

# HEPPIGRAM: Clinical Scenarios and Recommendations for the Use of

## Antiretroviral Drugs to Reduce Perinatal HIV-1 Transmission

Adapted from the Public Health Service Task Force Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV-1 Transmission in the United States, November 26, 2003  
[http://www.aidsinfo.nih.gov/guidelines/perinata/PER\\_112603.html#table3](http://www.aidsinfo.nih.gov/guidelines/perinata/PER_112603.html#table3)

<p><b>SCENARIO #1</b> <b>HIV-infected pregnant women who have not received prior ART</b></p> <ul style="list-style-type: none"><li>◆ Pregnant women with HIV infection must receive standard clinical, immunologic, and virologic evaluation. Recommendations for initiation and choice of ART should be based on the same parameters used for persons who are not pregnant, although the known and unknown risks and benefits of such therapy during pregnancy must be considered and discussed.</li><li>◆ The three-part ZDV chemoprophylaxis regimen, initiated after the first trimester, should be recommended for all pregnant women with HIV-infection regardless of antenatal HIV RNA copy number to reduce the risk for perinatal transmission.</li><li>◆ The combination of ZDV chemoprophylaxis with additional ARVs for treatment of HIV infection is recommended for infected women whose clinical, immunologic or virologic status requires treatment or who have HIV RNA over 1,000 copies/mL regardless of clinical or immunologic status.</li><li>◆ Women who are in the first trimester of pregnancy may consider delaying initiation of therapy until after 10-12 weeks' gestation.</li></ul>	<p><b>SCENARIO #2</b> <b>HIV-infected women receiving ART during the current pregnancy</b></p> <ul style="list-style-type: none"><li>◆ HIV-infected women receiving ART for whom pregnancy is identified after the first trimester should continue therapy. ZDV should be a component of the antenatal antiretroviral treatment regimen after the first trimester whenever possible, although this may not always be feasible.</li><li>◆ For women receiving ART for whom pregnancy is recognized during the first trimester, the woman should be counseled regarding the benefits and potential risks of ARV administration during this period, and continuation of therapy should be considered. If therapy is discontinued during the first trimester, all drugs should be stopped and reintroduced simultaneously to avoid the development of drug resistance.</li><li>◆ Regardless of the antepartum ARV regimen, ZDV administration is recommended during the intrapartum period and for the newborn.</li></ul>
<p><b>SCENARIO #3</b> <b>HIV-infected women in labor who have had no prior therapy</b></p> <ul style="list-style-type: none"><li>◆ Several effective regimens are available. These include:<ol style="list-style-type: none"><li>1. Intrapartum intravenous ZDV followed by six weeks of ZDV for the newborn;</li><li>2. Oral ZDV and 3TC during labor, followed by one week of oral ZDV/3TC for the newborn;</li><li>3. A single dose nevirapine at the onset of labor followed by a single dose of nevirapine for the newborn at age 48 hours*;</li><li>4. The two-dose nevirapine regimen combined with intrapartum intravenous ZDV and six week ZDV for the newborn.</li><li>5. In the immediate postpartum period, the woman should have appropriate assessments (e.g., CD4+ count and HIV RNA copy number) to determine whether antiretroviral therapy is recommended for her own health.</li></ol></li></ul> <p><i>*These recommendations may change due to the high rate of nevirapine resistance. Please refer to the following guidelines for updates: <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5118a1.htm">www.cdc.gov/mmwr/preview/mmwrhtml/rr5118a1.htm</a></i></p>	<p><b>SCENARIO #4</b> <b>Infants born to mothers who have received no ART during pregnancy or intrapartum</b></p> <ul style="list-style-type: none"><li>◆ The six-week neonatal ZDV component of the ZDV chemoprophylactic regimen should be discussed with the mother and offered for the newborn.</li><li>◆ ZDV should be initiated as soon as possible after delivery - preferably within six-12 hours of birth.</li><li>◆ Some clinicians may choose to use ZDV in combination with other antiretroviral drugs, particularly if the mother is known or suspected to have ZDV-resistant virus. However, the efficacy of this approach for prevention of transmission has not been proven in clinical trials, and appropriate dosing regimens for neonates are incompletely defined for many drugs.</li><li>◆ In the immediate postpartum period, the woman should undergo appropriate assessments (e.g., CD4+ count and HIV RNA copy number) to determine if antiretroviral therapy is required for her own health. The infant should undergo early diagnostic testing so that if HIV-infected, treatment can be initiated as soon as possible.</li></ul> <p><b>Note:</b> Discussion of treatment options and recommendations should be noncoercive, and the final decision regarding the use of antiretroviral drugs is the responsibility of the woman. A decision not to accept treatment with ZDV or other drugs should not result in punitive action or denial of care. Use of ZDV should not be denied to a woman who wishes to minimize exposure of the fetus to other antiretroviral drugs and who therefore chooses to receive only ZDV during pregnancy to reduce the risk for perinatal transmission.</p>