

Postpartum HIV Management and Follow-Up

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Panel's Recommendations
<ul style="list-style-type: none">• Continuous antiretroviral therapy (ART) currently is recommended for all individuals with HIV to reduce the risk of disease progression and prevent the sexual transmission of HIV (AI). <p>ART should be continued after delivery (AI). Any plans for modifying ART after delivery should be made in consultation with the individual and their HIV care provider, ideally before delivery, taking into consideration the recommended regimens for nonpregnant adults (AIII) and plans for future pregnancies.</p> <ul style="list-style-type: none">• Because the immediate postpartum period poses unique challenges to ART adherence and retention in HIV care, arrangements for new or continued supportive services should be made throughout pregnancy and before postpartum hospital discharge (AII). <p>Confirmatory testing should follow a positive HIV test during labor; see Pregnancy and Postpartum HIV Testing and Identification of Perinatal and Postnatal HIV Exposure. If testing confirms HIV infection, ART should be offered, and a supply of ART should be provided before postpartum hospital discharge to prevent treatment interruption (AII). Immediate linkage to HIV care and comprehensive follow-up also is needed (AII).</p> <p>When HIV is newly diagnosed in the intrapartum period, infants should begin presumptive HIV therapy, and ART should be provided before postpartum hospital discharge (AII) (see Antiretroviral Management of Infants with Perinatal HIV Exposure or HIV Infection).</p> <ul style="list-style-type: none">• In the context of HIV during pregnancy, evidence-based counseling should be provided to support shared decision-making about infant feeding options prior to and during pregnancy; counseling and plans for infant feeding should be reviewed again after delivery (AIII) (see Preventing HIV Transmission During Infant Feeding).• Clinicians should discuss future reproductive plans and timing, as well as the risks and benefits of conceiving while on specific antiretroviral (ARV) medications (AII). The use of appropriate contraceptive options to prevent unintended pregnancy and optimal interpregnancy intervals should also be discussed (AII) (see Prepregnancy Counseling and Care). <p>Contraceptive counseling should involve shared decision-making and should start during the prenatal period; a contraceptive plan should be developed before postpartum hospital discharge, as desired by the patient (AII).</p>
<p>Rating of Recommendations: A = Strong; B = Moderate; C = Optional</p> <p>Rating of Evidence: I = One or more randomized trials with clinical outcomes and/or validated laboratory endpoints; II = One or more well-designed, nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion</p>

The postpartum period provides an opportunity to review and optimize a patient's health care. Comprehensive medical care and supportive services are particularly important for patients with HIV and their families, who often face multiple medical and social challenges. Components of comprehensive care include the following services, as needed:

- Primary care, gynecologic/obstetric care, and HIV specialty care;
- Pediatric and pediatric HIV specialty care for the infant;
- Sexual and reproductive health services, including contraception;
- Mental health services;

- Substance use prevention and treatment;
- Supportive services;
- Coordination of care through case management for the patient, their child (or children), and other family members; *and*
- Prevention of secondary transmission for partners with differing HIV status, including counseling on the use of condoms, antiretroviral therapy (ART) to maintain virologic suppression in the partner **with** HIV (i.e., treatment as prevention), and the potential use of pre-exposure prophylaxis (PrEP) by the partner **without** HIV (see [Pre-exposure Prophylaxis \[PrEP\] to Prevent HIV During Periconception, Antepartum, and Postpartum Periods](#)).

Tailored supportive services can include screening for intimate partner violence; case management; childcare; respite care; assistance with basic needs, such as housing, food, and transportation; peer counseling; and legal and advocacy services. Ideally, these services should begin before pregnancy and continue throughout pregnancy and the postpartum period.

