Washington State Department of Health

DOH 347-350 March 2018

# STD Fast Facts: Washington State 2016

In Washington, sexually transmitted infections (STIs) are the most commonly reported of all communicable diseases. STIs comprised 73% of notifiable diseases or conditions reported to the Washington State Department of Health in 2016.

Healthcare providers and laboratories are required to report confirmed cases of chlamydia, gonorrhea, syphilis, herpes, lymphogranuloma venereum, chancroid, and granuloma inguinale to their local health departments. See **Table 1** for the number of STI cases reported in Washington State in 2015 and 2016.

### Table 1 Reported STI Cases by Disease, Washington State 2015-2016

| Disease | 2015 | 2016 | Trend |
|---|---|---|---|
| Chlamydia Infection (CT) | 28,748 | 31,193 | ↑ |
| Gonorrhea (GC) | 7,203 | 8,165 | ↑ |
| Primary & Secondary Syphilis | 453 | 566 | ↑ |
| Early and Late Latent Syphilis | 670 | 838 | ↑ |
| Late Syphilis | 1 | 2 | ↑ |
| Congenital Syphilis | 3 | 5 | ↑ |
| Genital Herpes, adult initial infection | 2,525 | 2,548 | ↑ |
| Neonatal Herpes | 1 | 2 | ↑ |
| Lymphogranuloma Venereum | 1 | 1 | - |
| Chancroid | 1 | 0 | ↓ |
| Granuloma Inguinale | 0 | 0 | - |

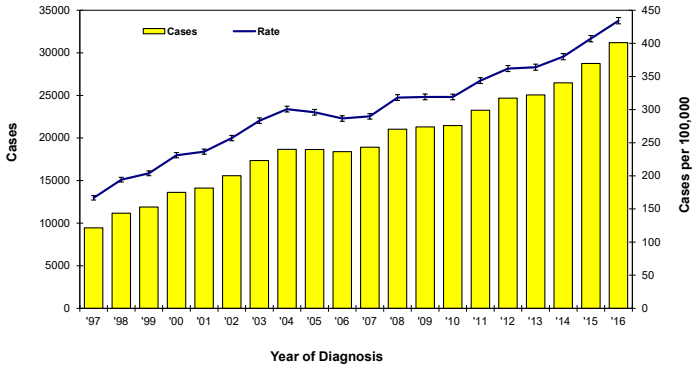
## Chlamydia

Infection with the bacterium *Chlamydia trachomatis* (CT) is the most frequently reported STI statewide and nationally. While many people with chlamydia experience minor discomfort and do not seek testing or treatment, untreated chlamydia in women can lead to pelvic inflammatory disease (PID), infertility, ectopic pregnancy and other reproductive health issues.

The number of chlamydial infection cases and incidence rate among persons in Washington State from 1997 to 2016 are presented in **Figure 1**. Washington reported 434.2 cases of chlamydia per 100,000 persons in 2016, a 36% increase since 2008. In the United States, 475.0 cases of chlamydia were reported per 100,000 people in 2015.[i]

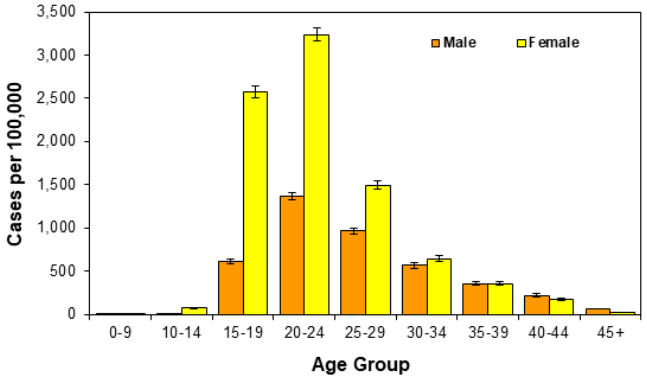
By race and ethnicity, rates of chlamydia were lowest among white persons and highest among black persons and all other races[ii] in 2016. The rate of chlamydia was higher in Washington than nationally within each race and ethnicity group.[i]

