

# Sexually Transmitted Infections Surveillance Report

**New York State** 

**2020** 

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# **Executive Summary: Report**

This document summarizes 2020 surveillance data for the three major notifiable sexually transmitted infections (STIs) in New York State (NYS):

- syphilis;
- gonorrhea; and
- chlamydia.

Healthcare providers and laboratories are required to report suspected or confirmed diagnoses of communicable diseases including STIs under NYS Public Health Law 2101 and 2102<sup>1</sup>. More detailed information on data collected are provided in the Technical Notes section.

Due to COVID-19 pandemic impact that started in the first quarter of 2020, STI diagnoses in the state were severely impacted by <u>changes in care seeking behavior</u>. The impact translated to, in some cases, artificial declines in morbidity reported for the year. In 2020, reported diagnoses of gonorrhea increased for the seventh consecutive year, while primary and secondary syphilis increased after showing a decline in 2017, and chlamydia decreased for the first time since 2013. Data from the <u>Centers for Disease Control and Prevention</u><sup>2</sup> (CDC) ranks New York State 17th, 19th, and 11th among all states in 2020 for the total number of diagnoses of chlamydia, gonorrhea, and primary and secondary syphilis, respectively; and 36th for diagnoses of congenital syphilis.

The highest rates of STIs in NYS continued to be seen in young people, non-Hispanic Black individuals, and men who have sex with men; further, with the rise in congenital syphilis births, persons of reproductive capacity are a population of concern with respect to STI transmissions.

Since chlamydia became reportable in 2000, the number of diagnoses has exceeded other reportable STIs. In 2020, it continued to be the most commonly reportable STI in NYS with 97,199 diagnoses (22%% decrease from 2019) with the highest rates seen in females 15-24 years of age.

Gonorrhea diagnoses increased 3.5% in 2020, to 42,318 reported diagnoses. Gonorrhea increased in females by 28.7% and decreased in males by 6.2% when compared to 2019. Additionally, the rates were highest among males 20-34 and among females 15-24.

Primary and secondary syphilis diagnoses increased 5% in 2020 compared to 2019. Diagnoses among males accounted for 91% of primary and secondary syphilis diagnoses; 81.3% of males diagnosed with primary or secondary syphilis reported other males as their sex partners. In 2020, rates of primary and secondary syphilis among females continued to increase 6-fold compared to 2014 rates. Additionally, in 2020, 29 diagnoses of congenital syphilis were reported statewide, a 7.4% increase compared to 2019 (27 diagnosed infants). These data represent only a portion of the true burden of STIs in NYS. Many cases of syphilis, gonorrhea, and chlamydia go undiagnosed and therefore unreported, and several highly prevalent STIs, such as human papillomavirus, genital herpes, and trichomoniasis, are not reported at all.

Further, in 2020, CDC released guidance supporting syndromic management of some STIs and this could also impact reporting. This report provides important information about the burden of notifiable bacterial STIs in NYS.

NYS remains committed to conducting high quality STI surveillance, responding to STI-related outbreaks, identifying persons with STIs, and linking them and their partners to care and treatment through Partner Services. Additional priorities include promoting CDC-recommended screening, diagnosis, and treatment practices, sharing local epidemiological information with health care professionals and the community. We value our partnership with community experts in strengthening collaborations, monitoring and developing STI-related policies, and analyzing data for program insights and improvement.

# **Sexually Transmitted Infection Description: Syphilis**

<u>Syphilis</u><sup>3</sup> is an STI caused by the bacterium *Treponema pallidum* and is spread through vaginal, anal, or oral sex with an infected partner.

Syphilis is generally classified in four stages that occur sequentially:

- Primary syphilis characterized by a single painless skin ulcer (sore), although there may be multiple sores. The sore generally appears within a few weeks of sexual contact with an infected person, usually on or around the genitals or anus, or on the lips, or in the mouth. Transmission occurs through direct contact with a syphilitic sore during sex. After the sores heal (sores will heal without treatment) the infection progresses to secondary syphilis.
- Secondary syphilis –presents as skin rashes and lesions on mucous membranes, generally within six weeks after the primary sore or sores heal. Symptoms resolve even without treatment and the infection enters the latent stage.
- Early non-primary non-secondary stage causes intermittent flare-ups of symptoms, alongside periods with no outward symptoms.
- Late/tertiary stage occurs when the infection is left untreated and begins three or more years after infection. In this stage the bacteria, while not sexually transmittable, can spread throughout the body leading to serious illness or death.

Syphilis infection increases the risk for contracting other STIs like HIV.

Syphilis can be cured with <u>antibiotics</u><sup>4</sup>, though any damage to the body that has already occurred cannot be undone. Dosage and length of treatment will depend upon the syphilis stage at diagnosis and whether there are clinical manifestations.

Syphilis data presented in this surveillance report represent confirmed or probable cases according to the <u>case definitions</u><sup>5</sup> for syphilis.

The first two stages are presented combined as "Primary and Secondary Syphilis," and represent the most infectious stages of syphilis.

"Early Syphilis" combines primary and secondary syphilis diagnoses with syphilis diagnosed within the first year of infection that had progressed past the primary and secondary stages (aka "early non-primary non-secondary"). Individuals diagnosed with "early non-primary non-secondary" may or may not have been experiencing clinical manifestations of syphilis at the time of their diagnosis.

Congenital syphilis occurs in infants who acquire the infection from pregnant persons infected with syphilis. Congenital syphilis can cause severe medical complications during pregnancy, and result in birth defects and/or death to the fetus/infant.

Congenital syphilis data presented in this surveillance report represent confirmed or probable cases according to the <u>case definition</u><sup>6</sup>.

# **Sexually Transmitted Infection Description: Gonorrhea**

<u>Gonorrhea</u><sup>7</sup> is an STI caused by the bacterium *Neisseria gonorrhoeae* and is spread through oral, anal, or vaginal sex with an infected partner. Gonorrhea can also be passed from mother to infant during vaginal delivery.

Vaginal symptoms, which usually begin within 5 to 60 days of transmission, may include unusual discharge, spotting, and inflammation of the vulva. Penile symptoms can include thick discharge from the urethra, painful urination, and redness and swelling of the urethral opening.

If left untreated, gonorrhea may progress to an infection of the female reproductive organs called pelvic inflammatory disease (PID). PID can cause abscesses and scar tissues thereby increasing the risk of infertility, miscarriage, and ectopic pregnancy. In rare cases, untreated gonorrhea in men may cause severe pain and swelling in the testicles, resulting in sterility.

Gonorrhea can spread throughout the body and increase the risk for contracting other STIs like HIV. Gonorrhea can be cured with <u>antibiotics</u><sup>8</sup>; however, <u>antimicrobial resistant gonorrhea</u><sup>9</sup> is increasingly a concern. Recently, CDC <u>updated treatment recommendations</u><sup>10</sup> for uncomplicated gonorrhea to a single 500 mg intramuscular dose of ceftriaxone. <u>Partner treatment</u><sup>14</sup> is crucial for the prevention of repeat infections.

Gonorrhea data presented in this surveillance report represent confirmed or probable cases according to the <u>case definition</u><sup>11</sup>.

# **Sexually Transmitted Infection Description: Chlamydia**

<u>Chlamydia</u><sup>12</sup> is an STI caused by the bacterium *Chlamydia trachomatis* and is spread through oral, anal, or vaginal sex with an infected partner. It is the most common notifiable infection in the United States (not including COVID-19 in 2020). Chlamydia may pass from mother to infant during vaginal delivery.

Most people who are infected have no outward symptoms. If symptoms are present, they may appear one to three weeks after transmission. Vaginal symptoms may include discharge, burning urination, and spotting. Penile symptoms may include urethral discharge, pain when urinating, and inflammation of the testicles which may result in sterility. Infection may occur in the rectum after anal sex with an infected partner, or spread from another infected area, such as the vagina.

Untreated chlamydial infections may lead to an infection of the female reproductive organs called pelvic inflammatory disease (PID). PID can cause abscesses and scar tissues, thereby increasing the risk of infertility, miscarriage, and ectopic pregnancy.

Chlamydia infection increases the likelihood of contracting other STIs, such as gonorrhea or HIV.

Chlamydia can be cured with common <u>antibiotics</u><sup>13</sup>. <u>Partner treatment</u><sup>14</sup> is crucial for the prevention of repeat infections.

Chlamydia data presented in this surveillance report represent confirmed cases according to the <u>case</u> definition<sup>15</sup>.

Figure 1. STI Diagnoses by Age, New York State, 2020

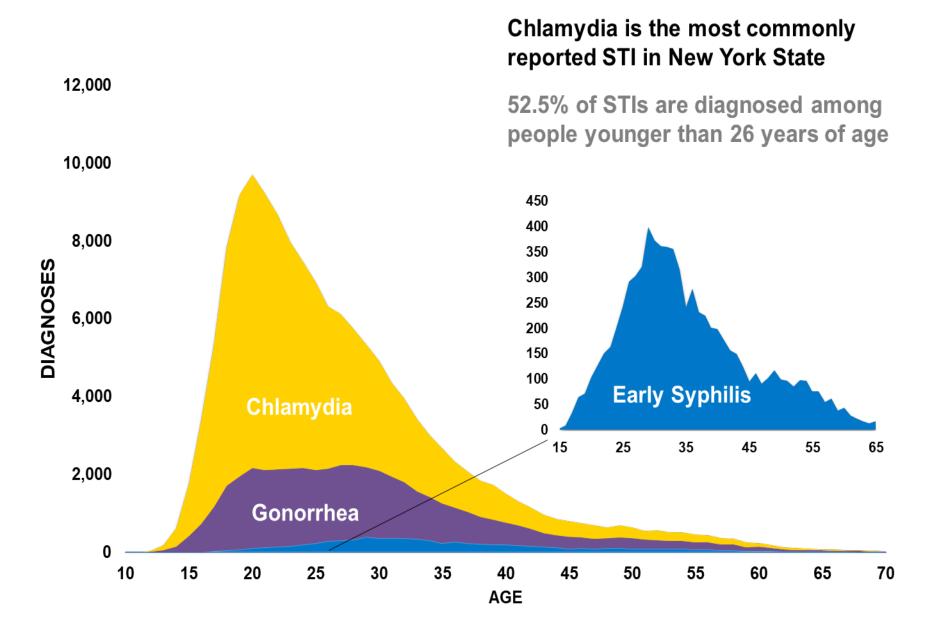


Table 1. STIs by Region/County, New York State, 2020

	Early Sy	philis	Gonorrhea		Chlamydia	
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	7,752	41.7	42,318	228.3	97,199	529.6
New York City (NYC)	6,274	73.1	25,027	303.3	56,167	707.4
Bronx	1,442	104.3	5,939	419.7	14,265	1,004.9
Kings	1,716	63.9	7,753	304.5	17,129	705.9
New York	2,008	111.2	6,841	391.8	12,315	734.6
Queens	1,024	46.5	3,893	185.2	11,022	550.9
Richmond	84	18.9	601	138.7	1,436	332.4
NYS excl. NYC	1,478	14.4	17,291	168.8	41,032	394.2
Buffalo Region	134	9.4	3,817	275.6	6,769	489.6
Allegany	1	2.4	9	19.5	111	223.2
Cattaraugus	4	5.2	48	77.6	168	252.5
Chautauqua	6	6.4	144	132.2	505	445.6
Erie	110	12.3	3,016	349.3	4,938	578.5
Genesee	1	2.4	38	76.6	127	260.6
Niagara	10	5.1	500	279.7	750	421.9
Orleans	2	5.5	47	133.0	106	296.1
Wyoming	-	-	15	46.9	64	194.0
Capital Region	184	13.2	2,170	156.3	4,923	349.0
Albany	75	25.4	911	277.7	1,565	462.0
Clinton	-	-	17	21.6	203	241.3
Columbia	8	17.5	48	107.3	147	331.4
Delaware	1	3.0	14	39.9	61	163.6
Essex	1	3.7	4	14.4	48	167.9
Franklin	1	2.0	12	22.8	72	144.8
Fulton	-	-	86	197.8	146	342.6
Greene	5	10.0	26	63.2	100	253.0
Hamilton	-	-	-	-	1	36.4
Montgomery	2	4.9	76	175.1	169	400.9
Otsego	6	12.4	28	50.5	132	180.6
Rensselaer	42	27.2	364	240.8	709	469.5
Saratoga	10	4.7	103	51.4	444	225.6
Schenectady	22	15.5	424	295.9	845	590.9
Schoharie	3	10.0	5	16.5	52	187.1
Warren	8	11.8	31	59.0	107	217.3
Washington	-	-	21	39.5	122	242.7

	Early Sy	philis	Gonorr	hea	Chlamy	dia
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	83	5.1	2,701	165.2	6,585	380.6
Broome	4	2.5	310	171.3	735	359.9
Cayuga	2	2.7	101	157.7	229	353.6
Chenango	4	7.0	17	42.6	78	210.6
Cortland	1	1.2	33	76.1	180	299.3
Herkimer	1	2.1	33	66.4	157	305.5
Jefferson	8	6.9	230	192.5	711	548.6
Lewis	1	4.8	4	17.9	52	241.1
Madison	2	3.0	28	42.1	144	194.4
Oneida	12	6.0	347	167.2	696	333.0
Onondaga	30	7.0	1,398	319.0	2,621	589.8
Oswego	-	-	49	46.8	257	230.3
St Lawrence	3	3.0	28	23.9	239	212.1
Tioga	-	-	26	64.9	95	244.4
Tompkins	15	10.3	97	84.5	391	276.4
Rochester Region	345	28.8	4,494	385.0	6,690	570.9
Chemung	3	3.0	116	161.1	339	475.2
Livingston	5	9.8	39	64.2	134	178.4
Monroe	312	42.6	4,045	565.7	5,357	748.4
Ontario	7	7.2	74	78.0	250	264.6
Schuyler	1	7.2	4	29.8	30	233.4
Seneca	2	7.7	19	61.4	60	191.5
Steuben	5	6.8	34	44.0	192	248.4
Wayne	10	14.0	159	216.1	294	411.2
Yates	-	-	4	14.7	34	139.7
Hudson Valley	405	19.3	2,116	100.5	7,095	330.8
Dutchess	70	24.9	300	108.5	891	312.8
Orange	98	26.5	397	109.3	1,430	373.3
Putnam	12	14.1	31	35.2	138	162.6
Rockland	35	12.2	114	38.1	935	310.5
Sullivan	8	11.6	108	160.9	213	328.0
Ulster	22	14.3	149	93.3	471	300.6
Westchester	160	18.9	1,017	118.5	3,017	348.6
Long Island	327	12.8	1,993	78.2	8,970	351.5
Nassau	161	13.3	935	77.7	4,173	347.9
Suffolk	166	12.3	1,058	78.8	4,797	354.5

