European Health Interview Survey 2014

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2 Metadata update	
2.1 Date of last update	23.08.2023

3 Popis štatistiky

3.1 Popis údajov

Object of the survey

The European Health Survey (EHIS) documents the level of health of the population at national and international level. It is implemented every 5 years. Year of last survey: 2014.
The target population is natural person who live in private households for most of the year in the territory of the Slovak Republic and is 15 years of age or older at the time of the survey. Persons living in collective households and institutions (e.g. retirement homes, orphanages, prisons, monasteries, etc.) are generally excluded from the target population.
The EHIS survey covers four main thematic areas:

- European Health Status Module_ – includes minimum european health module, diseases and chronic conditions, accidents and injuries, absence from work (due to health problems), physical and sensory functional limitations, personal care activities, household activities, pain and mental health.
- European Health Care Module_ – includes using of inpatient and day care, using of ambulantory and home care, medicine use, preventive services, unmet needs for health care.
- European Health Determinants Module_ - includes height and weight, physical activity/ excercise, consumption of fruit and vegetables, smoking, alcohol consumption, social support, provision of informal care or assistance.
- European module with basic information about respondent and his/her household _– includes basic demographic and socioeconomic characteristics – sex, age, economic activity, type of household, level of education.

Sampling and statistical unit
Sampling unit is a residential household.

A residential household consists of all persons living in the apartment. A single dwelling household may have one or more farming households.
The statistical unit for the survey is a natural person (male, female) aged 15 and over living most of the year in the territory of the Slovak Republic, who provides data on the self-employed household to which he/she belongs.
Reference period
G e nerally used reference period in the EHIS 2014 questionnaire was the period of last 12 months from the date of the interview (e.g. if interview date was 16.9.2014, the last 12 months is between 16.9.2013 and 15.9.2014). For some questions, other reference periods were also used, e.g. last 4 weeks, 2 weeks, at least the last 6 months, etc.

3.2 Klasifikačný systém

- ISCED 2011
- NACE Rev.2
- ISCO-08

3.3 Pokrytie štatistických oblastí a okruhov

The EHIS survey aims to collect health data on the following subject areas:
- health status,
- health care,
- health determinants and
- basic characteristics of persons and household (standardized variables).

More detailed information on the coverage of areas — see Section 3.1 Subject of the survey.

3.4 Štatistické pojmy a definície

A **residential household** consists of all persons living in the apartment. A single dwelling household may have one or more farming households.
A **housekeeping** consists of all persons in the apartment who live together and manage together, including the joint provision of the necessities of life. Joint reimbursement of basic household expenses (food, housing costs, electricity, gas, etc.) is considered a sign of management.
Collective household — e.g. a boarding house, dormitory in an educational establishment or other accommodation occupied by more than 5 people without sharing household expenses.
Long-standing (chronic) illness or long-standing health problem means a disease or health problem that persists or is expected to persist for at least 6 months. Temporary (transient) health problems are not taken into account. It also includes recurrent problems that are seasonal or independent, even if their symptoms last less than 6 months, long-term illness or a long-standing health problem that is or has been kept under control by medication, e.g. high blood pressure being treated. This includes all long-standing health problems, not just diagnosed by a doctor.
Road traffic accident - this refers to all accidents that occurred on public roads and in public or private car parks, provided that the accident did not occur during the performance of work tasks. The injured party may be either in the means of transport (e.g. driver or passenger) or may be another road user (e.g. pedestrian).
Home accident - includes all accidents that occurred at home (in one's own or another home), regardless of the activity the person carried out (work in or around the house - garage, garden). If the

