The IHIS CR is the source of all other health data for the CZSO.

The Chapter uses the breakdown of diseases and related health problems according to diagnoses and chapters of the International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10).

Notes on Tables

Data on the network and activities of **health establishments, which provide health services**, and on the numbers of physicians (including dentists), in full-time equivalent terms, are published for the health sector in total, i.e. including health establishments of the Ministry of Defence, Ministry of the Interior, and Ministry of Justice.

Tables 24-1 Selected health establishments

Data are taken from the National Register of Health Service Providers administered by the IHIS CR.

The **number of beds** in health establishments refers to the bed stock without makeshift beds.

The **number of places** is given for health establishments, without round o'clock operation, and for children's establishments such as children's homes for children up to three years of age, day care centres for children, etc.

Physicians, including dentists (full-time equivalent – FTE) – the sum of working times of individual workers of the health establishments converted using the number of hours of work per week of a full-time employment contract as laid down for a given establishment or workplace; since 2007 physicians have been given including contractual workers.

Other specialized therapeutic institutions include convalescent homes and sanatoriums, other specialised therapeutic institutions for children and adults, and other in-patient care establishments (as for instance, plastic surgery clinics, clinics for obesity treatment, etc.).

Child care institutions for children up to 3 years of age include also infant care institutions.

Tables 24-2 to 24-4 In-patient care in hospitals and in specialized therapeutic institutions

The data source here is the National Register of Hospitalised Patients (NRHOSP) and the questionnaire on the bed stock of an in-patient care provider.

Cases of hospitalisation shall mean the number of cases of hospitalisation per a department. One case of hospitalisation per a department shall mean every terminated hospitalisation at one in-patient care either it has been terminated by a release or decease of a patient or it has been relocated to other department or into other health establishment.

Days of treatment – one day of treatment shall mean a whole calendar day, on which a patient has received all services, which the health services provider can provide, including accommodation and board.

The **average time of treatment** shall mean the average time of treatment of a hospitalisation at a department in days. It is calculated as an average number of days of treatment per one case of hospitalised patients in a department.

The **bed usage** is calculated as a ratio of days of treatment and the average daily number of available beds. The average daily number of available beds shall mean the real bed stock subdivided by the number of days of the reference period.

Table 24-2 In-patient care in hospitals

The item shall mean an in-patient care provided both in hospitals for acute care, including university hospitals, and in hospitals of follow-up care.

Table 24-3 In-patient care in hospitals by department

In certain cases data for departments of hospitals involve data for multiple independent departments as follows:

- Internal medicine, including independent departments of diabetology, gastroenterology, geriatrics, nephrology, rheumatology, and unified specialism of internal medicine;

- Surgery, including independent departments of cardiothoracic surgery and unified specialism of surgery;
- Psychiatry, including independent departments of addiction treatment; and
- Other includes independent departments of oral and maxillofacial surgery, treatment of burns, nuclear medicine, clinical pharmacology, occupational medicine, orthopaedic prosthetics, and occupation diseases.

Table 24-4 In-patient care in specialized therapeutic institutions

Other specialized therapeutic institutions include other specialised therapeutic institutions for children and adults and other in-patient care establishments (as for instance, plastic surgery clinics, clinics for obesity treatment, etc.).

Tables 24-5 to 24-7 Balneological institutions and balneological care

The data source here is the questionnaire on the activities of a provider of balneological rehabilitation and care filled in by balneological institutions. In this case children shall mean people of 0–14 years of age and adolescents shall mean persons aged 15–18 years.

Balneological care recommended by a physician as an inevitable part of treatment process is broken down to complete balneological care (fully covered by health instance companies) and partly covered balneological care (partly covered by health insurance only). Children and adolescents are as a principle provided with complete balneological care except for cases parents of the patient have requested treatment in the form of sponsored balneological care.

Table 24-5 Balneological institutions

Data on the numbers of institutions and of beds for the complete balneological care include also institutions, which terminated their activities during a year.

Table 24-7 Patients admitted to in-patient care of balneological institutions by type of disease

Indication groups are given in the Act No 48/1997 Sb, on public health insurance and on amendments to certain related acts as amended, in Annex No 5, which determines the indication list for balneological treatment and rehabilitation care for adults, children, and adolescents.

