METHODOLOGY

1. MAIN DEMOGRAPHIC DATA OF POPULATION

Till 1990, the **population number** is the data of the full-scope population census, between 2000 and 2011, the data are calculated on the basis of the census on 1 February 2001, while data from 2012 are calculated on the basis of the census on 1 October 2011 by considering natural (live birth, death) vital statistics data as well as data of internal and international migration.

Live birth: (in accordance with UN recommendations) a foetus is live-born if it gives any sign of life (i.e. respiration, heart functioning, pulsation of umbilical cord) after birth, regardless of the length of pregnancy and the length of life after birth.

Death: (in accordance with UN recommendations) the final passing away of all signs of life after live birth at any time, i.e. the cessation of all life functions, without the capacity of revival.

Cause of death: all diseases, morbid conditions or injuries which either resulted in, or contributed to death, and the circumstances of the accident or violence which produced any such injuries.

The *grouping by causes of death* was prepared on basis of the detailed list (A00–Y98) of the Revision X. of the International Classification of Diseases – ICD-X. The retrospective data were revised on the basis of ICD-X.

In the former practice the classification of causes of deaths to the appropriate ICD category and the selection of the underlying cause were performed by a traditional (manual) method. During processing the 2005 cause of death data, we turned to the automated data processing for the first time. The software we use is recommended by the European Union and it has been adapted to the national specific features. The methodological change slightly modified the structural composition of causes of death and at the same time in given causes of deaths it altered the earlier developed decennial trends.

Entry numbers of motor vehicle accidents according to ICD-X: V02–V04, V09.0; V09.2, V12–V14, V19.0–V19.2, V19.4–V19.6, V20–V29, V30–V39, V40–V49, V50–V59, V60–V69, V70–V79, V80.3–V80.5, V86, V87.0–V87.5, V87.7, V87.8, V88.0–V88.5, V88.7, V88.8, V89.0, V89.2.

Natural increase (decrease): the difference between live births and deaths.

Foetal loss: foetal deaths and induced abortions together.

Foetal death: death of the foetus before birth (prior to the complete expulsion or extraction from the mother), irrespective of the length of pregnancy. Early and medium term foetal death is if from the conception no longer than 24 weeks passed. Late foetal death is if from the conception longer than 24 completed weeks passed.

Induced abortion: the intentional interruption of pregnancy through surgical intervention.

Infant death: death after live birth before reaching the age of one year. (Still-born children and those deceased on the first anniversary of the birth are not counted to infant deaths.)

Average life expectancy: expresses how many further years can be expected by people of different ages at the mortality rate of the given year.

Standardized mortality ratio: the mortality level of a population is expressed by the mortality rates of the standard population. It's mostly used for showing the territorial (regional) differences of mortality where the country-level age-specific mortality rates are taken as standard weights. Calculation method: the ratio of the observed (actual)

number of deaths and the expected number of deaths calculated by the standard weights. It expresses in percentage the mortality difference between the population of the region concerned and the standard (country) population.

Lost potential years: the number of years not lived by the deceased from the potential lifetime of 0–70 years. In the yearbook, the crude and standardized rates of the lost potential lifetime per hundred thousand population concerned (below the age of 70) are indicated. Standardization has been made according to the age structure of the Eurostat European standard population. For the age groups over 70 years this rate is 0

Source of data: The full-scale census carried out by the Hungarian Central Statistical Office every ten years; the statistics of vital events based on the registration of marriages, births and deaths; in the case of induced abortions and foetal deaths, the data officially provided by hospitals.

2. PRIMARY HEALTH CARE

Primary care: health care chosen by the patient in his/her place of residence or the vicinity, based on a personal relationship and provided long term, regardless of the patient's sex, age and the nature of his/her illness.

General practitioner: provides personal, continuous, wide-scale, long-term basic health care service (health promotion, prevention, early diagnose and treatment of diseases) in a given area. In addition to providing treatment and rehabilitation, he/she carries out regular screening, inspection of patients' health status, provides health information, refers patients to further examination by specialized institutions or hospital and certifies the ability to work. The service is provided basically for adults, but at settlements where no local paediatrician service is available he/she treats also children.

The general practitioner's service may be operated by the local government, a health institution carrying out local government duties, a health entrepreneur, or private physicians. Besides those who are registered with him/her, a general practitioner with area duties is obliged to provide care to insured people in the area who have chosen another GP if they are unable to visit their chosen GP (outpatients).

Family paediatrician: provides basic care to children up to age of 14. Upon request he/she may continue to provide care to people aged 14–18 years. A paediatrician with area duties is obliged to provide care to, besides those who are registered with him/her, insured people in the area who have chosen another doctor, if they are unable to visit their chosen doctor.

Total number of inhabitants registered at GPs/Family paediatricians: those people, who passed their social security card to a chosen General Practitioner/Paediatrician.

GPs'/Family paediatricians' consultations: number of attendances at GPs'/Family paediatricians' office, as well as number of cases cared out of GPs' office.

Consultations per one GP/Family paediatrician: calculated by the average number of GPs'/Family paediatricians.

Care out of GPs' office: visits at patient's home and first aid.

District nurse: health care personnel with a nursing qualification carrying out duties of patient care and, at the instruction of the general practitioner, certain treatment and regular care duties.

Source of data: Hungarian Central Statistical Office, NSDCP 1021: Report on general practitioners' and family paediatricians' activities.

Health visitor: a health professional who has the following scope of duties: protection of women, care of expectant and confined mothers and 0-18 year-old children not attending school, and complex care of families. Her main activities are health care, prevention and health promotion.

Cared people: pregnant women, 0–18 year-old children (who don't attend any educational institution) and their family being resident in the district of the health visitor. **Newly registered pregnant women:** women registered for the first time during their actual pregnancy.

