

ATTACHMENT A

The Division of Women's and Infant's Health (DWIH) has prepared statistics for various vital events regarding perinatal regions. Listed below are the titles of these various tables. All data used in these tables are for Virginia 2006. These tables can be accessed through the DWIH website below.

<http://www.vahealth.org/wih/Data.htm>

Statistics for cities and counties in Virginia are available through the Virginia Department of Health (VDH) Division of Health Statistics website, which is provided below.

<http://www.vdh.virginia.gov/HealthStats/stats.asp>

In addition, basic definitions and information necessary for using these tables is provided in the next pages. Please remember the implications of these definitions when interpreting the statistics in the tables.

If you have problems using these websites or questions, technical assistance is available through the Data Analyst for the Division of Women's and Infants' Health. Contact information provided below.

Kristin Austin, MPH

(804) 864-7765

Kristin.Austin@vdh.virginia.gov

Statistics by Perinatal Region*

Table 1.	Summary of Total Counts of Vital Events by Perinatal Region.
Table 2.	Pregnancy, Fertility, Abortion Rates by Perinatal Region.
Table 3.	Mortality Rates by Perinatal Region.
Table 4.	Low Birth Weight by Perinatal Region.
Table 5.	Very Low Birth Weight by Perinatal Region.
Table 6.	Preterm births by Perinatal Region.
Table 7.	First Trimester Entry into Prenatal Care by Perinatal Region.
Table 8.	Adequacy of Prenatal Care Utilization Index by Perinatal Region.
Table 9.	Non-Marital Births for 2006 by Perinatal Region.
Table 10.	Substance Use during pregnancy by Perinatal Region.
Table 11.	Underlying Causes of Infant Deaths by Perinatal Region.
Table 12.	Summary of Vital Events for the Teen Population by Perinatal Region.
Table 13.	Summary of Vital Events for Women 35 and older by Perinatal Region.
Table 14.	Breastfeeding Percents by Hospital.

*The source of Tables 1-13 are VDH Division of Health Statistics and of Table 14 are the Virginia Newborn Screening database.

Basic Definitions for Statistics

Population Projections. The population projections are from the National Center for Health Statistics with the approval of the U.S. Bureau of the Census.

Women of Child-Bearing Age (WCBA). These are women 15 to 44 years of age.

Total Pregnancies. Total pregnancies are the sums of live births, induced terminations or pregnancy, and natural fetal deaths with 20 weeks gestation or more.

Live Births. A live birth is defined as the complete expulsion or extraction of a product of human conception from its mother, irrespective of the duration of the pregnancy, which, after such expulsion or extraction, breathes or shows any other evidence of life such as a beating 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. (Vital Statistics Laws of Virginia, Chapter 7, Section 32.1-249.7)

Fetal Deaths. A fetal death is caused by an induced termination of pregnancy or a natural spontaneous death prior to the complete expulsion or extraction from the mother of a product of human conception, irrespective of the duration of the pregnancy. 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, pulsating of the umbilical cord, or definite movement of voluntary muscles.

Induced Termination of Pregnancy. These are fetal deaths in which the pregnancy has been deliberately terminated with the purpose of producing a nonviable fetus. Molar and ectopic pregnancies are excluded.

Natural Fetal Deaths. Formerly called miscarriages; these are fetal deaths that are not induced in order to produce a nonviable fetus. They are also referred to as spontaneous abortions, although they include the terminations of molar and ectopic pregnancies. The term includes the misnomer of still births. For these attached tables, only natural fetal deaths with 20 weeks or more gestation were used in the calculations (Table 1), except for the calculation of perinatal mortality (Table 3).

Pregnancy Rate. The number of pregnancies per 1,000 females ages 15-44.

Fertility Rate. The number of live births per 1,000 females ages 15-44.

Abortion Rate. The number of induced terminations of pregnancy per 1,000 females ages 15-44.

Teenager. Ages 10-19 years old

Teen Pregnancy Rate. The number of live births to females ages 10-19 per 1,000 females ages 10-19.

Low Weight Births and Very Low Weight Births. A low weight birth is defined as one in which the birth weight is less than 2500 grams (5 pounds 8 ounces), regardless of gestation. A very low weight birth is one with a birth weight of less than 1500 grams (3 pounds 5 ounces).

Preterm Births. A preterm births (also referred to as a premature birth) is defines as one in which the gestational age is less than 37 weeks.

Non-Marital Births. Non-Marital births are those which occurred to women who were not married to the fathers of the children at any time during the preceding 10 months.