Figure 2. Early Syphilis by Year, New York State, 1960 - 2020

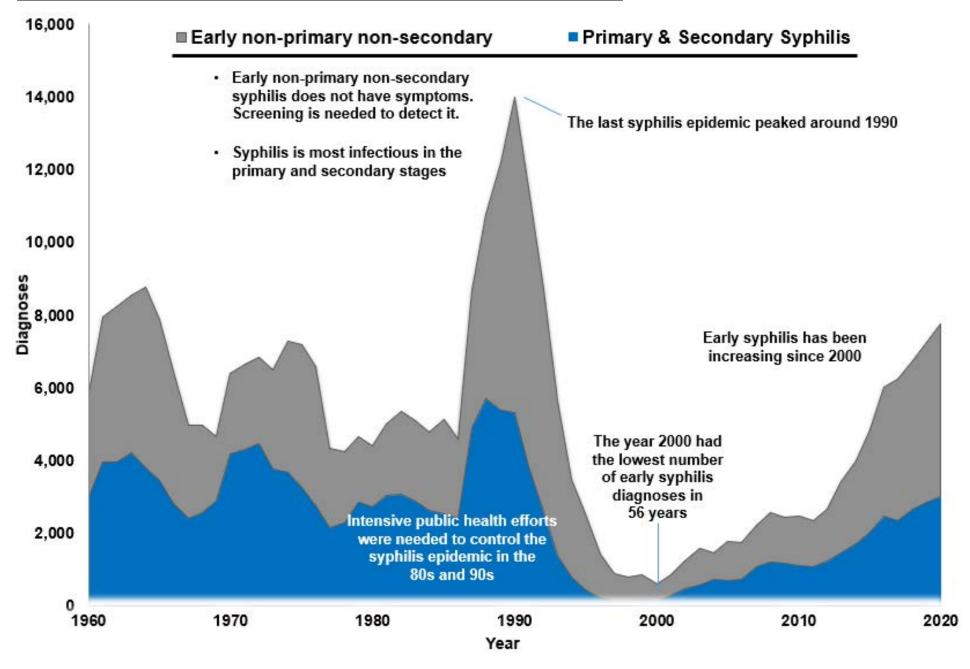
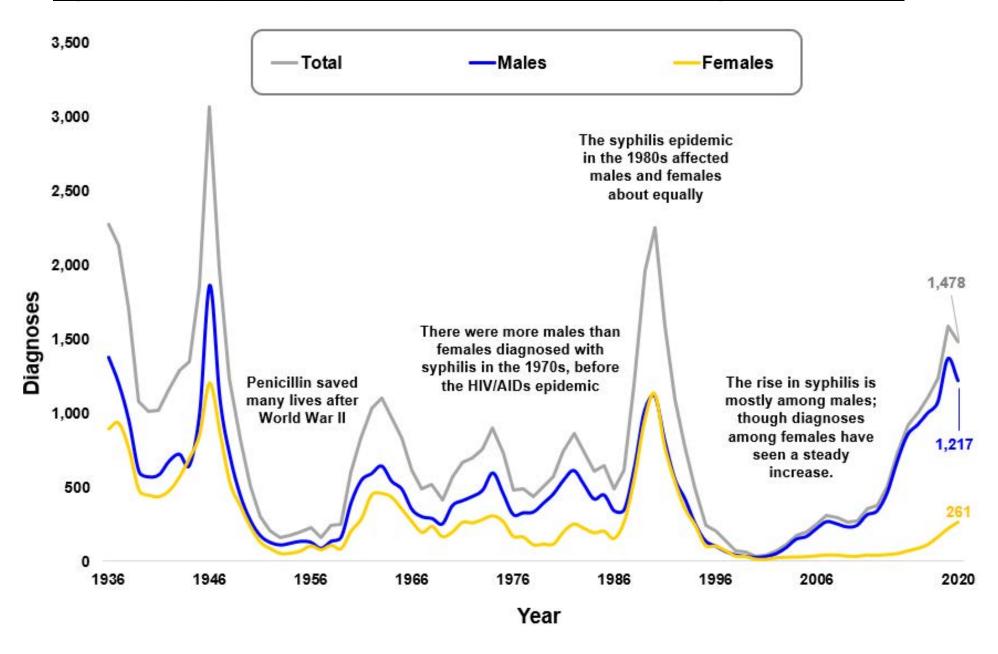
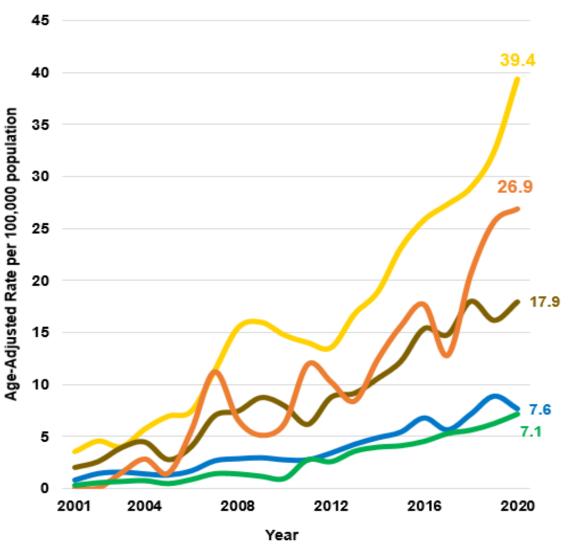


Figure 3. Early Syphilis by Year and Sex, New York State excluding NYC, 1936 - 2020



<u>Figure 4. Primary and Secondary Syphilis Rates by Race/Ethnicity and Year New York State</u>, 2001 - 2020



Non-Hispanic Black individuals continue to have the largest rates of primary and secondary syphilis annually

#### American Indian/Alaskan Native

population represent a relatively small proportion of the morbidity but the second highest rate in the state

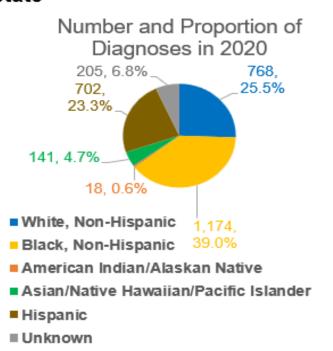
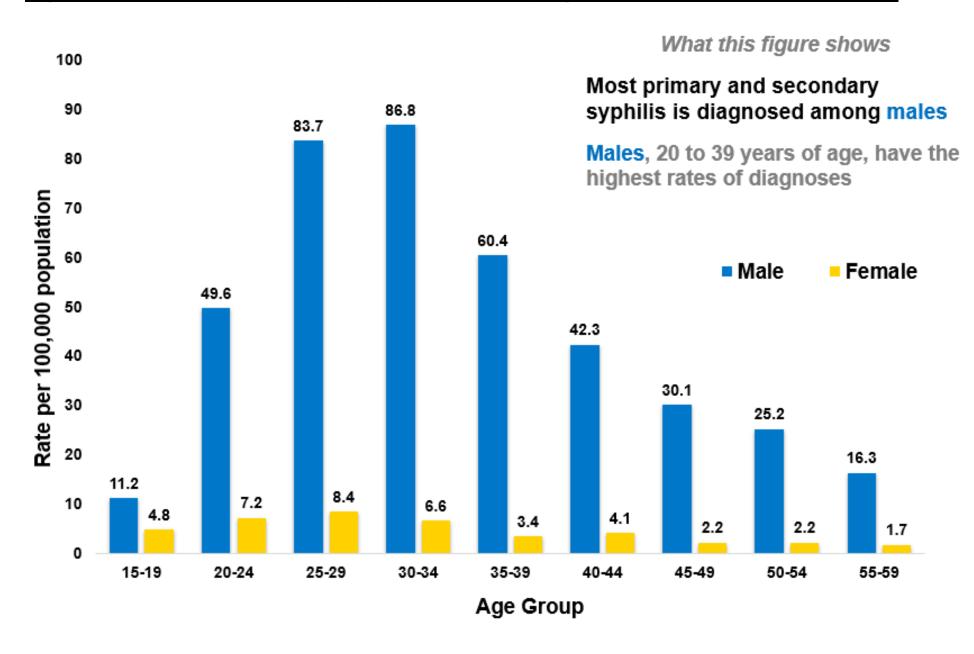
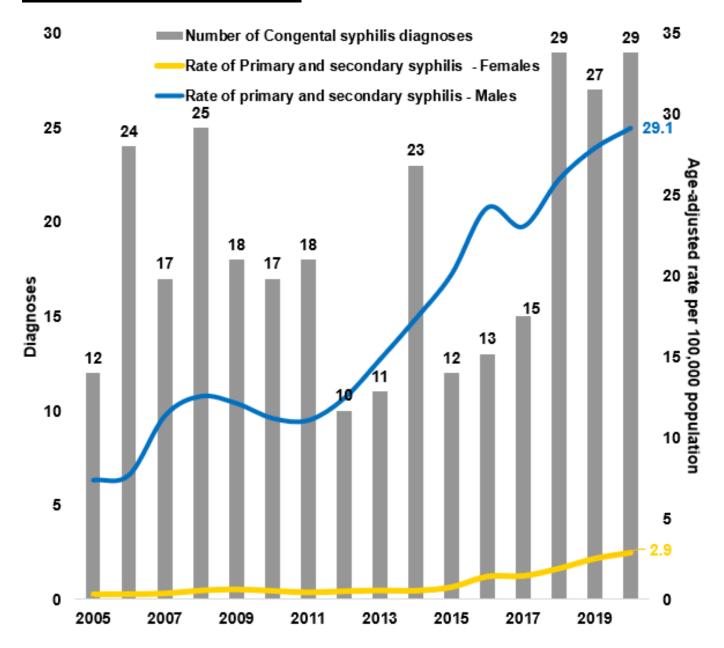


Figure 5. Primary and Secondary Syphilis Rates by Age and Sex, New York State, 2020



<u>Figure 6. Congenital Syphilis Diagnoses with Primary & Secondary Syphilis Rates</u> New York State, 2005 - 2020



The number of congenital syphilis diagnoses increased to 29 in 2020 from 27 in 2019.

The rate of primary and secondary syphilis among females has increased 314% in past 5 years (0.7 to 2.9 per 100,000)

Table 2. Syphilis by Region/County, New York State, 2020

	Primary and Secondary Syphilis		Early Non-P Non-Secon Syphil	ndary			
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
New York State (NYS)	3,008	16.0	4,744	25.7	2,774	14.7	
New York City (NYC)	2,231	25.8	4,043	47.3	2,303	27.0	
Bronx	459	32.7	983	71.6	500	36.4	
Kings	623	23.0	1,093	40.9	743	28.3	
New York	751	41.2	1,257	70.0	538	29.4	
Queens	361	16.4	663	30.1	464	21.0	
Richmond	37	8.0	47	10.9	58	13.3	
NYS excl. NYC	777	7.4	701	6.9	471	4.2	
Buffalo Region	64	4.6	70	4.8	82	5.7	
Allegany	-	-	1	2.4	2	4.5	
Cattaraugus	1	0.9	3	4.3	1	1.9	
Chautauqua	3	2.9	3	3.5	5	4.6	
Erie	53	6.0	57	6.3	54	5.9	
Genesee	1	2.4	-	-	6	13.1	
Niagara	6	3.4	4	1.7	9	4.6	
Orleans	-	-	2	5.5	3	6.4	
Wyoming	-	-	-	-	2	4.0	
Capital Region	107	7.5	77	5.8	53	3.3	
Albany	46	14.9	29	10.5	17	4.7	
Columbia	6	13.2	2	4.4	3	4.8	
Delaware	-	-	1	3.0	-	-	
Essex	1	3.7	-	-	2	8.0	
Franklin	1	2.0	-	-	-	-	
Greene	3	5.8	2	4.2	3	7.3	
Montgomery	-	-	2	4.9	3	5.8	
Otsego	3	6.5	3	5.9	1	2.7	
Rensselaer	24	14.9	18	12.2	5	2.5	
Saratoga	5	2.2	5	2.5	4	2.0	
Schenectady	12	8.3	10	7.1	7	4.2	
Schoharie	1	4.2	2	5.9	1	3.9	
Warren	5	6.0	3	5.8	2	2.3	
Washington	-	-	-	-	5	8.0	

	Primary and Secondary Syphilis		Early Non-P Non-Secor Syphili	ndary	Unknown Duration or Late Syphilis	
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	47	2.9	36	2.2	38	2.4
Broome	2	1.3	2	1.1	9	4.3
Cayuga	1	1.4	1	1.4	2	2.2
Chenango	3	5.7	1	1.3	1	3.1
Cortland	1	1.2	-	-	1	2.3
Herkimer	1	2.1	-	-	2	3.3
Jefferson	5	4.2	3	2.7	2	1.8
Lewis	1	4.8	-	-	-	-
Madison	1	1.8	1	1.2	2	3.2
Oneida	6	3.0	6	2.9	13	6.0
Onondaga	17	4.1	13	2.9	1	0.3
Oswego	-	-	-	-	1	1.0
St Lawrence	1	0.7	2	2.2	-	-
Tompkins	8	4.9	7	5.4	4	5.4
Rochester Region	236	19.5	109	9.3	60	4.8
Chemung	2	2.2	1	0.8	6	7.4
Livingston	3	5.1	2	4.7	2	3.7
Monroe	212	28.7	100	13.9	45	5.8
Ontario	7	7.2	-	-	2	2.6
Schuyler	-	-	1	7.2	1	8.0
Seneca	1	3.9	1	3.8	1	2.7
Steuben	3	3.9	2	2.9	1	1.3
Wayne	8	12.0	2	2.0	2	2.9
Hudson Valley	214	10.0	191	9.3	146	6.5
Dutchess	58	20.5	12	4.5	3	0.9
Orange	42	11.1	56	15.4	20	4.8
Putnam	8	9.3	4	4.8	9	10.7
Rockland	15	5.0	20	7.2	25	7.6
Sullivan	1	1.4	7	10.2	3	4.0
Ulster	7	4.7	15	9.6	5	3.2
Westchester	83	9.7	77	9.2	81	9.0
Long Island	109	4.3	218	8.5	92	3.0
Nassau	50	4.2	111	9.1	27	2.1
Suffolk	59	4.3	107	8.0	65	3.9

Rates are per 100,000 residents and age-adjusted.