Number of the visits of the health visitors: visits in the home of pregnant women and in the home of children aged 0–18 years who don't study in an educational institution.

Infants born prematurely: new-born babies who were born before the 37th completed gestation week of the pregnancy.

Home visit: care activity and action of the district health visitors in the home of the families.

At the examination of maturity the percentile value of the body mass in respect of body length has to be presented on the basis of the data of the growth and development table (on the basis of the methodological elaboration of the National Institute of Child Health).

- Under 3 percentiles: heavy malnutrition
- Between 3–10 percentiles: moderate malnutrition
- Over 90 percentiles: overnutrition

Medical consultation: consultation together with the general practitioner or the family paediatrician.

Consultation of a health visitor: independent consultation with the health visitor.

Mobile Services of Specialists (MSS): health care service which provides regular service of gynaecologists and paediatricians to the residents of settlements without specialists at the place.

Source of data: Ministry of Human Capacities, NSDCP 2087: Summary reports of health visitors.

Occupational health service: a preventive service for identifying, overseeing and studying occupational hazards; compiling related management proposals; adapting labour process to personal mental and physical skills; performing onsite occupational inspection function.

"A", "B", "C", "D" occupational health categories: classification of activities according to health risks by right of the 89/1995. (VII.14.) Government Decree on the occupational health service. Employees of "A" occupational health category are exposed to the most dangerous risk factors, while employees of "D" occupational health category meet the less harm.

Source of data: National Public Health Institute, NSDCP 1485: Report on occupational health service.

3. HOME SPECIAL CARE, HOSPICE CARE

Home special care: according to the 20/1996. (VII. 26.) Ministry of Welfare Decree on home special care, it's an activity performed at the order of the insured's medical attendant by a specialized nurse at the insured's home or residence.

Visit: nursing activity performed at the order of the patient's medical attendant by a specialized nurse at the patent's home or residence.

Case: number of patients, to whom home special care was ordered irrespective of the length of care.

Patient: number of cared patients during the year irrespective of how many times the nursing was ordered to a patient.

Source of data: Ministry of Human Capacities, NSDCP 2108: Report on home special care activity.

4. OUTPATIENT SERVICE

Outpatient service: the examination and treatment of patients referred to or voluntarily attending specialized health care provided by medical staff with special qualification in an outpatient clinic or an outpatient department of an inpatient institution.

Number of attendances: the attendance of an outpatient at the consultation in a day irrespective of the number of services provided to her/him.

Number of interventions: the number of services provided to an outpatient during one consultation.

Hours worked by a specialist: working hours performed by a specialist in outpatient service during a calendar year.

Hours worked by a non-specialist: hours worked by a non-specialist are separate activities performed in hours worked by a non-specialist ancillary health worker independently in her/his professional competence, under professional guidance of a specialist, but without her/his direct supervision (e.g. physiotherapy, physicotherapy, medical massage, dietetics, laboratory, psychology, medical pedagogy, speech therapy, etc.).

Source of data: Ministry of Human Capacities, NSDCP 2159: Data on outpatient service turnover.

5. DISPENSARIES

Dispensaries: a curative and preventive health care institution which provides care for outpatients suffering from certain specific diseases (pulmonary, psychiatric-mental, skin and venereal diseases or tumours, etc.). Dispensaries register and provide regular care for patients found and referred to a dispensary during patient care, furthermore, those referred to special examination, found at screening or attending voluntarily the institution.

Patient registered in a dispensary: a patient registered at a specific time (generally at the end of the year) and undergoing regular medical treatment or care (control) in the dispensary.

New patient: a patient newly recorded in the reference year; a TB or STD patient who was discharged as cured after a previous treatment but has relapsed; a patient with a malignant tumour who visits an oncological clinic or was found by screening and has not yet been treated with the given disease.

Pulmonological dispensaries

Tuberculosis and pulmonological care: all curative and preventive pulmonary activities carried out in TB dispensaries.

There is no obligation to report chronic pulmonary diseases other than tuberculosis and bronchial cancer. Only those patients are registered who attend a pulmonary dispensary.

Patient turnover: includes all attendances of registered TB patients, contact people, non-TB patients, and patients attending for preventive reasons during the year, regardless whether a doctor, an assistant or a nurse dealt with them. Home visits to TB patients are also included here.

Pulmonary screening examination: a medical examination by radiological and photographic methods carried out for the primary purpose of detecting pulmonary tuberculosis and pulmonary tumours.

Due to methodological changes in 2009, comparability of data on non-TB-patients and prevention in Table 5.1 is limited in time.

Source of data: Korányi National Institute of Tuberculosis and Pulmonology, NSDCP 2083: Annual report on pulmonary dispensaries.

Skin and venereal dispensaries

Skin and venereal care: a specialist's treatment of patients with skin and sexually-transmitted diseases, the prevention of the spread of infections by regular interventions and the supervision of patients for a specified time.

Source of data: Ministry of Human Capacities, NSDCP 2084 Operational report of skin and venereal dispensaries; NSDCP 2096: Report on STD patients treated in skin and venereal dispensaries.

Psychiatric dispensaries

Psychiatric care: the treatment provided by specialists with regional obligation of medical attendance for people suffering from chronic psychiatric illnesses during all phases of the illness.

Psychiatric care covers disorders of consciousness, mood disorders, mental retardation, personality disorders and clinical pictures of elderly people. Besides, it provides acute care and short-term follow-up for people suffering from temporary mental disorders.

Source of data: Ministry of Human Capacities, NSDCP 2086: Report on psychiatric dispensaries.

6. INPATIENT SERVICE

Inpatient service: in the frame of inpatient services medical services (operation, examination or treatment) are provided. These services can be used by a patient upon the suggestion of the General Practitioner (family doctor), a specialist (or any other authorized person), or at the patient's request.

