

# European Health Interview Survey 2019

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2 Metadata update	
2.1 Date of last update	27.07.2023
3 Popis štatistiky	
3.1 Popis údajov	
<p><b>Object of the survey</b></p> <p>The European Health Interview Survey (EHIS) covers health status, healthcare and health determinants, as well as socio-demographic characteristics of the population at national and international level. It is implemented in a 5-year periodicity. Year of last implementation: 2019.</p> <p>The target population are individuals who, at the time of data collection, have their usual residence in private households within the Slovak Republic and are 15 years of age or older at the time of the survey. At the same time, they are in private households for the bulk of the year. Persons living in collective households and institutions (e.g. retirement homes, orphanages, prisons, monasteries, etc.) are generally excluded from the target population.</p> <p>The EHIS survey covers 4 main thematic areas:</p> <ul style="list-style-type: none"><li>• health status,</li><li>• healthcare,</li><li>• health determinants,</li><li>• basic characteristics of persons and household (standardised variables).</li></ul> <p><b>Sample and reporting unit</b></p> <p>The sampling unit is a residential household.</p> <p>The reporting unit is a private household, and in it one selected person (respondent) — an individual (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.</p> <p><b>Reference period</b></p> <p>The survey was carried out from 01 July to 31 December 2019.</p>	
3.2 Klasifikačný systém	
International Standard Classification of Education ISCED 2011	

### 3.3 Pokrytie štatistických oblastí a okruhov

The EHIS survey aims to collect health data for the following subject areas:

1. European Health Status Module — includes minimum european health module, diseases and chronic conditions, accidents and injuries, absence from work (due to health problems), functional limitations, personal care activities, household activities, pain and mental health;
2. European Health Care Module — includes use of inpatient and day care, use of ambulatory and home care, medicine use, preventive services, unmet needs for health care;
3. European Health Determinants Module — includes height and weight, physical activity/exercise, dietary habits, smoking, alcohol consumption, social support, provision of informal care or assistance;
4. European Module with basic information about respondent and household — includes basic demographic and social-economic characteristics — sex, age, economic activity, type of household, highest level of education, etc..

### 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).

$BMI = \text{weight(kg)} / \text{height(m)}^2$

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 standardiized 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 reporting unit for the survey is a private household and an individual in it (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-employed household to which he/she belongs.

### 3.6 Cieľová populácia

The target population is individuals aged 15 and over living most of the year in the Slovak Republic in self-employed households.

### 3.7 Geografické pokrytie

Each part of the Slovak Republic.

Statistical phenomenos are representative at the level of regions (Bratislava, Trnava, Trenčín, Nitra, Žilina, Banská Bystrica, Prešov and Košice) - NUTS3 level.

### 3.8 Časové pokrytie

European Health Interview Survey was carried out in 2009, 2014 a 2019.

### 3.9 Bázické obdobie

## 4 Merná jednotka

Number and percentage of persons.

## 5 Referenčné obdobie

Data were collected during 6 months in 2019. Survey was carried out from 01 July until 31 December 2019.

## 6 Inštitucionálny mandát

### 6.1 Právne akty a iné dohody

The third wave of EHIS was conducted under the Framework Regulation 1338/2008 of the European Parliament and of the Council of 16 December 2008 on Community statistics on public health and health and safety at work, complemented by Commission Implementing Regulation (EU) No. 255/2018 as regards statistics based on the European Health Interview Survey, in all 28 EU Member States, Iceland, Norway and Turkey.

### 6.2 Spoločné využívanie údajov

## 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 field of legislative, methodological, organizational, technical, security, personnel, preventing leakage of confidential statistical data or 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 Section 25a and Sections 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 participated in data collection is to protect their personal data. All information collected is 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 guaranteed by Act No. 540/2001 Coll. on state statistics, as amended, and personal data protection by Act No. 18/2018 Coll. on the protection of personal data and on the amendment of certain laws. Persons who participated in the data collection and in the processing of the survey results had to follow strict principles of safe behavior when handling personal data. They are bound by confidentiality about all discovered facts, they may not use them for personal use, publish them and provide 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 the data provided by respondent cannot be directly or indirectly identified.

