

OECD Health Statistics 2016

Definitions, Sources and Methods

Infant mortality

The number of deaths of children aged under one year of age that occurred in a given year, expressed per 1000 live births.

Note: Some of the international variation in infant and neonatal mortality rates may be due to variations among countries in registering practices of premature infants. Most countries have no gestational age or weight limits for mortality registration. However, some countries specify limits based on some combination of gestational age, birth weight or survival.

Sources and Methods

The **Eurostat database** (accessed in April 2016) is the main data source for European countries.

Australia

Sources: Australian Bureau of Statistics. Deaths, Australia. ABS Cat. No. 3302.0. Canberra: ABS.

Further information: <http://www.abs.gov.au/>.

Minimum threshold of 22 weeks: Data not available.

Austria

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Statistics Austria, Gesundheitsstatistisches Jahrbuch (Todesursachenstatistik).

Further information: http://www.statistik.at/web_en/.

Belgium

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Statistics Belgium (former National Statistical Institute).

Methodology: Since 2010, the official numbers for livebirths and deaths are coming from the Population National Register (and not exclusively from the civil registration). Livebirths and deaths of residents taking place in foreign countries are therefore included in the statistics.

Canada

Source: Statistics Canada, Canadian Vital Statistics Birth and Death Databases.

From 1991: CANSIM Table 102-0506.

1960-1990: Selected Infant Mortality and Related Statistics, Canada, 1921-1990, Cat. No. 82-549.

Further information: <http://www.statcan.gc.ca/>.

Chile

Source: National Committee of Vital Statistics, composed of the National Institute of Statistics (INE), the Ministry of Health (MINSAL, Department of Health Statistics and Information DEIS) and the National Service of Civil Identification Registry (Servicio de Registro Civil e Identificación SRCeI).

Methodology:

- Data compilation is done jointly by the Sub-Department of Vital Statistics of INE (Instituto Nacional de Estadísticas) and the Vital Statistics Unit of the Department of Health Statistics and Information (DEIS) of MINSAL. It validates the integrity of the records by comparing them with the closing death/births certificates issued by each Office of Civil Registration (SRCeI) for each calendar year. It also validates the stability of the series and the contents of each variable while repairing the inconsistent values, which are mostly consulted at source. Through the National Unique Role (RUN, an Identity Document) several databases are joined together. This allows for the completion of missing or inconsistent information. The original records from the SRCeI identity database can thus be consulted, as well as the original manuals, especially in the case of deaths.

- 95% of Civil Registry (SRCeI) offices, which record more than 90% of vital events, have an automatic system that records all the variables of the data collection instruments for each fact of life.

- Deaths are matched up with the following databases:

- a) Hospitals,
- b) Compulsory Declaration Diseases of Universal Surveillance (“Enfermedades de Declaración Obligatoria de Vigilancia Universal”),
- c) Fatal Occupational Accidents,
- d) Legal Forensic autopsies,
- e) Traffic Accident Reports from Chilean police and with those of the complaints filed with Chilean police.

- Efforts are underway to expand access to other databases (such as the Accident Directory of the Maritime Territory, the Accident Directory of the Civil Aviation Department and complaints filed with the Investigation Police of Chile). Then, INE’s experts encode the occupation and assign an urban or rural area code, while the International Classification of Diseases (ICD-9 until 1996 and ICD-10 since 1997) encoders from Minsal DEIS do the same with the basic causes of death. After all these processes, there is generally a small number of records (less than 100 births, fewer than 40 deaths) for which residence, birth weight, gestational age and size at birth data could not be retrieved, data which ends up being attributed through specific rules. Thus, the databases become available after a year, in order to classify and release consolidated statistics.

Further information: <http://www.deis.cl/estadisticas-mortalidad/>,

http://www.ine.cl/canales/chile_estadistico/demografia_y_vitales/estadisticas_vitales/estadisticas_vitales.php and

<http://www.deis.cl/series-y-graficos-de-mortalidad> (both in Spanish).

Minimum threshold of 22 weeks:

Source: National Committee of Vital Statistics, composed of the National Institute of Statistics (INE), the Ministry of Health (MINSAL, Department of Health Statistics and Information DEIS) and the National Service of Civil Identification Registry (“Servicio de Registro Civil e Identificación”, SRCeI).


Methodology:

- Data calculated using the gestational age criteria.

Further information: Information on Vital Registries available at http://www.deis.cl/?page_id=757 (in Spanish).

Czech Republic

Source: Eurostat database. Data extracted on April 15th, 2016.

