DEPARTMENT OF HEALTH

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

This document is a resource to guide a facility toward essential practices for managing antiretroviral (ARV) medications for use during and after delivery to prevent mother-to-child transmission of HIV. Each facility is responsible for ensuring that the best practices listed below meet any accreditation or clinical standards.

All labor and delivery units and birth centers must have the capacity to provide the following to prevent perinatal transmission of HIV:

- Administration of intravenous zidovudine (IV ZDV; also known as AZT) to pregnant women in labor near delivery when recommended (unless the pregnant woman living with HIV meets certain criteria).
- Administration of one or more postpartum antiretroviral (ARV) prophylaxis to all newborns perinatally exposed to HIV. ARV regimens are determined by risk; refer to the HHS guidelines for specific recommendations.

ARV inventory access

For pregnant women during labor and delivery:

- Administration of IV ZDV during labor and delivery is critical to decrease the risk of perinatal HIV transmission. IV ZDV is rarely used outside of this setting, so it is not commonly stocked outside of labor and delivery hospitals or birth centers.
- Due to unpredictable absorption of oral ZDV in labor, IV ZDV is the only recommended approach. Sites should **not** use oral ZDV and should require access to IV ZDV in their intrapartum protocol.

For newborns after birth:

- All oral ARVs for newborns after perinatal HIV exposure will be in liquid form. Standard medications are zidovudine, lamivudine, nevirapine (syrup form) and raltegravir (available only in a powder form that has to be mixed into a suspension within 30 minutes of each administration).
  - These ARVs must be initiated as close to the time of birth as possible, preferably within six hours.
  - Due to weight-based dosing and short 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:

- Coordinate with a local pharmacy to ensure prompt access to oral ARV for infants.
- 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 a potential pharmacy source

Inventory management

Ensure that any ARV medications on shelves are within expiration date, per standard pharmacy protocols. Consider working with the wholesaler to ensure that supplies are not short dated.

Facility protocol development and 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 medications for newborns.
- See Perinatal HIV Transmission for Health Professionals (https://www.health.state.mn.us/diseases/hiv/hcp/perinatal/index.html) for complete checklists for details of best practices.

Development and implementation of an institutional protocol will require providers, pharmacy, and care coordinators to collaborate.

- To develop a protocol, reference MDH checklists as above and consider reaching out to the available experts listed below or connect to a facility with established protocols for reference.
- Work with infectious disease pharmacists, if available, within the site or health system.

- Consider using this as an educational opportunity for trainees to gain experience in creating and updating protocols and regularly reviewing guidelines for updates.
- Use current educational structures 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 best practice alerts.
- Add hyperlinks to guidelines in your EHR or intranet resource page.

Resources

- 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://clinicalinfo.hiv.gov/en/guidelines/perinatal/recommendations-arv-drugs-pregnancy-overview) is updated periodically and should be checked for changes every six months to ensure that facility practices and protocols follow the latest recommendations.
  - Two sections specifically address the pharmacotherapy needs of those living with HIV during pregnancy and their infants:
    - Intrapartum Antiretroviral Therapy/Prophylaxis
    - Management of Infants Born to Women with HIV Infection
- **Children's MN Perinatal and Pediatric HIV Program Nurse Coordinator:** 612-387-2989
- **Children's MN Perinatal and Pediatric HIV Program Physician Access Line 24/7**: 612-343-2121
- **National Perinatal HIV Hotline 24/7:** 888-448-8765
- **Minnesota Department of Health, HIV Nurse Specialist:** 651-785-8182

Minnesota Department of Health
www.health.state.mn.us

12/4/2025