

Syphilis Information Sheet

What is syphilis?

Syphilis is a sexually transmitted infectious disease caused by the bacteria *Treponema pallidum*. The bacteria enter the body through mucous membranes or abraded skin. Once inside the body, syphilis enters the blood stream and attaches to cells, damaging organs over time. Shortly after infection occurs, the body produces syphilis antibodies that can be detected by a blood test. A low level of antibodies will stay in the blood for months or years even after the disease has been successfully treated.

What are the signs and symptoms of syphilis infection?

An infected baby may be born with or without signs or symptoms of disease. Untreated babies can have seizures, brain damage, and serious physical deformities.

The signs and symptoms of syphilis infection in adults occur in stages.

Primary Stage

- A painless sore (chancre) which may be accompanied by swollen glands.

Secondary Stage

- A rash on any part of the body.
- Tiredness, fever sore throat, headaches, hoarseness, loss of appetite, patchy hair loss, swollen glands.

Third Stage

- Illness in the skin, bones, nervous system, and heart.

The signs and symptoms of primary and secondary stage syphilis may disappear even in the absence of adequate treatment.

How is syphilis spread?

- Syphilis is spread from person to person through direct contact with a syphilis sore during vaginal, anal, or oral sex.
- Many sores are unrecognized, and persons who are unaware of their infection may transmit the organism to others.
- Pregnant women with syphilis can pass it to the babies they are carrying.

Syphilis cannot be spread through contact with toilet seats, doorknobs, swimming pools, hot tubs and bathtubs, shared clothing, or eating utensils.

What are the risk factors for syphilis?

- Sexual contact, including oral and anal sex, with an infected person.
- Birth of an infant by an untreated, infected mother.

Can syphilis be treated and prevented?

- A single intramuscular injection of penicillin, an antibiotic, will cure a person who has syphilis for less than a year. Additional doses are needed to treat someone who has had syphilis for longer than a year. Treatment will kill the syphilis bacterium and prevent further damage, but it will not repair damage already done.
- A baby born with syphilis needs daily penicillin treatment for 10 days.
- The surest way to avoid transmission of sexually transmitted diseases, including syphilis, is to abstain from sexual contact or be in a long-term mutually monogamous relationship with a partner who has been tested and is known to be uninfected.
- Having syphilis once does not protect a person from getting it again. Following successful treatment, people can still be susceptible to re-infection.
- Correct and consistent use of latex condoms can reduce the risk of syphilis only when the infected area or site of potential exposure is protected. Condoms lubricated with spermicides (especially Nonoxynol-9 or N-9) are no more effective than other lubricated condoms in protecting against the transmission of sexually transmitted diseases (STDs). Based on findings from several research studies, N-9 may itself cause lesions, providing a point of entry for STDs, including HIV.

How is blood tested for syphilis?

All donated blood is tested for syphilis before it is transfused to a patient. A sample of the donor's blood is screened using a specific treponemal antibody test, Micro-hemagglutination Treponema pallidum (MHA-TP).

Blood that is reactive by MHA-TP is tested again using an enzyme immunoassay (EIA) that detects the presence of IgG antibodies to Treponoma pallidum, Syphilis-G EIA. If the Syphilis-G EIA is reactive or equivocal, a quantitative Rapid Plasma Reagin (RPR) test is done for counseling purposes to establish current infection status.

What if I test confirmed positive for syphilis?

If your test is reactive (positive) by Syphilis-G EIA, you should see your physician immediately. Your physician will determine if you are truly infected with syphilis, discuss the affect on your health, and prescribe treatment if necessary.

Should a person with a positive syphilis test result donate blood?

- A donor with a reactive MHA-TP test result and a non-reactive (negative) Syphilis-G EIA is considered not to be infected (false-positive).
- A reactive MHA-TP test result and a reactive (positive) Syphilis-G EIA may indicate recent, past or treated syphilis, and the donor is permanently deferred from donating. The donor is advised to consult with his or her physician, because diagnosis should not be made on a positive test result without a history or clinical evidence of syphilis.

What is meant by a false-positive test result?

A false-positive test result means that the initial screening test was reactive, but a supplemental test was **non-reactive (negative)**. Almost all false-positive test results occur because of interference with the test and are not due to infection. They are not testing errors. Receiving a false-positive test result can be worrisome and upsetting, but tests that are falsely-positive really mean that the infection is not present in the blood. Therefore, a person with a false-positive result does not have the disease and has not exposed a partner, children or friends to the infection. A false-positive reaction may be due to a past syphilis infection or other conditions not associated with syphilis, including pregnancy, rheumatoid arthritis, influenza or pneumonia. If you have any additional concerns, you may speak with a physician who can give you medical advice. Repeat testing may also be discussed with your doctor.

What does an equivocal test result mean?

An equivocal test result means that the test did not clearly provide a negative or positive result. An equivocal result means that syphilis infection status cannot be resolved. The correct evaluation in such situations must be based on subsequent testing and clinical evaluation.

What should I do if I am infected with syphilis?

If your test results indicate infection with syphilis, there are several important steps you should take to protect your health and the health of others.

- **DO** see a physician for medical evaluation, even if you do not have symptoms. Immediate and appropriate medical care is one of the ways to delay or prevent the onset of life-threatening conditions.
- **DO** inform your sexual partners that you are infected with syphilis so that they also can be tested and receive treatment, if necessary.
- **DO** abstain from sexual contact until your sores are healed or your physician has told you the infection is successfully treated.
- **DO** tell your obstetrician about your syphilis infection before considering pregnancy.
- **DO NOT** donate blood or plasma for others.
- **DO NOT** have sex until you and your partners have been treated and cured.

You may obtain more information from the following resources:

Centers for Disease Control and Prevention (CDC): STD information and referrals to STD Clinics, 1-800-CDC-INFO (800-232-4636), TTY: 1-888-232-6348, In English, en Espanol.
<http://www.cdc.gov.std>

CDC National Prevention Network (NPIN), PO Box 6003, Rockville, MD 20849-6003, 1-800-458-5231, TTY: 1-800-243-7012, Email: info@cdcnpin.org