Postpartum care should include immediate linkage to care, thorough medical assessment, counseling, and follow-up, with particular attention to new HIV diagnoses during labor or delivery. **This is important because intrapartum diagnosis of HIV has been negatively associated with HIV care outcomes in the postpartum period.**^{1,2} The American College of Obstetricians and Gynecologists recommends contact with obstetrician-gynecologists within 3 weeks postpartum and that postpartum care be provided as an ongoing process based on individual needs rather than as a single postpartum visit.³ A follow-up appointment within 2 to 4 weeks of postpartum discharge is recommended with the health care provider managing HIV care, whether an obstetrician or an HIV specialist, particularly in the context of ART adherence challenges. Telemedicine visits should be considered when in-person appointment attendance is a concern.⁴

When care is not co-located or not within the same health care system, a case manager's role for care coordination becomes even more crucial. Case management improves the likelihood of achieving viral suppression and maintaining continuity of care.⁵ Alternative models of HIV care delivery—such as HIV-adapted group prenatal care—have been associated with higher retention in HIV care for women in the postpartum period.⁶ Ensuring continuity of ART between the antepartum and postpartum periods is especially critical. When HIV is newly diagnosed in the intrapartum period, infants should begin presumptive HIV therapy, and ART should be provided before postpartum hospital discharge. Special hospital programs may need to be established to support dispensing ART before discharge.

Patients taking testosterone or other medications and patients whose self-expression is less common may **require** additional support and linkage to care during the postpartum period.⁷⁻⁹

Postpartum Antiretroviral Therapy

ART should be continued postpartum. Decisions about changes to an ART regimen after delivery should be made after discussion between the HIV care provider and patient, ideally before delivery. Health care providers counseling on postpartum ART should factor in the possibility of future pregnancies (planned or unplanned) alongside the anticipated ART regimen, contraceptive choices, and any unique drug–drug interactions in the postpartum period (see [Pregnancy Counseling and Care](#) and [Appendix C: Antiretroviral Counseling Guide for Health Care Providers](#)). Some ART

regimens that are recommended for nonpregnant adults may not be recommended for use during pregnancy or while attempting to conceive (see the [Adult and Adolescent Antiretroviral Guidelines](#)). See [Recommendations for Use of Antiretroviral Drugs During Pregnancy, Table 4. HIV-Related Antepartum Screenings and Assessments During Pregnancy, Table 5. HIV-Related Laboratory Monitoring Schedule During Pregnancy, Teratogenicity, and Antiretroviral Drug Regimens and Pregnancy Outcomes](#) for additional information and specific recommendations regarding regimens for use during pregnancy and when trying to conceive.

ART is currently recommended for all individuals with HIV to reduce the risk of disease progression and to prevent secondary transmission of HIV.¹⁰ The Strategic Timing of AntiRetroviral Treatment (START)¹¹ and TEMPRANO trials¹² were randomized clinical trials that demonstrated that early ART can reduce the risk of disease progression, even in individuals with CD4 T lymphocyte cell counts >500 cells/mm³, and the HIV Prevention Trials Network (HPTN) 052 randomized clinical trial demonstrated that **effective** ART can reduce the risk of sexual transmission of HIV to a partner **without HIV** by **100%**.¹³ People with HIV who take ART as prescribed and achieve and maintain an undetectable viral load have effectively no risk of transmitting HIV through sex (i.e., Undetectable = Untransmittable).¹⁴

Postpartum counseling should emphasize the importance of lifelong ART. Several studies have demonstrated significant decreases in ART adherence postpartum.¹⁵⁻¹⁹ During the postpartum period, medical appointment follow-up may be difficult, including appointment adherence, which can affect ART adherence. Systematic monitoring of retention in HIV care is recommended for all individuals with HIV, but special attention is warranted during the postpartum period.

Adherence to ART and Postpartum Depression

Symptoms of depression have been associated with lower ART adherence and viral suppression during pregnancy and the postpartum period.²⁰ Furthermore, postpartum depression is common in the context of HIV.^{2,21-24} The U.S. Preventive Services Task Force recommends universal screening for postpartum depression²⁵ using a validated tool (e.g., the Edinburgh Postnatal Depression Scale); such screening is especially important when increased risk for postpartum depression and poor adherence is suspected. Enquiring about intimate partner violence, food or housing insecurity, and substance use is also important, as these factors have been associated with worsening depressive symptoms.²⁶ Counseling should emphasize that postpartum physical and psychological changes (and the stresses and demands of caring for a new baby) may make adherence more difficult and that additional support may be needed during this period.^{5,27-30}