respondent works professionally from home, an accident that happens to him while performing his work tasks in his or another home is classified as an accident at work (not monitored in the survey).
Leisure accident means an accident that occurs during leisure time spent outside work, outside employment-related activities, outside household chores including shopping, and outside road traffic (cultivating hobbies and hobbies, walking, running, ball games, dancing, climbing, working with wood, working in the garden, etc.). This also includes visiting pubs and restaurants, recreational parks and recreation centers.
Aids to facilitate walking include walkers, orthopaedic shoes, special shoes, walking sticks, stirrups, splints, crutches, wheelchair, artificial limbs (legs), prostheses or assistance from another person, etc. Holding hands is also considered the help of another person. In the case of a visually impaired person with a guide dog, this dog cannot be considered an aid.
An inpatient is a patient who is officially admitted to a hospital or hospital to care for his health and stays there for at least 1 night or more than 24 hours. This includes staying in a hospital or hospital abroad and staying for antenatal and postpartum complications. The time spent in the maternity hospital in connection with childbirth is not taken into account. This includes all types of hospitals (both general and specialized) and nursing homes except nursing homes, hospices and spas.
A day patient (same day patient) includes scheduled medical and paramedical services provided to a patient who is formally admitted for diagnosis, treatment or other type of health care with the intention of being discharged on the same day (e.g. the patient undergoes minor surgery after which he remains in bed for a couple of hours for observation).
An orthodontist is a dental specialist who performs diagnosis, prevention and correction of defects in the growth of teeth and oral jaw (e.g. prescription of dental braces).
A dental hygienist is a healthcare professional who performs complete dental and oral care (oral hygiene), provides advice, inspects the patient's teeth and gums, performs tartar and plaque removal, takes a picture of the dentition, etc.
Medical or surgical specialist is a medical specialist, including dental and other surgeons, but not a general dentist. Its tasks are: performing medical examinations and diagnostics, prescribing medicines, providing treatment for diagnosed diseases, disorders or injuries, providing specialized medical and surgical treatments for individual diseases, disorders and injuries, counseling and using methods of preventive medicine. Specialists are e.g. orthopedist, internist, neurologist, cardiologist, gynecologist, surgeon, dental surgeon, etc.
A physiotherapist (rehabilitation worker) is a professional health worker who uses one or more of the following therapies in order to improve or restore motor functions: exercise, massage, electrotherapy, ultrasound therapy, heat treatment, hydrotherapy, balneotherapy, etc.
A psychologist, psychotherapist or psychiatrist is a mental health professional who diagnoses, provides psychotherapy and psychiatric care.
Home care services include the provision of medical and non-medical home supportive care services for persons who, due to physical or mental illness, disability or old age, cannot perform specific activities related to self-care or household care, or are limited in movement only to their own home. They include services provided by a visiting nurse or midwife from a health care institution, agency or association or community organization through staff or volunteers. *Medical services*: e.g. additional help after a hospital stay, help for people with chronic diseases who need long-term care, home dialysis, providing instructions to parents about prenatal and postnatal care (before and after the birth of a child), etc. *Non-medical services*: e.g. help with personal hygiene, eating, dressing, bathing, etc. Services are provided to a person in their own home/household.
Prescribed medicines includes: drugs, herbal remedies, homeopathic remedies, nutritional supplements (vitamins, minerals or tonics), birth control pills, and hormones for purposes other than contraception, all of which are prescribed by a doctor. This does not include birth control pills and hormones prescribed by a doctor for the purpose of contraception and all non-prescribed medicines, e.g. medicines recommended by a pharmacist

Medicines not prescribed by the doctor includes medicines, herbal medicines, homeopathic medicines, nutritional supplements (vitamins, minerals or tonics) that are not prescribed by a doctor. This does not include birth control pills and hormones used as contraception, herbal teas (if they are not considered medicine) and all other medicines prescribed by a doctor.
Body mass index (BMI) is weight in kilograms divided by the square of height in meters. It counts only for adults (from 18 years old).
BMI = weight(kg)/ height(m) ^{2}
Categories of BMI:
BMI < 18,5 – underweight
18,5 ≤ BMI < 25 – normal weight
25 ≤ BMI < 30 – overweight
BMI ≥ 30 – obesity.
A typical week is a normal 7-day week including both working and weekend days in a given season.
A typical day represents a day during which the respondent behaves in a usual (regular) way.
Consumption of fruit — fruit can be fresh, frozen, canned, dried, and can also be cut into small pieces or ground into a pulp. Only fruit juices squeezed from fresh fruit are included. Fruit juices from concentrate or industrially processed fruit or artificially sweetened fruit juices are not included.
Consumption of vegetables — vegetables can be fresh, frozen, canned or cooked and can also be cut into small pieces or ground into a mush. Also included are legumes (beans, lentils), vegetable dishes (including soups), vegetable juices squeezed from fresh vegetables. Potatoes and similar starchy foods such as sweet potatoes, plantains and cassava are not included (they are included in the breads and cereals group). Vegetable juices from concentrate or industrially processed vegetables or artificially sweetened vegetable juices are also not included.
Smoking includes breathing in and out of the smoke of tobacco products (industrially produced cigarettes, hand-rolled cigarettes, cigars, pipes, etc.) is considered smoking. Smoking marijuana mixed with tobacco (a cigarette containing both ingredients) is not considered tobacco smoking.
1 standardized alcoholic drink is defined like:

1. beer - 3 dl
2. wine - 1 dl (grape, fruit, sparkling, homemade wines, mead)
3. liqueurs, aperif- 0,8 - 1 dl (egg liqueur, amaretto, cinzano, fernet citrus, griotka, martini, baileys, etc.)
4. spirits - 0,4 dl (vodka, whisky, cognac, rum, brandy, plum spirit, pear spirit, pine spirit, gin, tequila, becherovka, etc.)
5. mixed drinks - 2 dl (mojito, fernet with tonic, pinacolada, cuba libre, gin with tonic, radler, etc.).

3.5 Štatistická jednotka

The statistical unit for the survey is a private household and in it one selected person (respondent) — a natural person (male, female) aged 15 and over living most of the year in the territory of the Slovak Republic, who provides data on the self-farming household to which he/she belongs.

