

Glossary



Glossary Terms

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

(See **HIV Disease**.)

AGE-SPECIFIC FERTILITY RATE (ASFR)

The rate of live births per 1,000 women for the specific age group. This is a more detailed measure than the crude birth rate, as it reflects variations in the birth rate by age groups of the female population.

(See ASFR under **Fertility Rate** in the Methodology section for an example.)

AGE STANDARDIZATION

Age standardization is a method of calculation which adjusts a statistical measure for differences in the age/gender structures between populations. With standardized measures, more meaningful comparisons can be made between genders, different time periods, or geographic areas because the age standardized statistic is calculated as if all populations had the same age/gender population distribution.

The age standardized measures in this report include **Age Standardized Mortality Rate (ASMR)**, **Standardized Mortality Ratio (SMR)**, **Potential Years of Life Lost Standardized Rate (PYLLSR)**, and **Potential Years of Life Lost Index (PYLLI)**. (See the above headings in the Methodology section for examples.)

AGE STANDARDIZED MORTALITY RATE (ASMR)

A summary of age-adjusted death rates by age and gender, which have been standardized to a 'standard' population (1991 Canada Census) for the purpose of rate comparisons between genders, different time periods, or different geographic locations. The ASMR is the theoretical number of deaths that would occur per 10,000 population, if the specific population had the same age structure as the standard population. Age standardization is used for comparisons because populations vary in the proportions of the various ages of the individuals that comprise them, and such differences would in themselves tend to affect the disease occurring in each of the populations.

(See also **Age Standardization** and **Standard Population**. See **Age Standardized Mortality Rate** in the Methodology section for an example.)

AIDS

(See **HIV Disease**.)

ALCOHOL-RELATED DEATHS

Alcohol-related deaths include deaths where alcohol was a contributing factor (indirectly related) as well as those due to alcohol (directly related). Alcohol-related and drug overdose deaths are the only cause of death categories that are not based entirely upon underlying causes of death.

The ICD-10 codes for deaths due to the use or abuse of alcohol (directly related) are shown in Table 39. If any of the conditions listed as directly related to alcohol are noted on the Medical Certificate as antecedent causes giving rise to the underlying cause or as other significant conditions contributing to the death, the death is considered to be indirectly related to alcohol.

Coding practices from 1995 to 1999 may have produced over-counting of alcohol-related mortality. With the introduction of ICD-10 in 2000, more specific codes are available. Currently produced data should not be used in combination with data produced prior to 2000.

ASFR

(See **Age Specific Fertility Rate**.)

ASMR

(See **Age Standardized Mortality Rate**.)

AVERAGE AGE

The average ages of brides, grooms, and mothers of newborns in this annual report are calculated based on information provided on marriage or birth registration forms. The average ages of the population living in data dissemination areas are based on the mid-year population estimates for five-year age groups.

AVERAGE AGE POPULATION

The average age of the population is a grouped average based on the mid-year population estimates for five-year age groups. This information is provided by BC Stats, Ministry of Citizens' Services.

BIRTH ORDER

Denotes the number position of the present birth relative to previous live births. That is, whether the live birth being counted is the 1st, 2nd, 3rd, etc. live born infant to a particular mother.

BIRTH RATE

The number of live births divided by the mid-year population and converted to a rate per 1,000 population.

BIRTH RELATED STATISTICS

The birth related statistics shown in this report include teenage mother, elderly gravida, C-section, low birth weight, and pre-term live birth rates.

BIRTH WEIGHT

The first weight of the fetus or newborn after birth. For live births this weight should be measured within the first hour of life before significant postnatal weight loss has occurred. Hospitals in BC measure weight in grams; the approximate equivalents in imperial measures are included below for comparisons to other jurisdictions. For statistical and risk assessment purposes, birth weights are grouped as:

- Low Birth Weight (LBW) less than 2,500 grams (< 5 lb 8 oz)
- "Healthy" Weight 2,500 to 4,499 grams (5 lb 8 oz - 9 lb 15 oz)
- High Birth Weight 4,500 grams or more (> 9 lb 15 oz)

Low birth weight is sometimes further divided into these overlapping categories:

- Extremely Low Birth Weight less than 500 grams (< 1 lb 2 oz)
- Very Low Birth Weight less than 1,500 grams (< 3 lb 5 oz)

In recent years there has been an increasing preference to identify high birth weight as Large for Gestational Age, which is above the 90th percentile of the birth weight distribution at each gestational age.

