

In Washington, sexually transmitted infections (STIs) are the most commonly reported of all communicable diseases. STIs comprised more than 74% of notifiable diseases or conditions reported to the Washington State Department of Health in 2015.

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. **Table 1** compares total STI cases diagnosed and reported in Washington State in 2014 and 2015.

Table 1 Reported STI Cases by Disease,Washington State 2014–2015

Disease	2014	2015	
Chlamydia Infection (CT)	26,246	28,721	1
Gonorrhea (GC)	6,136	7,203	Ť
Primary & Secondary Syphilis	337	452	Ť
Early and Late Latent Syphilis	502	670	Ť
Late Syphilis	1	1	_
Congenital Syphilis	2	3	1
Genital Herpes, adult initial infection	2,082	2,524	1
Neonatal Herpes	1	1	<u> </u>
Lymphogranuloma Venereum	0	1	1
Chancroid	0	0	_
Granuloma Inguinale	0	0	_

*Cases diagnosed in the calendar year and reported as of 03/07/16

Chlamydial Infection

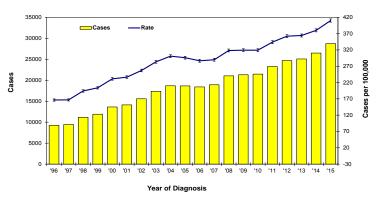
Infection with the bacterium *Chlamydia trachomatis* (CT) is the most frequently reported STI nationally and in Washington. Under-reporting is likely as many people with chlamydia are not aware of their infections and thus do not seek testing, especially men. Later consequences of untreated CT can include damage to a woman's reproductive organs such as pelvic inflammatory disease (PID), infertility, and ectopic pregnancy.

The number of chlamydial infection cases and incidence rate among persons in Washington State for 1996 to 2015 are presented in **Figure 1** and

STD Fast Facts: Washington State 2015

show a steady rise between 1996 and 2004 before leveling off for three years. Since 2007 the incidence rate has sharply increased to the 2015 incidence rate of 410 cases per 100,000 population. However, Washington's 2015 CT rate remains lower than the national CT incidence rate, which was 456 cases per 100,000 in 2014.

Figure 1 Chlamydial Infection Cases and Rates, Washington State 1996 – 2015



Age-specific incidence rates by gender for CT infection cases in Washington State in 2015 are presented in **Figure 2**. Young women between 15 and 24 years continue to have disproportionately higher incidence rates than other age groups and than males, which may point toward less testing in men overall.

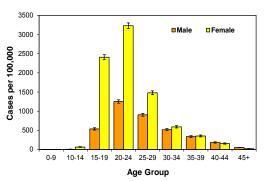


Figure 2 Chlamydial Rates by Gender and Age Group, Washington State 2015

Chlamydial infection cases were reported from all counties in Washington State in 2015. As presented in **Figure 3**, CT is widespread with rural

counties experiencing rates higher than the overall Washington State rate.

Figure 3 Chlamydia Incidence Rates by County Compared to the WA State Rate 2015



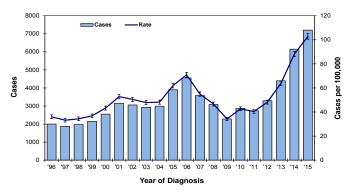
- CT cases reported and incidence rate increased by 9% in 2015
- Age-specific CT rates were highest among 20 – 24 year olds for both females and males in 2015
- 59% of CT cases reported in 2015 were for persons aged 24 years and younger

Gonorrhea

Infection with the bacterium *Neisseria gonorrhoeae* (GC) is a common cause of morbidity in the United States. Symptoms may be absent, but when present include abnormal genital discharge and painful urination. Consequences of untreated gonorrhea may include PID, infertility, and disseminated infections. Gonorrhea also increases the likelihood of contracting other infections, including HIV.

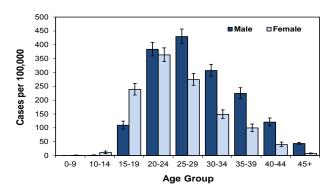
After several years of steady decline, the gonorrhea rate in Washington State sharply increased from 2009 through 2015 (**Figure 4**). The overall GC incidence rate for Washington State in 2015 was 103 cases per 100,000. However, Washington's 2015 GC rate remains lower than the national GC incidence rate, which was 111 cases per 100,000 in 2014.

Figure 4 Gonorrhea Cases and Rates, Washington State 1996–2015



The age distribution for gonorrhea differs between gender and age groups as seen in **Figure 5**. Among males, the burden of disease continues to be distributed across older age groups, reflecting transmission among men who have sex with men (MSM).

Figure 5 Gonorrhea Rates by Gender and Age Group, Washington State 2015



Gonorrhea rates by county are presented in **Figure 6**. GC cases were reported from a majority of counties in Washington State in 2015.



Figure 6 Gonorrhea Incidence Rates by County Compared to the WA State Rate 2015

- Gonorrhea cases reported and annual incidence rate increased by 17% in 2015
- Age-specific GC rates were highest among 20 – 24 year old females and 25 – 29 year old males in 2015
- 41% of all GC cases reported in 2015 were persons living in King County

CDC GC Treatment Guidelines

- 1. Treat with ceftriaxone (250mg IM) in combination with azithromycin (1g).
- 2. If ceftriaxone is not an option, then treat with cefixime (400mg), also with azithromycin (1g).
- 3. For persons with cephalosporin allergy, treat with azithromycin (2g) in combination with either gentamicin (240mg) or gemifloxacin (320 mg).
- 4. Persons suspected of having gonorrhea should be treated presumptively at the time of their initial evaluation, before test results are available.

