



**An  
Phríomh-Oifig  
Staidrimh**

Central  
Statistics  
Office

**Standard Report  
on  
Methods and Quality  
for  
Births Registration**



# **Standard Report on Methods and Quality**

## **for Births Registration**

This documentation applies to the reporting  
period:

**<2007 onwards>**

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CENTRAL STATISTICS  
OFFICE  
[www.cso.ie](http://www.cso.ie)



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## **1 Overview**

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. Statistics on births registered in Ireland have been collected and published since 1864. They provide a comprehensive picture of the number of births, and the demographic details of the parents. They are crucial for demographic research and are also used in health research and social research.

## **2 General Information**

### **2.1 Statistical Category**

Compilation based on administrative data

### **2.2 Area of Activity**

Social Statistics

### **2.3 Organisational Unit Responsible, Persons to Contact**

Vital Statistics

Sean O'Connor Tel. +353 (21) 4535295, email: [sean.oconnor@csso.ie](mailto:sean.oconnor@csso.ie)  
[VitalStats@csso.ie](mailto:VitalStats@csso.ie)

### **2.4 Objectives and Purpose; History**

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.

They provide a comprehensive picture of the number of births and the demographic details of the parents. They are crucial for demographic research and are also used in health research and social research.

Statistics on babies' names registered in Ireland have been collected and published since 1998. They are based on an analysis of the first names recorded on birth returns for registration and vital statistics.

An analysis of the top ten most popular surnames of babies' registered is also included in this babies' names publication for the year's 2014 et seq. The number of unique surnames in the data is presented for the relevant year. These unique surnames include some double-barreled surnames e.g., O'Brien-Murphy.

### **2.5 Periodicity**

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.



## **2.6 Client**

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.

## **2.7 Users**

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

## **2.8 Legal basis**

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

# **3 Statistical Concepts, Methods**

## **3.1 Subject of the Statistics**

Information on live births occurring in Ireland.

## **3.2 Units of Observation/Collection Units/Units of Presentation**

Births as recorded on birth notification forms. These 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.

## **3.3 Data Sources**

General Registration Office.



### **3.4 Reporting Unit/Respondents**

Every live birth occurring in Ireland must be registered with the General Register Office.

### **3.5 Type of Survey/Process**

Aggregation of administrative data concerning registered births.

### **3.6 Characteristics of the Sample/Process**

#### **3.6.1 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.

**Sampling frame** - Not applicable

#### **3.6.2 Sampling/Census Design**

Not applicable

### **3.7 Survey Technique/Data Transfer**

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. File is downloaded, decrypted and uploaded on to Data Capture 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.

### **3.8 Questionnaire (including explanations)**

Not applicable

### **3.9 Participation in the Survey**

Not applicable

### **3.10 Characteristics of the Survey/Process and its Results**

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.

### 3.11 The principal occupation classification groups:

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

The Standard Occupational Codes replaced the Socio-economic groupings used

prior to 2012. <https://www.hesa.ac.uk/support/documentation/occupational/soc2010>

### 3.12 Regional Breakdown of Results

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) and Eastern and Midland (Dublin, Mid-East and Midland).

**NUTS3 Regional Authority areas:** Border, Midland, West, Dublin, Mid-East, Mid- West, South-East and 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.



<b>Border</b>	Cavan	<b>Dublin</b>	Dublin City
	Donegal		Dún Laoghaire-Rathdown
	Leitrim		Fingal
	Monaghan		South Dublin
	Sligo		
		<b>Mid-East</b>	Kildare
			Meath
<b>Midland</b>	Laois		Wicklow
	Longford		Louth
	Offaly		
	Westmeath	<b>Mid-West</b>	Clare
			Limerick City and County
<b>West</b>	Galway city		Tipperary
	Galway County		
	Mayo		
	Roscommon	<b>South-East</b>	Carlow
			Kilkenny
<b>South-West</b>	Cork City		Waterford City and County
	Cork County		Wexford
	Kerry		