Hospital: a health care institution providing for longer-term patient stays, and, in addition, offering hotel-type services.

Number of approved hospital beds: the number of hospital beds available on 31 December of the reference year, covered by the operating permit issued by the National Public Health and Medical Officer Service. Spare beds, birthing beds, and beds for attendants, newborn infants, examinations and the health care personnel are not considered hospital beds.

Hospital bed in operation: an approved hospital bed suitable for hospitalisation (ready to receive patients after preparation) for at least 6 months during the reference period.

Discharged patient: a patient who, during the year, leaves the hospital or is transferred either to another ward in the same hospital or to another hospital, or who dies.

Number of day care cases: number of patients whose nursing time didn't reach 24 hours and received one of the interventions defined in the Appendix 9 of Ministry of Welfare Order 9/1993 (IV.2.).

Nursing day: care of a patient in a hospital for one day.

Average length of stay (days): measured by dividing the total number of nursing days worked in a hospital during a year by the number of discharged patients.

Bed occupancy rate: the number of nursing days worked in a hospital expressed as a percentage of the number of workable nursing days.

Hospital mortality rate: the number of deaths in a hospital expressed as a percentage of the total number of patients discharged from there.

Source of data: National Health Insurance Fund of Hungary, NSDCP 2155: Summary report on hospitals' nursing cases.

7. AMBULANCE SERVICES

National Ambulance Service: the public ambulance service with a competency extended to the whole country, financed by the state. Its mission is the rescue and emergency care on land and in the air and the maintenance of the control system connected to the emergency calls.

Ambulance station: a building integrated into the ambulance care system where no direct patient care is performed, but

- ensures the prompt deployment of the staff and the departure of the cars without delay
- ensures the adequate supply with IT and telecommunication devices
- is able to give place for the residence of the staff being on duty
- is able to store, clean, disinfect and keep ready to deploy the ambulance cars and their medical devices.

Ambulance mission: rescue, delivery, rescue transportation, protected transportation and mobile supervision together.

The number of cases **in the case statistics** is smaller than the total of those for the listed types of duties, because the cases where the ambulance unit did not find a patient at the scene are excluded from the figures.

Rescue: the emergency care of the patient on the scene and transport to the competent medical care provider.

Rescue transportation: ambulance mission when the patient is transported – immediately or within two hours – from the place of discovery to a health institution. At least ambulance nurse's attention is needed.

Protected transportation: transportation from a health institution to another health institution with the order of a medical doctor. Medical or ambulance nurse's attention is needed.

Mobile supervision: rescue staff standing on the alert to ensure prompt emergency care at events, other meetings needing rescue preparedness, according to the personal and material conditions defined by law.

Ambulance car – (Patient transport ambulance): a car put in action with an EMT (Emergency Medical Technician) and a car driver, supplied with basic medical devices, working with a radio/mobile phone integrated into the central network of the National Ambulance Service radio system, supplied with warning light and sound devices, and at least one equipment built to stabilize a board able to transport a lying patient and with appropriate disinfectants and with wash proof, disinfectable or changeable seat covers.

Emergency ambulance: an ambulance car working with ambulance officer or ambulance doctor, and equipped with additional diagnostic and therapeutic facilities (e.g. EKG, defibrillator, medicines, intubation devices).

Mobile intensive care unit (MICU): a special ambulance equipped with additional devices compared to emergency ambulance. It works with a doctor, and the stretcher board is placed in a manner that the patient can be approached from both sides and from the direction of the head, too. The special devices (using by the specialized

doctor) allow of the anaesthesia, multi-parametric monitoring, artificial respiration of the patients, on-site electrotherapy of some arrhythmia (pacemaker), thrombus dissolution. Some kind of intensive therapeutic intervention (e.g. central vein preparation, thorax intubation) can also be performed.

Active/running ambulance: an ambulance determined to complete direct ambulance missions.

Total number of ambulance cars: the total number involves both the running and reserved cars. (The total ambulance stock involves the brand new cars waiting for first deployment and the cars sorted out, too.)

Maintenance journey: the activity of the ambulance car that isn't aimed to perform rescue tasks. For example: trips necessary because of regular maintenance, repair or replacement.

Simple patient transport: transport task performed without emergency, upon the order of a doctor. The indicator does not exist from 2008.

Patient left at the scene: the patient can be cared for on the scene, or the patient refuses care and/or hospital transport, so transport is not performed.

Mass accident: an event which causes injury or illness to more than 5 people at the same time and place, due to the same reason.

Hungarian Air Ambulance Non-profit Ltd.: function of the company is to organise and work on the operation and maintenance of the helicopters, additionally to cover the H.E.M.S. (Helicopter Emergency Medical Service) crew and medical equipment on duty in the air ambulance bases, and primary mission, secondary transport and repatriation.

Primary transport: when the E.M.S. helicopter is the first medical support on the scene.

Secondary transport: number of secondary transports, when the H.E.M.S. crew was not the first medical staff.

Mission: when the helicopter was taken off for patient (primary and secondary, total). **Treated patient:** the number of those missions when the H.E.M.S. crew and the patient meets.

Source of data: National Ambulance Service, Ministry of Human Capacities, Hungarian Air Ambulance Non-profit Ltd., NSDCP 1017: Statistical report on the activity of ambulance services and patient transportation.

8. MEDICINE SUPPLY

Consumer price of medicines: gross price aggregating any specific producer / importer price with associated maximized wholesale / retail margins.

Pharmacy: any service provider specialized in supplying medicines; any health care institution performing ancillary medicine retailing functions; may operate in public, branch, institute and pharmacy operated by a general practitioner subunit forms.

