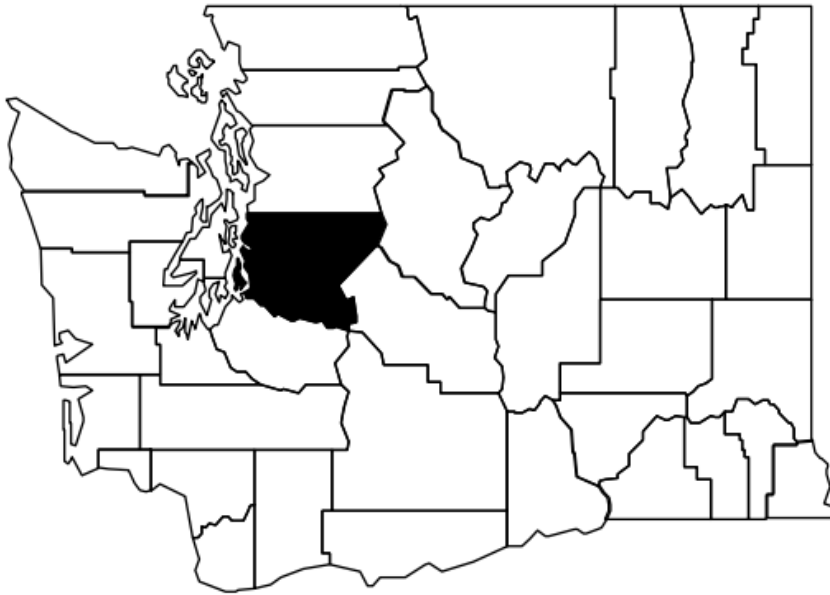


Sexually Transmitted Infection Profile

Washington State 2020



Disease Control and Health Statistics
Infectious Disease Assessment Unit



DOH 150-156

Sexually Transmitted Infection Profile

Washington State 2020



To request this document in another format, call 1-800-525-0127. Deaf or hard-of-hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.

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

Introduction.....	1
Data Sources, Definitions, and Limitations	1
<u>County STI Trends</u>	
Table 1. Washington State Reportable Sexually Transmitted Infections, 2020.	4
<u>Chlamydia</u>	
Figure 1. Chlamydia Cases and Incidence Rates per 100,000 population, 2001-2020	4
<u>Gonorrhea</u>	
Figure 2. Gonorrhea Cases and Incidence Rates per 100,000 population, 2001-2020	5
<u>Primary & Secondary Syphilis</u>	
Figure 3. Primary & Secondary Syphilis Cases and Incidence Rates, 2001-2020.	5
<u>Data Tables</u>	
Table 2. Chlamydia Cases and Incidence Rates by Gender and Age Group, 2011-2020.....	6
Table 3. Gonorrhea Cases and Incidence Rates by Gender and Age Group, 2011-2020	8
Table 4. Primary & Secondary Syphilis Cases and Incidence Rates by Gender and Age Group, 2011-2020.....	10

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 state-wide. 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/

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.