Table 3. Early Syphilis by Region/County and Sex, New York State, 2020

	Male	:	Fema	le	Total		
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
New York State (NYS)	7,005	75.9	664	7.2	7,752	41.7	
New York City (NYC)	5,788	138.5	403	9.6	6,274	73.1	
Bronx	1,257	190.7	145	20.4	1,442	104.3	
Kings	1,602	123.9	101	7.9	1,716	63.9	
New York	1,912	217.1	80	8.5	2,008	111.2	
Queens	946	86.2	65	6.1	1,024	46.5	
Richmond	71	31.8	12	5.7	84	18.9	
NYS excl. NYC	1,217	23.3	261	5.3	1,478	14.4	
Buffalo Region	109	15.1	25	3.7	134	9.4	
Allegany	1	4.8	-	-	1	2.4	
Cattaraugus	3	6.8	1	3.5	4	5.2	
Chautauqua	6	13.0	-	-	6	6.4	
Erie	89	19.8	21	4.9	110	12.3	
Genesee	1	4.6	-	-	1	2.4	
Niagara	8	8.2	2	2.0	10	5.1	
Orleans	1	6.2	1	5.3	2	5.5	
Capital Region	137	19.2	47	7.1	184	13.2	
Albany	59	40.7	16	10.5	75	25.4	
Columbia	7	30.1	1	4.8	8	17.5	
Delaware	1	5.9	-	-	1	3.0	
Essex	1	6.6	-	-	1	3.7	
Franklin	-	-	1	5.5	1	2.0	
Greene	3	9.8	2	11.2	5	10.0	
Montgomery	1	4.9	1	4.9	2	4.9	
Otsego	5	22.6	1	2.3	6	12.4	
Rensselaer	32	41.1	10	13.8	42	27.2	
Saratoga	9	8.3	1	1.0	10	4.7	
Schenectady	11	15.9	11	15.5	22	15.5	
Schoharie	2	12.4	1	7.8	3	10.0	
Warren	6	16.1	2	7.7	8	11.8	

	Male		Femal	le	Total	
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	75	9.1	8	1.0	83	5.1
Broome	4	5.0	-	-	4	2.5
Cayuga	2	4.8	-	-	2	2.7
Chenango	4	14.1	-	-	4	7.0
Cortland	1	2.4	-	-	1	1.2
Herkimer	1	4.1	-	-	1	2.1
Jefferson	7	10.9	1	2.0	8	6.9
Lewis	1	9.0	-	-	1	4.8
Madison	1	2.4	1	3.6	2	3.0
Oneida	8	7.6	4	4.3	12	6.0
Onondaga	30	14.3	-	-	30	7.0
St Lawrence	2	3.4	1	2.4	3	3.0
Tompkins	14	19.9	1	0.8	15	10.3
Rochester Region	263	43.1	82	14.7	345	28.8
Chemung	3	6.0	-	-	3	3.0
Livingston	3	9.9	2	10.1	5	9.8
Monroe	238	64.9	74	21.4	312	42.6
Ontario	6	12.0	1	2.3	7	7.2
Schuyler	-	-	1	14.5	1	7.2
Seneca	2	14.2	-	-	2	7.7
Steuben	4	10.8	1	2.6	5	6.8
Wayne	7	19.6	3	8.5	10	14.0
Hudson Valley	344	32.5	61	5.8	405	19.3
Dutchess	60	42.2	10	6.8	70	24.9
Orange	72	37.9	26	15.0	98	26.5
Putnam	11	25.1	1	2.5	12	14.1
Rockland	29	20.3	6	3.9	35	12.2
Sullivan	4	10.2	4	12.9	8	11.6
Ulster	21	26.2	1	1.3	22	14.3
Westchester	147	35.0	13	3.1	160	18.9
Long Island	289	22.4	38	3.0	327	12.8
Nassau	146	24.2	15	2.4	161	13.3
Suffolk	143	20.8	23	3.6	166	12.3

Table 4. Primary and Secondary Syphilis by Region/County and Sex, New York State, 2020

	Male	;	Fema	le	Total	
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	2,721	29.2	268	2.9	3,008	16.0
New York City (NYC)	2,069	49.2	143	3.4	2,231	25.8
Bronx	400	59.5	51	7.2	459	32.7
Kings	589	45.2	33	2.6	623	23.0
New York	715	80.7	29	3.0	751	41.2
Queens	333	30.3	25	2.3	361	16.4
Richmond	32	13.7	5	2.3	37	8.0
NYS excl. NYC	652	12.3	125	2.5	777	7.4
Buffalo Region	51	7.1	13	2.0	64	4.6
Cattaraugus	1	1.7	-	-	1	0.9
Chautauqua	3	5.8	-	-	3	2.9
Erie	41	9.3	12	2.8	53	6.0
Genesee	1	4.6	-	-	1	2.4
Niagara	5	5.4	1	1.4	6	3.4
Capital Region	82	11.0	25	3.8	107	7.5
Albany	39	25.2	7	4.9	46	14.9
Columbia	5	21.5	1	4.8	6	13.2
Essex	1	6.6	-	-	1	3.7
Franklin	-	-	1	5.5	1	2.0
Greene	2	6.1	1	6.2	3	5.8
Otsego	3	13.2	-	-	3	6.5
Rensselaer	17	20.7	7	9.5	24	14.9
Saratoga	5	4.3	-	-	5	2.2
Schenectady	4	5.8	8	11.0	12	8.3
Schoharie	1	8.3	-	-	1	4.2
Warren	5	12.4	-	-	5	6.0

Rates are per 100,000 residents and age-adjusted.

	Mak	е	Fema	ale	Tota	al
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	43	5.3	4	0.5	47	2.9
Broome	2	2.6	-	-	2	1.3
Cayuga	1	2.4	-	-	1	1.4
Chenango	3	11.4	-	-	3	5.7
Cortland	1	2.4	-	-	1	1.2
Herkimer	1	4.1	-	-	1	2.1
Jefferson	5	7.7	-	-	5	4.2
Lewis	1	9.0	-	-	1	4.8
Madison	-	-	1	3.6	1	1.8
Oneida	4	3.7	2	2.3	6	3.0
Onondaga	17	8.3	-	-	17	4.1
St Lawrence	1	1.4	-	-	1	0.7
Tompkins	7	9.0	1	0.8	8	4.9
Rochester Region	182	29.6	54	9.6	236	19.5
Chemung	2	4.3	-	-	2	2.2
Livingston	2	5.3	1	5.5	3	5.1
Monroe	163	44.1	49	14.1	212	28.7
Ontario	6	12.0	1	2.3	7	7.2
Seneca	1	7.0	-	-	1	3.9
Steuben	2	5.2	1	2.6	3	3.9
Wayne	6	18.4	2	5.5	8	12.0
Hudson Valley	189	17.6	25	2.3	214	10.0
Dutchess	51	35.6	7	4.5	58	20.5
Orange	36	18.7	6	3.3	42	11.1
Putnam	7	15.8	1	2.5	8	9.3
Rockland	10	6.8	5	3.2	15	5.0
Sullivan	-	-	1	2.9	1	1.4
Ulster	7	8.9	-	-	7	4.7
Westchester	78	18.3	5	1.2	83	9.7
Long Island	105	8.1	4	0.3	109	4.3
Nassau	49	8.2	1	0.2	50	4.2
Suffolk	56	8.0	3	0.5	59	4.3

Table 5. Early Syphilis by Sex and Age, New York State, 2020

	New York (NYS		New York City (NYC)		NYS excl.	NYC
Age(yrs)	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
			Male			
10-14	1	0.2	0	0.0	1	0.3
15-19	119	20.3	74	34.0	45	12.2
20-24	620	99.9	456	189.6	164	43.2
25-29	1,396	195.7	1,172	333.3	224	61.9
30-34	1,636	231.0	1,428	395.3	208	59.9
35-39	1,089	173.0	946	319.8	143	42.9
40-44	723	126.4	627	247.5	96	30.2
45-49	489	87.1	395	166.1	94	29.0
50-54	439	72.3	353	146.4	86	23.5
55-59	279	43.7	190	78.6	89	22.4
60-64	121	20.2	84	37.8	37	9.8
65-69	61	12.4	39	21.5	22	7.1
70+	32	3.3	24	6.6	8	1.3
			Female			
10-14	3	0.6	1	0.5	2	0.6
15-19	60	10.6	33	15.4	27	7.7
20-24	112	18.0	69	26.5	43	11.9
25-29	141	19.7	80	21.3	61	18.0
30-34	104	14.8	64	17.4	40	12.0
35-39	75	11.7	47	15.3	28	8.4
40-44	72	12.2	49	18.0	23	7.2
45-49	26	4.4	13	5.0	13	3.9
50-54	32	5.0	25	9.4	7	1.8
55-59	28	4.1	14	5.2	14	3.4
60-64	6	0.9	3	1.2	3	0.8
65-69	3	0.5	3	1.3	0	0.0
70+	2	0.1	2	0.4	0	0.0

	New York State New York City (NYS) (NYC)			NYS excl	. NYC	
Age(yrs)	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
			Total			
10-14	4	0.4	1	0.2	3	0.5
15-19	182	15.8	110	25.5	72	10.0
20-24	744	59.8	537	107.2	207	27.9
25-29	1,554	108.8	1,269	174.4	285	40.7
30-34	1,763	125.1	1,515	207.9	248	36.4
35-39	1,176	92.7	1,005	166.7	171	25.7
40-44	805	69.2	686	130.7	119	18.7
45-49	518	44.9	411	82.6	107	16.3
50-54	474	37.9	381	75.3	93	12.5
55-59	307	23.1	204	39.8	103	12.6
60-64	127	10.1	87	18.1	40	5.1
65-69	64	6.1	42	10.4	22	3.4
70+	34	1.5	26	2.9	8	0.6

Table 6. Primary and Secondary Syphilis by Sex and Age, New York State, 2020

	New York State (NYS)		New York (NYC		NYS excl. NYC		
Age(yrs)	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
			Male				
10-14	1	0.2	0	0.0	1	0.3	
15-19	66	11.2	42	19.3	24	6.5	
20-24	308	49.6	211	87.7	97	25.5	
25-29	597	83.7	466	132.5	131	36.2	
30-34	615	86.8	510	141.2	105	30.3	
35-39	380	60.4	313	105.8	67	20.1	
40-44	242	42.3	198	78.1	44	13.8	
45-49	169	30.1	125	52.5	44	13.6	
50-54	153	25.2	105	43.6	48	13.1	
55-59	104	16.3	55	22.8	49	12.4	
60-64	49	8.2	24	10.8	25	6.6	
65-69	30	6.1	17	9.4	13	4.2	
70+	7	0.7	3	0.8	4	0.7	
			Female				
10-14	2	0.4	1	0.5	1	0.3	
15-19	27	4.8	13	6.1	14	4.0	
20-24	45	7.2	30	11.5	15	4.1	
25-29	60	8.4	29	7.7	31	9.1	
30-34	46	6.6	28	7.6	18	5.4	
35-39	22	3.4	10	3.3	12	3.6	
40-44	24	4.1	11	4.1	13	4.1	
45-49	13	2.2	7	2.7	6	1.8	
50-54	14	2.2	9	3.4	5	1.3	
55-59	12	1.7	3	1.1	9	2.2	
60-64	2	0.3	1	0.4	1	0.3	
65-69	1	0.2	1	0.4	0	0.0	
70+	0	0.0	0	0.0	0	0.0	

	New York State (NYS)		New York (NYC		NYS excl. NYC		
Age(yrs)	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
			Total				
10-14	3	0.3	1	0.2	2	0.3	
15-19	93	8.1	55	12.7	38	5.3	
20-24	356	28.6	244	48.7	112	15.1	
25-29	664	46.5	502	69.0	162	23.1	
30-34	667	47.3	544	74.7	123	18.1	
35-39	402	31.7	323	53.6	79	11.9	
40-44	269	23.1	212	40.4	57	8.9	
45-49	182	15.8	132	26.5	50	7.6	
50-54	167	13.4	114	22.5	53	7.1	
55-59	116	8.7	58	11.3	58	7.1	
60-64	51	4.1	25	5.2	26	3.3	
65-69	31	3.0	18	4.5	13	2.0	
70+	7	0.3	3	0.3	4	0.3	

