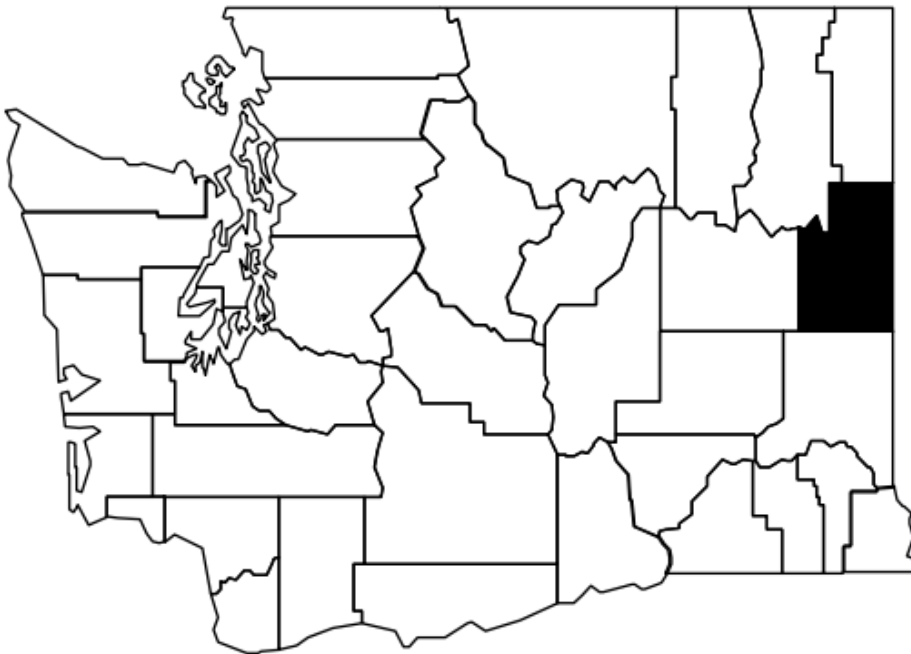


# Sexually Transmitted Infection Profile

Spokane County 2020



Disease Control and Health Statistics  
Infectious Disease Assessment Unit



DOH 150-156

# Sexually Transmitted Infection Profile

Spokane County 2020



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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 Spokane 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

Cases: 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 non-secondary, unknown duration or late, congenital, and syphilitic stillbirths. See CDC guidelines for specific criteria: [www.cdc.gov/std/](http://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

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.

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

Tabular Data: 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.

## Spokane County STI Disease Trends

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

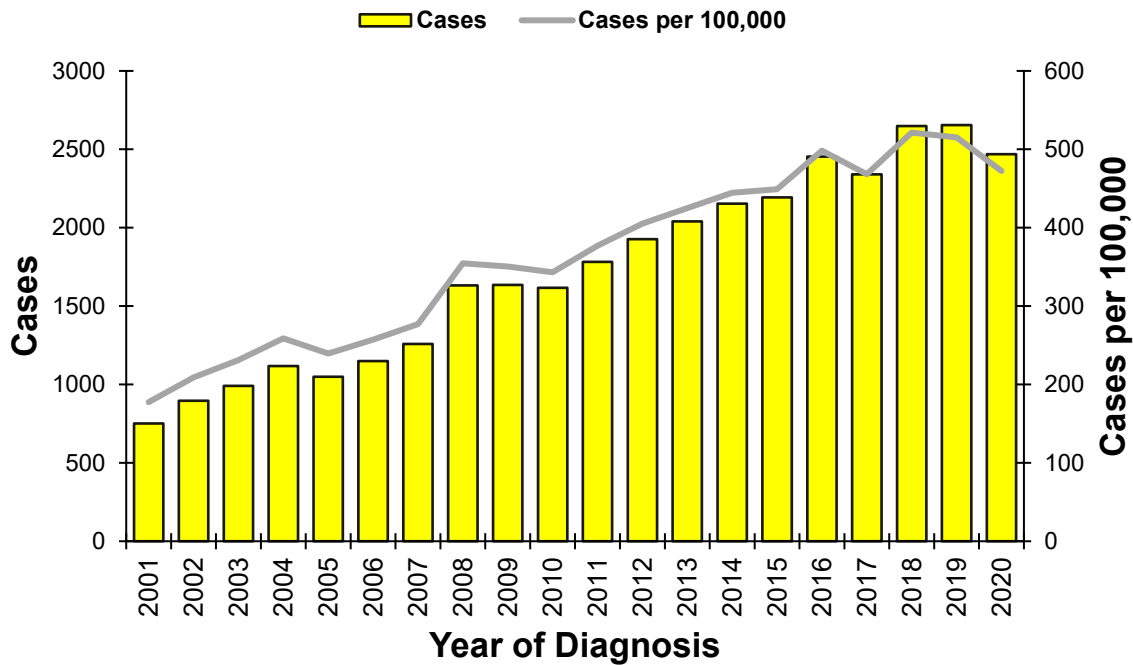
Disease	County Cases	County Rate§	WA State Rate
Chlamydia	2,469	472.4	410.4
Gonorrhea	900	172.2	151.2
P&S Syphilis	80	15.3	10.9
Genital Herpes	64	12.2	18.0
Chancroid/GI/LGV	0		
<b>Total</b>	<b>3,513</b>		

