

Data quality, concepts and methodology: Definitions

The definitions used for the production of statistical tables of Canadian vital statistics data are based on those recommended by the World Health Organization ¹ and the United Nations. ²

Age of mother. Age the mother attained at her last birthday preceding delivery.

Birth. The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy. See also "Fetal death (stillbirth)" and "Live birth".

Birth and fertility rates

- **Age-specific fertility rate (ASFR):** The number of live births per 1,000 women in a specific age group. Five-year age groups were used in these tabulations (ranging from 15 to 19 to 45 to 49 years).
- **Age-specific fertility rate, women 15 to 19 years:** Live births to women under age 20 per 1,000 women aged 15 to 19.
- **Crude birth rate:** The number of live births per 1,000 population.
- **Total fertility rate (TFR):** An estimate of the average number of live births a woman can be expected to have in her lifetime, based on the age-specific fertility rates (ASFR) of a given year. The total fertility rate (TFR) = SUM of single year of age-specific fertility rate.

Birth weight. The first weight of the fetus or newborn obtained immediately after birth, expressed in grams.

- **Extremely low birth weight:** Birth weight under 1,000 grams.
- **Very low birth weight:** Birth weight under 1,500 grams.
- **Low birth weight:** Birth weight under 2,500 grams.
- **Normal birth weight:** Ranges from 2,500 to 4,499 grams.
- **High birth weight:** Birth weight of 4,500 or more grams.

Delivery. A delivery may consist of one or more live born or stillborn fetuses. The number of deliveries in a given period will be equal to or less than the number of births because multiple births (twins, triplets or higher-order births) are counted as single deliveries.

Fetal death (stillbirth). See Stillbirth definition.

Fetal death (stillbirth) rate. See Stillbirth rate definition.

Live birth. The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the 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.

Marital status of mother. Refers to the legal conjugal status of the mother at the time of the delivery. Persons in common-law relationships are assigned to their legal marital status category. A **single** person is one who has never been married, or a person whose marriage has been

annulled and who has not remarried. A **separated** person is legally married but is not living with his or her spouse because the couple no longer wants to live together. A **divorced** person is one who has obtained a legal divorce and has not remarried. A **married** person is one who is legally married and not separated. A person whose spouse has died and who has not remarried is **widowed**.

Mean age of mother. The mean (average) age of mother for Canada, a province or a territory is calculated by summing the mothers' ages at their last birthday preceding delivery, and then dividing the sum by the total number of live births in that jurisdiction. To estimate mid-year mean age, a statistic often used in analyses, add 0.5 to mean age.

Mean birth weight. The mean (average) birth weight for Canada, a province or a territory is calculated by summing the first weight of each live newborn (obtained immediately after birth), and then dividing the sum by the total number of live births in that jurisdiction.

Median birth weight. The median is the middle value in a set of ordered numbers (for example, newborns' birth weight ranked from lightest to heaviest). In the case of an even number of observations, the median is the average of the two middle values.

Multiple birth. A delivery that results in more than one birth, whether live born or stillborn. This includes the delivery of twins, triplets, quadruplets, quintuplets and more.

Parity of mother. The number of live births a woman has had to date (excludes fetal deaths or stillbirths). A woman with zero parity has had no live births; a woman of parity 1 has had one live birth, of parity 2, two live births, and so on. In the case of a first delivery resulting in live twins, the woman has a parity of 1 after the first twin is born and a parity of 2 after the second twin is born.

Population. Persons whose usual place of residence is somewhere in Canada, including Canadian government employees stationed abroad and their families, members of the Canadian Armed Forces stationed abroad and their families, crews of Canadian merchant vessels, and non-permanent residents of Canada.

Mid-year (July 1) population estimates are used to calculate the rates in vital statistics Tables

Provinces and territories. Unless otherwise stated, the geographic distribution of births and fetal deaths (stillbirths) in the tables of this publication is based on the mother's usual place of residence.

Nunavut came into being officially as a Territory of Canada on April 1, 1999. The name Northwest Territories applies to a Territory with different geographic boundaries before and after April 1, 1999.

Stillbirth (fetal death). Death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Only fetal deaths where the product of conception has a birth weight of 500 grams or more or the duration of pregnancy is 20 weeks or longer are registered in Canada.

In Quebec (as well as in Saskatchewan prior to 2001 and in New Brunswick prior to November 1996), only fetal deaths (stillbirths) weighing 500 or more grams must be reported, regardless of the gestation period.

Because of these differences in reporting requirements, fetal death (stillbirth) data are presented for two gestation periods: 20 or more weeks of gestation (including fetal deaths or stillbirths with unknown weeks of gestation), and 28 or more weeks of gestation (excluding unknown weeks of gestation).

Stillbirth (fetal death) rate. The number of fetal deaths (stillbirths) per 1,000 live births plus fetal deaths (stillbirths).

Type of birth. Type of birth refers to the plurality of a delivery, that is, whether the delivery results in the birth of one or more live born or stillborn infants.

Weeks of gestation. The interval, in completed weeks, between the first day of the mother's last menstrual period and the day of delivery (that is, the duration of pregnancy). It can also be any estimate of that interval, based on ultrasound, a physical examination or other method. Canadian birth registration documents do not specify how the gestational age was calculated.

Pre-term refers to a period of gestation less than 37 completed weeks;

term, 37 through 41 completed weeks; and **post-term**, 42 or more completed weeks.

Notes

1.

World Health Organization (WHO). *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision*, Volumes 1 and 2 (ICD-10). Geneva, 1992.

2.

United Nations. *Principles and Recommendations for a Vital Statistics System*. Statistical Papers, Series M, No. 19, Rev. 1. New York, 1974.