

Standard SIMS Report:

Births Registration

Single Integrated Metadata Structure (SIMS) Report

For

Births Registration

This documentation applies to the reporting period:

2023

Last edited:

04/07/2022



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2. Introduction

Statistics on births registered in Ireland have been collected and published since 1864. This was initially done by the General Register Office. Since 1953 the reports have been compiled by the Central Statistics Office, based on administrative data supplied by the General Register Office.

3. Contact

Contact Organisation: Contact Organisation Unit: Contact Name: Contact person function: Contact person function: Contact Mail address: Contact email address: Contact Phone Number: Contact Fax Number: Central Statistics Office Life Events and Demography Sean O'Connor Statistician Central Statistics Office, Skehard Road, Cork. T12 X00E Sean.oconnor@cso.ie +353 21 4535000

4. Metadata Update

4.1. Metadata last certified

10 July 2024

4.2. Metadata last posted

July 2024

4.3. Metadata last update

10 July 2024



5. Statistical Presentation

5.1. Data Description

The main statistics on births are disseminated as part of the quarterly and annual vital statistics publications. The principal variables disseminated regarding births are presented in tables aggregated by date, month and quarter of occurrence, sex, weight, place of birth, birth parity, multiple birth, gestation period, and age, area of residence, nationality, country of birth, marital status and years married (where applicable), of parents. Crude birth rates, standardised birth rates and fertility rates are also presented.

Statistics on babies' names registered in Ireland are published on an annual basis and contain ranked information on the most popular names given to babies at birth as well as offering a regional breakdown using the residence area of the mother at birth and separate tables using the nationality of the parents to aggregate the information.

5.2. Classification System

There is a 10 category Standard Occupation Code (SOC2010) Classification used from 2012. See directly below in alphabetical order:

Standard Occupation Codes Occupations included are as listed

- 4 Administrative and secretarial occupations
- 3 Associate professional and Technical occupations
- 6 Caring, Leisure and Other service occupations
- 9 Elementary occupations
- 1 Managers, Directors and Senior officials
- 8 Process, Plant and Machine operatives
- 2 Professional occupations
- 7 Sales and Customer service occupations
- 5 Skilled trades occupations
- 0 Unemployed, Retired, Student and occupation unknown

Births are classified by the residence of the mother. The classification is at the level of counties, cities and certain towns see directly hereunder:

New NUTS 3 breakdown used from 2018

The composition of the current NUTS regions effective from 1st January 2018 is as follows:

- Northern and Western (Border and West),
- Southern (Mid-West, South-East and South-West)
- Eastern
- Midland (Dublin, Mid-East and Midland).

NUTS3 Regional Authority areas:

- Border,
- Midland,
- West,
- Dublin,
- Mid-East,
- Mid- West,
- South-East
- South-West

The current regional classification came into effect on the 1st of January 2018. Tipperary North (Mid-West region) and Tipperary South (formally in the South-East region) were amalgamated into Tipperary and classified as part of the Mid-West region. Louth has moved from the Border region to the Mid-East region.

5.3. Sector Coverage

Not applicable.

5.4. Statistical Concepts and definitions

Live Births

The terms used in relation to live births are defined as follows:

- A live birth: is defined as the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, 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, whether or not the umbilical cord has been cut or the placenta is attached.
- **Parity:** Parity is the number of previous live born children to a woman.
- **Birth Order**: Birth order is the number of live born children a woman has in the order in which they are born.
- Parity and Birth order: A first birth relates to parity 0 or birth order 1 i.e. birth order = parity + 1.
- **Crude birth rate (CBR)**: The number of live births divided by the total population at that age (or age-group), multiplied by 1,000.
- Age specific fertility rate (ASFR): The number of live births at a certain age (or age-group) divided by the female population at that age (or age-group) multiplied by 1,000.
- **Total period fertility rate (TPFR):** The sum of the ASFRs, divided by 1,000 i.e. the expected number of children a woman will have in her lifetime based on the fertility of that year.
- Age specific reproduction rate (ASRR): The number of female live births at a certain age (or agegroup) divided by the female population at that age (or age-group), multiplied by 1,000.
- **Gross reproduction rate (GRR)**: The sum of the ASRRs divided by 1,000 i.e. the expected number of daughters a woman will have in her lifetime based on the fertility of that year.
- Net reproduction rate (NRR): The sum of the products of the ASRR's and the expected number of female years to be lived at that age, divided by 1,000 i.e. the GRR adjusted for female mortality.
- The difference between the gross and the net reproduction rates is an indicator of female mortality.
- Average age at maternity: The sum of the products of the ages at maternity of live births and their ages divided by the number of live births
- Average age at maternity of first birth: The sum of the products of the ages at maternity of first live births and their ages divided by the number of first live births.
- Childbearing years are regarded as between 15 and 49.
- Live birth to mothers less than 15 are included in the age 15 category and are divided by the age 15 population. Similarly, live births to mothers aged greater than 49 are included in the age 49 category and are divided by the age 49 population.
- Average of mean ages: Live births where the age at maternity is not stated are excluded from the calculation.