### Figure 1 Chlamydia Cases and Rates, Washington State 1997-2016



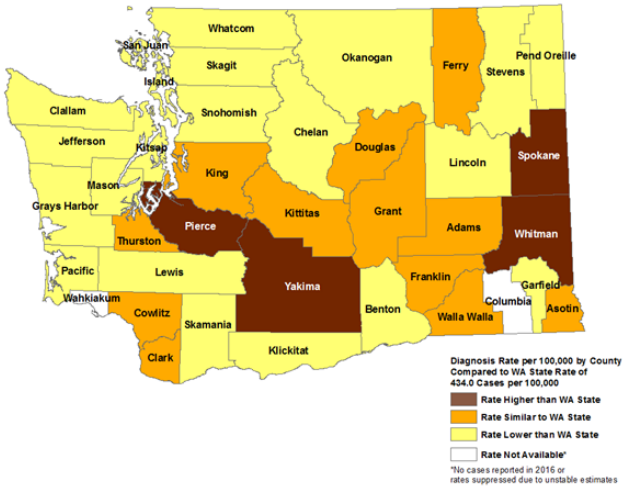

Statewide chlamydia rates for 2016 are presented by gender and age group in **Figure 2**. Women 15 to 24 years of age have the highest rates of chlamydia, partially due to better detection and screening of chlamydia among women of childbearing age.

### Figure 2 Chlamydia Rates by Gender and Age Group, Washington State 2016




All Washington counties reported one or more chlamydia infections in 2016 (**Figure 3**).

**Figure 3 Chlamydia Incidence Rates by County Compared to the WA State Rate 2016**




- Chlamydia cases reported and incidence rate increased by 9% in 2016.
- Chlamydia rates were highest among those 20 – 24 years of age and women.
- 60% of CT cases reported in 2016 were under the age of 24.

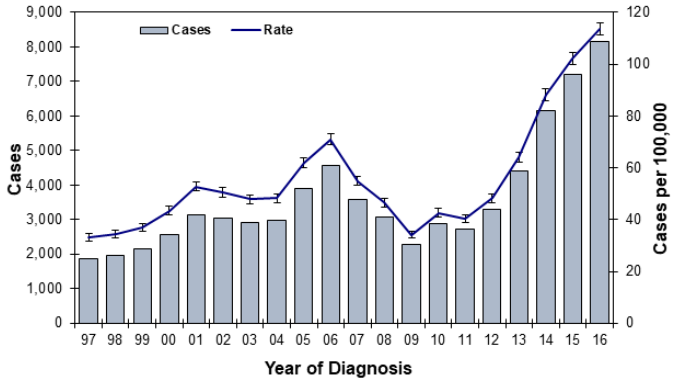
# Gonorrhea

Infection with the bacterium *Neisseria gonorrhoeae* (GC) is the second most commonly reported STI in the United States. Symptoms include abnormal genital discharge and painful urination. Some people do not notice any symptoms. Untreated gonorrhea may lead to PID, infertility, and the infection may spread to the joints or other parts of the body. Gonorrhea increases the likelihood of contracting HIV and other sexually transmitted diseases.

Statewide gonorrhea rates from 1997-2016 are presented in **Figure 4**. The rate of gonorrhea in Washington has increased every year since 2012. In 2016, there were 113.7 cases of gonorrhea per 100,000 people in Washington, a 144% increase since since 2008. In the United States, there were 123.0 cases of gonorrhea per 100,000 people in 2015.[i]

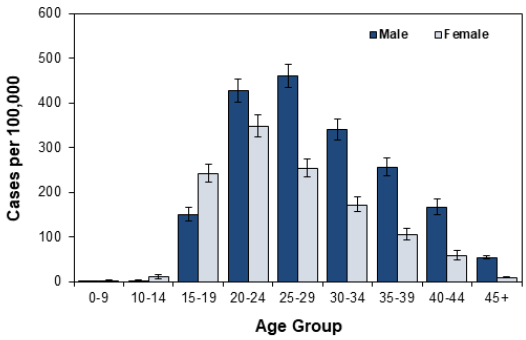
By race and ethnicity, rates of gonorrhea in Washington were highest among black persons and lowest for white persons in 2016. The rate of gonorrhea was higher in Washington than nationally within each race and ethnicity.[i] Since 2014, gonorrhea rates have increased the most among persons of all other races.[ii]

**Figure 4 Gonorrhea Cases and Rates, Washington State 1997-2016**



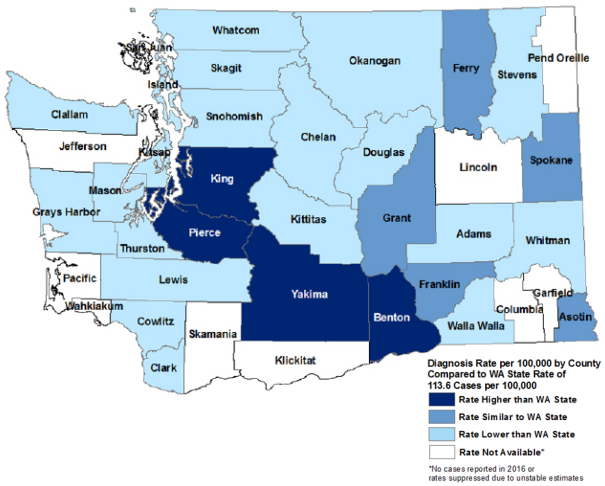

Gonorrhea cases by age and sex are shown in **Figure 5**. Males have a higher rate of gonorrhea than females in most age groups, partly due to high rates among men who have sex with men (MSM). About 4% of men in Washington are MSM,[iii] yet MSM represented 47% of male gonorrhea cases in 2016.