Washington State STI Disease Trends

Table 1. Washington State Reportable Sexually Transmitted Infections, 2020

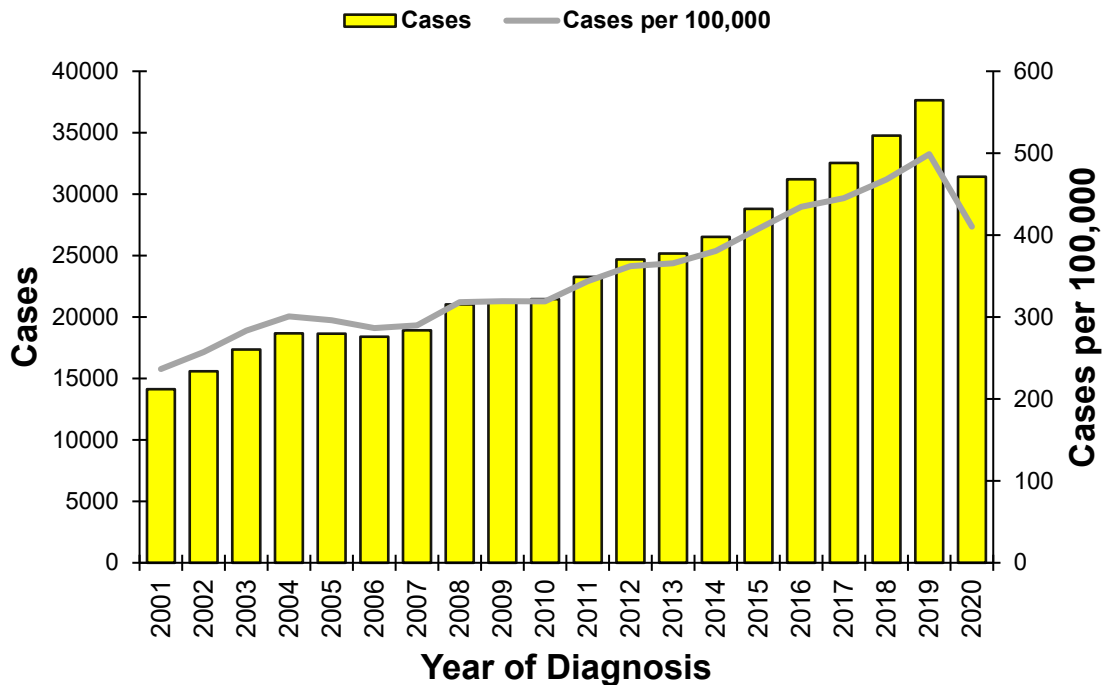
Disease	WA State Cases	WA State Rate§
Chlamydia	31,423	410.4
Gonorrhea	11,580	151.2
P&S Syphilis	837	10.9
Genital Herpes	1,375	18.0
Chancroid/GI/LGV	0	0.0
Total	45,215	

§ Crude incidence rate per 100,000 population.

