

Sexually Transmitted Infections

Surveillance Report

New York State

2019

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This document summarizes 2019 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](#)¹. More detailed information on data collected are provided in the Technical Notes section.

In 2019, reported diagnoses of chlamydia and gonorrhea increased for the sixth consecutive year, while primary and secondary syphilis increased after showing a decline in 2017. Data from the [Centers for Disease Control and Prevention](#)² (CDC) ranks New York State 9th, 17th, and 11th among all states in 2019 for the total number of diagnoses of chlamydia, gonorrhea, and primary and secondary syphilis, respectively; and 4th 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.

Since chlamydia became a reportable STI in 2000, the number of diagnoses has dominated other reportable STIs. In 2019, it continued to be the most commonly reportable STI in NYS with 124,389 diagnoses (3.9% increase over 2018). The highest rates were among females 15-24 years of age.

Gonorrhea diagnoses increased 9.6% in 2019, to 40,896 reported diagnoses. The increase among females was higher than males (10.6% compared to 9.2%). Additionally, the rates were highest among males 20-34, and among females 15-24.

Primary and secondary syphilis diagnoses increased 8% in 2019 compared to 2018 the national percent increase was 11.2% for the same period. Diagnoses among males accounted for 91.9% of primary and secondary syphilis diagnoses; 70.2% of males diagnosed with primary or secondary syphilis reported other males as their sex partners. In 2019, males accounted for the vast majority of diagnoses; rates of primary and secondary syphilis among females continued to increase 5-fold compared to 2014 rates. Additionally, in 2019, 27 diagnoses of congenital syphilis were reported statewide, a 7% decrease compared to 2018 (29 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. 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.

Syphilis³ is an STI caused by the bacterium *Treponema pallidum*, and is spread through vaginal, anal, or oral sex.

Syphilis is generally classified in four stages that occur sequentially unless treated:

- 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, 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 antibiotics⁴, 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 [CDC case definitions](#)⁵ 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 their pregnant parent with untreated 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 [CDC case definition](#)⁶.

Gonorrhea⁷ is an STI caused by the bacterium *Neisseria gonorrhoeae*, and is spread through oral, anal, or vaginal sex. Gonorrhea can also be passed from mother to infant during vaginal delivery.

Vaginal symptoms, which usually begin within 5-60 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 antibiotics⁸; however, antimicrobial resistant gonorrhea⁹ is increasingly a concern. Recently, CDC updated treatment recommendations¹⁰ for uncomplicated gonorrhea to a single 500 mg intramuscular dose of ceftriaxone.

Gonorrhea data presented in this surveillance report represent confirmed or probable cases according to the CDC case definition¹¹.

Chlamydia¹² is an STI caused by the bacterium *Chlamydia trachomatis*, and is spread through oral, anal, or vaginal sex. It is the most common notifiable infection in the United States. 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, or spread from another infected area, such as the vagina. Untreated chlamydial infections may lead to an infection of the female reproductive organs, 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 antibiotics¹³. Partner treatment¹⁴ is crucial for the prevention of repeat infections.

Chlamydia data presented in this surveillance report represent confirmed cases according to the CDC case definition¹⁵.

Figure 1. STI Diagnoses By Age

New York State, 2019

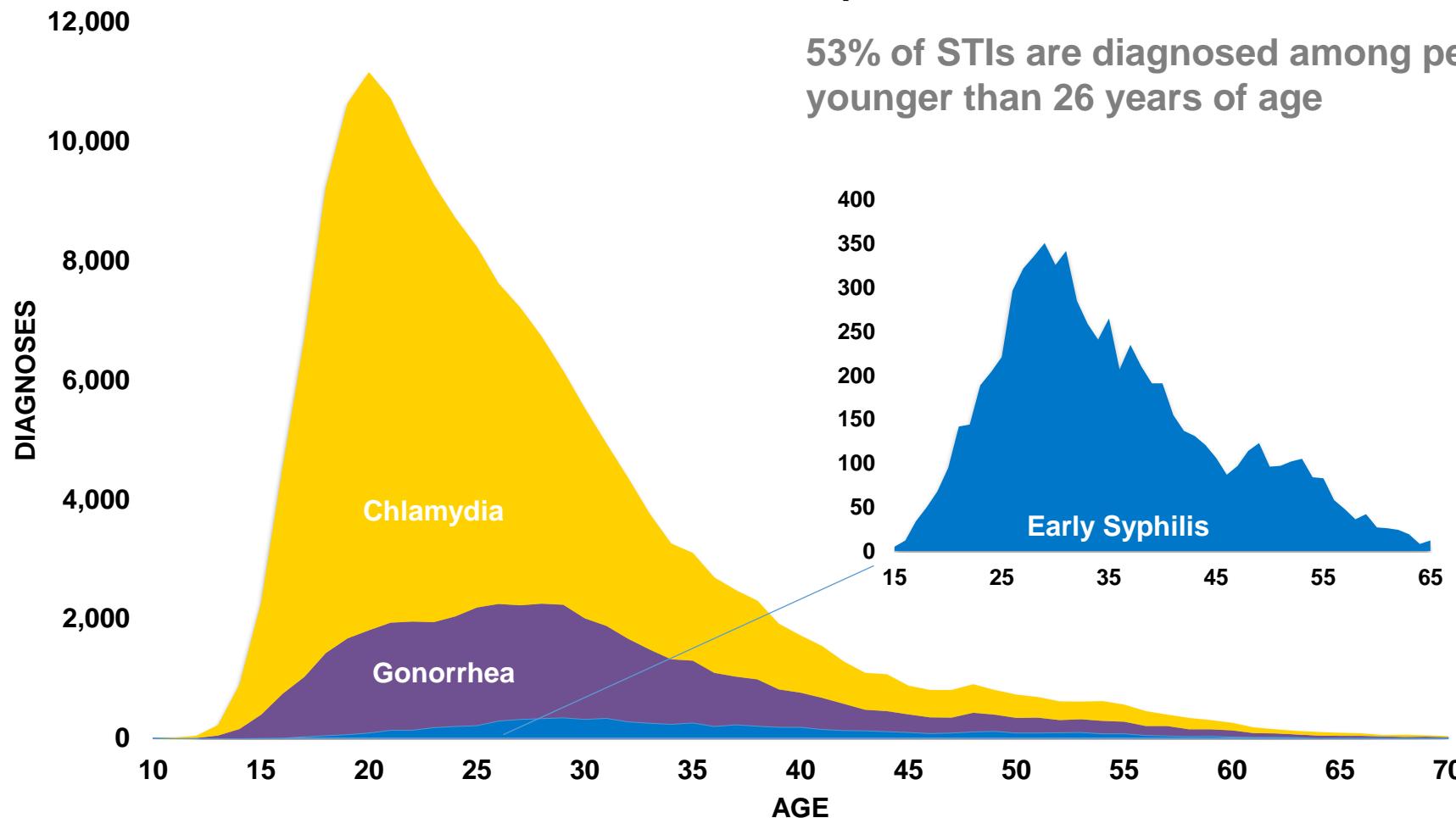


Table 1. STIs by Region/County
New York State, 2019

Region/County	Early Syphilis		Gonorrhea		Chlamydia	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	7,247	38.6	40,896	217.0	124,389	667.9
New York City (NYC)	5,665	65.4	28,973	340.9	76,206	941.7
Bronx	1,300	92.7	5,932	409.6	18,369	1,267.9
Kings	1,445	53.3	8,989	343.7	23,171	938.0
New York	1,922	106.3	9,242	501.6	17,889	1,038.7
Queens	929	41.0	4,322	200.2	14,859	724.9
Richmond	69	15.3	488	111.9	1,918	443.1
NYS excl. NYC	1,582	15.3	11,923	114.9	48,183	457.5
Buffalo Region	134	9.4	2,521	179.1	7,744	551.7
Allegany	1	2.3	12	29.7	136	259.3
Cattaraugus	3	4.1	37	55.3	225	335.1
Chautauqua	4	3.8	138	121.6	621	529.5
Erie	109	12.4	1,942	221.9	5,463	630.9
Genesee	3	5.5	26	52.5	149	296.9
Niagara	10	5.0	337	184.2	933	520.2
Orleans	2	3.6	20	54.7	151	412.6
Wyoming	2	6.5	9	28.2	66	189.3
Capital Region	219	15.9	1,577	112.3	5,839	406.9
Albany	98	32.4	733	223.9	2,006	576.4
Clinton	2	3.6	29	34.9	269	312.8
Columbia	5	10.0	30	65.8	162	353.4
Delaware	2	7.4	10	24.6	96	255.7
Essex	-	-	11	39.5	61	219.1
Franklin	1	2.8	5	10.1	106	223.3
Fulton	2	4.6	28	62.3	166	380.0
Greene	5	13.0	16	39.3	136	336.9
Hamilton	-	-	1	36.1	3	105.9
Montgomery	-	-	30	72.4	149	354.7
Otsego	5	8.2	26	42.6	271	385.0
Rensselaer	41	27.5	275	179.3	735	471.6
Saratoga	9	4.2	88	43.1	491	248.4
Schenectady	40	26.0	245	170.2	861	597.6
Schoharie	1	3.9	7	25.9	76	261.1
Warren	6	10.4	30	56.5	136	266.0
Washington	2	3.6	13	23.8	115	221.7

Region/County	Early Syphilis		Gonorrhea		Chlamydia	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	134	8.4	1,819	108.9	7,576	431.3
Broome	19	10.7	208	111.8	704	351.1
Cayuga	1	0.8	62	95.6	263	404.5
Chenango	3	7.0	14	35.9	102	266.9
Cortland	6	14.1	23	43.5	231	366.8
Herkimer	4	6.5	20	38.9	159	305.1
Jefferson	8	6.4	95	79.5	776	587.1
Lewis	2	9.3	3	14.7	50	228.1
Madison	4	5.3	24	38.1	212	287.7
Oneida	18	8.0	160	77.2	849	401.4
Onondaga	37	9.1	1,017	228.1	2,950	655.0
Oswego	6	4.9	39	36.9	338	291.2
St Lawrence	6	7.0	24	23.8	307	261.9
Tioga	3	7.0	13	34.1	123	315.8
Tompkins	17	16.6	117	78.6	512	320.8
Rochester Region	316	26.8	2,652	224.3	7,365	620.3
Chemung	6	8.2	110	152.4	381	531.1
Livingston	3	5.1	40	63.0	163	227.8
Monroe	287	40.0	2,296	317.7	5,758	795.8
Ontario	5	5.5	58	59.7	311	321.9
Schuyler	2	14.6	8	62.4	33	240.1
Seneca	3	9.7	16	52.6	80	261.4
Steuben	6	6.4	67	82.1	298	378.6
Wayne	3	4.5	51	69.3	306	418.8
Yates	1	3.5	6	26.6	35	154.2
Hudson Valley	424	20.0	1,735	81.4	9,427	436.8
Dutchess	95	33.9	210	74.5	1,158	400.7
Orange	105	28.6	288	77.3	1,738	449.5
Putnam	8	9.2	30	36.4	212	243.1
Rockland	38	13.6	140	47.3	1,182	383.5
Sullivan	9	13.3	46	68.6	280	435.3
Ulster	29	17.8	115	71.0	603	379.8
Westchester	140	16.0	906	104.6	4,254	491.0
Long Island	355	13.7	1,619	63.1	10,232	397.6
Nassau	189	15.3	818	67.0	4,928	404.9
Suffolk	166	12.4	801	59.7	5,304	391.2

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

Early Syphilis includes Primary Syphilis, Secondary Syphilis and Early Non-Primary Non-Secondary Syphilis.