BIRTHS

(See **Total Births**.)

BREECH

A delivery in which the buttocks or feet appear first.

(See also **Mode of Delivery**.)

C-SECTION

A delivery by cesarean, involving the surgical incision of the abdomen and uterine walls.

(See also **Mode of Delivery**.)

C-SECTION RATES

The number of live births, delivered by cesarean divided by the number of live births and converted to a rate per 1,000 live births.

CESAREAN

A delivery involving the surgical incision of the abdomen and uterine walls.

See also **Mode of Delivery**.

COMMUNITY

A geographical area defined by a municipal (city, town, village, district municipality, Indian Government district, island municipality, or resort municipality) boundary. In this report, data are only provided for incorporated communities.

CONFIDENCE INTERVAL

A measure of the variability of a statistic. A wide confidence interval indicates that the statistic is likely to fall within a wide range of values, while a narrow confidence interval indicates the statistic is likely to fall within a narrow range of values. In general, statistical confidence intervals will be wider for areas with small populations or rare events than for areas with larger populations or more common events.

(See **Statistical Tests of Significance** at the end of the Methodology section.)

CONGENITAL ANOMALIES

Physical defects that existed or date from birth.

CRUDE RATES**For live births:**

The crude rate is the number of live births divided by the mid-year population and converted to a rate per 1,000 population.

For birth-related statistics (teenage mother, elderly gravida, C-section, low birth weight, and pre-term):

The rate is the number of these births divided by the number of live births and converted to a rate per 1,000 live births.

For stillbirths and perinatal deaths:

The rate is the number of stillbirths or perinatal deaths divided by the number of total births (live births plus stillbirths) and converted to a rate per 1,000 total births.

For infant deaths:

The crude rate is the number of infant deaths divided by the number of live births and converted to a rate per 1,000 live births.

For maternal deaths:

The rate is the number of maternal deaths divided by the number of live births and converted to a rate per 10,000 live births.

For deaths and mortality statistics:

The crude rate is the number of deaths divided by the mid-year population and converted to a rate per 1,000 population.

For marriages:

The crude rate is the number of marriages divided by the mid-year population and converted to a rate per 1,000 population.

DEATH RATE

The number of deaths divided by the mid-year population and converted to a rate per 1,000 population.

DEATHS DUE TO MEDICALLY TREATABLE DISEASES

(See **Medically Treatable Diseases**.)

DRUG-INDUCED DEATHS

Deaths due to drug-induced causes. This category of deaths excludes unintentional injuries, homicides, and other causes that could be indirectly related to drug use. Deaths directly due to alcohol are also excluded. The causes of death classified as being drug-induced (shown in Table 44 with their ICD-10 codes) are based on those used by the National Center for Health Statistics.¹

DRUG OVERDOSE DEATHS

Deaths where the underlying cause of death was determined to be unintentional poisoning by illicit/illegal drugs. These deaths are a small portion of the deaths due to unintentional poisoning by drugs, and exclude accidental poisoning by drugs in therapeutic use. Deaths due to conditions that may arise from substance abuse, such as Hepatitis 'B' and 'C' and HIV, are also excluded.

Drug overdose deaths can be divided according to drug type: heroin/morphine, methadone, cocaine, psychostimulants including "crystal meth" (methamphetamine hydrochloride) and "ecstasy" (methylenedioxymethamphetamine), and other mixed drugs. The ICD-10 codes for these deaths are shown in Table 46. It should be noted that specified drug (nature of injury) codes must also be listed on the Medical Certificate for the death to be considered a drug overdose.