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

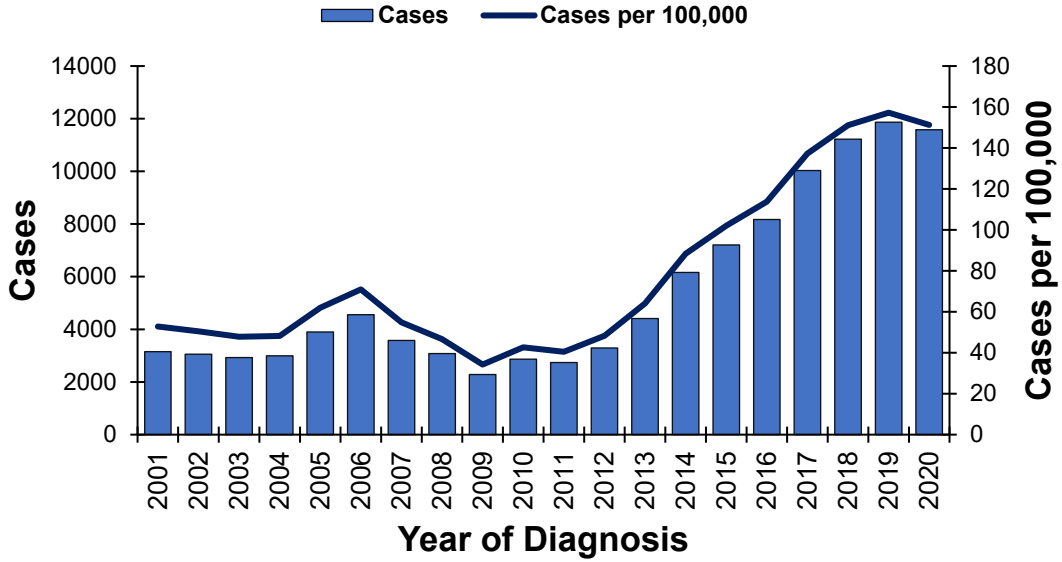
Chlamydia

Figure 1. Chlamydia Cases, Washington State, 2001-2020



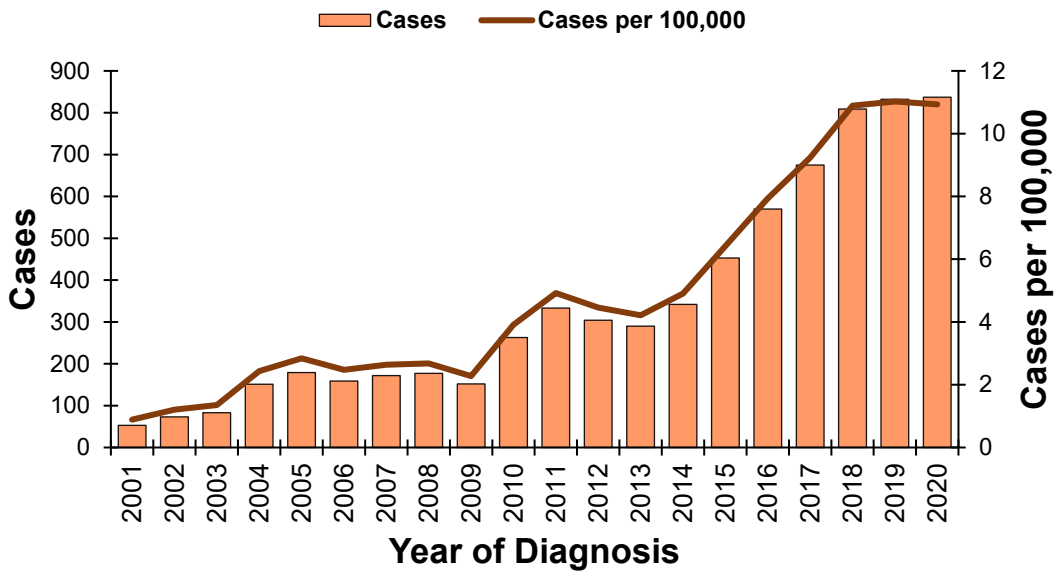
Gonorrhea

Figure 2. Gonorrhea Cases, Washington State, 2001-2020



Primary and Secondary Syphilis

Figure 3. Primary and Secondary Syphilis Cases, Washington State, 2001-2020



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	203	15.5	23	3.4	180	28.2
	15-24	15599	1699.2	3500	740.4	12099	2717.1
	25-34	5589	593.7	2085	435.2	3504	758.1
	35-44	1453	160.5	736	160.8	717	160.3
	45+	413	15.3	284	22.0	129	9.2
	Missing	10	+	5	+	5	+
	All Ages	23267	343.8	6633	196.7	16634	489.9
2012	0-14	199	15.2	27	4.0	172	26.9
	15-24	16065	1752.4	3710	786.6	12355	2775.8
	25-34	6241	659.7	2416	501.1	3825	824.7
	35-44	1621	179.1	848	185.2	773	172.8
	45+	540	19.7	366	27.8	174	12.2
	Missing	22	+	5	+	17	+
	All Ages	24688	362.1	7372	217.0	17316	506.3
2013	0-14	182	13.9	12	+	170	26.5
	15-24	15819	1721.1	3609	763.7	12210	2734.1
	25-34	6717	704.8	2549	523.9	4168	893.5
	35-44	1734	191.1	880	191.8	854	190.3
	45+	684	24.5	478	35.6	206	14.2
	Missing	28	+	12	+	16	+
	All Ages	25164	365.6	7540	219.8	17624	510.6
2014	0-14	171	12.9	22	3.3	149	23.1
	15-24	16034	1734.0	3902	821.5	12132	2697.6
	25-34	7594	785.7	2919	590.8	4675	989.4
	35-44	2014	221.5	1013	220.4	1001	222.6
	45+	677	23.8	492	35.9	185	12.5
	Missing	35	+	12	+	23	+
	All Ages	26525	380.7	8360	240.6	18165	520.0
2015	0-14	158	11.8	18	2.6	140	21.5
	15-24	16930	1821.6	4291	900.3	12639	2791.4
	25-34	8379	857.1	3516	702.8	4863	1018.7
	35-44	2418	264.6	1244	269.2	1174	259.9
	45+	895	30.8	635	45.3	260	17.3
	Missing	16	+	7	+	9	+
	All Ages	28796	407.8	9711	275.7	19085	539.2