Public pharmacy: institute providing primarily the direct and complete medicine supply of sick people.

Branch pharmacy: pharmacies operating as stand-alone shops in larger pharmacy companies.

Pharmacy of institutes: any institutional subunit supplying medicines for operating any inpatient and veterinary institutes.

Pharmacy operated by a general practitioner: supplementary service providing specific medicines to general practitioners and family paediatricians.

Hospital internal pharmacy: institutional pharmacy subunit providing only prescription medicines for discharged patients and inpatient institute employees.

Data of prescription turnover: the health insurance expense relating to the given year from 1 January to 31 December.

Source of data: Ministry of Human Capacities, NSDCP 1578: Report on public pharmacies; NSDCP 1501: Report on the turnover of public pharmacies.

9. BLOOD TRANSFUSION SERVICE

Blood donor: a person giving blood or blood-components for others or himself/herself with curative-preventive purpose.

Unit of blood transfusion: letting 450 ml (+/- 10 percent; in blood preservation solution) blood in a traditional manner.

Source of data: National Blood Transfusion Service.

10. PERSONNEL OF HEALTH SERVICE

Health personnel: people working in health institutions who hold medical, dental, hygienist or pharmacological degrees or health college diplomas, workers holding primary- or secondary-level health qualifications and people holding non-health qualifications (psychologists, biologists, etc.) and unqualified assistant workers who are involved in health care.

Registered physician: a person holding degree of a medical university (physicians, dentists, hygienists). In Hungary, activities which require a graduate doctor (dentist) can only be carried out by a doctor who is in the medical register. Figures for doctors also include doctors working in non-medical jobs and non-working doctors.

Active physician: a doctor who is admitted to the national medical register and is active

Medical coverage: number of doctors per ten thousand of population, or the number of population per doctor.

Specialist doctor: a graduate doctor (dentist, hygienist) who has passed an examination in some medical specialisation after work on placement for a certain time as specified by the National Professional Certification Committee, and has been awarded a specialist qualification. One doctor may hold more than one specialist qualification, that's why one person can appear in more than one category.

Full-time workers: those whose compulsory daily working time is identical with the standard time specified by the employer for the job.

Part-time workers: those whose working hours are fewer than those specified as compulsory for the job.

Employment needed for operation: the number of budget-approved posts at the end of the year calculated for the number of employees working full-time.

Filled jobs: the number of appointed employees' jobs (except external deputies) at the end of the year, calculated for the number of employees working full-time. Additional and secondary jobs are also included in the number of filled jobs.

Ancillary worker: a person with a health college diploma or basic or intermediate health qualification who is involved in health care.

Pharmacist: a person holding degree of a medical university's pharmacology faculty and who is admitted to the national register of pharmacists.

Other graduates: people working in health institutions but not carrying out health services (i.e. engineers, lawyers, economists, etc.).

Health visitor: health worker holding a college diploma. Her principal activities involve preventive care for mothers, infants and children. Gives advice and health information.

Midwife: an ancillary worker with a college diploma working in maternity or gynaecological institutions, wards or clinics, providing care and nursing for pregnant women and women in childbirth, newborn infants and women patients.

Highly qualified nurse: an ancillary worker with health college diploma.

Ambulance officer: occupation requiring health college qualification. Provides urgent aid to a sick or injured person at the site of an accident or onset of sickness, and during transit. During mobile supervision, undertakes command duties.

Dietician: occupation requiring health college qualification. Makes up diets and provides dietary advice in health institutions and public catering institutions.

Personal care worker: an ancillary worker with infant and child care qualification providing care and nutrition for healthy infants and children. Specialised personal care worker: cares for patients in dispensaries, hospitals, and medical children's homes.

Nurse: a person with an intermediate or basic health qualification. Carries out duties of patient care and medical duties under instructions of a doctor. Specialized nurse: provides nursing and care for patients under medical treatment in clinics, teaching hospitals, sanatoria and other health institutions (infant and child nurse, neuro- and mental hygienic nurse, etc.).

General assistant: an ancillary worker with intermediate qualification who assists doctors in the examination and treatment of patients and carries out independent health duties appropriate to his or her qualification. Specialized assistant: a person who also carries out specialised medical duties in a particular area (e.g. dentistry, radiology, laboratory work, etc.).

Orderly: carries out transport of patients to the place of treatment or operating room and subsequently returns them to the ward.

Dresser: prepares a patient for operation and prepares the operating room.

Source of data: Hungarian Central Statistical Office, NSDCP 1019: Report on personnel of health service; National Healthcare Service Center, NSDCP 1589: Statistics on the distribution of physicians by region, specialist qualification, age and sex; NSDCP 1860: Report on the number of physicians, dentists and pharmacists with granted diploma; NSDCP 2095: Report on health examinations of physicians, dentists, pharmacists, psychologists.

11. SELF-PERCEIVED HEALTH, ACCESS TO HEALTH CARE SERVICES (HBLS/EU-SILC)

Self-perceived health: as the respondent subjectively perceives his/her general health that includes different (i.e. physical, social and emotional) dimensions.

Suffer from any chronic (long-standing) illness or condition: long-standing illnesses or health problems having lasted (or recurred) or are expected to last (recur) for 6 months or more. Those long-standing diseases that don't influence the everyday life of the respondent and/or are kept under control with medication are also included. **Limitation in activities because of health problems:** if the respondent has a long-standing health problem that causes a reduction in his/her everyday activities. Activity limitations are defined as "the difficulties the individual experience in performing an activity", where the reference is to activities people usually do. The limitations must have started at least six months ago and still exist at the moment of the interview.

Unmet need for medical/dental examination or treatment: if there was at least one occasion in the past 12 months when the person really needed examination or treatment but did not receive it.

