

THE VERMONT VITAL STATISTICS SYSTEM

Statewide vital registration began in Vermont in 1857, when the General Assembly passed a bill requiring that towns report all births, marriages, and deaths occurring in their jurisdiction to the Secretary of State. The legislature also required periodic publication of tables from the reports. This volume is the latest in a series of publications begun in 1857. Historically, the information contained on vital records has served as an important tool for public health officials and others by providing a picture of the general health of the population. Recognizing its importance, in 1896 the Legislature transferred responsibility for the vital statistics system to the newly formed Board of Health, the forerunner of the Vermont Department of Health. The Health Department has retained this responsibility to the present day.

The Vermont vital statistics system monitors the following vital events: births, deaths, marriages and civil unions, divorces and dissolutions, fetal deaths, and abortions. Each type of vital record follows a different path before being used to produce the statistics published here.

Births: When a birth occurs, the physician, midwife, or other birth attendant is required to complete a birth certificate and file it with the town clerk in the town of birth within 10 days. For hospital births, it is usually the medical records staff that completes the birth certificate. The completed birth certificate is recorded and filed in the town where the birth took place, and a certified copy is sent to the Health Department.

Deaths: Although a physician is responsible for filing the death certificate, the job may be, and often is, delegated to the funeral director. Most of the information needed to complete the death certificate is obtained from the family of the deceased. A physician, however, must complete the cause of death information and sign the death certificate. The funeral director files the completed certificate with the town clerk who sends a certified copy to the Health Department.

Marriages and civil unions: When a couple wishes to marry or establish a civil union in Vermont, they provide a town clerk with the information needed to complete the license. The couple takes the license to an officiant, who signs and dates it, and returns it to the town clerk. The town clerk records and files the certificate, and sends a certified copy to the Health Department.

Divorces and dissolutions: A divorce certificate or certificate dissolving a civil union is initiated by a lawyer or other individual handling the divorce or dissolution. The certificate is filed with the court as part of the divorce or dissolution proceedings. The court keeps the certificate until the decree becomes final, usually three months after the court hearing. When the decree is final, the court clerk signs the certificate and sends it to the Health Department for filing.

Fetal deaths and abortions: Reports of fetal death and induced termination of pregnancy (abortion) are sent directly to the Health Department by the physician, hospital, or clinic that performs the procedure. By law, these reports are for statistical purposes only, are not public records, and are destroyed after five years.

In addition to receiving copies of vital records from Vermont town clerks, the Health Department also receives copies of certificates of all Vermont resident births and deaths that occur in other states and in Canada. This allows the Department to do statistical analyses of vital events involving Vermont residents even if the birth or death occurred outside of the state. Health Department staff code and enter all vital records received into a computerized database. Records with unknown or unlikely data are corrected after querying the data provider. A data file containing statistical information from the records is sent to the National Center for Health Statistics to become part of a national database.

EXPLANATORY NOTES

1. The tables in this bulletin were derived from records of vital events filed at the Vermont Department of Health for calendar year 2004.
2. Rates are based on the 2004 population estimates from Claritas, Inc.
3. Caution must be used in comparing rates due to the small population in Vermont and the small number of events recorded.
4. Rate comparisons throughout are made to the U.S. white (Hispanic and non-Hispanic) population rather than entire U.S. population. This is because only 3.2 percent of the Vermont population was non-white as of the 2000 U.S. Census.
5. If you have questions about the information found in this bulletin, you may contact a statistician at the Vermont Department of Health, 802-863-7300.
6. If you have questions about the population figures found in this bulletin, you may call the Vermont Department of Health to request a copy of *The Population and Housing Estimates*, which also provides information about age groups other than those presented in this publication.
7. The following is a list of Vermont's counties and the county abbreviations that are used in this bulletin.

Addison	ADD	Lamoille	LAM
Bennington	BEN	Orange	ORG
Caledonia	CAL	Orleans	ORL
Chittenden	CHI	Rutland	RUT
Essex	ESS	Washington	WAS
Franklin	FRA	Windham	WDM
Grand Isle	GI	Windsor	WDR

DEFINITIONS, RATES, AND RATIOS

ABORTION: The purposeful interruption of an intrauterine pregnancy with the intention other than to produce a live-born infant or other than to remove a dead fetus, and which does not result in a live birth.

ABORTION RATE: Number of resident abortions occurring in Vermont x 1000, divided by the total resident women ages 15 to 44.

ABORTION RATIO: Number of resident abortions occurring in Vermont x 1000, divided by the total resident live births.

AGE ADJUSTMENT: Age adjusting allows one to compare rates among populations having different age distributions by adjusting the crude rates in each population to a standard population base. In this bulletin, county rates are adjusted using the state population distribution as the standard.

