

Standard Report
on
Methods and Quality (v1)
for
Stillbirths Registration

This documentation applies to the reporting period:

<2007 onwards>

Last edited: 24/09/2009

CENTRAL STATISTICS OFFICE

Skehard Road, Cork

021 4535000

www.cso.ie

Table of Contents

1 Overview

2 General Information

- 2.1 Statistical Category
- 2.2 Area of Activity
- 2.3 Organisational Unit Responsible, Persons to Contact
- 2.4 Objectives and Purpose; History
- 2.5 Periodicity
- 2.6 Client
- 2.7 Users
- 2.8 Legal basis

3 Statistical Concepts, Methods

- 3.1 Subject of the Statistics
- 3.2 Units of Observation/Collection Units/Units of Presentation
- 3.3 Data Sources
- 3.4 Reporting Unit/Respondents
- 3.5 Type of Survey/Process
- 3.6 Characteristics of the Sample/Process
 - 3.6.1 Population and Sampling Frame
 - 3.6.2 Sampling Design
- 3.7 Survey Technique/Data Transfer
- 3.8 Questionnaire (including explanations)
- 3.9 Participation in the Survey
- 3.10 Characteristics of the Survey/Process and its Results
- 3.11 Classifications used
- 3.12 Regional Breakdown of Results

4 Production of the Statistics, Data Processing, Quality Assurance

- 4.1 Data Capture
- 4.2 Coding
- 4.3 Data Editing
- 4.4 Imputation (for Non-Response or Incomplete Data Sets)
- 4.5 Grossing and Weighting
- 4.6 Computation of Outputs, Estimation Methods Used
- 4.7 Other Quality Assurance Techniques Used

5 Quality

- 5.1 Relevance
- 5.2 Accuracy and Reliability
 - 5.2.1. Sampling Effects, Representativity
 - 5.2.2. Non-Sampling Effects
 - 5.2.2.1 Quality of the Data Sources used
 - 5.2.2.2 Register Coverage
 - 5.2.2.3 Non-response (Unit and Item)
 - 5.2.2.4 Measurement Errors
 - 5.2.2.5 Processing Errors
 - 5.2.2.6 Model-related Effects
- 5.3 Timeliness and Punctuality
 - 5.3.1 Provisional Results
 - 5.3.2 Final Results
- 5.4 Coherence
- 5.5 Comparability
- 5.6 Accessibility and Clarity
 - 5.6.1 Assistance to Users, Special Analyses
 - 5.6.2 Revisions
 - 5.6.3 Publications
 - 5.6.3.1 Releases, Regular Publications
 - 5.6.3.2 Statistical Reports
 - 5.6.3.3 Internet
 - 5.6.4 Confidentiality

6 Additional documentation and publications

1 Overview

Every stillbirth occurring in Ireland must be registered with the General Register Office. The details of these stillbirth registrations are compiled into statistical reports by the Central Statistics Office, acting on behalf of the Department of Health and Children. These reports are used by perinatal health researchers.

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

Sandra Tobin Tel. +353 (21) 4535307, email: sandra.tobin@csso.ie

2.4 Objectives and Purpose; History

While statistics of infant mortality are obtained in the course of the usual procedure for registration of deaths, which has been in operation since 1863, particulars of late foetal mortality have been obtained through a scheme of notification to the Directors of Community Care. The scheme of notifying late foetal deaths was introduced in 1957, but comparisons between different areas of the country showed marked differences in the coverage of the scheme in the early years. Consequently, the number of late foetal deaths in the early years of the scheme is believed to be understated.

In 1995 stillbirths were registered in Ireland for the first time under the Stillbirths Registration Act, 1994. The definition of a stillbirth under the Act is broader than the definition used for late foetal deaths in previous Vital Statistics Reports. Late foetal deaths were defined as foetal deaths at or over 28 weeks gestation. This definition was applied up to 1994 inclusive. Stillbirths are defined as foetal deaths weighing 500 grams or more or at gestational age of 24 weeks or more. This definition applies to stillbirth figures from 1995 onwards.

2.5 Periodicity

Statistics on stillbirths are in the annual publication of births, deaths and stillbirths.

2.6 Client

Vital Statistics releases and publications are prepared on behalf of the Minister for Health and Children in accordance with the provisions of Section 2 of the Vital Statistics and Births, Deaths and Marriages Registration Act, 1952 and Section 73 of the Civil Registration Act 2004.

2.7 Users

- Government
- Other CSO sections
- Demographic Researchers, Health Researchers
- The general public
- Professional Bodies

2.8 Legal basis

Vital Statistics releases and publications are prepared on behalf of the Minister for Health and Children in accordance with the provisions of Section 2 of the Vital Statistics and Births, Deaths and Marriages Registration Act, 1952 and Section 73 of the Civil Registration Act 2004.

3 Statistical Concepts, Methods

3.1 Subject of the Statistics

Information on stillbirths occurring in Ireland.

3.2 Units of Observation/Collection Units/Units of Presentation

Stillbirths as recorded on Birth Notification Forms and the Medical Certificate Relating to the Birth of a Stillborn Child. These are presented in tables aggregated by sex, underlying cause of stillbirth, weight, gestation period, and age, area of residence and number of previous children of mother.

3.3 Data Sources

General Register Office.

3.4 Reporting Unit/Respondents

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

3.5 Type of Survey/Process

Aggregation of administrative data concerning registered stillbirths.

3.6 Characteristics of the Sample/Process

3.6.1 Population and Sampling Frame

Not applicable

3.6.2 Sampling/Census Design

Not applicable

3.7 Survey Technique/Data Transfer

Information about stillbirths as recorded on Birth Notification Forms and the Medical Certificate Relating to the Birth of a Stillborn Child is collected electronically by the General Registration Office. This information is sent to the Central Statistics Office annually in electronic format.