MMWR, June 5, 2015, Vol.64 No.RR-3 http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6403a1.htm

2015 Gonorrhea Increase

After several years of a steady decrease in the gonorrhea incidence rate, the rate sharply climbed from 2011-2015. There was a 38% increase in gonorrhea cases between 2013 and 2014, and a 17% increase in gonorrhea cases between 2014 and 2015. Twelve counties in Washington experienced a greater than 50% increase in gonorrhea cases in 2015. While 41% of all 2015 gonorrhea cases were reported in King County, many of the counties experiencing gonorrhea increases were rural counties outside of the urban Seattle area.

There is a nation-wide ongoing concern that gonorrhea is becoming increasingly resistant to the antibiotics used to treat it. Quinolone-resistant *N. gonorrhoeae* strains are common in the United States thus this group of antibiotics is no longer recommended for use against GC. Overuse or incorrect use of antibiotics and gonorrhea's ability to mutate rapidly in response to treatment are believed to be the main reasons the bacteria is becoming resistant to available treatments.

In response to these developments, local public health officials are actively working with

health care providers to ensure that people with gonorrhea and those exposed get appropriate testing and treatment to stop ongoing spread. The Washington State Department of Health recommends following the U.S. Centers for Disease Control and Prevention (CDC) treatment guidelines for treating gonorrhea when identified.

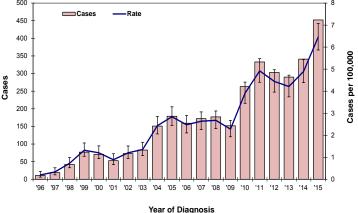
Syphilis

Syphilis is caused by infection with the *Treponema pallidum* bacterium. Early symptoms of syphilis include painless lesions, rash, and flu-like symptoms. Untreated syphilis can cause long-term effects such as damage to internal organs, dementia, and blindness. Syphilis occurs in overlapping disease stages of primary, secondary, latent, and late. Primary and secondary (P&S) syphilis are the infectious stages and indicate likely acquisition of the disease in the preceding year. Thus, the cases with these two syphilis stages are the focus of epidemiologic analysis.

Starting in 1997, infectious syphilis reemerged in Washington primarily among urban MSM. A sharp increase in incidence rate has been observed since that time (**Figure 7**). In 2015, there were 452 cases of primary and secondary syphilis reported in Washington for an incidence rate of 6.5 cases per 100,000. Washington's 2015 P&S syphilis rate is higher than the national rate, which was 6.3 cases per 100,000 in 2014.

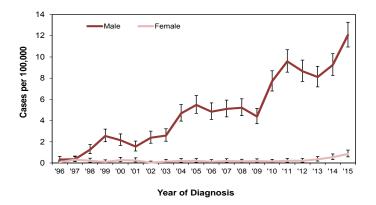
& Rates, Washington State 1996-2015

Figure 7 Primary & Secondary Syphilis Cases



There continues to be a large disparity between male and female P&S syphilis rates as shown in **Figure 8**. This pattern of case incidence has been observed since 1997 and is consistent with an epidemic concentrated among MSM.

Figure 8 Primary & Secondary Syphilis Rates by Gender, Washington State 1996-2015



Approximately 70% of the primary and secondary syphilis cases diagnosed in 2015 were people living in the predominately urban Puget Sound region of the state including Snohomish, King and Pierce Counties (**Figure 9**).

Figure 9 Primary & Secondary Syphilis Cases Reported by County, Washington State 2015



- Primary and secondary syphilis rates increased by 33% between 2014 and 2015
- 79% of the P&S syphilis cases in 2015 reported a history of MSM
- 28% of the P&S syphilis cases in 2015 were co-infected with HIV
- There were 3 congenital syphilis cases diagnosed in 2015

Other STIs

Washington State requires reporting of initial infection of genital herpes, as well as other serious but less commonly occurring STIs. In 2015, 2,524 cases of genital herpes initial infection were reported for an incidence rate of 36 cases per 100,000 persons (**Figure 10**). One case of neonatal herpes was reported in 2015 for a rate of 1.1 per 100,000 live births. One case of lympnogranuloma venereum was reported in 2015. Zero cases of chancroid, or granuloma inguinale were reported in 2015.

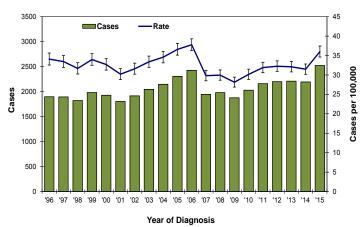


Figure 10 Adult Initial Infection Herpes Cases and Rates, Washington State 1996 – 2015

For More Information

Infectious Disease Prevention WA State Dept. of Health:

http://www.doh.wa.gov/YouandYourFamily/ IllnessandDisease/SexuallyTransmittedDisease

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

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711). (DOH #347-350)

Office of Infectious Disease Assessment Unit Disease Control and Health Statistics Washington State Dept. of Health P.O. Box 47838 Olympia, WA 98504-7842 Telephone: 360-236-3455 FAX: 360-586-5440