

## Syphilis

### Background

Syphilis is a sexually transmitted infection characterized by stages that can be separated by extended periods without symptoms.

- *Primary syphilis* usually consists of a solitary sore at the site of inoculation that lasts one to five weeks. Syphilis is most infectious during this period and can be transmitted by direct contact with the primary lesion, ordinarily during sex. Blood tests for syphilis are often not positive until three weeks or more after the exposure (inoculation).
- *Secondary syphilis* does not always follow in every case but when it does, it typically appears approximately four weeks after the sore disappears. It includes general body rash, swollen lymph nodes and focal rashes in moist sites, such as the mouth or vagina. These last one to six weeks then disappear, even without treatment. People with secondary syphilis remain infectious, especially upon contact with mucous patches.
- There are no symptoms during *latent syphilis* infection. Latent syphilis may go undetected for a lifetime or be followed within a few years by outward symptoms of *tertiary (late) syphilis*. Blood tests for syphilis are generally positive (reactive) throughout latent infection.
- Between 30% and 40% of untreated people with primary syphilis will develop symptoms of *tertiary (late) syphilis* at some point. Late syphilis can cause disabilities such as dementia, and balance and sensory problems.
- *Fetal infections* acquired while in the womb or during delivery are called *congenital syphilis*. Thanks to syphilis testing during pregnancy, these are rare. Congenital syphilis may cause abortion, stillbirth or neonatal death, in addition to *chronic disability*.

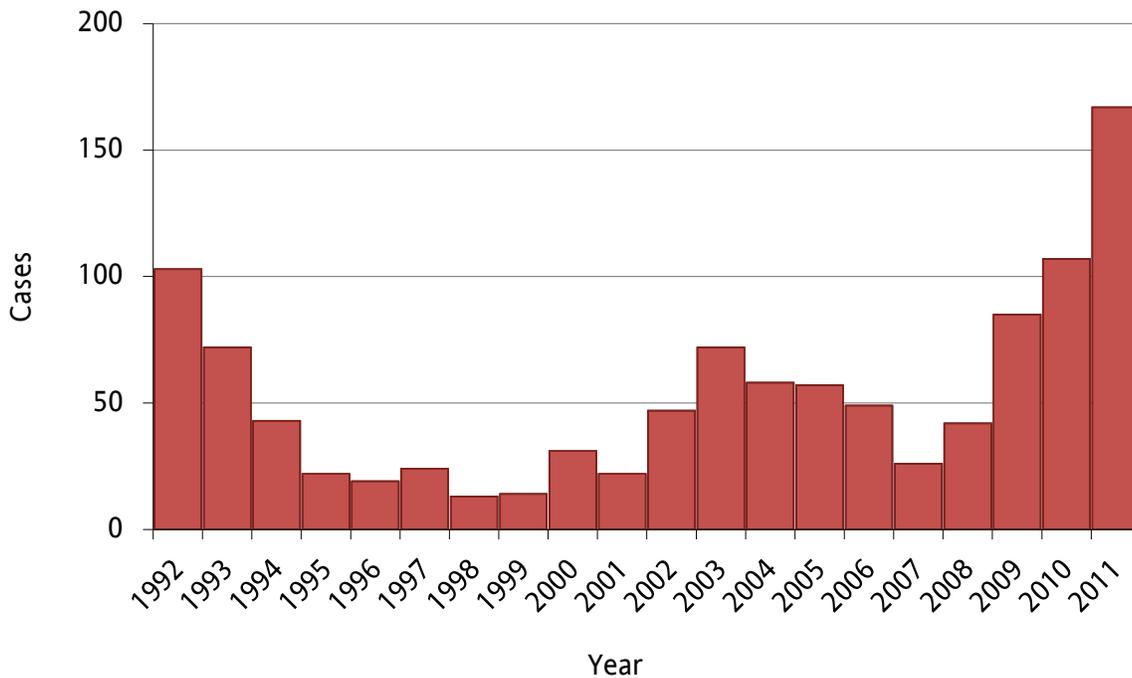
### Treatment

Syphilis infections can be cured with antibiotics. Recent sex partners of people with confirmed primary, secondary or early latent syphilis should receive treatment for syphilis regardless of whether or not they have a positive blood test for syphilis.

### Epidemiology

In Oregon, early syphilis (including primary, secondary and early latent syphilis) cases increased substantially during the past four years to 167 (4.3/100,000) during 2011 after a low of 26 cases (0.7/100,000) during 2007. The 167 cases reported during 2011 in Oregon were more than in any single year since 1991 (Figure 1).

