HIV among Pregnant Women, Infants, and Children in the United States

Fast Facts

- All pregnant women should be screened for HIV as early as possible during each pregnancy.
- Women with HIV who take antiretroviral medication during pregnancy as recommended can reduce the risk of transmitting HIV to their babies to less than 1%.
- HIV disproportionately affects black/African American children in the United States.

HIV transmission from mother to child during pregnancy, labor and delivery, or breastfeeding is known as perinatal transmission and is the most common route of HIV infection in children. When HIV is diagnosed before or during pregnancy, perinatal transmission can be reduced to less than 1% if appropriate medical treatment is given, the virus becomes undetectable, and breastfeeding is avoided. Since the mid-1990s, HIV testing and preventive interventions have resulted in more than a 90% decline in the number of children perinatally infected with HIV in the United States.

The Numbers

- In 2010, an estimated 217 children younger than the age of 13 years were diagnosed with HIV in the 46 states with long-term, confidential name-based HIV infection reporting since at least 2007; 162 (75%) of those children were perinatally infected.
- At the end of 2009, an estimated 10,834 persons who were diagnosed with HIV when they were younger than 13 years were living in the 46 states with long-term, confidential name-based HIV reporting. Of the total, 9,522 (88%) of these persons acquired HIV perinatally. Of these diagnoses of perinatal HIV infection, 63% were in blacks/African Americans, 22% were in Hispanics/Latinos, and 13% were in whites. These numbers include persons of all ages who were infected with HIV as children.
- The number of women with HIV giving birth in the United States increased approximately 30%, from 6,000–7,000 in 2000 to 8,700 in 2006.
- Despite the increase in the number of women with HIV giving birth, the estimated number of perinatal HIV infections per year in all 50 states and 5 US dependent areas continues to decline.
- Among perinatally infected children born during 2007 through 2009, black/African American children had the highest HIV rate per 100,000 live births each year, although the rate decreased from 15.2 in 2007 to 9.9 in 2009. The rates for Hispanic/Latino and white children remained stable during this time.
- From the beginning of the epidemic through 2009, an estimated 5,626 people who were diagnosed with AIDS when they were younger than 13 years died in the 50 states and the District of Columbia. Of the total, 4,986 (89%) of them were infected perinatally.

Prevention Challenges

The reduction in perinatal HIV infections in the United States represents an important achievement in public health. However, perinatal transmission of HIV continues to occur—and infant infections can be associated with interruptions of care at any stage of pregnancy for HIV-infected women and their infants. The following challenges can be categorized as missed opportunities in preventing perinatal HIV transmission:

- Enhanced primary HIV prevention strategies for women and girls continue to be needed and evaluated to prevent new infections in these populations, which will in turn, prevent perinatal HIV infections.

Note: Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.

1Live birth data reflect race/ethnicity of the infant’s mother.
2Hispanics/Latinos can be of any race.

1The remaining 25% are categorized as “other,” which includes hemophilia, blood transfusion, and risk factor not reported or not identified.
• Few HIV medical care providers routinely provide preconception care or family planning services to their patients with HIV, which may result in unintended pregnancies.

• Other missed opportunities for perinatal HIV prevention include lack of the following: appropriate prenatal care, prenatal HIV testing (see bullet below), prenatal antiretroviral medication, Cesarean delivery for women with a viral load greater than 1,000 copies/mL, and education on avoidance of breastfeeding. Among the mothers of HIV-infected infants reported to CDC from 2003–2007, only 62% had at least one prenatal visit, 27% were diagnosed with HIV after delivery, and only 29% received some antiretroviral medication during pregnancy.

• HIV testing. Because approximately 18% of all people with HIV do not know their HIV status, many women who are infected with HIV may not know they are infected. The Centers for Disease Control and Prevention (CDC) recommends routine, opt-out1 HIV testing for all persons aged 13–64 years in health care settings, including women during every pregnancy. If women are tested and diagnosed with HIV infection before or early in their pregnancy, they can be given medication to improve their own health and reduce the risk of transmitting HIV to their infant.

Other factors also pose prevention challenges, including
• Substance abuse, mental illness, and HIV-related stigma present barriers to prenatal care in women living with HIV. Increasing accessibility to prenatal care services is crucial to sustain and maximize the decline in perinatal HIV infections.
• Socioeconomic issues associated with poverty, including limited access to high-quality health care, housing, and HIV prevention education, may directly or indirectly increase the risk factors for HIV infection.
• Lack of awareness that pre-chewing of food for infants is a transmission risk.
• Of the more than 140,000 HIV-serodiscordant heterosexual couples (one partner is HIV-infected and the other is not) in the United States, about half of them want additional children; and many of these couples have limited access to safe conception methods and services.

What CDC Is Doing
• CDC published Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings in 2006. To further reduce the number of children who are infected with HIV perinatally, these recommendations called for routine opt-out HIV testing for all pregnant women, with repeat HIV testing in the third trimester for women who meet certain criteria.
• CDC, the Council of State and Territorial Epidemiologists, and the American Academy of Pediatrics have recommended universal HIV perinatal exposure reporting to ensure that HIV-infected pregnant women receive all necessary interventions to safeguard their health and that of their infants.
• CDC has proposed a framework to eliminate mother-to-child HIV transmission (EMCT) in the United States to guide efforts by federal agencies and other national, state, and local organizations. In this framework, EMCT is defined as a transmission rate of less than 1% among infants born to HIV-infected women and less than 1 transmission per 100,000 live births.
• CDC is collaborating with the François-Xavier Bagnoud Center (FXBC, http://www.fxbcenter.org) to organize and lead a group of stakeholders and experts from maternal and child health, HIV/AIDS, policy, research, and surveillance fields to eliminate mother-to-child HIV transmission in the United States using the EMCT framework.
• CDC, the American College of Obstetricians and Gynecologists, CityMatCH, and the National Fetal and Infant Mortality Review Program developed a continuous quality improvement methodology for local systems to identify and address missed prevention and treatment opportunities. The Fetal and Infant Mortality Review (FIMR)/HIV Prevention Methodology is underway in nine sites, and an FIMR/HIV Prevention Methodology National Resource Center provides information and technical assistance to any community interested in conducting the methodology (www.fimrhiv.org).
• CDC has worked to educate obstetricians, gynecologists, nurse midwives, and other health care professionals on the importance of perinatal HIV testing and counseling through the One Test. Two Lives. campaign. CDC has also conducted educational sessions for health care professionals and sponsored a special supplement titled “Achievements, Issues, and Challenges: Prevention of Mother-to-Child HIV Transmission in the United States and in Resource-Limited Settings” in the American Journal of Obstetrics and Gynecology. For more information, visit http://www.cdc.gov/actagainstaidsoptt/index.html.

Additional Resources:
CDC INFO
1-800-CDC-INFO (232-4636)
cdcinfo@cdc.gov
Get answers to questions and locate HIV testing sites.

CDC HIV Web Site
www.cdc.gov/hiv

CDC National HIV Testing Resources
http://hivtest.cdc.gov
Text your ZIP code to KNOW IT or 1-800-458-5251. Locate an HIV testing site near you.

CDC National Prevention Information Network (NPIN)
1-800-448-0440
www.cdcnpin.org
Technical assistance and resources.

AIDSinfo
1-800-448-0440
www.aidsinfo.nih.gov
Treatment and clinical trials.

AIDS.gov
www.aids.gov
Comprehensive government HIV resources.

1 Opt-out HIV testing: Pregnant women are told that an HIV test will be included in the standard group of prenatal tests (that is, tests given to all pregnant women), and that they may decline the test. Unless they decline, they will receive an HIV test.