



Quality Report for the statistical survey Births and Deaths in Republika Srpska, 2020



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Release date: 14 October 2021

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1 INTRODUCTION TO THE STATISTICAL PROCESS AND PRODUCT

1.1 Purpose of the survey

The main purpose of the survey on births and deaths is to collect data and produce demographic indicators, in order to provide data users and decision makers with necessary information.

1.2 Legal basis and responsibility of statistical institutions

The statistical survey on births and deaths in Republika Srpska for 2020 was conducted based on the Statistical Programme of Republika Srpska for the period 2018-2021 which complies with the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No 85/03).

1.3 Relevant classifications

The statistical survey on births and deaths is conducted in accordance with the methodology which complies with UN recommendations (UN Principles and Recommendations for a Vital Statistics System Revision 2).

1.4 Reporting unit

Reporting units for the collection of statistical data on births and deaths are the register offices in Republika Srpska.

1.5 Statistical observation unit

Observation units are all registered birth and death cases in Republika Srpska.

1.6 Scope and coverage

The coverage is full; thus, the survey covers all births and deaths registered in the register office records.

1.7 Statistical concepts and definitions

Some important definitions used in birth and death statistics are:

- Live birth means the birth of a child who breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles. If a child dies shortly after birth, it is registered first as a live birth and then as an infant death.
- following the recommendations of the World Health Assembly and the International Federation of Gynecology and Obstetrics (FIGO), a still-born child is considered a child, born or taken out from a mother's body, who exhibits no signs of life, i.e. not breathing nor showing any other sign of life, where pregnancy lasted more than 22 weeks (approximately 6 lunar months) and weight at child-birth was 500 g or more.
- Death means the permanent disappearance of all evidence of life at any time after live birth has taken place.
- Infant death means the disappearance of all evidence of life within one year after live birth has taken place.

2 RELEVANCE, ASSESSMENT OF USERS' NEEDS AND PERCEPTIONS

2.1 Users of statistical survey data

2.1.1 Key users of statistical survey data

Key users of birth and death statistics are:

- Government and other public administration institutions, such as the Ministry of Family, Youth and Sports, as well as other institutions at the state level,
- Science, research and education (faculties and research centres, citizens' associations),
- General public (natural persons),
- The media (broadcasters, news agencies),
- International users (EUROSTAT, WB, IMF, foreign embassies).

2.1.2 Assessment of users' needs

User requirements are met by providing both the PDF format and Excel spreadsheets containing series of data on births and deaths at the Institute's website, for easier data management and analysis. In order to facilitate the interpretation of the data, each annual release, in addition to the data tables, also contains a brief commentary and methodological instructions in Serbian and English. The thematic bulletin Demographic Statistics and the Statistical Yearbook also contain an English version.

2.1.3 Measuring users' perceptions and user satisfaction

In 2020, the Republika Srpska Institute of Statistics conducted the User Satisfaction Survey and the results are available at the official website of the Institute. There is no specific measurement of user satisfaction related to the survey on births and deaths.

2.2 Data completeness

2.2.1 Quality and performance indicator – Data completeness – rate (R1)

The rate of available statistics is the ratio of available statistics to statistics required by regulations, mainly regulations of the European Commission and other relevant international organisations.

The survey serves to calculate some of the key indicators in accordance with international standards, except for indicators that require data on the number of inhabitants by age groups because these are not available. The methodology for conducting the survey complies with international standards. Also, the survey is conducted in accordance with the requirements defined by the European Commission Regulation No 1260/2013 of the European Parliament and of the Council on European demographic statistics and the Guidelines for Producers of Statistics.

Table 1 shows that 95.5% (21/22) of the requirements from the Regulation is met.