Main reason for unmet need for medical/dental examination or treatment: applicable to respondents who had unmet need for medical/dental examination or treatment in the last 12 months. The most important reason is presented in the tables. **Source of data:** HBLS/EU-SILC

The aim of the Household Budget and Living Conditions Survey (HBLS) of the Hungarian Central Statistical Office is to collect data on income and living conditions of Hungarian households. Based on representative probability samples, we collect data about 8,000 households¹ and 20,000 persons of the target population annually. Among the target primary variables are data on self-perceived health, health behaviour and access to health care services. EU-SILC statistics on income and living conditions are based on the data from HBLS.

In published tables, according to domestic practice, we consequently indicate the reference period of the data, unlike Eurostat tables where the year of data collection is published. In case of general health, chronic illness and limitation, the reference period is the year of data collection, but in case of unmet need for medical examination or treatment, data refer to the year preceding the data collection.

12. DISEASES REGISTERED IN PRIMARY CARE SERVICES

Diseases registered at the general practitioners' and family paediatricians' service

Diseases registered at the general practitioners' and family paediatricians' service: data do not indicate the number of people but the number of the diseases of individuals (a person may have also several diseases indicated in the register). The rates were calculated per ten thousand population of respective age and sex. At the inclusion in the age group, the age completed in the given year was taken into consideration. Denomination of the diseases was performed according to the Xth revision of ICD.

Also those patients were included in the population of the observations who were treated or cared for in another health institution, but were indicated in the GP's registration, too.

Source of data: Hungarian Central Statistical Office, NSDCP 1021: Report on general practitioners' and family paediatricians' activities.

Cases with congenital anomalies

Congenital anomalies are morphological, biochemical or functional disorders developing – as an effect of genetic or environmental factors – in the foetal life and are noticed at birth (or in the prenatal or postnatal period).

When using data, it has to be taken into consideration that disproportions in the number of reports do not make possible to get all-inclusive picture on the real situation. From the middle of 2015, the data supply is performed in the system of the eHCAR (online, electronic Hungarian Congenital Abnormalities Registry program).

Source of data: Ministry of Human Capacities, NSDCP 2101: Summary report on newborn children with congenital anomalies.

School health service

Denomination of the diseases was performed according to the Xth revision of ICD.

Details of the observed grades:

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¹ In case of HBLS the basic units of sampling are the households. The number of data providing households in case of EU-SILC was 11685 in 2011, 11311 in 2012, 10223 in 2013, 9204 in 2014, 7770 in 2015, 8003 in 2016 and 8142 in 2017.

- pupils of the 2nd grade of educational institutions (8 year-olds)
- pupils of the 4th grade of educational institutions (10 year-olds)
- pupils of the 6th grade of educational institutions (12 year-olds)
- pupils of the 8th grade of educational institutions (14 year-olds)
- pupils of the 10th grade of educational institutions (16 year-olds)
- pupils of the 12th grade of educational institutions (18 year-olds)

Source of data: Ministry of Human Capacities, NSDCP 2100: Report on school health service.

Occupational health service

Occupational diseases: an acute and chronic health damage occurring in the course of work, in relation to the occupation, or chronic health damage occurring after employment, and arising from occupational hazards, like physical, chemical, biological, psycho-social and ergonomic factors or from using the worker's resources to a higher or lower extent than the optimum.

Source of data: National Public Health Institute, NSDCP 1572: Report on occupational diseases.

13. INFECTIOUS DISEASES, VACCINATION

Reported acute infectious diseases: all acute infectious diseases which have to be reported with reporting obligation according to the decree, and for which, when it is detected, epidemiological public health measures are necessary to be taken in order to prevent the further spreading of the disease.

Number of HIV-infected persons: number of Human Immunodeficiency Virus-infected persons by the year of verification (by blood-test). The number of HIV-infected persons also includes the number of AIDS (Acquired Immunodeficiency Syndrome)-patients reported in the reference year.

Case of food poisoning: depending on the number of people affected can be: solitary (1–5), group (6–30) or mass (over 30).

Number of diseases caused by food poisoning: number of people who became ill from food poisoning.

Source of data: Ministry of Human Capacities, NSDCP 1561: Reported infectious diseases, NSDCP 1565: Estimated number of patients with influenza and influenza-like diseases during the epidemic, NSDCP 1573: Report on HIV infection, NSDCP 1566: Report on vaccination; NSDCP 1560: Summary of foodborne diseases.

14. DISEASES REGISTERED IN DISPENSARIES

Pulmonological care

New TB patients (incidence): patients detected early by screening but for whom bacteriological tests prove negative and for whom sensitivity to the bacteriological test is not 100 per cent, and those certified bacteriologically positive.

A patient needing further treatment is one who is bacteriologically negative and is treated for a further year; a new patient diagnosed bacteriologically who requires treatment for more than one year; and a patient who remains Koch-positive after two years following his/her registration. Active TB patients: new patients and those subject to further treatment. A patient under observation: registered patients kept under close observation for two years due to safety reasons.

Registered TB patients (prevalence): TB patients registered as active and under observation at a certain date, usually the last day of the reference year (31 December), including other (non-pulmonary) TB patients, too. Since 1996, in accordance with a WHO recommendation, patients under observation have not been included.

Registered non-TB pulmonary patients: patients under treatment in a pulmonary dispensary at a specific date (31 December) because of a chronic non-TB pulmonary disease.

COPD (Chronic obstructive pulmonary disease): the disease involves the narrowing of the lower respiratory tract, its two main groups are chronic bronchitis and emphysema. Patients have permanent impairment and require regular specialist care. **Source of data**: Korányi National Institute of Tuberculosis and Pulmonology, NSDCP 2083: Annual report on pulmonary dispensaries.