Figure 2. Early Syphilis by Year

New York State, 1960 - 2019

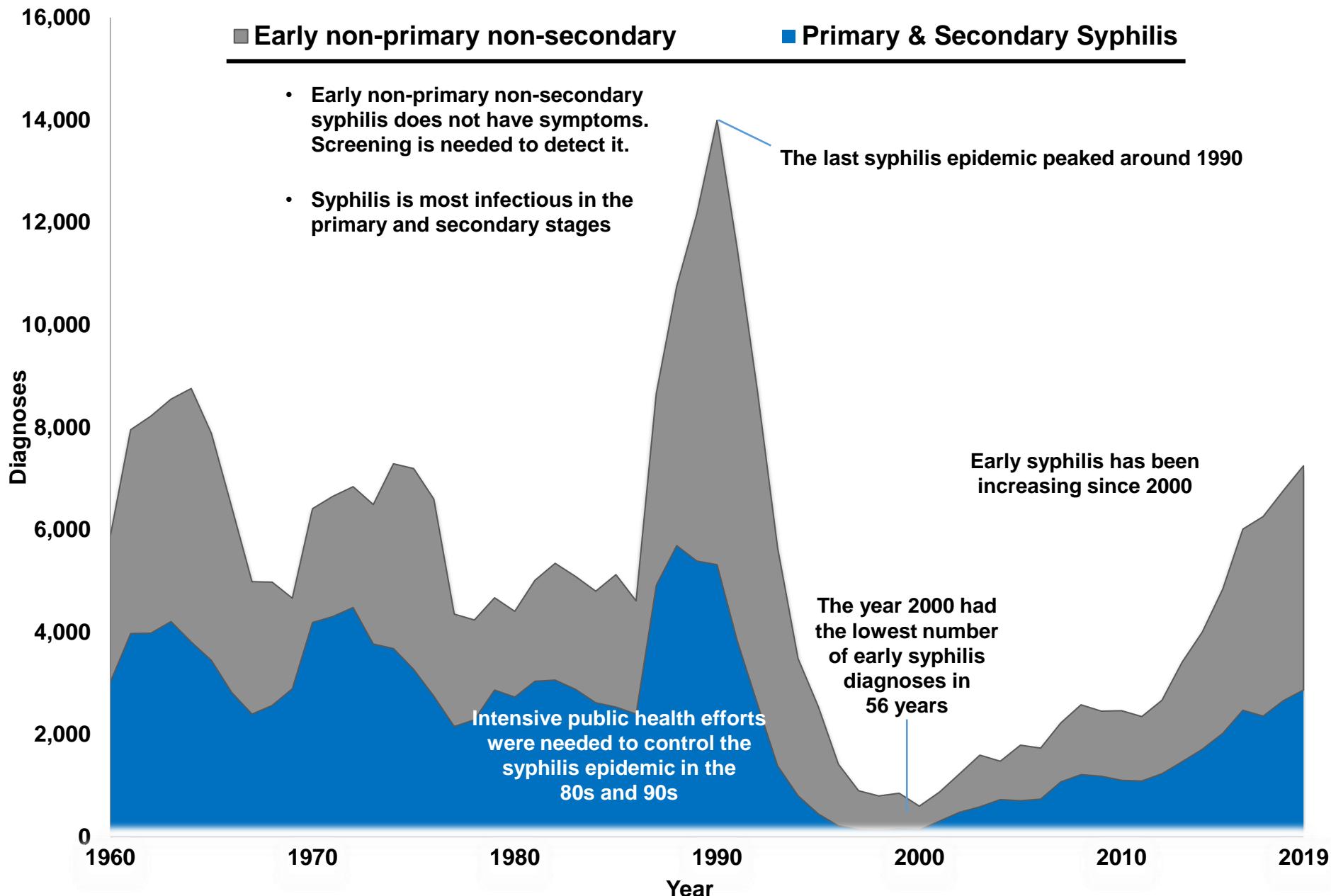


Figure 3. Early Syphilis by Year and Sex

New York State excluding NYC, 1936 - 2019

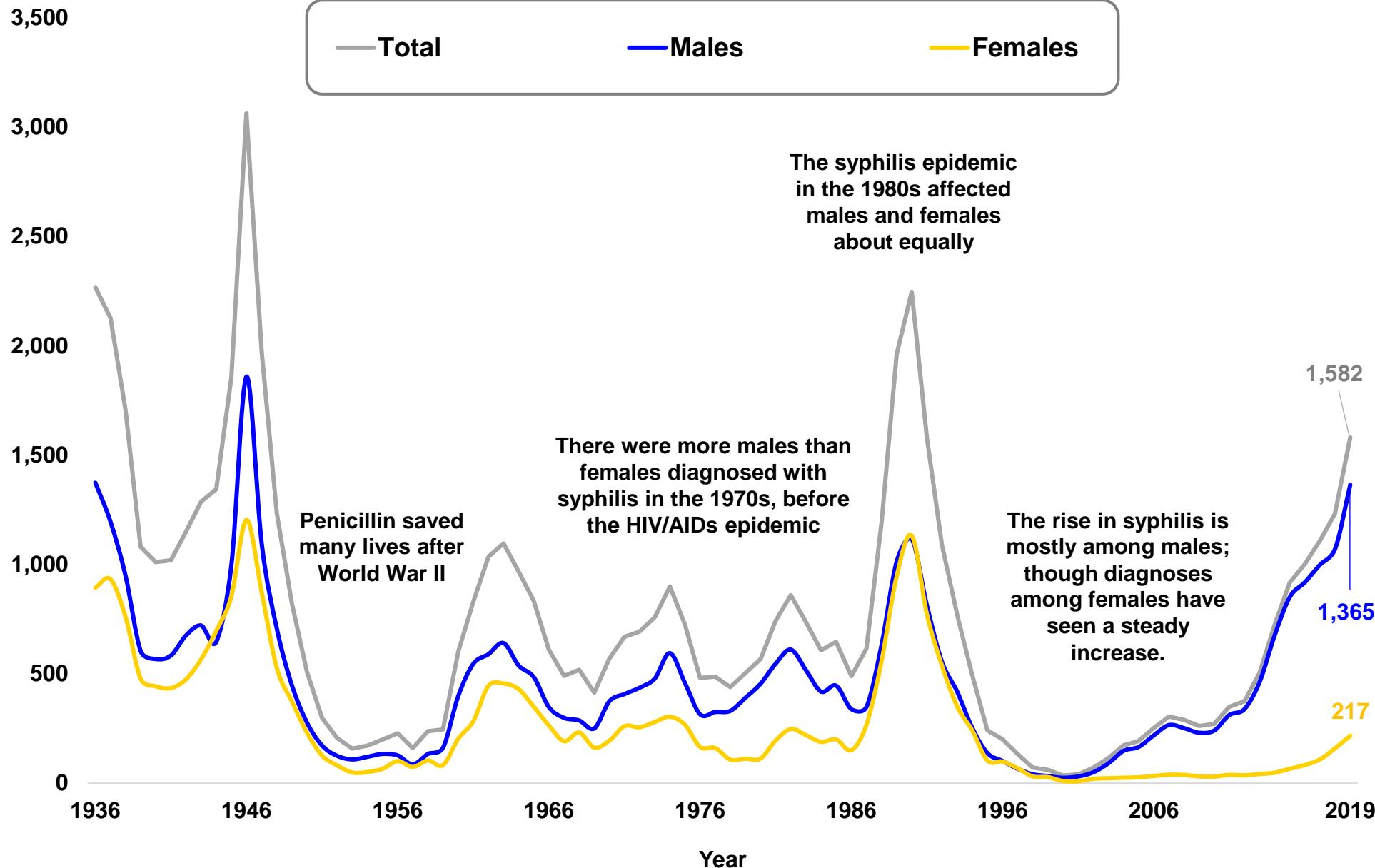
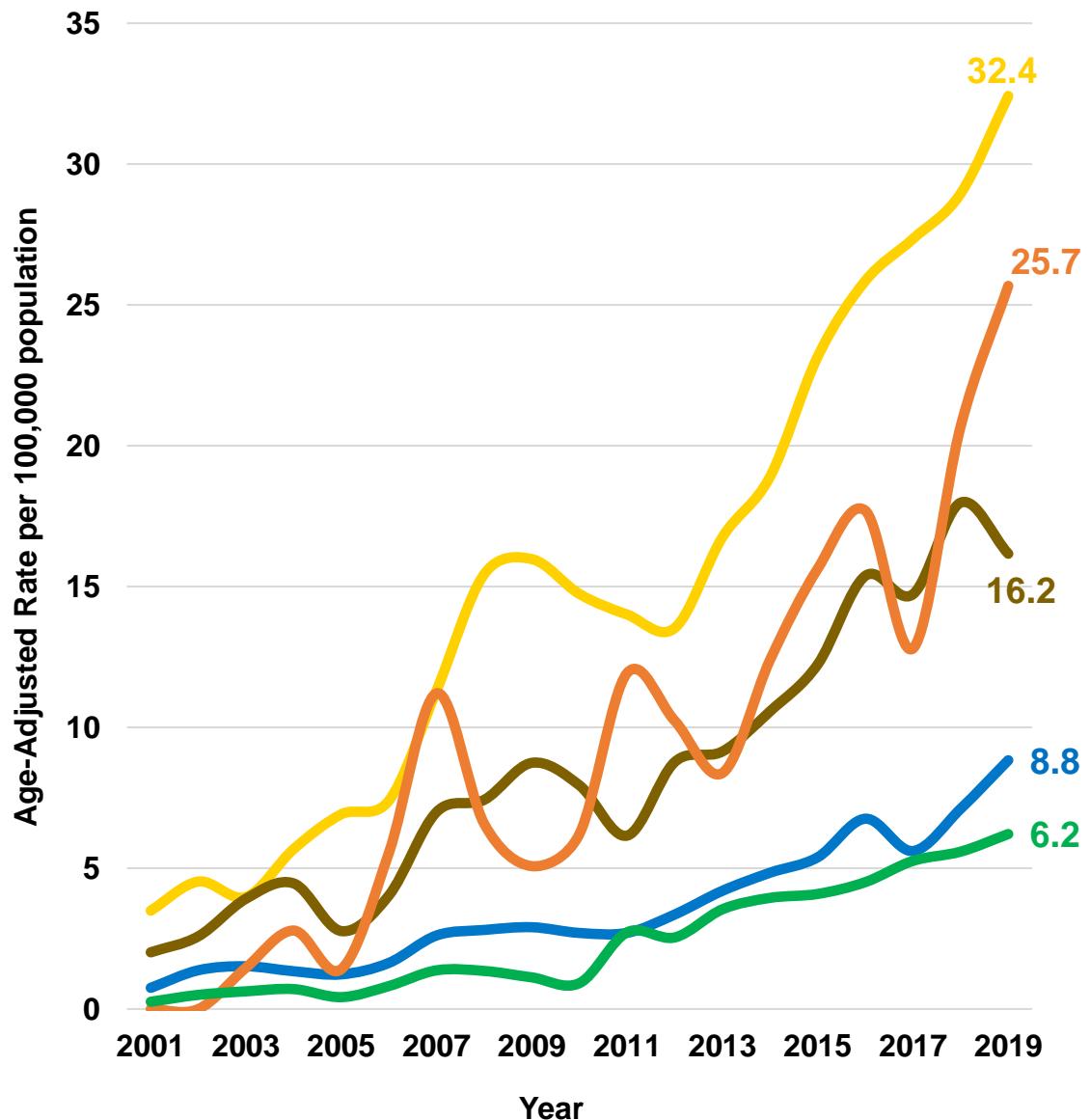


Figure 4. Primary and Secondary Syphilis Rates by Race/Ethnicity and Year

New York State, 2001 - 2019



What this figure shows

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

Number and Proportion of Diagnoses in 2019

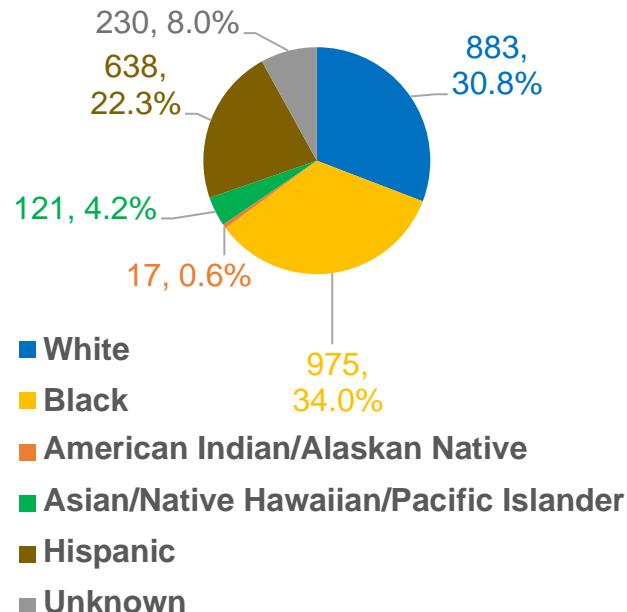


Figure 5. Primary and Secondary Syphilis Rates by Age and Sex
New York State, 2019

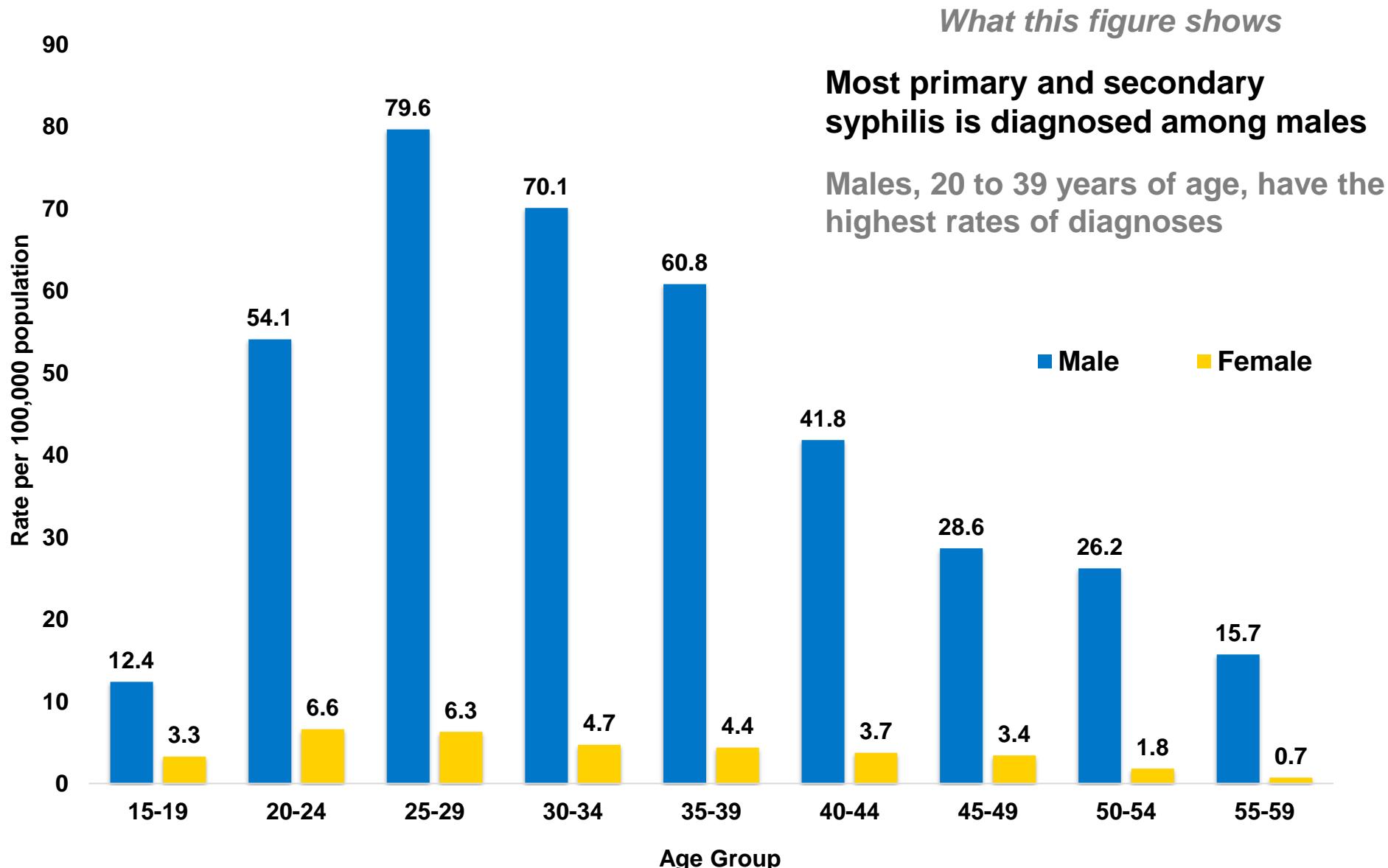
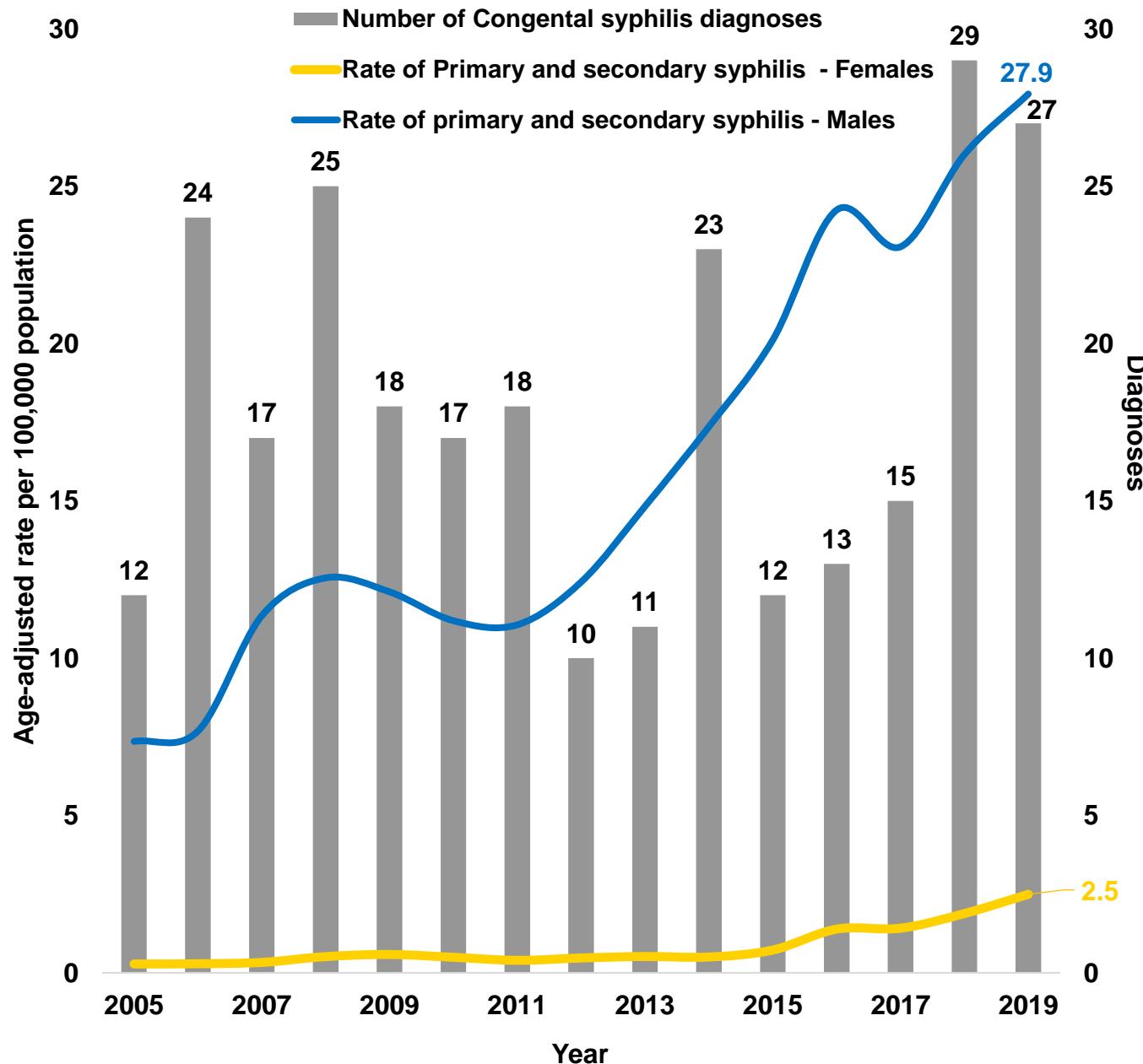


Figure 6. Congenital Syphilis Diagnoses with Primary & Secondary Syphilis Rates

New York State, 2005 - 2019



What this figure shows

The number of congenital syphilis diagnoses decreased in 2019 but still remains high.

