Antiretroviral Drug Access and Management: Best Practices to Prevent Perinatal HIV Transmission

Disclaimer
This document is a general resource to help guide a facility toward best practices to reduce the likelihood of mother-to-child transmission of HIV. Each facility is responsible for ensuring that the best practices listed below meet any accreditation or clinical standards.

National Guidelines
The U.S. Department of Health and Human Services (HHS) has created a guideline to direct clinical practice. Recommendations for the Use of Antiretroviral Drugs in Pregnant Women with HIV Infection and Intervention to Reduce Perinatal HIV Transmission in the United States (https://aidsinfo.nih.gov/guidelines/html/3/perinatal/0) is updated periodically and should be checked for changes every 6 months to ensure that facility practices and protocols follow the latest recommendations.

Two sections specifically address the pharmacotherapy needs of pregnant women living with HIV and their infants:
- Intrapartum Antiretroviral Therapy/Prophylaxis
- Management of Infants Born to Women with HIV Infection

High Level Summary of Guideline:
- Unless a woman living with HIV meets certain criteria, administration of intravenous zidovudine (IV ZDV; also known as AZT) near delivery is recommended.
- All newborns who were perinatally exposed to HIV should receive postpartum antiretroviral (ARV) medication to reduce the risk of perinatal transmission of HIV.
- ARV regimens are determined by risk; refer to the HHS guidelines for specific recommendations.

ARV Inventory Access
Intrapartum administration of IV ZDV is critically important to help decrease the risk of perinatal HIV transmission. IV ZDV is rarely used outside of this setting so it is not commonly stocked at hospitals or birth centers. Due to unpredictable absorption of oral ZDV in labor, IV ZDV is highly preferred. Sites should not depend on oral ZDV in their intrapartum protocol.

Oral ARV for infants will be in liquid form. These medications include liquid ZDV, liquid lamivudine, liquid nevirapine, and oral suspension of raltegravir.
- Oral ARV should be started as soon as possible after birth, ideally within 6-12 hours of delivery.
- Due to weight based dosing and shorter duration of therapy, opened stock bottles are a strong likelihood.

Facilities with an outpatient pharmacy on-site:
- Be prepared to shift inventory from inpatient pharmacy to outpatient pharmacy and vice versa to meet immediate patient needs.
- Make sure to include syringes that are manually marked for the correct dose to prevent dosing errors.
Facilities without an outpatient pharmacy on-site should coordinate with a local pharmacy to ensure prompt access to oral ARV for infants.

**Inventory Leadership**

If a facility is not able to stock these medications, a protocol should be developed that lists other hospitals or birth centers to approach for an emergency inventory need. Contact the Children’s MN Perinatal HIV Program Nurse Coordinator if assistance is needed to find an inventory leader.

In addition, ensure that any ARV medications on shelves are within expiration date. Consider working with the wholesaler to ensure that supplies are not short-dated.

**Facility Protocol Implementation**

Each hospital or birth center should develop an institutional protocol that directs implementation of medical and pharmacotherapy best practices. Protocols utilized at each practice site should:

- Incorporate risk-classification for both mother and infant.
- Include a recommendation to consult with an HIV Specialist.
- Reference the HHS guidelines.
- Specify a pharmacy procedure for ensuring prompt access to IV ZDV and oral ARV drugs for newborns.

Development and implementation of an institutional protocol will require providers, pharmacy, and care coordinators to collaborate. Suggestions to promote success include:

- Have students and residents create the protocol and regularly review guidelines for updates.
- Work with infectious disease pharmacists, if available, within the site or health system.
- Use current educational structure such as monthly clinic meetings, email groups, or educational events to promote knowledge of the protocol.
- Leverage the electronic health record (EHR) capacity for order sets and alerts.
- Add hyperlinks to guidelines in your EHR or intranet resource page.
- Reach out to a facility with a protocol in place or to the resources listed below with questions.

**Resources**

Children’s MN Perinatal HIV Program Nurse Coordinator: 612-387-2989

Children’s MN Perinatal HIV Program Physician Access Line 24/7: 612-343-2121

National Perinatal Hotline 24/7: 1-888-448-765

Minnesota Department of Health HIV Nurse Specialist: 651-201-5746

Minnesota Department of Health STD/HIV/TB Section
651-201-5414
www.health.state.mn.us/hiv

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To obtain this information in a different format, call: 651-201-5746.