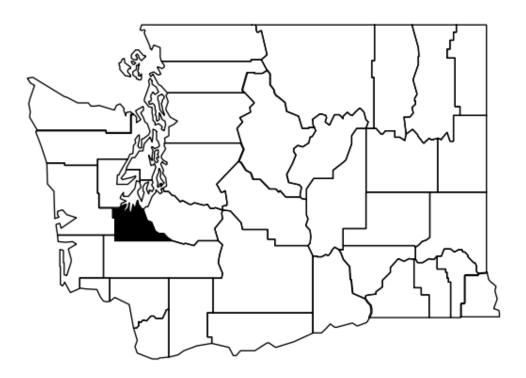
# Sexually Transmitted Infection Profile

Thurston County 2020



Disease Control and Health Statistics Infectious Disease Assessment Unit



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### Introduction

Sexually transmitted infections (STIs) continue to be the most frequently diagnosed and reported notifiable conditions in Washington State. This report describes the STI burden in Thurston County. Data are presented for the more commonly reported diseases of chlamydial infection, gonorrhea, primary and secondary syphilis, and genital herpes. Figures are presented for chlamydial infection, gonorrhea, and primary and secondary syphilis, when at least ten (10) cases were diagnosed in 2020. The corresponding incidence rates are presented graphically when there are greater than sixteen (16) cases diagnosed within one year. The report concludes with tables containing a decade of historical data by age group and gender for chlamydial infection, gonorrhea, and primary and secondary syphilis, when at least twenty (20) cases were diagnosed in 2020. To protect patient confidentiality, data within these tables is suppressed if stratified counts are less than ten (10) or could be used to deduce other counts that are less than ten (10). Due to small number standards, gender data is only stratified by people who identify as male or female. People who identify as transgender, nonbinary, or other gender identity are included within the annual total case count. For this reason, total annual case counts may appear higher than the sum of individual cells.

### **Data Sources, Definitions and Limitations**

<u>Cases</u>: Surveillance cases are the number of new episodes of disease (not unique persons) diagnosed in a given year. Cases are identified and submitted by health care providers to local health jurisdictions and entered into the Washington State Department of Health Public Health Information Management System – Sexually Transmitted Diseases (PHIMS-STD) data system. Additionally, cases of chlamydial infection reported through electronic lab reporting (ELR) alone are included in the final chlamydia case counts. To be included in surveillance reporting, each case must meet disease definitions (see below). Data presented in this report represent new cases of infection diagnosed during a given year and reported as of June 1, 2021.

### Disease Definitions:

Chancroid

A sexually transmitted infection caused by the bacterium *Haemophilus ducreyi* that may include the symptoms of painful genital sores and swollen pelvic lymph nodes. Cases are defined by laboratory detection of *H. ducreyi* from a clinical specimen.

Chlamydia (CT)

- A sexually transmitted infection caused by the bacterium *Chlamydia trachomatis* that may include the symptoms of swelling and pain in internal sexual organs, though the infection often has no symptoms in women. Cases are defined by laboratory detection of *C. trachomatis* from a clinical specimen.

Genital Herpes (HSV) – A sexually transmitted infection caused by the herpes simplex viruses type 1 and type 2 that may include the symptoms of blisters or sores in the genital area. Cases are defined by laboratory detection of herpes simplex virus (HSV1 or HSV2) or positive antibody response from a clinical

specimen. Reportable cases include only adult genital initial infection and neonatal infection.

Gonorrhea (GC)

- A sexually transmitted infection caused by the bacterium *Neisseria* gonorrhoeae that may include the symptoms of swelling and pain in internal sexual organs, though the infection sometimes has no symptoms. Cases are defined by laboratory detection of the bacterium N. gonorrhoeae from a clinical specimen.

Granuloma Inguinale (GI) – A sexually transmitted infection caused by the bacterium Klebsiella granulomatis that may include the symptoms of slowly increasing genital sores and swollen pelvic lymph nodes. Cases are defined by microscopic examination of a clinical specimen.

Lymphogranuloma Venereum (LGV) – A sexually transmitted infection caused by three strains of Chlamydia trachomatis that may include the symptoms of genital sores and swollen pelvic lymph nodes. Cases are defined by laboratory detection of the L1, L2 and L3 serovars of *C. trachomatis* from a clinical specimen.