 **Break in time series in 2012:** Until March 2012, live birth was defined as a child expelled or removed out of the mother’s body, who gives sign of life (respiration, heartbeat, umbilicus pulsation, active movement of muscles) and whose birth weight is 500 grams and more or less than 500 grams, and survives for 24 hours after birth. Those surviving less than 24 hours were registered as spontaneous abortions. A fetus with no signs of life and with a birth weight of at least 1000 grams was considered a **stillbirth**. Since April 2012, live birth is defined as a child expelled

or removed out of the mother's body, who gives sign of life. Definition of live birth does not contain weight limit and gestational age. A fetus with no signs of life and with a birth weight of at least 500 grams is considered a **stillbirth**.

🔪 **Break in time series in 1965:** Until 1964, **live birth** was defined as a birth of a fetus that showed signs of life (breathing or a heartbeat), born after 28 weeks of gestation, longer than 35 cm and weighing at least 1000 grams. All fetuses not meeting the criteria of live birth but surviving at least 24 hours were considered live births. Those surviving less than 24 hours were registered as spontaneous abortions. A fetus, or at least 28 weeks gestation, that was not breathing, with a body length of at least 35 cm and with a birth weight of at least 1000 grams was considered a **stillbirth**. In 1965, the former Czechoslovakia started using the internationally recommended definition of live birth. Such change in definition resulted in a sudden jump in infant mortality rates between 1964 and 1965 in both the Czech Republic and Slovak Republic. **Live birth** child was defined as a birth of a fetus that showed signs of life (no minimum threshold). A fetus with no signs of life, born at least 28 week gestation and with a birth weight of at least 1000 grams was considered a **stillbirth**.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Czech Statistical Office, official national data on births and deaths.

Methodology: Data are counted according to a different methodology. Numbers of deaths by birthweight were used in the calculation from 2000 to 2011. Since 2012, the gestational age was used as minimum threshold in the calculation.

Denmark

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Medical Birth Register & Danish Civil Registration System.

Methodology: Gestational age is used as the threshold.

Estonia

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Sources:

From 2008: National Institute for Health Development, Causes of Death Registry and Medical Birth Registry

Until 2007: Statistics Estonia, Causes of death database.

Finland

Source: Eurostat database. Data extracted on April 15th 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: THL Medical Birth Register.

Methodology: Information on infant and neonatal mortality for the pilot data collection is taken from THL Medical Birth Register (and includes cases without information on gestational age), since the data collected by Statistics Finland do not include information on gestational age for others than deceased infants. The inclusion criteria differ slightly between these two data sources: Statistics Finland includes all births and deaths in Finland for citizens and

permanent residents, while THL Medical Birth Register includes all births and deaths in Finland without any restrictions to citizenship or residency.

France

Sources:

From 1996: Eurostat database. Data extracted on April 15th, 2016.

Until 1995: Institut national de la statistique et des études économiques (Insee).

Methodology:

Breaks in time series:

2009: In 2008, a new legislative change took place. The decree No. 2008-800 of August 20th 2008 has redefined the notion of a lifeless child. The certificate for a lifeless child is based on a medical birth certificate. The criteria (22 weeks of gestation or a 500-grams weight) are no longer taken into account.

2002: Data for the period 2002 to 2008 refer to infant mortality rates based on a minimum threshold of 22 weeks following the viability criteria defined by WHO (<http://www.insee.fr/fr/methodes/default.asp?page=sources/sou-adm-etat-civil.htm>). Until 2001, a minimum threshold of 180 days of gestation age or 28 weeks was necessary for considering a lifeless child.

Further information:

From 1996: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Until 1995: http://www.insee.fr/fr/themes/tableau.asp?reg_id=0&ref_id=NATnon02230.

Minimum threshold of 22 weeks:

Source: Insee, Données détaillées des statistiques d'état civil sur les décès en 2013, séries longues, tableau T77 : Décès d'enfants de moins d'un an selon le sexe et la durée de vie

(http://www.insee.fr/fr/themes/detail.asp?reg_id=0&ref_id=ir-socsd20133).

Germany

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Federal Statistical Office, Statistics on the natural movement of the population, internal table.

Coverage:

- Death statistics are produced from a compulsory complete count. They are based on reports from the registrar in whose district the death has taken place. The surveys are conducted decentrally by the statistical offices of the Länder. The offices exchange information so that the deaths can be shown by the Land in which the deceased person lived. Deaths of persons who lived abroad but died in Germany are not included in deaths statistics.