3.6 Cieľová populácia

All persons aged 15 and over living in private households.

3.7 Geografické pokrytie

Territory of the Slovak Republic.

3.8 Časové pokrytie

European Health Interview Survey was realised in 2009 and 2014.

3.9 Bázické obdobie

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4 Merná jednotka

Number and percentage of people.

5 Referenčné obdobie

The EHIS 2014 survey questions mainly related to 2014. Generally used reference period in the EHIS questionnaire was the period of the last 12 months from the date of the interview (e.g. if interview date was 16.9.2014, the last 12 months is between 16.9.2013 and 15.9.2014). For some questions, other reference periods were also used, e.g. last 4 weeks, 2 weeks, at least the last 6 months, etc.

6 Inštitucionálny mandát

6.1 Právne akty a iné dohody

The legislative basis for the EHIS is the Framework Regulation (EC) No. 1338/2008 of the European Parliament and of the Council on Community statistics on public health and health and safety at work (Annex I concerning the field 'health status and health determinants'). The EHIS 2014 survey was carried out in accordance with Commission Regulation (EU) No. 141/2013 implementing Regulation (EC) No. 1338/2008 of the European Parliament and of the Council on Community statistics on public health and health and safety at work, as regards statistics based on the European Health Interview Survey (EHIS).

6.2 Spoločné využívanie údajov

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7 Štatistická dôvernosť

7.1 Politika štatistickej dôvernosti

Protection of statistical confidentiality (protection of confidential statistical data) is a system of interconnected measures in the legislative, methodological, organizational, technical, security and personnel fields, preventing the leakage of confidential statistical data or the premature publication of statistical information. Authorities performing state statistics are obliged to ensure the protection of confidential statistical data from misuse in the manner set forth in § 25a and § 29 and 30 of Act No. 540/2001 Coll. on state statistics, as amended.

7.2 Zaobchádzanie s údajmi

The basic task of the persons who will participate in the data collection is to protect the personal data of the respondent. All information collected are used for statistical and research purposes of a non-commercial nature, and all responses to questions are treated as strictly confidential. The protection of confidential data is legally enshrined in Act No. 540/2001 Coll. on state statistics, as amended, and personal data is protected in accordance with Act No. 18/2018 Coll. on the protection of personal data and on the amendment of certain laws.
Persons who participate in the collection of data and in the processing of the results of the investigation must adhere to strict principles of safe behavior when handling personal data. They are bound by the confidentiality of all the facts discovered, they must not use them for personal use, publish them and provide them to anyone or make them available to anyone. The obligation to maintain confidentiality also belongs to the person to whom the confidential statistical data was provided for scientific purposes.
The Statistical Office of the Slovak Republic provides or publishes statistical data and information without direct identifiers in such a form that data provided by the applicant cannot be directly or indirectly identified.

8 Politika zverejňovania

8.1 Kalendár prvého zverejnenia

The calendar of the first release contains the timetable for the first publication of selected indicators. The data was published at 9:00 a.m. on the SO SR website (www.statistics.sk) in the section Catalog of informative reports and was also available from the spokesperson of the SO SR. A notice on the specification of deadlines is also published on the website of the SO SR.

8.2 Prístup ku kalendáru prvého zverejnenia

First release calendar

8.3 Prístup používateľov k štatistickým informáciám

Policy on dissemination of statistical information

9 Periodicita zverejňovania

Every 5 years.

10 Dostupnosť a zrozumiteľnosť

10.1 Tlačové správy

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10.2 Publikácie

Selected results from the EHIS 2014 survey are published in the analytical publication View of the health status of the Slovak population and its determinants (EHIS 2014 results).
Conditions of access to published data:
The statistical information service carries out direct sales in the store. The Electronic Information Service (ELIS) enables the purchase of statistical publications in electronic form. The order with the required publication titles can be sent by e-mail to the address Information Services (www.statistics.sk).

10.3 On-line databázy

Selected results from the EHIS 2014 survey are published on the website of the Statistical Office od the Slovak Republic in the section Indicators.
The results of the EHIS 2014 survey are processed into anonymized microdata, i.e. the data is protected in such a way as to minimize the risk of identification of the statistical units to which they relate while preserving the greatest possible information value of the microdata. Access to anonymized microdata may be approved by the Statistical Office of the Slovak Republic to research entities based on the fulfilment of conditions for providing access to confidential statistical data for scientific purposes.
Access to anonymized microdata for scientific purposes can be requested by research subjects, namely:
- universities and other educational organisations of higher education,
- organisations, or scientific research institutions.
Accompanying documentation for anonymized microdata:
- Description of monitored EHIS variables (identification and name of target variables, variable values, description of variable values, filters, location of variables in the questionnaire)
- Metadata for the EHIS survey (legal basis, structure of the EHIS questionnaire, selection and weighting methodology, organization and course of the survey, selected methodological explanations)

10.4 Prístup k mikroúdajom

Access to national microdata EHIS 2014 - yes.
Who has rights to access - scientists, institutions, universities.
Conditions of access to data - bilateral signed agreement.
Accompanying information to data - microdata are without direct identifier.
According to the recommendations of Eurostat.

