Sexually transmitted infections in pregnancy

Why STIs matter in pregnancy

Pregnancy is a time of major physiologic change, but it does not create immunity against sexually transmitted infections. A person can enter pregnancy with an undiagnosed infection, acquire a new infection while pregnant, or be reinfected after treatment if a partner has not been treated. This is why prenatal care routinely includes STI risk assessment and laboratory testing.

The clinical stakes are broader than discomfort or genital symptoms. Some STIs can ascend into the reproductive tract, inflame membranes, affect the placenta, or expose the fetus or newborn to infection during pregnancy, labor, birth, or breastfeeding. Outcomes linked in medical literature to untreated or inadequately treated STIs include preterm labor, premature rupture of membranes, low birth weight, congenital infection, neonatal conjunctivitis or pneumonia, neurologic injury, stillbirth, and maternal postpartum infection. The exact risk depends on the infection, timing, organism burden, immune status, and access to care.

Importantly, identifying an STI early often changes the course. Syphilis, chlamydia, gonorrhea, and trichomoniasis are examples of infections for which treatment can reduce complications. HIV and hepatitis B are not usually

considered curable, but modern prevention and treatment strategies can markedly reduce mother-to-child transmission. Herpes simplex virus and HPV also require individualized counseling, symptom management, and delivery planning when relevant.

Screening during prenatal care

STI screening is not a sign that a clinician is judging someone's relationship or sexual history. It is standard preventive care. Many STIs are silent, and relying on symptoms misses infections. Testing recommendations vary by country, local prevalence, age, prior results, and individual risk factors, so the prenatal clinician should tailor a plan.

Common prenatal screening may include blood tests for HIV, syphilis, and hepatitis B, and nucleic acid amplification tests for chlamydia and gonorrhea using urine or swabs. Hepatitis C screening is also common in many settings. Repeat testing later in pregnancy may be recommended for people at higher risk, those with a new or multiple partners, a partner with an STI, substance use risk factors, a prior STI during pregnancy, or residence in areas with high STI prevalence.

Testing before conception can also be valuable, particularly for people with a history of STIs, pelvic inflammatory disease, infertility evaluation, multiple partners, or a partner whose status is unknown. Preconception screening can provide time for treatment, vaccination review, and partner care before pregnancy begins.

Common STIs and pregnancy-specific concerns

Chlamydia is a common bacterial STI and is frequently asymptomatic. In pregnancy, untreated infection has been associated with adverse outcomes such as preterm birth and neonatal conjunctivitis or pneumonia. Diagnosis is made with laboratory testing, and pregnancy-appropriate treatment is available through a clinician.

Gonorrhea can infect the cervix, rectum, throat, or eyes and may cause discharge, pelvic pain, or no symptoms at all. In pregnancy, untreated gonorrhea can increase the risk of complications such as premature rupture of

membranes, preterm birth, and neonatal eye infection. Because antimicrobial resistance is a global concern, treatment should follow current local guidelines and include partner management.

Syphilis is especially important because it can cross the placenta and cause congenital syphilis, miscarriage, stillbirth, prematurity, or severe newborn disease. Screening early in pregnancy, repeat screening when indicated, and prompt treatment are critical. A positive test requires professional interpretation because syphilis testing often involves both screening and confirmatory assays.

Trichomoniasis, caused by the protozoan Trichomonas vaginalis, may produce vaginal discharge, irritation, odor, or discomfort with urination, though many cases are asymptomatic. It has been associated with preterm birth and low birth weight in some studies. Treatment decisions in pregnancy should be individualized by a healthcare professional.

HIV can be transmitted during pregnancy, labor, delivery, or breastfeeding. With early diagnosis, antiretroviral therapy, viral load monitoring, appropriate birth planning, and infant prophylaxis, the risk of transmission can be dramatically reduced. HIV testing is therefore a cornerstone of prenatal care.

Hepatitis B can be transmitted to the newborn around birth. Identifying hepatitis B surface antigen in pregnancy allows the newborn to receive timely hepatitis B vaccine and hepatitis B immune globulin when indicated. Maternal antiviral therapy may be considered in some cases with high viral loads.