Table 1. List of statistics to be collected in accordance with the European Commission Regulation on European demographic statistics No 1260/2013 and the Guidelines for Producers of Statistics

Live births by month of birth	YES
Live births by mother's age and mother's year of birth	YES
Live births by mother's age, mother's year of birth and mother's region (NUTS 2) of residence	YES
Live births by mother's age, mother's year of birth and mother's region (NUTS 3) of residence	YES
Live births by mother's age, mother's year of birth and mother's citizenship	YES
Live births by mother's age, mother's year of birth and live-birth order	YES
Live births by mother's age, mother's year of birth and sex of the new-born	YES
Live births by mother's age, mother's year of birth and mother's legal marital status	YES
Live births by mother's age, mother's year of birth and employment status of the mother	YES
Live births by mother's age, mother's year of birth and mother's educational attainment	YES
Live births by birth weight and duration of gestation	YES
Legally induced abortions by mother's age and previous live births	NO
Stillbirths by mother's age	YES
Deaths by sex and age	YES
Deaths by months of occurrence	YES
Deaths by sex, age, year of birth and region (NUTS 2) of residence	YES
Deaths by sex, age, year of birth and region (NUTS 3) of residence	YES
Deaths by sex, age, year of birth and country of birth	YES
Deaths by sex, age, year of birth and citizenship	YES
Deaths by sex, age, year of birth and educational attainment	YES
Infant deaths by age and sex	YES
Infant deaths by mother's educational attainment and father's educational attainment	YES

3 ACCURACY AND RELIABILITY

3.1 Sampling error

3.1.1 Quality and performance indicator – Sampling error (A1)

The survey is not a sample-based survey.

3.1.2 Activities to reduce sampling errors

See item 3.1.1.

3.2 Non-sampling errors

3.2.1 Non-sampling errors – Coverage errors

3.2.1.1 Quality and performance indicator – Over-coverage rate (A2)

Overcoverage is not possible because the coverage is created on the basis of data entered in the register office records. All duplicate records are checked when the material is controlled and cleaned, and, if necessary, deleted.

3.2.1.2 Quality and performance indicator – Common units - proportion (A3)

The statistical survey on births and deaths does not use units from multiple sources.

3.2.1.3 Undercoverage error

The statistical survey on births and deaths covers all reporting units in Republika Srpska. Thus, there are no undercoverage errors.

3.2.1.4 Measures to reduce coverage errors

See item 3.2.1.2.

3.2.2 Non-sampling errors – Measurement errors

3.2.2.1 Reasons behind measurement errors

The most common reasons behind measurement errors are:

- the person filling in the questionnaire failed to read the instructions in detail,
- lack of attention of the person filling in the questionnaire when giving answers,
- the person filling in the questionnaire does this superficially, without entering all the necessary data,
- the questionnaire is not always completed by the same person.

3.2.2.2 Measures to reduce the number of measurement errors

The most effective measure to reduce measurement errors is to provide a clear and understandable methodological explanation for completing the questionnaire, which should not be too extensive.

3.2.3 Non-sampling errors – Non-response errors

3.2.3.1 Quality and performance indicator – Unit non-response rate (A4)

As the registration of births and deaths is observed on the basis of individually completed forms, these can be observed as indicators of the unit non-response rate, and not as the non-response rate of the register office actually providing the data. In the reference year 2020, there were no unit non-response cases.

3.2.3.2 Quality and performance indicator – Item non-response rate (A5)

As for the item non-response rate for births, it can be observed according to the key variables, which are the date of birth and personal identification number. The non-response rate is 1.4% for the remaining six digits of the personal identification number. The date of birth of the children (day, month and year of birth) has no non-response / non-response rate.

As for the item non-response rate for deaths, it can be observed according to the key variables, which are the date of death and personal identification number. The non-response rate is 1% for the remaining six digits of the personal identification number. The date of death (day, month and year of death) has no non-response rate.

3.2.3.3 Procedures in the event of non-response

In case of missing individual data or inconsistent data, the reporting unit is contacted in order to complete the report in the manner required by the methodology.

3.2.3.4 Procedures to reduce non-response rates

In case of non-response, we attempt to obtain the missing data and if we fail to do so, the data is marked as unknown.

