HIV in Specific Populations

HIV and Family Planning

Thanks to highly effective antiretroviral treatment, many people with HIV are living healthy lives and pursuing long-term goals, such as starting and raising a family. Approximately 5,000 women living with HIV give birth in the United States each year.

Women living with HIV—as well as some transgender men and nonbinary people—can have problem-free pregnancies and give birth to healthy babies. But this requires careful planning before conception, during pregnancy and after delivery. HIV-positive people who do not wish to become pregnant have a wide range of effective contraception options.

For more information about care and treatment before, during and after pregnancy, see the Department of Health and Human Services (DHHS) "Recommendations for Use of Antiretroviral Drugs in Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States."

Contraception

People living with HIV can use all available contraceptive methods, including condoms, birth control pills, hormonal patches, vaginal rings, implants and intrauterine devices. However, only condoms also offer protection against HIV and other sexually transmitted infections.

Some antiretroviral drugs can interact with hormonal contraceptives, which could potentially reduce their efficacy or increase side effects. Minor drug level changes on laboratory tests may not be clinically significant, and real-world studies of contraception effectiveness in women with HIV are limited. Drug interactions vary widely—and many modern antiretrovirals have no known clinically significant interactions with contraceptives—so ask your doctor about your specific regimen.

Preventing Sexual Transmission

One concern for heterosexual serodiscordant couples—meaning one partner is HIV positive and the other is negative—is how to prevent transmission of the virus during condomless sex. Fortunately, effective antiretroviral treatment and pre-exposure prophylaxis (PrEP) can dramatically lower the risk.

People with HIV who consistently take antiretroviral medications and maintain viral suppression do not transmit the virus during sex, known as undetectable equals untransmittable, or U=U. This is the case whether the man or the woman is HIV positive. People with an undetectable viral load

have zero risk of transmission to sex partners, while those with a very low viral load (1,000 or less) have almost zero or negligible risk.

“If the partner with HIV is on antiretroviral therapy and has achieved sustained viral suppression, sexual intercourse without a condom allows conception with effectively no risk of sexual HIV transmission to the partner without HIV,” according to the DHHS guidelines.

PrEP lowers the risk of HIV acquisition even further and can provide an alternative when the HIV-positive partner does not have an undetectable viral load. People can use PrEP for a limited time while trying to conceive or stay on it for ongoing protection. HIV-negative women can safety start or continue PrEP during pregnancy and while breastfeeding.

Tenofovir disoproxil fumarate/emtricitabine (Truvada and generic equivalents) is an approved PrEP option for all adults and adolescents at risk for HIV. This is also the case for long-acting injectable cabotegravir (Apretude), which is administered by a health care provider every other month. However, a second PrEP pill, tenofovir alafenamide/emtricitabine (Descovy), is not yet approved for cisgender women due to inadequate data.

Consistent use of PrEP pills or injections reduces the risk of HIV acquisition by about 99% for gay men and transgender women, who have been studied most extensively. PrEP pills also work for cisgender women, but good adherence appears to be even more important. Research is lacking on the effectiveness of PrEP for heterosexual or bisexual men who have sex with HIV-positive women, but there’s no reason to think they wouldn’t be protected as well. Research is also inadequate for transgender men.

Earlier in the epidemic, serodiscordant couples who wished to conceive were sometimes offered options such as sperm washing (which separates sperm cells from semen) and assisted reproductive technologies, such as in vitro fertilization. But with a combination of suppressive antiretroviral treatment and PrEP, natural conception via condomless sex is very safe. That said, assisted reproduction for infertility should not be withheld simply because one or both parents are living with HIV.

HIV and Pregnancy

People living with HIV can have healthy babies who do not acquire the virus. Women on modern antiretroviral therapy with well-controlled HIV do not appear to be at greater risk for complications during pregnancy, premature delivery or having infants with birth defects. Conversely, pregnancy does not seem to worsen HIV disease progression. Research is lacking on pregnancy in HIV-positive transgender men and nonbinary people.

HIV testing is recommended for all sexually active people, including those who are pregnant or wish to conceive. All pregnant people should be tested as early as possible during each pregnancy; repeat HIV testing during the third trimester is recommended for those at higher risk. Women who do not already know their status should receive a rapid HIV test during labor or delivery. Testing for hepatitis B and C, syphilis and other infections is also recommended.