10.5 Iné

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10.6 Dokumentácia o metodike

Links to methodological notes on the survey and its characteristics are on the official website of the Statistical Office of the Slovak Republic: www.statistics.sk

10.7 Dokumentácia o kvalite

The Statistical Office of the Slovak Republic holds a certificate that confirms that the office meets the requirements of the international standard ISO 9001:2015 in the organization, acquisition, processing and provision of official statistics according to applicable standards. At the same time, it provides evidence that the established quality management system creates suitable conditions for further improving the quality of services provided to users and develops the office towards greater efficiency. A quality report is drawn up based on Eurostat's quality requirements. The quality report is submitted in the required structure no later than 2 months after sending the microdata. The main parts of the report are focused on relevance, accuracy and reliability, topicality and timeliness, accessibility and comprehensibility, comparability and coherence.

11 Riadenie kvality

11.1 Zabezpečovanie kvality

Elaboration of organizational security of the survey, methodical manual for the interviewer and provision of training and video presentation. Testing data collection tools. Monitoring data collection, response rates and reviewing data collected on a monthly basis. Multiple control and validation of the file at the regional and responsible level. Final validation using the validation program EDIT tool.

11.2 Hodnotenie kvality

In general, the quality of detection is considered very good.

12 Relevantnosť

12.1 Potreby používateľov

Health data has a significant impact on policy makers, media and academic research.
Main groups of users:

- Eurostat, European Council, European Parliament and other european institutions;
- Ministries of the Slovak Republic;
- Social partners;
- Media;
- Scientists and students;
- International organisations (OECD, WHO).

12.2 Spokojnosť používateľov

Continuous monitoring of user satisfaction.

12.3 Úplnosť štatistických informácií

NUTS level of detail

- The lowest regional level of results publishable – NUTS 3
- The lowest regional level of results provided by the researcher – NUTS 3

13 Presnosť a spoľahlivosť

13.1 Celková presnosť

The EHIS 2014 survey was carried out in accordance with the relevant regulation (Commission Regulation (EU) No. 141/2013 implementing Regulation (EC) No. 1338/2008 of the European Parliament and of the Council on Community statistics in the field of public health and safety and security occupational health, as regards statistics based on the European health interview survey (EHIS) and in accordance with the Eurostat methodology for the implementation of the 2nd wave of the EHIS survey (Methodological manual EHIS wave 2 and EHIS wave 2 – model questionnaire). Data processing, data validation and transmission to Eurostat were carried out in accordance with valid Eurostat work manuals – EHIS wave 2 Data delivery quidelines, EHIS wave 2 Validation rules. Data validation was carried out using the Eurostat EDIT tool.

13.2 Výberové chyby

Sampling errors — indicators

Indicator/ sub-indicator (variables from which indicator is derived)	Number of respondents **n** (unweight)	Estimated proportion **p** (weight)	Standard error SE	95% confidence interval	Design effect deff
Respondents aged 15+ in good or very good health (HS1)					
All	3 300	65,7	0,64	64,5 67,0	1,01
Women	1 720	61,6	0,89	59,9 63,4	1,08
Men	1 610	70,1	0 93	68,3 71,9	1,16
Respondents aged 15+ with longstanding illness or health problems (HS2)					
All	3 199	53,7	0,70	52,4 55,1	1,10
Women	1 914	59,0	0,94	57,1 60,8	1,00
Men	1 285	48,1	1,05	46,1 50,2	1,09
Respondents aged 15+ that were severely limited in activities people usually do because of health					

problems for at least past 6 months (HS3)					
All	**709**	**11,3**	**0,42**	**10,5 12,1**	**0,96**
Women	428	12,4	0,58	11,2 13,5	0,89
Men	281	10,1	0,60	9,0 11,3	1,04
Respondents aged 15+ having been hospitalized in the past 12 months (HO1) (men and women)	734	12,1	0,44	11,2 13,0	1,00
Respondents aged 18+ who are obese (BMI > = 30 , where BMI = BM2 in kg / (BM1 in m * BM1 in m) (men and women)	950	15,9	0,50	15,0 16,9	1,02

13.3 Nevýberové chyby

Non-sampling errors

1. Coverage errors

The baseline data of the sampling frame is data from Census 2011. Changes in the number of households are known only from qualified estimates, information for identifying them for selection is not known. Information about changes in housing and housing stock is known, and these are used for the selection of households.

Information on the change in the status of permanently occupied dwellings and houses from 2011 to 2014 was used in updating the sample frame for the household sample for the EHIS 2014 survey.