3.2.4 Revision

3.2.4.1 Quality and performance indicator – Data revision – average size (A6)

Revision was not planned nor implemented.

3.2.5 Imputation

3.2.5.1 Quality and performance indicator – Imputation - rate (A7)

The data are imputed for those variables for which the remaining data allow imputation. Currently, there is no automatic recording; thus, the imputation rate is not available.

4 TIMELINESS AND PUNCTUALITY

4.1 Timeliness of publication

The timeliness of data publication represents the time lag between the observation period the data refer to and the date of publication.

4.1.1 Quality and performance indicator – Time lag – first results (TP1)

Final data are also the first results.

4.1.2 Quality and performance indicator – Time lag – final results (TP2)

The timeliness of final survey data publication represents the time lag between the date of the first release and the end of the reference period. In this case, the time lag amounts to 115 days from the end of the reference month.

Table 2. Timeliness of publication of annual data on births and deaths

	2020
Date of final data publication	26 Apr 2021
Time lag (number of days)	T+115

4.2 Punctuality of publication

The punctuality of data publication represents the time lag between the actual release date of data and the target date for release, as announced in the Release Calendar.

4.2.1 Quality and performance indicator – Punctuality – delivery and publication (TP3)

There was no discrepancy between the date announced in the annual Release Calendar and the actual publication date.

4.3 Reasons for major delays and measures to improve timeliness and punctuality

The results are published in a timely manner. There were no delays, that is, the data were published within the set deadlines. There was no discrepancy between the date announced in the annual Release Calendar and the actual publication date.

5 COHERENCE AND COMPARABILITY

5.1 Coherence

5.1.1 Quality and performance indicator – Coherence between different data sources (CH1)

The reference survey is the annual survey in births and deaths, conducted on the full coverage of observation units for 2020.

5.1.2 Reasons for major discrepancies

There were no major discrepancies.

5.2 Comparability

5.2.1 Quality and performance indicator – Asymmetry for mirror-flows statistics (CC1)

The calculation of this indicator is not applicable in birth and death statistics.

5.2.2 Quality and performance indicator – Length of comparable time series (CC2)

Data on the number of births and deaths in Republika Srpska have been collected since 1996.

5.2.3 Breaks in time series

There have been no breaks in the series of data on births and deaths in Republika Srpska since the beginning of data collection (1996), except that data on births and deaths for the Brcko District have not been included since 2002. Since 2003, the data have been presented in accordance with the definition of permanent resident, and since 2008 subsequent entries have been excluded from processing. All methodological changes, for the purpose of data comparison, can be excluded or included in data processing and thus provide the user with a series of comparable data.

5.3 Geographical comparability

5.3.1 Comparability with the European Statistical System members

Data on the number of births and deaths are used for national purposes. All variables are fully compliant with international recommendations. Since 2002, the Republika Srpska Institute of Statistics has been submitting data to the BiH Agency for Statistics on an annual basis.

6 ACCESSIBILITY AND CLARITY, DISSEMINATION FORMATS

6.1 Releases in which data are published

Data on births and deaths are published at the website of the Republika Srpska Institute of Statistics www.rzs.rs.ba and in printed form of the annual release Births and Deaths in Republika Srpska. The release provides final data on the number of births and deaths in Republika Srpska during the calendar year.

6.2 Publications in which data are published

Data on births and deaths are published in the following publications:

- Thematic bulletin Demographic Statistics,
- Statistical Yearbook of Republika Srpska, in the part referring to births and deaths,
- This is Republika Srpska, in the part referring to births and deaths,
- Cities and Municipalities of Republika Srpska.

6.3 Online database

Online database containing data on births and deaths is available to users.

6.4 Access to microdata

Microdata are not available.

6.5 Accessibility of methodological documents

The Institute's official website, in the part referring to population statistics, provides basic concepts and definitions for this survey, as well as its Methodology.

In addition, brief metadata are also available in printed and online publications, namely in the Statistical Yearbook, the thematic bulletin Demographic Statistics and the release Births and Deaths in Republika Srpska.