#### **Old NUTS 3 breakdown used to 2017**

**NUTS3 Regional Authority areas:** Border, Midland, West, Dublin, Mid-East, Mid- West, South-East and South-West

**Border:** Cavan, Donegal, Leitrim, Louth, Monaghan, Sligo.

**Midland:** Laois, Longford, Offaly, Westmeath.

**West:** Galway City, Galway county, Mayo, Roscommon.

**Dublin:** Dublin City, South Dublin, Fingal, Dún Laoghaire-Rathdown.

**Mid-East:** Kildare, Meath, Wicklow.

**Mid-West:** Clare, Limerick City, Limerick County, North Tipperary.

**South-East:** Carlow, Kilkenny, South Tipperary, Waterford City, Waterford County, Wexford.

**South-West:** Cork City, Cork County, Kerry.





## **4 Production of the Statistics, Data Processing, Quality Assurance**

### **4.1 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.

### **4.2 Coding**

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

#### **4.2a Births classified by area of residence of mother**

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.

### **4.3 Data Editing**

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.

### **4.4 Imputation (for Non-Response or Incomplete Data Sets)**

No imputation.

### **4.5 Grossing and Weighting**

No grossing or weighting.

### **4.6 Computation of Outputs, Estimation Methods Used**

Results are aggregated – no estimation used.

### **4.7 Other Quality Assurance Techniques Used**

Not applicable



## **5 Quality**

### **5.1 Relevance**

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

### **5.2 Accuracy and Reliability**

#### **5.2.1. Sampling Effect & Representativity**

Not applicable

#### **5.2.2 Non-Sampling Effects**

##### **5.2.2.1 Quality of the Data Sources used**

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 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).

##### **5.2.2.2 Register Coverage**

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.

##### **5.2.2.3 Non-response (Unit and Item)**

Not applicable

##### **5.2.2.4 Measurement Errors**

Not applicable

##### **5.2.2.5 Processing Errors**

Not applicable

##### **5.2.2.6 Model-related Effects**

Not applicable

### **5.3 Timeliness & Punctuality**

#### **5.3.1 Provisional Results**

Not Applicable



### **5.3.2 Final Results**

The annual report on Deaths, births, and stillbirths is generally published within 2 years of the end of the relevant calendar year.



## **5.4 Coherence**

The National Perinatal Reporting System (NPRS) ([http://www.hpo.ie/HIPE\\_and\\_NPRS\\_Reports.htm](http://www.hpo.ie/HIPE_and_NPRS_Reports.htm)) 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.

## **5.5 Comparability**

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.

## **5.6 Accessibility and Clarity**

### **5.6.1 Assistance to Users, Special Analyses**

Specific user requests are acceded to where possible, and where confidentiality issues do not arise. Please contact [vitalstats@cs0.ie](mailto:vitalstats@cs0.ie)

### **5.6.2 Revisions**

Generally, there are no revisions.

### **5.6.3 Publications**

#### **5.6.3.1 Releases, Regular Publications**

Vital Statistics – Quarterly  
report Report on Vital  
Statistics (annual)

The most recent versions of these reports can be  
accessed at:

<https://www.cs0.ie/en/statistics/birthsdeathsandmarriages/es/>

#### **5.6.3.2 Statistical Reports**

Statistical Yearbook

#### **5.6.3.3 Internet**

More publications are in our archive at:

<https://www.cs0.ie/en/statistics/birthsdeathsandmarriages/archive/>

Users can create their own tables from the CSO Main Data Dissemination Service (PxStat):

[PxStat](#)



#### **5.6.4 Confidentiality**

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.