- Births statistics are produced from a compulsory complete count. They are based on reports from the registrar in whose district the birth has taken place. Births of mothers who live abroad but gave birth to their child in Germany are not included in births statistics. Live births include all children whose heart has beat, whose umbilical cord has pulsed or whose natural pulmonary respiration has begun after separation from the womb. The other children are considered as still births or miscarriages and are not included in this figure.

Deviation from the definition:

- In Germany data on gestational age are not available.

- From reporting year 2014 onwards, data on birth weight are no longer available.

- From reporting year 2013 onwards, data on deaths of children by birth weight are no longer available.

- Calculation of data on infant mortality: total number of deaths of children under one year of age with a birth weight of respectively 500 grams and more and 1000 grams and more, divided by the total number of live births with a birth weight of respectively 500 grams and more and 1000 grams and more, expressed per 1000 live births.

Further information: <http://www.destatis.de>.

Greece

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks: Data not available.

Hungary

Source: Eurostat database. Data extracted on April 15th, 2016.

Methodology: Since 1970, the national birth statistics have included all live births that occurred in the legal resident population. Before 1970, the vital statistics included live births occurring in the *de facto* population.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Central Statistical Office (KSH), Demographic Yearbook.

Further information: <http://www.ksh.hu>.

Iceland

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Data not available. Preliminary figures available but not published.

Coverage:

- Weight information available for about 5% of the data, no information about weeks of gestation, hence no data about minimum threshold of 24 weeks (no weight option).
- Two measurements of estimated gestational age: the traditional way and ultrasound scan. Data are collected as follows: ultrasound (89%), and if ultrasound is not known, then estimation of gestational age by the traditional way (5%), and if we have no information about weeks of gestation, then by weight (5%).

Ireland

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Israel

Source: Central Bureau of Statistics. Based on birth and death registrations.

Further information: http://www.cbs.gov.il/shnaton66/st_eng03.pdf.

Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Minimum threshold of 22 weeks:

Source: Central Bureau of Statistics. Based on death registration and birth registration (including birth weight and gestational age).

Coverage: Coverage rates of gestational age data are approximately 94% on average over the years 2000-2012.

Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Italy

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks: Data not available.

Japan

Source: Ministry of Health, Labour and Welfare, Vital Statistics of Japan (published annually).

Methodology:

- The live births are registered regardless of gestation period, so very premature babies are registered as live births.
- Note that 1966 was the year of “Hinoe-Uma” (an old superstitious belief in Japan saying that females born in the year of “C-Horse” are doomed to an ominous destiny).

Further information: <http://www.mhlw.go.jp/english/database/db-hw/vs01.html> and <http://www.e-stat.go.jp/SG1/estat/eStatTopPortalE.do>.

Minimum threshold of 22 weeks:

Source: Ministry of Health, Labour and Welfare, Vital Statistics of Japan (published annually).

Methodology: The data is submitted with the gestation period threshold, while the live births are registered regardless of the gestation period and very premature babies are registered as live births. The infant mortality rate and neonatal mortality rate by gestation period are only on deaths due to diseases i.e. it does not include death due to external causes.

Further information: <http://www.mhlw.go.jp/english/database/db-hw/vs01.html> and <http://www.e-stat.go.jp/SG1/estat/eStatTopPortalE.do>.

Korea

Sources:

From 2009: National Statistical Office, Annual Report on the Cause of Death Statistics (based on vital registration).

1993- 2008: Ministry of Health and Welfare and the Korea Institute for Health and Social Affairs, Infant Mortality Survey Report.

1970-1991: National Statistical Office, Annual Report on the Vital Statistics (based on vital registration).

Methodology:

- Information on infant deaths was gathered from various existing sources and integrated into one set, after adjusting any overlap among datasets from the various sources (medical insurance benefit data, survey data from medical facilities and vital registration data).
- Total infant deaths divided by estimated total live births based on vital registration.

Further information: <http://kosis.kr>, http://english.mohw.go.kr/front_eng/index.jsp and <http://www.kihasa.re.kr/html/english/main.jsp>.

Minimum threshold of 22 weeks:

Sources:

From 2009: National Statistical Office, Annual Report on the Cause of Death Statistics (based on vital registration) National Statistical Office, Unpublished data.

Methodology:

- Information on infant/neonatal deaths was gathered from various existing sources and integrated into one set, after adjusting any overlap among datasets from the various sources (medical insurance benefit data, survey data from medical facilities and vital registration data).
- Total infant/neonatal deaths divided by estimated total live births based on vital registration.