§ Crude incidence rate per 100,000 population.

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

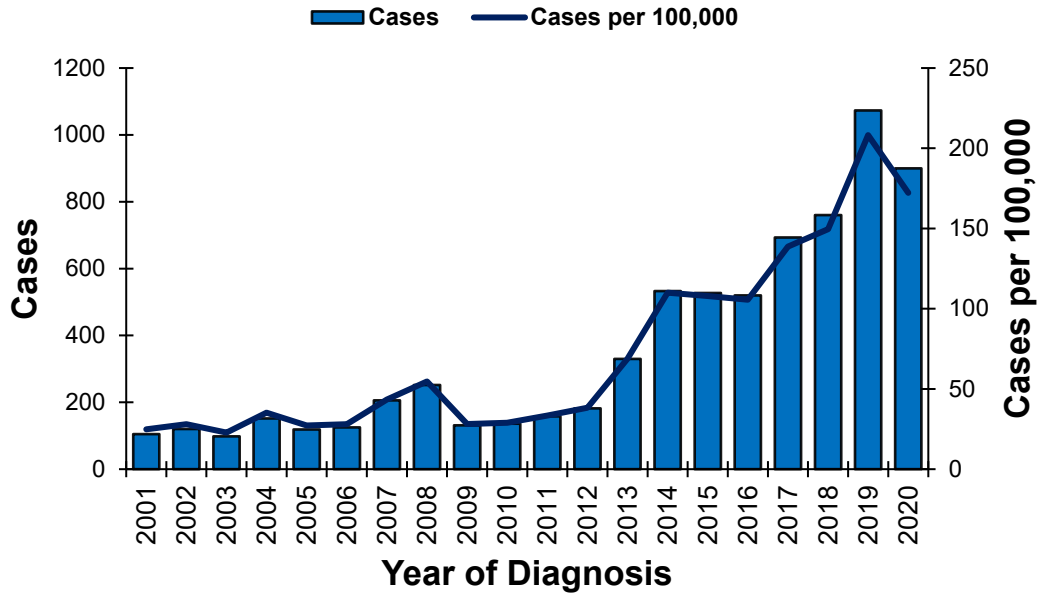
## Chlamydia

**Figure 1. Chlamydia Cases, Spokane County, 2001-2020**



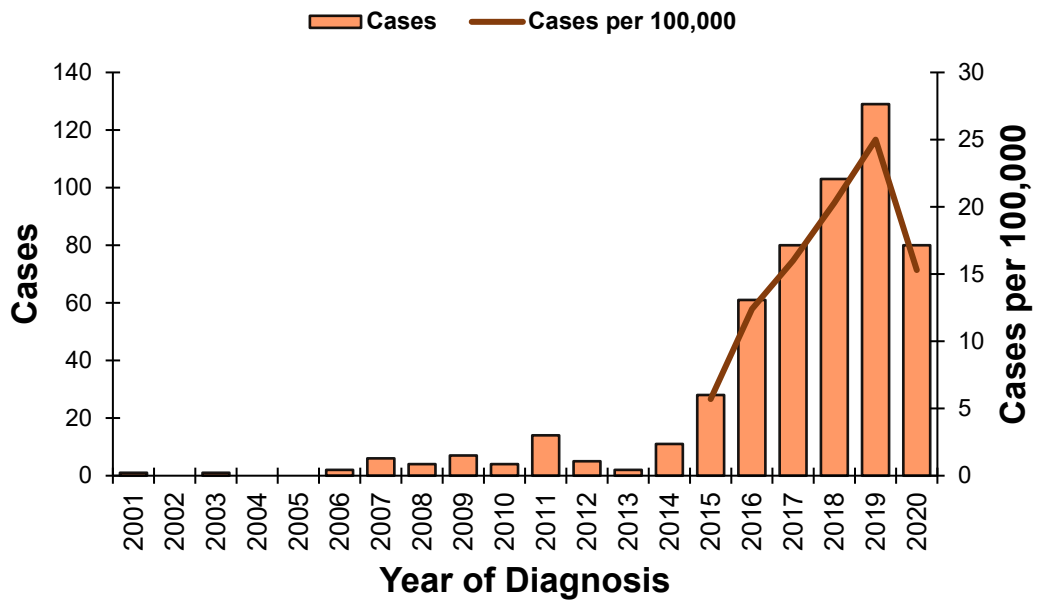
## Gonorrhea

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



## Primary and Secondary Syphilis

Figure 3. Primary and Secondary Syphilis Cases, Spokane 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 Group	Total		Males		Females	
		Cases	Rate	Cases	Rate	Cases	Rate
2011	0-14	24	26.6	+	+	+	+
	15-24	1309	1805.8	272	750.9	1037	2859.6
	25-34	343	547.5	120	373.2	223	731.2
	35-44	84	147.0	39	134.6	45	159.6
	45+	22	11.6	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	<b>1782</b>	<b>377.0</b>	<b>449</b>	<b>192.1</b>	<b>1333</b>	<b>557.9</b>
2012	0-14	26	28.9	+	+	+	+
	15-24	1332	1836.1	262	722.7	1070	2948.5
	25-34	460	721.6	158	483.3	302	972.4
	35-44	84	147.5	40	138.2	44	157.0
	45+	24	12.5	+	+	+	+