EARLY NEONATAL DEATH

Death of a child under seven days of age.

(See also **Infant Death**.)

ELDERLY GRAVIDA

Any woman who was 35 years of age or older at the time of delivery of a live born infant.

ELDERLY GRAVIDA RATE

The number of live births delivered by women aged 35 years or older divided by the number of live births and converted to a rate per 1,000 live births.

EXPECTED CESAREAN BIRTHS

The number of live births delivered by cesarean section that would be expected to be born to residents of a sub-provincial geographic area, based on the C-section rate for the province as a whole and the number of births in the sub-provincial geographic area.

(See **Observed versus Expected Ratio** in the Methodology section for an example.)

EXPECTED DEATHS

The number of deaths expected for residents of a sub-provincial geographic area, based on the age specific mortality rates for the province as a whole and the population age structure of the sub-provincial geographic area.

(See **Standardized Mortality Ratio** in the Methodology section for an example.)

EXPECTED LOW BIRTH WEIGHT

The number of live births with low birth weight (less than 2,500 grams) that would be expected to be born to residents of a sub-provincial geographic area, based on the low birth weight rate for the province as a whole and the number of live births in the sub-provincial geographic area.

(See **Observed versus Expected Ratio** in the Methodology section for an example.)

EXPECTED MATERNAL COMPLICATIONS

The number of live births with maternal complications that would be expected to be born to residents of a sub-provincial geographic area, based on the complication rate for the province as a whole and the number of live births in the sub-provincial geographic area.

(See **Observed versus Expected Ratio** in the Methodology section for an example.)

¹National Center for Health Statistics (1993). Technical notes. Monthly Vital Statistics Report. 41 (Suppl. 7), 48.

HEALTH SERVICE DELIVERY AREA (HSDA)

A geographic subdivision of the province used by the Ministry of Health for data dissemination purposes. The 16 Health Service Delivery Areas can be aggregated into the five Health Authorities plus the provincial Health Authority, or subdivided into 89 Local Health Areas (LHAs). See Figure 2 for a map of the province by HSDAs.

"HEALTHY" WEIGHT

A birth weight of 2,500 to 4,499 grams.
(See also **Birth Weight**.)

HIGH BIRTH WEIGHT

A birth weight of 4,500 grams or more.
(See also **Birth Weight**.)

HIV DISEASE

In 1987, the World Health Organization added new codes to the International Classification of Diseases (ICD) to identify Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV). In ICD-10, these conditions are coded to B20–B24 and are called HIV disease.

HSDA

(See **Health Service Delivery Area**.)

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

The virus that causes HIV disease.

ICD-9 CODES

The World Health Organization's International Classification of Diseases, Ninth Revision. This version of ICD was used by the BC Vital Statistics Agency for coding birth complications and causes of death from 1979 until 1999. Translation tables were developed and extensive manual reviews conducted in order to recode causes of death from ICD-9 to ICD-10, permitting direct comparison of cause of death trends including deaths from 1999 and earlier that were originally coded in ICD-9.

ICD-10 CODES

The World Health Organization's International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, implemented by the BC Vital Statistics Agency on January 1, 2000. The Preamble to Appendix 2 presents a summary of ICD-10 codes.

INFANT DEATH

Death of a child under one year of age. These deaths are divided according to age at death because of the high mortality rates that occur in the periods soon after birth and because different environmental factors underlie the cause of death in the different time periods.

- Neonatal death death of children less than 28 days after birth
- Post neonatal death death of children from 28 to 364 days after birth

Neonatal deaths are further divided as follows:

- Early neonatal death death of children less than 7 days after birth
- Late neonatal death death of children from 7 to 27 days after birth

INFANT MORTALITY RATE

The number of deaths of children under one year of age expressed as a rate per 1,000 live births. The infant mortality rate is an internationally accepted indicator of the health status of a population.

LATE NEONATAL DEATH

Death of a child from 7 to 27 days of age.

(See also **Infant Death**.)

LBW

(See **Low Birth Weight**.)