2. Measurements errors

Measurement errors that occur during field data collection were influenced by these sources:

a. Questionnaire
b. Interviewers
c. Respondents
d. Data collection

a. **Questionnaire**

The EHIS 2014 questionnaire has been compiled in accordance with Commission Regulation (EU) No. 141/2013 and Eurostat's methodology for the implementation of the 2nd wave of the survey (EHIS model questionnaire for the 2nd wave of the survey). When compiling the questionnaire, all variables required by the Regulation were taken into account and all proposed modules and rebounds (filters) were accepted.

The draft of questionnaire for EHIS 2014 was cognitively tested only at the level of the headquarters of the SO SR and the testing was aimed at verifying the quality and comprehensibility of the translation of questions into the national language. Cognitive testing did not examine the questionnaire in its entirety, but only questions with a methodological change compared to the previous survey wave conducted in 2009 and newly included questions. Concretely:

- **Accident s and injuries (AC**) – module tested in its entirety (questions AC1a, AC1b, AC1c, AC2),
- **Physical and sensory functional limitations (PL) –** only part of questions was tested (PL1, PL2, PL3, PL4, PL5),
- **Pain (PN) –** only question PN2 was tested,
- **Mental health (MH) –** module tested in its entirety (MH1A, MH1B, HH1C, MH1D, MH1E, MH1F, MH1G, MH1H),
- **Preventive services (PA) –** only part of questions was tested (PA1, PA6),
- **Unmet needs for health care (UN) -** module tested in its entirety (UN1A, UN1B, UN2a, UN2b, UN2c and UN2d),
- **Physical activity/exercise (PE)-** module tested in its entirety (PE1, PE2, PE3, PE4, PE5, PE6, PE7, PE8),
- **Consumption of fruit and vegetables (FV) -** module tested in its entirety (FV1, FV2, FV3 and FV4),
- **Alcohol consumption (AL) –** module tested in its entirety (AL1, AL2, AL3, AL4, AL5, AL6),
- **Social support (SS) –** only part of questions was tested (SS2 and SS3),
- **Prosivion of informal care or assistance (IC) –** module tested in its entirety (IC1, IC2, IC3).

b. **Interviewers**

A total number of 137 interviewers participated in the EHIS 2014 survey – internal employees of the section of industrial data collection and processing and field surveys of the SO SR in Banská Bystrica and employees of the field survey data collection departments of all regional workplaces. Since they were exclusively internal employees of the SO SR, they represented persons with many years of experience with all social surveys, including the previous wave of the survey, which was carried out in the conditions of the Slovak Republic in 2009.

The interviewer training took place as a 1-day training on 18.6.2014 at the workplace in Banská Bystrica. It was attended by representatives of the headquarters of the SO SR, employees of the section of industrial data collection and processing and field surveys in Banská Bystrica and employees of the data collection departments from field surveys of all regional workplaces. The training of interviewers was led methodologically by representatives of the headquarters of the SO SR, while the organizational side of data collection, recording and decentralized data processing was presented by representatives of the section of industrial data collection and processing and field surveys in Banská Bystrica, who are the main coordinators of field work. The subject of the training was familiarization with the content focus of the EHIS survey, explanation of the methodology of individual modules, questionnaire questions, questionnaire manual, sampling design and selection of respondents, process of monitoring field work, as well as discussing the timetable for the implementation of EHIS data collection and processing. Since CAPI data collection took place on part of the sample and each PAPI data collector was also responsible for recording it in the BLAISE application environment, special attention had to be paid to explaining the functionality of the data capture program.

The control of the interviewer's work was ensured by regular monitoring through the prepared program "EHIS records". This program made it possible to check the status of visits to respondents' households for each interviewer. In this program, the interviewer regularly recorded the visited households of the respondents and the result of the data collection on the set date (successful

participation/refusal of cooperation). Based on the outputs of the program, the coordinator (supervisor) of each department of data collection from field surveys of individual regional workplaces evaluated the current situation for each interviewer and, if necessary, resolved deficiencies (low number of visited respondents' households on the day of monitoring) with a specific interviewer. Direct control of the interviewer in the form of contacting the respondents' households was not carried out.

c. **Respondents**

The SO SR informed the affected municipalities and households about EHIS 2014 survey in the form of a letter (letter to mayors/mayors of municipalities, letter to the respondent's household). In addition, the survey was promoted through various regional and national media: print, radio, television.

During the visit, the interviewers handed over promotional materials to the households (pen and promotional leaflet about the EHIS survey), which were not only informative but also motivating for cooperation.

In general, as with other sample surveys, the respondents' fear of misuse of data for purposes other than statistical purposes and distrust in the anonymity of the survey also play a role - respondents consider the requested health information quite personal.

In the case of the EHIS 2014 survey, respondents were more troubled by the professional medical terminology used, especially in the case of the disease module and chronic health problems and preventive services. Some modules were considered by respondents to be very sensitive, intruding on their privacy: diseases and chronic health problems, mental health (MH) and preventive services (PA) (especially women-only questions). In the case of Smoking (SK) and Alcohol consumption (AL) modules, the method of data collection through the so-called self-completion of the questionnaire by the respondent (i.e. the respondent answered the questions by himself without the help of the interviewer; after the questionnaire was filled in by the respondent, the questionnaire was placed in an envelope, which was sealed and marked with the same identification number of the economic household as the main EHIS questionnaire).