Further information: <http://kosis.kr>, http://english.mohw.go.kr/front_eng/index.jsp and <http://www.kihasa.re.kr/html/english/main.jsp>.

Latvia

Source: Eurostat database. Data extracted in April 2016.

Further information: <http://ec.europa.eu/eurostat/data/database> > Population and social conditions > Demography and migration (pop) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Luxembourg

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Data not available. Registration of gestational age and birth weight by the national deaths registration system by the Directorate of Health is mandatory in Luxembourg but limited to perinatal period (stillbirths and early neonatal deaths) and deaths occurring in Luxembourg. No data is available from age 10 days to 365 days and deaths from residents occurring abroad. An estimate of 30% of all deaths of resident children <1 year of age occurs in specialised centers abroad. Thus national deaths registration system data usage would underestimate the rate.

Mexico

Source: National Population Council (CONAPO), Mexico 2014: Demographic estimations 1990-2009 and Population projections 2010-2030; data from 2011 onwards estimated by the Ministry of Health of Mexico. From 2011, information from birth certificates and administrative death records is used, both are corrected for underreporting.

Methodology:

From 2011: Data come from existing administrative records and are corrected for underreporting.

1960-2010: Data come from infant deaths and live births estimated by the National Population Council and are corrected for underreporting.

Further information: <http://www.conapo.gob.mx/> (in Spanish).

Netherlands

Source: Eurostat database. Data extracted on April 15th, 2016.

Methodology: Data come from the Causes of death statistics, based on the obligatory registration in the population register. Stillbirths are obligatory registered with a minimum threshold of 24 weeks (and before 1991, 28 weeks); children who die within 7 days after birth are also included.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: The Netherlands Perinatal Registry (PRN). Data are derived from the linkage of PRN-data and Population Register (PR).

Methodology:

- In the Netherlands it is not obligatory to report to the authorities a stillborn child with a gestational period of 22-23 weeks.
- The perinatal registry includes 4 registers (midwives, obstetricians + gynaecologists, GP's and paediatricians/neonatologists) and uses the minimum threshold of 22 weeks.

New Zealand

Source: Ministry of Health (National Collections).

Methodology:

- Birth data from 1991 onwards are based on live births registered in New Zealand by the date of registration to mothers resident in New Zealand. Before 1991, birth data were based on births registered in New Zealand to mothers resident in New Zealand and mothers visiting from overseas by the date of registration. Late birth registrations are included in the denominator population.
- Death data from 1991 onwards are based on deaths registered in New Zealand of New Zealand residents by the

date of registration. Before 1991, deaths data were based on deaths registered in New Zealand of New Zealand residents and people visiting from overseas by the date of registration.

- The Ministry of Health National Collections and Reporting Team provides infant mortality figures which include late registrations of birth data, after resolving misregistered infant deaths and still births (i.e. registered as one when it is the other) based on additional information that they receive. These data processes cause delays in provision of final data (for both infant and neonatal mortality statistics).

- Data relate to the year ending in December.

Further information: <http://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/mortality-collection>.

Minimum threshold of 22 weeks:

Source: Ministry of Health (National Collections).

Methodology: Live births and deaths with no reported gestation are excluded from the gestation specific categories but included in the total mortality categories.

Norway

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

The number of deaths of children under one year of age based on a minimum threshold of 22 completed weeks of gestation (or 500 grams birthweight if gestational age is not available).

Minimum threshold of 22 weeks:

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Poland

Source: Eurostat database. Data extracted on April 15th, 2016.

Methodology:  In Poland, the criteria for registration of live births are a minimum weight of 500 grams.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Central Statistical Office of Poland (CSO).

Methodology: The CSO sources of data are "Notification of death", secondarily utilised by national statistics.

Further information: <http://stat.gov.pl/en/>.


Portugal

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Slovak Republic

Source: Eurostat database. Data extracted on April 15th, 2016.

 **Break in time series in 1965:** Until 1964, **live birth** was defined as a birth of a fetus that showed signs of life (breathing or a heartbeat), born after 28 weeks of gestation, longer than 35 cm and weighing at least 1000 grams. All fetuses not meeting the criteria of live birth but surviving at least 24 hours were considered live births. Those surviving less than 24 hours were registered as spontaneous abortions. A fetus, of at least 28 weeks gestation, that was not breathing, with a body length of at least 35 cm and with a birth weight of at least 1000 grams was considered a **stillbirth**. In 1965, the former Czechoslovakia started using the internationally recommended definition

of live birth. Such change in definition resulted in a sudden jump in infant mortality rates between 1964 and 1965 in both the Czech Republic and Slovak Republic.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Statistical Office of the Slovak Republic.