LHA

(See **Local Health Area**.)

LIFE EXPECTANCY

Life expectancy at birth represents the mean number of years a birth cohort (persons born in the same year) may expect to live given the present mortality experience of a population. The life expectancy for a population is a summary measure that reflects the mortality rates for all ages combined, weighted in accordance with a life-table population structure. Life expectancy is an internationally accepted indicator of the health status of a population. Life expectancy is provided by BC Stats, Ministry of Citizens' Services.

LIVE BIRTH

The *Vital Statistics Act* defines a live birth as "The complete expulsion or extraction from its mother, irrespective of the duration of the pregnancy, of a product of conception in which, after the expulsion or extraction, there is:

- (a) breathing;
- (b) beating of the heart;
- (c) pulsation of the umbilical cord; or
- (d) unmistakable movement of voluntary muscle, whether or not the umbilical cord has been cut or the placenta attached."

LIVE BIRTH RATE

The number of live births divided by the mid-year population and converted to a rate per 1,000 population.

LOCAL HEALTH AREA (LHA)

A geographic subdivision of the province used by the Ministry of Health for data dissemination purposes. The 89 local health areas can be aggregated into 16 Health Service Delivery Areas (HSDAs) or five Health Authorities plus the provincial Health Authority. See Figure 1 for a map of the province by LHAs.

LOW BIRTH WEIGHT (LBW)

A birth weight of less than 2,500 grams. Low birth weight babies have increased risks of morbidity and premature death.

See also **Birth Weight**.

LOW BIRTH WEIGHT RATE

The number of low birth weight live born babies per 1,000 live births.

MARRIAGE RATE

The number of marriages divided by the mid-year population and converted to a rate per 1,000 population.

MATERNAL DEATH

Death of a woman while pregnant or within 42 days of termination of pregnancy from causes related to the pregnancy, but not from accidental or incidental causes.

MATERNAL DEATH RATE

The number of maternal deaths divided by the number of live births and converted to a rate per 10,000 live births.

MEDICALLY TREATABLE DISEASES, DEATHS DUE TO

Deaths due to medically treatable diseases are based on Charlton's² classification. The disease categories are ones for which mortality could potentially have been avoided through appropriate medical intervention. It should be noted that the causes are considered to have been medically treatable only if the death occurred to persons within a specified age range (see footnotes to Table 37).

The incidence of deaths from medically treatable diseases can be used by public health professionals as a way of monitoring the effect of health promotion programs.

MODE OF DELIVERY

The modes of delivery presented in this report consist of cesarean, forceps, spontaneous breech, spontaneous vertex, and vacuum (or suction).

Cesarean:

A delivery involving the surgical incision of the abdomen and uterine walls.

Forceps:

An assisted delivery employing forceps.

Spontaneous Breech:

An unassisted (spontaneous) delivery in which the buttocks or feet of the fetus appear first.

Spontaneous Vertex:

An unassisted (spontaneous) delivery in which the head of the fetus appears first.

Vacuum:

An assisted delivery employing suction or vacuum.

MODERATELY PREMATURE

A gestational age of 28 to 36 weeks.

(See also **Gestational Age**.)

MVA DEATHS

Motor Vehicle Accidental Deaths.

NATURAL POPULATION INCREASE (NPI)

The component increase in a population due to the number of live births less deaths; also called Natural Population Growth. This increase is often expressed as a rate, such as per 1,000 population. It does not include increases due to immigration or decreases due to emigration.

NEONATAL DEATH

Death of a child under 28 days of age.

(See also **Infant Death**.)

NPI

(See **Natural Population Increase**.)

OBSERVED DEATHS

The actual number of deaths that occurred to residents of a sub-provincial geographic area in a specified time period.

²Charlton, J.R.H. (1987). Avoidable Deaths and Diseases as Monitors of Health Promotion. In T. Abelin, Z.J. Brzezinski, & V. Carstairs (Eds.), *Measurement in Health Promotion and Protection* (pp.467-479). Copenhagen, Denmark: World Health Organization, Regional Office for Europe.