**Figure 5 Gonorrhea Rates by Gender and Age Group, Washington State 2016**




Gonorrhea rates for 2016 are mapped by county in **Figure 6**. One or more gonorrhea cases were reported in all but three counties.

**Figure 6 Gonorrhea Incidence Rates by County Compared to the WA State Rate 2016**



- Washington's rate of gonorrhea increased 144% from 2008 to 2016.
- Gonorrhea rates were highest in males 25-29.
- 41% of 2016 gonorrhea cases were from King County.

**CDC GC treatment guidelines**

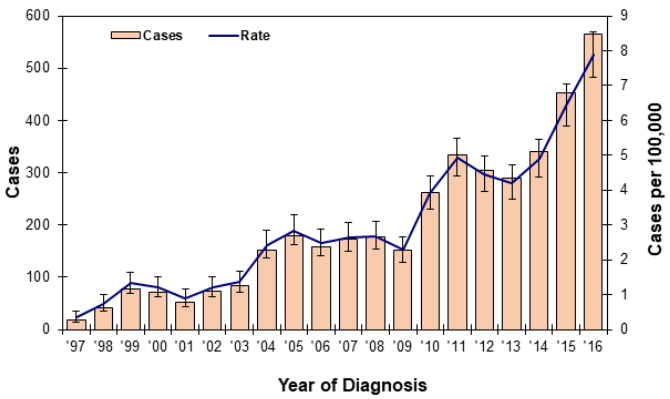
- Treat with ceftriaxone (250mg IM) in combination with azithromycin (1g). [iv]
- Alternatively, ceftriaxone may be substituted with cefixime (400mg).
- Treat persons allergic to cephalosporins with azithromycin (2g) in combination with either gentamicin (240mg) or gemifloxacin (320 mg).
- Persons suspected of having gonorrhea should be treated presumptively at the time of their initial evaluation, before test results are available.

# Syphilis

Syphilis is caused by the bacterium *Treponema pallidum*. Syphilis progresses through stages of primary, secondary, latent, and late. Primary and secondary (P&S) syphilis are the first stages of the disease when persons are most contagious. P&S syphilis symptoms include painless lesions, rashes, and flu-like symptoms. Untreated syphilis can cause internal organ damage, dementia and blindness.

Annual rates of P&S syphilis from 1997-2016 are shown in **Figure 7**. There were 7.9 cases of P&S syphilis reported per 100,000 people in Washington, a 194% increase since 2008. Washington's 2016 P&S syphilis rate is higher than the 2015 national rate of 7.4 cases per 100,000 people.[i]

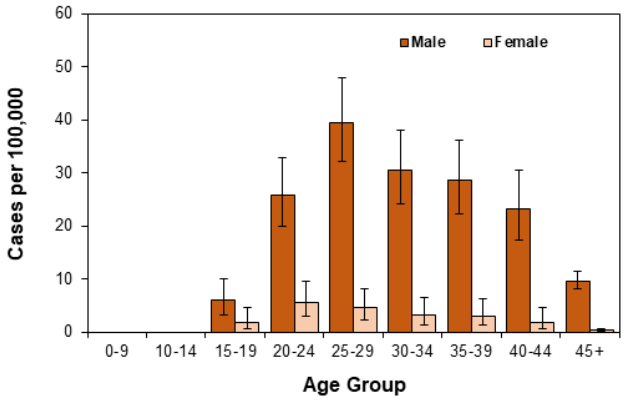
**Figure 7 Primary and Secondary Syphilis Cases & Rates, Washington State 1997-2016**




Men had higher rates of P&S syphilis than women in 2016 (**Figure 8**). MSM represented 81% of male P&S syphilis cases.