Further information: <http://portal.statistics.sk/showdoc.do?docid=6674> and <http://portal.statistics.sk/showdoc.do?docid=2434>.

Slovenia

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: National Institute of Public Health, Slovenia (Perinatal information system of the Republic of Slovenia, Notification of death, Medical Certificate of Death and cause of Death).

Methodology:

Infant mortality: Minimum threshold of 22 weeks (or 500 g weight): indicators are calculated as: [The number of deaths of children under one year of age based on a minimum threshold of 22 completed weeks of gestation in a given year] / [expressed per 1000 live births (22 completed weeks of gestation)].


Spain


Sources:

From 1975: Eurostat database. Data extracted on April 15th, 2016.

Until 1974: National Statistics Institute. Death statistics according to causes of death.

Methodology:

 Until 1975, "the foetus could only be considered born if it had a human figure and lived for twenty four hours completely separate from the womb" (Art. 30 Civil Code). The statistics on births and deaths carried out until 1975 did not meet the demographic concepts recognised internationally, as these did not include those born alive who died within 24 hours of birth (which in the Civil Code are called "aborted babies" (Art. 745)).

 **Break in time series:** Data for the period 1960-1979 may include deaths of non-residents in Spain and stillbirths whose mother was non-resident in Spain (that occurred in Spanish territory). In the same way, the ratio may include births whose mother was non-resident in Spain. From 1980, data apply exclusively to deaths of children of residents in Spain and live births whose mother was a resident of Spain.

Further information:

From 1975: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Until 1974: <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft15/p417&file=inebase&L=0>.

Minimum threshold of 22 weeks:

Source: National Statistics Institute. Death statistics according to causes of death.

Methodology:

- In Spain, only the births that have at least 500 grams at birth are recorded (whether live or dead). Deaths are recorded if the child was born alive (in other case, they are recorded as stillbirth). Data are also available regarding the weeks of gestation or weight at birth only if the death occurs within the first 24 hours of life or it is a stillbirth.

- Databases of births and deaths have been linked in order to extract the information required. Such linkage has provided no information in 13.2% of children under one year old and 12.7% of children under 28 days of life. This is the reason for the difference between our original rate of infant mortality (3.1) and the new one with at least 22 weeks of gestation (2.7), as well as our original neonatal mortality rate (2.1) and the new one with at least 22 weeks of gestation (1.8).

Sweden

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: The Swedish Medical Birth Register.

Methodology:

- The lowest gestational age in the register is 22 weeks.
- Data include only observations where information on gestational age is not missing.

Switzerland

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Sources:

2013: Federal Statistical Office, Neuchâtel, Vital Statistics.

Further information: <http://www.bfs.admin.ch/bfs/portal/en/index.html>.

From 2007 to 2012: European Perinatal Health Report 2010.

Methodology:

- Gestational age is available only since 2007.
- Small discrepancies with 2010 data published by Euro-Peristat are possible, due to special inclusion criteria applied for Euro-Peristat data. In Euro-Peristat data:
 - birth and death cases with missing gestational ages were included for the 22 weeks threshold if they had a minimum birthweight of 500 grams;
 - infant deaths following a termination of pregnancy were counted as stillbirths and therefore excluded from live births, neonatal and infant deaths cases;
 - in a few cases, where the birth of a baby was included in the official statistics, but not his/her death or the contrary, the birth inclusion status was applied to both. Here, births and deaths are counted if they are included in the official statistics, irrespective of the inclusion of the other.

Further information: <http://www.europeristat.com/>.

Turkey

Source: Eurostat database. Data extracted on April 15th, 2016.

Further information: <http://ec.europa.eu/eurostat/data/database> > Population and social conditions > Demography and migration (pop) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Minimum threshold of 22 weeks:

Source: Ministry of Health, Public Health Institution of Turkey.

Methodology:

2007-2014: Rates calculated based on the number of deaths of children under one year of age based on a minimum threshold of 22 completed weeks of gestation (or 500 grams birthweight if gestational age is not available).


Further information: <http://www.turkstat.gov.tr/PreHaberBultenleri.do?id=18623> and <http://www.hips.hacettepe.edu.tr/eng/surveys.shtml>.

United Kingdom

Sources:

From 1986: Eurostat database. Data extracted on April 15th, 2016.

