

LIVE BIRTHS

According to preliminary data, there were 4.3 million births in the United States in 2006, which represents an increase of 3 percent from the previous year, the largest single-year increase since 1989. The number of births rose in every racial and ethnic group, most noticeably among non-Hispanic Black women and American Indian/Alaska Native women. Overall, the birth rate was 14.2 per 1,000 population.

With regard to age, overall birth rates were highest among those aged 25–29 years (116.8 per 1,000), followed by those aged 20–24 years (105.9 per 1,000). The birth rate for non-

Hispanic Whites was highest in the 25–29 age group (109.2 per 1,000), while the rates for non-Hispanic Blacks, Hispanics, and American Indian/Alaska Natives were highest in the 20–24 age group (133.1, 177.0, and 114.9 per 1,000, respectively). The birth rate among Asian/Pacific Islanders was highest among 30- to 34-year-olds (116.5 per 1,000).

The percentage of births with a cesarean delivery has been increasing steadily since 1996, while vaginal births after a previous cesarean (VBAC) have been decreasing. Among all births in 2005, more than 30 percent were delivered by cesarean, representing a 46 percent increase since

1996. Only 7.9 percent of women with a previous cesarean delivery had a vaginal birth in 2005, compared to a high of 28.3 percent in 1996, a decrease of 72 percent. This trend is maintained even when considering only low-risk women.⁴² Additionally, induction of labor has increased substantially since 1990. Nearly 23 percent of singleton births were induced in 2005, which is nearly 2.5 times the percentage in 1990 (9.6 percent).

In 2005, 83.9 percent of women received prenatal care during the first trimester of pregnancy, while 3.5 percent of women received care in the third trimester or not at all.⁴³

Live Births per 1,000 Women, by Age and Race/Ethnicity, 2006*

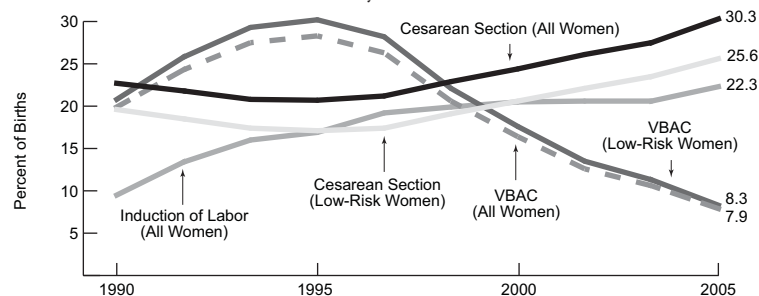
Source II.20: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

	Total	Non-Hispanic White	Non-Hispanic Black	Hispanic	American Indian/ Alaska Native	Asian/ Pacific Islander
15-19 Years	41.9	26.6	63.7	83.0	54.7	16.7
20-24 Years	105.9	83.4	133.1	177.0	114.9	62.5
25-29 Years	116.8	109.2	107.1	152.4	97.2	107.8
30-34 Years	97.7	98.1	72.6	108.4	61.5	116.5
35-39 Years	47.3	46.3	36.0	55.6	28.2	62.8
40-44 Years	9.4	8.4	8.3	13.3	6.1	14.1

*Data are preliminary.

Births Involving Cesarean Section, VBAC, and Induction of Labor, by Maternal Risk Status,* 1990–2005**

Source II.21, 22, 23: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*A low-risk woman is defined as one with a full-term (at least 37 completed weeks of gestation), singleton (not a multiple pregnancy), and vertex fetus (head facing in a downward position in the birth canal). **Data after 2003 for C-sections and VBACs are from the 37 reporting areas using the 1989 Standard Certificate of Live Birth (unrevised) to maintain comparability with previous years' data.

BREASTFEEDING

Breastmilk benefits the health, growth, immunity, and development of infants, and mothers who breastfeed may have a decreased risk of breast and ovarian cancers.⁴⁴ Among infants born in 2004, 73.8 percent were reported to have ever been breastfed. Non-Hispanic Black infants were the least likely to ever be breastfed (56.2 percent), while Asian/Pacific Islanders and Hispanics were the most likely (81.7 and 81.0 percent, respectively).

The American Academy of Pediatrics recommends that infants be exclusively breastfed—without supplemental solids or liquids—for the first 6 months of life; however, only 11.3 percent of infants born in 2004 were exclusively breastfed at 6 months, and only 41.5 percent of infants were fed any breastmilk at 6 months.

