This background article explains the data from the **European health interview survey (EHIS)**, a general population survey that provides information on health status, health determinants and healthcare activities in the **European Union (EU)**.

The article provides information on the main features of these data, their historical development and current legal basis, some main methodological features, information concerning data quality and finally an overview of the uses of the data that come from this source.

This article is one of a set of background articles concerning the methodology for the production of health statistics in the EU and accompanies a number of statistical articles which make up an online publication on **health statistics**.

**Main features**

**Statistical objectives**

The European health interview survey aims to provide statistical data — on a harmonised basis and with a high degree of comparability between the EU Member States — supporting the monitoring of health policies on social inclusion and protection, health inequalities and healthy ageing.

**Scope of the data**

EHIS covers three broad topics: health status (including activity limitations), health determinants — lifestyles and (use and limitations in access to) healthcare services.

The general coverage of the survey is the population aged 15 or over living in private households residing in the territory of the country. However this coverage was not uniform in the first wave of EHIS as some national surveys used an upper age limit or included people living in institutions like homes for the elderly.

**Development and legal basis**

**Development and history—**

The European health interview survey was developed between 2003 and 2006. It consists of four modules on health status, health determinants, health care, and background variables. These modules may be implemented nationally either as a single survey or as elements of existing surveys (such as national health interview surveys, labour force surveys or other household surveys).
The first wave of EHIS was conducted between 2006 and 2009 in 17 EU Member States as well as Switzerland (for whom no data are available) and Turkey.

The second wave is being conducted between 2013 and 2015 in all EU Member States, Iceland and Norway and the survey should subsequently be run at regular five-year intervals beginning in 2019. Some other countries conducted their national interview surveys using the second wave of EHIS questionnaire.

Legal basis

The first wave was conducted on the basis of a gentlemen’s agreement, in other words, without a legal obligation.

According to Regulation 1338/2008 of the European Parliament and of the Council on Community statistics on public health and health and safety at work, the survey is to be conducted every five years. The second wave of EHIS is being conducted in all 28 EU Member States during the period 2013–15 according to Commission Regulation (EU) No 141/2013 and its subsequent amendment to take account of the accession of Croatia to the EU (Commission Regulation (EU) No 68/2014).

Methodology

The following refers to the implementation of the first and second waves of EHIS even though data for the second wave of EHIS have not yet been disseminated at the time of publishing this article.

Main sources

EHIS is implemented in each Member State or non-member country according to national practices: it can be conducted as a separate survey or incorporated into another, health or non-health survey. However, across the EU, the same list of variables is to be collected according to conceptual guidelines and a recommended common questionnaire.

Data are collected using national questionnaires — which may sometimes comprise more questions than EHIS — and obtained through face-to-face interviews, telephone interviews, self-administered questionnaires, or by a combination of these means.

Statistical units

The statistical unit is the individual.

Main concepts and definitions

The tables below give an overview of the topics surveyed in both waves of EHIS (it is indicted if the topic was included only in one of the two waves). Links to more detailed information is presented below under the heading further methodological information.

Health status

This topic includes different dimensions of health status and health-related activity limitations:

Health care

This topic covers the use of different types of medicines and formal and informal health and social care services, which are complemented by data on health-related expenditure, and limitations in access to and satisfaction with health care services:

Health determinants

This topic includes various individual and environmental health determinants:

Reference period
<table>
<thead>
<tr>
<th>General health status (Minimum European health module): self-perceived health, chronic morbidity and activity limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease-specific morbidity</td>
</tr>
<tr>
<td>Accidents and injuries</td>
</tr>
<tr>
<td>Health related absenteeism from work</td>
</tr>
<tr>
<td>Physical and sensory functional limitations</td>
</tr>
<tr>
<td>Personal care activities / Activities of daily living (such as eating and washing) and help received/needed</td>
</tr>
<tr>
<td>Household activities / Instrumental activities of daily living (such as preparing meals and shopping) and help received/needed</td>
</tr>
<tr>
<td>Pain</td>
</tr>
<tr>
<td>Aspect of mental health (psychological distress and mental well-being in the first wave, depressive symptoms in the second wave)</td>
</tr>
<tr>
<td>Work-related health problems (only in the first wave)</td>
</tr>
</tbody>
</table>

| Hospitalisation (in-patient and day care) |
| Consultations with doctors and dentists |
| Visits to specific non-medical health professionals (such as physiotherapists or psychologists) |
| Use of home care and home help services |
| Use of medicines (prescribed and non-prescribed) |
| Healthcare preventive actions (such as influenza vaccination, breast examination, cervical smear test and blood tests) |
| Unmet needs for health care |
| Out-of-pocket payments for medical care (only in the first wave) |
| Satisfaction with services provided by healthcare providers (only in the first wave) |
| Visits to specific categories of alternative medicine practitioners (only in the first wave) |

| Height and weight |
| Physical activity |
| Consumption of fruits, vegetables and juice |
| Smoking behaviour and exposure to tobacco smoke |
| Alcohol consumption |
| Social support |
| Provision of informal care or assistance (only in the second wave) |
| Illicit drug use (only in the first wave) |
| Environment (home and workplace exposures, criminality exposure) (only in the first wave) |
EHIS makes use of a variety of reference periods (the following refers to the second wave):

- Current period of time: some variables on health status and most variables on health determinants refer to the current (typical) situation;
- One typical week: variables related to physical activity;
- Previous 2 weeks: variables related to medicine use and mental health;
- Previous 4 weeks: variables related to pain and frequency of consultations of health professionals;
- Previous 12 months: variables related to accidents and injuries, disease-specific morbidity, most variables on health care and alcohol consumption.

