

HIV IN PREGNANCY

In 2005, 111 infants tested positive for HIV after being born to HIV-infected mothers (126,964 females over age 13 were living with HIV/AIDS in that year). The number of infant HIV/AIDS cases in 2005 was only one-third the number reported in 1994. A major factor in this decline is the increasing use of prophylaxis before, during, and after pregnancy to reduce perinatal transmission of the virus. In 1994, the U.S. Public Health Service began to recommend prophylaxis for all HIV-positive pregnant women; since 1995, HIV counseling and voluntary testing have been recommended for all pregnant women. In 2004,

the Centers for Disease Control and Prevention released new and updated materials to further promote universal prenatal HIV testing. It is expected that the perinatal transmission rate will continue to decline with increased use of aggressive interventions and obstetric procedures, such as elective cesarean section.

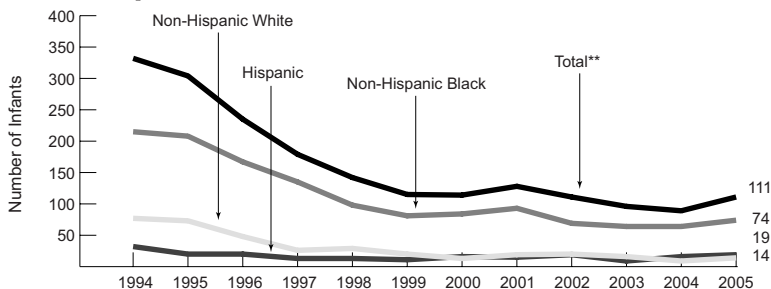
Although there is a significant racial/ethnic disparity in HIV/AIDS among women, and consequently among infants born to HIV-infected women, the decline over the past decade occurred among each racial and ethnic group. The number of cases of HIV/AIDS among non-Hispanic Black infants declined 65.6 percent,

from 215 cases in 1994 to 74 cases in 2005. The decline among Hispanic infants was less marked (40.6 percent), from 32 cases in 1994 to 19 cases in 2005. The most extreme decline in the number of cases was among non-Hispanic White infants (81.8 percent) from 77 cases in 1994 to 14 cases in 2005.

Women can become infected with HIV in a variety of ways. Among infants with HIV/AIDS in 2005, 19 were born to mothers who acquired their HIV through injection drug use, 35 were born to mothers who contracted HIV from sex with an infected partner, and 46 were born to mothers whose risk factor was not specified.

Reported Cases of HIV/AIDS* in Infants Born to HIV-infected Mothers, by Infant Race/Ethnicity, 1994-2005

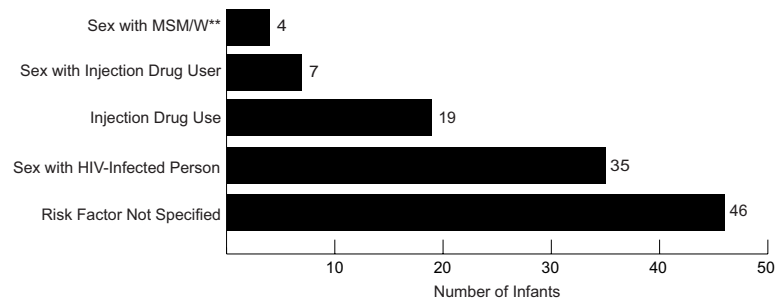
Source II.5: Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report



*Includes children with a diagnosis of HIV infection (not AIDS), a diagnosis of AIDS following a prior diagnosis of HIV infection, or concurrent diagnoses of HIV infection and AIDS, in 25 States with confidential name-based HIV reporting. **Includes two Asian/Pacific Islanders and one American Indian/Alaska Native.

Reported Cases of HIV/AIDS* in Infants Born to HIV-infected Mothers, by Perinatal Transmission Categories, 2005

Source II.5: Centers for Disease Control and Prevention, HIV/AIDS Surveillance Report



*Includes children with a diagnosis of HIV infection (not AIDS), a diagnosis of AIDS following a prior diagnosis of HIV infection, or concurrent diagnoses of HIV infection and AIDS, in 25 States with confidential name-based HIV reporting. **Men who have sex with men and women.