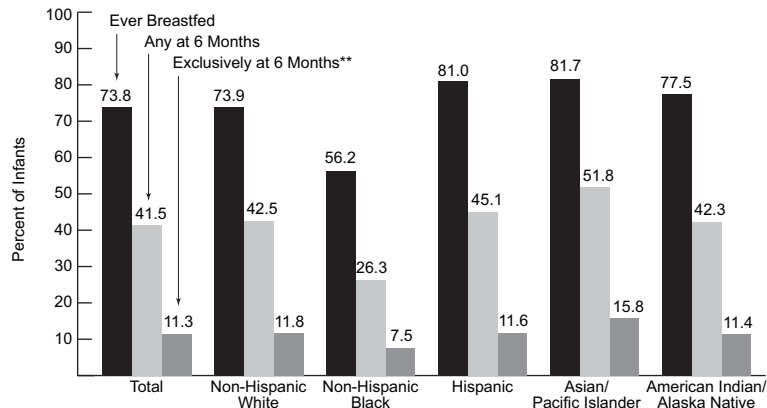
Breastfeeding practices vary considerably by maternal age, educational attainment, and marital status. For instance, infants born to college graduates were most likely to have ever been breastfed (85.3 percent), while infants born to

mothers with a high school education or less were least likely (65.7 and 67.7 percent, respectively.)

Research indicates that maternal employment can also affect whether and for how long an infant is breastfed; for instance, mothers working full time are less likely to be breastfeeding at 6 months than those working part time or not at all.⁴⁵ In 2005, 49.5 percent of mothers with children under 1 year of age were employed, and more than two-thirds were employed full-time (data not shown).⁴⁶

Infants* Who Are Breastfed, by Race/Ethnicity and Duration, 2004–2006

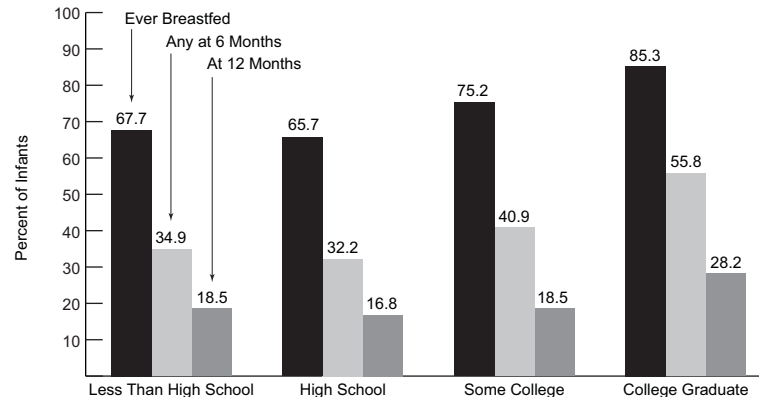
Source II.24: Centers for Disease Control and Prevention, National Immunization Survey



*Includes only infants born in 2004. **Exclusive breastfeeding is defined as only breastmilk—no solids, water, or other liquids; data are not comparable to previous years' data due to changes in data collection methods.

Infants* Who Are Breastfed, by Maternal Education and Duration, 2004–2006

Source II.24: Centers for Disease Control and Prevention, National Immunization Survey



*Includes only infants born in 2004.

SMOKING DURING PREGNANCY

Smoking during pregnancy can have a negative impact on the health of infants and children by increasing the risk of complications during pregnancy, premature delivery, and low birth weight—a leading cause of infant mortality.⁴⁷ Maternal cigarette use data is captured on birth certificates; however, data collection methods vary due to revisions to the birth certificate in 2003. As of 2005, the 1989 Standard Certificate of Live Birth (unrevised) was used in 36 States, New York City and Washington, DC, while 11 States used the revised birth certificate.⁴⁸

In 2005, 10.7 percent of all pregnant women giving birth in areas using the unrevised birth

certificate smoked cigarettes during their pregnancy. This varied by maternal race and ethnicity.

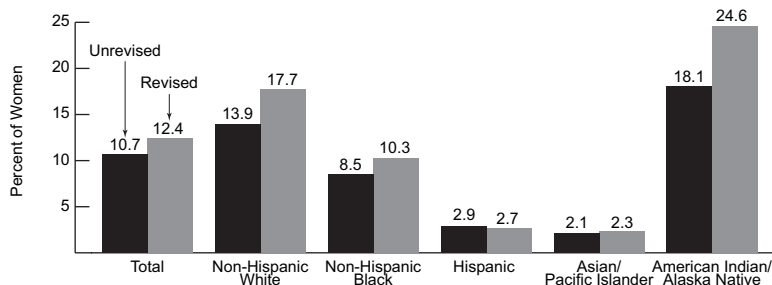
Among women in the unrevised reporting areas, American Indian/Alaska Native mothers were most likely to have smoked during pregnancy (18.1 percent), followed by non-Hispanic White women (13.9 percent). Smoking during pregnancy was higher among pregnant women in areas using the revised birth certificate (12.4 percent). Smoking was also most common among American Indian/Alaska Native mothers in these areas (24.6 percent). Asian/Pacific Islanders and Hispanic women were least likely to have smoked during pregnancy in both reporting areas.