The rate of primary and secondary syphilis among females has increased 400% in past 5 years (0.5 to 2.5 per 100,000)

Table 2. Syphilis by Region/County
New York State, 2019

Region/County	Primary and Secondary Syphilis		Early Non-Primary Non-Secondary Syphilis		Unknown Duration or Late Syphilis	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	2,864	15.2	4,383	23.4	3,231	16.9
New York City (NYC)	1,987	22.9	3,678	42.5	2,675	30.7
Bronx	429	30.3	871	62.4	613	43.3
Kings	492	18.1	953	35.2	844	31.1
New York	689	38.0	1,233	68.3	578	31.3
Queens	350	15.3	579	25.7	582	25.8
Richmond	27	6.1	42	9.3	58	13.5
NYS excl. NYC	877	8.5	705	6.9	556	5.0
Buffalo Region	81	5.8	53	3.6	83	5.2
Allegany	1	2.3	-	-	1	3.5
Cattaraugus	2	2.8	1	1.3	1	1.0
Chautauqua	-	-	4	3.8	9	7.7
Erie	66	7.6	43	4.7	55	5.4
Genesee	2	3.7	1	1.7	6	10.8
Niagara	8	4.2	2	0.8	5	2.7
Orleans	1	2.2	1	1.5	4	9.4
Wyoming	1	3.1	1	3.4	2	5.6
Capital Region	138	10.1	81	5.8	45	3.0
Albany	65	22.2	33	10.2	21	6.4
Clinton	1	1.8	1	1.8	-	-
Columbia	2	3.8	3	6.2	2	3.5
Delaware	1	3.7	1	3.7	2	4.2
Franklin	-	-	1	2.8	1	2.8
Fulton	1	2.3	1	2.3	2	4.4
Greene	2	5.7	3	7.3	-	-
Montgomery	-	-	-	-	1	2.4
Otsego	1	1.0	4	7.2	4	7.8
Rensselaer	26	17.6	15	9.9	4	3.2
Saratoga	8	3.7	1	0.5	1	0.5
Schenectady	25	16.2	15	9.8	4	2.1
Schoharie	1	3.9	-	-	-	-
Warren	4	6.8	2	3.6	3	4.6
Washington	1	1.9	1	1.7	-	-

Region/County	Primary and Secondary Syphilis		Early Non-Primary Non-Secondary Syphilis		Unknown Duration or Late Syphilis	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	70	4.3	64	4.1	34	2.2
Broome	7	3.8	12	6.9	10	5.7
Cayuga	1	0.8	-	-	-	-
Chenango	2	3.8	1	3.2	-	-
Cortland	4	8.4	2	5.6	2	6.2
Herkimer	4	6.5	-	-	-	-
Jefferson	3	2.3	5	4.1	3	2.6
Lewis	-	-	2	9.3	-	-
Madison	2	2.4	2	2.9	-	-
Oneida	13	5.8	5	2.2	4	2.1
Onondaga	19	4.7	18	4.4	6	1.3
Oswego	3	2.6	3	2.4	1	1.3
St Lawrence	3	3.6	3	3.5	1	1.3
Tioga	1	2.0	2	5.1	2	4.8
Tompkins	8	8.8	9	7.8	5	4.2
Rochester Region	225	18.9	91	7.9	61	4.9
Chemung	2	2.5	4	5.7	-	-
Livingston	3	5.1	-	-	7	11.2
Monroe	205	28.4	82	11.5	44	5.7
Ontario	3	3.4	2	2.1	4	4.9
Schuyler	1	7.3	1	7.3	-	-
Seneca	2	5.1	1	4.6	3	8.8
Steuben	6	6.4	-	-	2	2.2
Wayne	2	3.1	1	1.4	1	0.7
Yates	1	3.5	-	-	-	-
Hudson Valley	241	11.4	183	8.6	173	7.4
Dutchess	66	23.8	29	10.1	12	3.9
Orange	48	13.1	57	15.5	20	5.1
Putnam	3	3.1	5	6.2	6	6.8
Rockland	19	7.0	19	6.5	34	10.5
Sullivan	6	8.7	3	4.6	14	18.4
Ulster	14	8.6	15	9.2	7	4.1
Westchester	85	9.7	55	6.3	80	8.3
Long Island	122	4.6	233	9.1	160	5.6
Nassau	71	5.7	118	9.6	66	5.0
Suffolk	51	3.7	115	8.7	94	6.3

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

Early Syphilis includes Primary Syphilis, Secondary Syphilis and Early Non-Primary Non-Secondary Syphilis.

Table 3. Early Syphilis by Region/County and Sex
New York State, 2019

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	6,666	71.6	531	5.7	7,247	38.6
New York City (NYC)	5,301	125.8	314	7.4	5,665	65.4
Bronx	1,160	173.3	117	16.5	1,300	92.7
Kings	1,368	105.2	73	5.4	1,445	53.3
New York	1,843	208.5	61	7.0	1,922	106.3
Queens	870	77.1	56	5.1	929	41.0
Richmond	60	26.8	7	3.3	69	15.3
NYS excl. NYC	1,365	26.2	217	4.3	1,582	15.3
Buffalo Region	118	16.4	16	2.3	134	9.4
Allegany	1	4.8	-	-	1	2.3
Cattaraugus	3	8.1	-	-	3	4.1
Chautauqua	4	7.6	-	-	4	3.8
Erie	95	21.5	14	3.2	109	12.4
Genesee	3	10.3	-	-	3	5.5
Niagara	9	9.0	1	0.8	10	5.0
Orleans	1	2.9	1	4.3	2	3.6
Wyoming	2	12.1	-	-	2	6.5
Capital Region	178	25.2	41	6.2	219	15.9
Albany	89	58.6	9	6.9	98	32.4
Clinton	2	6.4	-	-	2	3.6
Columbia	5	19.7	-	-	5	10.0
Delaware	2	15.1	-	-	2	7.4
Franklin	1	4.6	-	-	1	2.8
Fulton	2	8.9	-	-	2	4.6
Greene	3	15.5	2	10.5	5	13.0
Otsego	3	10.3	2	6.1	5	8.2
Rensselaer	32	42.3	9	12.7	41	27.5
Saratoga	9	8.3	-	-	9	4.2
Schenectady	23	30.0	17	22.4	40	26.0
Schoharie	-	-	1	7.8	1	3.9
Warren	5	17.6	1	3.4	6	10.4
Washington	2	6.6	-	-	2	3.6

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	122	15.2	12	1.4	134	8.4
Broome	15	17.7	4	3.6	19	10.7
Cayuga	1	1.6	-	-	1	0.8
Chenango	3	13.6	-	-	3	7.0
Cortland	6	28.2	-	-	6	14.1
Herkimer	4	12.9	-	-	4	6.5
Jefferson	8	11.3	-	-	8	6.4
Lewis	2	18.1	-	-	2	9.3
Madison	4	10.7	-	-	4	5.3
Oneida	15	13.0	3	2.6	18	8.0
Onondaga	34	17.1	3	1.5	37	9.1
Oswego	4	6.9	2	2.8	6	4.9
St Lawrence	6	13.5	-	-	6	7.0
Tioga	3	13.7	-	-	3	7.0
Tompkins	17	33.6	-	-	17	16.6
Rochester Region	252	43.1	64	10.8	316	26.8
Chemung	6	16.0	-	-	6	8.2
Livingston	3	9.8	-	-	3	5.1
Monroe	224	64.2	63	17.0	287	40.0
Ontario	4	9.1	1	2.1	5	5.5
Schuyler	2	29.2	-	-	2	14.6
Seneca	3	17.9	-	-	3	9.7
Steuben	6	12.7	-	-	6	6.4
Wayne	3	8.9	-	-	3	4.5
Yates	1	7.6	-	-	1	3.5
Hudson Valley	367	34.0	57	5.6	424	20.0
Dutchess	79	55.0	16	11.5	95	33.9
Orange	90	48.1	15	8.5	105	28.6
Putnam	6	13.8	2	4.1	8	9.2
Rockland	34	23.9	4	3.0	38	13.6
Sullivan	5	11.8	4	14.6	9	13.3
Ulster	26	30.6	3	4.1	29	17.8
Westchester	127	29.0	13	3.2	140	16.0
Long Island	328	25.1	27	2.2	355	13.7
Nassau	174	28.0	15	2.5	189	15.3
Suffolk	154	22.6	12	1.9	166	12.4

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

Early Syphilis includes Primary Syphilis, Secondary Syphilis and Early Non-Primary Non-Secondary Syphilis.

Table 4. Primary and Secondary Syphilis by Region/County and Sex
New York State, 2019

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	2,621	27.9	231	2.5	2,864	15.2
New York City (NYC)	1,864	43.9	111	2.7	1,987	22.9
Bronx	380	55.8	44	6.4	429	30.3
Kings	469	35.8	21	1.6	492	18.1
New York	662	75.1	23	2.4	689	38.0
Queens	329	28.6	20	2.0	350	15.3
Richmond	24	10.9	3	1.2	27	6.1
NYS excl. NYC	757	14.4	120	2.4	877	8.5
Buffalo Region	72	10.3	9	1.2	81	5.8
Allegany	1	4.8	-	-	1	2.3
Cattaraugus	2	5.6	-	-	2	2.8
Erie	59	13.7	7	1.5	66	7.6
Genesee	2	7.1	-	-	2	3.7
Niagara	7	7.5	1	0.8	8	4.2
Orleans	-	-	1	4.3	1	2.2
Wyoming	1	5.4	-	-	1	3.1
Capital Region	114	16.1	24	3.8	138	10.1
Albany	59	39.9	6	5.0	65	22.2
Clinton	1	3.2	-	-	1	1.8
Columbia	2	7.2	-	-	2	3.8
Delaware	1	7.5	-	-	1	3.7
Fulton	1	4.4	-	-	1	2.3
Greene	2	10.6	-	-	2	5.7
Otsego	1	2.2	-	-	1	1.0
Rensselaer	17	22.7	9	12.7	26	17.6
Saratoga	8	7.3	-	-	8	3.7
Schenectady	18	23.6	7	9.2	25	16.2
Schoharie	-	-	1	7.8	1	3.9
Warren	3	10.3	1	3.4	4	6.8
Washington	1	3.5	-	-	1	1.9

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	65	7.9	5	0.7	70	4.3
Broome	7	7.4	-	-	7	3.8
Cayuga	1	1.6	-	-	1	0.8
Chenango	2	7.3	-	-	2	3.8
Cortland	4	17.1	-	-	4	8.4
Herkimer	4	12.9	-	-	4	6.5
Jefferson	3	4.0	-	-	3	2.3
Madison	2	4.9	-	-	2	2.4
Oneida	10	8.7	3	2.6	13	5.8
Onondaga	17	8.6	2	1.1	19	4.7
Oswego	3	5.0	-	-	3	2.6
St Lawrence	3	6.7	-	-	3	3.6
Tioga	1	3.9	-	-	1	2.0
Tompkins	8	17.9	-	-	8	8.8
Rochester Region	181	30.7	44	7.4	225	18.9
Chemung	2	4.9	-	-	2	2.5
Livingston	3	9.8	-	-	3	5.1
Monroe	162	46.1	43	11.7	205	28.4
Ontario	2	4.8	1	2.1	3	3.4
Schuyler	1	14.6	-	-	1	7.3
Seneca	2	9.7	-	-	2	5.1
Steuben	6	12.7	-	-	6	6.4
Wayne	2	6.2	-	-	2	3.1
Yates	1	7.6	-	-	1	3.5
Hudson Valley	212	19.7	29	2.9	241	11.4
Dutchess	56	39.5	10	7.2	66	23.8
Orange	43	22.7	5	3.0	48	13.1
Putnam	3	5.9	-	-	3	3.1
Rockland	17	12.5	2	1.5	19	7.0
Sullivan	4	9.6	2	7.4	6	8.7
Ulster	13	15.4	1	1.2	14	8.6
Westchester	76	17.3	9	2.2	85	9.7
Long Island	113	8.5	9	0.7	122	4.6
Nassau	64	10.1	7	1.2	71	5.7
Suffolk	49	7.0	2	0.3	51	3.7

Table 5. Early Syphilis by Sex and Age

New York State, 2019

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Male						
10-14	2	0.4	2	0.9	0	0.0
15-19	128	21.4	81	36.6	47	12.5
20-24	677	106.7	464	186.7	213	55.2
25-29	1,400	190.9	1,123	305.9	277	75.6
30-34	1,357	192.9	1,139	316.8	218	63.4
35-39	1,029	163.3	870	291.9	159	47.9
40-44	678	119.1	561	220.1	117	37.2
45-49	495	84.9	401	162.6	94	27.9
50-54	457	73.9	360	147.0	97	26.0
55-59	253	39.0	179	73.1	74	18.3
60-64	102	17.1	63	28.5	39	10.4
65-69	49	10.2	29	16.2	20	6.6
70+	37	3.9	27	7.7	10	1.7
Female						
10-14	1	0.2	1	0.5	0	0.0
15-19	39	6.8	24	11.0	15	4.2
20-24	91	14.3	51	19.0	40	10.9
25-29	114	15.6	62	15.9	52	15.2
30-34	81	11.6	45	12.2	36	10.9
35-39	71	11.1	48	15.5	23	7.0
40-44	55	9.3	39	14.3	16	5.1
45-49	31	5.1	18	6.7	13	3.8
50-54	25	3.8	15	5.6	10	2.6
55-59	14	2.0	7	2.5	7	1.6
60-64	2	0.3	1	0.4	1	0.3
65-69	4	0.7	1	0.5	3	0.9
70+	3	0.2	2	0.4	1	0.1

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Total						
10-14	3	0.3	3	0.7	0	0.0
15-19	169	14.4	107	24.3	62	8.4
20-24	774	61.0	521	100.7	253	33.6
25-29	1,527	104.2	1,198	158.4	329	46.4
30-34	1,453	103.6	1,199	164.9	254	37.6
35-39	1,109	87.3	927	152.4	182	27.5
40-44	735	63.4	602	113.9	133	21.1
45-49	527	44.0	420	81.6	107	15.7
50-54	484	38.0	377	73.4	107	14.0
55-59	267	19.8	186	35.8	81	9.8
60-64	104	8.3	64	13.4	40	5.2
65-69	53	5.1	30	7.5	23	3.6
70+	40	1.8	29	3.3	11	0.8

Table 6. Primary and Secondary Syphilis by Sex and Age
New York State, 2019

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Male						
10-14	0	0.0	0	0.0	0	0.0
15-19	74	12.4	44	19.9	30	8.0
20-24	343	54.1	216	86.9	127	32.9
25-29	584	79.6	440	119.9	144	39.3
30-34	493	70.1	378	105.1	115	33.4
35-39	383	60.8	307	103.0	76	22.9
40-44	238	41.8	165	64.7	73	23.2
45-49	167	28.6	118	47.9	49	14.6
50-54	162	26.2	105	42.9	57	15.3
55-59	102	15.7	62	25.3	40	9.9
60-64	46	7.7	22	10.0	24	6.4
65-69	19	3.9	4	2.2	15	5.0
70+	10	1.1	3	0.9	7	1.2
Female						
10-14	1	0.2	1	0.5	0	0.0
15-19	19	3.3	10	4.6	9	2.5
20-24	42	6.6	24	8.9	18	4.9
25-29	46	6.3	18	4.6	28	8.2
30-34	33	4.7	16	4.4	17	5.1
35-39	28	4.4	12	3.9	16	4.8
40-44	22	3.7	12	4.4	10	3.2
45-49	21	3.4	13	4.8	8	2.3
50-54	12	1.8	5	1.9	7	1.8
55-59	5	0.7	0	0.0	5	1.2
60-64	0	0.0	0	0.0	0	0.0
65-69	2	0.4	0	0.0	2	0.6
70+	0	0.0	0	0.0	0	0.0