**Syphilis** 

- A sexually transmitted infection caused by the bacterium *Treponema* pallidum that may include many kinds of symptoms or none at all, depending upon the stage of disease. Cases are defined and assigned a stage by a combination of positive blood tests, symptoms, and history of previous treatment. The U.S. Centers for Disease Control and Prevention (CDC) provides guidelines with additional details of surveillance definitions and staging criteria. The stages of primary and secondary (P&S) syphilis are grouped together for analysis in this report; these stages are the most infectious and the best indicators of recent infection.

*Primary* – identified by the presence of one or many painless sores. Secondary – identified by the presence of a rash on one or more areas of the body, often with fever, fatigue or other symptoms at the same time. Other Stages – additional stages of syphilis include early non-primary nonsecondary, unknown duration or late, congenital, and syphilitic stillbirths. See CDC guidelines for specific criteria: www.cdc.gov/std/

Incidence Rates: Incidence rates in this report are calculated as the number of new episodes of a disease (not unique persons) diagnosed in a given year divided by the total population (age- and sex-adjusted) for that year, expressed as a rate per 100,000. Incidence rates allow comparisons between two or more populations by standardizing the denominator and are the most appropriate statistic to use when investigating differences between groups. Rates are not presented when there were fewer than 17 cases of disease reported due to statistical instability concerns.

Limitations: The data presented in this report may be subject to a number of limiting factors. Clinically diagnosed cases (without laboratory confirmation) may be missed through public health surveillance systems. Depending upon diagnosing practices, completeness of reporting may vary by the source of health care. In addition, the diagnosing practitioner is responsible for providing the case information including the patient demographic data items of age and gender upon which many of the analyses in this report depend. Biases could exist in the data due to under-reporting, inability of certain populations to access medical services, errors in laboratory reporting, or differential reporting or screening by disease and source of care. Also, small increases or decreases

STI Profile 2020 2 **Thurston County**  in numbers from year to year can look large if the actual number of cases is small. Care should be taken in interpreting these data in light of known limitations.

<u>Population</u>: Denominator population estimates for 2001-2020 incidence rates are from Washington State Adjusted Population Estimates, Office of Financial Management (OFM), <a href="http://www.ofm.wa.gov/pop/">http://www.ofm.wa.gov/pop/</a>. Denominator population estimates for 2020 are based on 6-year (2014-2019) extrapolations.

<u>Tabular Data</u>: The data tables are provided in hopes that community and local partners will use these historical data as a resource for future health planning. Data tables for additional years previous are available upon request.

Anyone with specific questions about how these data should be interpreted is encouraged to contact the Infectious Disease Assessment Unit's STI Surveillance team at 360-236-3445.

STI Profile 2020 3 Thurston County

# **Thurston County STI Disease Trends**

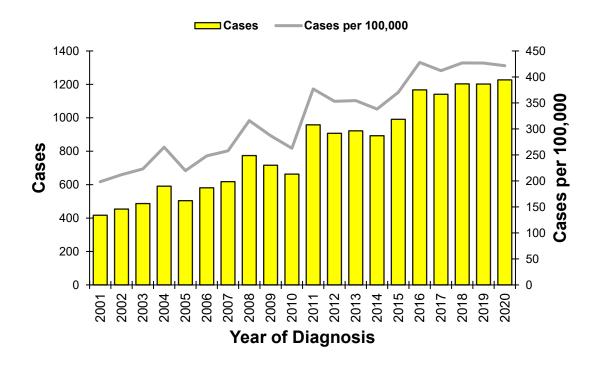
Table 1. Washington State Reportable Sexually Transmitted Infections, Thurston County, 2020

Disease	County Cases	County Rate§	WA State Rate
Chlamydia	1227	421.6	410.4
Gonorrhea	305	104.8	151.2
P&S Syphilis	30	10.3	10.9
Genital Herpes	84	28.9	18.0
Chancroid/GI/LGV	0		
Total	1646		

<sup>§</sup> Crude incidence rate per 100,000 population.