WEIGHT GAIN DURING PREGNANCY

Weight gain during pregnancy is an important factor in pregnancy outcome. Inadequate weight gain has been associated with increased risk of intrauterine growth retardation (IUGR), preterm birth, low birth weight, and perinatal mortality. Excessive weight gain can also have a negative impact on pregnancy outcome, including elevated risk of a large-for-gestational-age infant, cesarean delivery, and long-term maternal weight retention. In 1990, the Institute of Medicine (IOM) developed a set of recommendations for maternal weight gain based on the pre-pregnancy Body Mass Index (BMI) of the mother. The guidelines advise that those with a BMI of less than 19.8 gain 28 to 40 pounds, those with a BMI of 19.8–26.0 gain 25 to 35 pounds, and those with a BMI of 26.1–29.0 gain 15 to 25 pounds. There are currently no recommendations for women who have a BMI of 29.1 or greater. The IOM convened a workshop in 2006 to assess the impact of pregnancy weight on maternal and child health, and a report from that workshop was released in February 2007.

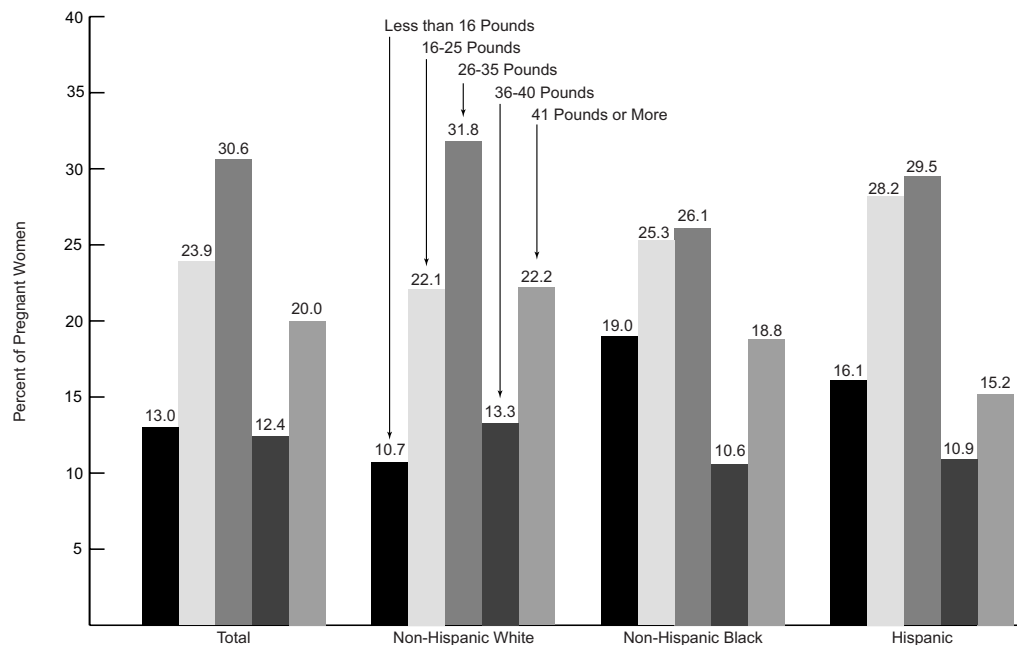
Data from the National Vital Statistics System show that 13.0 percent of women gained fewer than 16 pounds during pregnancy in 2004; this was most common among non-Hispanic Black women (19.0 percent). Another 20.0 percent of

all pregnant women gained more than 40 pounds, which was most common among non-Hispanic White women (22.2 percent). These data suggest that approximately one-third of women had weight gain outside the

recommended guidelines; however, this does not account for pre-pregnancy BMI or gestational age. Analyses of other national data sets suggest that approximately two-thirds of women experience weight gain outside of the IOM guidelines.

Weight Gain During Pregnancy, by Race/Ethnicity,* 2004

Source II.21: 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.

MATERNAL MORBIDITY AND RISK FACTORS IN PREGNANCY

Maternal morbidity refers to diseases or conditions that arise during pregnancy. Since 1989 (the year these data became available from birth certificates), diabetes and hypertension have been the most commonly reported conditions. Both chronic and gestational (developing only during pregnancy) diabetes may pose health risks to the mother and infant. Babies born to mothers with diabetes can have birth defects. These babies may also be premature or stillborn, or very large at birth.¹ In 2004, diabetes during pregnancy occurred at a rate of 35.8 per 1,000 live births. There was little variation among racial and ethnic groups.