	Missing	1	+	0	0.0	1	+
	<b>All Ages</b>	<b>1927</b>	<b>405.2</b>	<b>478</b>	<b>203.1</b>	<b>1449</b>	<b>603.1</b>
2013	0-14	20	22.1	0	0.0	20	45.5
	15-24	1363	1861.0	276	754.6	1087	2964.6
	25-34	527	823.4	184	560.8	343	1099.6
	35-44	101	177.0	48	165.3	53	189.2
	45+	29	14.9	19	20.5	10	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	<b>2040</b>	<b>425.0</b>	<b>527</b>	<b>221.8</b>	<b>1513</b>	<b>624.3</b>
2014	0-14	13	+	0	0.0	13	+
	15-24	1379	1863.6	299	809.0	1080	2916.1
	25-34	629	989.5	209	641.9	420	1354.7
	35-44	111	194.7	+	+	+	+
	45+	21	10.6	+	+	+	+
	Missing	1	+	1	+	0	0.0
	<b>All Ages</b>	<b>2154</b>	<b>444.6</b>	<b>575</b>	<b>239.5</b>	<b>1579</b>	<b>646.0</b>
2015	0-14	15	+	0	0.0	15	+
	15-24	1351	1809.3	279	748.6	1072	2866.2
	25-34	657	1044.3	252	782.4	405	1319.1
	35-44	133	234.0	56	192.7	77	277.3
	45+	37	18.3	27	27.9	10	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	<b>2193</b>	<b>449.1</b>	<b>614</b>	<b>253.5</b>	<b>1579</b>	<b>641.6</b>