Table 7. Early Syphilis by Region/County and Year, New York State, 2018 - 2020

	2018	3	2019		2020	)
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	6,758	35.6	7,247	38.6	7,752	41.7
New York City (NYC)	5,526	63.0	5,665	65.3	6,274	73.1
Bronx	1,310	91.3	1,300	92.8	1,442	104.3
Kings	1,320	48.7	1,445	53.3	1,716	63.9
New York	1,905	104.6	1,922	106.1	2,008	111.2
Queens	915	39.5	929	41.0	1,024	46.5
Richmond	76	17.3	69	15.3	84	18.9
NYS excl. NYC	1,232	11.6	1,582	15.3	1,478	14.4
Buffalo Region	108	7.9	134	9.4	134	9.4
Allegany	2	6.9	1	2.4	1	2.4
Cattaraugus	1	1.7	3	4.1	4	5.2
Chautauqua	2	1.7	4	3.8	6	6.4
Erie	91	10.8	109	12.4	110	12.3
Genesee	3	5.8	3	5.5	1	2.4
Niagara	6	3.0	10	5.0	10	5.1
Orleans	2	5.8	2	3.6	2	5.5
Wyoming	1	2.3	2	6.5	-	-
Capital Region	146	9.9	219	15.9	184	13.2
Albany	55	16.8	98	32.5	75	25.4
Clinton	2	2.1	2	3.6	-	-
Columbia	6	12.4	5	10.0	8	17.5
Delaware	-	-	2	7.4	1	3.0
Essex	2	5.3	-	-	1	3.7
Franklin	-	-	1	2.8	1	2.0
Fulton	2	4.4	2	4.6	-	-
Greene	3	6.6	5	12.9	5	10.0
Montgomery	4	9.1	-	-	2	4.9
Otsego	-	-	5	8.2	6	12.4
Rensselaer	21	13.5	41	27.5	42	27.2
Saratoga	8	3.3	9	4.2	10	4.7
Schenectady	34	22.9	40	26.0	22	15.5
Schoharie	1	1.9	1	3.9	3	10.0
Warren	7	10.8	6	10.4	8	11.8
Washington	1	1.9	2	3.6	-	-

	2018	3	2019		2020	)
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	102	6.2	134	8.4	83	5.1
Broome	14	6.9	19	10.7	4	2.5
Cayuga	-	-	1	0.8	2	2.7
Chenango	-	-	3	7.0	4	7.0
Cortland	8	16.6	6	14.1	1	1.2
Herkimer	5	7.9	4	6.5	1	2.1
Jefferson	9	7.0	8	6.4	8	6.9
Lewis	-	-	2	9.3	1	4.8
Madison	1	1.2	4	5.3	2	3.0
Oneida	16	7.6	18	8.0	12	6.0
Onondaga	28	6.3	37	9.1	30	7.0
Oswego	4	3.5	6	4.9	-	-
St Lawrence	5	5.5	6	7.0	3	3.0
Tioga	1	2.8	3	7.0	-	-
Tompkins	11	12.7	17	16.6	15	10.3
Rochester Region	223	18.8	316	26.8	345	28.8
Chemung	15	17.8	6	8.2	3	3.0
Livingston	3	4.2	3	5.1	5	9.8
Monroe	195	27.3	287	39.9	312	42.6
Ontario	6	7.0	5	5.5	7	7.2
Schuyler	-	-	2	14.6	1	7.2
Seneca	-	-	3	9.7	2	7.7
Steuben	1	1.4	6	6.4	5	6.8
Wayne	2	2.7	3	4.5	10	14.0
Yates	1	6.6	1	3.5	-	-
Hudson Valley	322	14.8	424	20.0	405	19.3
Dutchess	52	17.3	95	33.9	70	24.9
Orange	64	17.4	105	28.6	98	26.5
Putnam	16	16.7	8	9.2	12	14.1
Rockland	32	11.0	38	13.6	35	12.2
Sullivan	8	11.2	9	13.3	8	11.6
Ulster	20	11.6	29	17.8	22	14.3
Westchester	130	14.5	140	16.0	160	18.9
Long Island	331	12.4	355	13.7	327	12.8
Nassau	180	14.3	189	15.3	161	13.3
Suffolk	151	10.6	166	12.4	166	12.3

Rates are per 100,000 residents and age-adjusted.

Table 8. Early Syphilis by Year and Region, New York State, 1958 - 2020

	New York Sta	te (NYS)	New York Ci	ty (NYC)	NYS excl.	NYC		New York Sta	te (NYS)	New York Cit	y (NYC)	NYS excl.	NYC
Year	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	Year	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1958	2,724	16.1	2,486	31.6	238	2.7	1990	13,997	77.9	11,750	159.3	2,247	21.2
1959	3,374	20.0	3,128	40.2	246	2.7	1991	11,486	63.9	9,902	135.2	1,584	14.9
1960	5,863	34.8	5,262	68.1	601	6.6	1992	8,709	48.6	7,619	104.1	1,090	10.2
1961	7,948	46.8	7,118	91.7	830	9.0	1993	5,643	31.1	4,876	66.1	767	7.1
1962	8,215	47.7	7,179	92.4	1,036	11.0	1994	3,481	18.9	2,986	40.1	495	4.6
1963	8,547	49.4	7,450	96.1	1,097	11.5	1995	2,548	14.0	2,306	30.8	242	2.2
1964	8,756	49.9	7,788	100.6	968	9.9	1996	1,416	7.6	1,215	16.2	201	1.9
1965	7,878	44.3	7,043	89.9	835	8.4	1997	897	5.1	763	10.1	134	1.2
1966	6,446	36.4	5,834	74.7	612	6.2	1998	797	4.0	725	9.6	72	0.6
1967	4,980	27.6	4,489	55.8	491	4.9	1999	850	4.8	789	10.4	61	0.6
1968	4,975	27.4	4,456	55.3	519	5.2	2000	599	2.6	564	7.1	35	0.3
1969	4,661	25.6	4,247	52.6	414	4.1	2001	870	4.6	830	10.3	40	0.4
1970	6,410	34.7	5,840	72.3	570	5.5	2002	1,231	6.4	1,161	14.4	70	0.6
1971	6,649	35.9	5,980	75.8	669	6.3	2003	1,596	8.3	1,482	18.4	114	1.0
1972	6,840	36.6	6,147	77.0	693	6.5	2004	1,475	7.7	1,302	16.2	173	1.6
1973	6,486	34.9	5,727	72.5	759	7.1	2005	1,789	9.4	1,596	19.9	193	1.7
1974	7,287	39.2	6,388	82.2	899	8.3	2006	1,731	9.1	1,479	18.5	252	2.3
1975	7,194	39.0	6,469	85.4	725	6.7	2007	2,224	11.6	1,919	23.9	305	2.7
1976	6,593	36.6	6,112	81.4	481	4.6	2008	2,576	13.4	2,286	28.3	290	2.6
1977	4,347	24.2	3,860	51.5	487	4.6	2009	2,452	12.7	2,190	26.9	262	2.3
1978	4,232	23.4	3,793	51.2	439	4.1	2010	2,461	12.7	2,190	26.7	271	2.4
1979	4,666	25.8	4,163	57.7	503	4.7	2011	2,348	12.0	1,998	24.2	350	3.1
1980	4,404	24.4	3,836	53.2	568	5.3	2012	2,666	13.6	2,291	27.4	375	3.3
1981	5,009	28.8	4,266	60.7	743	7.2	2013	3,411	17.4	2,907	34.6	504	4.5
1982	5,342	30.8	4,483	64.5	859	8.2	2014	4,000	20.4	3,276	38.8	724	6.5
1983	5,086	29.2	4,340	62.9	746	7.1	2015	4,837	24.6	3,920	46.3	917	8.2
1984	4,794	27.3	4,186	59.7	608	5.8	2016	6,008	30.6	5,006	59.1	1,002	9.0
1985	5,120	29.3	4,474	62.5	646	6.2	2017	6,252	31.9	5,144	61.0	1,108	9.9
1986	4,607	25.9	4,117	56.9	490	4.6	2018	6,758	34.6	5,526	65.8	1,232	11.1
1987	8,659	48.6	8,043	110.0	616	5.9	2019	7,247	37.2	5,665	67.9	1,582	14.2
1988	10,749	59.8	9,557	129.7	1,192	11.3	2020	7,752	40.1	6,274	76.0	1,478	13.3
1989	12,170	68.0	10,209	138.6	1,961	18.6							

<u>Table 9. Primary and Secondary Syphilis by Year and Region</u> <u>New York State, 1955 - 2020</u>

	New York Stat	e (NYS)	New York Cit	y (NYC)	NYS excl.	NYC		New York Sta	te (NYS)	New York Cit	ly (NYC)	NYS excl.	NYC
Year	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	Year	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1955	699	4.3	566	7.0	133	1.6	1988	5,688	31.7	5,042	68.4	646	6.1
1956	739	4.5	605	7.5	134	1.6	1989	5,384	30.1	4,362	59.2	1,022	9.7
1957	730	4.4	635	7.8	95	1.1	1990	5,313	29.6	4,265	57.8	1,048	9.9
1958	1,045	6.2	911	11.4	134	1.5	1991	3,825	21.3	3,133	42.8	692	6.5
1959	1,610	9.5	1,446	18.6	164	1.8	1992	2,596	14.5	2,246	30.7	350	3.3
1960	3,016	17.9	2,607	33.7	409	4.5	1993	1,387	7.7	1,129	15.3	258	2.4
1961	3,966	23.3	3,384	43.6	582	6.3	1994	801	4.4	626	8.4	175	1.6
1962	3,975	23.1	3,333	42.9	642	6.8	1995	447	2.5	362	4.8	85	0.8
1963	4,204	24.3	3,489	45.0	715	7.5	1996	214	1.2	138	1.8	76	0.7
1964	3,802	21.7	3,165	40.9	637	6.5	1997	138	0.8	97	1.3	41	0.4
1965	3,445	19.4	2,889	36.8	556	5.6	1998	118	0.6	81	1.1	37	0.3
1966	2,822	15.9	2,445	31.4	377	3.8	1999	150	0.9	130	1.7	20	0.2
1967	2,396	13.3	2,086	25.9	310	3.1	2000	132	0.6	117	1.5	15	0.1
1968	2,564	14.1	2,231	27.7	333	3.3	2001	304	1.6	282	3.5	22	0.2
1969	2,890	15.9	2,616	32.4	274	2.7	2002	478	2.5	434	5.4	44	0.4
1970	4,185	22.6	3,779	46.8	406	3.9	2003	584	3.0	531	6.6	53	0.5
1971	4,300	23.2	3,844	48.7	456	4.3	2004	727	3.8	621	7.7	106	1.0
1972	4,479	24.0	4,041	50.6	438	4.1	2005	705	3.7	616	7.7	89	0.8
1973	3,763	20.3	3,325	42.1	438	4.1	2006	736	3.9	578	7.2	158	1.4
1974	3,676	19.8	3,145	40.5	531	4.9	2007	1,072	5.6	916	11.4	156	1.4
1975	3,266	17.7	2,864	37.8	402	3.7	2008	1,211	6.3	1,065	13.2	146	1.3
1976	2,746	15.2	2,494	33.2	252	2.4	2009	1,184	6.1	1,056	13.0	128	1.1
1977	2,153	12.0	1,881	25.1	272	2.6	2010	1,101	5.7	955	11.7	146	1.3
1978	2,283	12.6	2,058	27.8	225	2.1	2011	1,088	5.6	894	10.8	194	1.7
1979	2,865	15.9	2,561	35.5	304	2.8	2012	1,229	6.3	996	11.9	233	2.1
1980	2,729	15.1	2,393	33.2	336	3.1	2013	1,464	7.5	1,167	13.9	297	2.6
1981	3,036	17.5	2,581	36.7	455	4.4	2014	1,708	8.7	1,307	15.5	401	3.6
1982	3,059	17.6	2,580	37.1	479	4.6	2015	2,021	10.3	1,521	18.0	500	4.5
1983	2,879	16.5	2,459	35.6	420	4.0	2016	2,470	12.6	1,940	22.9	530	4.7
1984	2,618	14.9	2,280	32.5	338	3.2	2017	2,355	12.0	1,799	21.3	556	5.0
1985	2,531	14.5	2,169	30.3	362	3.5	2018	2,656	13.6	2,026	24.1	630	5.7
1986	2,397	13.5	2,112	29.2	285	2.7	2019	2,864	14.7	1,987	23.8	877	7.9
1987	4,910	27.5	4,542	62.1	368	3.5	2020	3,008	15.6	2,231	27.0	777	7.0