5.5. Statistical Unit

The statistical units are individuals being birthed as recorded on birth notification forms.

5.6. Statistical Population

All live births in Ireland

5.7. Reference Area

Ireland, with breakdowns for Region and County



5.8. Time Coverage

2007 to date.

5.9. Base period

Not applicable.

6. Unit of Measure

Integer numbers for births, percentages for rates.

7. Reference Period

Calendar year for annual statistics and calendar quarter for quarterly dissemination.

8. Institutional Mandate

8.1. Legal Acts and other agreements

Vital Statistics releases and publications are prepared on behalf of the Minister for Employment Affairs and Social Protection in accordance with the provisions of Section 2 of the Vital Statistics and Births, Deaths and Marriages Registration Act 1952 (as amended by section 7 of the Births, Deaths and Marriages Registration Act 1972) and Section 73 (when commenced) of the Civil Registration Act 2004

8.2. Data Sharing

Not applicable.

9. Confidentiality

9.1. Confidentiality - policy

All information supplied to the CSO is treated as strictly confidential. The Statistics Act, 1993 sets stringent confidentiality standards: Information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business undertaking may be divulged to any other government department or body.

These national statistical confidentiality provisions are reinforced by the following EU legislation: Council Regulation (EC) No 223/2009 on European statistics for data collected for EU statistical purposes. Further details are outlined in the CSO's Code of Practice on Statistical Confidentiality.

For more information on the CSO confidentiality policy please visit: <u>https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/statisticalconfidentiality/</u>

9.2. Confidentiality – data treatment

All data are treated as strictly confidential in accordance with Vital Statistics and Births, Deaths and Marriages Registration Act, 1952 (as amended by section 7 of the Births, Deaths and Marriages Registration Act 1972) and Section 73 (when commenced) of the Civil Registration Act 2004.

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10. Release Policy

10.1. Release Calendar

The date of dissemination of all statistics released by CSO can be found in the Release Calendar published in CSO.ie. This calendar is regularly updated.

10.2. Release calendar access

The release calendar can be accessed via the CSO website, www.cso.ie, or directly from this link: https://www.cso.ie/en/csolatestnews/releasecalendar/

10.3. User access

In accordance with Principle 6 of the European Statistics Code of Practice all users of CSO statistics have equal access via the CSO website at the same time of 11 am. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.

The CSO recognises that in very limited circumstances a business need for pre-release access may be substantiated. Any form of pre-release access is a privilege and a strict CSO pre-release access policy is adhered to for these special requests. The full pre-release access policy can be accessed at https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/

11. Frequency of Dissemination

There is a quarterly publication of births and deaths registered in the year with a yearly summary included with the fourth quarter. This data is provisional. There is an annual report publication of births and deaths occurring in the year. This data is final.

12. Accessibility and clarity

12.1. News release

Not applicable.

12.2. Publications

The most recent Vital Statistics Quarterly and Yearly summary can be accessed at: <u>https://www.cso.ie/en/statistics/birthsdeathsandmarriages/vitalstatistics/</u>

The most recent Vital Statistics annual report can be accessed at: <u>https://www.cso.ie/en/statistics/birthsdeathsandmarriages/vitalstatisticsannualreport/</u>

The latest Baby Names release can be found at: <u>https://www.cso.ie/en/statistics/birthsdeathsandmarriages/irishbabiesnames/</u>

12.3. On-line database

All statistics contained in our releases can also be found and downloaded from our public dissemination database PxStat directly from the following links:

Births Occurrence (Final) <u>https://data.cso.ie/product/VSBO</u> Births Registered (Provisional) <u>https://data.cso.ie/product/VSBR</u>



Births, Deaths and Marriages <u>https://data.cso.ie/product/VSBDM</u> Irish Baby Names <u>https://data.cso.ie/product/IBN</u>

12.3.1. AC 1. Data tables - consultations

The following tables display information on the number of accesses to the different Vital Statistics releases during the period 01/01/2024 and 30/06/2024:

Yearly Summary	Total views	Total users
2023	1583	844
2022	10579	5853
2021-2015 combined	2564	1544

Quarterly Vital Statistics	Total views	Total users
2023 all quarters	8152	4999
2022 all quarters	2105	1280
2021-2016 combined	520	402

12.4. Micro-data Access

Not applicable.

12.5. Other

More publications are in our archive at: <u>https://www.cso.ie/en/statistics/birthsdeathsandmarriages/archive/</u>

Specific user requests are acceded to where possible, and where confidentiality issues do not arise.

