

# Gonorrhea in Oregon

## Background

Gonorrhea is primarily a sexually transmitted bacterial infection that affects the genital tract, rectum, mouth and throat of men and women. Women are more likely to become infected with gonorrhea after exposure. However, women are less likely than men to develop symptoms after infection and before they are tested.

The proportion of women with infection symptoms when they are tested ranges from 20 percent to as high as 75 percent. However, more than 95 percent of men with gonorrhea present symptoms when they are tested.

Symptoms of gonorrhea among women include painful urination, painful menses and pelvic pain. Symptoms can also include discharge from the vagina and cervix or from the rectum. Men usually experience painful urination and discharge from the penis.

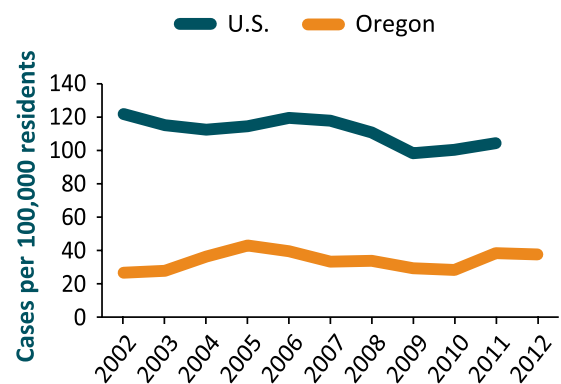
Men can experience complications from epididymitis and prostatitis. Both men and women who acquire gonorrhea through oral sex can have sore throat and discharge. Gonorrhea can also be transmitted from mother to infant during childbirth. This can cause eye infections and can sometimes spread to other parts of the infant's body.

Gonorrhea can cause serious complications. These include pelvic inflammatory disease that sometimes leads to infertility or tubal pregnancy in women. Infections that spread can cause very rare cases of arthritis and blisters on the skin in either sex, but such infections are very rare. Untreated gonorrhea during pregnancy can cause premature delivery. Sometimes it can be hard to see the difference between symptoms caused by gonorrhea and those caused by chlamydial infection. Gonorrheal and chlamydial infections commonly occur at the same time.

## Gonorrhea facts at a glance

- A total of 1,469 cases of gonorrhea were reported in Oregon during 2012.
- Gonorrhea rates ranged from 25 to 45 cases per 100,000 Oregon residents per year during 2002–2012. These rates were well below the overall U.S. rates.
- Overall reported rates of gonorrhea are higher in men than in women.
- The highest rates occur among men and women in their 20s. Rates remain higher for men starting at age 20.
- At least 42% of men with reported cases of gonorrhea report having had sex with other men.
- Although cephalosporin is the preferred antibiotic treatment for gonorrhea, its effectiveness appears to be declining. This might become a major problem because no clear alternatives exist for treating gonorrhea.

**Figure 1 — Incidence of gonorrhea by year, Oregon and the United States, 2002–2012**



**Note:** Rates for the U.S. are only available through 2011.

Oregon state law requires health providers and laboratories to report gonorrhea cases to the local health department. Local public health personnel who have resources to interview people with reported cases ensure those with the infection have received treatment, and help notify and treat sexual partners.

## Treatment

Gonorrhea can usually be treated successfully with antibiotics. They will generally prevent the infection from passing to partners and causing long-term health consequences. Unfortunately, resistance to antibiotics tends to appear rapidly among circulating strains of *Neisseria gonorrhoeae* (the bacterium). Since 2007, cephalosporin has been the only class of reliably effective gonorrhea antibiotic. However, within the last two years, lab tests have shown evidence of cephalosporins becoming less effective in treating gonorrhea.

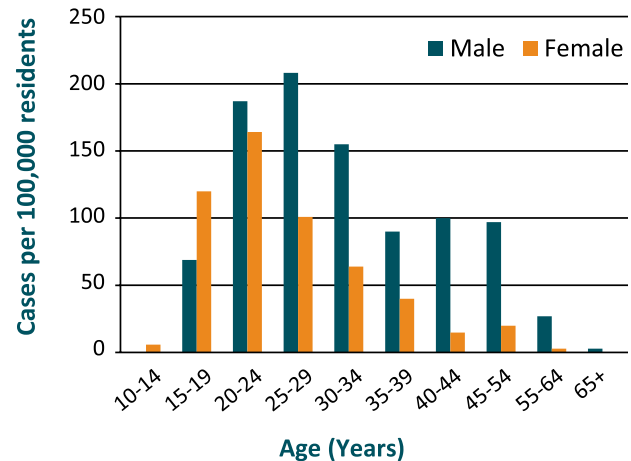
## Screening

In recent years, urine testing with nucleic acid amplification tests (NAATs) has made screening for gonorrhea much more convenient for clinicians and for patients. NAATs are often used to test for chlamydia and gonorrhea at the same time. NAATs have virtually replaced culture screening and diagnostic testing of gonorrhea. NAATs are very convenient and accurate.

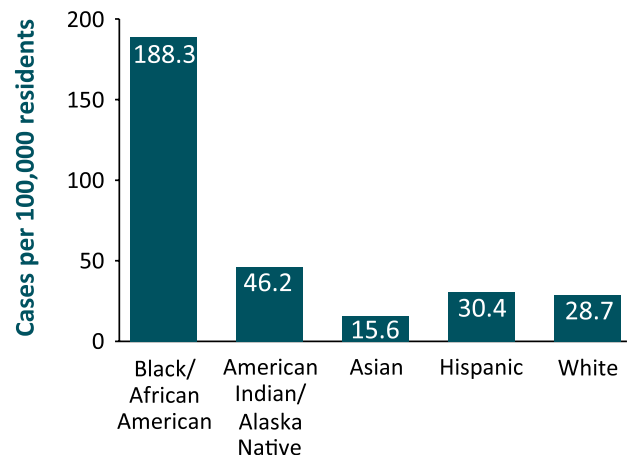
However, substituting NAATs for culture testing may make labs unable to culture *Neisseria gonorrhoeae* and test readily for susceptibility to antibiotics; this testing might become needed again if *N. gonorrhoeae* becomes widely resistant to cephalosporins.

Centers for Disease Control and Prevention (CDC) and U.S. Preventive Services Task Force (USPSTF) guidance on screening for infections recommends that clinicians screen all sexually active women under the age of 25, including those who are

**Figure 2 — Incidence of gonorrhea by age and sex, Oregon, 2012**



**Figure 3 — Incidence of gonorrhea by race and ethnicity, Oregon, 2012**



pregnant, for gonorrhea if they have the following specific risk factors:

- A history of previous gonorrhea or other sexually transmitted infection;
- New or multiple sexual partners;
- Inconsistent condom use;
- Sex work; or
- Drug use.

Broader screening is recommended for Oregon residents with a higher incidence of infection than the general population. These groups include Multnomah County residents, African Americans and other blacks, and men who have sex with men.

## Prevention

Primary prevention strategies aim to stop a person from becoming infected in the first place by:

- Delaying age at onset of intercourse;
- Decreasing the number of sex partners; and
- Increasing condom use.

Rapid identification and treatment of new cases can also be considered primary prevention when they stop transmission to a sex partner. Secondary prevention strategies aim to eliminate existing infections by:

- Treating gonorrhea cases that do not present symptoms until they are tested; and
- Treating sex partners of people with gonorrhea.

## Data source for graphics

Oregon Public Health Division statewide mandatory reporting of syphilis cases: <http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Pages/annrep.aspx>