+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 Group	Total		Males		Females	
		Cases	Rate	Cases	Rate	Cases	Rate
2016	0-14	23	24.8	0	0.0	23	50.8
	15-24	1585	2089.8	396	1045.4	1189	3131.8
	25-34	636	1054.5	241	783.5	395	1336.5
	35-44	154	273.1	73	252.6	81	294.6
	45+	55	26.6	36	36.2	19	17.6
	Missing	1	+	0	0.0	1	+
	<b>All Ages</b>	2454	498.2	746	305.1	1708	688.7
2017	0-14	10	+	0	0.0	10	+
	15-24	1440	1869.6	374	972.7	1066	2763.6
	25-34	637	1059.9	236	770.3	401	1360.9
	35-44	194	342.0	95	326.8	99	358.1
	45+	58	27.4	33	32.4	25	22.8
	Missing	1	+	1	+	0	0.0
	<b>All Ages</b>	2340	468.2	739	297.7	1601	636.4
2018	0-14	13	+	+	+	+	+
	15-24	1621	2066.1	410	1049.6	1211	3074.0
	25-34	729	1195.1	310	996.0	419	1402.6
	35-44	216	376.9	112	381.0	104	372.5
	45+	69	32.1	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	2648	521.3	877	347.4	1771	693.1
2019	0-14	19	19.6	+	+	+	+
	15-24	1588	1989.6	415	1044.6	1173	2926.1
	25-34	741	1191.3	305	961.7	436	1430.3
	35-44	216	373.8	111	374.2	105	373.3
	45+	87	39.8	+	+	+	+
	Missing	1	+	1	+	0	0.0
	<b>All Ages</b>	2655	515.3	895	349.5	1757	678.0
2020	0-14	11	+	+	+	+	+
	15-24	1478	1822.6	399	988.2	1079	2649.9
	25-34	727	1147.0	291	901.5	436	1401.8
	35-44	190	326.7	98	328.3	92	325.0
	45+	61	27.5	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	2469	472.4	831	319.8	1363	518.7

+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 Group	Total		Males		Females	
		Cases	Rate	Cases	Rate	Cases	Rate
2011	0-14	+	+	0	0.0	+	+
	15-24	98	135.2	33	91.1	65	179.2
	25-34	46	73.4	23	71.5	23	75.4
	35-44	10	+	+	+	+	+
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	158	33.4	63	27.0	95	39.8
2012	0-14	+	+	0	0.0	+	+
	15-24	110	151.6	42	115.9	68	187.4
	25-34	53	83.1	25	76.5	28	90.2
	35-44	14	+	+	+	+	+
	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	182	38.3	75	31.9	107	44.5
2013	0-14	+	+	0	0.0	+	+
	15-24	124	169.3	37	101.2	87	237.3
	25-34	143	223.4	70	213.3	73	234.0
	35-44	43	75.4	25	86.1	18	64.3
	45+	+	+	17	18.4	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	330	68.8	149	62.7	181	74.7
2014	0-14	+	+	0	0.0	+	+
	15-24	202	273.0	96	259.7	106	286.2
	25-34	227	357.1	126	387.0	101	325.8
	35-44	72	126.3	48	165.1	24	86.0
	45+	+	+	24	25.4	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	533	110.0	294	122.5	239	97.8
2015	0-14	0	0.0	0	0.0	0	0.0
	15-24	172	230.3	82	220.0	90	240.6
	25-34	240	381.5	132	409.8	108	351.8
	35-44	82	144.3	+	+	+	+
	45+	33	16.3	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	527	107.9	290	119.7	237	96.3