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

Aggregations classified by:

- sex, underlying cause of stillbirth, weight, gestation period
- age, area of residence, socio-economic group and marital status of parents,
- number of previous children of mother.

3.11 Classifications used

Stillbirths are defined as foetal deaths weighing 500 grams or more or at gestational age of 24 weeks or more. This definition applies to stillbirth figures from 1995 onwards.

Late foetal deaths were defined as foetal deaths at or over 28 weeks gestation. This definition was applied up to 1994 inclusive.

All stillbirths registered on or after 1, January 2007 are classified according to The World Health Organisation's International Classification of Diseases, Version 10 (ICD-10).

<http://www.who.int/classifications/apps/icd/icd10online>

Stillbirths and late foetal deaths from 1979 to 2006 were coded according to ICD-9. Causes of stillbirth/late foetal death for other years were classified by earlier versions of ICD.

There is a 12 category classification of socio-economic group of parents, and a 7 category classification of principal economic status of parents.

3.12 Regional Breakdown of Results

Stillbirths are classified by the residence of the parents. The classification is at the level of counties, cities and certain towns.

4 Production of the Statistics, Data Processing, Quality Assurance

4.1 Data Capture

The hospital completes details of the birth on the Birth Notification Form. The attending physician completes the Medical Certificate Relating to the Birth of a Stillborn Child. When the stillbirth is registered the data from these forms is entered electronically by the General Registration Office.

4.2 Coding

Each stillbirth is geographically coded for the residence of the parents. The parents are also each assigned a Principal Economic Status and Socio-Economic Group code.

An Underlying Cause of Stillbirth Code is determined from the 4 lines on the medical certificate of the stillbirth. World Health Organisation rules are followed in choosing this code. Cause is coded manually for all stillbirths.

4.3 Data Editing

The EXCEL data file is edited to ensure that the ICD-10 code chosen as the underlying cause of death is an acceptable underlying cause of a stillbirth.

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

Relevant to researchers on stillbirth and infant mortality.

5.2 Accuracy and Reliability

5.2.1. Sampling Effect & Representivity

Not a sample

5.2.2 Non-Sampling Effects

5.2.2.1 Quality of the Data Sources used

The sources of the data are the attending doctor for the cause of stillbirth, and the next of kin or other qualified informant for the demographic details.

Either parent of a stillborn child may voluntarily register the stillbirth within forty-two days of the birth.. If the stillbirth is not registered within forty-two days, the hospital where the birth occurred is obliged to act as informant and register the birth.

5.2.2.2 Register Coverage

All stillbirths occurring in Ireland are legally obliged to be registered. However, there are indications that non-registration does occur.

The National Perinatal Reporting System (NPRS) (http://www.esri.ie/health_information/nprs/) also produces statistics on stillbirths, which can be compared to the numbers in these reports. The NPRS figures are derived from birth notification forms only, rather than from stillbirths registered. In recent years, the numbers of stillbirths according to NPRS reports have been higher than the numbers published in CSO reports. This suggests that there is some non-registration of stillbirths and that caution should be taken in interpreting the statistics on stillbirths in CSO reports.

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

None

5.3.2 Final Results

The annual report on births, deaths, and stillbirths includes tables on the stillbirths occurring in that year.

5.4 Coherence

The National Perinatal Reporting System (NPRS) (http://www.esri.ie/health_information/nprs/) also produces statistics on stillbirths, which can be compared to the numbers in these reports. The NPRS figures are derived from birth notification forms only, rather than from stillbirths registered. In recent years, the numbers of stillbirths according to NPRS reports have been higher than the numbers published in CSO reports. This suggests that there is some non-registration of stillbirths and that caution should be taken in interpreting the statistics on stillbirths in CSO reports.

5.5 Comparability

As cause of stillbirth coding strictly follows World Health Organisation guidelines, statistics are internationally comparable. These guidelines also ensure comparability over time.

Version 10 of ICD coding was introduced in Ireland in 2007.

Definitions of stillbirth can vary internationally, with different conditions for gestation period and/or weight, or relying only on gestation period., or relying only on weight. The World Health Organisation defines a stillbirth as the death of a foetus weighing at least 500 grams. This is the definition used in the National Perinatal Reporting System (NPRS).

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@csso.ie

5.6.2 Revisions

Generally there are no revisions.

5.6.3 Publications

5.6.3.1 Releases, Regular Publications

Annual Report on Births, Deaths and Stillbirths

http://cmintra01/cso.ie/releasespublications/pr_bdm.htm

5.6.3.2 Statistical Reports

None

5.6.3.3 Internet

Most recent publications are available at:

http://www.cso.ie/releasespublications/pr_bdm.htm

More publications are in our archive at:

http://www.cso.ie/releasespublications/pr_bdmarchive.htm

5.6.4 Confidentiality

All data are treated as strictly confidential in accordance with Part V of the Statistics Act, 1993, and Section 73 of the Civil Registration Act, 2004.

6 Additional documentation and publications

The National Perinatal Reporting System (NPRS) (http://www.esri.ie/health_information/nprs/) also produces statistics on stillbirths, which can be compared to the numbers in these reports. The NPRS figures are derived from birth notification forms, rather than from stillbirths registered. In recent years, the numbers of stillbirths according to NPRS reports have been higher than the numbers published in CSO reports. This suggests that there is some non-registration of stillbirths and that caution should be taken in interpreting the statistics on stillbirths in CSO reports.

The entries for this statistic under StatCentral (the portal to Ireland's official statistics) is at <http://www.statcentral.ie/viewStat.asp?id=209>