Figure 7. Gonorrhea by Year and Region, New York State, 1960 - 2020

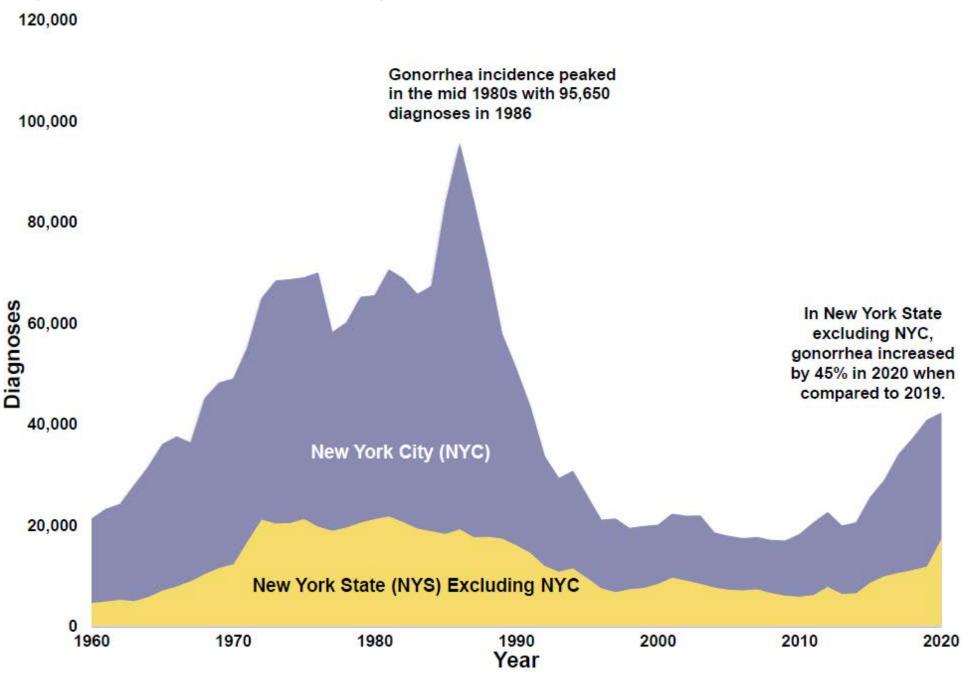
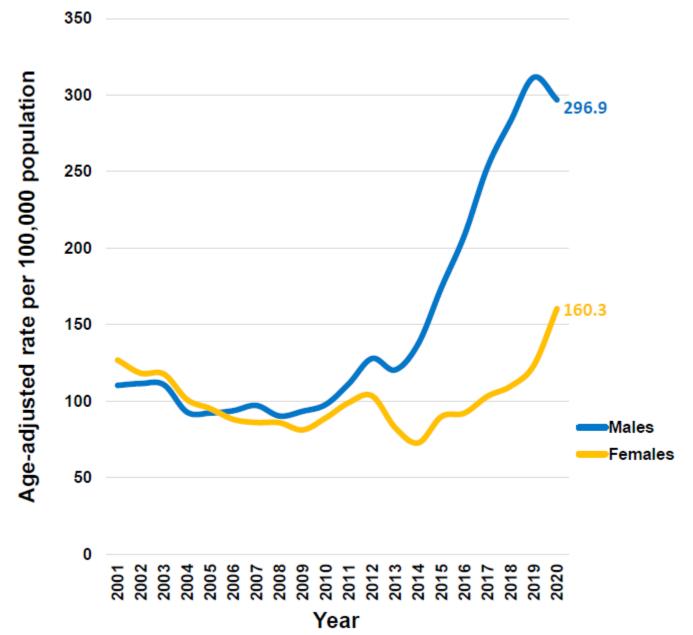


Figure 8. Gonorrhea Rates by Sex and Year, New York State, 2001 - 2020



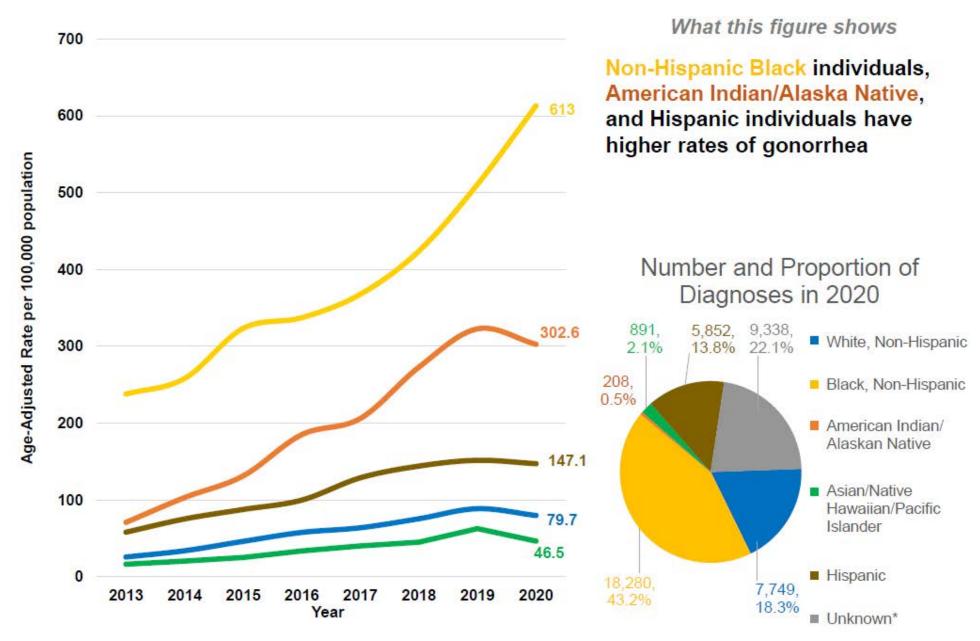
The vast majority of recent gonorrhea increases have been among males, though the rate among females has been increasing since 2014

2006 was the first year since 2001 where there were more gonorrhea diagnoses among males than among females

In 2020, diagnoses among females continued the upward trend as in prior years while diagnoses among males declined.

restrictions might have resulted in more heterosexual transmissions.

Figure 9. Gonorrhea Rates by Race/Ethnicity and Year, New York State, 2013 - 2020



\*Data on race/ethnicity should be interpreted with caution given high proportion of diagnoses with unknown information

Figure 10. Gonorrhea Rates by Age and Sex, New York State, 2020

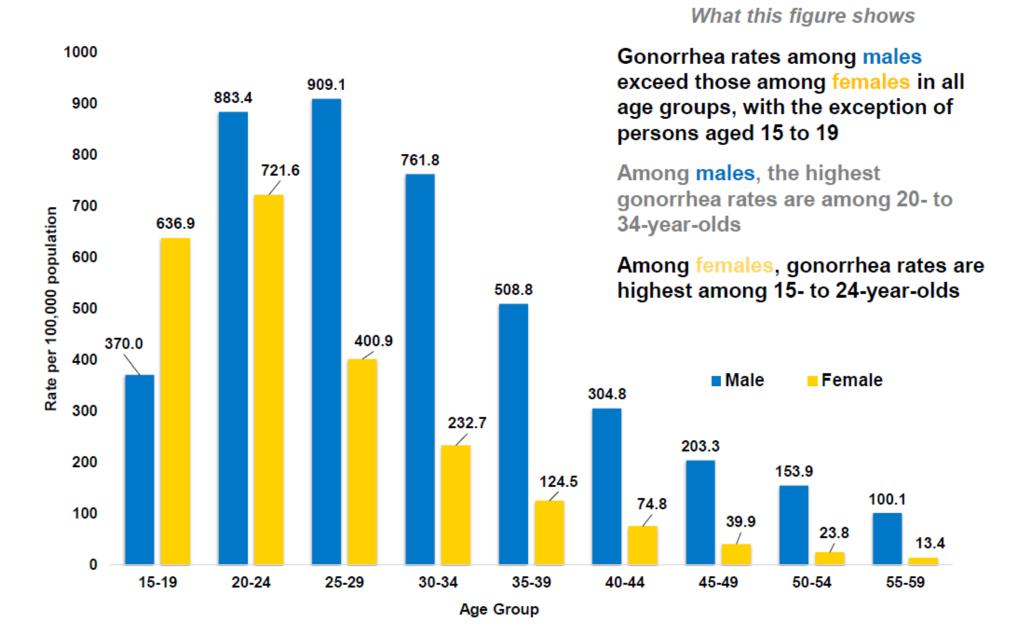


Table 10. Gonorrhea by Region/County and Sex, New York State, 2020

	Male		Fema	le	Total		
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
New York State (NYS)	27,672	296.9	14,559	160.3	42,318	228.3	
New York City (NYC)	18,168	438.4	6,772	174.7	25,027	303.3	
Bronx	3,737	541.1	2,159	306.3	5,939	419.7	
Kings	5,570	436.2	2,167	183.5	7,753	304.5	
New York	5,663	646.6	1,161	148.7	6,841	391.8	
Queens	2,842	264.6	1,040	105.9	3,893	185.2	
Richmond	356	163.3	245	115.1	601	138.7	
NYS excl. NYC	9,504	182.6	7,787	155.3	17,291	168.8	
Buffalo Region	2,175	309.2	1,642	242.6	3,817	275.6	
Allegany	6	18.1	3	19.8	9	19.5	
Cattaraugus	23	73.9	25	81.7	48	77.6	
Chautauqua	67	122.1	77	144.7	144	132.2	
Erie	1,764	406.2	1,252	294.3	3,016	349.3	
Genesee	22	88.0	16	65.8	38	76.6	
Niagara	267	295.1	233	266.4	500	279.7	
Orleans	21	111.2	26	157.2	47	133.0	
Wyoming	5	28.0	10	72.7	15	46.9	
Capital Region	1,112	156.8	1,058	156.2	2,170	156.3	
Albany	494	313.6	417	241.6	911	277.7	
Clinton	12	28.2	5	13.0	17	21.6	
Columbia	30	130.6	18	86.3	48	107.3	
Delaware	7	37.1	7	43.5	14	39.9	
Essex	2	12.3	2	17.0	4	14.4	
Franklin	8	24.3	4	20.0	12	22.8	
Fulton	48	212.9	38	182.6	86	197.8	
Greene	10	44.4	16	93.1	26	63.2	
Montgomery	38	173.2	38	180.8	76	175.1	
Otsego	13	47.4	15	53.4	28	50.5	
Rensselaer	168	216.6	196	271.8	364	240.8	
Saratoga	52	49.2	51	53.6	103	51.4	
Schenectady	196	273.5	228	321.0	424	295.9	
Schoharie	4	26.0	1	7.0	5	16.5	
Warren	17	63.9	14	55.4	31	59.0	
Washington	13	42.8	8	36.6	21	39.5	

	Male		Fema	le	Total	
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	1,316	158.4	1,385	172.7	2,701	165.2
Broome	164	180.2	146	163.4	310	171.3
Cayuga	46	132.0	55	187.5	101	157.7
Chenango	10	48.5	7	36.4	17	42.6
Cortland	19	86.1	14	65.1	33	76.1
Herkimer	15	59.6	18	74.1	33	66.4
Jefferson	121	171.8	109	219.3	230	192.5
Lewis	2	17.3	2	18.3	4	17.9
Madison	14	44.1	14	40.2	28	42.1
Oneida	166	153.2	181	183.6	347	167.2
Onondaga	651	302.5	747	335.4	1,398	319.0
Oswego	21	40.6	28	53.6	49	46.8
St Lawrence	12	19.0	16	30.0	28	23.9
Tioga	14	68.0	12	63.3	26	64.9
Tompkins	61	106.4	36	63.3	97	84.5
Rochester Region	2,382	405.6	2,112	366.4	4,494	385.0
Chemung	46	121.8	70	204.3	116	161.1
Livingston	21	71.2	18	54.0	39	64.2
Monroe	2,173	614.2	1,872	523.4	4,045	565.7
Ontario	44	89.8	30	66.5	74	78.0
Schuyler	1	12.2	3	47.4	4	29.8
Seneca	7	39.8	12	90.4	19	61.4
Steuben	12	30.1	22	58.6	34	44.0
Wayne	76	199.9	83	234.3	159	216.1
Yates	2	14.9	2	14.3	4	14.7
Hudson Valley	1,261	117.9	855	83.0	2,116	100.5
Dutchess	179	126.7	121	89.5	300	108.5
Orange	237	127.6	160	91.7	397	109.3
Putnam	25	54.8	6	14.5	31	35.2
Rockland	75	49.6	39	26.2	114	38.1
Sullivan	64	171.7	44	149.3	108	160.9
Ulster	72	85.2	77	101.2	149	93.3
Westchester	609	142.4	408	95.4	1,017	118.5
Long Island	1,258	97.3	735	59.0	1,993	78.2
Nassau	591	97.2	344	58.2	935	77.7
Suffolk	667	97.6	391	59.8	1,058	78.8

Table 6. Gonorrhea by Sex and Age, New York State, 2020

	New York (NYS		New Yor (NY)		NYS excl.	NYC
Age(yrs)	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
			Male			
10-14	37	6.6	21	9.4	16	4.8
15-19	2,171	370.0	1,219	560.0	952	257.9
20-24	5,482	883.4	3,195	1,328.4	2,287	601.8
25-29	6,485	909.1	4,340	1,234.1	2,145	593.1
30-34	5,396	761.8	3,931	1,088.2	1,465	422.1
35-39	3,203	508.8	2,287	773.1	916	274.5
40-44	1,743	304.8	1,227	484.3	516	162.1
45-49	1,142	203.3	762	320.3	380	117.4
50-54	934	153.9	588	243.9	346	94.6
55-59	639	100.1	384	158.8	255	64.3
60-64	273	45.5	138	62.1	135	35.7
65-69	115	23.4	48	26.5	67	21.6
70+	48	5.0	25	6.9	23	3.8
			Female			
10-14	172	32.3	101	47.0	71	22.3
15-19	3,611	636.9	1,859	867.9	1,752	496.7
20-24	4,496	721.6	2,073	795.7	2,423	668.4
25-29	2,865	400.9	1,252	333.1	1,613	476.0
30-34	1,632	232.7	681	185.4	951	284.9
35-39	795	124.5	321	104.6	474	142.9
40-44	442	74.8	203	74.8	239	74.8
45-49	236	39.9	109	42.0	127	38.3
50-54	153	23.8	77	29.1	76	20.1
55-59	92	13.4	57	21.1	35	8.4
60-64	37	5.6	23	8.9	14	3.5
65-69	9	1.6	6	2.7	3	0.9
70+	10	0.7	6	1.1	4	0.5