+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 Group	Total		Males		Females	
		Cases	Rate	Cases	Rate	Cases	Rate
2016	0-14	+	+	0	0.0	+	+
	15-24	173	228.1	88	232.3	85	223.9
	25-34	220	364.8	121	393.4	99	335.0
	35-44	89	157.8	55	190.3	34	123.7
	45+	+	+	27	27.2	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	520	105.6	291	119.0	229	92.3
2017	0-14	+	+	0	0.0	+	+
	15-24	216	280.4	101	262.7	115	298.1
	25-34	289	480.8	166	541.8	123	417.4
	35-44	137	241.5	88	302.7	49	177.2
	45+	+	+	36	35.4	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	693	138.7	391	157.5	302	120.1
2018	0-14	+	+	+	+	0	0.0
	15-24	258	328.8	126	322.6	132	335.1
	25-34	308	504.9	168	539.8	140	468.6
	35-44	140	244.3	94	319.7	46	164.8
	45+	+	+	+	+	15	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	760	149.6	427	169.2	333	130.3
2019	0-14	+	+	+	+	+	+
	15-24	302	378.4	135	339.8	167	416.6
	25-34	418	672.0	231	728.4	187	613.4
	35-44	241	417.0	142	478.7	99	352.0
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	1073	208.2	586	228.8	487	187.9
2020	0-14	+	+	0	0.0	+	+
	15-24	299	368.7	133	329.4	165	405.2
	25-34	365	575.9	219	678.4	146	469.4
	35-44	174	299.2	118	395.3	56	197.8
	45+	+	+	44	41.0	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	900	172.2	514	197.8	385	146.5

+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.

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

Age Group	Total		Males		Females		
	Cases	Rate	Cases	Rate	Cases	Rate	
2011	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	+	+
	25-34	+	+	+	+	0	0.0
	35-44	+	+	+	+	+	+
	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	14	+	+	+	+	+
2012	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
	25-34	*	*	*	*	*	*
	35-44	*	*	*	*	*	*
	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	5	*	*	*	*	*
2013	0-14	*	*	*	*	*	*
	15-24	*	*	*	*	*	*
	25-34	*	*	*	*	*	*
	35-44	*	*	*	*	*	*
	45+	*	*	*	*	*	*
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	2	*	*	*	*	*
2014	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	0	0.0
	25-34	+	+	+	+	0	0.0
	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
	<b>All Ages</b>	11	+	11	+	0	0.0
2015	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	+	+
	25-34	14	+	+	+	+	+
	35-44	10	+	10	+	0	0.0
	45+	+	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	28	5.7	+	+	+	+

\*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 4. P&S Syphilis

Age Group	Total		Males		Females		
	Cases	Rate	Cases	Rate	Cases	Rate	
2016	0-14	0	0.0	0	0.0	0	0.0
	15-24	+	+	+	+	+	+
	25-34	22	36.5	+	+	+	+
	35-44	18	31.9	+	+	+	+
	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	61	12.4	46	18.8	15	+
2017	0-14	0	0.0	0	0.0	0	0.0
	15-24	15	+	+	+	+	+
	25-34	34	56.6	21	68.5	13	+
	35-44	19	33.5	+	+	+	+
	45+	12	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	80	16.0	45	18.1	35	13.9
2018	0-14	0	0.0	0	0.0	0	0.0
	15-24	18	22.9	+	+	+	+
	25-34	42	68.9	25	80.3	17	56.9
	35-44	29	50.6	+	+	+	+
	45+	14	+	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	103	20.3	65	25.8	38	14.9
2019	0-14	0	0.0	0	0.0	0	0.0
	15-24	25	31.3	14	+	11	+
	25-34	44	70.7	26	82.0	18	59.0
	35-44	31	53.6	+	+	+	+
	45+	29	13.3	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	129	25.0	88	34.4	41	15.8
2020	0-14	0	0.0	0	0.0	0	0.0
	15-24	19	23.4	+	+	+	+
	25-34	25	39.4	15	+	10	+
	35-44	19	32.7	+	+	+	+
	45+	17	7.7	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	<b>All Ages</b>	80	15.3	51	19.6	29	11.0

+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.