



# PREGNANCY AND HIV

## HOW DO BABIES GET AIDS?

The virus that causes AIDS can be transmitted from an infected mother to her newborn child. Without treatment, about 20% of babies of infected mothers get HIV.

Mothers with higher viral loads are more likely to infect their babies. However, no viral load is low enough to be "safe". Infection can occur any time during pregnancy, but usually happens just before or during delivery. The baby is more likely to be infected if the delivery takes a long time. During delivery, the newborn is exposed to the mother's blood. Drinking breast milk from an infected woman can also infect babies. Mothers who are HIV-infected **should generally not breast-feed their babies**. To reduce the risk of HIV infection when the father is HIV-positive, some couples have used sperm washing and artificial insemination.

## HOW CAN WE PREVENT INFECTION OF NEWBORNS?

**Use antiretroviral medications:** The risk of transmitting HIV is extremely low if antiretroviral medications are used. Transmission rates are only 1% to 2% if the mother takes combination antiretroviral therapy. The rate is about 4% when the mother takes AZT during the last six months of her pregnancy, and the newborn takes AZT for six weeks after birth. See Fact Sheet 411 for more information on AZT.

Even if the mother does not take antiretroviral medications until she is in labor, two methods cut transmission by almost half.

- AZT and 3TC (See Fact Sheet 415) during labor, and for both mother and child for one week after the birth.
- One dose of nevirapine (See Fact Sheet 431) during labor, and one dose for the newborn, 2 to 3 days after birth.

Combining nevirapine and AZT during labor and delivery cuts transmission to only 2%. However, resistance to nevirapine can develop in up to 40% of women who take the single dose. This reduces the success of later antiretroviral therapy for the mother. Resistance to nevirapine can also be transmitted to newborns through breast feeding. However, the shorter regimens are more affordable for developing countries.

**Keep delivery time short:** The risk of transmission increases with longer delivery

times. If the mother uses AZT and has a viral load (see Fact Sheet 125) under 1,000, the risk is almost zero. Mothers with a high viral load might reduce their risk if they deliver their baby by cesarean (C-) section.

## Feeding the Newborn

Up to 14% of babies may get HIV infection from infected breast milk. Breast feeding is controversial, especially in the developing world. Most transmission from breast feeding occurs within the first two months after birth. On the other hand, replacement feeding within the first two years of life can create additional risks for infant mortality from various diseases.

A recent study showed that it is possible for a newborn to become infected by eating food that is chewed for it by an infected mother. This practice should be avoided.

## HOW DO WE KNOW IF A NEWBORN IS INFECTED?

Most babies born to infected mothers test positive for HIV. Testing positive means you have HIV antibodies in your blood. Fact Sheet 102 has more information on HIV tests. Babies get HIV antibodies from their mother even if they aren't infected.

Another test, similar to the HIV viral load test (See Fact Sheet 125, Viral Load Tests), can be used to find out if the baby is infected with HIV. Instead of antibodies, these tests detect the HIV virus in the blood. This is the only reliable way to determine if a newborn is infected with HIV.

If babies **are** infected with HIV, their own immune systems will start to make antibodies. They will continue to test positive. If they **are not** infected, the mother's antibodies will disappear and the babies will test negative after about 18 months.

## WHAT ABOUT THE MOTHER'S HEALTH?

Recent studies show that HIV-positive women who get pregnant do not get any sicker than those who are not pregnant. Becoming pregnant is not dangerous to the health of an HIV-infected woman. This is true even if the mother breast-feeds her newborn for a full term (2 years). In fact, a study in 2007 showed that becoming pregnant was good for a woman's health.

However, "short-course" treatments to prevent infection of a newborn are not the best choice for the mother's health. Combination therapies are the standard treatment. If a pregnant woman takes medications only during labor and delivery, HIV might develop resistance to them. This can reduce the future treatment options for the mother. See Fact Sheet 126 for more information on resistance.

A pregnant woman should consider all of the possible problems with antiretroviral medications.

- Pregnant women should not to use both ddI (Videx, see Fact Sheet 413) and d4T (Zerit, see Fact Sheet 414) in their antiretroviral treatment due to a high rate of a dangerous side effect called lactic acidosis.
- Do not use efavirenz (Sustiva) or indinavir (Crixivan) during pregnancy.
- If you have more than 250 T-cells, do not start using nevirapine (Viramune).

Some doctors suggest that women interrupt their treatment during the first 3 months of pregnancy for two reasons:

- The risk of missing doses due to nausea and vomiting during early pregnancy, giving HIV a chance to develop resistance
- The risk of birth defects, which is highest during the first 3 months. There is almost no evidence of these birth defects, except with efavirenz.
- Experts disagree whether the use of combination therapy results in a higher risk of premature or low birth weight babies.

If you have HIV and you are pregnant, or if you want to become pregnant, talk with your doctor about your options for taking care of yourself and reducing the risk of HIV infection or birth defects for your new child.

## THE BOTTOM LINE

An HIV-infected woman who becomes pregnant needs to think about her own health and the health of her new child. Pregnancy does not seem to make the mother's HIV disease any worse.

The risk of transmitting HIV to a newborn can be virtually eliminated with "short course" treatments taken only during labor and delivery. But short treatments increase the risk of resistance to the drugs used. This can reduce the success of future treatment for both mother and child.

However, the risk of birth defects caused by medications is greater during the first 3 months of pregnancy. If a mother chooses to stop taking some medications during pregnancy, her HIV disease could get worse. Any woman with HIV who is thinking about getting pregnant should carefully discuss treatment options with her doctor.