Main classifications

EHIS makes use of the following international classifications:

- The regional codes are those from the classification of territorial units for statistics (NUTS) and the corresponding statistical regions for the EFTA and candidate countries;
- Educational attainment is compiled according to the 2011 version of the international standard classification of education (ISCED 2011);
- Occupation in employment uses the 2008 version of the international standard classification of occupations (ISCO-08);
- The economic sector in employment is collected according to the section level (one letter) of the 2008 version of the statistical classification of economic activities in the European Community (NACE Rev. 2).

Further methodological information

A manual for planning and implementing the second wave of EHIS is available. The first part of the manual includes conceptual guidelines, model questions and instructions for translation and interviewing. The second part deals with statistical survey guidelines.

Methodological information on the first wave of EHIS can be found through the following links:

- background and rationale of the questions;
- questionnaire;
- conceptual guidelines;
- guidelines for data delivery;
- EHIS indicators guidelines;
- EHIS data collection — surveys overview.

Data quality

The data collection methods for this survey were prepared in detail in order to take into account the issues of comparability and of harmonisation between EU Member States. As a basis for a high degree of comparability, a common questionnaire covering four modules was prepared.

In practice, the national surveys implementing the first wave of EHIS were conducted in different ways, for example in terms of the extent to which the common questionnaire was adapted and divergences from the standard coverage (reference population). Some of the practices are highlighted here.

In most cases the first wave of EHIS was conducted as a stand-alone survey, whereas in France and Germany it was integrated into existing health interview surveys. Germany, Estonia, France, Austria and Turkey excluded some parts of at least one of the four EHIS modules. In some countries a different sequence of questions was followed from that foreseen in the common questionnaire. The majority of questions which were added or modified in national questionnaires were related to socio-demographic questions such as employment and also changes to the list of chronic conditions. More information on the harmonisation of national questions with
EHIS standard questionnaire for the first wave can be found in the Comparison of EHIS source questions with national survey questions. In some cases modified questions were used in sections related to alcohol, drug consumption and health care services.

Countries used different ways of conducting the first wave of EHIS and performed differently according to various quality-related indicators, which could also have had an impact on results.

- Target population: inclusion or exclusion of people living in institutions (such as homes for the elderly).
- Various types of sampling frame were used (notably results of a population census, population registers, dwelling registers and telephone lists).
- Conducting interviews with one or more persons in the household.
- Modes of data collection: face-to-face interviews (paper and pen or computer assisted interviews) or telephone interviews, supplemented in just less than half of the national surveys by self-administered questionnaires.
- Use of proxy respondents in cases when the intended interviewee could not answer and different reasons for the use of proxy interviews; and substitution of respondents.
- Year when the survey was conducted (2006–10) and data collection period (varied from 1 to 12 months between countries).
- Unit response rates are available for 13 national surveys (from the first wave of EHIS) and these ranged from 56% to 89%.

More information on data quality can be found in a synthesis of national quality reports for the first wave.

**Data dissemination**

**Published data**

Statistical data are available in various formats. See also provides data and analysis, while Eurobase provides a set of multi-dimensional databases and information in a simpler format as main tables.

Furthermore, microdata are available for scientific purposes and more information is provided at http://ec.europa.eu/eurostat/web/microdata/overview and specifically for the EHIS at http://ec.europa.eu/eurostat/web/microdata/european-health-interview-survey.

Disseminated data are broken down by age and sex and one other dimension: educational attainment level, income quintile group or labour status.

**Time and geographical coverage**

The first wave of EHIS was carried out in the years and countries indicated below:

- 2006: Estonia and Austria
- 2007: Slovenia and Switzerland
- 2008: Belgium, Bulgaria, the Czech Republic, France, Cyprus, Latvia, Malta, Romania and Turkey
- 2009: Germany, Greece, Spain, Hungary, Poland and Slovakia.

Due to different time periods and to incomplete coverage reasons, no EU aggregates were calculated for the first wave of the EHIS.

The second wave of EHIS was implemented as follows:

- 2013: Belgium and the United Kingdom
- 2014: Bulgaria, the Czech Republic, Estonia, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland and Sweden
2015: Denmark, Germany, Ireland, Italy, Iceland and Norway.

Units

All indicators are calculated in terms of percentages.

Timing of data release

The data from the first wave of EHIS were disseminated at the latest in 2011. The dissemination of data concerning the second wave should begin at the end of 2015 and be finalised by the end 2016.

See also

Online publications

- Health in the European Union – facts and figures
- Disability statistics

Statistical articles using data from the European health interview survey

- Self-perceived health
- Functional and activity limitations
- Cardiovascular diseases
- Specific cancers
- Respiratory diseases
- Mental health and related issues
- Accidents and injuries
- Overweight and obesity
- Consultations
- Preventive services
- Medicine use
- Quality of life indicators — health

General health statistics articles

- Health statistics introduced

Database

- Health status (hlthstate)
- Health determinants (hlthdet)
- Health care (hlthcare)

Dedicated section

- Health
Methodology

- European health interview survey (EHIS) (ESMS metadata file — hlthdetesms)

External links

- European Commission — Directorate-General for Health and Food Safety — Public health — Indicators — Policy
- European Commission — Directorate-General for Health and Food Safety — Public health — ECHI — European Core Health Indicators
- European Commission — Directorate-General for Employment, Social Affairs and Inclusion — Social protection and social inclusion — EU social indicators

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