Psychiatric and addictological care

Psychiatric patient: a person admitted to a psychiatric institution because of mental or behavioural dysfunction.

Estimated number of alcoholics: a datum derived from the number of deaths from liver cirrhosis, using the Jellinek formula (the number of deaths due to liver cirrhosis multiplied by 144).

Registered alcoholic: a person who was treated or taken under care in an addictology or psychiatric dispensary because of alcoholism, and attended the dispensary at least once during the year.

Source of data: Ministry of Human Capacities NSDCP 2086: Report on psychiatric dispensaries, NSDCP 2096: Report on STD patients treated in skin and venereal dispensaries, NSDCP 2088: Report on care of addictological patients; National Health Insurance Fund of Hungary NSDCP 2155: Summary report on nursing cases of hospitals.

Treatment of drug users

Drug users: people who consumed drugs daily or occasionally and were registered in the registers of drug ambulances and drug centres, psychiatric dispensaries, child and youth psychiatric wards and special ambulances, crises intervention wards, alcohology and addictology dispensaries and wards or special ambulances, drug therapeutic institutions.

Data have to be treated with the greatest possible care because of the uncertainty of the range of data suppliers and other circumstances of data supply.

Source of data: National Public Health and Medical Officer Service, NSDCP 2105: Report on drug consumers and their treatment.

New reported malignant neoplasms

New malignant neoplasm patients (incidence): who were diagnosed with cancer during cancer screening provided by inpatient institutions, the oncology network or other health care institutions and who were registered at the National Cancer Register. The National Cancer Register examines the whole population, and from the reports on the discovered tumours builds up a database where the observation unit is the diagnosed malignant neoplasms. The cancer types are denominated according to the Xth revision of ICD.

Data collected by the National Cancer Register are under permanent revision according to the practice of the European cancer centres, so data have to be treated knowing that data on the previous year are surely and those on 3–5 years before are likely corrected.

Source of data: The National Institute of Oncology, NSDCP 1549: Summary report on neoplasms by the National Cancer Register.

15. PERSONS WITH REDUCED WORKING CAPACITY, PERSONS WITH DEFICIENCY

Disabled persons (according the rules before 1 January 2012): persons in working age whose total health status was less than 60% and – considering his/her abilities and living conditions – the assessment committee did not suggest for rehabilitation.

Act CXCl of 2011 redesigned the social support system including the disability benefit system i.e. entitlement conditions for benefits and allowances and their amounts. The new Law entered into force at 1. January 2012. Since then, the official wording is "persons with reduced working capacity" instead of "disabled".

According the new rules the persons with reduced working capacity can obtain disability benefit (instead of disability pension) or rehabilitation benefit depending on their officially stated working capacity. Rehabilitation benefit can be obtained by those whose working capacity can be restored or who need long-term occupational rehabilitation. Others not suggested for rehabilitation can be entitled to disability benefit. The complex assessment concerns new claimants and involve the attendees of periodic mandatory medical review.

Categories of reduced working capacity:

- I. Total health status is 1-30%; of which: Group D (unable to work but not requiring other's care), Group E (completely unable to work and requiring other's care).
- II. Total health status is 31-50%; of which Group C1 (with a possibility for rehabilitation), Group C2 (without a possibility of rehabilitation). III. Total health status is 51-60%; in which: Group B1 (with a possibility for rehabilitation, suggested for complex rehabilitation (rehabilitation annuity)), Group B2 (without a possibility of rehabilitation complex rehabilitation is not suggested).

Rehabilitation benefit: the entitlement to allowance and the suggestion for complex rehabilitation is based on the opinion of the social and rehabilitation expert committee. All those persons who belong to Group B1 and C1 are entitled to rehabilitation benefit if the other conditions of eligibility are met. The length of obtaining rehabilitation benefit can be maximum 3 years.

Disability benefit: persons who belong to Group B2 and C2, E and D are entitled to disability allowance if the other conditions of eligibility are met. The amount of the disability allowance can be equal to the minimal pension (or higher depending on the previous earnings) but cannot exceed three times of that.

Population of working age: total number of persons aged 15–64 years.

The temporal comparison of officially stated health deterioration data (reduced working capacity) can be limited due to the significant transformation of the social support system and the major changes in the entitlement criteria. These results should be interpreted with reservations.

Source of data: Ministry of Human Capacities, NSDCP 2064: Assessment of reduced working capacity.

Person with deficiency: the population census in 2011 and the microcensus in 2016 regarded as disabled (person with deficiency) who – by his/her own admission – has got permanent physical, mental (psychological) or sensory deficiency irrespective of whether it limits him/her in the participation of usual, expectable social activities or the daily life.

Type of deficiency: in the questionnaire of the population census in 2011 and the microcensus in 2016, three deficiencies could be indicated at the most. In tables showing data by the type of deficiency, the sum of deficiency types can be higher than the number of persons living with deficiency (in the last row of the tables) due to the possibility of multiple answers. Compared to the previous census (in 2001) the main reason of disability (the most serious deficiency) could not be indicated.

Source of data: Hungarian Central Statistical Office, Population census 2011, Microcensus 2016

16. ACCIDENTS, SUICIDES

Road traffic accidents involving personal injury: incidental, unintentional road traffic occurrence in which at least one moving vehicle was involved and which resulted in the death or injury of one or more persons within 30 days after the occurrence.

Persons killed due to road traffic accident: those who were killed outright, or who died within 30 days as a result of the accident.

Persons seriously injured due to road traffic accident: those who sustained serious casualty, bruise or any other injury healing beyond eight days or which necessitated hospital care due to the accident.

Persons slightly injured due to road traffic accident: those whose wounds (dislocations, bruises) due to the accident recover within eight days after the accident. **Children victims of road accidents:** killed or injured people up to the age of 14 years. **Source of data:** Hungarian Central Statistical Office, NSDCP 1009: Report on road traffic accidents involving personal injury.