	New York State (NYS)		New Yor (NYC		NYS excl. NYC		
Age(yrs)	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
			Total				
10-14	209	19.2	122	27.8	87	13.4	
15-19	5,789	501.8	3,085	714.3	2,704	374.6	
20-24	9,989	803.3	5,279	1,053.6	4,710	634.3	
25-29	9,368	656.0	5,610	771.1	3,758	536.5	
30-34	7,057	500.7	4,641	636.9	2,416	354.8	
35-39	4,008	316.0	2,618	434.3	1,390	208.9	
40-44	2,193	188.6	1,438	274.0	755	118.3	
45-49	1,380	119.7	873	175.4	507	77.4	
50-54	1,089	87.1	667	131.9	422	56.7	
55-59	731	55.1	441	86.1	290	35.6	
60-64	310	24.6	161	33.5	149	19.2	
65-69	124	11.8	54	13.4	70	10.8	
70+	58	2.5	31	3.4	27	1.9	

Table 12. Gonorrhea by Region/County and Year, New York State, 2018 - 2020

	2018		2019	)	2020	)
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	37,322	196.0	40,896	217.0	42,318	228.3
New York City (NYC)	26,128	302.2	28,973	341.0	25,027	303.3
Bronx	5,220	352.8	5,932	410.1	5,939	419.7
Kings	7,592	283.7	8,989	343.8	7,753	304.5
New York	9,086	490.9	9,242	500.8	6,841	391.8
Queens	3,803	173.0	4,322	200.3	3,893	185.2
Richmond	427	96.5	488	111.9	601	138.7
NYS excl. NYC	11,194	107.0	11,923	115.0	17,291	168.8
Buffalo Region	2,856	201.2	2,521	179.3	3,817	275.6
Allegany	17	38.5	12	29.8	9	19.5
Cattaraugus	44	64.6	37	55.2	48	77.6
Chautauqua	172	153.7	138	122.3	144	132.2
Erie	2,249	256.4	1,942	222.1	3,016	349.3
Genesee	41	81.7	26	52.5	38	76.6
Niagara	304	163.6	337	184.0	500	279.7
Orleans	23	62.3	20	54.7	47	133.0
Wyoming	6	16.7	9	28.1	15	46.9
Capital Region	1,315	93.0	1,577	112.5	2,170	156.3
Albany	535	163.0	733	224.5	911	277.7
Clinton	33	41.3	29	35.3	17	21.6
Columbia	27	54.6	30	65.9	48	107.3
Delaware	6	14.7	10	24.8	14	39.9
Essex	7	24.7	11	39.4	4	14.4
Franklin	3	6.5	5	10.0	12	22.8
Fulton	32	73.0	28	62.3	86	197.8
Greene	16	35.2	16	39.3	26	63.2
Hamilton	-	-	1	35.9	-	
Montgomery	29	67.9	30	72.2	76	175.1
Otsego	29	46.6	26	42.7	28	50.5
Rensselaer	234	152.8	275	179.7	364	240.8
Saratoga	73	35.0	88	43.1	103	51.4
Schenectady	260	182.1	245	170.5	424	295.9
Schoharie	3	10.9	7	26.0	5	16.5
Warren	20	37.0	30	56.5	31	59.0
Washington	8	14.8	13	23.8	21	39.5

	2018	3	2019	)	2020	
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	1,874	110.5	1,819	109.0	2,701	165.2
Broome	196	104.9	208	111.7	310	171.3
Cayuga	109	163.4	62	95.6	101	157.7
Chenango	12	30.4	14	35.8	17	42.6
Cortland	19	33.4	23	43.7	33	76.1
Herkimer	14	24.8	20	38.8	33	66.4
Jefferson	102	78.2	95	79.0	230	192.5
Lewis	1	4.7	3	14.6	4	17.9
Madison	15	18.1	24	38.1	28	42.1
Oneida	115	54.4	160	77.4	347	167.2
Onondaga	1,085	242.7	1,017	228.7	1,398	319.0
Oswego	52	46.7	39	36.9	49	46.8
St Lawrence	32	30.1	24	23.8	28	23.9
Tioga	10	24.4	13	34.0	26	64.9
Tompkins	112	66.4	117	78.7	97	84.5
Rochester Region	2,159	181.2	2,652	224.1	4,494	385.0
Chemung	43	58.1	110	152.4	116	161.1
Livingston	17	28.6	40	63.3	39	64.2
Monroe	1,867	256.8	2,296	317.2	4,045	565.7
Ontario	72	74.1	58	59.5	74	78.0
Schuyler	3	21.7	8	62.6	4	29.8
Seneca	21	68.6	16	52.4	19	61.4
Steuben	46	54.9	67	82.3	34	44.0
Wayne	84	114.4	51	69.3	159	216.1
Yates	6	21.6	6	26.6	4	14.7
Hudson Valley	1,452	68.5	1,735	81.4	2,116	100.5
Dutchess	180	63.8	210	74.5	300	108.5
Orange	241	66.0	288	77.2	397	109.3
Putnam	23	24.9	30	36.3	31	35.2
Rockland	109	38.2	140	47.4	114	38.1
Sullivan	36	52.8	46	68.6	108	160.9
Ulster	98	60.6	115	71.0	149	93.3
Westchester	765	88.5	906	104.5	1,017	118.5
Long Island	1,538	59.2	1,619	63.1	1,993	78.2
Nassau	752	61.5	818	67.1	935	77.7
Suffolk	786	57.1	801	59.6	1,058	78.8

Table 13. Gonorrhea by Year and Region, New York State, 1958 - 2020

	New York Sta	ate (NYS)	New York Ci	ity (NYC)	NYS excl.	NYC		New York Sta	ite (NYS)	New York Cit	y (NYC)	NYS excl.	NYC
Year	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	Year	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1958	17,060	100.8	13,340	171.4	3,720	42.8	1990	51,090	284.4	34,990	474.4	16,100	152.3
1959	18,610	110.2	14,400	185.2	4,210	47.4	1991	43,530	242.3	28,940	395.3	14,590	136.7
1960	21,370	127.0	16,680	215.7	4,690	52.1	1992	33,720	188.1	21,710	296.5	12,010	112.6
1961	23,270	136.9	18,280	235.4	4,990	53.9	1993	29,350	161.9	18,470	250.5	10,880	100.9
1962	24,220	140.7	18,900	243.5	5,320	56.5	1994	30,790	167.4	19,250	258.6	11,540	106.4
1963	27,950	161.7	22,920	295.6	5,030	52.4	1995	25,970	143.0	16,360	218.8	9,610	88.3
1964	31,680	180.6	25,830	333.6	5,850	60.1	1996	21,140	114.1	13,530	181.4	7,610	69.9
1965	36,120	203.2	28,990	370.2	7,130	72.2	1997	21,360	120.6	14,560	193.0	6,800	62.4
1966	37,610	212.4	29,660	378.7	7,950	80.4	1998	19,500	99.0	12,100	159.7	7,400	67.3
1967	36,380	201.5	27,380	341.1	9,000	90.0	1999	19,870	112.6	12,210	161.1	7,660	69.5
1968	45,250	249.4	34,830	432.5	10,420	103.5	2000	20,110	88.2	11,670	145.6	8,440	77.0
1969	48,290	265.0	36,690	454.5	11,600	114.3	2001	22,294	116.8	12,614	156.5	9,680	87.8
1970	49,080	265.5	36,730	454.6	12,350	119.7	2002	21,925	114.6	12,811	158.7	9,114	82.4
1971	55,240	298.6	38,400	486.4	16,840	159.9	2003	21,952	114.5	13,466	166.9	8,486	76.4
1972	64,940	347.8	43,760	548.4	21,180	199.0	2004	18,579	96.9	10,860	135.0	7,719	69.4
1973	68,470	368.5	48,060	609.1	20,410	190.0	2005	17,912	93.6	10,596	132.2	7,316	65.8
1974	68,740	369.5	48,220	620.2	20,520	189.8	2006	17,459	91.4	10,299	128.8	7,160	64.4
1975	69,130	374.9	47,840	631.7	21,290	196.4	2007	17,699	92.5	10,310	128.7	7,389	66.5
1976	70,060	389.0	50,260	669.3	19,800	187.6	2008	17,120	89.1	10,483	129.9	6,637	59.6
1977	58,280	324.6	39,300	524.3	18,980	179.8	2009	17,009	88.1	10,898	134.0	6,111	54.7
1978	60,190	332.2	40,570	547.6	19,620	183.8	2010	18,270	94.2	12,354	150.8	5,916	52.8
1979	65,250	361.1	44,660	578.1	20,590	192.9	2011	20,643	105.9	14,403	174.1	6,240	55.6
1980	65,560	363.3	44,280	614.8	21,280	198.1	2012	22,631	115.6	14,747	176.7	7,884	70.2
1981	70,690	406.9	48,890	695.5	21,800	208.4	2013	19,960	101.7	13,500	160.8	6,460	57.5
1982	68,920	396.8	48,210	694.2	20,710	198.4	2014	20,594	104.8	13,978	165.7	6,616	59.0
1983	65,830	378.2	46,410	672.8	19,420	186.0	2015	25,632	130.4	16,913	199.8	8,719	77.9
1984	67,420	383.6	48,540	692.2	18,880	181.2	2016	29,048	147.9	19,029	224.7	10,019	89.7
1985	83,850	479.1	65,510	914.8	18,340	176.1	2017	34,111	174.1	23,491	278.4	10,620	95.2
1986	95,650	537.7	76,400	1,055.2	19,250	182.9	2018	37,322	191.0	26,128	311.2	11,194	100.4
1987	84,250	472.6	66,540	909.9	17,710	168.1	2019	40,896	210.1	28,973	347.3	11,923	107.2
1988	71,900	400.3	54,100	722.8	17,800	168.7	2020	42,318	218.8	25,027	303.2	17,291	156.0
1989	57.980	323.8	40,550	550.5	17,430	165.3							

Figure 11. Chlamydia by Year and Region, New York State, 2001 - 2020

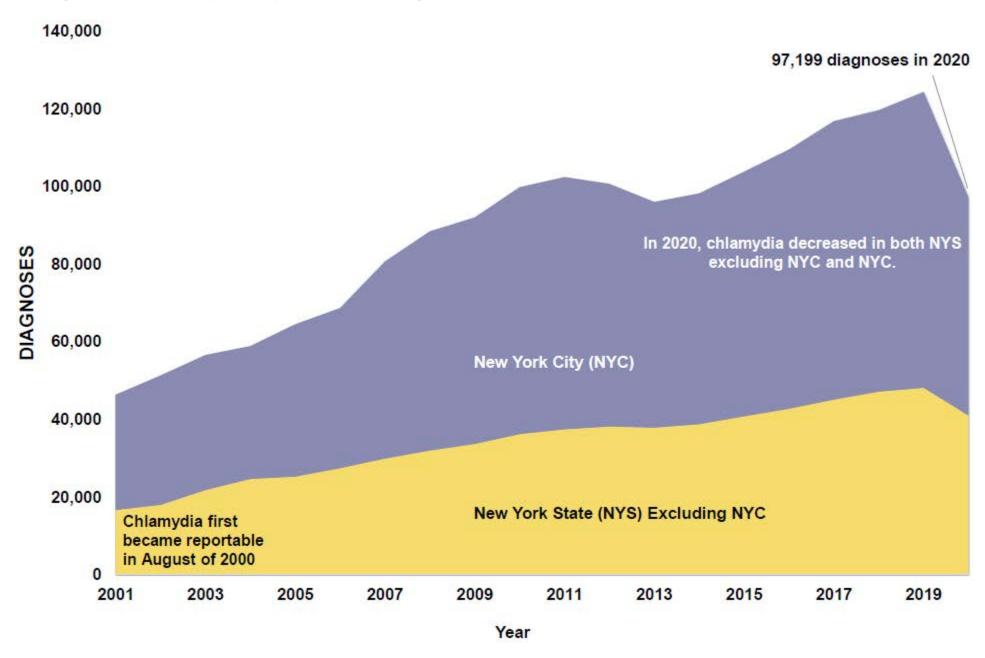
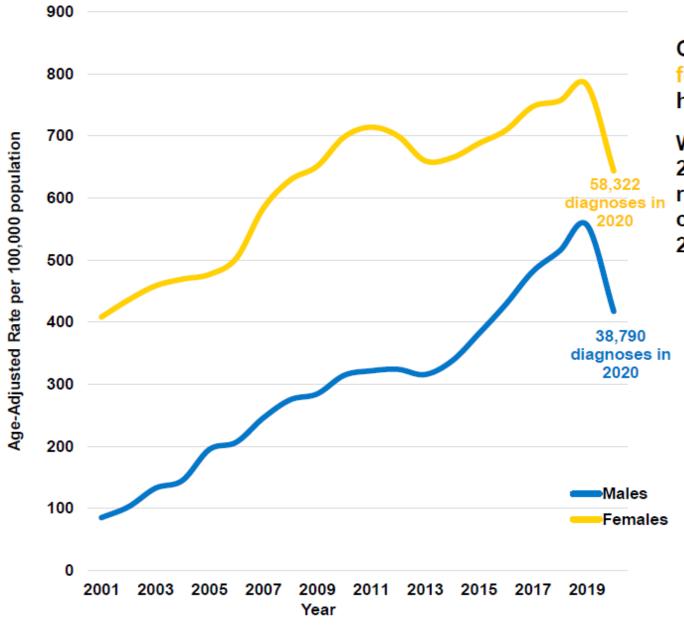


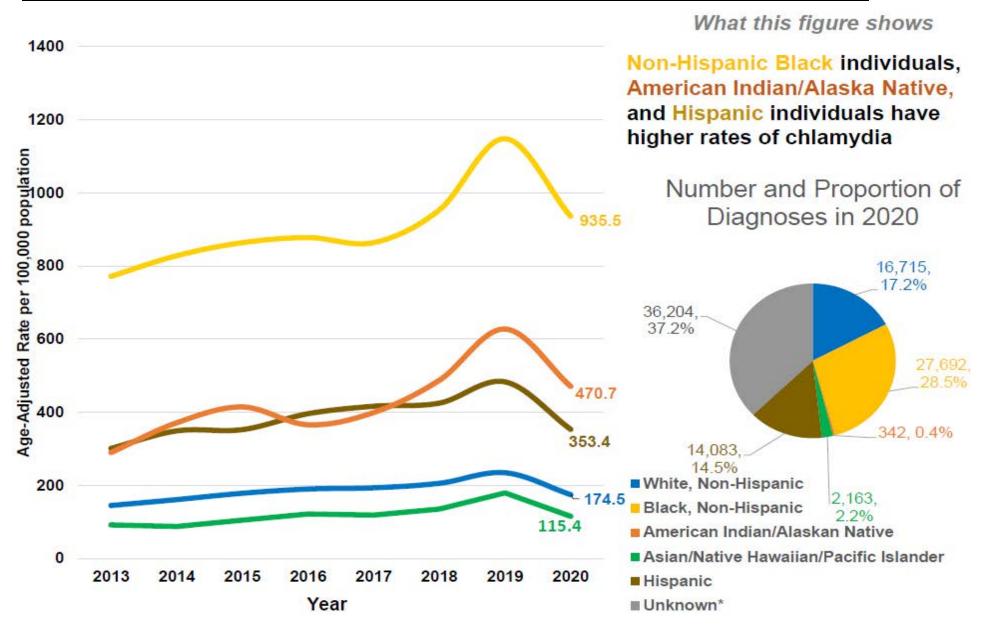
Figure 12. Chlamydia Rates by Sex and Year, New York State, 2001 - 2020



Chlamydia rates among females continue to be higher than males

With the exception of 2020, the female to male ratio of diagnoses have continued to narrow since 2001.