Hypertension during pregnancy can be either chronic in nature or limited to the duration of the pregnancy. Severe hypertension during pregnancy can result in preeclampsia, fetal growth restriction, premature birth, placental abruption, and stillbirth.² Chronic hypertension was present in 9.6 of every 1,000 live births in 2004, and was noticeably more prevalent among non-Hispanic Black women than non-Hispanic White and Hispanic women. The rate of pregnancy-associated hypertension was even higher, occurring in 37.9 of every 1,000 live births. Rates were comparable between non-

Hispanic White and non-Hispanic Black women, but were lower among Hispanic women.

Other illnesses or risk factors during pregnancy can include eclampsia, which involves seizures (usually preceded by a diagnosis of preeclampsia), hydramnios and oligohydramnios, which are too much and too little amniotic fluid, respectively, and incompetent cervix, which can result in preterm birth. All of these conditions are more

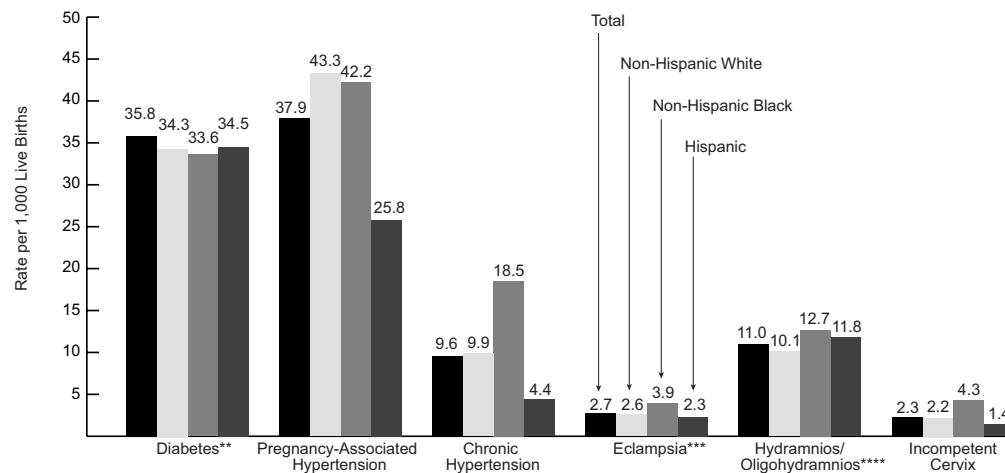
prevalent among non-Hispanic Black women than non-Hispanic White and Hispanic women.

1 Centers for Disease Control and Prevention. *Diabetes and pregnancy FAQs*. Available from: <http://www.cdc.gov/ncbddd/bd/diabetespregnancyfaqs.htm#whatcanhappentoawoman>. Viewed 4/18/07.

2 U.S. Agency for Healthcare Research and Quality. *Evidence Report/Technology Assessment Number 14: Management of chronic hypertension during pregnancy*. Publication #00E011; 2000 Aug.

Maternal Morbidities and Risk Factors in Pregnancy, by Race/Ethnicity,* 2004

Source II.21: 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. **Includes both chronic and gestational diabetes. ***Eclampsia is characterized by seizures and generally follows preeclampsia, which is marked by high blood pressure, weight gain, and protein in the urine. ****Hydramnios is too much amniotic fluid, while oligohydramnios is a lack of amniotic fluid.

OBSTETRICAL PROCEDURES AND COMPLICATIONS OF LABOR AND DELIVERY

There are a number of complications that can arise and procedures that can occur during labor and delivery. In 2004, repair of a current obstetric laceration and cesarean section were the two most common obstetrical procedures among women aged 15–44 years, according to hospital discharge data (occurring during 99.4 and 98.7 hospital stays per 10,000 women, respectively). Other common procedures were artificial rupture of membranes, also known as “breaking the waters” (75.2 per 10,000), episiotomy, which is a surgical cut to the perineum to enlarge the

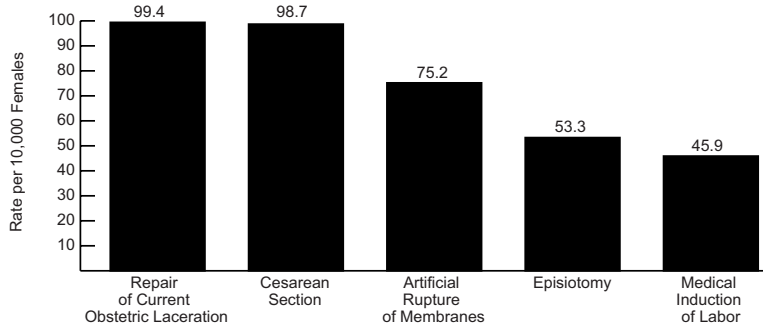
vaginal opening (53.3 per 10,000), and medical induction of labor (45.9 per 10,000). The rate of induction of labor was twice the 1990 rate, while the cesarean section rate increased 41 percent after a recent low in 1996.