## Chlamydia

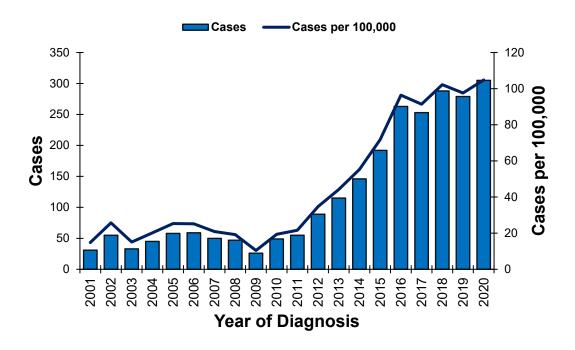
Figure 1. Chlamydia Cases, Thurston County, 2001-2020



<sup>+</sup> Rates are suppressed for counts under 17 with a corresponding RSE >25% due to statistical instability.

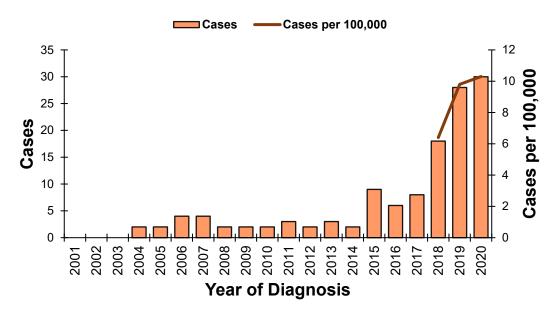
## Gonorrhea

Figure 2. Gonorrhea Cases, Thurston County, 2001-2020



# **Primary and Secondary Syphilis**

Figure 3. Primary and Secondary Syphilis Cases, Thurston County, 2001-2020



Note: Incidence rates calculated based off counts less than seventeen (17) are suppressed in this figure due to statistical instability.

## **Data Tables**

Table 2. Chlamydia Cases and Incidence Rates by Gender and Age Group, 2011-2020

	Age	Age Total		Ma	ales	Fema	ales
	Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	+	+	0	0.0	+	+
	15-24	640	1903.5	128	753.0	512	3079.8
	25-34	246	716.2	63	371.5	183	1052.2
2011	35-44	56	169.9	+	+	+	+
2	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	958	377.0	212	171.0	746	573.2
	0-14	+	+	0	0.0	+	+
	15-24	582	1721.1	96	560.5	486	2912.0
	25-34	246	711.2	66	386.4	180	1028.2
2012	35-44	59	177.6	+	+	+	+
8	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	907	353.2	196	156.5	711	540.6
	0-14	+	+	0	0.0	+	+
	15-24	621	1819.4	114	658.9	507	3012.5
	25-34	226	652.9	66	386.1	160	913.2
2013	35-44	52	154.7	+	+	+	+
~	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	922	354.5	208	163.9	714	536.0
	0-14	+	+	+	+	+	+
	15-24	570	1656.6	104	595.2	466	2752.0
	25-34	240	696.4	74	435.4	166	950.3
2014	35-44	56	165.0	17	101.7	39	226.5
7	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	893	338.3	210	163.0	683	505.2
	0-14	+	+	+	+	0	0.0
	15-24	670	1931.1	133	754.6	537	3146.0
	25-34	235	688.5	76	451.4	159	919.3
2015	35-44	63	184.7	+	+	+	+
N	45+	+	+	+	+	+	+
	Missing	2	+	1	+	1	+
	All Ages	991	370.6	245	187.7	746	544.9

<sup>+</sup>Data has been suppressed where counts are less than ten (10) or could be used to deduce other counts that are less than ten (10). Additionally, incidence rates calculated based off counts less than seventeen (17) are suppressed due to statistical instability.