Figure 13. Chlamydia Rates by Race/Ethnicity and Year, New York State, 2013 - 2020



<sup>\*</sup>Data on race/ethnicity should be interpreted with caution given high proportion of diagnoses with unknown information

Figure 14. Chlamydia Rates by Age and Sex, New York State, 2020

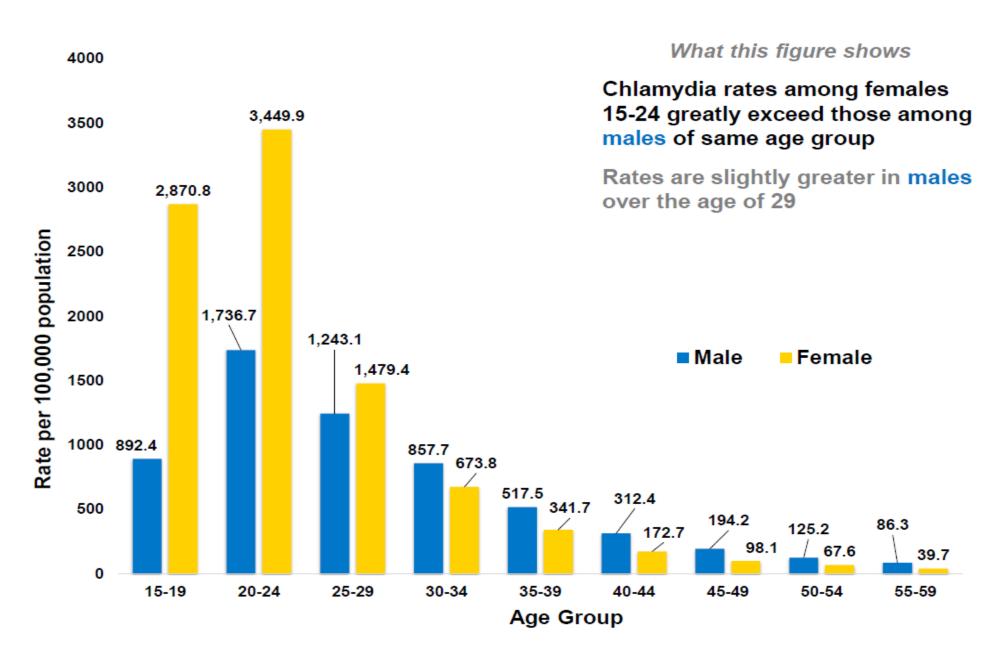


Table 14. Chlamydia by Region/County and Sex, New York State, 2020

	Male		Fema	ale	Total		
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
New York State (NYS)	38,790	417.5	58,322	643.9	97,199	529.6	
New York City (NYC)	24,975	616.2	31,105	796.8	56,167	707.4	
Bronx	5,145	735.6	9,086	1,281.7	14,265	1,004.9	
Kings	7,550	612.0	9,563	8.008	17,129	705.9	
New York	7,253	837.3	5,044	623.1	12,315	734.6	
Queens	4,554	439.4	6,450	662.5	11,022	550.9	
Richmond	473	215.6	962	452.2	1,436	332.4	
NYS excl. NYC	13,815	261.1	27,217	534.1	41,032	394.2	
Buffalo Region	2,230	317.0	4,539	669.4	6,769	489.6	
Allegany	24	96.5	87	369.1	111	223.2	
Cattaraugus	51	151.2	117	359.3	168	252.5	
Chautauqua	150	261.3	355	643.2	505	445.6	
Erie	1,722	399.3	3,216	761.4	4,938	578.5	
Genesee	37	143.0	90	389.9	127	260.6	
Niagara	202	221.0	548	631.6	750	421.9	
Orleans	30	163.2	76	444.5	106	296.1	
Wyoming	14	70.1	50	349.6	64	194.0	
Capital Region	1,636	225.4	3,287	480.6	4,923	349.0	
Albany	605	369.0	960	550.7	1,565	462.0	
Clinton	65	148.8	138	342.4	203	241.3	
Columbia	42	176.4	105	511.7	147	331.4	
Delaware	16	77.3	45	262.6	61	163.6	
Essex	17	99.2	31	256.5	48	167.9	
Franklin	22	68.6	50	269.7	72	144.8	
Fulton	37	164.0	109	532.3	146	342.6	
Greene	36	160.4	64	404.7	100	253.0	
Hamilton	-	-	1	76.0	1	36.4	
Montgomery	54	250.4	115	558.7	169	400.9	
Otsego	44	130.7	88	222.4	132	180.6	
Rensselaer	217	276.9	492	690.7	709	469.5	
Saratoga	134	128.6	310	325.7	444	225.6	
Schenectady	268	370.2	577	820.8	845	590.9	
Schoharie	17	124.3	35	252.6	52	187.1	
Warren	38	152.8	69	286.9	107	217.3	
Washington	24	85.9	98	448.4	122	242.7	

Region/County         Diagnoses         Rate         Diagnoses         Rate         Diagnoses           Central Region         2,190         248.8         4,395         520.2         6,585           Broome         251         247.8         484         482.1         735	Rate 380.6 359.9
Broome 251 247.8 484 482.1 735	
25. 25.5	359.9
C	
Cayuga 73 208.4 156 521.1 229	353.6
Chenango 20 107.0 58 321.7 78	210.6
Cortland 61 209.9 119 382.5 180	299.3
Herkimer 47 179.0 110 439.6 157	305.5
Jefferson 274 338.8 437 844.9 711	548.6
Lewis 16 147.0 36 340.9 52	241.1
Madison 31 81.0 113 305.4 144	194.4
Oneida 197 181.0 499 501.8 696	333.0
Onondaga 876 402.0 1,745 772.0 2,621	589.8
Oswego 68 123.3 189 343.9 257	230.3
St Lawrence 82 136.1 157 299.3 239	212.1
Tioga 27 134.5 68 361.0 95	244.4
Tompkins 167 265.2 224 288.5 391	276.4
Rochester Region 2,355 399.5 4,335 747.3 6,690	570.9
Chemung 97 257.6 242 708.9 339	475.2
Livingston 51 135.8 83 221.9 134	178.4
Monroe 1,940 544.4 3,417 957.8 5,357	748.4
Ontario 82 173.8 168 359.4 250	264.6
Schuyler 7 103.9 23 377.4 30	233.4
Seneca 11 62.5 49 365.7 60	191.5
Steuben 64 160.1 128 342.4 192	248.4
Wayne 92 248.8 202 579.7 294	411.2
Yates 11 100.0 23 173.5 34	139.7
<b>Hudson Valley</b> 2,407 221.5 4,688 446.4 7,095	330.8
Dutchess 292 202.9 599 425.1 891	312.8
Orange 485 241.7 945 528.7 1,430	373.3
Putnam 53 121.4 85 208.4 138	162.6
Rockland 328 219.3 607 406.4 935	310.5
Sullivan 55 158.7 158 516.8 213	328.0
Ulster 139 171.7 332 431.3 471	300.6
Westchester 1,055 244.4 1,962 454.3 3,017	348.6
<b>Long Island</b> 2,997 230.7 5,973 477.8 8,970	351.5
Nassau 1,500 246.2 2,673 454.3 4,173	347.9
Suffolk 1,497 217.0 3,300 498.5 4,797	354.5

Rates are per 100,000 residents and age-adjusted.

Table 15. Chlamydia by Sex and Age, New York State, 2020

	New York State (NYS)		New Yor (NY)		NYS excl. NYC		
Age(yrs)	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
			Male				
10-14	69	12.4	41	18.3	28	8.4	
15-19	5,236	892.4	2,843	1,306.1	2,393	648.4	
20-24	10,777	1,736.7	5,811	2,416.0	4,966	1,306.8	
25-29	8,867	1,243.1	5,956	1,693.7	2,911	804.9	
30-34	6,075	857.7	4,539	1,256.5	1,536	442.6	
35-39	3,258	517.5	2,482	839.0	776	232.5	
40-44	1,786	312.4	1,326	523.3	460	144.5	
45-49	1,091	194.2	803	337.6	288	88.9	
50-54	760	125.2	571	236.8	189	51.7	
55-59	551	86.3	390	161.3	161	40.6	
60-64	212	35.3	138	62.1	74	19.6	
65-69	62	12.6	45	24.8	17	5.5	
70+	33	3.4	23	6.4	10	1.6	
			Female				
10-14	564	105.9	316	147.1	248	78.0	
15-19	16,275	2,870.8	8,174	3,816.0	8,101	2,296.7	
20-24	21,494	3,449.9	10,787	4,140.5	10,707	2,953.6	
25-29	10,573	1,479.4	6,028	1,603.9	4,545	1,341.4	
30-34	4,725	673.8	2,795	760.7	1,930	578.1	
35-39	2,183	341.7	1,314	428.0	869	261.9	
40-44	1,021	172.7	630	232.1	391	122.3	
45-49	580	98.1	396	152.5	184	55.5	
50-54	435	67.6	305	115.2	130	34.3	
55-59	273	39.7	213	78.8	60	14.4	
60-64	116	17.6	89	34.5	27	6.8	
65-69	41	7.3	31	13.9	10	3.0	
70+	22	1.6	15	2.8	7	0.9	

	New York State (NYS)		New York (NYC		NYS excl. NYC		
Age(yrs)	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
			Total				
10-14	633	58.1	357	81.4	276	42.4	
15-19	21,514	1,864.8	11,020	2,551.7	10,494	1,453.9	
20-24	32,284	2,596.1	16,611	3,315.3	15,673	2,110.8	
25-29	19,461	1,362.8	12,005	1,650.2	7,456	1,064.4	
30-34	10,825	768.0	7,359	1,010.0	3,466	509.0	
35-39	5,456	430.2	3,811	632.2	1,645	247.2	
40-44	2,811	241.7	1,960	373.4	851	133.4	
45-49	1,675	145.3	1,203	241.7	472	72.0	
50-54	1,196	95.6	877	173.4	319	42.8	
55-59	825	62.2	604	118.0	221	27.1	
60-64	328	26.1	227	47.3	101	13.0	
65-69	103	9.8	76	18.8	27	4.2	
70+	55	2.4	38	4.2	17	1.2	

Table 16. Chlamydia Among Young Females, by Age and Region/County New York State, 2020

	15-19 yrs		20-24	yrs	15-24 yrs		
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
New York State (NYS)	16,275	2,870.8	21,494	3,449.9	37,769	3,174.0	
New York City (NYC)	8,174	3,816.0	10,787	4,140.5	18,961	3,994.1	
Bronx	2,706	6,044.0	3,229	6,704.2	5,935	6,386.1	
Kings	2,568	3,936.8	3,222	4,156.2	5,790	4,055.9	
New York	1,218	3,381.2	1,780	3,015.9	2,998	3,154.3	
Queens	1,432	2,655.2	2,199	3,556.2	3,631	3,136.5	
Richmond	250	1,754.6	357	2,554.2	607	2,150.6	
NYS excl. NYC	8,101	2,296.7	10,707	2,953.6	18,808	2,629.6	
Buffalo Region	1,470	3,209.3	1,765	3,797.8	3,235	3,505.7	
Allegany	39	2,033.4	27	1,418.8	66	1,727.3	
Cattaraugus	29	1,160.9	50	2,266.5	79	1,679.4	
Chautauqua	121	2,859.2	129	3,464.0	250	3,142.3	
Erie	1,044	3,800.8	1,283	4,379.1	2,327	4,099.3	
Genesee	14	853.1	43	2,870.5	57	1,815.9	
Niagara	193	3,278.4	182	3,153.7	375	3,216.7	
Orleans	15	1,316.9	29	2,478.6	44	1,905.6	
Wyoming	15	1,469.1	22	2,433.6	37	1,922.1	
Capital Region	1,057	2,342.4	1,289	2,511.4	2,346	2,432.3	
Albany	335	3,024.8	357	2,218.6	692	2,547.3	
Clinton	37	1,417.1	62	1,756.9	99	1,612.4	
Columbia	31	2,279.4	42	3,134.3	73	2,703.7	
Delaware	14	1,073.6	18	1,562.5	32	1,302.9	
Essex	9	1,107.0	12	1,532.6	21	1,315.8	
Franklin	10	762.8	23	1,919.9	33	1,315.3	
Fulton	40	2,816.9	37	2,750.9	77	2,784.8	
Greene	20	2,103.0	20	1,867.4	40	1,978.2	
Hamilton	1	1,052.6	-	0.0	1	584.8	
Montgomery	34	2,367.7	44	3,237.7	78	2,790.7	
Otsego	29	1,072.1	47	1,367.1	76	1,237.2	
Rensselaer	163	3,479.2	179	3,721.4	342	3,601.9	
Saratoga	88	1,321.9	147	2,322.6	235	1,809.6	
Schenectady	188	4,050.0	221	4,589.8	409	4,324.8	
Schoharie	15	1,362.4	12	1,269.8	27	1,319.6	
Warren	17	1,114.0	31	1,884.5	48	1,513.7	
Washington	26	1,814.4	37	2,644.7	63	2,224.6	