Accident at work: a reported accident healing over three days incapacity for work, which occurred to an employee in the course of work or in relation to it, irrespective of the place and time of the accident and the extent of active involvement of the employee (injured).

Fatal accident at work: an accident at work the victim of which dies within one year after the accident, as a result of the accident as attested by a doctor's opinion.

Data on accidents at work according to the European Statistics on Accident at Work (ESAW): data from harmonised data collection of the European Union on accidents at work. Under the terms of the Commission Regulation (EU) No 349/2011 of 11 April 2011 Member States shall transmit microdata on persons who had an accident in the course of work during the reference period and the associated metadata according to the methodology of European Statistics on Accident at Work.

Data on accidents at work and their metadata are published by Eurostat on the following website: http://ec.europa.eu/eurostat/data/database

Source of data: Ministry for National Economy, NSDCP 2063: Data on accidents at work according to the European Statistics on Accidents at Work (ESAW).

Fatal home accident: death resulting from an accident which occurred in the victim's place of residence. All fatal events the direct causes of which were home accidents, regardless of the time between the accident and the time of death, are counted as fatal home accidents. Between 2005 and 2012 the classification of the nature of injury (table 16.18.) was carried out by considering all injuries reported on the Death Certificate. However, from 2013, the rules of selection of the main injury published by the WHO are applied.

Source of data: the data collection of the Hungarian Central Statistical Office on the "Death Record" carried out on the basis of §.30 of Act CLV of 2016 and the data transmission on the "Certificate on the Examination of the Deceased" according to §.42 of the Government Regulation 351/2013 (X.4.).

Suicide: data refer to cases ending with death, excluding attempts for suicide. The regional grouping of data has been done according to the actual place of residence of the deceased, and listing to different age groups has been done according to the completed age. The time series of table 16.23. are based on the following conversion of ICD categories: Hanging, strangulation: E953.0–953.9→X70; Drug intoxication: E950.0–952.9→X60–X66; X68–X69; Drowning: E954→X71; Jumping in front of

moving vehicle: E958.0; E958.5 \rightarrow X81–X82; Firearm and explosive material: E955.0–955.9 \rightarrow X72–X75; Jumping down from a high place: E957.0–957.9 \rightarrow X80; Cutting, stabling tool: E956 \rightarrow X78; Other methods:E951.0–952.9; E958.1–958.4; E958.6–958.9 \rightarrow X67; X76–X77, X79.

Source of data: the data collection of the Hungarian Central Statistical Office on the "Death Record" carried out on the basis of §.30 of Act CLV of 2016 and the data transmission on the Certificate on the Examination of the Deceased" according to §.42 of the Government Regulation 351/2013 (X.4.).

Fire case: a process of burning which causes danger to life, bodily integrity or material property, or which causes damage to these. A person killed or injured in a fire is one who is registered by the fire brigade as having died or having been injured at the spot of the accident.

Emergency case: elementary damage, accident, technological irregularity, technical breakdown, release of dangerous material or an emergency caused by some other act. (For definition of deaths and injuries in an emergency case, see that for fire outbreak.) **Source of data:** National Directorate General for Disaster Management, NSDCP 1219: Statistics on fire and emergency cases.

17. HEALTH INSURANCE, HEALTH EXPENDITURES, PRICES, EARNINGS

Health care expenditure: expenditure on health data are based on the international health accounts methodology (A System of Health Accounts 2011 Edition), and do not contain data on investments.

Current expenditure on health measures the final use of resident units of health care goods and services.

Financing schemes: the government schemes and compulsory health care financing schemes contain governmental and local governmental health care expenditure as well as the expenses of the Health Insurance Fund; the voluntary health care payment schemes contain the voluntary health funds, non-profit financing schemes and enterprise financing schemes; the household out-of-pocket payments contain the direct payments of the households.

Health care providers: those institutions and service providers where health care is the main activity.

Source of data: Hungarian Central Statistical Office, NSDCP 2120: Health expenditure and income data, NSDCP 2016: Revenues and expenditures of non-budgetary health organisations and other data collections of different statistical domains; Hungarian State Treasury: Budget data: final accounts, reports of health institutions, Hungarian National Bank: Private insurance enterprises' data.

Non-budgetary health care providers: businesses, individual businesses, churches, foundations, public foundations, public benefit institutions, as well as non-profit organisations and other organisations without legal entity determined by special legislation, whose main activity is health care. Data are collected according to the methodology of the National Health Account. For the data collection of 2016, those organisations were selected, whose income exceeded HUF 2 million according to the state of the business register on January 2017.

Source of data: Hungarian Central Statistical Office, NSDCP 2016: Revenues and expenditures of non-budgetary health care providers.

Personal basic wage: payroll wage (in the business sector), salary (for public employees), basic salary + supplement (for civil servants) in the given month.

Gross earnings: total earnings accounted in the observed month + 1/12 part of non-monthly premiums, bonus and 13th month salary paid in the preceding year.

Source of data: Ministry for National Economy; NSDCP 1405: Data on personal wages and earnings

Sick pay: on the basis of social security regulations, it is an income replacement paid for the period of incapacity for work for calendar days. After utilization of the sick-leave days, the employee receives sick-pay except for child-care sick-pay and occupational accidents, when sick-pay is due from the first day of sickness. The amount of sick-pay represents 70%, from 1 August 2009, 60% of the daily average earnings in case of min. 2 years of continuously insured time, or 60%, from 1 August 2009, 50% for the period of hospital care or in case of shorter insured time.

Sick pay days: those days of incapacity for work for which the insured person received sick pay (in calendar days).

Sick pay case: cases of incapacity for work for which sick pay was paid and which started during the accounting period.