# Continued Table 2. Chlamydia

	Age	Age Total		Ma	ales	Fem	ales
	Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	+	+	0	0.0	+	+
	15-24	743	2114.0	166	927.4	577	3345.5
12	25-34	307	931.6	104	642.9	203	1210.2
2016	35-44	89	257.6	45	265.1	44	250.3
8	45+	+	+	13	+	+	+
	Missing	1	+	0	0.0	1	+
	All Ages	1167	428.0	328	246.5	839	600.9
	0-14	+	+	0	0.0	+	+
	15-24	699	1978.6	164	909.8	535	3092.1
	25-34	323	983.2	119	738.7	204	1218.4
2017	35-44	96	275.4	45	263.0	51	287.4
8	45+	+	+	10	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	1141	412.1	338	250.0	803	566.6
	0-14	+	+	0	0.0	+	+
	15-24	748	2101.7	177	975.1	571	3274.4
	25-34	312	934.8	110	672.3	202	1187.3
2018	35-44	90	254.2	44	253.4	46	255.0
8	45+	+	+	23	19.5	+	+
	Missing	2	+	1	+	1	+
	All Ages	1203	427.1	355	258.1	848	588.2
	0-14	+	+	+	+	+	+
	15-24	742	2084.8	190	1046.7	552	3165.4
	25-34	327	979.7	124	757.8	203	1193.1
2019	35-44	99	279.6	39	224.6	60	332.6
8	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	1202	426.7	367	266.8	835	579.2
	0-14	+	+	0	0.0	+	+
	15-24	684	1876.4	181	970.1	503	2826.5
	25-34	376	1091.7	148	877.7	228	1297.1
2020	35-44	107	294.1	44	247.2	63	339.0
2	45+	+	+	21	34.1	+	+
	Missing	1	+	0	0.0	1	+
	All Ages	1227	421.6	394	277.4	828	555.7

<sup>+</sup>Data has been suppressed where counts are less than ten (10) or could be used to deduce other counts that are less than ten (10). Additionally, incidence rates calculated based off counts less than seventeen (17) are suppressed due to statistical instability.

Note: Due to small number standards, gender data is only stratified by people who identify as male or female. People who identify as transgender, nonbinary, or other gender identity are included within the annual total case count. For this reason, total annual case counts may appear higher than the sum of individual cells

Table 3. Gonorrhea Cases and Incidence Rates by Gender and Age Group, 2011-2020

	Age	_ Total		Ma	les	Females		
	Group	Cases	Rate	Cases	Rate	Cases	Rate	
	0-14	0	0.0	0	0.0	0	0.0	
	15-24	31	92.2	12	+	19	114.3	
	25-34	15	+	+	+	+	+	
2011	35-44	+	+	+	+	+	+	
7	45+	+	+	+	+	+	+	
	Missing	0	0.0	0	0.0	0	0.0	
	All Ages	55	21.6	28	22.6	27	20.7	
	0-14	+	+	0	0.0	+	+	
	15-24	45	133.1	16	+	29	173.8	
01	25-34	28	81.0	14	+	14	+	
2012	35-44	10	+	+	+	+	+	
N	45+	+	+	+	+	+	+	
	Missing	0	0.0	0	0.0	0	0.0	
	All Ages	89	34.7	41	32.7	48	36.5	
	0-14	0	0.0	0	0.0	0	0.0	
	15-24	61	178.7	24	138.7	37	219.8	
	25-34	39	112.7	22	128.7	17	97.0	
2013	35-44	+	+	+	+	+	+	
· ·	45+	+	+	+	+	+	+	
	Missing	0	0.0	0	0.0	0	0.0	
	All Ages	115	44.2	58	45.7	57	42.8	
	0-14	0	0.0	0	0.0	0	0.0	
	15-24	60	174.4	33	188.9	27	159.4	
_	25-34	56	162.5	29	170.6	27	154.6	
2014	35-44	+	+	+	+	+	+	
(4	45+	+	+	+	+	+	+	
	Missing	0	0.0	0	0.0	0	0.0	
	All Ages	146	55.3	80	62.1	66	48.8	
	0-14	0	0.0	0	0.0	0	0.0	
	15-24	73	210.4	28	158.9	45	263.6	
10	25-34	74	216.8	39	231.7	35	202.4	
2015	35-44	31	90.9	+	+	+	+	
(A	45+	13	+	+	+	+	+	
	Missing	1	+	0	0.0	1	+	
	All Ages	192	71.8	97	74.3	95	69.4	

<sup>+</sup>Data has been suppressed where counts are less than ten (10) or could be used to deduce other counts that are less than ten (10). Additionally, incidence rates calculated based off counts less than seventeen (17) are suppressed due to statistical instability.