In the module Accidents and injuries (AC) (questions AC1a, AC1b, AC1c), respondents often found it difficult to remember the most serious injury/accident that happened to them, as a long period of time was assessed, i.e. last 12 months. They often considered whether the injury/accident that happened to them could be considered serious. Respondents questioned the inclusion of home treatment in code 4 under question AC2.

In the case of the module Unmet needs for health care (UN), respondents considered the questions to be very long and complicated for initial understanding. Many times, respondents hesitated whether to take into account chronic health problems, acute health conditions, or the need for a preventive health check-up when answering.

The module Physical activity/exercise (PE) was also methodologically more problematic, especially question PE1 in the case of respondents who had more than one paid job, both of which were quite different in physical terms; from the point of view of stating the number of days, also questions PE2 and PE3 in the case of respondents whose typical week was of different length due to service work (alternating between a short and a long week).

The questions of the module Consumption of fruit and vegetable (FV) and Alcohol consumption (AL) were evaluated by the respondents as more time-consuming. Respondents needed more time to understand questions and methodology and to fit into the appropriate frequency of consumption. Respondents often objected that questions would be difficult to interpret the results.

d. **Data collection**

Data collection in field was realised from 1.7. 2014 until 31.12. 2014.

Data collection was carried out in two ways - personal interview through a paper questionnaire (PAPI) and personal interview through an electronic questionnaire that was created in the BLAISE environment (CAPI). Part of the questionnaire, specifically Smoking (SK) and Alcohol consumption (AL) modules, was collected in the form of a separate questionnaire to be filled out by the respondent

personally (i.e. the interviewer did not ask respondent questions directly). After filling out the questionnaire, the respondent put the questionnaire into a prepared envelope, sealed it and handed it over to the interviewer, who marked the envelope with the corresponding identification number of the investigated household. In this way, the anonymity of collected data on smoking and alcohol consumption was fully ensured.
The collection and recording of data in the case of PAPI and CAPI was provided only by internal employees of the Department of Statistics of Field Surveys - employees of the departments of data collection from field surveys of individual regional workplaces. These are employees who are highly qualified in the field of statistical data collection and processing, and most of them have many years of experience with several statistical surveys.
Within the EHIS 2014 questionnaire, there were also open questions with the need for additional coding. These are the following variables: Country of birth (BIRTHPLACE), Nationality (CITIZEN), Occupation in employment (JOBISCO), Economic sector of employment (LOCNACE).
The process of coding open-ended questions depended on the method of data collection. In the case of electronic CAPI data collection, the BLAISE program for data recording had a dial pad for individual variables of the BIRTHPLACE, JOBISCO, CITIZEN and LOCNACE types, while the corresponding code was selected by direct verbal notation. In the case of PAPI, directly in the respondent's household, the answer to the given question was entered only verbally in the paper questionnaire, and the code was additionally assigned only when the data was recorded in the BLAISE program. In both cases, the coding of these variables was ensured by interviewers - internal employees of the field investigations department of the SO SR workplace in Banská Bystrica and employees of the data collection departments from field investigations of individual regional workplaces.

3. **Non-response rate**

a. **Unit non-response rate**

The overall unit non-response rate for the 2014 EHIS was 1.2. Only the overall unit non-response rate is known, no information is available for individual methods of data collection (PAPI, CAPI), as the method of collection that will be used was not defined before the actual visits to the selected households. The substitution did not apply.
In condition of the Slovakia, the following methods were applied in the EHIS 2014 survey with the aim of reducing unit non-response:

- repeated visits were made in case when respondent could not be reached, while the visit was planned for a time period with a higher probability of successful contact (e.g. visit made at different times of a day, visit in the evening, at the weekend),
- promotion of the survey at the national and regional level and informing about the visit of the selected household by letter, informing the mayors/mayors of the municipalities about the visit of the households in the selected municipality,
- an effort to motivate respondent to cooperate in the form of a promotional item (pens).

b. **Item non-response rate**

Item non-response rate for health indicators (unweight and before imputation):

Average 0,02 %	Minimum 0,00 %	Maximum 0,99 %

Total item non-response rate for all EHIS variables (including all technical and main social variables) (unweight):