6.6 Measures to improve clarity of disseminated results

The website of the Republika Srpska Institute of Statistics provides data in PDF format, in Excel spreadsheets, in graphs as well as in databases, in order to enable users to analyse and use the data.

6.7 Quality and performance indicator – Data tables – consultations (AC1)

There is no procedure for recording the number of accesses to datasets on births and deaths.

6.8 Quality and performance indicator – Metadata - consultations (AC2)

There is no procedure for recording the number of accesses to sets of metadata on births and deaths.

6.9 Quality and performance indicators – Metadata completeness - rate (AC3)

The metadata completeness rate (ESMS v.2.0) for this survey is 93.3% (56/60x100).

7 SURVEY COSTS AND BURDEN ON RESPONDENTS

7.1 Costs of survey implementation

No data are available on the costs of the Republika Srpska Institute of Statistics for the implementation of statistical activities within the scope of birth and death statistics.

7.2 Burden on respondents

No data are available on costs and burden on reporting units.

7.3 Measures to reduce costs and burden

The introduction of electronic data retrieval from the Central Database of the Ministry of Administration and Local Self-Government is the most important measure aimed at reducing costs and burden.

8 CONFIDENTIALITY

8.1 Confidentiality - policy

Data collected for the purposes of birth and death statistics are subject to the legal framework of confidentiality and are used for statistical purposes only.

The confidentiality of data and protection of personal data are regulated by the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska, No. 85/03) and the Rulebook on protection of confidential data of the Republika Srpska Institute of Statistics. The confidentiality of statistical data is also ensured by the Law on protection of personal data ("Official Gazette of BiH", No. 49/06).

8.2 Confidentiality – data handling

The confidentiality of data and protection of personal data are guaranteed by Articles 25 and 29 of the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03). The Institute informs all reporting units that the collected data will be used for statistical purposes only and that confidential data will remain confidential in accordance with this Law.

Collected, processed and stored data are considered confidential if reporting units can be directly or indirectly identified using these data, thereby disclosing individual data.

Statistical data must not be given to users if they contain or disclose confidential data. Confidential data are the data referring to a reporting unit or a group that consists of at least three reporting units, when a share of one of the units in the group exceeds 85%.

In the collection, processing and delivery of data, the Institute and authorised bodies and organisations undertake all organisational, regulatory, administrative and technical measures necessary to protect data confidentiality and to prevent unauthorized access, publication and use of data.

Persons who, while carrying out their duties, may have access to confidential data, must act in accordance with the provisions of this Law even after they cease to perform their functions

9 STATISTICAL PROCESSING

9.1 Source of data

The birth and death register records are used as a source of data for birth and death statistics

9.2 Frequency of data collection

The data on births and deaths are collected monthly.

9.3 Data collection

Data on births and deaths are taken over from the Central Database of the Ministry of Administration and Local Self-Government of Republika Srpska. The register offices fill in the application with data on births and deaths for all registered cases in the territory of Republika Srpska, using the interview method and on the basis of the reporting method (answers to some questions are taken over from the Birth Registration form or the Death Certificate). Data from the Central Database of the Ministry of Administration and Local Self-Government are taken over on the 20th of the month for the previous month.

9.4 Data validation

Data processing for birth and death statistics is organised at the headquarters of the Republika Srpska Institute of Statistics, in the Population, Education and Crime Statistics Division.

All submitted reports are recorded at the Institute's headquarters. The data on causes of death are entered continuously every month of the current year, until March of the following year. Logical controls are performed continuously after data entry. The data are compared with the data from previous years and if there are certain discrepancies the reporting unit is contacted by phone in order to resolve these.

9.5 Data compilation

In the event of non-response for an entire report or for individual questions, as well as in the event of discrepancies and errors which cannot be corrected through repeated contacts with the reporting unit, the data are imputed based on available data for the observation unit from the previous month.

9.6 Adjustments

9.6.1 *Seasonal adjustment*

Birth and death statistics are not subject to seasonal adjustment