



# PREGNANCY AND HIV

## HOW DO BABIES GET AIDS?

HIV, the virus that causes AIDS, can be transmitted from an infected mother to her newborn child. According to the World Health Organization, without antiretroviral treatment, up to 30% of babies of HIV infected mothers get HIV. If the mother breastfeeds, the overall risk rises to between 35% and 50%.

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, which is a high-risk exposure.

An HIV-infected father can transmit HIV to his wife and to their child. To reduce this risk, some couples have used sperm washing and artificial insemination.

## HOW CAN WE PREVENT INFECTION OF NEWBORNS?

**What if the father is infected with HIV?** Recent studies have shown that it is possible to "wash" the sperm of an HIV-infected man so that it can be used to fertilize a woman and produce a healthy baby. These procedures are effective. However, they are very expensive and not easily available.

**Use antiretroviral medications:** The risk of transmitting HIV is extremely low if antiretroviral medications are used in pregnancy and labor, and the mother does not breastfeed. Transmission rates are only 1% to 2% if the mother takes combination antiretroviral therapy (ART). The rate is also about 2% when the mother takes AZT (see fact sheet 411) during the last 10-12 weeks of her pregnancy and a single dose of nevirapine (see fact sheet 431) during labor, and the newborn takes a single dose of nevirapine within 3 days of birth.

ART is becoming more available throughout the world. The World Health Organization estimates that the use of ART prevented 65,000 infant infections through 2008. Wherever ART is generally available, women should receive a standard multi-drug regimen (see fact sheet 404).

**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 20% of babies may get HIV infection from infected breast milk if the mother is not

taking ART. However, breast milk contains nutrients that the newborn needs. It also protects the baby against some common childhood illnesses. Replacement feeding can increase the risk of infant death. This can be due to loss of disease protection provided by the mother's milk or the use of contaminated water to mix baby formula.

The World Health Organization advises that mothers should take ART during breastfeeding. After 6 months, they should add other foods while continuing to breastfeed for up to a year.

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

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

All babies born to infected mothers test positive for HIV. They have antibodies to HIV even if they are not infected because the mother's antibodies are passed to the baby. This does not mean the baby is infected. Fact Sheet 102 has more information on HIV tests.

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 HIV 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 eventually disappear. The babies will test negative after about 12 to 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 an HIV-infected woman's health.

"Short-course" ART to prevent infection of a newborn is not the best choice for the mother's health. If a pregnant woman takes ART only during labor and delivery, HIV might develop resistance. 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 use both ddI (Videx, see fact sheet 413) and d4T (Zerit, see fact sheet 414) in their ART due to a high rate of a dangerous side effect called lactic acidosis.
- Do not use efavirenz (Sustiva, see fact sheet 432) during the first 3 months of pregnancy.
- If your CD4 count is more than 250, do not start using nevirapine (Viramune, see fact sheet 431).

Some doctors suggest that women interrupt their treatment during the first 3 months of pregnancy for three 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 this, except with efavirenz.
- ART might increase the risk of premature or low birth weight babies.

**However, current guidelines do not support treatment interruption for pregnant women. The guidelines can be found here:** <http://www.aidsinfo.nih.gov/guidelines/GuidelineDetail.aspx?GuidelineID=9&ClassID=2>

If you have HIV and you are pregnant, or if you want to become pregnant, talk with your health care provider 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 is very low with "short course" treatments taken only during labor and delivery and if the mother does not breastfeed. 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.

There is some risk of birth defects caused by any drug 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 health care provider.

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