Cigarette use also varied by maternal age in 2005. Among women in the unrevised reporting areas, women under 20 years of age were most likely to have smoked cigarettes during pregnancy (15.1 percent), followed by 13.0 percent of women aged 20–29 years. Similarly, 16.4 percent of women under 20 years of age in the revised reporting areas smoked during pregnancy, followed by 15.0 percent of women aged 20–29.

Smoking during the postpartum period has negative consequences for the mother and infant. In 2004, 17.9 percent of mothers smoked postpartum (data not shown). Women at highest risk were young mothers (under 20 years), White mothers, and mothers whose pregnancy was unintended.⁴⁹

Cigarette Smoking During Pregnancy, by Maternal Race/Ethnicity and Birth Certificate Type,* 2005

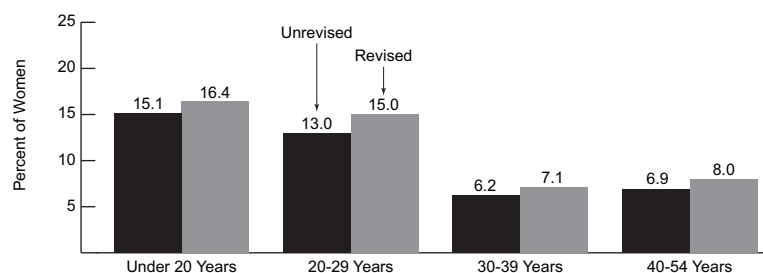
Source II.23: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*The 1989 Standard Certificate of Live Birth (unrevised) was used in 36 reporting areas including New York City and Washington, DC; the 2003 revised birth certificate was used in 11 reporting areas.

Cigarette Smoking During Pregnancy, by Maternal Age and Birth Certificate Type,* 2005

Source II.23: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*The 1989 Standard Certificate of Live Birth (unrevised) was used in 36 reporting areas including New York City and Washington, DC; the 2003 revised birth certificate was used in 11 reporting areas.

MATERNAL MORBIDITY AND RISK FACTORS IN PREGNANCY

Since 1989, diabetes and hypertension have been the most commonly reported health conditions among pregnant women. Diabetes, both chronic and gestational (developing only during pregnancy), may pose health risks to the mother and infant. Women with gestational diabetes are at increased risk for developing diabetes later in life.⁵⁰ In 2005, diabetes during pregnancy occurred at a rate of 38.5 per 1,000 live births and was similar across all racial and ethnic groups (data not shown).

Hypertension during pregnancy can also be either chronic in nature or limited to the duration of pregnancy. Severe hypertension during pregnancy can result in preeclampsia, fetal growth restriction, premature birth, placental abruption, and stillbirth.⁵¹ Chronic hypertension was present in 10.4 per 1,000 live births in 2005. The rate of pregnancy-associated hypertension was even higher, occurring in 39.9 of every 1,000 live births.

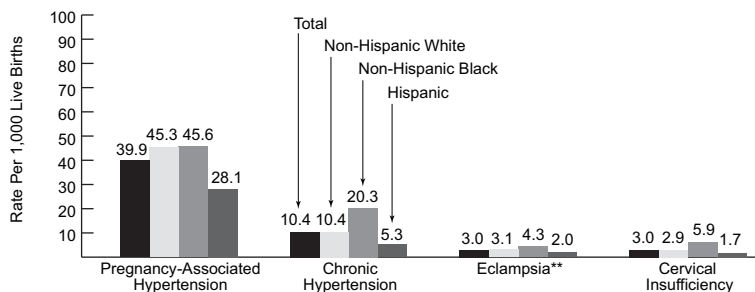
Other illnesses or risk factors during pregnancy can include eclampsia, which involves seizures (usually preceded by a diagnosis of preeclampsia), and cervical insufficiency, which occurs when the cervix opens or dilates before the fetus is full term.

All of these conditions are more common among non-Hispanic Black than non-Hispanic White and Hispanic women, and among older mothers.

