

U.S. Meets Perinatal HIV Elimination Goals

The risk of mother-to-child HIV transmission fell below 1% for the first time in 2019.

May 12, 2023 By [Liz Highleyman](#)

In 2019, the United States met its goals for the elimination of HIV among newborns for the first time, according to [a report in the journal Pediatrics](#). Although not yet reaching zero, the likelihood of mother-to-child HIV transmission fell below 1%, and the perinatal HIV diagnosis rate dropped below one case per 100,000 live births.

“These laudable accomplishments have been made possible through the decades-long coordinated multidisciplinary and multisectoral efforts of HIV research, public health agencies, and advocacy communities,” Nahida Chakhtoura, MD, and Bill Kapogiannis, MD, of the National Institutes of Health, wrote in an [accompanying editorial](#).

Pregnant women with HIV can transmit the virus to their babies during gestation or delivery, but effective antiretroviral treatment dramatically reduces the risk. In 1994, the [ACTG 076 trial](#) showed that AZT (zidovudine or Retrovir) administered to the mother during pregnancy and at delivery and given to the baby for the first six weeks after birth lowered the likelihood of HIV transmission from 26% to 8%, reducing the risk by about two thirds. Modern antiretroviral therapy that leads to full viral suppression makes transmission virtually impossible, but elimination of perinatal HIV requires [universal testing and prompt treatment](#) of all pregnant people living with the virus.

In 2012, the Centers for Disease Control and Prevention (CDC) published a [Framework for Elimination of Perinatal Transmission of HIV in the United States](#), setting forth the goals of reducing the rate of perinatal transmission to less than 1% and the incidence of perinatal HIV to less than one case per 100,000 live births.

Margaret Lampe, RN, MPH, of the CDC, and colleagues used data from the National HIV Surveillance System and the National Inpatient Sample Healthcare Cost and Utilization Project to assess perinatally acquired HIV among babies born in the United States between 2010 and 2019.

The annual estimated number of live births to women diagnosed with HIV decreased from 4,587 in 2010 to 3,525 in 2019. During this same period, the number of infants with perinatally acquired

HIV dropped from 74 to 32. (At the peak in the early 1990s, more than 1,500 infants acquired HIV annually.) The perinatal HIV transmission rate fell from 1.6% to 0.9%, and the annual perinatal diagnosis rate declined from 1.9 to 0.9 cases per 100,000 live births.

The rate of perinatal HIV transmission varies by race and ethnicity, both because some groups are more likely to be living with HIV and because they are less likely to receive prompt testing, care and treatment. [According to CDC estimates](#), just over 60% of infants diagnosed with HIV in 2019 were Black, 17% were Latino, 12% were white and 5% or less were Asian, American Indian or other.

Based on these findings, the researchers concluded that both perinatal HIV diagnosis and transmission goals were first achieved in 2019. Racial and ethnic disparities persist, but they declined substantially over the 10-year study period.

“To maintain the elimination of perinatal HIV, and to eliminate racial disparities, the continued coordinated effort of health care and public health is required,” they wrote. “The approach to perinatal HIV elimination is a public health model that can be replicated or expanded to areas.”

However, the risk of perinatal HIV transmission remains high when women are not diagnosed until late in pregnancy or at delivery, especially if they have a high viral load.

“Much work remains to close the science-to-service gaps, as 16% to 30% of pregnant individuals diagnosed at or after delivery resulted in perinatal transmission of HIV,” Chakhtoura and Kapogiannis wrote in their editorial. “Important implementation science is needed to uncover individual, health system and provider level challenges and implement interventions that will improve the delivery and uptake of culturally competent, unbiased, health care among diverse communities.”

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