OBSERVED LOW BIRTH WEIGHT LIVE BIRTHS

The actual number of low birth weight live births that occurred to residents of a sub-provincial geographic area in a specified time period.

OBSERVED MATERNAL COMPLICATIONS

The actual number of maternal complications that occurred to residents of a sub-provincial geographic area in a specified time period.

OBSERVED PERINATAL CONDITIONS

The actual number of perinatal conditions that occurred to residents of a sub-provincial geographic area in a specified time period.

OBSERVED PYLL

The actual number of potential years of life lost (to age 75) from deaths that occurred to residents of a sub-provincial geographic area in a specified time period.

OUT-OF-WEDLOCK BIRTHS

Births where the mother of the baby is not lawfully married to the father of the baby.

OVERDOSE DEATHS

(See **Drug Overdose Deaths**.)

P-VALUE

The probability of rejecting the null hypothesis when a specified test procedure is used on a given data set. The data are statistically significant when the null hypothesis is rejected and not significant otherwise.

(See **Statistical Test** in the Methodology section for examples.)

PERINATAL

Pertaining to or occurring in the period shortly before, during and after birth, starting at 22 completed weeks of gestation and ending 7 completed days after birth.

PERINATAL DEATH RATE

The number of perinatal deaths divided by the number of total births (live births plus stillbirths) and converted to a rate per 1,000 total births.

POPULATION

Mid-year population estimates used in the preparation of this report were obtained from BC STATS, Ministry of Citizens' Services.

POST MATURE

(See **Post-Term**.)

POST NEONATAL DEATH

Death of a child between the ages of 28 days and 364 days.

(See also **Infant Death**.)

POST TERM

A gestational age of 42 weeks or more.

(See also **Gestational Age**.)

POTENTIAL YEARS OF LIFE LOST (PYLL)

The number of years of life lost when a person dies before a specified age (75 years). In this report, all deaths are assumed to occur at the midpoint of five-year age groups.

(See **Potential Years of Life Lost (PYLL)** in the Methodology section for an example.)

PREMATURE

(See **Pre-Term**.)

PRE-TERM

A gestational age less than 37 weeks.

(See also **Gestational Age**.)

PRE-TERM RATE

The number of pre-term live births divided by the number of live births and converted to a rate per 1,000 live births.

PYLL INDEX (PYLLI)

The ratio of an area's observed PYLL to its expected PYLL. This is a health status indicator.

(See **Potential Years of Life Lost Index (PYLLI)** in the Methodology section for an example.)

PYLL STANDARD RATE (PYLLSR)

An age-standardized measure of an area's PYLL, expressed in terms of a rate per 1,000 population, adjusted to a standard population (1991 Canada Census). This is a health status indicator.

(See PYLLSR under **Potential Years of Life Lost (PYLL)** in the Methodology section for an example.)

PYLL

(See **Potential Years of Life Lost**.)

PYLL %

The percent of all PYLL in the age group due to a specified cause of death.

PYLLI

(See **PYLL Index**.)

PYLLSR

(See **PYLL Standardized Rate**.)

QUINTILE

A ranking is derived by dividing a group (e.g., LHAs within British Columbia) into five subgroups, each with equal numbers of LHAs. (Since there are 89 LHAs and 89 is not evenly divisible by five, there is one less LHA in the middle group.) These divisions are derived from a ranking of the group members according to the value of a measure, such as the SMR or the PYLLI.

SAM

(See **Smoking-attributable Mortality**.)

SIDS

Sudden Infant Death Syndrome. The BC Coroners' Service (BCCS) utilizes an additional category of infant deaths referred to as "sudden unexplained death in infancy" (SUDI). An explanation of this term can be found at <http://www.pssg.gov.bc.ca/coroners/child-death-review/docs/cdru-2010annualreport.pdf> (see glossary).

As the World Health Organization ICD-10 classification system (upon which the statistics in this report are based) does not utilize this terminology, events classified as "SUDI" by the BCCS are herein included in the SIDS (R95.-) category, as is the usual practice followed by other provincial vital statistics agencies and Statistics Canada.