## 8 Politika zverejňovania

### 8.1 Kalendár prvého zverejnenia

The calendar contains the timetable for the first publication of selected indicators. The data were published at 9:00 a.m. on the SO SR website ( [www.statistics.sk](http://www.statistics.sk) ) in the section Catalog of informative reports and were 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

### 10.2 Publikácie

### 10.3 On-line databázy

Selected results from the EHIS survey are published on the website of the SO SR in the section [Indicators](#).

Results from the EHIS 2019 survey are processed into the form of anonymized microdata, data are protected in a such way to minimize the risk of identification of the statistical units to which they relate, to preserve the greatest possible informational value of the microdata. Access to anonymized microdata can be approved by the Statistical Office of the Slovak Republic to research subjects based on the fulfillment of the conditions for providing access to confidential statistical data for scientific purposes.

Access to anonymized microdata for scientific purpose can be requested by following research subjects:

- universities and other educational organisations of higher education,
- organizations or public 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 sample 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 mikróúdajom**

Approach to the national microdata from survey EHIS 2019 — yes.

Who has the right to access - scientists, institutions, universities.

Conditions of access to data — bilateral signed agreement.

Accompanying information to data - microdata are without direct identifier.

According recommendations from Eurostat.

#### **10.5 Iné**

#### **10.6 Dokumentácia o metodike**

Links on methodological notes about survey and its characteristics are on official website [www.statistics.sk](http://www.statistics.sk).

#### **10.7 Dokumentácia o kvalite**

The Statistical Office of the Slovak Republic is holder of certificate that confirms that the office meets the requirements of the international standard ISO 9001:2015 in organizing, obtaining, processing and providing 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 investigation, 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 level. The final validation of EHIS 2019 microdata at national level was carried out using Eurostat's EDAMIS validation programme.

## 11.2 Hodnotenie kvality

In general, quality of the survey 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 insitutions,
- Ministries of the SR,
- Social partners,
- Media,
- Scientists and students,
- International organisations (OECD, WHO).

### 12.2 Spokojnosť používateľov

Continuous monitoring of user satisfaction.

### 12.3 Úplnosť štatistických informácií

#### Level of detail of NUTS

- The lowest regional level of results publishable – NUTS3
- The lowest regional level of results provided by the researcher – NUTS3

## 13 Presnosť a spoľahlivosť

### 13.1 Celková presnosť

The EHIS 2019 survey was carried out in accordance with the relevant regulation (Commission Regulation (EU) No. 2018/255 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 3rd wave of the EHIS survey 2019 (Methodological manual EHIS wave 3 and EHIS wave 3 – model questionnaire). Data processing, data validation and transfer to Eurostat were carried out in accordance with valid Eurostat work manuals – EHIS wave 3 Data delivery quidelines, EHIS wave 3 Validation rules. The final data validation was carried out in the EDAMIS application.

### 13.2 Výberové chyby

#### Sampling errors– indicators

Indicator/ sub-indicator (variables from which	Number of respondents n (unweight)	Estimated proportion p (weight)	Standard error SE	95% confidence interval	Design effect deff
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indicator is derived)					
<b>Respondents aged 15+ in good or very good health (HS1)</b>					
<b>All</b>	3 251	66,5	0,66	64,7 68,4	1,1
<b>Women</b>	1 774	62,7	0,90	60,4 65,1	1,1
<b>Men</b>	1 477	70,6	0 97	68,0 73,3	1,0
<b>Respondents aged 15+ with longstanding illness or health problems (HS2)</b>					
<b>All</b>	3 410	53,7	0,75	52,4 55,1	1,3
<b>Women</b>	2 115	58,2	0,99	56,4 60,0	1,3
<b>Men</b>	1 295	48,9	1,13	46,9 51,0	1,2
<b>Respondents aged 15+ that were severely limited in activities people usually do because of health problems for at least past 6 months (HS3)</b>					
<b>All</b>	<b>655</b>	<b>9,6</b>	<b>0,39</b>	<b>8,9 10,4</b>	<b>1,0</b>
<b>Women</b>	432	11,5	0,57	10,5 12,6	1,0
<b>Men</b>	223	7,6	0,52	6,6 8,6	0,9
<b>Respondents aged 15+ having been hospitalized in the past 12 months (HO1) (men and women)</b>	737	11,8	0,45	10,9 12,6	1,1
<b>Respondents aged 18+ who are obese (BMI &gt; = 30, where BMI = BM2 in kg / (BM1</b>	1 202	19,1	0,55	18,0 20,2	1,1