Excessive or insufficient weight gain during pregnancy can also influence birth outcomes. In 2005, 10.7 percent of infants born to mothers who gained less than 16 pounds were low birth weight, compared to 5.9 percent of infants born to women gaining 36 to 40 pounds. Excessive weight gain (40 or more pounds) may elevate the risk of gestational diabetes, preeclampsia, and large-for-gestational-age babies; more than 20 percent of pregnant women gained more than 40 pounds in 2005 (data not shown).

Selected Maternal Morbidities and Risk Factors in Pregnancy, by Maternal Race/Ethnicity,* 2005

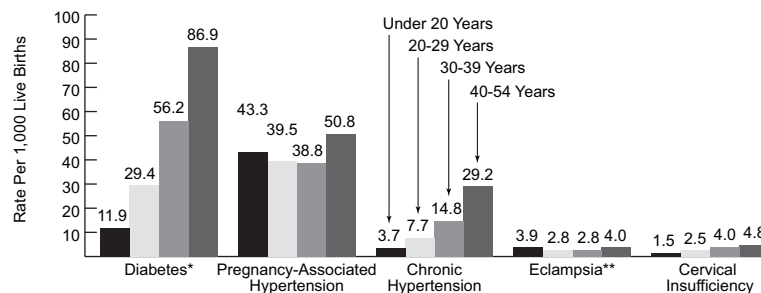
Source II.21, 22: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*Data not reported for American Indian/Alaska Natives, Asian/Pacific Islanders, and persons of more than one race. **Eclampsia is characterized by seizures and generally follows preeclampsia, which is marked by high blood pressure, weight gain, and protein in the urine.

Selected Maternal Morbidities and Risk Factors in Pregnancy, by Maternal Age, 2005

Source II.21, 22: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*Includes gestational and chronic diabetes. **Eclampsia is characterized by seizures and generally follows preeclampsia, which is marked by high blood pressure, weight gain, and protein in the urine.

MATERNAL MORTALITY

Maternal deaths are those reported on the death certificate to be related to or aggravated by pregnancy or pregnancy management that occur within 42 days after the end of the pregnancy. The maternal mortality rate has declined dramatically since 1950 when the rate was 83.3 deaths per 100,000 live births; however, the maternal mortality rate in 2005 (15.1 per 100,000 live births) was 84 percent higher than the rate reported in 1990 (8.2 per 100,000). According to the National Center for Health Statistics, this increase may largely be due to changes in how pregnancy status is recorded on death certificates;

beginning in 1999, the cause of death was coded according to International Classification of Diseases, 10th Revision (ICD-10). Other methodological changes in reporting and data processing have been responsible for apparent increases in more recent years.⁵²

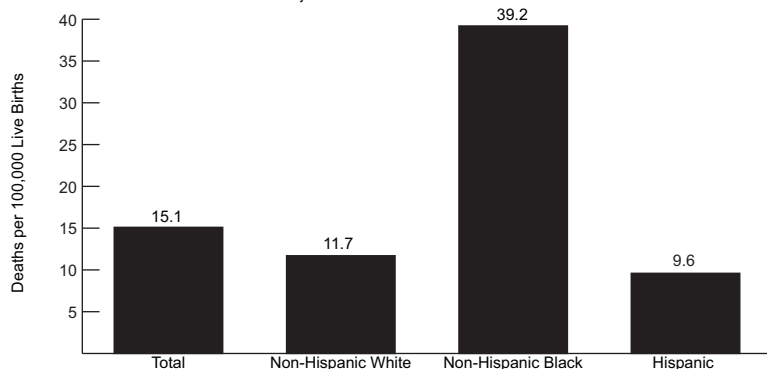
In 2005, there were a total of 623 maternal deaths. This does not include the 137 deaths of women due to complications during pregnancy or childbirth after 42 days postpartum or the deaths of pregnant women due to external causes such as unintentional injury, homicide, or suicide. In 2005, the maternal mortality rate among non-Hispanic Black women (39.2 per

100,000 live births) was more than 3 times the rate among non-Hispanic White women (11.7 per 100,000) and more than 4 times the rate among Hispanic women (9.6 per 100,000).

The risk of maternal death increases with age for women of all races and ethnicities. In 2005, the maternal mortality rate was highest among women aged 35 years and older (38.0 per 100,000 live births), compared to 7.4 per 100,000 live births to women under 20 years of age and 10.7 per 100,000 live births among women aged 20–24 years.

Maternal Mortality Rates, by Race/Ethnicity,* 2005

Source II.5: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*Data not reported for Asian/Pacific Islanders, American Indian/Alaska Natives, persons of more than one race, and persons of other races not specified.

Maternal Mortality Rates, by Age, 2005

Source II.25: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