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Total						
10-14	1	0.1	1	0.2	0	0.0
15-19	94	8.0	55	12.5	39	5.3
20-24	388	30.6	243	47.0	145	19.3
25-29	631	43.1	459	60.7	172	24.3
30-34	532	37.9	400	55.0	132	19.5
35-39	411	32.3	319	52.4	92	13.9
40-44	260	22.4	177	33.5	83	13.2
45-49	189	15.8	132	25.6	57	8.4
50-54	174	13.6	110	21.4	64	8.4
55-59	107	7.9	62	11.9	45	5.4
60-64	46	3.7	22	4.6	24	3.1
65-69	21	2.0	4	1.0	17	2.7
70+	10	0.4	3	0.3	7	0.5

Table 7. Early Syphilis by Region/County and Year
New York State, 2017 - 2019

Region/County	2017		2018		2019	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	6,252	32.7	6,758	35.6	7,247	38.6
New York City (NYC)	5,144	57.8	5,526	63.1	5,665	65.4
Bronx	1,050	72.0	1,310	91.2	1,300	92.7
Kings	1,398	50.7	1,320	48.8	1,445	53.3
New York	1,782	97.5	1,905	104.8	1,922	106.3
Queens	844	35.5	915	39.5	929	41.0
Richmond	70	15.5	76	17.3	69	15.3
NYS excl. NYC	1,108	10.5	1,232	11.7	1,582	15.3
Buffalo Region	95	6.7	108	7.9	134	9.4
Allegany	1	1.6	2	6.9	1	2.3
Cattaraugus	-	-	1	1.7	3	4.1
Chautauqua	2	1.7	2	1.7	4	3.8
Erie	79	9.0	91	10.8	109	12.4
Genesee	4	7.3	3	5.8	3	5.5
Niagara	8	4.4	6	3.0	10	5.0
Orleans	-	-	2	5.9	2	3.6
Wyoming	1	2.6	1	2.3	2	6.5
Capital Region	177	12.2	146	9.9	219	15.9
Albany	85	27.9	55	16.8	98	32.4
Clinton	8	9.6	2	2.1	2	3.6
Columbia	10	17.2	6	12.4	5	10.0
Delaware	1	2.0	-	-	2	7.4
Essex	-	-	2	5.3	-	-
Franklin	1	2.7	-	-	1	2.8
Fulton	2	4.4	2	4.4	2	4.6
Greene	2	4.4	3	6.6	5	13.0
Hamilton	1	7.1	-	-	-	-
Montgomery	3	7.9	4	9.1	-	-
Otsego	3	6.3	-	-	5	8.2
Rensselaer	22	13.9	21	13.5	41	27.5
Saratoga	12	5.8	8	3.3	9	4.2
Schenectady	22	13.6	34	22.9	40	26.0
Schoharie	1	1.9	1	1.9	1	3.9
Warren	4	7.1	7	10.8	6	10.4
Washington	-	-	1	1.9	2	3.6

Region/County	2017		2018		2019	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	86	5.2	102	6.2	134	8.4
Broome	4	2.3	14	6.9	19	10.7
Cayuga	1	1.5	-	-	1	0.8
Chenango	1	1.8	-	-	3	7.0
Cortland	6	16.9	8	16.6	6	14.1
Herkimer	1	1.0	5	7.9	4	6.5
Jefferson	5	3.7	9	7.1	8	6.4
Lewis	-	-	-	-	2	9.3
Madison	5	6.3	1	1.2	4	5.3
Oneida	5	2.0	16	7.6	18	8.0
Onondaga	39	8.9	28	6.3	37	9.1
Oswego	2	1.8	4	3.5	6	4.9
St Lawrence	4	3.8	5	5.5	6	7.0
Tioga	2	5.5	1	2.9	3	7.0
Tompkins	11	9.9	11	12.7	17	16.6
Rochester Region	122	10.2	223	18.8	316	26.8
Chemung	9	10.7	15	17.9	6	8.2
Livingston	1	1.4	3	4.3	3	5.1
Monroe	98	13.8	195	27.3	287	40.0
Ontario	2	2.1	6	7.0	5	5.5
Schuyler	3	19.8	-	-	2	14.6
Seneca	3	8.8	-	-	3	9.7
Steuben	3	3.2	1	1.4	6	6.4
Wayne	3	3.3	2	2.7	3	4.5
Yates	-	-	1	6.6	1	3.5
Hudson Valley	314	14.5	322	14.8	424	20.0
Dutchess	58	20.4	52	17.3	95	33.9
Orange	51	14.1	64	17.5	105	28.6
Putnam	10	10.8	16	16.7	8	9.2
Rockland	31	10.5	32	11.0	38	13.6
Sullivan	9	13.3	8	11.2	9	13.3
Ulster	16	8.3	20	11.6	29	17.8
Westchester	139	15.7	130	14.5	140	16.0
Long Island	314	12.1	331	12.4	355	13.7
Nassau	164	13.4	180	14.3	189	15.3
Suffolk	150	10.9	151	10.6	166	12.4

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

Early Syphilis includes Primary Syphilis, Secondary Syphilis and Early Non-Primary Non-Secondary Syphilis.

Table 8. Early Syphilis by Year and Region
New York State, 1958 - 2019

Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1958	2,724	16.1	2,486	31.6	238	2.7
1959	3,374	20.0	3,128	40.2	246	2.7
1960	5,863	34.8	5,262	68.1	601	6.6
1961	7,948	46.8	7,118	91.7	830	9.0
1962	8,215	47.7	7,179	92.4	1,036	11.0
1963	8,547	49.4	7,450	96.1	1,097	11.5
1964	8,756	49.9	7,788	100.6	968	9.9
1965	7,878	44.3	7,043	89.9	835	8.4
1966	6,446	36.4	5,834	74.7	612	6.2
1967	4,980	27.6	4,489	55.8	491	4.9
1968	4,975	27.4	4,456	55.3	519	5.2
1969	4,661	25.6	4,247	52.6	414	4.1
1970	6,410	34.7	5,840	72.3	570	5.5
1971	6,649	35.9	5,980	75.8	669	6.3
1972	6,840	36.6	6,147	77.0	693	6.5
1973	6,486	34.9	5,727	72.5	759	7.1
1974	7,287	39.2	6,388	82.2	899	8.3
1975	7,194	39.0	6,469	85.4	725	6.7
1976	6,593	36.6	6,112	81.4	481	4.6
1977	4,347	24.2	3,860	51.5	487	4.6
1978	4,232	23.4	3,793	51.2	439	4.1
1979	4,666	25.8	4,163	57.7	503	4.7
1980	4,404	24.4	3,836	53.2	568	5.3
1981	5,009	28.8	4,266	60.7	743	7.2
1982	5,342	30.8	4,483	64.5	859	8.2
1983	5,086	29.2	4,340	62.9	746	7.1
1984	4,794	27.3	4,186	59.7	608	5.8
1985	5,120	29.3	4,474	62.5	646	6.2
1986	4,607	25.9	4,117	56.9	490	4.6
1987	8,659	48.6	8,043	110.0	616	5.9
1988	10,749	59.8	9,557	129.7	1,192	11.3
1989	12,170	68.0	10,209	138.6	1,961	18.6

Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1990	13,997	77.9	11,750	159.3	2,247	21.2
1991	11,486	63.9	9,902	135.2	1,584	14.9
1992	8,709	48.6	7,619	104.1	1,090	10.2
1993	5,643	31.1	4,876	66.1	767	7.1
1994	3,481	18.9	2,986	40.1	495	4.6
1995	2,548	14.0	2,306	30.8	242	2.2
1996	1,416	7.6	1,215	16.2	201	1.9
1997	897	5.1	763	10.1	134	1.2
1998	797	4.0	725	9.6	72	0.6
1999	850	4.8	789	10.4	61	0.6
2000	599	2.6	564	7.1	35	0.3
2001	870	4.6	830	10.3	40	0.4
2002	1,231	6.4	1,161	14.4	70	0.6
2003	1,596	8.3	1,482	18.4	114	1.0
2004	1,475	7.7	1,302	16.2	173	1.6
2005	1,789	9.4	1,596	19.9	193	1.7
2006	1,731	9.1	1,479	18.5	252	2.3
2007	2,224	11.6	1,919	23.9	305	2.7
2008	2,576	13.4	2,286	28.3	290	2.6
2009	2,452	12.7	2,190	26.9	262	2.3
2010	2,461	12.7	2,190	26.7	271	2.4
2011	2,348	12.0	1,998	24.2	350	3.1
2012	2,666	13.6	2,291	27.4	375	3.3
2013	3,411	17.4	2,907	34.6	504	4.5
2014	4,000	20.4	3,276	38.8	724	6.5
2015	4,837	24.6	3,920	46.3	917	8.2
2016	6,008	30.6	5,006	59.1	1,002	9.0
2017	6,252	31.9	5,144	61.0	1,108	9.9
2018	6,758	34.6	5,526	65.9	1,232	11.1
2019	7,247	37.3	5,665	68.0	1,582	14.2

Rates are per 100,000 residents.

Early Syphilis includes Primary Syphilis, Secondary Syphilis and Early Non-Primary Non-Secondary Syphilis.

Table 9. Primary and Secondary Syphilis by Year and Region
New York State, 1954 - 2019

Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC		Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate		Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1954	710	4.5	617	7.7	93	1.2	1987	4,910	27.5	4,542	62.1	368	3.5
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

Rates are per 100,000 residents.

Figure 7. Gonorrhea by Year and Region

New York State, 1960 - 2019

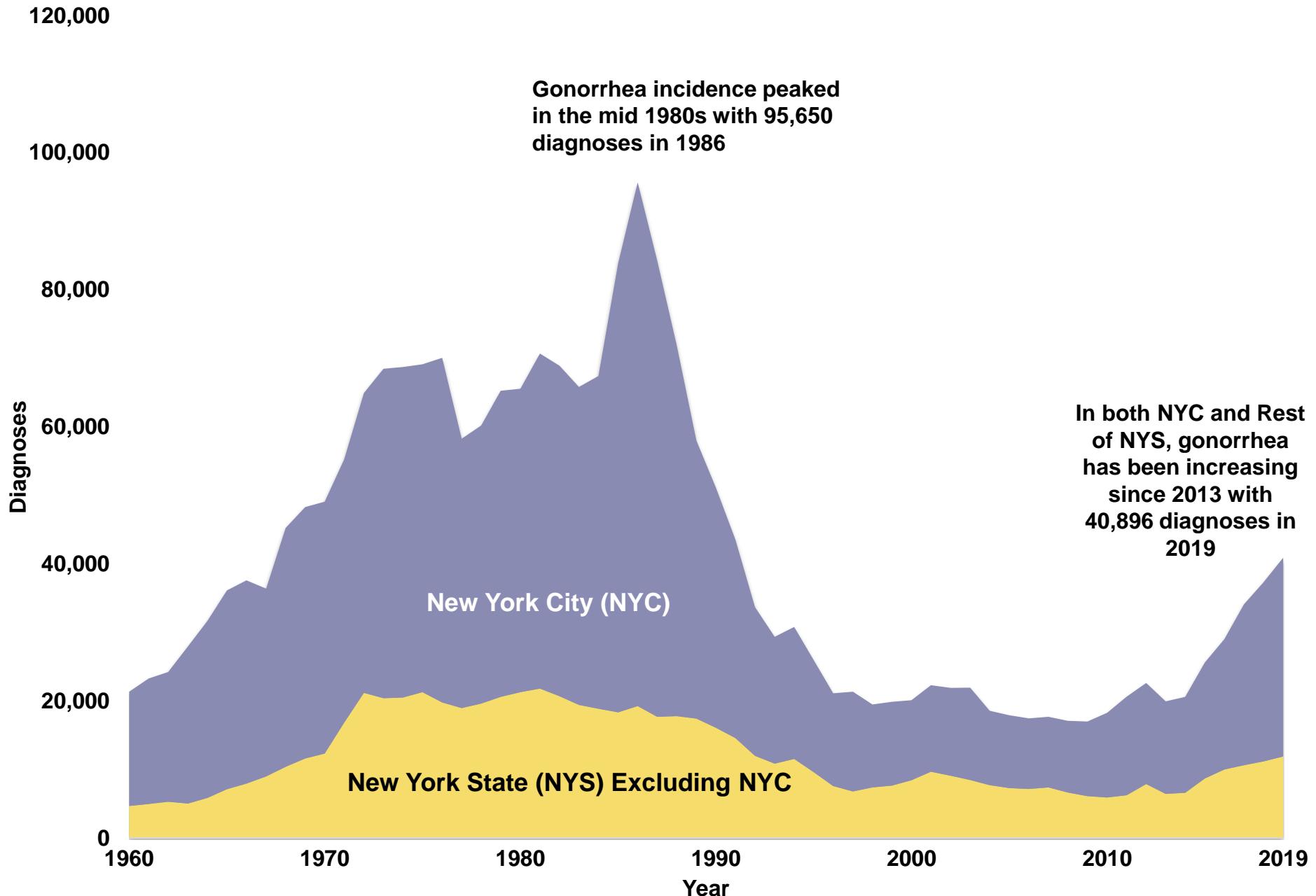
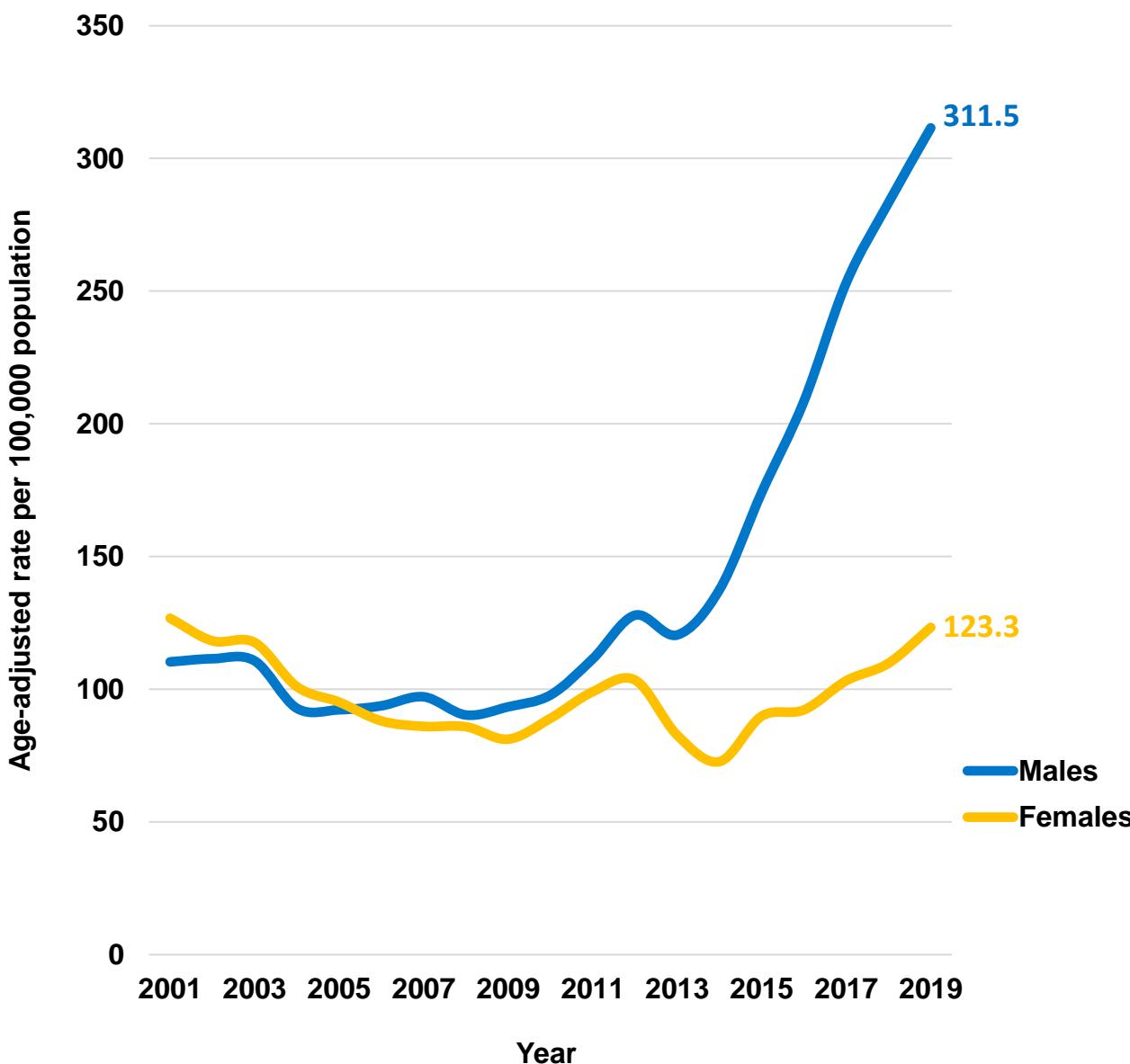


