United States Epidemiological Data Through 2005

- About 100–200 infants in the United States are infected with HIV annually. Many of these infections involve women who were not tested early enough in pregnancy or who did not receive prevention services.
- An estimated 6,051 persons who had been infected with HIV perinatally were living with HIV/AIDS at the end of 2005.
- Of the perinatally infected persons living with HIV/AIDS at the end of 2005, an estimated 66% were black (not Hispanic or Latino), and an estimated 20% were Hispanic/Latino.
- Over the course of the epidemic, the number of AIDS cases associated with perinatal transmission has decreased dramatically. This decrease is largely due to the increased identification of women infected with HIV and timely interventions to prevent perinatal transmission.

HIV Transmission to Child

Rates of HIV transmission from mother to infant in United States:
- 25% without treatment;
- 9%-13% with treatment only during labor or at birth;
- 0.9% or less with antiretroviral therapy during pregnancy and labor, and with AZT to newborn, if maternal viral load <1000 at delivery.

Perinatal Transmission Can Occur Three Ways

- intrauterine — in the uterus, during pregnancy, via blood;
- intrapartum — during the birth process, via blood and genital secretions;
- postpartum — after birth, via breast milk.

Factors Increasing the Likelihood of Perinatal Transmission of HIV

- Low CD4 count in mother
- High viral load in mother
- Illicit drug use by mother
- Active genital herpes or other sexually transmitted infection during labor
- Prolonged rupture of membranes
- Chorioamnionitis — infection of “bag of water” during labor and delivery
- Premature delivery
- Breastfeeding

Vaginal Delivery or Cesarean Delivery?

- If mother’s viral load is less than 1000 at the time of delivery, the rate of HIV transmission is the same with vaginal delivery as with cesarean delivery;
- Cesarean delivery may reduce transmission in women with viral loads >1000 if all of the following conditions are present: elective scheduled surgery, bag of water is not broken, and woman is not in labor.
- It is important that an HIV-infected woman get prenatal care by a provider knowledgeable about HIV. This will give her the best chance of not transmitting HIV to her infant.
- Ideally, a woman should consult with her health-care provider before she gets pregnant to make sure she is in good health and taking medications that are safe to take while pregnant.

HIV Progression in Mother

- Pregnancy does not accelerate the progression of HIV disease or lead to increased viral load. Although CD4+ count may be slightly lower in pregnancy, the percent CD4+ does not change. The lower CD4+ count is a result of increased blood volume, a physiologic change of pregnancy.

Sources

Adapted from the Centers for Disease Control Fact Sheet 2007; http://www.cdc.gov/hiv/topics/perinatal/resources/factsheets/perinatal.htm.