Syphilis is a bacterial infection, usually caught through sexual contact (a sexually transmitted infection, or STI). New diagnoses of syphilis have increased in the UK over the last ten years. Significant numbers of men who have sex with men, and who also have HIV, have been diagnosed with syphilis in recent years.

Syphilis can be treated if you are diagnosed early. If it is left untreated, it can cause long-term complications such as damage to the heart and brain, and can be fatal.

If you have both syphilis and HIV, syphilis may progress much faster than it does in HIV-negative people. It can also be harder to treat for people with HIV, especially if you have a low CD4 cell count, so it is particularly important that it is treated early.

**Transmission**

Syphilis is an infection caused by the bacterium *Treponema pallidum*. There are three stages to the disease: primary syphilis; secondary syphilis and tertiary syphilis. During the primary and secondary stages, it is easy to pass the infection on to other people during sexual contact – during anal, vaginal and oral sex, or by sharing sex toys.

"Primary or secondary syphilis is usually treated with a single injection of penicillin."

Syphilis can be contracted from contact with syphilitic sores.
during unprotected anal, oral or vaginal sex. It can also be transmitted by close physical contact with syphilitic rashes and lesions, which can be anywhere on the body.

It can also be passed on by sharing injecting equipment with someone who has the infection. Pregnant women can pass syphilis on to their baby in the womb, which can cause serious health problems for the child. In the UK, women are tested for syphilis during pregnancy. You can contract syphilis from infected blood during a transfusion, although this is now very rare in the UK as all blood is tested before use.

In a person with HIV who is not taking HIV treatment, untreated syphilis may make them more infectious. This is because untreated sexually transmitted infections can increase HIV viral load in genital fluids. However, if the person with HIV is taking effective HIV treatment and has an undetectable viral load, they will not pass HIV on. Syphilis will not make a difference to this.

In an HIV-negative person, having syphilis can make it more likely that they will be infected with HIV if they are exposed to the virus.

Syphilis is not transmitted through contact with household objects or by sharing clothes, towels or bathrooms.

**Prevention**

Using a condom for oral, anal, or vaginal sex offers some protection from infection with syphilis, or from passing on the infection to somebody else. Protection is not complete because sores and rashes aren’t always in the area protected by condoms. People who are sexually active are advised to have regular sexual health check-ups. Routine sexual health check-ups include a blood test for syphilis. It’s also a good idea to mention to the doctor or nurse any unusual rashes or sores.

Don’t share injecting equipment; avoid sharing sex toys, cover them with a condom or clean them before each use.

Most HIV clinics offer sexual health checks where you can get free and confidential diagnosis, and treatment if necessary, without needing referral from your GP or your HIV doctor.

**Symptoms**

Many people have no symptoms of syphilis in the early (primary) stage of infection. However, you are still infectious even if you have no symptoms.

In the early stage of disease, you may not notice symptoms. Syphilis can progress more quickly and severely in people with HIV, and you may have more serious symptoms in the early stage.
Shortly after becoming infected with syphilis (primary syphilis) a small sore, spot or ulcer (called a chancre) may appear at the site of infection – usually the anus, mouth, penis or vagina. The sore does not hurt and usually heals quite quickly. Some people have swollen glands during this time.

Unless you are treated for syphilis during the primary stage, after a few weeks you will start to show symptoms of ‘secondary’ syphilis. These can include a non-itchy rash anywhere (but commonly on the palms of your hands and the soles of your feet), small skin growths around the vagina or anus, and flu-like symptoms such as swollen glands, fever, muscle pain and headache. Other symptoms can be ringing in the ears, patchy hair loss and lack of appetite. The rash and skin growths are highly infectious. The symptoms may last a few weeks or come and go.

After this secondary stage, untreated syphilis moves into a ‘latent’ phase. You are still infected (and infectious for the first year or so), but have no symptoms. You can stay in this phase for many years.

If your syphilis infection is not treated, you usually develop ‘tertiary’ syphilis after years of infection. About a third of people with tertiary syphilis develop serious symptoms at this stage. What they are depends on where in the body the infection spreads. It can cause damage to the heart, bones, eyes, brain, nerves, skin and blood vessels, and can cause health problems such as heart disease, stroke, dementia, paralysis, blindness and deafness. People with a very low CD4 cell count may be at higher risk of damage to the brain (neurosyphilis). If left untreated at this stage, syphilis can cause death.

**Diagnosis**

A general sexual health check-up will include a blood test, which looks for antibodies produced by your body against the syphilis infection. If you have any lesions, they will be swabbed and tested. It can take up to three months for the body to develop antibodies, so a test taken shortly after you have been exposed to the bacterium may not detect infection. You may have to have another test three months later. There is some evidence to suggest that tests for syphilis are not as reliable in people with HIV.

**Treatment**

Primary or secondary syphilis is usually treated with a single injection of penicillin. Being on HIV treatment and having an undetectable viral load may increase the likelihood of the treatment working. You can be treated during pregnancy.

People who are allergic to penicillin are given a course of different antibiotic tablets. It is important you take the whole course. You may need to come back for a follow-up appointment more often if you’re not able to be treated with penicillin.

If you have latent or tertiary syphilis, you will be given a course of three, weekly injections of penicillin. Although tertiary syphilis can be treated, if you are already experiencing health problems as a result of damage from the syphilis, the treatment will
not improve this.

To avoid infecting other people with syphilis, or being re-infected with the bacteria, it is important to avoid sex altogether, and any skin contact, until you have been told that the treatment has been successful. You will need to have a follow-up blood test a week after treatment to see if it has worked. Any sexual partners should also be tested and, if necessary, treated.

You can find more information on sexual health, sexual health check-ups, and STIs, in NAM’s booklet *HIV & sex*.

**Find out more**

- HIV & sex Information booklet
- Oral sex Simple factsheet
- How hepatitis C is passed on during sex Basic leaflet with pictures

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Author: Selina Corkery
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