Figure 1. Incidence of syphilis by year, Oregon, 1992–2011



During 2011, elevated rates of early syphilis were observed in men aged 25–44 years, with the highest rate occurring in men aged 40–44 years (22.3/100,000) (Figure 2). During the past decade, almost all cases of early syphilis have occurred among men who have sex with other men. During 2011, at least 129 of 166 men with reported cases of early syphilis reported having had sex with other men and only a single reported case occurred in a woman. During 2011, 46% (48/104) of early syphilis cases occurred in men with HIV (Figure 3). Similarly, relatively high numbers of gonorrhea cases are observed among men who have sex with men, and men with HIV, though numerous gonorrhea cases also occur among women. These trends also are being observed in the rest of the United States. The reasons for the high occurrence of syphilis among men with HIV are not completely understood. Two factors likely contribute. In order to avoid transmitting HIV to HIV-negative partners, some men with HIV select sex partners who are also HIV-positive. Since syphilis is common in this population, they might inadvertently be exposing one another to syphilis. Men with syphilis appear to transmit the infection more easily if they also have HIV, and men who have HIV appear to be more easily infected after exposure to syphilis. For this reason, men with HIV should be encouraged to test regularly for syphilis.

Figure 2. Cases of early syphilis by age group and sex, Oregon, 2011

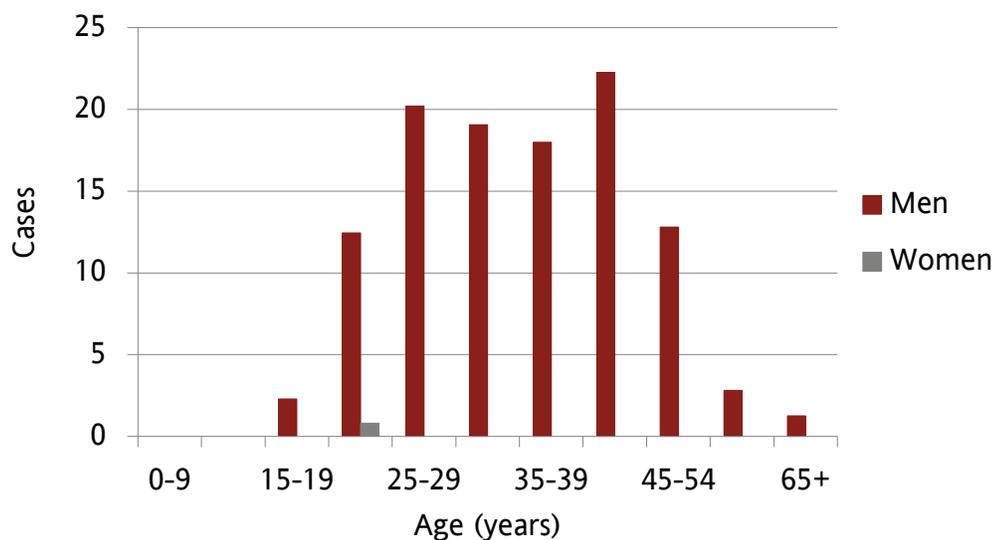


Figure 3. Cases of early syphilis among men, by report of sex with other men (MSM), Oregon, 2006–2010

