



# Third Trimester Pregnancy Screening for Syphilis and HIV



Sexually active pregnant women are as susceptible to a sexually transmitted disease (STD) as non-pregnant women, but the health risks associated with infection are higher. Many STDs, including HIV, do not show symptoms— making screening and testing of pregnant women imperative to prevent these serious health complications. The earlier treatment is received, the better the health outcomes. The results of untreated STDs acquired before or during pregnancy can have serious, even oddslot life-threatening, outcomes for the development of the fetus.

The Centers for Disease Control and Prevention (CDC) recommends prenatal testing for syphilis and HIV during a woman's first prenatal visit and repeat testing for "high-risk" mothers during the third trimester (preferably 28-32 weeks). Increased testing for HIV during pregnancy has helped in drastically reducing vertical, or mother-to-child, transmission of HIV. Many states require testing pregnant women for HIV during their first and third trimester, leading to a public health victory in preventing perinatal cases of HIV. Of concern now are the rising rates of syphilis in the U.S., and



consequently increasing rates of congenital syphilis. The majority of states only mandate testing pregnant women for syphilis during their first trimester, but increasing rates of congenital syphilis are leading public health officials and legislators to consider adding a requirement for third trimester syphilis testing. Harmonizing syphilis and HIV testing in the third trimester for pregnant women could have a significant impact on reducing congenital syphilis in the United States.

## Syphilis

Syphilis is a bacterial STD, which if found during pregnancy can be treated in the mother, and a congenital infection in the fetus can be treated or prevented. If left untreated, women who acquire a syphilis infection before or during pregnancy are at risk for transmitting the infection to their baby. Congenital syphilis is a disease that occurs when a mother with syphilis passes the infection to the fetus during pregnancy. In babies, syphilis is linked to premature birth, stillbirth, and in some cases, death shortly after birth. Untreated infants that survive may develop problems in multiple organs including the brain, eyes, ears, teeth, and bones.

Due to the fact that many STDs, including syphilis, are without symptoms in adults, it is critical that women who are pregnant be tested and treated for syphilis. Depending on the length of the syphilis infection, there are varying impacts on the health of the fetus. The longer a syphilis infection goes untreated in pregnant women, the higher the risk of stillbirth or death for a baby shortly after birth.<sup>1</sup> Untreated syphilis in pregnant women results in stillbirth or infant death in up to 40 percent of cases.<sup>2</sup> A live baby born with syphilis may not have signs or symptoms of disease, but if not treated immediately, the baby may develop serious problems within weeks. Untreated babies may develop

bone deformities, become blind or deaf, have brain problems that cause developmental delays or seizures, or die.<sup>3</sup>

According to the United States Preventive Services Task Force (USPSTF), all pregnant women in the U.S. should be tested for syphilis.<sup>4</sup> The CDC recommends that all women should be screened for syphilis at their first prenatal visit and those who are at high risk for syphilis, are previously untested, or live in areas of high syphilis morbidity should be screened again early in the third trimester and at delivery.<sup>5</sup> Where the amount of prenatal care delivered is not optimal (i.e. there is no first trimester care), screening should be performed at the time that pregnancy is confirmed.

## Human Immunodeficiency Virus (HIV)

HIV can be transmitted through bodily fluid and can pass from mother to child during pregnancy, labor and delivery, or breastfeeding. Transmission from mother to child is preventable through antiretroviral treatment and avoiding breastfeeding. If acquired, HIV destroys blood cells that are crucial to helping the body fight disease and can lead to acquired immune deficiency syndrome (AIDS).

When pregnant women know their HIV status and are on treatment, they can greatly reduce the risk of transmitting HIV to the fetus. If a woman is receiving treatment for HIV throughout her pregnancy, the risk of transmitting HIV to her baby can be 1 percent or less.<sup>6</sup> However, like syphilis, HIV can often be asymptomatic for a period of time, which makes testing women during pregnancy essential to prevent transmission.





The U.S. Preventative Services Task Force recommends that clinicians screen all pregnant women for HIV.<sup>7</sup> The CDC's Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health Care Settings state, "HIV screening should be included in the routine panel of prenatal screening tests for all pregnant women....Repeat screening in the third trimester is recommended in certain jurisdictions with elevated rates of HIV infection among pregnant women."<sup>8</sup> According to the American College of Obstetricians and Gynecologists' (ACOG) Committee on Obstetric Practice Recommendations, repeat testing in the third trimester for HIV, or rapid HIV testing at labor and delivery or both are recommended as strategies to further reduce the rate of perinatal HIV transmission.<sup>9</sup> ACOG recommends repeat conventional or rapid HIV testing in the third trimester for women in areas with high HIV prevalence, women known to be at high risk for acquiring HIV infection, and women who declined testing earlier in the pregnancy.