	15-19 yrs		20-24	20-24 yrs		yrs
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	1,331	2,243.5	1,781	2,763.9	3,112	2,514.5
Broome	167	2,467.9	184	1,998.3	351	2,197.2
Cayuga	41	1,988.4	57	2,767.0	98	2,377.5
Chenango	19	1,517.6	24	2,083.3	43	1,788.7
Cortland	34	1,453.6	57	1,940.1	91	1,724.5
Herkimer	43	2,266.7	49	3,047.3	92	2,624.8
Jefferson	95	3,368.8	221	5,753.7	316	4,744.0
Lewis	10	1,347.7	12	1,791.0	22	1,558.1
Madison	39	1,306.1	48	1,744.8	87	1,516.5
Oneida	159	2,255.0	200	2,924.0	359	2,584.4
Onondaga	525	3,295.7	663	4,207.9	1,188	3,749.3
Oswego	59	1,458.6	82	2,191.3	141	1,810.7
St Lawrence	50	1,156.9	57	1,391.9	107	1,271.2
Tioga	27	1,976.6	23	1,844.4	50	1,913.5
Tompkins	63	1,096.0	104	1,219.4	167	1,169.7
Rochester Region	1,286	3,255.0	1,649	4,072.3	2,935	3,668.7
Chemung	73	3,012.8	90	3,977.0	163	3,478.4
Livingston	23	868.3	46	1,413.2	69	1,168.7
Monroe	1,026	4,328.7	1,275	5,157.3	2,301	4,751.8
Ontario	41	1,202.7	65	1,973.9	106	1,581.6
Schuyler	11	2,669.9	8	1,941.7	19	2,305.8
Seneca	9	1,036.9	19	2,166.5	28	1,604.6
Steuben	33	1,260.5	63	2,582.0	96	1,898.0
Wayne	64	2,567.2	72	3,246.2	136	2,886.9
Yates	6	642.4	11	1,085.9	17	873.1
Hudson Valley	1,335	1,733.7	1,799	2,472.7	3,134	2,092.7
Dutchess	191	1,870.5	239	2,280.1	430	2,078.0
Orange	290	2,153.1	360	2,940.7	650	2,528.1
Putnam	20	679.1	37	1,329.0	57	994.9
Rockland	167	1,449.3	245	2,359.6	412	1,880.8
Sullivan	41	1,934.9	59	2,938.2	100	2,423.1
Ulster	107	1,988.1	120	2,256.9	227	2,121.7
Westchester	519	1,655.2	739	2,501.9	1,258	2,065.9
Long Island	1,622	1,887.1	2,424	2,785.3	4,046	2,339.0
Nassau	706	1,740.2	1,053	2,598.1	1,759	2,168.9
Suffolk	916	2,018.6	1,371	2,948.5	2,287	2,489.2

Table 17. Chlamydia by Region/County and Year, New York State, 2018 - 2020

	2018		201	9	2020		
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
New York State (NYS)	119,670	634.4	124,389	668.3	97,199	529.6	
New York City (NYC)	72,445	881.3	76,206	942.2	56,167	707.4	
Bronx	17,704	1,191.7	18,369	1,269.2	14,265	1,004.9	
Kings	21,696	863.2	23,171	939.1	17,129	705.9	
New York	17,240	1,001.0	17,889	1,037.4	12,315	734.6	
Queens	14,087	674.4	14,859	725.7	11,022	550.9	
Richmond	1,718	394.0	1,918	443.2	1,436	332.4	
NYS excl. NYC	47,225	443.9	48,183	457.8	41,032	394.2	
Buffalo Region	7,798	550.7	7,744	552.6	6,769	489.6	
Allegany	158	296.2	136	261.1	111	223.2	
Cattaraugus	216	316.9	225	334.5	168	252.5	
Chautauqua	606	518.3	621	534.4	505	445.6	
Erie	5,449	624.1	5,463	631.7	4,938	578.5	
Genesee	156	314.2	149	296.8	127	260.6	
Niagara	994	545.4	933	519.5	750	421.9	
Orleans	164	439.1	151	412.8	106	296.1	
Wyoming	55	158.9	66	189.1	64	194.0	
Capital Region	6,033	414.8	5,839	408.0	4,923	349.0	
Albany	1,932	545.2	2,006	578.5	1,565	462.0	
Clinton	303	344.3	269	316.6	203	241.3	
Columbia	201	436.5	162	353.7	147	331.4	
Delaware	95	242.5	96	257.4	61	163.6	
Essex	83	288.7	61	217.2	48	167.9	
Franklin	107	218.2	106	223.1	72	144.8	
Fulton	213	478.1	166	380.0	146	342.6	
Greene	146	356.2	136	338.6	100	253.0	
Hamilton	4	116.0	3	105.3	1	36.4	
Montgomery	153	351.8	149	352.9	169	400.9	
Otsego	220	302.8	271	386.6	132	180.6	
Rensselaer	804	516.0	735	473.1	709	469.5	
Saratoga	547	270.5	491	248.1	444	225.6	
Schenectady	817	564.3	861	598.6	845	590.9	
Schoharie	67	226.6	76	262.6	52	187.1	
Warren	204	398.2	136	266.5	107	217.3	
Washington	137	264.0	115	221.8	122	242.7	

	2018		2019	)	2020		
Region/County	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
Central Region	7,786	436.1	7,576	432.1	6,585	380.6	
Broome	623	298.9	704	350.9	735	359.9	
Cayuga	259	384.1	263	404.4	229	353.6	
Chenango	99	253.5	102	266.2	78	210.6	
Cortland	203	307.4	231	368.9	180	299.3	
Herkimer	166	312.4	159	303.9	157	305.5	
Jefferson	873	660.5	776	582.0	711	548.6	
Lewis	61	278.9	50	227.5	52	241.1	
Madison	201	263.9	212	289.3	144	194.4	
Oneida	917	429.5	849	402.3	696	333.0	
Onondaga	3,211	703.8	2,950	657.3	2,621	589.8	
Oswego	328	281.4	338	294.6	257	230.3	
St Lawrence	294	244.4	307	263.1	239	212.1	
Tioga	92	234.2	123	315.4	95	244.4	
Tompkins	459	272.0	512	321.0	391	276.4	
Rochester Region	6,874	570.8	7,365	620.0	6,690	570.9	
Chemung	319	437.2	381	531.3	339	475.2	
Livingston	170	228.1	163	229.2	134	178.4	
Monroe	5,338	727.7	5,758	794.6	5,357	748.4	
Ontario	329	334.0	311	320.9	250	264.6	
Schuyler	24	176.6	33	240.3	30	233.4	
Seneca	84	255.8	80	260.6	60	191.5	
Steuben	264	330.1	298	379.5	192	248.4	
Wayne	291	385.0	306	419.9	294	411.2	
Yates	55	221.8	35	154.2	34	139.7	
Hudson Valley	8,823	407.1	9,427	436.4	7,095	330.8	
Dutchess	1,169	400.7	1,158	400.0	891	312.8	
Orange	1,563	403.5	1,738	449.0	1,430	373.3	
Putnam	187	209.3	212	242.5	138	162.6	
Rockland	1,105	365.1	1,182	384.3	935	310.5	
Sullivan	273	425.2	280	435.1	213	328.0	
Ulster	601	373.8	603	379.8	471	300.6	
Westchester	3,925	449.5	4,254	490.3	3,017	348.6	
Long Island	9,911	381.7	10,232	397.7	8,970	351.5	
Nassau	4,784	389.9	4,928	406.3	4,173	347.9	
Suffolk	5,127	374.4	5,304	390.2	4,797	354.5	

Table 18. Chlamydia by Year and Region, New York State, 2001 - 2020

	New York State (NYS)		New York (NYC		NYS excl. NYC		
Year	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate	
2001	46,385	243.1	29,649	367.9	16,736	151.8	
2002	51,344	268.3	33,276	412.2	18,068	163.3	
2003	56,632	295.3	34,776	431.0	21,856	196.8	
2004	58,907	307.3	34,187	425.0	24,720	222.1	
2005	64,528	337.3	39,215	489.4	25,313	227.7	
2006	68,725	359.7	41,236	515.8	27,489	247.4	
2007	80,734	422.0	50,755	633.3	29,979	269.6	
2008	88,459	460.4	56,448	699.6	32,011	287.2	
2009	92,075	476.9	58,353	717.6	33,722	301.7	
2010	99,821	514.5	63,544	775.9	36,277	323.6	
2011	102,460	525.4	64,966	785.3	37,494	334.0	
2012	100,687	514.4	62,460	748.3	38,227	340.5	
2013	96,020	489.2	58,098	692.0	37,922	337.7	
2014	98,262	500.0	59,417	704.5	38,845	346.2	
2015	103,825	528.2	62,965	744.0	40,860	365.0	
2016	109,549	557.9	66,748	788.1	42,801	383.3	
2017	116,843	596.3	71,690	849.6	45,153	404.7	
2018	119,670	612.3	72,445	862.8	47,225	423.6	
2019	124,389	639.1	76,206	913.4	48,183	433.3	
2020	97,199	502.7	56,167	680.5	41,032	370.2	

## **Technical Notes: Data Sources**

- 1. The 2020 STI morbidity data for New York State exclusive of New York City were obtained for diagnoses meeting federal case definition and reported by the 57 local health departments outside of New York City to the New York State Department of Health (NYS DOH) Communicable Disease Electronic Surveillance System (CDESS). STI Surveillance data in this report include diagnoses reported to CDESS in 2020 and closed by September 22, 2021.
- 2. The 2020 New York City STI morbidity data were obtained from data provided by the New York City Department of Health and Mental Hygiene (NYC DOHMH) Bureau of STI in December 2021. The Maven surveillance system is the source of surveillance information for STI diagnoses reported among residents of the five boroughs of New York City.
- 3. Rates were calculated using U.S. population data available from the National Cancer Institute Surveillance, Epidemiology, and End Results Program (SEER). SEER population estimates were used to calculate rates by county, age, race/ethnicity, and sex. Rates are age-adjusted to the U.S. population to enable comparison of rates between areas or demographic groups with differing age structures.

<sup>§</sup> Surveillance, Epidemiology, and End Results (SEER) Program Populations (1969-2020) (<a href="www.seer.cancer.gov/popdata">www.seer.cancer.gov/popdata</a>), National Cancer Institute, DCCPS, Surveillance Research Program, released February 2022.

## **Technical Notes: STI Statistics**

- 1. Reportable STIs in New York State include syphilis, gonorrhea, chlamydia, chancroid, and lymphogranuloma venereum (LGV). Reporting requirements for granuloma inguinale are limited to residents of the five boroughs of New York City. Statistics for chancroid, granuloma inguinale, and LGV were not included in this report due to the small numbers of reported cases.
- 2. Individual STI diagnoses were aggregated at the state and county level, by disease, age, sex, and race/ethnicity.
- 3. The STI rates were calculated by the number of STI diagnoses reported divided by the source population.
- 4. Race and ethnicity surveillance information is collected according to standards for the classification of federal data on race and ethnicity issued by the Office of Management and Budget. The race and ethnicity information presented in this report is based on the following categories: Black, non-Hispanic; Hispanic (regardless of race designation); Asian, non-Hispanic (combined Asian and Native Hawaiian/Pacific Islander); and White, non-Hispanic. Limited data are presented for diagnoses reported among Native American/Alaskan Native, multi-race, or other race due to low numbers which make the interpretation of rates unreliable. Laboratories account for the majority of case reports, a source which does not routinely collect data on race/ethnicity. The amount of missing race/ethnicity data also limits the interpretation of race/ethnicity trends. Adjustments have not been made to records with missing race/ethnicity information.
- 5. Sex presented in this report is limitedly categorized into male and female only. Future reports will also display STI rates and diagnoses by gender identity at the time of diagnosis.
- 6. In 2005, CDC revised the definition for neurosyphilis. Neurological involvement can occur at any stage for syphilis diagnoses; thus, neurosyphilis is not classified as a separate stage for syphilis and is considered as a subset of syphilis diagnoses. NYC DOHMH began using the new case definition for neurosyphilis in 2005 and in the rest of the state, the new definition for neurosyphilis was adopted in 2006.
- 7. Chlamydia became reportable in New York State outside New York City in August 2000; thus, statewide trends are provided for 2001 2020.
- 8. Some diagnoses did not have valid information on age, sex, or race/ethnicity. They were included in the calculation for the total number of diagnoses, but not included in the calculation for the age-, sex-, and/or race/ethnicity-specific rates/incidence.
- 9. Strata in which there were no diagnoses reported are presented as "-".
- 10. All data were analyzed using SAS® Version 9.4 software (SAS Institute, Inc., Cary, North Carolina).

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# **Technical Notes: Citation and Contact Information**

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