



Northern Ireland Birth Statistics Quality Assessment

Introduction

The purpose of this assessment paper is to inform users about the quality of Birth Statistics in Northern Ireland and associated outputs. This document provides a range of information that describes the quality of the data and details any points that should be noted when using the outputs.

Background to Vital Events Data

The Northern Ireland Statistics and Research Agency (NISRA) produce data on births, deaths, marriages, civil partnerships and adoptions from civil registration events which are registered with the General Register Office (GRO). Data is produced on a daily, weekly, monthly, quarterly and annual basis depending on user requirements.

Statistics which are produced from vital events registered in Northern Ireland are of a high quality and should have complete population coverage as it is a legal requirement to register all such events that occur in Northern Ireland.

Contacts

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Dimension	Assessment by the Author
Relevance	<p><i>The degree to which the statistical product meets user needs in both coverage and content.</i></p> <p>Registration of births in Northern Ireland is a legal requirement under the Registration of Births and Deaths (Ireland) Act, 1863. All information provided at registration, which is normally provided by one or more parents of a baby, is collected by a District Registrar employed by the District Council. During registration all information is entered on to an electronic system called the Registration and Certificate Modernisation System (RCMS), which is managed by NISRA's General Registrar Office (GRO). Statisticians within NISRA's Vital Statistics team have access to the data contained within the RCMS for analysis on behalf of the Registrar General for Northern Ireland.</p> <p>Published figures relate only to births to resident mothers and do not include births to women usually resident in Northern Ireland who give birth abroad. They do include births to women whose usual residence is outside Northern Ireland where the birth occurred in Northern Ireland. Such numbers are relatively small and are not considered to adversely affect the inferences that can be drawn from the published results.</p> <p>Key users of birth statistics include NISRA in the production of population (and in turn household) estimates/projections, the Department of Health, Social Services and Public Safety (DHSSPS) and the Department of Education to plan maternity services and future school provision respectively. Data are used, for example, to monitor teenage birth rates which are a DHSSPS key indicator. Lobby groups use birth statistics to support their cause, for example, campaigns against school closures or midwife shortages. Special interest groups, such as Birth Choice UK, use the data to provide comparisons between maternity units to help women choose where they might like to give birth. Other users include academics, demographers and health researchers, who conduct research into birth trends and characteristics. Organisations such as Eurostat and the United Nations use birth statistics to make international comparisons.</p>



Accuracy

The proximity between an estimate and the unknown true value.

All babies born in Northern Ireland must be registered within 42 days of the birth. This process is informed by the detailed information captured on the Maternity System at the time of birth, which is passed to GRO. In the event where the birth is recorded on the Maternity System, but is not registered, GRO follow this up with the parent(s) to ensure registration takes place. Any birth not registered within one year from the date of birth can be registered by GRO on behalf of the Registrar General.

Occasionally, a birth may take place outside a hospital without a midwife in attendance. These births are not recorded on the Maternity System and GRO have no knowledge of their existence until a registration takes place. The number of cases where a registration doesn't take place is believed to be relatively small and is not considered to adversely affect published results.

During the registration a provisional copy of the information is printed out before the registration is finalised and the informant is asked to check the information supplied (e.g. to check that all spellings/dates are correct). Any further errors can be addressed at this stage, before being finalised on GRO's electronic system (RCMS).

Appropriate validation checks are embedded within the RCMS to help the Registrar with this process. Information supplied at birth registration is generally believed to be correct since wilfully supplying false information may render the informant liable to prosecution for perjury.

Birth statistics are extracted directly from RCMS and are subjected to further checks by the Vital Statistics Team in NISRA's Demography & Methodology Branch. Further details of these checks are available on the NISRA website:

http://www.nisra.gov.uk/archive/demography/publications/vital_stats_QA.pdf



Timeliness and Punctuality

Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.

Timeliness

In Northern Ireland monthly birth registration totals are published on the last day of each month one month in arrears. More detailed breakdowns are published in the Registrar General Quarterly Report, published on the last working day of the quarter, one quarter in arrears. Provisional annual figures for the reference year, including detailed breakdowns, are published within 6 months of the end of the reference year. Finalised figures are published within 11 months of the end of the reporting period through the Registrar General Annual Report. Similar arrangements pertain across the rest of the UK reflecting user needs in the respective territories.

Punctuality

The Vital Statistics Publication Schedule is available on the NISRA Website. This is published at the start of each financial year at the following link:

<http://www.nisra.gov.uk/demography/default.asp.htm>

The UK National Statistics Publication Hub provides 28 days advance notice of releases.

In the unlikely event of a change to the Publication Schedule, the public would be advised of the change via the NISRA website and any pre-announced dates would be updated on the UK National Statistics' Publication Hub. A full explanation of the reason(s) for the change would be provided as set out in the Code of Practice for Official Statistics.



Accessibility and Clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.

