Syphilis in Oregon

Stages of syphilis

Syphilis is a sexually transmitted bacterial infection. Oregon state law requires health providers and laboratories to report syphilis cases to the local health department. People with syphilis often go through long periods when they have no symptoms.

- **Primary syphilis** — Usually consists of a single sore that lasts one to five weeks. Syphilis is most infectious during this period. It can be transmitted by direct contact, most often during sex. Blood tests for syphilis are often not positive until three weeks or more after exposure. Sometimes the sore goes unnoticed.

- **Secondary syphilis** — Secondary syphilis does not follow in every case. When present, it appears about four weeks after the sore disappears. It includes rashes of the skin, mouth and genitals and swollen lymph nodes. Symptoms last one to six weeks and then disappear, even without treatment. People with secondary syphilis are infectious.

- **Latent syphilis** — There are no symptoms during this stage. Latent syphilis may go undetected for a lifetime or be followed in a few years by late (tertiary) syphilis. Blood tests are positive throughout latent infection.

- **Late (tertiary) syphilis** — This stage occurs in 30% to 40% of untreated people with primary syphilis. Late syphilis can cause disabilities such as dementia, balance and sensory problems.

- **Congenital syphilis** — This is when a fetus acquires syphilis in the womb or during delivery. Congenital syphilis is rare because most pregnant women are tested for syphilis. It may cause miscarriage, stillbirth or neonatal death. It can also cause the child to be chronically disabled.

- **Neurologic complications** — Neurologic complications can occur at any stage of syphilis including meningitis or ocular disease in primary and secondary and early latent syphilis, or dementia and peripheral nerve damage in late stages of syphilis. ‘Neurosyphilis’ is not considered a stage of syphilis.

Syphilis facts at a glance

- Oregon’s rate of early syphilis infections greatly increased during the last eight years. There were 0.7 cases per 100,000 people in 2007 and 10.5 cases per 100,000 people in 2014. This represents a 1500% increase. Increases continue during 2015.

- During 2014, people with HIV accounted for 42% of Oregon’s new early syphilis cases.

- In the last decade, at least 64% of Oregon’s early syphilis cases have occurred in men who have sex with men.

Treatment

Syphilis infections can be cured with antibiotics. Sex partners of people with confirmed primary, secondary or early latent syphilis should be treated for syphilis whether or not they have tested positive for it.

Epidemiology

In Oregon, early syphilis (primary, secondary and early latent) cases increased greatly during 2008 – 2015. In 2014 there were 15 times as many cases reported as there were in 2007 (Figure 1). Three quarters of the way through 2015, it appears that...
there will be about 20% to 30% more cases reported during 2015 than during 2014. During 2014, 92% of cases occurred in men, and the highest rates of syphilis occurred in people aged 35 to 44 (Figure 2). During 2014, 73% of men with syphilis reported having had sex with other men, but not all men with syphilis were asked this question.

Though only 8% of reported cases of infectious syphilis in Oregon during 2014 occurred in women, the 33 cases statewide amounted to almost twice as many as the 17 cases reported among women during 2013, and that in turn was almost twice as many as the 9 reported in 2012. Cases among women are ominous because babies can acquire congenital syphilis from their mothers while in the womb. Congenital syphilis can cause stillbirth, premature birth, infant death and chronic disability. After only zero to one reported congenital syphilis case a year in Oregon during the previous decade, Oregon experienced 2 cases of congenital syphilis in 2012 and 4 so far during 2015.

During 2014, 41% of syphilis infections occurred among people who already had HIV infection (Figure 3). We do not fully understand why the incidence of syphilis is so high among people with HIV. One possible factor is that some men with HIV select sex partners who are also HIV-positive in order to avoid transmitting HIV to those not infected during condomless sex. In so doing, HIV-positive men may inadvertently expose one another to syphilis. In addition, men with syphilis appear to transmit the infection more easily if they also have HIV. People who have HIV also appear to be more easily infected after they are exposed to syphilis. For these reasons, people with HIV should test regularly for syphilis. Finally, like other sexually transmitted diseases, syphilis is more likely to affect residents of Oregon’s urban areas. During 2014, 347 people with reported syphilis lived in Clackamas, Lane, Marion, Multnomah or Washington Counties accounting for 83% of all early syphilis reported in Oregon during the year.
Preventing syphilis

People can avoid getting syphilis by abstaining from sex or by being in a mutually monogamous relationship in which neither partner has syphilis. People can also reduce their risk of syphilis by using condoms every time they have sex, be it oral, vaginal or rectal. However, condom use has declined during the recent past, coinciding with increases in syphilis and in other sexually transmitted infections such as gonorrhea. Since condoms don’t completely prevent syphilis transmission, and not everyone uses condoms 100% of the time, people at risk for acquiring syphilis should be tested (screened) for syphilis at least once a year and as often as 4 times a year if they are sexually active with multiple partners. These groups include:

- Men who have sex with men
- People with HIV
- People of either sex who use illicit drugs including, but not limited to methamphetamine, opioids, cocaine
- People of either sex who engage in sex work or exchange sex for money or other things of value
- People who have or have had other bacterial or viral sexually transmitted infections
- People who have been exposed to syphilis

Frequent testing helps prevent spread of syphilis by identifying people with unrecognized syphilis and treating them so they are no longer infectious. Public health experts would like to see more of the people in these categories get screened regularly and people already being screened infrequently to be screened more often. Interestingly, studies have shown that even if we weren’t able to increase the number of people being screened regularly, increasing screening to 4 times a year in people already being screened once a year would cause large reductions in syphilis transmission.

In order to know whether their patients should be screened for syphilis, doctors, and clinics and other healthcare providers need to adopt the habit of routinely asking their patients about the number and gender of their sex partners, past histories of sexually transmitted infections or syphilis exposure and use of recreational drugs.

Screening for syphilis in pregnancy

In this era of epidemic syphilis in Oregon, pregnant women should be tested for syphilis three times, once at the first prenatal visit, once at the beginning of the third trimester and once at delivery. This recommendation represents more frequent testing than is ordinarily done in areas where syphilis is not epidemic.

Data source for graphics

Oregon Public Health Epidemiology Users System (Orpheus).

For additional resources and information see: http://public.health.oregon.gov/DiseasesConditions/HIVSTDViralHepatitis/SexuallyTransmittedDisease/Pages/index.aspx