Average 0,05 %	Minimum 0,00 %	Maximum 3,33 %

4. **Processing errors**

For EHIS 2014 survey, a program created in the BAISE environment was used to record data. The program was created by the cooperation of the headquarters of the SO SR with the department of field investigations, which is located within the workplace of the SO SR in Banská Bystrica. The aforementioned department is currently responsible for the collection, coordination and monitoring

of data collection in the field, as well as for the processing and control of data from all regional workplaces. Within each regional workplace, a field survey data collection department is created, which is managed by the field survey department mentioned above.
The same data recording program was used for both methods of data collection (PAPI and CAPI). The collection and recording of data in the case of PAPI and CAPI was provided only by internal employees of the Department of Statistics of Field Surveys - employees of the departments of data collection from field surveys of individual regional workplaces. These are persons who are highly qualified in the field of statistical data collection and processing, and most of them have many years of experience with several statistical surveys. The training of internal employees from the point of view of data recording was provided by the department of field investigations of the regional office of the SO SR in Banská Bystrica in cooperation with the headquarters of the SO SR in accordance with the document - Instructions for uploading and correcting EHIS data. The program included checks for error reports in accordance with valid Eurostat documents (Regulation of the EU Commission No. 141/2013, Manual European Health Interview Survey EHIS wave 2, Validation rules and Data delivery guidelines). After typing each questionnaire, the software displayed a list in the form of an error log, where 2 types of errors could occur - serious errors (errors) and informative errors (warnings). If it was an error that occurred directly when typing the questionnaire, the error was corrected immediately after it was reported. Other errors (defined as EHIS checks) were analyzed and corrected separately. The interviewers of the individual regional workplaces, after typing the questionnaire and checking it and making possible corrections, together with the error log, sent it directly to the field investigations department for further processing. All records of questionnaires from individual regional workplaces were merged into one all-Slovak file, which was rechecked and cleaned in terms of error reports. In the case of serious errors, correction was necessary, in the case of warnings, the error had to be checked and subsequently explained, always based on consultation with a specific employee - interviewer. The checked and cleaned all-Slovak data set was further sent to the central level of the SO SR for further processing in accordance with the requirements of Eurostat (Validation rules and Data delivery guidelines).
Basic checking and cleaning of microdata was initially done at a decentralized level. At this level, checking and correcting data was mainly based on checks defined directly in BLAISE program. The department of field investigations of the regional workplace of the SO SR consulted directly with the interviewers - employees of the data collection departments from the field investigations of individual regional workplaces via e-mail or by phone about possible errors, and invited them to check errors and subsequently correct them, or add explanations to specific error reports. The number of errors in the created all-Slovak file was not large (they were signal confirmed errors) and occurred in the case of 79 households out of a total of 7,670 included in the selection. The all-Slovak dataset sent to the headquarters of the SO SR was further checked at the central level. First, the correctness (permissibility) of the values or codes (checks for allowed values) of all EHIS variables was checked in accordance with the relevant regulation and the documents Validation rules and Data delivery quidelines. Despite the fact that the Blaise program included the required Eurostat controls, a re-verification of data consistency (consistency checks) and compliance with skip checks (skip checks, filters) and logical links between variables was carried out in accordance with the Validation rules document. In the event of an error being discovered, the SO SR turned to the Department of Field Investigations of the regional workplace of the SO SR in Banská Bystrica to verify the correctness of the data, which physically verified the data in the relevant questionnaire, and if necessary, consulted with a specific interviewer - an employee of the relevant regional workplace. Data editing and processing was performed in the SAS environment. The cleaned and processed file was checked using the validation program of Eurostat EDIT tool.

5. **Imputation – rate**

Not applicable.

6. **Seasonal adjustment**

Not applicable.

14 Včasnosť a dochvíľnosť

14.1 Včasnosť

EHIS 2014 microdata was sent to Eurostat in accordance with the requirement defined by Commission Regulation (EU) No. 141/2013 implementing Regulation of the European Parliament and the Council (EC) No. 1338/2008 on Community statistics in the field of public health and occupational safety and health, as regards statistics based on the European Health Interview Survey (EHIS) - Article 6, Paragraph 2 - by the required deadline of 30.9. 2015. The SO SR carried out the data transfer on 9/29/2015 through the EDAMIS application.

The period of the start and the end of the individual stages of EHIS 2014 survey	Start (month/ year)	End (month/ year)
A.Survey preparation level (preparation of questionnaire, methodological manuals)	10/2013	06/2014
A.Data collection (fieldwork)	07/2014	12/2014
A.Processing level (data recording, validation, editation, imputation)	08/2014	09/2015
A.Transmission of microdata to Eurostat (date of the first transfer and the last transfer – data validated by Eurostat)	09/2015	
A.Dissemination of national results	12/2015	

14.2 Dochvíľnosť

EHIS 2014 microdata was sent to Eurostat in accordance with the requirement defined by Commission Regulation (EU) No. 141/2013 implementing Regulation of the European Parliament and the Council (EC) No. 1338/2008 on Community statistics in the field of public health and safety and health at work, as regards statistics based on the European Health Interview Survey (EHIS). In Article 6, paragraph 2, the deadline for providing microdata and reference metadata to the Commission (Eurostat) is defined, specifically, "Microdata shall be provided no later than September 30, 2015, or within nine months after the end of the national data collection period in cases where the survey takes place during following December 2014."The SO SR implemented the transfer of EHIS 2014 microdata on 29.9. 2015. The validation of the national EHIS 2014 microdata was confirmed by Eurostat with the delivery of the acceptance letter on 13.7. 2016.