in m * BM1 in m) (men and women)					
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### 13.3 Nevýberové chyby

#### Non-sampling errors

Non-sampling errors are errors in detection estimates that cannot be attributed to sample selection. Such errors can be either coverage errors, measurement errors, non-response errors, processing errors, or model assumption errors.

##### 1. Coverage errors

The starting data for the support of the selection are data from the 2011 Census. The Census includes all dwellings, which are divided into inhabited, uninhabited and institutionalized households.

##### 2. Measurement errors

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

- a. Questionnaire
- b. Interviewers
- c. Respondents
- d. Data collection — quality control of fieldwork

##### a. Questionnaire

The EHIS 2019 questionnaire was compiled in accordance with Commission Regulation (EU) No. 2018/255 and the Eurostat methodology for the implementation of the 3rd wave of surveys (EHIS model questionnaire for the 3rd wave of surveys). When compiling the questionnaire, all variables required by the relevant regulation were taken into account and all proposed modules and bounces (filters) were accepted.

The draft of the EHIS 2019 questionnaire was cognitively tested only at the level of the headquarters of the SO SR, and the testing was aimed at checking the quality and comprehensibility of the translation of the questions into the national language. Cognitive testing did not check the questionnaire in its entirety, but only the questions for which there was a methodological change compared to the previous wave of research carried out in 2014 and newly included questions.

##### b. Interviewers

A total of 146 interviewers took part in the EHIS 2019 survey — internal employees of the Department of field surveys statistics of the Regional Office of the SO SR in Banská Bystrica and employees of the data collection and field surveys departments of all regional offices.

##### c. Respondents

The SO SR informed the affected municipalities and households about the implementation of the EHIS 2019 survey in the form of a letter (letter to mayors/mayors of municipalities, letter to respondent's households). In addition, the investigation was promoted through various regional and national media: print, radio, and television.

During the visit, the interviewers handed over promotional materials to the households (a pen and a leaflet about the EHIS survey), which were not only informative but also motivating for cooperation. In general, as in other sample surveys, respondents' fear of misuse of data for other than statistical purposes and lack of confidence in the anonymity of the survey also play a role — respondents consider the requested health information quite personal.

In the case of the sample survey of EHIS 2019, 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 question modules were considered very sensitive by the respondents.

#### **d. Data collection**

Data collection was carried out from 01 July until 31 December 2019.

Data collection was carried out in 2 ways — in-person interview using a paper questionnaire (PAPI) and in-person interview using an electronic questionnaire created in the BLAISE environment (CAPI). Part of the questionnaire, specifically the 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 the respondent questions directly). After filling out, the respondent put the questionnaire in a paper envelope, sealed it and handed it to the interviewer, who marked the envelope with the corresponding identification number of the household. In this way, the anonymity of collected data on smoking and alcohol consumption was fully ensured.

Within the EHIS 2019 questionnaire, there were also open questions with the need for additional coding.