Table 24-8 Selected infectious diseases of compulsory notification

Data are taken from the Information System of Infectious Diseases which is developed and maintained by the National Institute of Public Health and is administered by the Ministry of Health. Table furthermore contains data on other infectious diseases from specialised information systems as follows: Register of Tuberculosis, Register of Venereal Diseases, and the National Reference Laboratory for HIV/AIDS.

Table 24-9 Incapacity for work due to disease or injury – basic indicators

Table shows selected results from the processing of the CZSO statistical questionnaire till 2011. The questionnaire had to be filled in by all economic entities, and/or their lower organizational components, which independently fulfilled duties concerning health insurance. The processing also included total figures submitted by the District Administrations of Social Security for entities that did not settle health insurance claims by themselves.

Since 2012 data have been provided by the CZSO by means of processing of data from the administrative data source of the Information System of the Czech Social Security Administration (CSSA). The Information System of the CSSA registers cases of temporary incapacity for work in the Czech Republic, which have been reported on the CSSA form “decision on a temporary incapacity for work” that is filled in by physicians or dentists. The statistics of temporary incapacity for work due to disease or injury capture all diseases and injuries, which caused at least one-day long incapacity for work of the sickness insured. Administrative data in the Information System of the CSSA contains data reported for all employees of legal and natural persons and separately for the own-account workers. Since 2012 data cannot be compared to data for the previous years in full.

Occupational injuries are injuries that occurred to employees fulfilling their work assignments or in connection with the fulfilment of these assignments.

New notified cases of incapacity for work due to disease or injury are registered based on the reported beginning of sick leave of the sickness insured.

Calendar days of incapacity for work due to disease or injury is the sum of calendar days, on which sickness-insured employees were on sick leave (based on the reported beginning and end of sick leave).

The **average duration of one case of incapacity for work** expresses how many there are on average calendar days of the incapacity for work per one new notified case of the incapacity for work.

Average percentage of incapacity for work expresses how many of one hundred sickness insured are every day incapacitated for work due to disease or injury. It is calculated as a ratio of the number of calendar days of incapacity for work due to disease or injury and the average number of sickness-insured employees, multiplied by the number of calendar days in the given year.

Table 24-10 Fatal occupational injuries and occupational diseases

A **fatal occupational injury** is such health damage that occurred to employees while fulfilling their work assignments or in connection with the fulfilment of these assignments leading to death of the suffering employee either immediately or within one year since the day, on which an occupational injury was inflicted. The source of data here is the State Labour Inspection Office.

Occupational diseases are according to Section 1 par 1 of the Order of the Government of the Czech Republic No 290/1995 Sb establishing the list of occupational disease as amended (the latest time by the Order of the Government of the Czech Republic No 168/2014 Sb), diseases formed due to adverse effects of chemical, physical, biological, or other adverse factors if they were formed under conditions enlisted on the List of Occupational Diseases. An acute poisoning caused by adverse effects of chemicals shall also be taken as an occupational disease.

Risk of occupational disease shall mean, according to Section 347 of the Act No 262/2006 Sb, Labour Code, such changes to health that were formed while performing work due to adverse effects of conditions under which occupational diseases may occur, however, they do not reach the level of health damage which can be assessed as an occupational disease and continuation in the work performance under the same conditions would lead to the formation an occupational disease.

Occupational diseases and risks of occupational diseases are registered in the National Register of Occupational Diseases, which forms a part of the National Health Information System according to the Act No 372/2011 Sb, on health services. The Register administrator is the IHIS CR and data processing is carried out by the Centre for Occupational Health at the National Institute of Public Health.

Tables 24-11 to 24-14 Terminated cases of incapacity for work due to disease or injury

Data on terminated cases of the incapacity for work due to disease or injury are taken from Information System Incapacity for Work maintained by the IHIS CR. Data for the System are provided by CSSA which acquire them from printed forms "Decision on the temporary incapacity for work due to disease or injury" filled in by physicians.

Terminated cases of incapacity for work due to disease or injury include all diseases and injuries which caused at least one-day-long incapacity for work of the sickness insured that was terminated in the given year. It involves neither diseases and injuries, which incapacity for work projected into the next year, nor the cases, in which forms the "Decision on the temporary incapacity for work due to disease or injury" were not filled in.