+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	176	13.0	11	+	165	25.0
	15-24	18178	1936.2	4830	1003.2	13348	2918.3
	25-34	9083	910.3	3898	763.2	5184	1064.4
	35-44	2735	296.7	1460	313.3	1274	279.5
	45+	1028	34.6	745	52.0	283	18.4
	Missing	16	+	4	+	12	+
	All Ages	31216	434.5	10948	305.5	20266	562.9
2017	0-14	187	13.6	22	3.1	165	24.5
	15-24	18882	1998.0	5245	1083.4	13635	2958.4
	25-34	9440	925.5	4121	789.0	5318	1068.6
	35-44	2888	307.4	1579	332.3	1309	281.9
	45+	1141	37.7	810	55.4	331	21.1
	Missing	6	+	2	+	4	+
	All Ages	32544	445.2	11779	322.9	20762	566.8
2018	0-14	170	12.2	23	3.2	147	21.6
	15-24	19601	2065.8	5451	1123.7	14146	3050.3
	25-34	10301	989.7	4803	900.7	5494	1082.5
	35-44	3252	337.9	1848	379.1	1402	295.2
	45+	1429	46.4	1030	69.2	398	25.0
	Missing	11	+	5	+	6	+
	All Ages	34764	468.0	13160	355.0	21593	580.3
2019	0-14	191	13.6	21	2.915132	170	24.74127
	15-24	20902	2184.6	5930	1212.5	14972	3201.2
	25-34	11143	1049.1	5134	944.4	6009	1159.0
	35-44	3445	349.2	1938	387.3	1507	310.0
	45+	1750	55.8	1233	81.5	517	31.9
	Missing	163	+	60	+	103	+
	All Ages	37641	498.8	14316	380.1	23278	615.8
2020	0-14	169	11.9	37	5.1	132	19.1
	15-24	17510	1813.9	4879	988.6	12631	2677.3
	25-34	9452	876.5	4214	764.0	5238	994.4
	35-44	2870	284.7	1609	314.5	1261	254.1
	45+	1268	39.8	830	53.9	438	26.6
	Missing	27	+	9	+	18	+
	All Ages	31423	410.4	11578	303.0	19718	514.1

+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	12	+	+	+	+	
	15-24	1190	129.6	525	111.1	665	149.3
	25-34	910	96.7	619	129.2	291	63.0
	35-44	383	42.3	315	68.8	68	15.2
	45+	242	9.0	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	2737	40.4	1668	49.5	1069	31.5
2012	0-14	+	+	+	+	+	
	15-24	1398	152.5	652	138.2	746	167.6
	25-34	1109	117.2	757	157.0	352	75.9
	35-44	499	55.1	400	87.3	99	22.1
	45+	+	+	+	+	+	+
	Missing	5	+	2	+	3	+
	All Ages	3290	48.3	2043	60.1	1247	36.5
2013	0-14	11	+	+	+	+	
	15-24	1658	180.4	764	161.7	894	200.2
	25-34	1650	173.1	1064	218.7	586	125.6
	35-44	699	77.0	517	112.7	182	40.6
	45+	390	14.0	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	4408	64.0	2686	78.3	1722	49.9
2014	0-14	29	2.2	0	0.0	29	4.5
	15-24	2346	253.7	1110	233.7	1236	274.8
	25-34	2362	244.4	1461	295.7	901	190.7
	35-44	954	104.9	695	151.2	259	57.6
	45+	466	16.4	396	28.9	70	4.7
	Missing	2	+	1	+	1	+
	All Ages	6159	88.4	3663	105.4	2496	71.4
2015	0-14	27	2.0	+	+	+	+
	15-24	2539	273.2	1193	250.3	1346	297.3
	25-34	2825	289.0	1824	364.6	1001	209.7
	35-44	1167	127.7	836	180.9	331	73.3
	45+	646	22.2	+	+	+	+
	Missing	2	+	0	0.0	2	+
	All Ages	7206	102.0	4402	125.0	2804	79.2