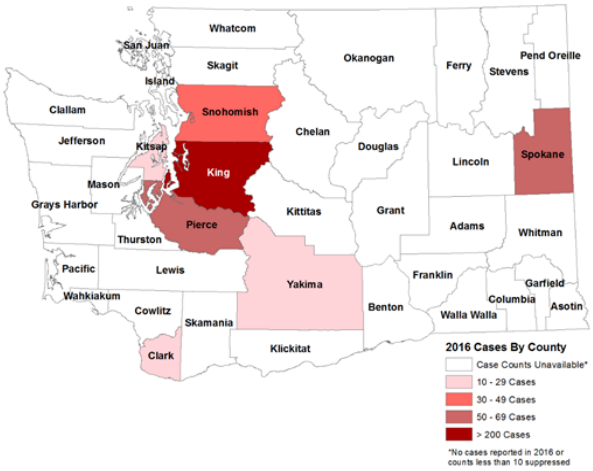
By race and ethnicity, rates of syphilis were highest among black and Hispanic persons and lowest among whites and all other races[ii] in 2016. The rates of P&S syphilis among white and Hispanic persons were higher in Washington than nationally.[i]

**Figure 8 Primary and Secondary Syphilis Rates by Gender, Washington State 1997-2016**




In 2016, 70% of P&S syphilis cases lived in Snohomish, King and Pierce Counties (**Figure 9**).

**Figure 9 Primary and Secondary Syphilis Cases Reported by County, Washington State 2016**




- P&S syphilis rates increased 23% from 2015 to 2016.
- 74% of 2016 P&S syphilis cases were MSM.
- 26% of 2016 P&S syphilis cases were also infected with HIV.
- There were 5 congenital syphilis cases in 2016.

# Primary and Secondary Syphilis: Complications on the Rise

The primary and secondary (P&S) syphilis infection rate continued to increase statewide and nationally in 2016. Untreated P&S syphilis can result in permanent and serious side effects, and these have increased in Washington as well.

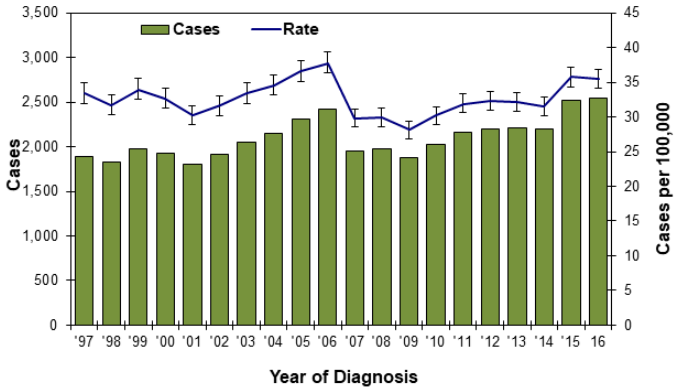
Syphilis can spread to the eyes (ocular syphilis) or brain (neurosyphilis) at any stage of the disease. While once rare, four ocular syphilis cases were reported in Washington from December 2014 to January 2015.[v] Two persons were permanently blinded. In November 2016, Washington DOH began tracking ocular syphilis symptoms in all P&S syphilis cases. By the end of that year, six additional people reported symptoms of ocular syphilis, including one person with some loss of vision.

Pregnant women can pass syphilis to their unborn child (congenital syphilis) which may result in stillbirth, child death and birth defects. From 2015 to 2016, there were 8 cases of congenital syphilis in Washington, as many cases as in the previous 12 years combined. Congenital syphilis is preventable and all pregnant women should be screened. Find STD clinics near you to schedule an appointment.[vi]

# Other STIs

Washington State requires reporting of genital herpes initial infections and other serious but uncommon STIs. In 2016, 2,548 cases of genital herpes initial infection were reported, or 35.5 cases per 100,000 persons (**Figure 10**). Two cases of neonatal herpes, one case of lymphogranuloma venereum, no cases of chancroid or granuloma inguinale were reported in 2016.

**Figure 10 Adult Initial Infection Herpes Cases and Rates, Washington State 1997-2016**




# Notes

[i] National estimates of STD rates by year: https://www.cdc.gov/std/stats16/tables.htm

[ii] For race and ethnicity, categories of white non-Hispanic, black non-Hispanic, Hispanic, and all other races non-Hispanic were used. 'All other races' includes persons of non-Hispanic ethnicity reporting a race other than white or black, including multiple races and missing race.

[iii] See MSM population estimates at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4873305/

[iv] For full treatment guidelines, visit https://www.cdc.gov/std/tg2015/gonorrhea.htm

[v] Original press release from King County: https://go.usa.gov/xn7J7

[vi] For a list of STD clinics by county, visit: https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/GettingTested

# For More Information

Infectious Disease Prevention
WA State Dept. of Health:
http://www.doh.wa.gov/Youand YourFamily/IllnessandDisease/SexuallyTransmittedDisease

U.S. Centers for Disease Control & Prevention:
www.cdc.gov/std/

For persons with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 or TDD/TTY 1-800-833-6388 (DOH #347-350).

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