



# **DATA QUALITY POLICY OF THE CROATIAN INSTITUTE OF PUBLIC HEALTH**

**CROATIAN INSTITUTE OF PUBLIC HEALTH**

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## Introduction

The Croatian Institute of Public Health (hereinafter: CIPH) is the carrier of official health statistics in the Republic of Croatia. This means that CIPH is required to comply with legal and strategic documents pertaining to the official statistics system in Croatia, primarily the Official Statistics Act, followed by Official Statistics Development Strategy in the Republic of Croatia, Statistics Activities Programme, and Annual Statistics Activities Implementation Plan (hereinafter: ASAP).

Furthermore, the Healthcare Act stipulates that one of the tasks carried out by CIPH is proposing and implementing research in the field of healthcare with the purpose of monitoring, analysis, and assessment of the population's health, and in the field of healthcare services organisation and activities.

In addition, the Healthcare Data and Information Act (OG 14/19), among other things, stipulates the rights, obligations and responsibilities of legal and natural persons in the Croatian healthcare system regarding healthcare data and information management for the purpose of all-encompassing and efficient use of health data and information in healthcare. This is done in order to improve and maintain the health of the population in the Republic of Croatia.

The above Act also defines CIPH as the authority for collecting data on public health, health and safety at work, coordinating the creation of proposals regarding all contents or relations and process standards used in the health information system in CRO, monitoring and proposals for harmonisation of health information in CRO with legal, procedural and other EU standards, determining, updating and maintaining methodological foundations and their international compliance in collaboration with legal and natural persons in the healthcare system.

CIPH is also the national authority for proposing the purpose, form and use of public health registries and other records in healthcare, requirements for sources and manner of collecting health data, managing national public health registries and other records in healthcare with issuing mandatory expert recommendations for data collection procedures, coordinating other registries in healthcare, and preparing and implementing activities related to public health statistics within its scope of work.

Pursuant to the above Act, CIPH is also responsible for managing the National Public Health Information System (NHIS), a health data and information storage system for data processing and filing. This is done in order to meet the requirements of public health, and it is a part of the Republic of Croatia health information infrastructure. Through NHIS, management of health data has been unified for health statistics purposes. This enables multiple data integration and application of advanced analytics and non standard statistics. The system enables management of public health information and processes of recording, receiving, using and filing health data.

Official healthcare statistics provide high quality, comparable and reliable statistical data for monitoring and assessing the state of the population's health, but also for organising activities throughout the healthcare system. This is the result of procedures followed during data collection and processing.

## Quality of data

The issue of quality in CIPH and other healthcare institutions is primarily regulated by the Quality in Healthcare Act (OG 118/18) and the Ordinance on Healthcare Quality Standards and their Implementation (OG 79/11). Quality assurance is accomplished through required harmonisation with EU methodology standards and fulfilling various reporting obligations to the EU and other international bodies and organisations. Other quality aspects are within the domain of the Quality Committee consisting of representatives from each specialty within CIPH. The Committee assesses compliance with quality standards in individual activities within CIPH, participates in external quality assessments and proposes and participates in the implementation of high quality training. Another aspect in the work of the Committee is recognising the need for continuous advancement of statistical indicators carried out by CIPH.

The quality system of data collection and processing within CIPH is based on 16 principles from the European Statistics Code of Practice, published by EUROSTAT:

1. Professional Independence
  - 1.a Coordination and Cooperation
2. Mandate for Data Collection and Access to Data
3. Adequacy of Resources
4. Commitment to Quality
5. Statistical Confidentiality and Data Protection
6. Impartiality and Objectivity
7. Sound Methodology
8. Appropriate Statistical Procedures
9. Non-excessive Burden on Respondents
10. Cost Effectiveness
11. Relevance
12. Accuracy and Reliability
13. Timeliness and Punctuality
14. Coherence and Comparability
15. Accessibility and Clarity.

As the carrier of official health statistics, CIPH issues the list of research conducted each year. Guidelines, procedures and instructions for reporting units, as well as the associated forms, are publicly available on the CIPH website <https://www.hzjz.hr/suradnici/>.

Most statistical research carried out by CIPH has two-tier control of data quality. The first tier involves regional institutes of public health, which are a part of national public health network that collect statistical data from reporting units in regional self-governance and the City of Zagreb. Subsequently, they conduct quantitative and qualitative analysis of the submitted reports where a part of the analyses is automated and implemented via IT applications. Second tier quality control is carried out by CIPH.

Implementation of health statistics research within CIPH is under the authority of physicians specialised in public health, epidemiology, and other professionals working within the scope of CIPH. Research implementation also involves creating and interpreting statistical results and reports. In research implementation, the above specialists work with other qualified medical and non-medical personnel, as required. This ensures that, in terms of scope and quality, the level of education and competence absolutely meets the requirements of the statistical profile. The number and profile of employees is defined in CIPH internal rules.

Within the past few years, CIPH has advanced the collection approach for a significant proportion of data and has almost completely transitioned to electronic data collection, which improved data quality and increased the ability for their use.

With the purpose of reducing the burden posed on the reporting units, CIPH encourages and uses, whenever possible, already available data which do not require additional filling out of reports. This reduces the possibility of errors and improves data quality.

## **Methodology**

CIPH generates official health statistics in a way that ensures comparability in time and complete national coverage. In extreme cases when the above task cannot be accomplished, the reason thereof is always stated, e.g. changes in the manner of data collection, changes in data processing methodology etc.

CIPH regularly and actively cooperates with the Croatian Bureau of Statistics, the central body for official statistics in Croatia, and the European statistics system in the development and harmonisation of statistical processes and data. Changes in methodology are continuously monitored, with harmonisation of data collection and analysis in the Republic of Croatia with the requirements set by EUROSTAT, OECD and other EU bodies and international organisations.

## **Data protection**

CIPH internal rules define the contractual obligations of personnel working at individual job positions and compensations in cases of breach of contract.

Data confidentiality is ensured throughout the process, with database access permitted only to participants in data entry, control and processing. There are mechanisms of limited access among different stakeholders in data processing with appropriate technical security, and the document Information Security Policy describes the methods for ensuring confidentiality, integrity and availability of significant information assets. When data are published, confidential data related to individual persons are protected by disabling indirect identification of a person from the published data.

With the purpose of protecting personal data from unauthorised access and processing, several CIPH documents also regulate data protection, these include: Procedure for Personal Data Management, Procedure in Cases of Personal Data Breaching, and Personal Data Protection Procedure for Microbiological Findings. It is recommended that the quantity of personal data and scope of data being processed are minimised during analysis by analysing the personal data that are being collected and assessing whether this is really necessary.

## **Disclosure of Data**

Statistical reports are regularly published within the framework of the Health Statistics Yearbook, different publications, and papers. The data disclosed in the above publications are used by the Ministry of Health, the Croatian Health Insurance Fund, and other bodies in the state and public administration, as well as the general public, with regular monitoring of viewings on CIPH web pages dedicated to public health statistics, i.e. of published data.

Under the Right of Access to Information Act (OG 25/13, 85/15 and 69/22), external users can implement their right of access to information. CIPH submits data within the legal timeframe, and legal templates for users are published on the CIPH official website.