Accessibility

The NISRA website is the primary vehicle for release of Births data in Northern Ireland. A combination of narrative, charts, graphs and data may be downloaded in PDF and Microsoft Excel. The Vital Statistics Team have commenced production of a suite of micro datasets with pivot table functionality. This allows users the flexibility of producing their own tables. See

www.nisra.gov.uk/archive/demography/publications/births_deaths/births_microdata_2012.xlsx for further details. In terms of feed back from users, a recent user satisfaction survey was conducted by the NINIS management team, the results of which can be accessed via this link NINIS User survey
<http://www.ninis2.nisra.gov.uk/eazines/images/Customer%20Survey%202014.pdf>

Births data by Northern Ireland administrative and statistical (including small area) geographies are available on the Northern Ireland Neighbourhood Information System (NINIS).

A combination of interactive maps, charts, graphs and data may be created and downloaded in Microsoft Excel, CSV & PDF formats.

Special extracts of births data for Northern Ireland are available free of charge to authorised third parties subject to approval of a Data Sharing Agreement between GRO and the third party.

Clarity

Basic quality information relevant to each release is available in the background notes of the relevant Statistical Bulletin.

See

http://www.nisra.gov.uk/archive/demography/publications/births_deaths/Births_2013.pdf



Coherence and Comparability

Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain.

The Registration of Births and Deaths (Ireland) Act, 1863 made it a legal requirement for all births to be registered from 1 January 1864. Since then legislative changes have allowed for more detailed information to be collected from the informant at registration, but the basic information remains consistent e.g. name, date of birth, mother's name etc.

Birth registrations have always been the source for birth statistics in Northern Ireland. Limited birth figures are available back to 1864, with more detailed tables being available for more recent years. Births outputs are produced using the geographic boundaries in place during the year the birth was registered. This approach means that changes in boundaries can affect the comparability of statistics over time.

There is a large degree of comparability in birth statistics between countries within the UK. Annual birth statistics for the United Kingdom and its constituent countries are all based on the details collected when births are registered. NISRA, the Office for National Statistics (ONS) and the National Records of Scotland (NRS) quality assure all data enabling comparable detailed birth statistics to be published.

For Northern Ireland and Scotland, birth statistics are based on the number of births *registered* in the reference period, while England and Wales statistics relate to the number of births *occurring* in the reference period. Any differences are relatively minor given the 42 day window to officially register a birth. Approximately 90 per cent of births are registered with one month of the date of birth. This increases to 99 per cent by day 42. Figures for the UK are produced by ONS compiling data for England and Wales, Scotland and Northern Ireland.

In co-ordination with ONS and NRS, NISRA provide data to Eurostat each year to allow publication of UK birth figures alongside those for other European countries.

The definitions and classifications used across the UK in the production of birth statistics are consistent (for example, definition of a stillbirth) but there are some differences in the methods used. For example, Northern Ireland and Scotland code 100% of job titles for creation of the Standard Occupational Classification (SOC 2010), while England and Wales code only 10% of job titles. All jurisdictions use different coding tools. ONS also impute missing values for some data items whereas NISRA and NRS carry out no imputation. These differences are believed to have a negligible impact on the comparability of the statistics and the inferences that can be drawn from the information.



Assessment of User Needs and Perceptions	<p><i>The processes for finding out about users and uses, and their views on the statistical products.</i></p> <p>All Vital Statistics publication specifically invites users to provide any feedback they might have in respect of the content, format and relevance of the release. No negative feedback has been received as part of this process. User demand for data on birth weight and gestation period has however arisen – while this information is not currently available to the Vital Statistics Team, engagement with Health Trusts is in progress to gain access to the data.</p> <p>Each year the NISRA implements a customer survey with its key and casual customers in which feedback is incorporated into future outputs where possible. The most recent survey was carried out in 2013 and results specific to Demography & Methodology Branch indicate 98.5 per cent of respondents were either <i>Satisfied</i> or <i>Very Satisfied</i> with the service provided.</p>
Performance, Cost and Respondent Burden	<p><i>The effectiveness, efficiency and economy of the statistical output.</i></p> <p>While there is a legislative requirement to register births within 42 days, there is no subsequent respondent burden unless of course they fail to fulfil their legal obligations in this respect. The production and quality assurance processes, which are considered to be both cost effective and efficient, have been streamlined wherever possible and are kept under review from a continuous improvement perspective.</p>
Confidentiality, Transparency and Security	<p><i>The procedures and policy use to ensure sound confidentiality, security and transparent practices.</i></p> <p>NISRA adhere to the United Kingdom Statistics Authority (UKSA) <i>Code of Practice for Official Statistics</i> and the <i>National Statistician’s Guidance on Confidentiality of Official Statistics</i> in the collection and dissemination of birth statistics.</p> <p>Details of Demography & Methodology Branch’s approach to data access, physical security and disclosure control are available in the <i>Confidentiality Policy for Population and Vital Statistics</i> available at the following link: http://www.nisra.gov.uk/archive/demography/Confidentiality_Policy.pdf</p>