Many of the regular thematic CSO publications include tables of birth statistics. Examples are Measuring Ireland's progress, Women and Men in Ireland, and Ireland – North and South. These publications can be seen at: https://www.cso.ie/en/

12.5.1. AC2. Metadata consultations

Not calculated.

12.6. Documentation on Methodology

Documents on the Methodology used to compile this report can be found on the CSO website or by following the link: <u>https://www.cso.ie/en/methods/birthsdeathsandmarriages/livebirthsregistration/</u>

12.6.1. AC3 - Metadata completeness - rate

Not calculated.

12.7. Quality Documentation

The Quality Report for this Survey can be found on the CSO website of by following the link: <u>https://www.cso.ie/en/methods/qualityreports/livebirthsregistrationqualityreport/</u>

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13. Quality Management

13.1. Quality Assurance

Quality Management Framework

The CSO avails of an office wide Quality Management Framework (QMF). This framework allows all CSO processes and outputs to meet the required standard as set out in the European Statistics Code of Practice (ESCOP). The QMF foundations are based on establishing the UNECE's Generic Statistical Business Process Model (GSBPM) as the operating statistical production model to achieve a standardised approach to Quality Management. All and any changes implemented to CSO processes and outputs require adherence to the QMF.

13.2. Quality Assessment

Not assessed.

14. Relevance

14.1. User Needs

Vital Statistics releases and publications are prepared by the CSO on behalf of the Minister for Employment Affairs and Social Protection, in accordance with the provisions of Section 2 of the Vital Statistics and Births, Deaths and Marriages Registration Act, 1952 and Government Order SI 831 of 2007.

Statistics on births are crucial for demographic research and are also used in health research and social research.

14.1.1. Main National Users

- Government
- Other CSO sections e.g., Census, Quarterly National Household Survey (QNHS)
- Demographic Researchers, Health Researchers
- The general public
- Professional Bodies

14.1.2. Principal External Users

- European Union/Eurostat
- World Health Organisation

14.2. User Satisfaction

Not measured.

14.3. Data Completeness

Not applicable.

14.3.1. Data Completeness rate

Not calculated.



15. Accuracy and reliability

15.1. Overall accuracy

15.2. Sampling Error

Not applicable.

15.2.1. A1. Sampling error indicator

Not applicable.

15.3. Non-sampling Error

15.3.1. Coverage error

All live births occurring in Ireland are legally obliged to be registered. Non-registration is rare because of the necessity of a Birth certificate for many legal purposes.

15.3.1.1. A2. Over coverage rate

Not applicable.

15.3.1.2. A3. Common units - proportion

Not applicable.

15.3.2. Measurement error

Not applicable.

15.3.3. Non-Response Error

Not applicable.

15.3.3.1. Unit non-response rate

Not applicable.

15.3.3.2. Item non-response rate Not applicable.

15.3.4. Processing error Not applicable.

15.3.5. Model assumption error

Not applicable.



16. Timeliness and punctuality

16.1. Timeliness

Quarterly vital Statistics and the Yearly summary are usually disseminated within 5 months of the end of the time period they refer to.

The report on baby names is released approximately 2 months after the end of the reference year.

16.1.1. TP1. Time lag – First results

Not applicable.

16.1.2. TP2. Time lag - Final results

Vital Statistics Yearly Summary: + 4.5 months Vital Statistics Quarterly: +4.5 months Baby names: +2 months

16.2. Punctuality

All statistics based on Births Registration are published in accordance with the dates indicates in the CSO advance release calendar.

16.2.1. TP3. Punctuality - Punctuality - delivery and publication

0 days for all releases.

17. Comparability

17.1. Comparability - Geographical

Not applicable.

17.1.1. CC1. Asymmetry for mirror flow statistics

Not applicable.

17.2. Comparability over time

Statistics are internationally comparable and comparable over time. Some countries do not include births under a certain weight in their statistics. The CSO does not use any weight criterion in including a live birth in its statistics.

17.2.1. Length of Comparable Time series

17 years.

17.3. Coherence – cross domain

The National Perinatal Reporting System (NPRS) (<u>http://www.hpo.ie/HIPE_and_NPRS_Reports.htm</u>) also produces statistics on births, which can be compared to the numbers in CSO reports. The NPRS does not include births weighing less than 500 grams in its statistics.



17.3.1. Coherence - Sub annual and annual statistics

Annual statistics on births published by CSO are based on the same data that generates the quarterly statistics and therefore both are fully coherent.

17.3.2. Coherence with National Accounts

Not applicable.

17.4. Coherence – internal

Not applicable.

18. Cost and Burden

Vital statistics are based on administrative data, which implies zero burden on the respondents. An analysis of the cost incurred in generating the statistics has not been quantified.