+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	34	2.5	+	+	+	+
	15-24	2781	296.2	1416	294.1	1365	298.4
	25-34	3080	308.7	2042	399.8	1038	213.1
	35-44	1473	159.8	1072	230.1	401	88.0
	45+	800	26.9	+	+	+	+
	Missing	4	+	2	+	2	+
	All Ages	8172	113.8	5224	145.8	2948	81.9
2017	0-14	41	3.0	+	+	+	+
	15-24	3191	337.7	1617	334.0	1573	341.3
	25-34	3845	377.0	2567	491.5	1277	256.6
	35-44	1905	202.7	1392	292.9	513	110.5
	45+	1051	34.7	+	+	+	+
	Missing	1	+	1	+	0	0.0
	All Ages	10034	137.3	6470	177.4	3562	97.2
2018	0-14	48	3.4	+	+	+	+
	15-24	3337	351.7	1697	349.8	1637	353.0
	25-34	4422	424.9	2960	555.1	1460	287.7
	35-44	2196	228.2	1598	327.8	597	125.7
	45+	1216	39.5	+	+	+	+
	Missing	2	+	1	+	1	+
	All Ages	11221	151.1	7292	196.7	3923	105.4
2019	0-14	52	3.7	10	+	42	6.1
	15-24	3431	358.6	1680	343.5	1750	374.2
	25-34	4735	445.8	3201	588.8	1532	295.5
	35-44	2367	239.9	1701	339.9	664	136.6
	45+	1280	40.8	1036	68.5	242	14.9
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	11865	157.2	7628	202.5	4230	111.9
2020	0-14	39	2.8	+	+	+	+
	15-24	3456	358.0	1631	330.5	1817	385.1
	25-34	4478	415.3	2898	525.4	1568	297.7
	35-44	2466	244.6	1689	330.1	768	154.7
	45+	1132	35.5	+	+	+	+
	Missing	9	+	5	+	4	+
	All Ages	11580	151.3	7111	186.1	4436	115.7

+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 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	38	4.1	+	+	+	+
	25-34	94	10.0	+	+	+	+
	35-44	111	12.3	+	+	+	+
	45+	90	3.3	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	333	4.9	323	9.6	10	+
2012	0-14	+	+	0	0.0	+	+
	15-24	45	4.9	+	+	+	+
	25-34	82	8.7	+	+	+	+
	35-44	101	11.2	101	22.1	0	0.0
	45+	+	+	+	+	0	0.0
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	304	4.5	+	+	+	+
2013	0-14	0	0.0	0	0.0	0	0.0
	15-24	58	6.3	+	+	+	+
	25-34	86	9.0	+	+	+	+
	35-44	71	7.8	+	+	+	+
	45+	75	2.7	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	290	4.2	278	8.1	12	+
2014	0-14	0	0.0	0	0.0	0	0.0
	15-24	87	9.4	77	16.2	10	+
	25-34	98	10.1	+	+	+	+
	35-44	73	8.0	+	+	+	+
	45+	84	3.0	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	342	4.9	322	9.3	20	0.6
2015	0-14	0	0.0	0	0.0	0	0.0
	15-24	74	8.0	+	+	+	+
	25-34	198	20.3	184	36.8	14	+
	35-44	107	11.7	+	+	+	+
	45+	74	2.5	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	453	6.4	422	12.0	30	0.8

+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	96	10.2	78	16.2	18	3.9
	25-34	197	19.7	179	35.0	18	3.7
	35-44	143	15.5	+	+	+	+
	45+	134	4.5	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	570	7.9	518	14.5	52	1.4
2017	0-14	0	0.0	0	0.0	0	0.0
	15-24	123	13.0	103	21.3	19	4.1
	25-34	255	25.0	229	43.8	26	5.2
	35-44	168	17.9	154	32.4	14	+
	45+	129	4.3	119	8.1	10	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	675	9.2	605	16.6	69	1.9
2018	0-14	0	0.0	0	0.0	0	0.0
	15-24	138	14.5	+	+	+	+
	25-34	325	31.2	271	50.8	54	10.6
	35-44	193	20.1	172	35.3	20	4.2
	45+	153	5.0	+	+	+	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	809	10.9	697	18.8	111	3.0
2019	0-14	0	0.0	0	0.0	0	0.0
	15-24	122	12.8	90	18.4	32	6.8
	25-34	310	29.2	260	47.8	50	9.6
	35-44	202	20.5	174	34.8	27	5.6
	45+	198	6.3	186	12.3	12	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	832	11.0	710	18.9	121	3.2
2020	0-14	0	0.0	0	0.0	0	0.0
	15-24	134	13.9	91	18.4	42	8.9
	25-34	313	29.0	239	43.3	70	13.3
	35-44	211	20.9	174	34.0	37	7.5
	45+	179	5.6	166	10.8	13	+
	Missing	0	0.0	0	0.0	0	0.0
	All Ages	837	10.9	670	17.5	162	4.2

+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.