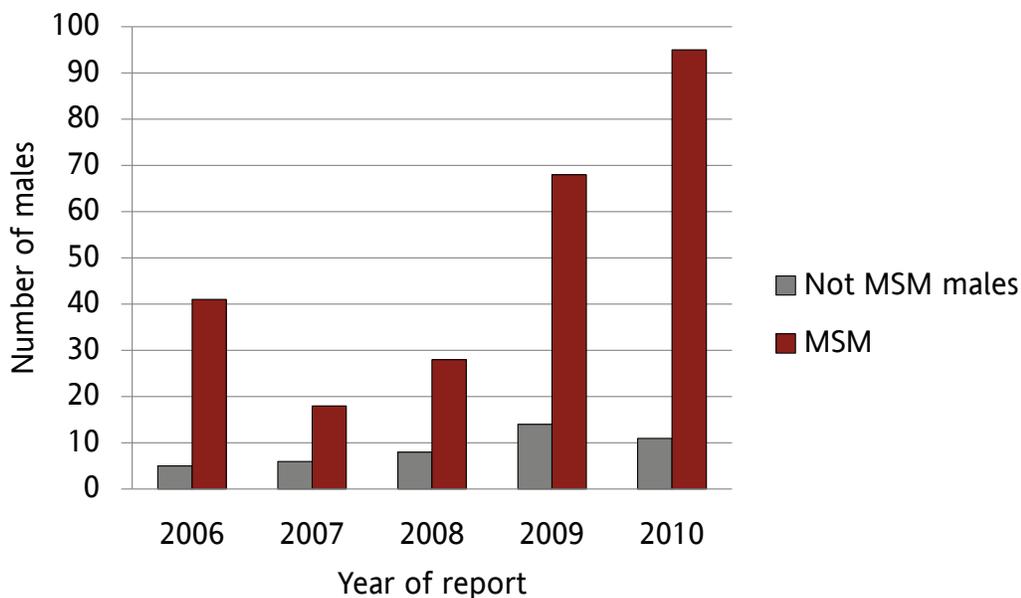
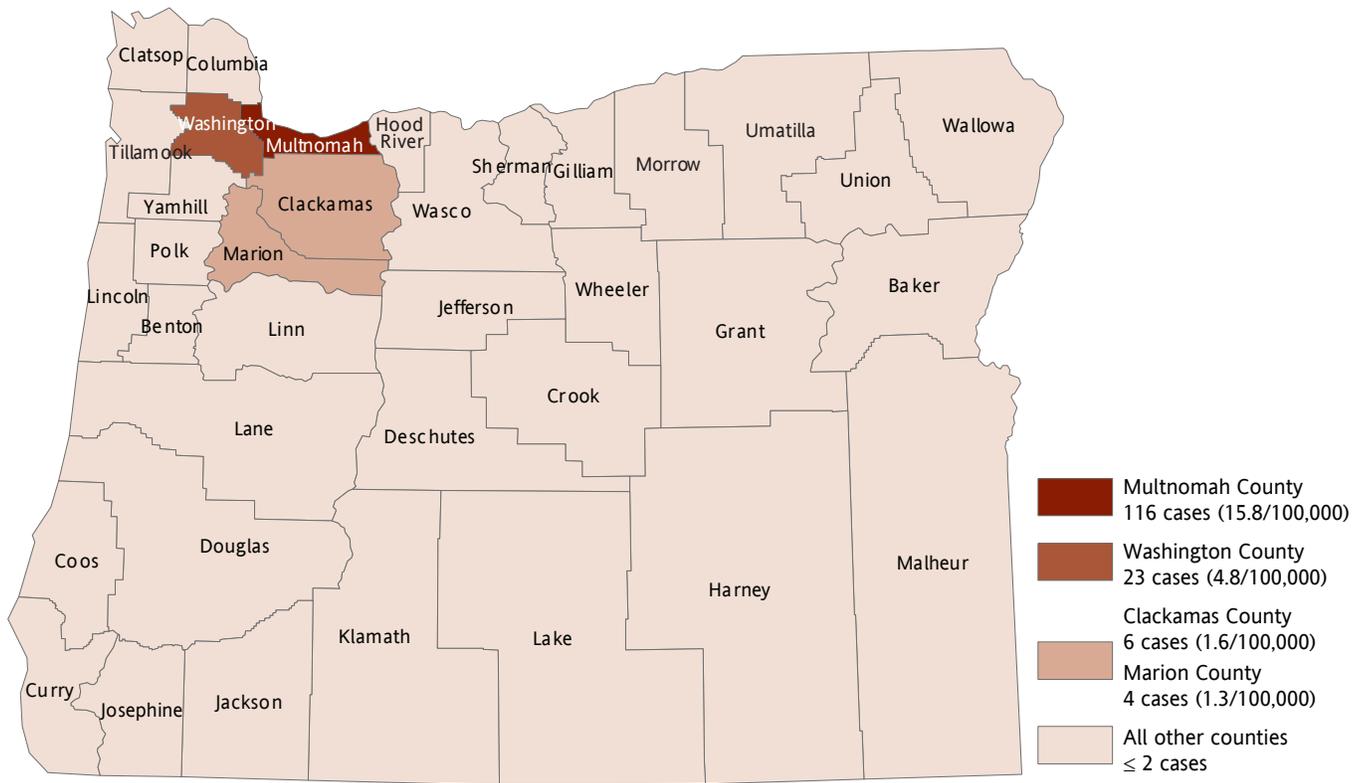


Figure 4. Cases and incidence of early syphilis by county, 2011



During 2011, 116 people (15.8/100,000) with reported cases of early syphilis lived in Multnomah County and accounted for 69 percent of all early syphilis in Oregon during the year.