Poor adherence has been shown to be associated with virologic failure, development of antiretroviral (ARV) drug resistance, and decreased long-term effectiveness of ART.³¹⁻³³ If viral suppression is achieved by the time of delivery, postpartum ART simplification to once-daily, coformulated regimens—which are often the preferred initial regimens for nonpregnant adults—could promote adherence during this challenging time. Efforts to maintain adequate adherence during the postpartum period may ensure effectiveness of therapy (see [Adherence to the Continuum of Care](#) in the [Adult and Adolescent Antiretroviral Guidelines](#)). When a protease inhibitor-based ART regimen is continued but at increased doses during pregnancy, available data suggest that doses can be reduced to standard doses immediately after delivery. In addition, such behavioral interventions as peer support and text messaging may help improve retention in HIV care postpartum.³⁴

Secondary Sexual Transmission and Contraception

The postpartum period is a critical time for addressing safer sex practices to reduce secondary transmission of HIV to partners,³⁵ and clinicians should begin discussing these practices with the patient during the prenatal period. Topics for discussion during counseling on prevention of secondary transmission to the partner without HIV should include condom use, ART for the partner with HIV to maintain viral suppression below the limit of detection, and the potential use of PrEP by the partner without HIV. With full, sustained viral suppression (undetectable viral load)—with or without reliable PrEP use by the partner—**eliminates the risk of sexual transmission** (see [Reproductive Options for Couples When One or Both Partners Have HIV](#) and [National Institutes of Health’s Treatment as Prevention](#) guidance for more information).

Comprehensive prepregnancy counseling and contraception should be integrated into all health care visits, with special attention given to these topics during routine prenatal and postpartum visits. Lack of breastfeeding is associated with earlier return of fertility. Ovulation returns as early as 6 weeks postpartum, and it can occur earlier in some cases—even before resumption of menses—increasing the likelihood of pregnancy soon after delivery.³⁶ HIV does not preclude the use of any contraceptive method (see [Table 3. Drug Interactions Between Antiretroviral Agents and Hormonal Contraceptives](#)). **Contraceptive plans should not vary based on HIV status; however, because of the significantly higher prevalence of unplanned pregnancy in the context of HIV,³⁷ establishing contraceptive plans early, using shared decision-making, is important.** If a long-acting reversible contraceptive (LARC)—such as an injectable, implant, or intrauterine device (IUD)—is desired, it should be inserted before postpartum hospital discharge or during the routine postpartum visit. If LARC insertion is planned for the postpartum visit and an interim contraceptive is desired, intramuscular depot medroxyprogesterone acetate is an option that can be given before postpartum hospital discharge. Counseling should advise against interpregnancy intervals shorter than 6 months.^{3,38,39}

The potential for drug–drug interactions between several ARV drugs and hormonal contraceptives is discussed in [Pregnancy Counseling and Care](#) and [Table 3. Drug Interactions Between Antiretroviral Agents and Hormonal Contraceptives](#). A systematic review conducted for the World Health Organization summarized the research on hormonal contraception, IUD use, and risk of HIV infection and concluded that women with HIV can use all forms of contraception.^{40,41} This is consistent with Centers for Disease Control and Prevention recommendations advocating access to a broad range of effective contraceptive methods, including combined hormonal contraceptives, progestin-only pills, depot medroxyprogesterone acetate, and implants.⁴²

Infant Feeding

In the context of HIV during pregnancy, evidence-based counseling should be provided to support shared decision-making about infant feeding **options** prior to and during pregnancy (see [Preventing HIV Transmission During Infant Feeding](#)). Counseling and plans for infant feeding should be reviewed again after delivery.

Lactation Inhibition

In the absence of breastfeeding, symptoms related to breast engorgement can be very unpleasant in the days following labor and delivery. Supportive measures—such as using acetaminophen or ibuprofen for pain control, alternating hot and cold compresses on the breasts, or wearing a tight-

fitting bra—can help relieve symptoms related to breast engorgement.³ Although pharmacologic options for lactation inhibition generally are not used in the United States, recent data suggest cabergoline may be appropriate in some cases.^{43,44} Cabergoline is a dopamine agonist/ergot derivative that reduces the production of prolactin; however, it is not approved by the U.S. Food and Drug Administration for lactation inhibition.^{45,46} Cabergoline is **contraindicated** for women with hypertension—including pregnancy-induced hypertension, preeclampsia, or eclampsia—or liver disease, and for women being treated with antipsychotics or those who have a history of puerperal psychosis.⁴⁷ Bromocriptine, another dopamine agonist, is no longer used for lactation inhibition because of serious cardiovascular and neurologic complications associated with its use.⁴⁸

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