

BIRTHS

In 2004, 6,597 babies were born to Vermont residents. This represents an increase of eight births from 2003. Until 2002, the number of babies born to Vermont residents had declined every year since 1989. The crude birth rate in 2004 is 10.6 per 1,000 Vermont residents, the same as in 2003 and up from 10.4 in 2002. The U.S. white birth rate for 2004 was 13.5. Comparisons are made to the U.S. white rate because 97 percent of Vermont resident births were to white mothers in 2004 ([Table B-5](#)). The Vermont birth rate peaked in 1955 at 24 per 1,000 residents, it then dropped for two decades, remained relatively stable from the late 1970's through the 1980's, and slowly and steadily decreased through the 1990's before stabilizing in recent years.

FERTILITY

Although the crude birth rate is based on the total population, a better measure of birth patterns is the fertility rate which is based on the population of women ages 15 through 44, the peak child-bearing years. The 2004 Vermont fertility rate was 51.9 per 1,000 women ages 15 through 44 ([Table B-8](#)), a slight increase from the 2003 rate of 51.0. The U.S. white fertility rate was 66.1 in 2004. The fertility rate in Vermont peaked in 1960 at 126, declined through the 1960's and 1970's, leveled off slightly in the 1980's, steadily declined through the early 90's, and has remained fairly stable since 1995. Age-specific fertility rates have generally declined among the younger age groups (<30), and increased among the older age groups, with the largest increase among 30-34 year olds.

FIGURE 5
AGE-SPECIFIC FERTILITY RATES, SELECTED YEARS 1980-2004

AGES/ YEAR	1980	1990	2000	2004
TOTAL	63.3	60.5	49.7	51.9
15 – 19	38.5	34.1	23.4	20.9
20 – 24	102.4	93.9	74.1	71.6
25 – 29	113.0	114.6	102.1	106.4
30 – 34	60.2	79.5	84.0	95.8
35 – 44	12.5	19.6	21.3	22.6

Slightly more than half of all births (50.3 %) in 2004 were to women in their twenties ([Table B-7](#)), down from 56.1 percent in 1990. Women age 30 and over accounted for 42.6 percent of births, down from 45.1 in 2003, and up from 35.4 percent in 1990. Women age 15 through 19 accounted for 7.1 percent of births, up from 6.4 in 2003, and down from 8.5 percent in 1990.

BIRTH WEIGHT

The median birth weight for all resident births in 2004 was, 3430 grams (7 pounds, 9 ounces). Low birth weight infants are those born weighing less than 2,500 grams (5 pounds 8 ounces). They are much more likely than heavier babies to suffer short and long term disabilities, and to die in infancy. In 2004, 6.4 percent of Vermont resident births were low birth weight ([Table B-16](#)) and 0.9 percent were very low birth weight (less than 1,500 grams or 3 pounds 5 ounces). The U.S. white low birth weight rate for 2004 was 7.2 percent. The Vermont low birth weight rate remains above the *Healthy Vermonters 2010* goal of 5.0 percent and very low birth weight rate is at the *Healthy Vermonters 2010* goal of 0.9 percent.

Low birth weight rates vary by age groups ([Table B-16](#)): in Vermont the low birth weight rate among women under age 20 was 9.9 percent, compared to 6.2 percent of births among women age 20-29 and 6.1 percent of births among women age 30 and older.

Infant birth weight is also positively associated with maternal weight gain: mothers who do not gain adequate weight during pregnancy are more likely to deliver low birth weight infants. On the other hand, there are risks associated with gaining too much weight including delivery complications, maternal and infant obesity. Although the weight gained by 18.8 percent of Vermont mothers in 2004 fell below the range recommended by the Institute of Medicine, 48.2 percent gained above the recommended range ([Table B-31](#)). Please refer to Appendix B for further information on the guidelines.

The single most important preventable risk factor for low birth weight is smoking during pregnancy. The low birth weight rate among women who smoked cigarettes during their pregnancy was 11.5 percent compared to 4.5 percent among women who did not smoke during pregnancy ([Table B-28](#)). About one in five women reported smoking during their pregnancy in 2004, and among those who smoked before pregnancy or during the first trimester, 28.3 percent quit.

PRENATAL CARE

Early, comprehensive, and high quality prenatal care is essential for a healthy pregnancy and birth. Through prenatal care, pregnant women are screened for medical conditions and counseled on nutrition, behavioral risks (such as using tobacco and alcohol), and domestic violence.

In 2004, 90.0 percent of the babies were born to mothers who began prenatal care in the first three months of pregnancy ([Table B-20](#)). The *Healthy Vermonters 2010* goal for first trimester prenatal care is 90 percent. While the 2004 percentage of women receiving first trimester prenatal care represents a slight decrease from the 2003 percentage of 90.6, in general the percentage of women receiving first trimester prenatal care has been increasing slowly, but steadily, since 1987. The percent of U.S. white births involving mothers who began prenatal care in the first trimester was 85.4 in 2004.

The proportion of births in 2004 to Vermont mothers who delayed care to the third trimester or received no prenatal care was 1.5 percent, down slightly from 1.6 percent in 2002 and 2003. The proportion of women receiving late or no prenatal care in 2004 was 3.2 percent for U.S. white mothers. As in previous years, the age of the mother is closely associated with the time of entry to prenatal care with young women seeking care later than older women.

We added a new table in 2002's report: ([Table B32](#)) – "Adequacy of Prenatal Care by Age of Mother". The Adequacy of Prenatal Care Utilization (APNCU) Index, developed by Milton Kotelchuck, Ph.D., characterizes the adequacy of timing of entry into prenatal care, along with the adequacy of the number of received prenatal care visits. Dr. Kotelchuck's algorithm is based on recommendations from the American College of Obstetricians and Gynecologists (ACOG), and it utilizes the month prenatal care began, the number of prenatal care visits, and adjusts for the infant's gestational age.

Based on the APNCU Index, in 2004, 88.7 percent of Vermont resident mothers received at least adequate prenatal care, which is higher than the U.S. 2004 proportion of 75.2. The percent of Vermont mothers who received inadequate care was 5.6, which is lower than the U.S. percent of 11.2 in 2004. Teen mothers had the highest percent of inadequate care while mothers 30 and older had the highest percent of adequate plus intensive care.

MEDICAL RISK FACTORS

Of the births in 2004, 59.2 percent of mothers had no reported medical risk factors for pregnancy ([Table B-29](#)). Of those with medical risk factors reported, the most common were pregnancy-associated hypertension, diabetes, acute or chronic lung disease, previous pre-term or small-for-gestational-age infant, and anemia. In 2004 54.0 percent of births had no complications of labor and/or delivery reported. Of those with complications, the most common complications of labor and/or delivery were dysfunctional labor, fetal distress, meconium, premature rupture of membrane, and breech/malpresentation.

DELIVERIES

Of babies born in Vermont hospitals in 2004, 25.0 percent were delivered by cesarean section ([Table B-27](#)) compared to 28.8 percent for U.S. white women in 2004. The primary cesarean section rate was 17.7 percent in Vermont for 2004, compared to 17.8 percent for white mothers nationally in 2004. Of mothers delivering in Vermont hospitals in 2004 who had a previous delivery by cesarean section, 17.3 percent had vaginal births, compared to 8.9 percent for U.S. white mothers in 2004.