## **6 Additional documentation and publications**

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/>

## Notification of Birth - Hospital Copy

TYPE OF BIRTH (YES=1. NO=2) • I. Still=2)		PLACE OF BIRTH (Hospital)		1. Birth 2. Illicit 3)		1 L_J		NAME AND _____	
SENSITIVE CASE (YES=1. NO=2)		CASE NO.		1 y 1 y 1 y 1 y		ADDRESS		HOSPITAL	
JN/ANI'S DETAILS						MOTHER'S HEALTH			
DATE OF BIRTH (DDMM/YYYY)						ANTENATAL CARE THIS PREGNANCY (Hospital/Obstetrician = 1, O.P. Only=2, Comp. Incd = 3, Nurse=4, Midwife Only, 5)			
TIME OF BIRTH						nsL			
ORDER OF BIRTH									
FORENAME(S)						1) J.E. Obstetrician DOCTOR			
SVR. NAME						DURING PREGNANCY (DDMMYYYY)			
SEX (M. i. f. = male = Z. Illicit = ., *3)						DATE OF FIRST VISIT TO HOSPITAL			
BIRTH WEIGHT						DURING PREGNANCY (DDMMYYYY)			
PDJONES STATION						WAS MOTHER IMMUNE TO RUBELLA			
FATHER'S DETAILS						METHOD OF DELIVERY (Spontaneous = 1, Breech = 2, Forceps = 3, Vag. Ext. = 4, Caesarean Sec. = 5, Other = 6)			
SURNAME						MAIN MATERNAL DISEASE OR AFFECTING INFANT			
BDMSUR.4						INFANT			
FORMER SURNAMES						OTHER MATERNAL DISEASES OR CONDITIONS AFFECTING FOETUS OR INFANT			
BIRTH SURNAME OF FATHER'S MOTHER						1371			
ADDRESS						142L			
co1JNTY						148L			
32   ..... COUNTY						149			
35   ..... NATIONALITY						150			
OCCUPATION						151			
MOTHER'S DETAILS						INFANT'S HEALTH			
SURNAME						TYPE OF FEEDING (Artificial = 1, Breast = 2, Combined = 3)			
BIRTH SURNAME						WAS BCG ADMINISTERED (Yes=1, No=2)			
FORMER SURNAMES						MAIN DISEASE OR CONGENITAL MALFORMATION AFFECTING INFANT			
BIRTH SURNAME OF FATHER'S MOTHER						OTHER DISEASES OR CONGENITAL MALFORMATIONS AFFECTING INFANT			
ADDRESS						154			
00 1/NITY						HOSPITAL			
COUNTRY						WAS ADMISSION BOOKED (Yes=1, No=2)			
56   ..... DATE OF MOTHER'S ADMISSION (DDMMYYYY)						159L			



NATIONALITY ..... 60

DATE OF MOTHER'S DISCHARGE (DDMMYYYY)

168

OCCUPATION ..... 64

NO. 4

DATE OF BIRTH (DDMMYYYY)

IF MULTIPLE BIR

No. 23 of 24

HOSPITAL MAJUTAL STATUS (Y=I, N=O, U=U)

FORMEDICAL REASONS (Y=I, N=O, U=U)

DATE OF PRESENT MAJUTAL STATUS (DDMMYYYY)

75

DATE OF LAST BIRTH (live or still) (DDMM YYYY)

83

NO. OF PREVIOUS

UVEBIJUHS

91

CHILDREN STILL LIVING

93

STILLBORN

LLJ

PERINATAL DEATH

TYPE OF DEATH (E=Stillborn, I=Stillborn, 2)

99

WAS AN AUTOPSY PERFORMED (Yes=1, No=2)

100

AGE AT DEATH

101

DAYS

102

HOURS

PLACE OF DEATH

104

IF STILLBORN

DID DEATH OCCUR BEFORE LIVERY (1)

DURING LIVERY (2) NOT KNOWN (J)

107

CAUSE OF DEATH

45

MAIN DISEASE OR CONDITION IN FETUS OR INFANT

MOTHER'S DETAILS

DATE OF INFANT'S DISCHARGE (DDMMYYYY)

6

WAS INFANT TRANSFERRED TO OTHER

3 -> wild. . . . .

1s, LJ

IP - YES - NAME OF HOSPITAL

GENERAL PRACTITIONER ATTENDED BY MOTHER

GENERAL PRACTITIONER TO ATTEND INFANT FOR IMMUNISATIONS

O.P.'s NAME AND ADDRESS