The computation formula is: The sum of (age-specific rate for each age group x standard population in that age group) multiplied by 1000, and then divided by the total standard population.

AGE-SPECIFIC DEATH RATE: Number of resident deaths in a specific age group x 1000, divided by the total resident population in a specific age group (using population estimates as of July 1).

AGE-SPECIFIC FERTILITY RATE: Number of resident live births to mothers in a specific age group x 1000, divided by the total resident female population in a specific age group (using population estimates as of July 1).

AGE-SPECIFIC PREGNANCY RATE: Number of resident pregnancies to women in a specific age group x 1000, divided by the total resident female population in a specific age group (using population estimates as of July 1).

ANNULMENT: The invalidation or voiding of a marriage, or civil union, which confers on the parties the status of never having been married to each other.

CIVIL UNION: A civil union is a legal relationship that provides for same-sex couples in Vermont all the benefits, protections, and responsibilities under law as are granted to spouses in a marriage.

CIVIL UNION RATE: Total number of civil unions x 1000, divided by the total resident population (using population estimates as of July 1).

CRUDE BIRTH RATE: Number of resident live births x 1000, divided by the total resident population (using population estimates as of July 1).

CRUDE DEATH RATE: Number of resident deaths x 1000, divided by the total resident population (using population estimates as of July 1).

CUMULATIVE ROW PERCENT: The total number of cases in the current column plus each previous column in each row, expressed as a percentage of all cases in that row.

DEATH: The permanent disappearance of any evidence of life at any time after live birth.

DIVORCE: The final legal dissolution of a marriage.

DIVORCE RATE: The sum of the number of divorces and annulments x 1000; divided by the total resident population, (using population estimates as of July 1).

DISSOLUTION: The final legal dissolution of a civil union.

FERTILITY RATE: Number of resident live births to women ages 15 to 44 x 1000, divided by the total resident female population ages 15 to 44 (using population estimates as of July 1).

FETAL DEATH: A reportable fetal death is a death prior to the complete expulsion or extraction from the mother of a product of conception, which has passed through at least the 20th week of gestation or weighs more than 400 grams; the death is indicated by the fact that, after such expulsion or extraction, 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. Heartbeats are to be distinguished from transient cardiac contractions; respirations are to be distinguished from fleeting respiratory efforts or gasps.

FETAL DEATH RATE: Number of resident fetal deaths x 1000, divided by the total resident live births and resident fetal deaths.

FETAL DEATH RATIO: Number of resident fetal deaths divided by total resident live births.

INFANT DEATH: Death occurring in the first year of life.

INFANT DEATH RATE: Number of resident infant deaths x 1000, divided by the total resident live births.

LIVE BIRTH: The complete expulsion or extraction from the mother of a product of conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles whether or not the umbilical cord has been cut or the placenta is attached. Heartbeats are to be distinguished from transient cardiac contractions; respirations are to be distinguished from fleeting respiratory efforts or gasps.

LOW BIRTH WEIGHT: A baby weighing less than 2,500 grams (5 pounds, 8 ounces) at birth.

LOW BIRTH WEIGHT PERCENT: The number of live births weighing less than 2,500 grams divided by the total number of live births.

MARRIAGE: The legal union of persons of opposite sex.

MARRIAGE RATE: Number of marriages x 1000, divided by the total resident population (using population estimates as of July 1).

NATURAL INCREASE: Occurs when the number of births is greater than the number of deaths.

NEONATAL DEATH: Death of a live-born infant before the infant becomes 28 days old (up to and including 27 days, 23 hours, 59 minutes from the moment of birth).

NEONATAL DEATH RATE: Number of resident neonatal deaths x 1000, divided by the total resident live births.

OCCURRENCE: The place where the event actually occurred.

PERINATAL DEATH: A fetal death or a death occurring before the infant becomes seven days old (up to and including six days, 23 hours, 59 minutes from the moment of birth).

PERINATAL DEATH RATE: Number of resident perinatal deaths x 1000, divided by the total resident live births and resident fetal deaths.

PLURALITY: The number of siblings born as a result of this pregnancy.

PREGNANCY RATE: Number of resident pregnancies in women ages 15 to 44 x 1000, divided by the total resident female population ages 15 to 44.

RESIDENCE: The usual place of residence for the person to whom the event occurred. For births and fetal deaths, residence is defined as the mother's usual place of residence.

ROW PERCENT: The number of cases in each row expressed as a percentage of all cases in that row.

WEEKS OF GESTATION: The number of weeks elapsed between the first day of the last menstrual period and the date of delivery.