Calendar days of incapacity for work due to disease or injury is the sum of calendar days, on which sickness-insured employees were on sick leave (based on the reported beginning and end of sick leave).

The **average duration of one case of incapacity for work** expresses how many there are on average calendar days of the incapacity for work per one terminated case of the incapacity for work.

The **average daily number of the incapacitated for work** is calculated as a share of calendar days of the temporary incapacity for work due to disease or injury in the number of calendar days of the reference period.

Table 24-15 Expenditure on health by source of financing and type of provider

Table has been compiled based on the System of Health Accounts (SHA). Data processed according to the OECD unified methodology are internationally comparable. The year 2000 was determined as the base period of the System of Health Accounts. Till 2013 data given were processed according to the original methodology of the SHA 1.0. Since 2014 data have been acquired by processing of data according to the new methodology of the SHA 2.0 and therefore they are not comparable in full with data from the previous years. Mains data sources for the SHA compilation are data from health insurance companies, reports from the Ministry of Labour and Social Affairs, data from national accounts, government accounts, household budget survey, and other data sources of the Czech Statistical Office.

Public budgets comprise of state budgets and local governments ones. The role of public budgets consists, first of all, in financing of specific activities, which are not funded from the public health insurance. These are expenditure on research and development related to health, further education of health professionals, programmes and campaigns of preventive health care and health awareness, activities of public health stations, partially also costs of investment projects, and direct subsidies to health establishments founded by the ministry, regions, and municipalities. The public budgets, moreover, reimburse the operation of the sector of the Ministry of Health, which includes institutions as follows: the Ministry of Health, health department of respective regional authorities, National Institute of Public Health, State Institute for Drug Control, and Institute of Health Information and Statistics of the Czech Republic.

Health insurance companies finance all health care guaranteed by the Act No 48/1997 Sb on the public health insurance and addition of certain related acts as amended and bear the largest share in the health sector financing. Besides they also operate their own programmes of preventive health care, various bonuses and contributions, and last but not least, reimburse operations of their own organisations.

Direct expenditure of households includes the population expenditure on drugs (co-payments for prescribed drugs and full payments for non-controlled drugs), for medical aids, payments for above-standard services at dentists, for curing in spas, above-standard rooms in hospitals, payments for various certificates and receipts, first of all, at general practitioners and regulation fees for treatment at physicians, for cures in hospitals, for prescriptions at pharmacies, and for visits at emergencies. Here source data come from household accounts (expenditure for health services) and data from the survey on retail turnover (products in the health sector).

Other (side) sources of funding are **private insurance** (travel health insurance, etc.), **non-profit organisations** (Red Cross, for instance), and **businesses** (in case that they cover a portion of the company-funded preventive health care, as above-standard services at private health care providers within employees' packages).

Table 24-16 Expenditure of health insurance companies on health care by diagnosis

Table does not give total costs of health insurance companies as they are published in the previous Table 24-15 yet solely selected data, which can be broken down by diagnosis and chapters of the ICD-10, respectively.

Table 24-17 Expenditure of health insurance companies per sickness-insured person by sex and by age group

The data are based on the System of Health Accounts of the Czech Republic. The average is calculated as a weighted arithmetic mean of costs where the numbers of sickness-insured persons in respective age groups are taken as the weights.

Table 24-18 Expenditure of health insurance companies on health care by selected diagnosis, sex, and by age group in 2014

Table shows selected diagnoses and chapters of the ICD-10 which represent groups bearing the largest costs for health insurance companies.

Table 24-19 Assets and liabilities of health insurance companies

Table shows selected indicators of financial performance from the processing of annual statistical questionnaires of the CZSO. This questionnaire must be filled in and returned by economic entities with health insurance administering public health insurance and classified to general government sector (social security funds subsector (S.1314)) as their principal activity and registered in the Commercial Register. Since 2003 the financial indicators of assets and liabilities have been adjusted to comply with accounting procedures of health insurance companies.

Financial property is money, securities, deposits at financial institutions, bonds, notes, FRNs, bills, debentures, and property shares.

