CLINICAL GUIDELINES PROGRAM
NEW YORK STATE DEPARTMENT OF HEALTH AIDS INSTITUTE | HIV · HCV · SUBSTANCE USE · LGBT HEALTH

New York State Good Practices to Prevent Perinatal HIV Transmission

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Recommended Guidelines

The Perinatal Transmission Prevention Guideline Committee of the New York State Department of Health AIDS Institute (NYSDOH AI) Clinical Guidelines Program recommends that clinicians who provide medical care for pregnant patients with HIV follow the Recommendations for the Use of Antiretroviral Drugs During Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States published by the U.S. Department of Health and Human Services (DHHS).

In addition to supporting the comprehensive DHHS recommendations, this committee also encourages clinicians in New York State to follow the good practices outlined below.

Note on "experienced" and "expert" HIV care providers: Throughout this guidance, when reference is made to "experienced HIV care provider" or "expert HIV care provider," those terms are referring to the following 2017 NYSDOH AI definitions:

- Experienced HIV care provider: Practitioners who have been accorded HIV Experienced Provider status by the American Academy of HIV Medicine or have met the HIV Medicine Association's definition of an experienced provider are eligible for designation as an HIV Experienced Provider in New York State. Nurse practitioners and licensed midwives who provide clinical care to individuals with HIV in collaboration with a physician may be considered HIV Experienced Providers as long as all other practice agreements are met (8 NYCRR 79-5:1; 10 NYCRR 85.36; 8 NYCRR 139-6900). Physician assistants who provide clinical care to individuals with HIV under the supervision of an HIV Specialist physician may also be considered HIV Experienced Providers (10 NYCRR 94.2)
- Expert HIV care provider: A provider with extensive experience in the management of complex patients with HIV.

→ KEY POINT

- Clinicians in New York State can call the Clinical Education Initiative (CEI Line) to speak with an experienced HIV clinician regarding maternal/fetal exposure. The CEI Line is available 24/7 by calling 866-637-2342 (press "2").

◊ LINKS TO CLINICAL RECOMMENDATIONS

Key topics covered in the DHHS guideline Recommendations for the Use of Antiretroviral Drugs During Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States include the following:

- Prepregnancy Counseling and Care for Persons of Childbearing Age With HIV
- Infant Feeding for Individuals With HIV in the United States
- Antepartum Care for Individuals With HIV
- Special populations:
  - Hepatitis B Virus/HIV Coinfection
  - Hepatitis C Virus/HIV Coinfection
  - HIV-2 Infection and Pregnancy
  - Early (Acute and Recent) HIV Infection
  - Intrapartum Care for People With HIV
- Postpartum Follow-Up of People With HIV

Antiretroviral Therapy

Do not interrupt antiretroviral therapy: Consistent adherence to antiretroviral therapy (ART) is essential to the maintenance of an undetectable HIV viral load in pregnant patients with HIV and is the best way to prevent perinatal transmission of HIV. Toward that end, this committee stresses that ART not be stopped or paused at any time antepartum, intrapartum, or postpartum, including any time when a patient has been directed to take nothing by mouth.

Any interruption in ART may increase the risk of perinatal transmission of HIV. Transmission rates as high as 18% have been reported when ART is interrupted in the third trimester [Galli, et al. 2009]. Continuing the baseline ART regimen intrapartum maximizes virologic suppression and reduces the risk of developing resistance to medications.

For clinical recommendations, see the DHHS guideline sections:

- Prepregnancy Counseling and Care for Persons of Childbearing Age With HIV
- Antepartum Care for Individuals With HIV
- Intrapartum Care for People With HIV

Continue ART postpartum: Good practice in discharge planning post-delivery includes making sure that the new parent has antiretroviral medications at home and has been counseled to avoid interruptions. HIV-associated clinical complications are reduced with the use of postpartum ART [Currier, et al. 2017]. For recommendations, see the DHHS guideline section Postpartum Follow-Up of People With HIV.

Syphilis Testing in the Third Trimester

Requirements: New York State Public Health Law requires that clinicians obtain serologic screening for syphilis for pregnant patients at the first prenatal visit and at delivery (cord blood testing). Syphilis screening between 28 and 32 weeks gestation is mandated by New York City. Effective May 3, 2024, New York State will require third trimester syphilis screening for all pregnant patients.

Recommendations: The NYSDOH AI recommends universal opt-out syphilis screening during the third trimester, preferably between 28 and 32 weeks gestation.

The incidence of primary and secondary syphilis among women has increased by 243% in the past 5 years in New York State [NYSDOH 2023]. Consequently, the number of cases of congenital syphilis is rising, with an increase from 29 cases in 2020 to 41 cases in 2021 [NYSDOH 2023]. Early third-trimester syphilis testing at 28 weeks is an additional opportunity for identifying syphilis and initiating treatment to reduce the risk of congenital syphilis. When diagnosed, syphilis is treated with penicillin G in collaboration with the local health department (see CDC: Syphilis Treatment Guideline, including Syphilis During Pregnancy).

