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New York State Good Practices to Prevent Perinatal HIV Transmission

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The Perinatal Transmission Prevention Guideline Committee of the New York State (NYS) Department of Health (DOH) AIDS Institute (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 in Pregnant Women With HIV Infection 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 that care providers in NYS follow the good practices outlined below.

KEY POINT
• Clinicians in NYS can call the Clinical Education Initiative (CEI Line) to speak with an experienced HIV care provider regarding maternal/fetal exposure. The CEI Line is available 24/7. – Call 1-866-637-2342, press "2"

Do Not Interrupt Antiretroviral Therapy

Consistent adherence to antiretroviral therapy (ART) is essential to 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 should 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:
  - *Preconception Counseling and Care for Women of Childbearing Age Living With HIV*
  - *General Principles Regarding Use of Antiretroviral Drugs During Pregnancy*
  - *Intrapartum Antiretroviral Therapy/Prophylaxis*

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, please see the DHHS guideline section *Postpartum Follow-Up of Women Living With HIV Infection*

Syphilis Testing in the Third Trimester

The NYSDOH recommends that clinicians obtain serologic screening for syphilis for pregnant patients with HIV at the first prenatal visit, during the third trimester (28-32 weeks of gestation), and at delivery.

- See *CDC > Sexually Transmitted Infections Treatment Guidelines, 2021 > Screening > Pregnant Women*

The incidence of early syphilis in women has more than quadrupled in NYS, outside of New York City, since 2014 [NYSDOH 2018]. Consequently, the number of cases of congenital syphilis are rising. Almost half of the cases of congenital syphilis

over the last 5 years involved acquisition of the infection during pregnancy [NYSDOH 2018]. Early third trimester syphilis testing at 28 weeks would allow for an additional opportunity for identification of the infection and initiation of treatment to reduce the risk of congenital syphilis.

Encourage HIV Testing for Sex Partner(s)

This Committee encourages healthcare providers to recommend HIV testing for sex partner(s) of pregnant patients. During the first prenatal visit, when a clinician provides counseling about HIV and other health conditions, the care provider 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 2018b]. Knowledge of sex partner HIV risk factors may be limited, as these individuals are not patients of the care provider. 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 person who has 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].

Vaginal Delivery With HIV Viral Load <1000 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 guidelines under *Transmission and Mode of Delivery* is recommended, and intrapartum intravenous zidovudine should be considered if HIV viral load is between 50 and 999 copies/mL. Invasive fetal monitoring should be avoided in such individuals, and cesarean delivery should be reserved for the standard obstetrical indications.

If a pregnant patient's HIV viral load is ≥1000 copies/mL in the 4 weeks prior to delivery, a scheduled cesarean delivery is recommended [ACOG 2018a]. If there is no documented HIV RNA level within 4 weeks of delivery, cesarean delivery may be preferred, especially if the patient reports lack of adherence to ART during pregnancy or has missed prenatal visits. Cesarean delivery is considered good 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 should be strongly considered.

- Clinical recommendations are provided in the DHHS guideline: *Intrapartum Care for Women with HIV*

Harm Reduction for Breastfeeding

Even in the setting of a suppressed HIV viral load, breastfeeding is not advised. However, when cultural factors or an individual's prior experience make it impossible to avoid breastfeeding, a harm reduction approach is advised. Care providers should ensure they are counseling individuals in a culturally effective manner that addresses both the mother's health and the health of the newborn. One harm reduction approach involves engaging the patient in a discussion about breastfeeding desires and intentions, seeking to understand the motivation for breastfeeding, exploring such alternatives as formula feeding or banked breast milk, and offering strategies for harm reduction if breastfeeding is still planned [Levison, et al. 2014].

- See the September 2018 *Breastfeeding Policy Statement Transmittal Letter* and *Policy Statement: Situations Where Breastfeeding Is Contraindicated or Not Advisable*

If a patient with HIV decides to breastfeed, the care provider should strongly recommend adherence to the prescribed ART regimen to reduce the risk of HIV transmission to the infant. In a meta-analysis of 18 studies performed primarily in African countries, estimates of 18-month HIV-free survival for infants were 89% when the mother remained on ART for 6 months and 96% among women who were receiving lifelong ART [Chikhungu, et al. 2016].

- See the DHHS guideline section *Counseling and Managing Women Living With HIV in the United States Who Desire to Breastfeed*

Infant PrEP has not been extensively studied in the context of breastfeeding. Care providers should consult an expert in pediatric HIV regarding the use of PrEP in infants who are being breastfed by a mother with HIV. Proposed harm reduction techniques beyond PrEP include exclusive breastfeeding (as opposed to formula use and breastfeeding) and flash-heat treatment of expressed breast milk [Levison, et al. 2014].

LINKS TO CLINICAL RECOMMENDATIONS

Key topics covered in DHHS ***Recommendations for the Use of Antiretroviral Drugs in Pregnant Women With HIV Infection and Interventions to Reduce Perinatal HIV Transmission in the United States*** include the following:

- *Preconception Counseling and Care for Women of Childbearing Age Living With HIV*
- *Counseling and Managing Women Living With HIV in the United States Who Desire to Breastfeed*
- *General Principles Regarding Use of Antiretroviral Drugs During Pregnancy*
- Special populations:
  - *Hepatitis B Virus/HIV Coinfection*
  - *Hepatitis C Virus/HIV Coinfection*
  - *HIV-2 Infection and Pregnancy*
  - *Acute HIV Infection*
- *Intrapartum Antiretroviral Therapy/Prophylaxis*
- *Transmission and Mode of Delivery*
- *Postpartum Follow-Up of Women Living With HIV Infection*

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