### **3 . N on-response rate**

#### **a. Unit non-response rate**

The overall unit non-response rate for the 2019 EHIS was 1.12. 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 2019 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, in the weekend),

- promotion of the investigation at the national and regional level and informing about the visit to the selected household by letter, informing the mayors/mayors of the municipalities about the visit to the households in the selected municipality,
- an effort to motivate the 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 0,1 %	Minimum 0,00 %	Maximum 1,56 %
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Total item non-response rate for all EHIS variables (including all technical and main social variables) (unweight):

Average 0,09 %	Minimum 0,00 %	Maximum 1,56 %
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### **4. Processing errors**

For EHIS 2019, a programme created in the BLAISE environment was used to record data. The software contains the following types of controls: data integrity check, duplicate identification, random checks, checks for permissible values and logic checks.

Errors caused by data logging have been removed. By monitoring errors in The period of start and the data recording phase, these errors were analyzed. Subsequently, the situation with data recording was improved. A final database was created at the centralized level. Logical checks, corrections, excess weighting and imputations were performed using the SAS system.

### **5. Imputations – rate**

In EHIS 2019 we didn't use imputation for missing variables.

### **6. Seasonal adjustment**

Not applicable.

## 14 Včasnosť a dochvilnosť

### 14.1 Včasnosť

EHIS 2019 microdata were sent to Eurostat in accordance with the requirement defined by Commission Regulation (EU) No. 2018/255 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 - within the required deadline within 9 months from the end of the national collection the SO SR data transfer took place on 28/08/2020 via the EDAMIS application.

The period of the start and the end of the individual stages of EHIS 2019 survey	Start (month/year)	End (month/year)
A. Survey preparation level (preparation of questionnaire, methodological manuals)	10/2018	06/2019
B. Data collection (fieldwork)	07/2019	12/2019
C. Processing level (data recording, validation, editation, imputations etc.)	01/2020	08/2020
D. Delivery of microdata to Eurostat (date of the first transfer and the last transfer of data — data validated by Eurostat)		08/2020
E. Dissemination of national results	01/2021	

### 14.2 Dochvilnosť

## 15 Porovnateľnosť a koherentnosť

### 15.1 Geografická porovnateľnosť

EHIS 2019 microdata are comparable from the point of view of geographical regions within the Slovakia. The data are representative up to the NUTS3 level.

### 15.2 Porovnateľnosť v čase

Results from the 3rd wave of the survey are comparable with the previous waves in 2014 a 2009.

### 15.3 Prierezová koherentnosť

Under the conditions of the Slovakia, the first survey was carried out in 2009. The data of the EHIS 2019 survey can be compared with the data of the second wave of the EHIS 2014 implementation (with the exception of newly included variables in the EHIS 2019 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 2019 survey can be compared with the MEHM indicators from the EU SILC 2019 survey.

#### 15.4 Vnútrotná koherentnosť

### 16 Náklady a záťaž respondentov

Total costs for realisation of survey EHIS 2019 were approximately 320 000 EUR.

### 17 Revízia údajov

#### 17.1 Politika revízií

#### 17.2 Revízia údajov v praxi

### 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 new network was a set of residential households, created from the database of residential households of the 2011 Census. Each dwelling was uniquely identifiable by address.

In determining the type of unit selection, account was taken of the 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) three-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 SR.

- proportional – collection was proportional to the number of dwellings in each loss.
- 3-stage random selection pretended:
- *I. stage*: random selection of census districts;
- *II. stage* : i n each census district selected, residential households were randomly selected ;
- *III. stage* : in each selected households was randomly individual selected.

### **Weighting methodology**

The baseline weights of selected individuals were calculated based 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](http://www.statistics.sk) ).

Factors used for calibration on NUTS 3 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 inactive persons

- level of education:

2 categories:

ISCED 0 – 4  
 ISCED 5 - 8

## **18.2 Periodicita zberu údajov**

5-year periodicity

## **18.3 Zber údajov**

### **Data collection methods: brief description**

Data were 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).

## **18.4 Validácia údajov**

Data control and validation were carried out at the level of data collection and processing. The data was checked continuously during 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.

#### **18.5 Spôsob spracovania údajov**

#### **18.6 Úprava údajov**

### **19 Poznámka**