HIV Testing for Sex Partners

Encourage HIV testing for sex partner(s): This committee encourages clinicians to recommend HIV testing for sex partners of pregnant patients. During the first prenatal visit, when a clinician provides counseling about HIV and other health conditions, the clinician can suggest that a patient's sex partner(s) undergo testing for HIV. The same suggestion can be made if a patient reports having new sex partners during pregnancy. Any sex partner who injects drugs is at particularly high risk of acquiring HIV [ACOG(b) 2018]. Knowledge of sex partner HIV risk factors may be limited, as these individuals are not patients of the clinician. HIV testing of all sex partners would provide the most comprehensive evaluation to limit perinatal transmission. If a pregnant patient's sex partner tests positive for HIV, initiation of ART will benefit the individual with HIV and will reduce the risk of sexual transmission. Barrier protection and pre-exposure prophylaxis (PrEP) may also be recommended for partners who test negative for HIV. Growing evidence suggests that involving partners in HIV treatment and prevention efforts during pregnancy can help decrease the risk of perinatal transmission [Takah, et al. 2017].

Method of Delivery

Vaginal delivery with HIV viral load <1,000 copies/mL: Clinicians are strongly encouraged to perform HIV RNA testing within 4 weeks of a patient's expected delivery date. If an HIV viral load <1000 copies/mL is detected, then a vaginal delivery as detailed in the DHHS guideline section Intrapartum Care for People With HIV is recommended, and intrapartum intravenous zidovudine may be considered if HIV viral load is between 50 and 999 copies/mL. Invasive fetal monitoring is best avoided in such individuals, with cesarean delivery reserved for the standard obstetrical indications.

Scheduled cesarean with HIV viral load ≥1,000 copies/mL: If a pregnant patient's HIV viral load is ≥1000 copies/mL in the 4 weeks before delivery, a scheduled cesarean delivery is recommended [ACOG(a) 2018]. If there is no documented HIV RNA level within 4 weeks of delivery, cesarean delivery may be preferred in some cases, especially if the patient reports a lack of adherence to ART during pregnancy or has missed prenatal visits. Cesarean delivery is considered appropriate practice in such cases because this mode of delivery has been associated with a decreased risk of perinatal HIV transmission [Andiman, et al. 1999]. Without documented evidence of HIV viral suppression close to the time of delivery, there is a lack of reassurance that vaginal delivery would be a safe alternative to cesarean delivery. In pregnant patients who have a history of nonadherence with medical care, and particularly with ART, the potential for perinatal HIV transmission cannot be ignored, and a planned cesarean delivery before the onset of labor may be strongly considered. Clinical recommendations are provided in the DHHS guideline section Intrapartum Care for People With HIV.

Infant Feeding

A culturally sensitive, patient-centered approach to counseling about infant feeding that is evidence based and addresses patient and infant health and a patient's values and desires is best to facilitate shared decision-making. When counseling a patient with HIV about infant feeding, discussion of alternatives to breastfeeding/chestfeeding, i.e., use of formula or pasteurized banked milk, that eliminate the risk of postnatal HIV transmission to the infant is advised. These replacement feeding methods are appropriate for patients with HIV who are not on ART or do not have a suppressed viral load, and clinicians can counsel such patients about the decreased risk of transmission (less than 1%) through breastfeeding/chestfeeding when viral suppression is achieved and maintained through consistent use of ART.

When a patient with HIV is on ART and has a sustained undetectable viral load and chooses to breastfeed/chestfeed, it is important for the care team (pediatric, adult, and obstetric) to support the patient's decision. In such cases, the clinician can emphasize that adherence to the prescribed ART regimen reduces the risk of HIV transmission to the infant and that exclusive breastfeeding/chestfeeding up to age 6 months is preferable to feeding with a combination of breast milk and formula (mixed feeding). In addition to other small case reports from resource-rich settings, an evaluation of 10 infants who were exclusively breastfed/chestfed by mothers with HIV in the United States, there were no cases of infant HIV transmission [Yusuf, et al. 2022].

Infant PrEP practices vary in the context of breastfeeding/chestfeeding. It is good practice for clinicians to consult an expert in pediatric HIV regarding the use of PrEP in infants being breastfed by a parent with HIV. Proposed harm reduction techniques beyond PrEP include exclusive breastfeeding/chestfeeding (as opposed to concurrent use of formula) and flash-heat treatment of expressed breast milk [Levison, et al. 2014].

See the DHHS guideline section Infant Feeding for Individuals With HIV in the United States for complete evidence-based recommendations.

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