Figure 8. Gonorrhea Rates by Sex and Year

New York State, 2001 - 2019



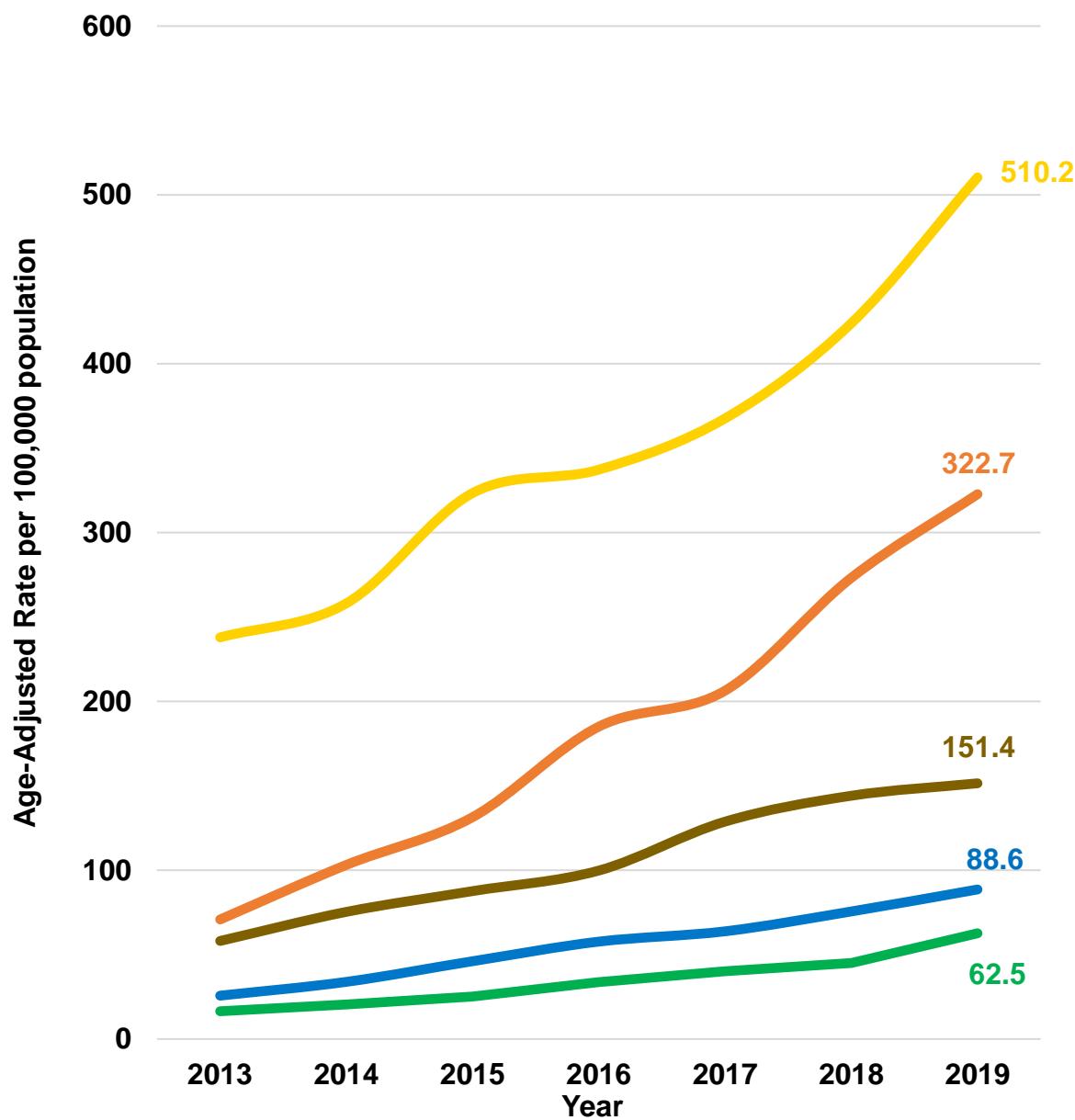
What this figure shows

The vast majority of the 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

Figure 9. Gonorrhea Rates by Race/Ethnicity and Year

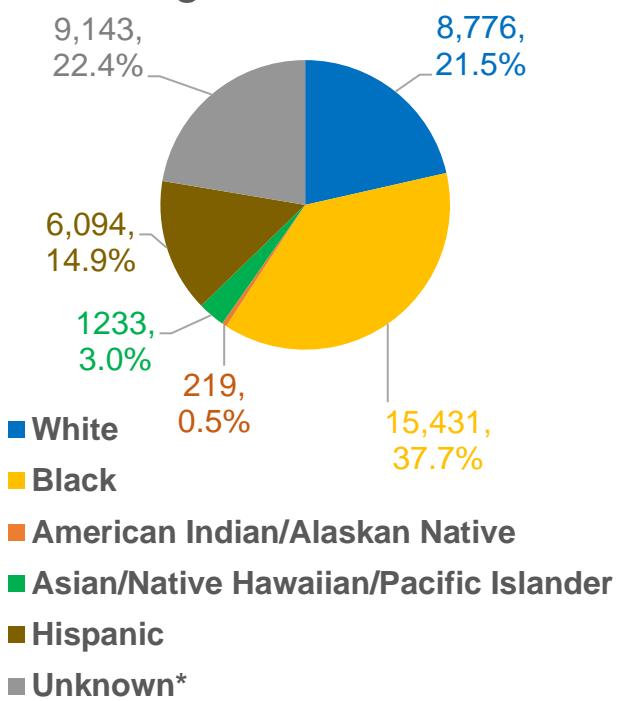
New York State, 2013 - 2019



What this figure shows

Non-Hispanic black individuals are disproportionately impacted by gonorrhea, followed by American Indian/Alaska Native and Hispanic individuals respectively

Number and Proportion of Diagnoses in 2019



*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, 2019

What this figure shows

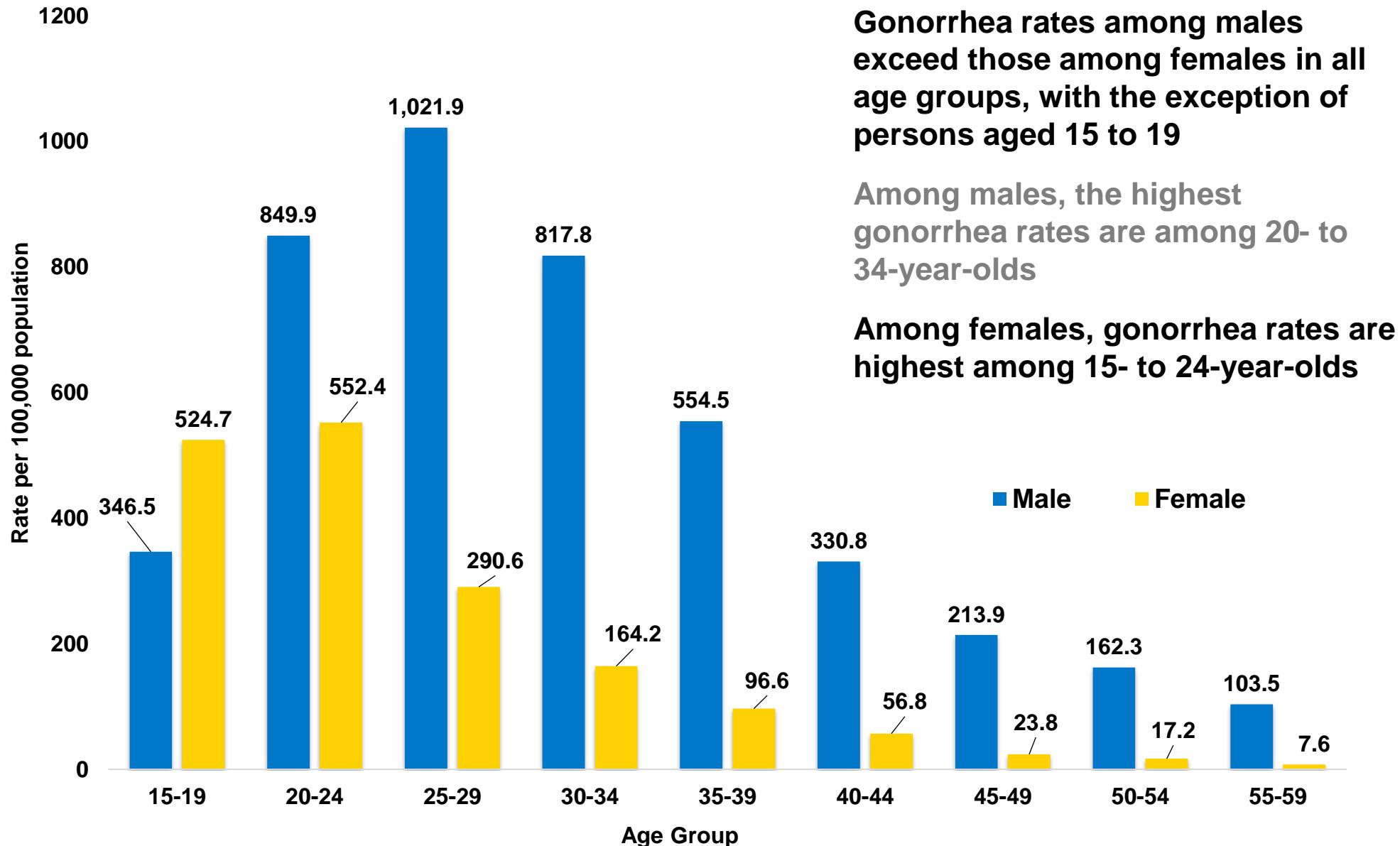


Table 10. Gonorrhea by Region/County and Sex

New York State, 2019

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	29,494	311.5	11,310	123.3	40,896	217.0
New York City (NYC)	22,439	526.2	6,442	164.8	28,973	340.9
Bronx	3,902	552.2	1,987	277.5	5,932	409.6
Kings	6,814	520.8	2,160	181.0	8,989	343.7
New York	8,075	883.5	1,143	138.7	9,242	501.6
Queens	3,315	299.4	998	101.6	4,322	200.2
Richmond	333	151.3	154	72.8	488	111.9
NYS excl. NYC	7,055	134.0	4,868	95.9	11,923	114.9
Buffalo Region	1,477	207.0	1,044	151.4	2,521	179.1
Allegany	7	34.6	5	25.1	12	29.7
Cattaraugus	18	53.7	19	57.1	37	55.3
Chautauqua	68	121.9	70	122.7	138	121.6
Erie	1,163	264.9	779	180.0	1,942	221.9
Genesee	19	73.4	7	29.7	26	52.5
Niagara	184	197.1	153	172.6	337	184.2
Orleans	13	68.7	7	39.7	20	54.7
Wyoming	5	28.3	4	29.8	9	28.2
Capital Region	814	113.0	763	112.0	1,577	112.3
Albany	376	237.8	357	209.7	733	223.9
Clinton	11	25.9	18	45.2	29	34.9
Columbia	17	74.3	13	59.6	30	65.8
Delaware	5	20.9	5	28.7	10	24.6
Essex	5	31.3	6	51.2	11	39.5
Franklin	2	5.8	3	16.8	5	10.1
Fulton	9	38.2	19	88.8	28	62.3
Greene	8	33.4	8	51.6	16	39.3
Hamilton	-	-	1	75.5	1	36.1
Montgomery	13	61.5	17	84.2	30	72.4
Otsego	19	64.8	7	22.9	26	42.6
Rensselaer	146	186.4	129	174.8	275	179.3
Saratoga	52	48.3	36	37.8	88	43.1
Schenectady	122	166.9	123	175.0	245	170.2
Schoharie	5	37.7	2	13.4	7	25.9
Warren	16	59.5	14	53.7	30	56.5
Washington	8	26.0	5	22.8	13	23.8

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	979	115.8	840	102.1	1,819	108.9
Broome	111	119.3	97	104.9	208	111.8
Cayuga	28	79.0	34	115.4	62	95.6
Chenango	11	54.2	3	16.7	14	35.9
Cortland	14	56.4	9	30.2	23	43.5
Herkimer	13	51.0	7	26.5	20	38.9
Jefferson	63	93.6	32	62.2	95	79.5
Lewis	2	19.5	1	10.2	3	14.7
Madison	16	48.6	8	27.6	24	38.1
Oneida	75	70.9	85	85.2	160	77.2
Onondaga	522	240.0	495	217.5	1,017	228.1
Oswego	22	38.1	17	35.9	39	36.9
St Lawrence	13	24.4	11	23.1	24	23.8
Tioga	7	36.0	6	32.3	13	34.1
Tompkins	82	112.6	35	44.4	117	78.6
Rochester Region	1,547	261.3	1,105	188.4	2,652	224.3
Chemung	50	134.2	60	172.4	110	152.4
Livingston	20	62.1	20	65.0	40	63.0
Monroe	1,363	382.9	933	257.4	2,296	317.7
Ontario	41	84.7	17	33.8	58	59.7
Schuyler	5	79.7	3	45.9	8	62.4
Seneca	9	56.0	7	51.5	16	52.6
Steuben	30	70.0	37	95.7	67	82.1
Wayne	28	74.6	23	63.9	51	69.3
Yates	1	10.7	5	39.6	6	26.6
Hudson Valley	1,131	104.6	604	57.8	1,735	81.4
Dutchess	129	89.6	81	58.6	210	74.5
Orange	169	88.0	119	67.2	288	77.3
Putnam	20	46.0	10	25.9	30	36.4
Rockland	100	67.3	40	26.9	140	47.3
Sullivan	28	75.4	18	61.7	46	68.6
Ulster	66	77.6	49	63.5	115	71.0
Westchester	619	143.4	287	66.4	906	104.6
Long Island	1,107	85.1	512	40.7	1,619	63.1
Nassau	574	93.0	244	40.8	818	67.0
Suffolk	533	78.2	268	40.7	801	59.7

Table 11. Gonorrhea by Sex and Age
New York State, 2019

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Male						
10-14	39	6.9	28	12.4	11	3.3
15-19	2,071	346.5	1,343	606.0	728	193.5
20-24	5,390	849.9	3,681	1,481.4	1,709	443.1
25-29	7,494	1,021.9	5,871	1,599.2	1,623	443.2
30-34	5,754	817.8	4,729	1,315.4	1,025	297.9
35-39	3,493	554.5	2,844	954.2	649	195.5
40-44	1,883	330.8	1,516	594.7	367	116.8
45-49	1,247	213.9	954	386.9	293	87.1
50-54	1,003	162.2	731	298.5	272	72.9
55-59	672	103.5	472	192.6	200	49.5
60-64	280	47.1	168	76.1	112	29.9
65-69	104	21.6	60	33.6	44	14.5
70+	45	4.8	26	7.4	19	3.2
Female						
10-14	172	32.0	116	53.4	56	17.5
15-19	3,031	524.7	1,905	873.2	1,126	313.2
20-24	3,511	552.4	1,958	728.6	1,553	423.3
25-29	2,126	290.6	1,127	289.5	999	291.8
30-34	1,148	164.2	606	164.8	542	163.6
35-39	619	96.6	335	108.0	284	85.9
40-44	335	56.8	191	69.8	144	45.6
45-49	146	23.8	77	28.7	69	20.0
50-54	113	17.2	67	25.0	46	11.8
55-59	53	7.6	26	9.5	27	6.4
60-64	28	4.3	14	5.4	14	3.5
65-69	12	2.2	9	4.1	3	0.9
70+	8	0.6	8	1.5	0	0.0

