

# Safety and Toxicity of Anti-HIV Medications During Pregnancy

## I am HIV positive and pregnant. Are there any anti-HIV medications that may be dangerous to me or my baby during my pregnancy?

Yes. Although information on anti-HIV medications in pregnant women is limited, enough is known to make recommendations about medications for you and your baby. However, the long-term effects of babies' exposure to anti-HIV medications *in utero* are unknown. Talk to your doctor about which medications may be harmful during your pregnancy and what medication and dose changes are possible.

In general, **protease inhibitors (PIs)** are associated with increased levels of blood sugar (hyperglycemia), development of diabetes mellitus or worsening of diabetes mellitus symptoms (see [Hyperglycemia Fact Sheet](#)), and **diabetic ketoacidosis**. Pregnancy is also a risk factor for hyperglycemia, but it is not known whether PI use increases the risk for pregnancy-associated hyperglycemia or gestational diabetes.

Two **non-nucleoside reverse transcriptase inhibitors (NNRTIs)**, Rescriptor (delavirdine) and Sustiva (efavirenz), are not recommended for the treatment of HIV-infected pregnant women. Use of these medications during pregnancy may lead to birth defects. Another NNRTI, Viramune (nevirapine), may be part of your HIV treatment regimen. Long-term use of Viramune may cause negative side effects, such as exhaustion or weakness; nausea or lack of appetite; yellowing of eyes or skin; or signs of liver toxicity, such as severe skin rash, chills, fever, sore throat, or other flu-like symptoms, liver tenderness or enlargement or elevated liver enzyme levels (see [Hepatotoxicity Fact Sheet](#)). These negative side effects are not normally seen with short-term use (one or two doses) of Viramune during pregnancy. However, because pregnancy and early symptoms of liver toxicity can be similar, your doctor should monitor you closely while you are taking Viramune. Also, Viramune should be used with caution in women who have never received HIV treatment and who have CD4 counts greater than 250 cells/mm<sup>3</sup>. Liver toxicity has occurred more frequently in these patients.

### Terms Used in This Fact Sheet:

**Diabetic ketoacidosis:** a complication of diabetes in which sugar is not broken down for energy and fat is broken down instead. This leads to an unhealthy buildup of ketones (fat by-products).

**Entry inhibitor:** class of anti-HIV medication. Entry inhibitors work by preventing HIV from entering a cell.

**Integrase inhibitor:** class of anti-HIV medication. Integrase inhibitors prevent the HIV integrase protein from inserting HIV's genetic information into an infected cell's own DNA.

**In utero:** the time an unborn baby is in its mother's uterus.

**Mitochondrial toxicity:** damage to the mitochondria (rod-like structures that serve as a cell's powerhouse) that can cause problems in the heart, nerves, muscles, pancreas, kidneys, and liver.

**Non-nucleoside reverse transcriptase inhibitor (NNRTI):** class of anti-HIV medication. NNRTIs work by blocking reverse transcriptase, a protein that HIV needs to make copies of itself.

**Nucleoside reverse transcriptase inhibitor (NRTI):** class of anti-HIV medication. NRTIs are faulty versions of the building blocks (nucleosides) used by reverse transcriptase, a protein that HIV needs to make copies of itself.

**Protease inhibitor (PI):** class of anti-HIV medication. PIs work by blocking protease, a protein that HIV needs to make copies of itself.

**Nucleoside reverse transcriptase inhibitors (NRTIs)** may cause **mitochondrial toxicity**, which may lead to a buildup of lactic acid in the blood. This buildup is known as hyperlactatemia or lactic acidosis (see [Lactic Acidosis Fact Sheet](#)). This toxicity may be of particular concern for pregnant women and babies exposed to NRTIs *in utero*.

There is very little known about the use of the **entry inhibitors** Fuzeon (enfuvirtide) and Selzentry (maraviroc) and the **integrase inhibitor**, Isentress (raltegravir), during pregnancy.

### For more information:

Contact your doctor or an AIDSinfo Health Information Specialist at 1-800-448-0440 or <http://aidsinfo.nih.gov>.