19. Data Revision

19.1. Data Revision Policy

Published statistics are subject to correction and revision for a variety of reasons. The most common reasons include the receipt of additional information (for example, late survey responses) and updated seasonal factors. Occasional revisions also occur as a result of changes to definitions, methodology, classifications and general updating of statistical series.

It is recognised internationally that the existence of a sound revisions policy maintains credibility in official statistics. The CSO General Revisions Policy, which details how revisions should be managed and communicated to users, outlines the three main types of revisions:

- Planned Routine Revisions
- Planned Major Revisions
- Unplanned Revisions.

One reason for unplanned revisions occurring can be when errors are detected after publication. The 'CSO Error Correction Policy – How to deal with Publication Errors' outlines the steps taken when these errors are detected. As required under Principle 6.3 of the European Statistics Code of Practice, errors detected in published statistics are corrected at the earliest possible date and users are informed. An important step in the process is the documentation and analysis of errors that have occurred and their causes. This allows the CSO to take measures preventing similar errors from occurring in the future and uniformity in dealing with them when they do.

The data revision policy that CSO statistics adheres to can be found via the following link: <u>https://www.cso.ie/en/methods/quality/treatmentofrevisions/</u>

19.2. Data Revision Practice

Generally, there are no revisions.

19.2.1. Data Revision - Average size

Not applicable.



20. Statistical processing

20.1. Source Data

The source of the data is the information gathered on the birth notification form at the hospital where the birth occurred. Detailed information on the birth is included on the birth notification form that is provided to the General Register Office (GRO). The comprehensive data provided on the birth notification form ensures the availability of good quality data. (A copy of the birth notification form is attached to end of this document).

20.1.1. Population and sampling frame

Birth and death rates are calculated using 2021 estimated usual residence census of population figures.

Usual Residence Population concept

For the purpose of this release the population concept of usual residence has been used, i.e. all persons usually resident and present in the State on census night, plus absent persons who are usually resident in Ireland, but are temporarily away from home and outside the State on Census night. All persons are classified according to the region of their usual residence.

20.1.2. Sampling design

Not applicable.

20.1.3. Survey size

Not applicable.

20.1.4. Survey technique

Weekly files of births registered in the previous week are sent electronically from the General Register Office (GRO) to the Central Statistics Office (CSO) in encrypted xml format. This file is downloaded, decrypted and uploaded on to the CSO's Data Management System (DMS).

Reconciliation sheets containing the reference number of each birth is sent by the GRO to the CSO weekly. The number of births per the Reconciliation sheets is checked against the number of births on the DMS to ensure that numbers are the same; this is a confirmation check by the CSO to ensure that all the data sent by the GRO has been received and uploaded on to the DMS.

20.2. Frequency of data collection

Weekly

20.3. Data Collection

Every live birth occurring in Ireland must be registered with the General Register Office. The details of these birth registrations are compiled into statistical reports by the Central Statistics Office, acting on behalf of the Department of Social Protection.

20.3.1. Type of Survey/Process

Aggregation of administrative data concerning registered births.

20.3.2. Questionnaire (including explanations)

The birth registration form is generally completed by the HSE. A copy of the most current form can be found here <u>https://assets.hse.ie/media/documents/birth-registration-application-form-march-2023_1.pdf</u>

20.3.3. Survey Participation



Not applicable.

20.3.4. Data Capture

Details of the birth are captured on a birth notification form at the hospital and forwarded to the General Register Office (GRO). The birth notifications of the previous week from all registry offices are sent in a weekly encrypted XML file from the GRO to the Central Statistics Office. In the CSO the file is decrypted and uploaded to the SFTP server and data is captured in the CSO Data Capture System (DMS). A copy of the birth notification form is attached to the end of this report.

20.4. Data Validation

Each Birth is geographically coded, given a standard Occupation code for each parent, a nationality and country of birth code.

From January 2018 onwards where births take place within the State and the area of residence of the mother is outside the State, the area of residence of the mother is recorded as outside the State. Prior to this, births where the mother was residing outside the State were assigned to the location where the birth took place within the State.

The data in the data capture system file is edited to ensure that the ages of parents, number of previous children, weight and gestation periods are feasible. These details will sometimes be checked with the hospital where the birth occurred.

20.5. Data Compilation

The data received from GRO undergoes simple aggregation classified by:

- sex, weight, gestation period, place of birth
- age, area of residence, and marital status of parents
- number of previous children of mother, multiple births
- date, month and quarter of occurrence
- crude birth rates, standardised birth rates and fertility rates are also presented.

20.5.1. Imputation (for Non-Response or Incomplete Data Sets)

No imputation is carried out.

20.5.1.1. A7. Imputation rate

Not applicable..

20.5.2. Grossing and Weighting

No grossing or weighting is carried out.

20.6. Adjustment

Not applicable.

20.6.1. Seasonal Adjustment

Not applicable.

21. Comment