Preventing transmission of HIV from mother to child is a key consideration. Perinatal, or vertical, transmission can occur during gestation (in utero), during delivery or after birth via breastfeeding. Today, the risk is very low for women who consistently take modern antiretroviral therapy and maintain viral suppression. Without treatment, an HIV-positive woman has about a 25% chance of passing HIV on to her baby, but for a woman on antiretrovirals with an undetectable viral load, the risk falls to 1% or less in United States. Thus, a critical component of preventing perinatal transmission is ensuring that pregnant people receive treatment that maximally suppresses viral replication as early as possible during pregnancy.

Antiretroviral treatment should continue throughout pregnancy and during labor and delivery. Pregnant women with HIV used to routinely receive intravenous AZT (Retrovir) during labor and delivery to reduce the risk of transmission to the baby. This is no longer necessary for women who maintain good adherence to antiretroviral therapy and have a viral load below 50 around the time of delivery. IV AZT is still recommended for those whose viral load is above 1,000 or unknown—even if they are taking other antiretrovirals—and is optional for those with a viral load between 50 and 1,000.

Earlier in the epidemic, Cesarean section (C-section)—a surgical procedure to remove the baby through an incision in the mother's abdomen—was recommended to prevent the baby from coming into contact with the mother's blood and other fluids during vaginal delivery. Today, if a woman is on antiretroviral treatment with an undetectable viral load, this is not necessary. However, a C-section is still recommended if viral load is over 1,000 or unknown around the time of delivery.

Antiretroviral Use During Pregnancy

People who test positive for HIV during pregnancy should start antiretroviral treatment as soon as possible, regardless of their viral load or CD4 T-cell count. Those who are already on a fully suppressive regimen when they become pregnant can often keep using the same drugs. Treatment should continue throughout pregnancy and during delivery. Beyond reducing the risk of mother-to-child transmission, staying on treatment and maintaining viral suppression is important for the mother's own health.

In general, pregnant people with HIV can use the same antiretroviral regimens recommended for non-pregnant people. Because pregnant women are often excluded from clinical trials of new medications, there are limited data regarding the pharmacokinetics and safety of newer antiretrovirals for the mother and baby during pregnancy and breastfeeding. Experts instead look at data from laboratory and animal studies. Pregnancy and breastfeeding should not preclude use of the most effective antiretroviral regimens unless they have known adverse effects or are unlikely to provide adequate drug levels, according to the guidelines.

When choosing an antiretroviral regimen, pregnant people and their doctors should consider multiple factors, including available safety data, virologic efficacy, drug interactions, pharmacokinetics, adverse effects, convenience and the individual's treatment history, drug resistance and comorbidities. The DHHS guidelines designate several preferred antiretrovirals for

use during pregnancy that have good efficacy, acceptable side effects, no known risk of pregnancy complications or birth defects, are easy to use and have pregnancy-specific pharmacokinetic data available to guide dosing.

For those starting treatment during pregnancy, the preferred nucleoside reverse transcriptase inhibitors are abacavir (Ziagen), lamivudine (Epivir), emtricitabine (Emtriva), tenofovir disoproxil fumarate (Viread) and tenofovir alafenamide (Vemlidy); the preferred integrase inhibitor is dolutegravir (Tivicay); and the preferred protease inhibitor is ritonavir-boosted darunavir (Prezista). Most of these drugs are available in various single-tablet regimens. Several alternative regimens are also acceptable options. Due to insufficient data, bictegravir/tenofovir alafenamide/emtricitabine (Biktarvy) and regimens containing doravirine are not considered preferred or alternative. Long-acting injectable cabotegravir and rilpivirine (Cabenuva), fostemsavir (Rukobia) and regimens that contain cobicistat as a booster are not recommended for initial treatment during pregnancy.