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Total						
10-14	211	19.2	144	32.4	67	10.2
15-19	5,105	434.3	3,251	739.3	1,854	252.0
20-24	8,923	702.7	5,661	1,094.5	3,262	433.4
25-29	9,641	658.1	7,019	927.9	2,622	370.1
30-34	6,921	493.4	5,354	736.2	1,567	232.0
35-39	4,126	324.6	3,193	524.9	933	140.8
40-44	2,226	192.1	1,715	324.5	511	81.1
45-49	1,394	116.5	1,032	200.5	362	53.1
50-54	1,120	87.8	802	156.2	318	41.7
55-59	725	53.7	498	95.8	227	27.4
60-64	308	24.7	182	38.0	126	16.4
65-69	116	11.2	69	17.3	47	7.4
70+	53	2.3	34	3.9	19	1.4

Table 12. Gonorrhea by Region/County and Year
New York State, 2017 - 2019

Region/County	2017		2018		2019	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	34,111	177.6	37,322	196.2	40,896	217.0
New York City (NYC)	23,491	268.7	26,128	302.4	28,973	340.9
Bronx	4,945	327.5	5,220	352.6	5,932	409.6
Kings	6,827	254.1	7,592	283.7	8,989	343.7
New York	7,849	420.8	9,086	492.0	9,242	501.6
Queens	3,514	157.0	3,803	173.1	4,322	200.2
Richmond	356	80.3	427	96.5	488	111.9
NYS excl. NYC	10,620	101.2	11,194	107.0	11,923	114.9
Buffalo Region	2,743	192.6	2,856	201.2	2,521	179.1
Allegany	10	24.9	17	38.5	12	29.7
Cattaraugus	46	71.3	44	64.6	37	55.3
Chautauqua	171	147.1	172	153.7	138	121.6
Erie	2,039	232.5	2,249	256.3	1,942	221.9
Genesee	32	61.1	41	81.7	26	52.5
Niagara	409	218.5	304	163.8	337	184.2
Orleans	31	84.9	23	62.3	20	54.7
Wyoming	5	14.1	6	16.7	9	28.2
Capital Region	1,290	89.7	1,315	93.1	1,577	112.3
Albany	519	157.2	535	163.1	733	223.9
Clinton	6	7.6	33	41.3	29	34.9
Columbia	30	60.8	27	54.6	30	65.8
Delaware	6	15.6	6	14.7	10	24.6
Essex	3	11.0	7	24.8	11	39.5
Franklin	6	11.4	3	6.5	5	10.1
Fulton	21	43.6	32	73.0	28	62.3
Greene	22	51.7	16	35.1	16	39.3
Hamilton	-	-	-	-	1	36.1
Montgomery	35	82.6	29	68.1	30	72.4
Otsego	26	45.7	29	46.7	26	42.6
Rensselaer	176	110.9	234	152.8	275	179.3
Saratoga	71	34.8	73	35.0	88	43.1
Schenectady	321	219.9	260	181.9	245	170.2
Schoharie	13	44.6	3	11.0	7	25.9
Warren	15	28.5	20	37.0	30	56.5
Washington	20	34.6	8	14.8	13	23.8

Region/County	2017		2018		2019	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	1,480	86.6	1,874	110.6	1,819	108.9
Broome	162	85.7	196	105.1	208	111.8
Cayuga	22	30.9	109	163.6	62	95.6
Chenango	8	19.8	12	30.4	14	35.9
Cortland	12	20.3	19	33.5	23	43.5
Herkimer	15	27.5	14	24.9	20	38.9
Jefferson	122	90.3	102	78.7	95	79.5
Lewis	5	21.0	1	4.7	3	14.7
Madison	24	33.5	15	18.2	24	38.1
Oneida	162	77.0	115	54.5	160	77.2
Onondaga	773	172.5	1,085	242.5	1,017	228.1
Oswego	49	40.2	52	46.7	39	36.9
St Lawrence	24	23.9	32	30.1	24	23.8
Tioga	15	35.9	10	24.4	13	34.1
Tompkins	87	65.4	112	66.4	117	78.6
Rochester Region	2,104	176.4	2,159	181.6	2,652	224.3
Chemung	35	47.2	43	58.2	110	152.4
Livingston	10	14.8	17	28.5	40	63.0
Monroe	1,891	260.8	1,867	257.5	2,296	317.7
Ontario	66	68.2	72	74.4	58	59.7
Schuyler	-	-	3	21.5	8	62.4
Seneca	10	34.1	21	68.8	16	52.6
Steuben	25	28.8	46	54.9	67	82.1
Wayne	62	81.1	84	114.4	51	69.3
Yates	5	30.0	6	21.6	6	26.6
Hudson Valley	1,526	71.8	1,452	68.6	1,735	81.4
Dutchess	210	74.4	180	63.9	210	74.5
Orange	294	80.4	241	66.1	288	77.3
Putnam	27	29.2	23	24.9	30	36.4
Rockland	124	41.8	109	38.2	140	47.3
Sullivan	75	114.8	36	52.8	46	68.6
Ulster	124	76.2	98	60.6	115	71.0
Westchester	672	77.9	765	88.6	906	104.6
Long Island	1,477	57.0	1,538	59.2	1,619	63.1
Nassau	717	58.2	752	61.5	818	67.0
Suffolk	760	56.0	786	57.2	801	59.7

Table 13. Gonorrhea by Year and Region

New York State, 1958 - 2019

Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1958	17,060	100.8	13,340	171.4	3,720	42.8
1959	18,610	110.2	14,400	185.2	4,210	47.4
1960	21,370	127.0	16,680	215.7	4,690	52.1
1961	23,270	136.9	18,280	235.4	4,990	53.9
1962	24,220	140.7	18,900	243.5	5,320	56.5
1963	27,950	161.7	22,920	295.6	5,030	52.4
1964	31,680	180.6	25,830	333.6	5,850	60.1
1965	36,120	203.2	28,990	370.2	7,130	72.2
1966	37,610	212.4	29,660	378.7	7,950	80.4
1967	36,380	201.5	27,380	341.1	9,000	90.0
1968	45,250	249.4	34,830	432.5	10,420	103.5
1969	48,290	265.0	36,690	454.5	11,600	114.3
1970	49,080	265.5	36,730	454.6	12,350	119.7
1971	55,240	298.6	38,400	486.4	16,840	159.9
1972	64,940	347.8	43,760	548.4	21,180	199.0
1973	68,470	368.5	48,060	609.1	20,410	190.0
1974	68,740	369.5	48,220	620.2	20,520	189.8
1975	69,130	374.9	47,840	631.7	21,290	196.4
1976	70,060	389.0	50,260	669.3	19,800	187.6
1977	58,280	324.6	39,300	524.3	18,980	179.8
1978	60,190	332.2	40,570	547.6	19,620	183.8
1979	65,250	361.1	44,660	578.1	20,590	192.9
1980	65,560	363.3	44,280	614.8	21,280	198.1
1981	70,690	406.9	48,890	695.5	21,800	208.4
1982	68,920	396.8	48,210	694.2	20,710	198.4
1983	65,830	378.2	46,410	672.8	19,420	186.0
1984	67,420	383.6	48,540	692.2	18,880	181.2
1985	83,850	479.1	65,510	914.8	18,340	176.1
1986	95,650	537.7	76,400	1,055.2	19,250	182.9
1987	84,250	472.6	66,540	909.9	17,710	168.1
1988	71,900	400.3	54,100	722.8	17,800	168.7
1989	57,980	323.8	40,550	550.5	17,430	165.3

Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1990	51,090	284.4	34,990	474.4	16,100	152.3
1991	43,530	242.3	28,940	395.3	14,590	136.7
1992	33,720	188.1	21,710	296.5	12,010	112.6
1993	29,350	161.9	18,470	250.5	10,880	100.9
1994	30,790	167.4	19,250	258.6	11,540	106.4
1995	25,970	143.0	16,360	218.8	9,610	88.3
1996	21,140	114.1	13,530	181.4	7,610	69.9
1997	21,360	120.6	14,560	193.0	6,800	62.4
1998	19,500	99.0	12,100	159.7	7,400	67.3
1999	19,870	112.6	12,210	161.1	7,660	69.5
2000	20,110	88.2	11,670	145.6	8,440	77.0
2001	22,294	116.8	12,614	156.5	9,680	87.8
2002	21,925	114.6	12,811	158.7	9,114	82.4
2003	21,952	114.5	13,466	166.9	8,486	76.4
2004	18,579	96.9	10,860	135.0	7,719	69.4
2005	17,912	93.6	10,596	132.2	7,316	65.8
2006	17,459	91.4	10,299	128.8	7,160	64.4
2007	17,699	92.5	10,310	128.7	7,389	66.5
2008	17,120	89.1	10,483	129.9	6,637	59.6
2009	17,009	88.1	10,898	134.0	6,111	54.7
2010	18,270	94.2	12,354	150.8	5,916	52.8
2011	20,643	105.9	14,403	174.1	6,240	55.6
2012	22,631	115.6	14,747	176.7	7,884	70.2
2013	19,960	101.7	13,500	160.8	6,460	57.5
2014	20,594	104.8	13,978	165.7	6,616	59.0
2015	25,632	130.4	16,913	199.8	8,719	77.9
2016	29,048	148.0	19,029	224.7	10,019	89.7
2017	34,111	174.1	23,491	278.4	10,620	95.2
2018	37,322	191.1	26,128	311.4	11,194	100.5
2019	40,896	210.2	28,973	347.5	11,923	107.3

Figure 11. Chlamydia by Year and Region

New York State, 2001 - 2019

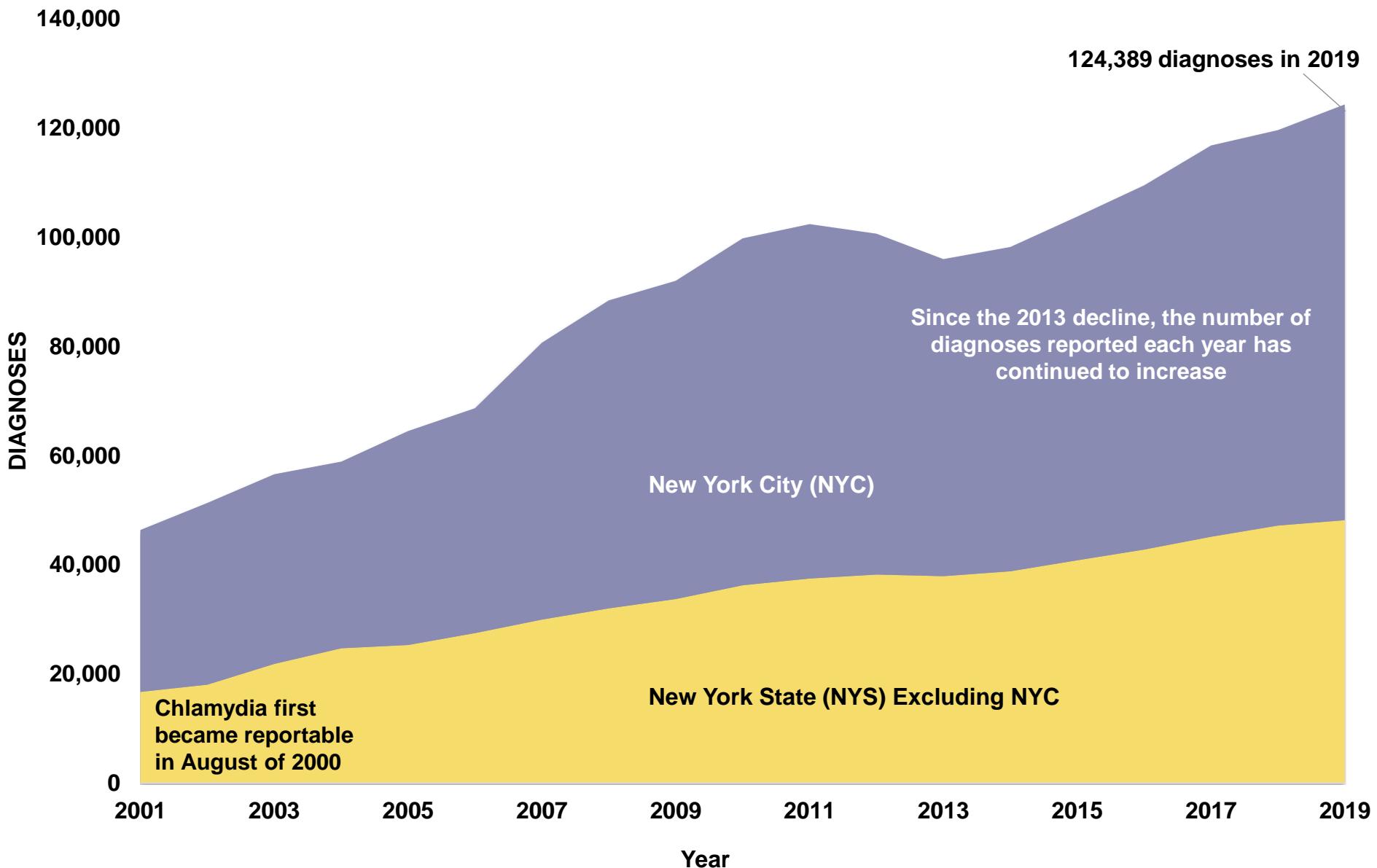
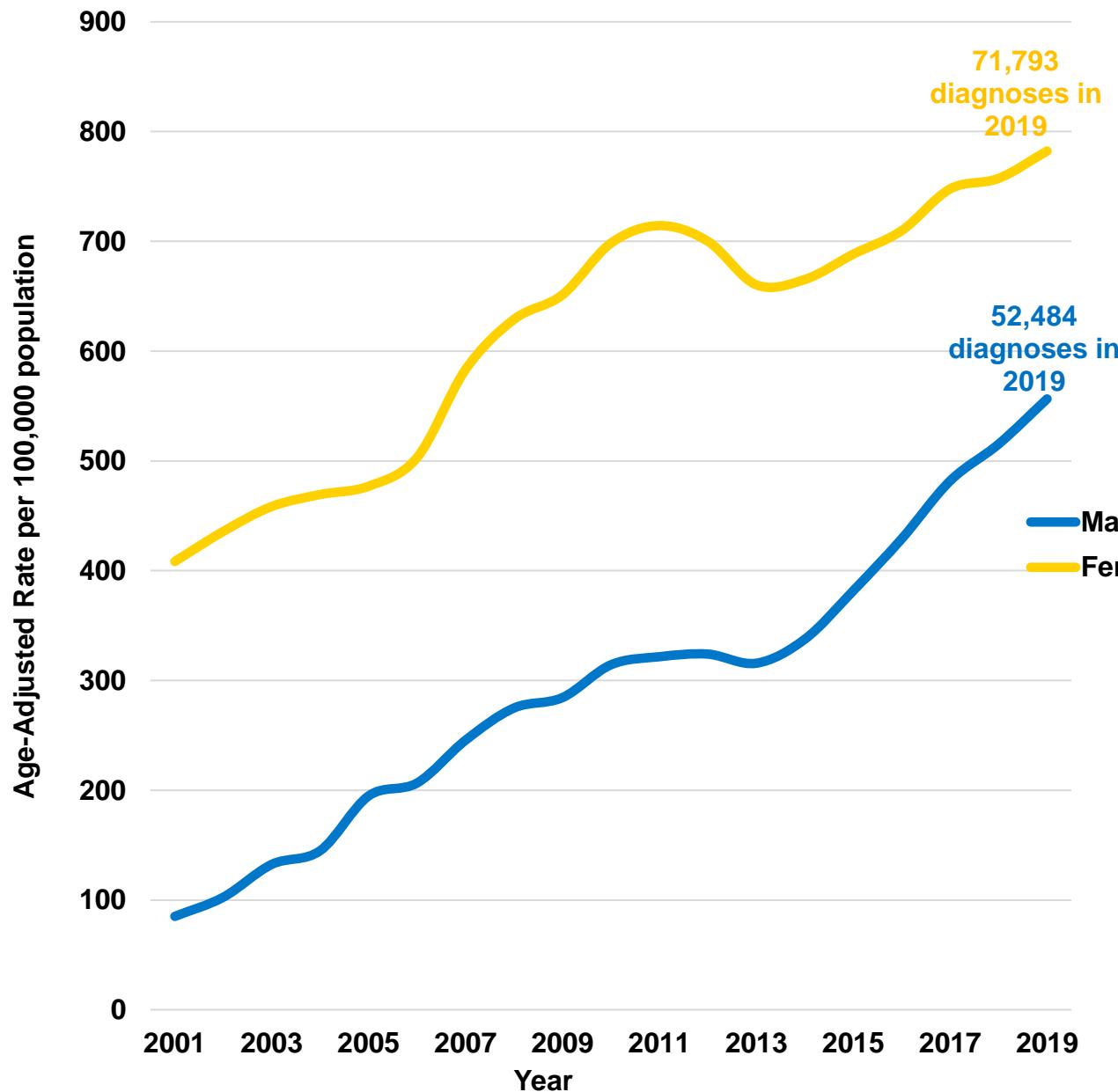