Until 1985: UK Health Statistics, ONS.

 **Break in time series:** 1 October 1992: In the UK, the definition of a stillbirth was amended to cover 24 weeks gestation or more (but voluntary notification at 22 and 23 weeks is possible). Before 1992, it was 28 weeks.

Further information:

- <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database> > Demography - National data (demo) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

- <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=6637>.

Minimum threshold of 22 weeks:

Sources:

England and Wales: ONS.

Scotland: **ISD Maternity**, data available only from 2006 onwards. No data available for Northern Ireland.

United States

Sources:

1998 onwards: U.S. Department of Health and Human Services/Centers for Disease Control and Prevention/National Center for Health Statistics. Deaths: Final (several issues).

1980 to 1997: U.S. Department of Health and Human Services/Centers for Disease Control and Prevention/National Center for Health Statistics. Vital Statistics of the United States, Volume II, Mortality, and Part A (published annually).

1960-1979: U.S. Department of Health and Human Services/Centers for Disease Control and Prevention/National Center for Health Statistics. Vital Statistics of the United States, Vol. II Mortality. Unpublished data.

Coverage: National Vital Statistics Registration System.

Further information: NCHS Vital Statistics website, <http://www.cdc.gov/nchs/nvss.htm>.

Minimum threshold of 22 weeks:

Source: U.S. Department of Health and Human Services/Centers for Disease Control and Prevention/National Center for Health Statistics. Linked birth/infant death dataset (various years). Available from http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm.

Coverage: National Vital Statistics Registration System.

Methodology: Estimates exclude events with unknown (non-stated) gestational age.

Further information: Linked birth/infant death data set's website available at <http://www.cdc.gov/nchs/linked.htm>.

NON-OECD ECONOMIES

Brazil

Source: The World Bank, World Development Indicators online (accessed on June 6th, 2016).

<http://databank.worldbank.org/data/>.

Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at www.childmortality.org. Projected data are from the United Nations Population Division's World Population Prospects; and may in some cases not be consistent with data before the current year.

China

Source: The World Bank, World Development Indicators online (accessed on June 6th, 2016).

<http://databank.worldbank.org/data/>.

Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at www.childmortality.org. Projected data are from the United Nations Population Division's World Population Prospects; and may in some cases not be consistent with data before the current year.

Colombia

Source: The World Bank, World Development Indicators online (accessed on June 6th, 2016).

<http://databank.worldbank.org/data/>.

Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at www.childmortality.org. Projected data are from the United Nations Population Division's World Population Prospects; and may in some cases not be consistent with data before the current year.

Costa Rica

Source: The World Bank, World Development Indicators online (accessed on June 6th, 2016).

<http://databank.worldbank.org/data/>.

Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at www.childmortality.org. Projected data are from the United Nations Population Division's World Population Prospects; and may in some cases not be consistent with data before the current year.

India

Source: The World Bank, World Development Indicators online (accessed on June 6th, 2016).

<http://databank.worldbank.org/data/>.

Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at www.childmortality.org. Projected data are from the United Nations Population Division's World Population Prospects; and may in some cases not be consistent with data before the current year.

Indonesia

Source: The World Bank, World Development Indicators online (accessed on June 6th, 2016).

<http://databank.worldbank.org/data/>.

Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at www.childmortality.org. Projected data are from the United Nations Population Division's World Population Prospects; and may in some cases not be consistent with data before the current year.

Lithuania

Source: Eurostat database. Data extracted in April 2016.

Further information: <http://ec.europa.eu/eurostat/data/database> > Population and social conditions > Demography and migration (pop) > Mortality (demo_mor) > Infant mortality rates (demo_minfind).

Russian Federation

Sources:


2014: Federal Service of State Statistics (ROSSTAT). Tables of mortality in Russia, available at

http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1137674209312.

From 2012: Federal Service of State Statistics (ROSSTAT), Statistical Compendium "Demographic yearbook of the Russian Federation 2012", http://www.gks.ru/free_doc/new_site/population/demo/demo22/xls. Data come from the Vital Statistics Office.

1996-2011: Eurostat Statistics Database.

Until 1995: World Health Organization Europe - European health for all database (HFA-DB).

 **Break in time series in 2012** due to a change in source.

South Africa

Source: The World Bank, World Development Indicators online (accessed on June 6th, 2016).

<http://databank.worldbank.org/data/>.

Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at www.childmortality.org. Projected data are from the United Nations Population Division's World Population Prospects; and may in some cases not be consistent with data before the current year.