People who are not on a preferred or alternative regimen when they become pregnant can usually either stay on their current regimen with more frequent viral load testing or switch to a new one. According to the DHHS guidelines, pregnant people should not delay treatment or stop taking antiretrovirals due to concerns about fetal exposure during the first trimester. Some older antiretrovirals were associated with an increased risk for problems during pregnancy, and some have been linked to congenital abnormalities in animal studies. This is not the case for the drugs in preferred and alternative regimens. There was previously a concern that dolutegravir might cause neural tube defects in exposed babies, but this was not confirmed in more extensive studies.

For more information, see the "Recommendations for Use of Antiretroviral Drugs During Pregnancy" section of the DHHS guidelines, which are based on extensive reviews of the latest data.

Care for HIV-Exposed Infants

Children born to women living with HIV should be tested for the virus shortly after birth, again at one to two months and again at four to six months. Standard antibody tests are not useful for this purpose, as newborn babies carry their mother's antibodies for about 18 months, so they will test positive. But nucleic acid tests that directly detect the virus can show whether infants are infected themselves.

Newborns exposed to HIV during gestation or delivery should receive prophylactic antiretrovirals as soon as possible after birth. If the mother did not recently acquire HIV (acute or primary infection), was on stable antiretroviral therapy with viral suppression during pregnancy and delivered at full term, the baby should receive AZT for two weeks. Infants born to women at higher risk for transmission—especially those who are not on treatment—and those born prematurely should receive a longer course of AZT or a combination regimen.

If the baby is found to be infected with HIV, they should start long-term combination treatment

promptly. Some research shows that starting treatment very early can limit the size of the viral reservoir and might even allow for long-term remission. Click here to learn more about treatment for children with HIV.

Breastfeeding

Whether to breastfeed can be a difficult decision for mothers living with HIV. The virus can be transmitted through breast milk, so earlier in the epidemic, HIV-positive women were advised not to breastfeed in areas where clean water and safe formula were readily available. In areas where this is not the case, exclusive breastfeeding is considered a safer option. Infants who are breastfed should be tested for HIV regularly, including at six months after cessation of breastfeeding.

Today, antiretroviral therapy can keep HIV fully suppressed, dramatically lowering the risk of transmission via breastfeeding. According to the DHHS guidelines, replacement feeding with properly prepared formula or pasteurized donor milk "eliminates the risk" of postnatal HIV transmission, while achieving and maintaining viral suppression during pregnancy and postpartum "decreases the risk of transmission via breastfeeding to less than 1%, but not zero."

Health experts and advocates increasingly encourage informing mothers with HIV about the risks and benefits of different infant feeding options and letting them decide for themselves. The guidelines stress that whether mothers choose to breastfeed or opt for formula feeding, they should be supported in their decision.

Prenatal and Postpartum Care

If a woman with HIV is generally healthy, gets good prenatal care and manages risk factors (such as smoking and high blood pressure), the likelihood of pregnancy complications is similar to that of HIV-negative women.

To maximize the chances of a healthy pregnancy, pregnant people with or without HIV should receive prenatal care—specialized health care designed to improve outcomes for both the mother and the developing baby. Prenatal care can help pregnant women improve their nutrition and limit unhealthy habits, such as smoking, alcohol consumption and drug use. For women living with HIV, prenatal care should also include regular viral load monitoring and treatment adherence counseling.

Some women living with HIV have poor access to health care, including preconception and prenatal care. They may not be aware of their HIV status until after they learn they are pregnant—oreven until the time of delivery. Lack of HIV testing before and during pregnancy and inadequate prenatal care are major barriers to the elimination of perinatal transmission.

If you are pregnant or are trying to become pregnant, put together a team of providers including, if possible, an OB-GYN who has experience working with HIV-positive people. Tell your regular HIV care providers if you are pregnant or trying to conceive. Case managers can help you navigate whatever benefits and services you need during and after pregnancy. Talking to HIV-positive

mothers about their experiences can be a great source of support.

You may encounter judgmental attitudes from people—including some health care providers—who feel it’s wrong for women with HIV to become pregnant and have children. If your providers aren’t supportive of your choices, it’s your right to find someone else.

Taking good care of yourself during pregnancy is important, but it’s just as important to pay attention to your health after the baby is born. Some women may have trouble maintaining good treatment adherence and finding time for health care appointments amid the whirlwind of caring for a newborn. Just remember—your health matters too!

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