SMOKING-ATTRIBUTABLE MORTALITY (SAM)

The absence on death certifications of complete and reliable data on smoking requires the use of estimation techniques to approximate the extent of smoking-attributable deaths. Estimation methods, while not precise, may at least provide a general indication of the extent of such deaths. This report uses an estimation method based on the concept of attributable risk, which is described in the Methodology section.

Smoking-attributable deaths are derived by multiplying a smoking-attributable mortality percentage by the number of deaths aged 35+ in specified cause of death categories. These categories are comprised of selected malignant neoplasms, circulatory system diseases, and respiratory system diseases, and are listed in Table 42. (See **Smoking-Attributable Mortality** in the Methodology section for more details.)

SMR

(See **Standardized Mortality Ratio**.)

STANDARD POPULATION

A reference population of known age distribution used in the calculation of standardized indicators to adjust for variations in population age structures in different geographic areas or time periods. For SMR and PYLLI calculations the standard population is the British Columbia population for the year(s) concerned. The 1991 Canadian Census is used as the standard population in the calculation of ASMR and PYLLSR.

STANDARDIZED MORTALITY RATIO (SMR)

The ratio of the number of deaths occurring to residents of a geographic area (e.g., LHA) to the expected number of deaths in that area based on provincial age-specific mortality rates. The SMR is a good measure for comparing mortality data that are based on a small number of cases or for readily comparing mortality data by geographical area. SMR is an internationally recognized health status indicator.

(See also **Age Standardization** and **Standard Population**.)

See **Standardized Mortality Ratio** in the Methodology section for an example.)

STILLBIRTH

Since 1986, the *Vital Statistics Act* defines a stillbirth as “The complete expulsion or extraction from its mother after at least 20 weeks of pregnancy, or after attaining a weight of at least 500 grams, of a product of conception in which, after the expulsion or extraction, there is no breathing, beating of the heart, pulsation of the umbilical cord, or unmistakable movement of voluntary muscle.”

The definition of a stillbirth has changed over the years. From 1950 until July 1, 1962, the definition of a stillbirth was the birth of a viable fetus after at least 28 weeks pregnancy in which pulmonary respiration does not occur, whether death occurs before, during, or after birth. From July 1, 1962 until January 1, 1986, the definition of a stillbirth did not include the phrase “or after attaining a weight of at least 500 grams.”

STILLBIRTH RATE

The number of stillbirths divided by the number of total births (live births plus stillbirths) and converted to a rate per 1,000 total births.

(See also **Crude Rates**.)

TEENAGE MOTHERS

Mothers less than 20 years of age.

TEENAGE MOTHER LIVE BIRTH RATE

The number of live births to teenage mothers divided by the number of live births and converted to a rate per 1,000 live births.

TERM

A gestational age of 37 to 41 weeks.

(See also **Gestational Age**.)

TFR

(See **Total Fertility Rate**.)

TOTAL BIRTHS

The number of live births plus stillbirths.

TOTAL FERTILITY RATE (TFR)

The number of births that a group of 1,000 women would have if, during their childbearing years, they had the age-specific birth rates observed in a given calendar year. TFR is a hypothetical measure of completed family size based on current levels of fertility by age.

(See TFR under **Fertility Rate** in the Methodology section for an example.)

TOTAL PYLL

The total number of potential years of life lost prior to an established cut-off point of 75 years.

UCOD

(See **Underlying Cause of Death**.)

UNDERLYING CAUSE OF DEATH (UCOD)

The World Health Organization defines the underlying cause of death as “(a) the disease or injury which initiated the train of events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury.”

VACUUM

An assisted delivery employing suction or vacuum.

(See also **Mode of Delivery**.)

VERTEX

A delivery in which the head of the fetus appears first.

(See also **Mode of Delivery**.)

VERY LOW BIRTH WEIGHT

A birth weight of less than 1,500 grams.

(See also **Birth Weight**.)