## Current State Policy Trends

To assure the health of pregnant women and children, there have been major efforts to reduce transmission of STD and HIV infections during pregnancy. There has been a 90 percent reduction of mother-to-child transmission (MTCT) of HIV in the United States,<sup>10</sup> and in the past, similar elimination success with the transmission of syphilis from pregnant women to their fetuses. However, over the past several years, there has been a significant increase in incidences of MTCT syphilis, or congenital syphilis.<sup>11</sup> According to data from the CDC, between 2012 and 2014 the national

congenital syphilis rate increased an alarming 38 percent from 8.4 cases per 100,000 live births in 2012 to 11.6 cases per 100,000 in 2014, or from 334 actual cases nationally to 458.<sup>12</sup>

A majority of states have policies requiring providers to offer testing for syphilis and HIV in the first trimester or at the first prenatal visit. Many state laws require HIV testing in the third trimester (at least 30 days before delivery) to assure that HIV is not transmitted to the fetus later in the pregnancy or at delivery. Due to the increasing rates of congenital syphilis, state policymakers and public health officials have been pursuing policy change to add syphilis testing to early third trimester care (28-32 weeks). In the last two legislative sessions, Louisiana,<sup>13</sup> Georgia,<sup>14</sup> and Texas<sup>15</sup> have all expanded their laws to require third trimester testing in response to rising rates of congenital syphilis. Another handful of states are currently looking at scaling up of prenatal syphilis screening through legislative or regulatory policy. By implementing third trimester screening policies, the hope is to reduce incidence of congenital syphilis by eliminating those cases among mothers who received no prenatal care in their first trimester or acquired infections during pregnancy,

For more information, please contact NCSD's State Policy Team at [statepolicy@ncsddc.org](mailto:statepolicy@ncsddc.org) or 202-842-4660.

<sup>1</sup> Centers for Disease Control and Prevention, Syphilis—CDC Fact Sheet, [www.cdc.gov/std/syphilis/stdfact-syphilis-detailed.htm](http://www.cdc.gov/std/syphilis/stdfact-syphilis-detailed.htm)

<sup>2</sup>*Id.*

<sup>3</sup>*Id.*

<sup>4</sup>U.S. Preventive Services Task Force. *Screening for syphilis infection in pregnancy: reaffirmation recommendation statement.* Ann Intern Med 2009;150:705–9.

<sup>5</sup>Centers for Disease Control and Prevention, 2015 Sexually Transmitted Diseases Treatment Guidelines. [www.cdc.gov/std/tg2015/](http://www.cdc.gov/std/tg2015/)

<sup>6</sup>If a woman takes HIV medicines exactly as prescribed throughout pregnancy, labor, and delivery, and provides HIV medicines to her baby for 4–6 weeks, the risk of transmitting HIV can be 1% or less. Centers for Disease Control and Prevention, *HIV Among Pregnant Women, Infants, and Children.* [www.cdc.gov/hiv/group/gender/pregnantwomen/](http://www.cdc.gov/hiv/group/gender/pregnantwomen/)

<sup>7</sup>US Preventative Services Task Force. *Human Immunodeficiency Virus (HIV) Infection: Screening.* April 2013. [www.uspreventiveservicestaskforce.org/uspstf13/hiv/hivfinalrs.htm](http://www.uspreventiveservicestaskforce.org/uspstf13/hiv/hivfinalrs.htm)

<sup>8</sup>Centers for Disease Control and Prevention, *Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings,* [www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm)

<sup>9</sup>American College of Obstetricians and Gynecologists, *Committee Opinion, No. 635, June 2015,* [www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Prenatal-and-Perinatal-Human-Immunodeficiency-Virus-Testing-Expanded-Recommendations](http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Prenatal-and-Perinatal-Human-Immunodeficiency-Virus-Testing-Expanded-Recommendations)

<sup>10</sup> HIV infections through perinatal transmission have declined more than 90% since the early 1990s, while the number of HIV-infected women giving birth has increased. <http://www.cdc.gov/hiv/group/gender/pregnantwomen/>

<sup>11</sup> Centers for Disease Control and Prevention, *Increase in Incidence of Congenital Syphilis—United States, 2012–2014.* Morbidity and Mortality Weekly Report (MMWR) November 13, 2015, 64(44):1241–1245 [www.cdc.gov/mmwr/preview/mmwrhtml/mm6444a3.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6444a3.htm)

<sup>12</sup>*Id.*

<sup>13</sup> [new.dhh.louisiana.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/Hepatitis/Act459.pdf](http://new.dhh.louisiana.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/Hepatitis/Act459.pdf)

<sup>14</sup> [www.legis.ga.gov/Legislation/en-US/display/20152016/HB/436](http://www.legis.ga.gov/Legislation/en-US/display/20152016/HB/436)

<sup>15</sup> [www.statutes.legis.state.tx.us/Docs/HS/htm/HS.81.htm#81.090](http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.81.htm#81.090)