Figure 12. Chlamydia Rates by Sex and Year

New York State, 2001 - 2019



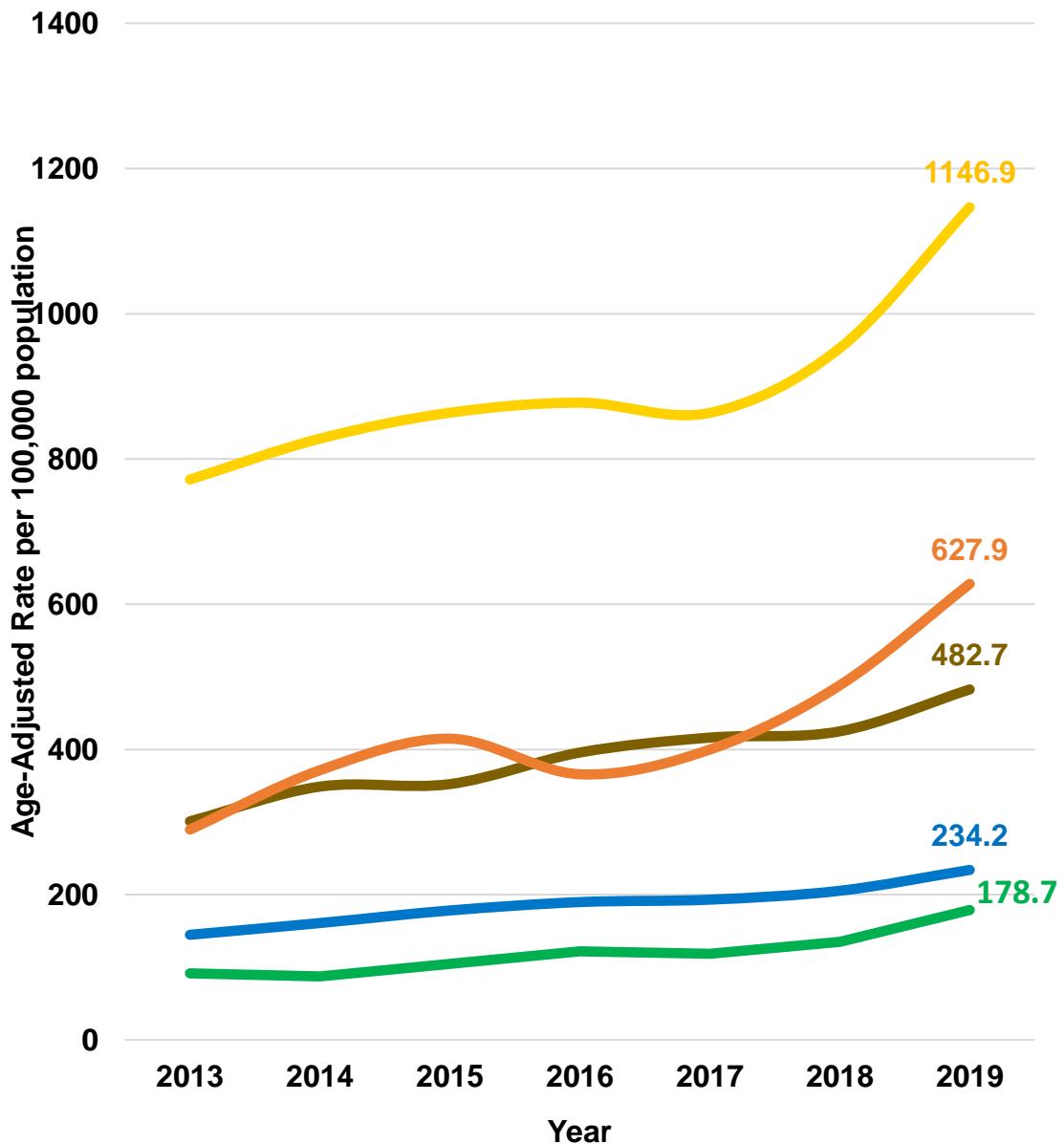
What this figure shows

Chlamydia rates among females continue to be higher than males

The female to male ratio of diagnoses have continued to narrow since 2001.

Figure 13. Chlamydia Rates by Race/Ethnicity and Year

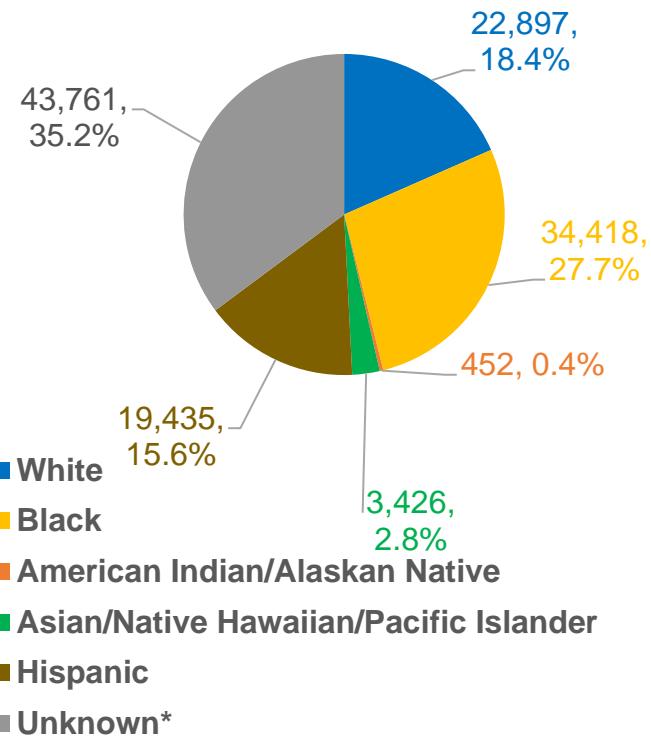
New York State, 2013 - 2019



What this figure shows

Non-Hispanic black individuals are disproportionately impacted by chlamydia, followed by American Indian/Alaska Native and Hispanic individuals

Number and Proportion of Diagnoses in 2019



*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, 2019

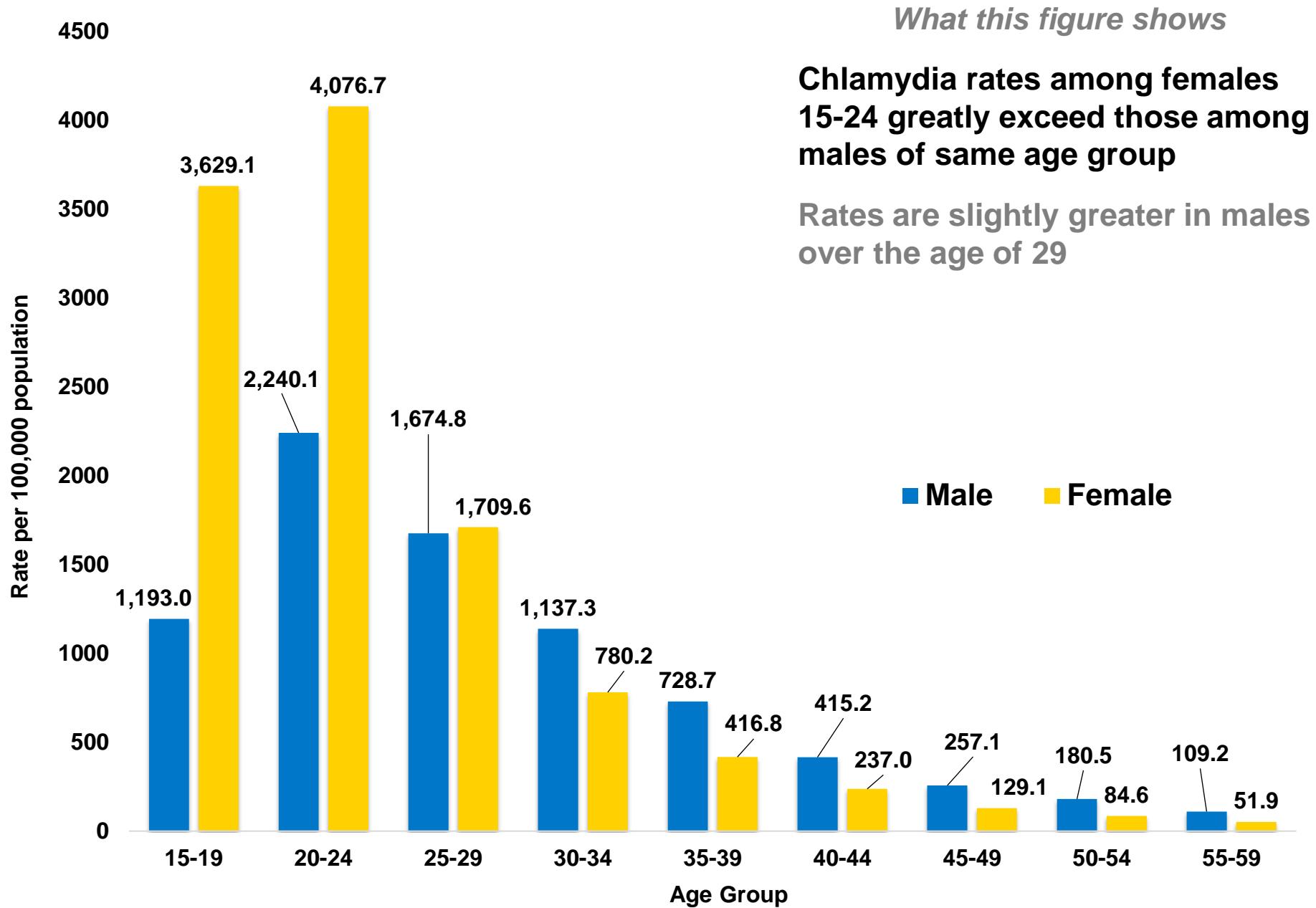


Table 14. Chlamydia by Region/County and Sex
New York State, 2019

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	52,484	556.5	71,793	782.2	124,389	667.9
New York City (NYC)	35,570	859.0	40,524	1,024.8	76,206	941.7
Bronx	6,825	950.4	11,502	1,595.0	18,369	1,267.9
Kings	10,835	859.0	12,309	1,021.5	23,171	938.0
New York	10,901	1,223.1	6,963	844.3	17,889	1,038.7
Queens	6,314	596.3	8,530	854.2	14,859	724.9
Richmond	695	313.8	1,220	575.5	1,918	443.1
NYS excl. NYC	16,914	315.8	31,269	606.7	48,183	457.5
Buffalo Region	2,707	378.4	5,037	731.7	7,744	551.7
Allegany	51	182.0	85	348.0	136	259.3
Cattaraugus	64	187.4	161	488.9	225	335.1
Chautauqua	212	357.9	409	714.2	621	529.5
Erie	1,957	446.2	3,506	819.1	5,463	630.9
Genesee	45	170.2	104	433.4	149	296.9
Niagara	292	317.2	641	732.2	933	520.2
Orleans	63	328.3	88	506.6	151	412.6
Wyoming	23	106.8	43	290.4	66	189.3
Capital Region	1,943	261.6	3,896	562.5	5,839	406.9
Albany	742	436.3	1,264	711.4	2,006	576.4
Clinton	89	197.4	180	436.8	269	312.8
Columbia	54	220.5	108	510.7	162	353.4
Delaware	34	173.4	62	355.6	96	255.7
Essex	20	132.1	41	332.9	61	219.1
Franklin	29	96.3	77	418.1	106	223.3
Fulton	53	225.6	113	548.6	166	380.0
Greene	47	198.8	89	554.0	136	336.9
Hamilton	3	207.1	-	-	3	105.9
Montgomery	32	152.0	117	571.9	149	354.7
Otsego	111	323.7	160	442.5	271	385.0
Rensselaer	235	285.3	500	686.0	735	471.6
Saratoga	141	136.5	350	366.0	491	248.4
Schenectady	260	355.3	601	850.8	861	597.6
Schoharie	18	119.2	58	405.6	76	261.1
Warren	40	149.5	96	389.5	136	266.0
Washington	35	118.5	80	360.7	115	221.7

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	2,699	303.7	4,877	565.4	7,576	431.3
Broome	253	258.3	451	450.9	704	351.1
Cayuga	89	256.0	174	570.4	263	404.5
Chenango	30	151.4	72	390.8	102	266.9
Cortland	75	249.2	156	474.0	231	366.8
Herkimer	42	161.3	117	456.0	159	305.1
Jefferson	335	411.6	441	831.6	776	587.1
Lewis	21	184.3	29	274.5	50	228.1
Madison	72	201.4	140	369.8	212	287.7
Oneida	262	239.2	587	580.3	849	401.4
Onondaga	1,034	472.5	1,916	832.1	2,950	655.0
Oswego	109	186.5	229	401.9	338	291.2
St Lawrence	100	161.3	207	375.5	307	261.9
Tioga	42	207.0	81	430.9	123	315.8
Tompkins	235	313.6	277	328.6	512	320.8
Rochester Region	2,662	444.5	4,703	801.8	7,365	620.3
Chemung	107	286.5	274	791.1	381	531.1
Livingston	57	162.7	106	295.8	163	227.8
Monroe	2,140	591.1	3,618	1,006.7	5,758	795.8
Ontario	112	232.5	199	417.2	311	321.9
Schuyler	8	106.7	25	384.5	33	240.1
Seneca	25	139.1	55	413.7	80	261.4
Steuben	104	255.4	194	510.4	298	378.6
Wayne	93	248.2	213	596.8	306	418.8
Yates	16	156.7	19	150.3	35	154.2
Hudson Valley	3,358	306.5	6,069	575.2	9,427	436.8
Dutchess	416	282.4	742	522.2	1,158	400.7
Orange	595	293.6	1,143	635.4	1,738	449.5
Putnam	73	158.7	139	338.1	212	243.1
Rockland	424	274.7	758	499.1	1,182	383.5
Sullivan	93	270.2	187	619.8	280	435.3
Ulster	187	229.8	416	535.3	603	379.8
Westchester	1,570	364.1	2,684	620.1	4,254	491.0
Long Island	3,545	271.2	6,687	530.3	10,232	397.6
Nassau	1,771	287.6	3,157	527.2	4,928	404.9
Suffolk	1,774	256.7	3,530	533.3	5,304	391.2