15 Porovnateľnosť a koherentnosť

15.1 Geografická porovnateľnosť

EHIS 2014 microdata is comparable from the point of view of geographical regions within the Slovakia. The data is representative up to NUTS level 3.

15.2 Porovnateľnosť v čase

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15.3 Prierezová koherentnosť

The EHIS survey is carried out every 5 years. Under the conditions of the Slovakia, the first survey was carried out in 2009. The data of the EHIS 2014 survey can be compared with the data of the first wave of the EHIS 2009 survey(with the exception of newly included variables in the EHIS 2014 survey and significant inter-annual methodological modifications in the case of some variables). The data for the Minimum European Health Module (MEHM) indicators from the EHIS 2014 survey can be compared with the MEHM indicators from the EU SILC survey.

15.4 Vnútorná koherentnosť

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16 Náklady a záťaž respondentov

Total costs for realisation of EHIS 2014 survey were approximately 298 000,00 EUR.

17 Revízia údajov

17.1 Politika revízií

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17.2 Revízia údajov v praxi

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18 Štatistické spracovanie

18.1 Zdrojové údaje

Methodology of selection
Target population for the EHIS survey consisted from individuals who lived in private households for the majority of the year in the territory of the Slovak Republic and were 15 years of age or older at the time of the survey.

The basis of the selection for the creation of the network was a set of residential households, created from the database of residential households of the Census 2011.
In determining the type of unit selection, into account was taken requirement of harmonisation of sample households in households, i.e. the use of the same sampling frame, sampling and unit sampling method.

The proportional regional (stratified) 3-stage random sampling method was used to establish the sampling network:

- stratified – losses are made up of a combination of region x size of municipalities (according to population). Using these two stratification variables, 48 areas (losses) were created, which covered the entire territory of the Slovak Republic.

- proportional – collection was proportional to the number of dwellings in each loss.
- 3-stage random selection pretended:

I. stage: random selection of census districts;

- in each loss, districts were randomly selected — with a selection probability proportional to the size of the district ;
- district could have been selected more than once;

II. stage :

- in each selected census district, residential households were randomly selected.

III. stage :

- in each selected households was randomly individual selected. This person was the observation reference unit.

Weighting methodology

The baseline weights of selected individuals were calculated on the assigned probability of selection. A correction of weights was made according to the rate of return of completed questionnaires in individual areas. The weights adjusted in this way (starting weights adjusted according to the rate of return) of selected individuals were calibrated to external numbers of persons according to the following criteria: gender, age categories, economic activity of the respondent and level of educational attainment for each region separately.

Method used to adjust the balance to external data: calibration using CALIF (free available on website of the SO SR www.statistics.sk).

Factors used for calibration on NUTS3 level (8 categories):

- sex x age groups:

2x7 categories:

15 – 24 (men, women)
25 – 34 (men, women)
35 – 44 (men, women)
45 – 54 (men, women)
55 – 64 (men, women)
65 – 74 (men, women)
75+ (men, women)

- economic activity

4 categories:

Working
Unemployed
Retired persons
Other active persons

- level of education:

2 categories:

ISCED 0 - 4
ISCED 5 - 8

18.2 Periodicita zberu údajov

Every 5 years.

18.3 Zber údajov

Data collection methods: brief description

Data was collected through face-to-face interviews by regional interviewers using PAPI (face-to-face interview via paper questionnaire) and CAPI (face-to-face interview via e-questionnaire).
Final selection unit collected by interview technique — PAPI (76%) and CAPI (24%).

18.4 Validácia údajov

Data control and validation were carried out at the level of data collection and processing. The data was continuously checked throughout data collection. The collected data was recorded in a data collection program that was created in the BLAISE environment. A number of logical checks were built into the data collection programme in the form of warnings and errors, which greatly contributed to reducing the error rate of completed data. The errors found have been analysed, verified and corrected. Subsequently, the responsible staff of the Department of field surveys statistics of the Regional Office carried out a formal check of the completeness of returned and completed questionnaires, a check on compliance with the specified sample, a content check of data quality and coding, and a final check of the collected data. The cleaned file was sent to the responsible department, where the completeness of the information obtained, formats and codes used, verification of the correctness of the recorded values and checking of logical links between individual indicators were carried out. Problematic cases were verified at regional level.
For the final validation of the final file transmitted to Eurostat, the validation tool EDIT tool prepared by Eurostat was used. The validation programme included a country microdata check for the overall microdata structure, a coherence check between variable values for all records and allowed items to identify missing values and incompleteness of the file, and record-level checks to verify consistency between variables for a given record.

18.5 Spôsob spracovania údajov

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18.6 Úprava údajov

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19 Poznámka

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