Receivables are given including advance payments and accruals.

Long-term assets shall mean intangible and tangible assets given in net book value.

Payables shall mean payables from business relations and advance payments received.

Data in Table are taken from statistical reports for health insurance companies. These data differ from data given in the national accounts for the social security funds subsector, which are based on the ESA 95 methodology of Eurostat.

Since 2010 there were nine health insurance companies operating in the Czech Republic; since 2013 some of the health insurance companies have merged and at present the total number of health insurance companies operating in the Czech Republic is seven.

Table 24-20 Household expenditure on health

The basic source of data for the estimation of household final consumption expenditure on health is the Household Budget Statistics of the CZSO. Household expenditure on health is broken down by an international methodology of the System of Health Accounts (SHA).

Table 24-21 Patients' expenditure on regulation fees

Since the beginning of 2008 patients have started to reimburse regulation fees for prescriptions, for visits to a physician, for hospitalisation, and for emergency care in accordance with the Act No 261/2007 Sb on stabilising of public budgets as amended. The duty to pay the regulation fee for hospitalisation was cancelled starting on 1 January 2014. Data are provided by the health insurance companies.

Tables 24-22 to 24-26 are based on the **European Health Interview Survey (EHIS)**, which was in the Czech Republic implemented by the IHIS CR in 2014. Data are representative for the population of the Czech Republic aged 15+ years and were collected from a sample of approx. 6.7 thousand respondents.

Table 24-22 Characteristics of self-perceived health status by sex and by age group in 2014

A **long-term disease or health problem** shall mean a disease of problem, which last or it is assumed to last for six months, at least.

The indicator of **long-term limitations in common activities** presents a share of persons who stated they were limited in activities they usually carry out for health related reasons for the period of previous six months at least.

The reference period for perceiving of **medium, severe, or very severe pain** was four weeks prior to the survey date.

A share of persons with **injury** shall mean a share of persons which in the last twelve months experienced some accident (traffic accident, home accident, or accident at leisure time) that resulted in an injury requiring health care. This does not involve occupational injuries.

Table 24-23 Occurrence of selected health problems by sex and by age group in 2014

Table gives shares of persons which perceived selected health troubles in the last twelve months prior to the survey date with no regard the problems were actually determined as a diagnosis by a physician.

Table 24-24 Body mass index, consumption of fruit and vegetables, and physical activities for health by sex and by age group in 2014

The **body mass index (BMI)** is the ratio of a person weight to their height to the second power. If a person's BMI value is within the interval 25–30 kg/m² the person is **overweighed**. Persons whose BMI value exceeds 30 kg/m² are **obese**.

Daily consumption of fruit and vegetables here means consumption of any type of fruit (including frozen, as compote, or pressed, except for fruit juices from concentrates) or vegetables (including vegetable juices and salads, except for potatoes and juices prepared from concentrates).

Indicator of **physical activities for health** gives a share of persons who are compliant with the World Health Organisation recommendations on physical activities for health (150 minutes aerobic activity of moderate intensity per week as minimum and muscle strengthening activities on two days per week). Physical activities within occupation are not included.

Table 24-25 Smokers of tobacco products and alcohol consumption by sex and by age group in 2014

Current occasional smokers are persons who smoke yet not every day. **Former smokers** are persons who do not smoke at present yet were smoking in the past on daily basis or occasionally.

Daily alcohol consumption gives a share of persons who have consumed a beverage containing alcohol (beer, wine, spirits, liquors, cocktails) every day or almost every day within the last twelve months.

Binge drinking represents a share of persons who stated they binged (used at least 60 g pure alcohol at a single occasion) at least once in a month within the last twelve months.

Table 24-26 Use of preventive care by sex and by age group in 2014

Indicators of **flu vaccination, blood cholesterol measurements, and blood glucose measurements** give shares of persons who underwent such examination and/or vaccination in the last twelve months.

Indicators of **faecal occult blood tests, mammography screening, and cervical screening** give shares of persons/women who underwent such examinations in the last two years.

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Further data can be found on the website of the Czech Statistical Office at:

– www.czso.cz/csu/czso/health_care_lide

or on the website of the Institute of Health Information and Statistics of the CR at:

– www.uzis.cz/en