Complications of labor and delivery can include moderate or heavy meconium, which occurs when the baby expels its first stool before being born; breech presentation or malpresentation, which occurs when the baby is in an abnormal position that may interfere with labor; tocolysis, which is the delaying of labor to avoid preterm birth; and precipitous labor, which is labor that takes less than 3 hours from beginning to end. Among childbearing women through age 54,

moderate/heavy meconium is most common, occurring at a rate of 48.3 per 1,000 live births, followed by breech/malpresentation (41.6 per 1,000), tocolysis (19.8 per 1,000), and precipitous labor (19.2 per 1,000). There is some racial and ethnic disparity in the occurrence of these complications. Moderate/heavy meconium is most common among births to non-Hispanic Black women and breech/malpresentation occurs most frequently in births to non-Hispanic White women. Both tocolysis and precipitous labor occur less frequently among births to Hispanic women than in births to non-Hispanic White women and non-Hispanic Black women.

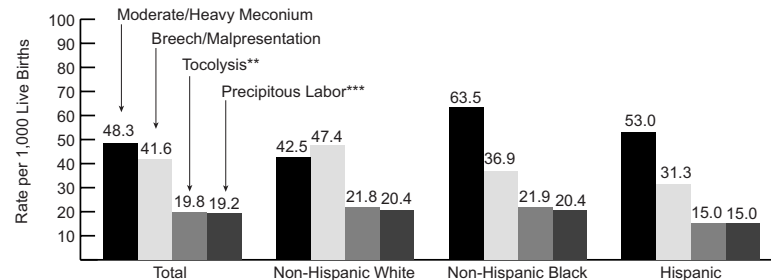
Rate of Discharges for Obstetrical Procedures from Short-Stay Hospitals Among Females Aged 15-44, 2004

Source II.22: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Discharge Survey



Complications of Labor and Delivery Among Childbearing Women Through Age 54, by Race/Ethnicity,* 2004

Source II.21: 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. **Delaying or inhibition of labor, especially to suppress preterm birth. ***Labor that is less than 3 hours from beginning of contractions to birth.

LIVE BIRTHS

According to preliminary data, there were 4.1 million births in the United States in 2005, which was unchanged from 2004. The number of births rose most noticeably among Hispanic women, followed by Asian/Pacific Islander women. Births also rose slightly among American Indian/Alaska Native and non-Hispanic Black women, while they declined slightly among non-Hispanic White women. The birth rate of 14.0 live births per 1,000 population was the same as the rate reported in 2004. Among non-Hispanic White, non-Hispanic Black, and Asian/Pacific

Islander populations, birth rates declined, while they rose slightly among the Hispanic and American Indian/Alaska Native populations.

With regard to age, overall birth rates were highest among those aged 25–29 years (115.6 per 1,000), followed by those aged 20–24 years (102.2 per 1,000). The birth rate for non-Hispanic Whites was highest in the 25–29 age group (109.3 per 1,000), while the rates for non-Hispanic Blacks, Hispanics, and American Indian/Alaska Natives were highest in the 20–24 age group (126.7, 169.6, and 109.0 per 1,000, respectively). The birth rate among Asian/Pacific

Islanders was highest among 30- to 34-year-olds (115.1 per 1,000).

Overall, 36.8 percent of births were to unmarried mothers. This percentage was the highest among non-Hispanic Black mothers (69.5 percent of all births), followed by American Indian/Alaska Native mothers (63.3 percent). The lowest percentage of births to unmarried mothers was among the Asian/Pacific Islander group (16.2 percent).