Method of Delivery. There are three methods of delivery listed in Table 2; vaginal, primary cesarean, and repeat cesarean delivery. These calculations are based on the birth certificate data where the hospital reported method of delivery.

Adequacy of Prenatal Care Utilization Index. The Adequacy of Prenatal Care Utilization (APNCU) Index attempts to characterize prenatal care (PNC) utilization on two independent and distinctive dimensions – namely adequacy of initiation of PNC and adequacy of received services (once PNC has begun) (Kotelchuck, 1994)

Substance use during pregnancy. Substance use includes tobacco, alcohol, and illicit drug use during pregnancy. The major method of tobacco use is smoking. Illicit drugs include heroine, methadone, marijuana, cocaine, amphetamines, or other illegal drugs used during pregnancy. Since this data comes from birth certificates, it is self-reported and underreported. These limitations should be considered when interpreting data on smoking, alcohol, and illicit drug use during pregnancy.

Race. For these tables, three the racial and ethnic classifications were used: White Non-Hispanic, Black Non-Hispanic, and Hispanic. This is important to remember if comparing racial and ethnic groups because sometimes in other reports, the White category may include both White Hispanics and missing racial/ethnic data. For these tables, race and ethnicity are based on birth or death certificate data, which is self-reported.

Currently, the race designation used for the pregnancy categories of births and fetal deaths is that of the mother. For deaths, the race is that of the decedent at death. In the case of infant deaths, this means that race of the child could be declared differently at birth and at death.

Breastfeeding. Table 14 uses the Virginia Newborn Screening data. This table shows the percentage of mother's who initiated breastfeeding exclusively during the first 24 to 48 hours following the birth of the newborn.

Infant Deaths. These are deaths of children under one year of age for given year.

Infant Mortality Rate (IMR). The number of infant deaths per 1,000 live births.

Neonatal Deaths. These are deaths of children under 28 days of age.

Neonatal Infant Mortality Rate. The number of neonatal deaths per 1,000 live births.

Post-neonatal Deaths. These are deaths of children 28 days and over but under one year of age.

Post-neonatal Infant Mortality Rate. The number of post-neonatal deaths per 1,000 live births.

Perinatal Deaths. In this report, these are defined as the sum of natural fetal deaths of 28 weeks or more gestation and the death of infants under seven days of age. The concept focuses on the critical thirteen-week period at the end of normal 40-week gestation as well as the first week of life of the newborn. It is used as a result of differing definitions of infant deaths in the world.

Perinatal Mortality Rate. The number of perinatal deaths per 1,000 live births.

Teen Infant Mortality Rate. The number of infant deaths to females ages 10-19 per 1,000 live births to females ages 10-19. Teen IMR was calculated using death certificate linked birth certificates for mother's age. Note, that not all birth certificates can be linked to death certificates, thus, this rate is lower than the actual teen IMR.

Maternal Mortality Rate. The number of pregnancy-related maternal deaths per 100,000 live births. The definition is based on the ICD-10 codes, O00-O99, and are deaths due to pregnancy.

Underlying Cause of Death. This is the term by which deaths are classified and listed in the tables, to be distinguished from the immediate and other causes of death listed on the death certificate. It may be defined as (a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury.

The underlying cause of death is reported on the death certificate. Then, a code is assigned based on the underlying cause of death using the International Statistical Classification of Disease (ICD-10) code. The top underlying causes of infant deaths with respective ICD-10 codes used in these tables are listed below:

Congenital Malformation. ICD-10 codes: Q00-Q99. These deaths are per 100,000 live births.

Disorders of short gestation and low birth weight. ICD-10 code: P07. These deaths are per 100,000 live births.

Sudden Unexplained Infant Deaths (SUID). SUID is the sudden death of an infant under one year of age that is unexplained at the time of death. Includes: sudden infant death syndrome (SIDS), accidental suffocation and strangulation in bed (ASSB), other accidental suffocation and strangulation (OASS), neglect, abandonment, and other maltreatment syndrome and cause unknown/unspecified (Shapiro-Mendoza, et al, 2006). The following ICD-10 codes were used: R95, W75, W83-84, Y06-07, and R99, respectively. This definition is adapted from the Centers of Disease Control and Prevention (CDC). These deaths are per 100,000 live births.

Sudden Infant Death Syndrome (SIDS). ICD-10 code: R95. SIDS is the sudden death of an infant under one year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history (Willinger et al, 1991). These deaths are per 100,000 live births.