Table 15. Chlamydia by Sex and Age
New York State, 2019

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Male						
10-14	121	21.5	76	33.5	45	13.4
15-19	7,131	1,193.0	4,204	1,897.1	2,927	778.2
20-24	14,207	2,240.1	7,981	3,211.8	6,226	1,614.1
25-29	12,282	1,674.8	8,781	2,391.9	3,501	955.9
30-34	8,002	1,137.3	6,199	1,724.2	1,803	524.0
35-39	4,591	728.7	3,620	1,214.6	971	292.5
40-44	2,363	415.2	1,856	728.0	507	161.3
45-49	1,499	257.1	1,159	470.0	340	101.0
50-54	1,116	180.5	848	346.3	268	71.8
55-59	709	109.2	539	220.0	170	42.1
60-64	260	43.7	171	77.4	89	23.8
65-69	111	23.1	73	40.9	38	12.5
70+	51	5.4	32	9.1	19	3.2
Female						
10-14	847	157.5	524	241.2	323	100.8
15-19	20,964	3,629.1	11,335	5,195.6	9,629	2,678.5
20-24	25,913	4,076.7	13,673	5,088.1	12,240	3,336.0
25-29	12,508	1,709.6	7,498	1,925.8	5,010	1,463.6
30-34	5,454	780.2	3,400	924.6	2,054	619.9
35-39	2,672	416.8	1,673	539.2	999	302.1
40-44	1,398	237.0	919	335.8	479	151.5
45-49	792	129.1	549	204.7	243	70.3
50-54	556	84.6	413	153.8	143	36.8
55-59	363	51.9	278	101.2	85	20.0
60-64	155	23.7	129	50.0	26	6.6
65-69	66	12.0	55	24.9	11	3.3
70+	54	4.1	41	7.7	13	1.6

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Total						
10-14	968	87.9	600	135.2	368	56.0
15-19	28,099	2,390.6	15,543	3,534.4	12,556	1,706.8
20-24	40,150	3,161.8	21,684	4,192.5	18,466	2,453.5
25-29	24,801	1,692.9	16,290	2,153.5	8,511	1,201.2
30-34	13,497	962.3	9,640	1,325.6	3,857	571.1
35-39	7,280	572.8	5,310	872.9	1,970	297.3
40-44	3,765	324.9	2,779	525.7	986	156.4
45-49	2,295	191.8	1,712	332.6	583	85.5
50-54	1,673	131.2	1,262	245.8	411	54.0
55-59	1,072	79.5	817	157.2	255	30.8
60-64	415	33.2	300	62.6	115	15.0
65-69	177	17.1	128	32.1	49	7.7
70+	105	4.6	73	8.3	32	2.3

Table 16. Chlamydia Among Young Females, by Age and Region/County
New York State, 2019

Region/County	15-19 yrs		20-24 yrs		15-24 yrs		Region/County	15-19 yrs		20-24 yrs		15-24 yrs	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate		Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	20,964	3,629.1	25,913	4,076.7	46,877	3,863.6	Central Region	1,595	2,623.7	1,961	2,984.5	3,556	2,811.1
New York City (NYC)	11,335	5,195.6	13,673	5,088.1	25,008	5,136.3	Broome	125	1,802.7	184	1,992.9	309	1,911.3
Bronx	3,784	8,306.6	3,761	7,513.3	7,545	7,891.3	Cayuga	61	2,863.8	73	3,491.2	134	3,174.6
Kings	3,595	5,398.9	4,032	5,040.3	7,627	5,203.2	Chenango	20	1,523.2	24	2,013.4	44	1,756.5
New York	1,601	4,395.0	2,619	4,310.2	4,220	4,342.0	Cortland	61	2,560.9	69	2,297.7	130	2,414.1
Queens	1,970	3,563.7	2,830	4,423.1	4,800	4,024.8	Herkimer	47	2,463.3	41	2,504.6	88	2,482.4
Richmond	385	2,689.5	431	3,095.4	816	2,889.6	Jefferson	101	3,506.9	214	5,424.6	315	4,615.4
NYS excl. NYC	9,629	2,678.5	12,240	3,336.0	21,869	3,010.6	Lewis	4	531.9	11	1,567.0	15	1,031.6
Buffalo Region	1,697	3,616.4	1,948	4,117.0	3,645	3,867.7	Madison	51	1,635.7	57	2,010.6	108	1,814.2
Allegany	44	2,236.9	25	1,334.8	69	1,796.9	Oneida	191	2,663.1	229	3,301.1	420	2,976.8
Cattaraugus	50	1,988.1	56	2,450.8	106	2,208.3	Onondaga	676	4,131.0	712	4,400.8	1,388	4,265.1
Chautauqua	141	3,248.8	148	3,850.2	289	3,531.3	Oswego	60	1,421.8	109	2,819.5	169	2,090.0
Erie	1,158	4,116.6	1,381	4,632.5	2,539	4,382.0	St Lawrence	77	1,733.5	78	1,892.7	155	1,810.1
Genesee	22	1,327.7	47	2,930.2	69	2,115.9	Tioga	27	1,929.9	31	2,526.5	58	2,208.7
Niagara	240	3,970.9	242	4,149.5	482	4,058.6	Tompkins	94	1,626.9	129	1,476.1	223	1,536.1
Orleans	30	2,453.0	32	2,829.4	62	2,633.8	Rochester Region	1,452	3,604.4	1,749	4,276.9	3,201	3,943.2
Wyoming	12	1,143.9	17	1,816.2	29	1,461.0	Chemung	83	3,320.0	122	5,311.3	205	4,273.5
Capital Region	1,266	2,746.5	1,551	2,997.4	2,817	2,879.2	Livingston	29	1,078.9	51	1,551.1	80	1,338.7
Albany	423	3,733.1	511	3,162.5	934	3,397.7	Monroe	1,136	4,712.3	1,288	5,184.6	2,424	4,952.0
Clinton	49	1,805.5	81	2,237.0	130	2,052.1	Ontario	54	1,556.2	85	2,568.0	139	2,050.1
Columbia	32	2,285.7	41	3,048.3	73	2,659.4	Schuyler	13	2,895.3	5	1,179.2	18	2,061.9
Delaware	19	1,422.2	25	2,100.8	44	1,741.9	Seneca	20	2,227.2	19	2,139.6	39	2,183.7
Essex	11	1,314.2	16	2,056.6	27	1,671.8	Steuben	58	2,156.1	90	3,623.2	148	2,860.5
Franklin	28	2,147.2	30	2,483.4	58	2,308.9	Wayne	51	1,997.6	84	3,633.2	135	2,774.9
Fulton	36	2,535.2	52	3,837.6	88	3,171.2	Yates	8	861.1	5	477.1	13	657.6
Greene	25	2,439.0	33	3,110.3	58	2,780.4	Hudson Valley	1,701	2,191.0	2,339	3,202.6	4,040	2,681.3
Hamilton	-	0.0	-	0.0	-	-	Dutchess	232	2,222.6	291	2,751.0	523	2,488.6
Montgomery	41	2,909.9	43	3,201.8	84	3,052.3	Orange	316	2,330.9	467	3,774.3	783	3,019.7
Otsego	59	2,101.9	63	1,794.4	122	1,931.0	Putnam	33	1,103.3	68	2,426.8	101	1,743.5
Rensselaer	146	3,046.7	190	3,888.7	336	3,471.8	Rockland	240	2,078.8	296	2,883.9	536	2,457.7
Saratoga	98	1,455.5	158	2,501.2	256	1,961.7	Sullivan	56	2,660.3	61	3,021.3	117	2,837.1
Schenectady	229	4,831.2	206	4,275.6	435	4,551.2	Ulster	123	2,266.9	161	3,020.6	284	2,640.4
Schoharie	25	2,236.1	24	2,523.7	49	2,368.3	Westchester	701	2,220.1	995	3,353.8	1,696	2,769.3
Warren	23	1,482.0	37	2,223.6	60	1,865.7	Long Island	1,918	2,185.4	2,692	3,051.8	4,610	2,619.7
Washington	22	1,484.5	41	2,825.6	63	2,148.0	Nassau	861	2,072.3	1,305	3,141.2	2,166	2,606.7
							Suffolk	1,057	2,287.1	1,387	2,972.2	2,444	2,631.3

Rates are per 100,000 residents.

Table 17. Chlamydia by Region/County and Year
New York State, 2017 - 2019

Region/County	2017		2018		2019	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	116,843	612.9	119,670	634.7	124,389	667.9
New York City (NYC)	71,690	861.1	72,445	881.5	76,206	941.7
Bronx	17,718	1,170.2	17,704	1,191.3	18,369	1,267.9
Kings	21,146	829.8	21,696	862.8	23,171	938.0
New York	16,678	967.6	17,240	1,003.3	17,889	1,038.7
Queens	14,426	676.7	14,087	674.2	14,859	724.9
Richmond	1,722	389.9	1,718	394.0	1,918	443.1
NYS excl. NYC	45,153	420.9	47,225	444.2	48,183	457.5
Buffalo Region	7,824	544.4	7,798	550.5	7,744	551.7
Allegany	92	173.6	158	296.8	136	259.3
Cattaraugus	211	309.4	216	317.1	225	335.1
Chautauqua	549	454.7	606	517.3	621	529.5
Erie	5,571	631.8	5,449	623.6	5,463	630.9
Genesee	167	326.8	156	314.3	149	296.9
Niagara	1,013	544.3	994	546.2	933	520.2
Orleans	148	399.5	164	438.7	151	412.6
Wyoming	73	205.5	55	159.3	66	189.3
Capital Region	5,999	407.1	6,033	415.1	5,839	406.9
Albany	1,877	524.6	1,932	546.1	2,006	576.4
Clinton	276	305.7	303	344.8	269	312.8
Columbia	189	399.6	201	436.3	162	353.4
Delaware	85	206.3	95	242.5	96	255.7
Essex	78	258.8	83	290.4	61	219.1
Franklin	86	172.4	107	218.4	106	223.3
Fulton	166	363.7	213	478.5	166	380.0
Greene	129	308.0	146	354.3	136	336.9
Hamilton	5	187.9	4	116.3	3	105.9
Montgomery	198	469.1	153	353.2	149	354.7
Otsego	236	302.0	220	303.2	271	385.0
Rensselaer	738	465.7	804	515.7	735	471.6
Saratoga	607	300.1	547	270.9	491	248.4
Schenectady	875	601.8	817	563.8	861	597.6
Schoharie	93	308.6	67	226.6	76	261.1
Warren	202	383.0	204	398.0	136	266.0
Washington	159	301.5	137	264.0	115	221.7

Region/County	2017		2018		2019	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	7,013	389.6	7,786	436.5	7,576	431.3
Broome	690	339.0	623	299.2	704	351.1
Cayuga	255	371.0	259	384.2	263	404.5
Chenango	116	291.8	99	253.9	102	266.9
Cortland	171	276.8	203	308.0	231	366.8
Herkimer	124	232.7	166	313.5	159	305.1
Jefferson	787	575.2	873	665.4	776	587.1
Lewis	63	283.5	61	279.4	50	228.1
Madison	196	254.4	201	264.2	212	287.7
Oneida	841	389.8	917	429.8	849	401.4
Onondaga	2,684	585.3	3,211	702.9	2,950	655.0
Oswego	327	270.1	328	281.4	338	291.2
St Lawrence	264	218.6	294	244.6	307	261.9
Tioga	72	185.2	92	234.7	123	315.8
Tompkins	423	250.9	459	272.2	512	320.8
Rochester Region	6,446	530.0	6,874	572.1	7,365	620.3
Chemung	274	365.9	319	437.3	381	531.1
Livingston	143	192.4	170	227.8	163	227.8
Monroe	4,988	674.8	5,338	730.0	5,758	795.8
Ontario	318	316.7	329	335.3	311	321.9
Schuyler	34	239.6	24	176.6	33	240.1
Seneca	101	310.4	84	256.9	80	261.4
Steuben	273	338.8	264	330.4	298	378.6
Wayne	263	343.3	291	384.6	306	418.8
Yates	52	218.1	55	221.8	35	154.2
Hudson Valley	8,393	386.5	8,823	407.6	9,427	436.8
Dutchess	1,074	365.9	1,169	401.3	1,158	400.7
Orange	1,542	402.7	1,563	404.4	1,738	449.5
Putnam	182	209.0	187	209.6	212	243.1
Rockland	944	312.1	1,105	364.9	1,182	383.5
Sullivan	271	422.8	273	425.3	280	435.3
Ulster	568	349.4	601	373.6	603	379.8
Westchester	3,812	434.6	3,925	450.2	4,254	491.0
Long Island	9,478	362.8	9,911	381.9	10,232	397.6
Nassau	4,561	368.9	4,784	389.6	4,928	404.9
Suffolk	4,917	357.5	5,127	375.0	5,304	391.2

Table 18. Chlamydia by Year and Region
New York State, 2001 - 2019

Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	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	525.5	64,966	785.3	37,494	334.0
2012	100,687	514.4	62,460	748.3	38,227	340.5
2013	96,020	489.3	58,098	692.0	37,922	337.7
2014	98,262	500.0	59,417	704.5	38,845	346.3
2015	103,825	528.2	62,965	744.0	40,860	365.1
2016	109,549	558.0	66,748	788.1	42,801	383.4
2017	116,843	596.5	71,690	849.7	45,153	404.9
2018	119,670	612.7	72,445	863.5	47,225	423.9
2019	124,389	639.4	76,206	914.1	48,183	433.4

1. The 2019 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 2019 and closed by April 24, 2019.
2. The 2019 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 2020. 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.

[§] Surveillance, Epidemiology, and End Results (SEER) Program Populations (1969-2019) (www.seer.cancer.gov/popdata), National Cancer Institute, DCCPS, Surveillance Research Program, released February 2021.

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); white, non-Hispanic; and Native American. Limited data are presented for diagnoses reported among Native American/Alaskan Native, or multi-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.
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 - 2019.
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).

Technical Notes: References

1. New York State Public Health Law (n.d.). Retrieved from https://www.health.ny.gov/regulations/public_health_law/
2. 2018 Sexually Transmitted Diseases Surveillance, Centers for Disease Control and Prevention (n.d.) . Retrieved from <https://www.cdc.gov/std/stats18/default.htm>
3. Syphilis, New York State Department of Health (n.d.) . Retrieved from <https://www.health.ny.gov/publications/3807/>
4. Syphilis Treatment and Care, Centers for Disease Control and Prevention (n.d.). Retrieved from <https://www.cdc.gov/std/syphilis/treatment.htm>
5. Syphilis (*Treponema pallidum*) 2018 Case Definition, Centers for Disease Control and Prevention (n.d.) . Retrieved from <https://www.cdc.gov/nndss/conditions/syphilis/case-definition/2018/>
6. Congenital Syphilis (*Treponema pallidum*) 2015 Case Definition, Centers for Disease Control and Prevention (n.d.). Retrieved from <https://www.cdc.gov/nndss/conditions/congenital-syphilis/case-definition/2015/>
7. Gonorrhea, New York State Department of Health (n.d.). Retrieved from <https://www.health.ny.gov/publications/3802/>
8. Gonorrhea Treatment and Care, Centers for Disease Control and Prevention (n.d.). Retrieved from <https://www.cdc.gov/std/gonorrhea/treatment.htm>
9. Antibiotic-Resistant Gonorrhea, Centers for Disease Control and Prevention (n.d.). Retrieved from <https://www.cdc.gov/std/gonorrhea/arg/default.htm>
10. Update to CDC's Treatment Guidelines for Gonococcal Infection, 2020. (n.d.). Retrieved from <https://dx.doi.org/10.15585/mmwr.mm6950a6>
11. Gonorrhea (*Neisseria gonorrhoeae*) 2014 Case Definition, Centers for Disease Control and Prevention (n.d.). Retrieved from <https://www.cdc.gov/nndss/conditions/gonorrhea/case-definition/2014/>
12. Chlamydia, New York State Department of Health (n.d.). Retrieved from <https://www.health.ny.gov/publications/3835/>
13. Chlamydia Treatment and Care, Centers for Disease Control and Prevention (n.d.). Retrieved from <https://www.cdc.gov/std/chlamydia/treatment.htm>
14. Expedited Partner Therapy, New York State Department of Health (n.d.). Retrieved from <https://www.health.ny.gov/diseases/communicable/std/ept/>
15. Chlamydia Trachomatis Infection 2010 Case Definition, Centers for Disease Control and Prevention (n.d.). Retrieved from <https://www.cdc.gov/nndss/conditions/chlamydia-trachomatis-infection/case-definition/2010/>

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