Genital herpes simplex virus may cause painful blisters or ulcers, but it can also shed without visible lesions. The greatest neonatal risk occurs when a first episode is acquired late in pregnancy. Clinicians may discuss antiviral suppression near term and delivery planning if lesions or prodromal symptoms are present at labor.

Human papillomavirus, or HPV, is very common. Genital warts may enlarge during pregnancy, and cervical screening abnormalities require pregnancy-aware follow-up. Most HPV-related issues do not prevent vaginal birth, but evaluation should be individualized. HPV vaccination is generally addressed before

pregnancy or postpartum rather than initiated during pregnancy.

Symptoms that should be discussed promptly

Because many STIs cause no symptoms, absence of symptoms is not reassuring enough to skip screening. Still, certain signs should prompt a call to a healthcare professional, especially during pregnancy.

New or unusual vaginal discharge, odor, itching, burning, or genital irritation
Pain with urination that is not clearly explained by a urinary tract infection
Pelvic or lower abdominal pain, pain during sex, or bleeding after sex
Genital sores, blisters, ulcers, warts, or painful skin breaks
Rash on the palms or soles, swollen lymph nodes, fever, or unexplained systemic symptoms after a possible exposure
A partner diagnosed with an STI, a new partner, or concern that a partner may have other sexual contacts

Urgent evaluation is especially important for genital lesions near the due date, suspected syphilis exposure, possible HIV exposure, or symptoms suggesting pelvic infection. Clinicians can also evaluate overlapping conditions such as bacterial vaginosis, candidiasis, urinary tract infection, or noninfectious skin changes.

Treatment principles and partner care

Treatment in pregnancy must balance effectiveness, fetal safety, local resistance patterns, gestational age, allergy history, and the specific organism. For that reason, self-treatment, leftover antibiotics, online medication without evaluation, or delaying care can be risky. A clinician may need to confirm the diagnosis, choose a pregnancy-appropriate medication, report certain infections to public health authorities, and arrange follow-up testing.

For curable STIs, completing the full course of treatment and avoiding sexual exposure until treatment is complete and partners have been managed are key steps. Some infections require a test of cure or repeat testing later in pregnancy because reinfection is common. Reinfection can be as harmful as the original infection.

Partner notification and treatment are not optional extras; they are part of medical prevention. A pregnant person may feel anxious, angry, embarrassed, or unsafe raising the topic. Healthcare teams, sexual health clinics, and public health programs can often help with confidential partner services. If discussing an STI could trigger violence or coercion, safety planning and support services should be prioritized.

Reducing risk while pregnant

Risk reduction is not about blame; it is about giving the pregnancy the best protection available. Abstaining from sex is the only way to completely avoid sexually transmitted exposure, but many pregnant people continue sexual activity and can reduce risk in practical ways.

Use condoms or barriers correctly for vaginal, anal, and oral sex, especially with new or untested partners.
Ask partners to test and share results before sex, and repeat testing if either partner has other exposures.
Avoid sex while either partner has genital sores, discharge, burning, or a known untreated STI.
Limit the number of sexual partners when possible, recognizing that risk depends on partner networks as well as individual behavior.
Discuss hepatitis B vaccination status, HIV prevention options, and local STI screening recommendations with a clinician.

People who are planning pregnancy can use preconception care to review vaccines, test for infections, and address reproductive tract infections that may affect fertility or pregnancy outcomes. During pregnancy, risk reduction can be revisited without shame as circumstances change.

Emotional and relational aspects

An STI diagnosis during pregnancy can bring fear, grief, anger, or confusion. Some people worry about their baby immediately; others worry about fidelity, stigma, or how they will be treated by clinicians. These reactions are understandable. A supportive healthcare professional should focus on facts, safety, treatment, and follow-up rather than blame.

It can help to ask direct questions: What infection was found? Could it affect the baby? Is it curable or manageable? Does my partner need testing or treatment? Do I need repeat testing? Are there restrictions on sex? Does this change my birth plan? Written instructions and follow-up appointments can reduce the burden of remembering details during a stressful time.

If there are concerns about coercion, sexual assault, reproductive control, or intimate partner violence, tell a trusted clinician if it is safe to do so. Confidential support may be available, and medical care can be coordinated with safety planning.