# **Continued Table 3. Gonorrhea**

	Age	Total		Ма	les	Females	
	Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	+	+	+	+	+	+
	15-24	125	355.7	56	312.9	69	400.1
	25-34	88	267.1	52	321.4	36	214.6
2016	35-44	35	101.3	25	147.3	10	+
~	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	263	96.4	145	109.0	118	84.5
	0-14	+	+	0	0.0	+	+
	15-24	75	212.3	39	216.4	36	208.1
	25-34	106	322.7	70	434.5	36	215.0
2017	35-44	46	132.0	25	146.1	21	118.3
N	45+	+	+	18	31.1	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	253	91.4	152	112.4	101	71.3
	0-14	0	0.0	0	0.0	0	0.0
	15-24	88	247.3	33	181.8	55	315.4
•	25-34	128	383.5	71	433.9	57	335.0
2018	35-44	44	124.3	+	+	+	+
8	45+	28	22.2	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	288	102.2	157	114.1	131	90.9
	0-14	0	0.0	0	0.0	0	0.0
	15-24	80	222.5	27	147.0	53	301.4
	25-34	115	339.6	68	409.9	47	272.1
2019	35-44	57	159.0	+	+	+	+
8	45+	27	21.0	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	279	97.6	147	105.3	132	90.3
	0-14	+	+	0	0.0	+	+
	15-24	98	268.8	38	203.7	59	331.5
	25-34	106	307.8	56	332.1	50	284.5
2020	35-44	66	181.4	38	213.5	28	150.7
7	45+	+	+	19	30.9	+	+
	Missing	1	+	0	0.0	1	+
	All Ages	305	104.8	151	106.3	153	102.7

<sup>+</sup>Data has been suppressed where counts are less than ten (10) or could be used to deduce other counts that are less than ten (10). Additionally, incidence rates calculated based off counts less than seventeen (17) are suppressed due to statistical instability.

Table 4. P&S Syphilis Cases and Incidence Rates by Gender and Age Group, 2011-2020

		Tot	tal	Ма	les	Fem	ales
	Age Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
	25-34	*	*	*	*	*	*
2011	35-44	*	*	*	*	*	*
7	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	3	*	*	*	*	*
	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
	25-34	*	*	*	*	*	*
2012	35-44	*	*	*	*	*	*
8	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	2	*	*	*	*	*
	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
-	25-34	*	*	*	*	*	*
2013	35-44	*	*	*	*	*	*
8	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	3	*	*	*	*	*
	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
_	25-34	*	*	*	*	*	*
2014	35-44	*	*	*	*	*	*
N	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	2	*	*	*	*	*
	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
	25-34	*	*	*	*	*	*
2015	35-44	*	*	*	*	*	*
~	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	9	*	*	*	*	*

<sup>\*</sup>For years with total case counts less than ten (10), stratified counts and rates have been fully suppressed to protect patient confidentiality.

<sup>+</sup>Data has been suppressed where counts are less than ten (10) or could be used to deduce other counts that are less than ten (10). Additionally, incidence rates calculated based off counts less than seventeen (17) are suppressed due to statistical instability.

# Continued Table 4. P&S Syphilis

		To	tal	Mal	les	Fem	ales
	Age Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
	25-34	*	*	*	*	*	*
2016	35-44	*	*	*	*	*	*
2	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	6	*	*	*	*	*
	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
	25-34	*	*	*	*	*	*
2017	35-44	*	*	*	*	*	*
7	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	8	*	*	*	*	*
	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	+	+
	25-34	+	+	+	+	+	+
2018	35-44	+	+	+	+	0	0.0
7	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	18	6.4	+	+	+	+
	0-14	+	+	+	+	0	0.0
	15-24	+	+	+	+	0	0.0
	25-34	+	+	+	+	+	+
2019	35-44	+	+	+	+	+	+
N	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	28	9.8	+	+	+	+
	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	+	+
	25-34	+	+	+	+	+	+
2020	35-44	+	+	+	+	+	+
7	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	30	10.3	+	+	+	+

<sup>\*</sup>For years with total case counts less than ten (10), stratified counts and rates have been fully suppressed to protect patient confidentiality.

<sup>+</sup>Data has been suppressed where counts are less than ten (10) or could be used to deduce other counts that are less than ten (10). Additionally, incidence rates calculated based off counts less than seventeen (17) are suppressed due to statistical instability.