# Sexually Transmitted Infection Profile

Lewis County 2020



Disease Control and Health Statistics Infectious Disease Assessment Unit



DOH 150-156

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Washington State Department of Health Disease Control and Health Statistics Infectious Disease Assessment Unit Olympia, Washington (360) 236-3445

DOH Pub# 150-156, December 2021

### Contents

1
1
4
4
5

#### 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 Lewis 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 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 <i>H. ducreyi</i>
	from a clinical specimen.
Chlamydia (CT)	- A sexually transmitted infection caused by the bacterium <i>Chlamydia trachomatis</i> 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 <i>C. trachomatis</i> 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*<br/>*pallidum* that may include many kinds of symptoms or none at all,<br/>depending upon the stage of disease. Cases are defined and assigned a stage<br/>by a combination of positive blood tests, symptoms, and history of previous<br/>treatment. The U.S. Centers for Disease Control and Prevention (CDC)<br/>provides guidelines with additional details of surveillance definitions and<br/>staging criteria. The stages of primary and secondary (P&S) syphilis are<br/>grouped together for analysis in this report; these stages are the most<br/>infectious and the best indicators of recent infection.<br/>*Primary* identified by the presence of one or many painless sores.<br/>*Secondary* identified by the presence of a rash on one or more areas of the<br/>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/

<u>Incidence Rates</u>: 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.

<u>Limitations</u>: 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 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), <u>http://www.ofm.wa.gov/pop/</u>. 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.

### Lewis County STI Disease Trends

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

Disease	County Cases	County Rate§	WA State Rate
Chlamydia	331	412.5	410.4
Gonorrhea	50	62.3	151.2
P&S Syphilis	6	+	10.9
Genital Herpes	7	+	18.0
Chancroid/GI/LGV	0		
Total	394		

§ Crude incidence rate per 100,000 population.

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

### Chlamydia





## Gonorrhea



Figure 2. Gonorrhea Cases, Lewis 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

	Age	Total		Males		Females	
	Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	+	+	0	0.0	+	+
	15-24	140	1451.9	26	504.5	114	2539.5
	25-34	59	687.2	13	+	46	1076.8
011	35-44	21	246.0	+	+	+	+
N	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	227	298.7	49	128.8	178	468.9
	0-14	+	+	0	0.0	+	+
	15-24	165	1714.9	29	565.9	136	3024.3
<b>.</b>	25-34	55	631.7	+	+	+	+
012	35-44	+	+	+	+	+	+
N	45+	0	0.0	0	0.0	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	237	310.6	43	112.5	194	509.3
	0-14	+	+	+	+	+	+
	15-24	187	1975.9	28	558.5	159	3572.7
~	25-34	63	725.3	16	+	47	1099.4
5013	35-44	+	+	+	+	+	+
CN .	45+	+	+	0	0.0	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	262	343.8	48	125.9	214	562.2
	0-14	0	0.0	0	0.0	0	0.0
	15-24	168	1782.4	40	805.2	128	2871.4
<b></b>	25-34	58	666.7	16	+	42	987.8
5012	35-44	+	+	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	252	330.3	68	177.9	184	483.1
	0-14	+	+	0	0.0	+	+
	15-24	191	2037.2	34	691.7	157	3520.0
10	25-34	58	668.3	18	403.3	40	948.9
501	35-44	13	+	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	266	347.0	58	150.9	208	544.2

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

+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
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	Age	Т	otal	Ма	les	Fem	ales
	Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	+	+	0	0.0	+	+
	15-24	158	1696.8	32	660.8	126	2819.3
	25-34	63	744.5	17	388.1	46	1126.9
016	35-44	25	296.7	+	+	+	+
N	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	252	327.7	58	150.1	194	507.1
	0-14	0	0.0	0	0.0	0	0.0
	15-24	187	2035.5	42	879.4	145	3287.2
	25-34	76	900.4	23	526.6	53	1301.3
017	35-44	+	+	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	289	373.2	77	197.7	212	550.8
	0-14	+	+	0	0.0	+	+
	15-24	172	1900.5	39	828.2	133	3063.7
~	25-34	79	928.5	18	409.8	61	1482.1
2018	35-44	17	196.5	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	1	+	0	0.0	1	+
	All Ages	277	353.4	66	167.1	211	542.8
	0-14	+	+	0	0.0	+	+
	15-24	211	2354.3	40	854.4	171	3994.7
	25-34	68	796.6	19	433.1	49	1180.7
2019	35-44	18	202.8	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	305	383.7	74	184.5	231	586.9
	0-14	+	+	0	0.0	+	+
	15-24	177	1976.5	38	810.9	139	3255.8
_	25-34	63	738.8	+	+	+	+
502(	35-44	13	+	+	+	+	+
	45+	+	+	0	0.0	+	+
	Missing	1	+	0	0.0	1	+
	All Ages	331	412.5	59	145.4	201	506.5

+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.

	Age	Age Total		Males		Females	
	Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
	25-34	*	*	*	*	*	*
011	35-44	*	*	*	*	*	*
3	45+	*	*	*	*	*	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	6	*	*	*	*	*
	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	+	+
01	25-34	+	+	+	+	+	+
012	35-44	0	0.0	+	+	+	+
	45+	0	0.0	0	0.0	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	12	+	+	+	+	+
	0-14	0	0.0	0	0.0	0	0.0
	15-24	13	+	+	+	+	+
~	25-34	+	+	+	+	+	+
5013	35-44	+	+	0	0.0	+	+
	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	21	27.6	+	+	+	+
	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	+	+
-	25-34	+	+	+	+	+	+
2012	35-44	+	+	+	+	0	0.0
	45+	0	0.0	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	16	+	+	+	+	+
	0-14	0	0.0	0	0.0	0	0.0
	15-24	10	+	+	+	+	+
10	25-34	15	+	+	+	+	+
2015	35-44	+	+	+	+	+	+
	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	31	40.4	16	+	15	+

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

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

+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
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	Age	Tot	al	Ма	les	Fem	ales
	Group	Cases	Rate	Cases	Rate	Cases	Rate
	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	+	+
6	25-34	32	378.2	17	388.1	15	+
5016	35-44	+	+	+	+	+	+
	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	52	67.6	27	69.9	25	65.3
	0-14	0	0.0	0	0.0	0	0.0
	15-24	12	+	+	+	+	+
~	25-34	16	+	+	+	+	+
2017	35-44	+	+	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	42	54.2	17	43.6	25	64.9
	0-14	0	0.0	0	0.0	0	0.0
	15-24	19	209.9	+	+	+	+
~	25-34	25	293.8	11	+	14	+
2018	35-44	+	+	+	+	+	+
	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	54	68.9	22	55.7	32	82.3
	0-14	0	0.0	0	0.0	0	0.0
	15-24	14	+	+	+	+	+
•	25-34	20	234.3	+	+	+	+
2019	35-44	+	+	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	50	62.9	26	64.8	24	61.0
	0-14	+	+	0	0.0	+	+
	15-24	15	+	+	+	+	+
~	25-34	20	234.5	+	+	+	+
202(	35-44	11	+	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	50	62.3	14	+	26	65.5

+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.