Accident sick pay is payable to an insured person or a person entitled to accident benefit and who becomes incapable for work by consequence of an industrial accident or occupational disease. Self-employed people conducting supplementary economic activity and employed pensioners are entitled to accident health care service and accident sick pay.

Sick leave: according to Act I of 2012 on the Labour Code, an employee is entitled to 15 days' sick leave per calendar year to cover periods of incapacity for work occurring by reason of sickness. The employer bears the expenses of sick leave. (Between 1 January 1992 and 31 December 1995, sick leave was set as 10 working days.) Sick leave may be taken in the case of unfitness for work occurring for reasons of the employee's own sickness, except for cases of industrial accident or occupational disease. Its amount is equal to the 70% of the average earnings of the given month till 30 June 1997, from 1 July 1997, to the 80%, from 1 August 2009, to the 70% of the employee's absence fee.

An employee entitled to sick leave within the calendar year may only receive sick pay after his or her sick leave entitlement was completely exhausted.

Source of data: Hungarian State Treasury, NSDCP 1714 Annual and regional data on health insurance benefits

Health-related expenditures of households (HBLS)

Fruit (01.1.6): includes, among others, fresh, chilled or frozen fruit, dried fruit, fruit peel, fruit kernels, nuts and edible seeds, preserved fruit and fruit-based products.

Vegetables (01.1.7): includes among others fresh, chilled, frozen or dried vegetables, fresh or chilled potatoes and other tuber vegetables, preserved or processed vegetables and vegetable-based products.

Alcoholic beverages (02.1.): includes among others spirits, alcoholic soft drinks, wines and wine-based drinks, beers and beer-based drinks.

Tobacco (02.2.): includes tobacco, cigarettes, cigars and other tobacco products.

Health expenditures (06.1.): within the main category, we distinguish the expenditures on medical products, appliances and equipment, out-patient medical, dental and paramedical services, and hospital services.

Pharmaceutical products (06.1.1.): includes among others medicinal preparations and drugs, medicines, vitamins and herbal teas that are used for human healing, either with or without prescription.

Other medical products (06.1.2.): includes among others clinical thermometers, first-aid kits, bandages, hypodermic syringes, hot-water bottles and ice bags, medical hosiery items.

Therapeutic appliances and equipment (06.1.3.): includes among others corrective eyeglasses and contact lenses, hearing aids and other therapeutic appliances and equipment (i.e. orthopaedic braces and supports, orthopaedic footwear, surgical belts, medical massage equipment and health lamps), and the repair of therapeutic appliances and equipment.

Medical services (06.2.1.): includes out-patient services, the consultations of physicians in general or specialist practice, and the gratuities paid by patients during the consultations.

Dental services (06.2.2.): includes services of dentists, oral hygienists and other dental auxiliaries and the gratuities paid at the dentist.

Paramedical services (06.2.3.): includes among others services of medical analysis laboratories and X-ray centres, outpatient thermal bath or sea-water treatments, medically prescribed corrective gymnastic therapy, ambulance services, gratuities for nurses, midwives and paramedics, hire of therapeutic equipment.

Hospital services (06.3.): hospitalization is defined as occurring when a patient is accommodated in a hospital for the duration of treatment. Hospital day-care and home-based hospital treatment are included as are hospices for terminally ill persons. Gratuities paid in hospitals are also included.

Source of data: HBLS.

The aim of The Household Budget and Living Conditions Survey (HBLS) of the Hungarian Central Statistical Office is to collect data on income and living conditions of Hungarian households. Based on representative probability samples we collect data about 8,000 households² and 20,000 persons of the target population annually. From the consumption data we publish the expenditures of households on fruits, vegetables, alcoholic beverages, tobacco and health. The consumption expenditures are classified according to COICOP, the Classification of Individual Consumption by Purpose.

In published tables, according to domestic practice, we consequently indicate the reference period of the data unlike Eurostat tables where the year of data collection is published. In case of consumption data, the reference period is the year preceding the data collection.

18. INTERNATIONAL DATA

Terms used in this section can be find in the source publications. Data in this chapter referring to Hungary were computed in line with the internationally harmonized methodology (in order to ensure comparability between countries) and may differ from the data published in the other chapters of the yearbook.

Source of data: Eurostat Database; European Health for All Database, World Health Organization Regional Office for Europe; OECD Health Data 2018.

MORBIDITY DATASET

The data are derived from the morbidity survey conducted every two years in relation to the mandatory data collection Report on general practitioners' and paediatricians' activities (National Statistical Data Collection Program [NSDCP] 1021). The data

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² In case of HBLS, the basic units of sampling are the households. In case of consumption data, the number of data providing households was 9,936 in 2011, 10,041 in 2012, 9,054 in 2013, 8,106 in 2014, 6,872 in 2015, 7,185 in 2016 and 7,485 in 2017.

reflect the state of 31 December 2017. The data suppliers were GPs (4 747 persons) and family paediatricians (1426 persons) working in the Hungarian health care system. GPs carry out the primary care of the adult population but in settlements where are not family paediatricians (where the number of children is under 600), GPs provide for those of 0-18 years too. In the observed population were included patients treated or cared for in another health institution but were indicated in the GP's registration as well. According to the international methodology the morbidity data do not indicate the number of persons but the number of diseases of the individuals. A person who has more than one disease is present in the statistics as many times as many diseases has. At the inclusion in the age group the age completed in 2017 was taken into consideration. The rates were calculated per ten thousand population of respective age and sex. Since certain diseases are more frequent in childhood, while others at the adult age, the questionnaire for persons of 0-18 years of age is different from the questionnaire filled in for adults. In the publication the denomination of the diseases was provided according to the International Classification of Diseases (ICD-X.).