Live Births per 1,000 Women, by Age and Race/Ethnicity, 2005*

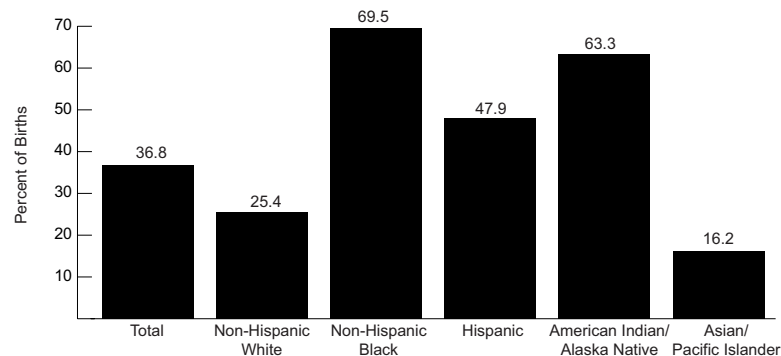
Source II.23: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

	Total	Non-Hispanic White	Non-Hispanic Black	Hispanic	American Indian/ Alaska Native	Asian/ Pacific Islander
15-19 Years	40.4	26.0	60.9	81.5	52.7	16.9
20-24 Years	102.2	81.5	126.7	169.6	109.0	61.0
25-29 Years	115.6	109.3	103.0	148.8	94.0	108.0
30-34 Years	95.9	97.2	68.5	106.5	59.9	115.1
35-39 Years	46.3	45.7	34.3	54.0	26.9	61.9
40-44 Years	9.1	8.3	8.2	12.9	6.0	13.9

*Data are preliminary.

Births to Unmarried Mothers, by Race/Ethnicity, 2005*

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



*Data are preliminary.

BREASTFEEDING

Breastmilk benefits the health, growth, immunity, and development of infants. Mothers who breastfed may have a decreased risk of breast and ovarian cancers.¹

In 2005, 72.9 percent of infants were reported to have ever been breastfed. Non-Hispanic Black infants were the least likely to ever be breastfed (55.4 percent), while Asian/Pacific Islanders were the most likely (81.4 percent), followed by Hispanics (79.0 percent). Infants born to younger mothers, mothers with lower educational attainment, mothers with low family

income, and mothers receiving WIC program benefits were also less likely to be breastfed.

The American Academy of Pediatrics recommends that infants be exclusively breastfed—without supplemental solids or liquids—for the first 6 months of life, based on evidence of reduced risk of upper respiratory and other common infections. However, only 13.9 percent of infants were exclusively breastfed at 6 months in 2005, and only 39.1 percent of infants were fed any breastmilk at 6 months.

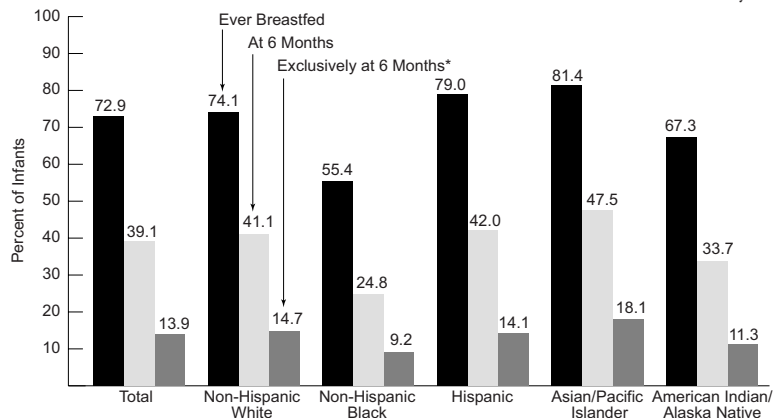
Younger mothers were less likely to breastfeed than mothers in older age categories. In 2005,

50.0 percent of infants with mothers under age 20 were ever breastfed, compared to 68.4 percent of infants born to mothers aged 20–29 years, and 77.7 percent of infants born to mothers aged 30 years and older. The percentage of infants who were breastfed at 6 and 12 months also increased with maternal age.

1 Ip S, Chung M, Raman G, Chew P, Magula N, DeVine D, Trikalinos T, Lau J. *Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries. Evidence Report/Technology Assessment No. 153 (Prepared by Tufts-New England Medical Center Evidence-based Practice Center, under Contract No. 290-02-0022). AHRQ Publication No. 07-E0007. Rockville, MD: Agency for Healthcare Research and Quality. April 2007.*

Infants Who Are Breastfed, by Race/Ethnicity and Duration, 2005

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



*Exclusive breastfeeding is defined as only breastmilk—no solids, water, or other liquids.

Infants Who Are Breastfed, by Maternal Age and Duration, 2005

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

