

Sexually Transmitted Infections Surveillance Report New York State

2018

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This document summarizes 2018 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.

In 2018, reported diagnoses of chlamydia and gonorrhea increased for the fifth 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 10th, 18th, and 10th among all states in 2018 for the total number of diagnoses of chlamydia, gonorrhea, and primary and secondary syphilis, respectively; and 24th for diagnoses of congenital syphilis. The highest rates of STIs in NYS continued to be seen in young people, non-Hispanic black individuals, and gay, bisexual and other men who have sex with men.

According to data in this report, chlamydia continued to be the most common reportable STI in NYS with 119,670 diagnoses (2.4% increase over 2017), and the highest number of diagnoses since chlamydia became reportable in 2000. The highest rates were among females 15-24 years of age.

Gonorrhea diagnoses increased 9.4% in 2018, to 37,322 reported diagnoses. The percent increase among males was higher than females (10.7% compared to 5.6%). Additionally, the rates were highest among males 20-34, and among females 15-24.

Primary and secondary syphilis diagnoses increased 12.8% in 2018 compared to 2017 which is slightly less than the national percent increase of 14.4% for the same period. Diagnoses among males accounted for 93% of primary and secondary syphilis diagnoses; 83.7% of males diagnosed with primary or secondary syphilis who provided information on sex partners reported sex with other males. Although males accounted for the vast majority of diagnoses, rates of primary and secondary syphilis among females almost quadrupled since 2014. In 2018, 29 diagnoses of congenital syphilis were reported statewide, a 93% increase compared to 2017.

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 papilloma virus, 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.

[Syphilis](#)³ 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), though 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 (sore 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 [antibiotics](#)⁴, 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 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 [CDC case definition](#)⁶.

[Gonorrhea](#)⁷ 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 to an 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 males 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 [antibiotics](#)⁸; however, [antimicrobial resistant gonorrhea](#)⁹ is increasingly a concern. Currently, the CDC recommends dual therapy treatment with ceftriaxone and azithromycin.

Gonorrhea data presented in this surveillance report represent confirmed or probable cases according to the [CDC case definition](#)¹⁰.

[Chlamydia](#)¹¹ 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. Chlamydia may pass to an 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 [antibiotics](#)¹². [Partner treatment](#)¹³ is crucial for the prevention of repeat infections.

Chlamydia data presented in this surveillance report represent confirmed cases according to the [CDC case definition](#)¹⁴.

Figure 1. STI Diagnoses By Age
New York State, 2018

What this figure shows

Chlamydia is the most commonly reported STI in New York State

54% of STIs are diagnosed among people younger than 26 years of age

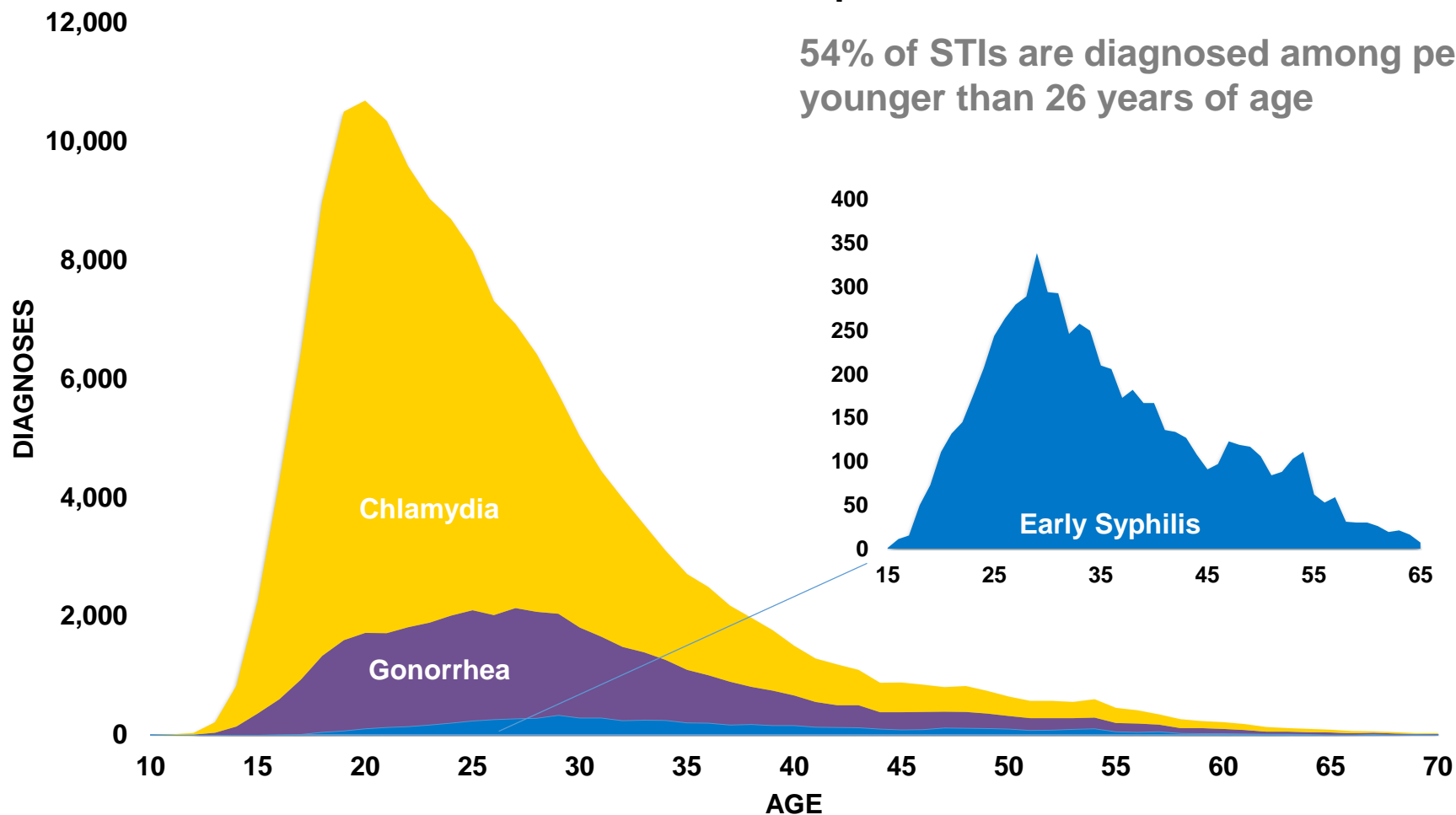


Table 1. STIs by Region/County
New York State, 2018

Region/County	Early Syphilis		Gonorrhea		Chlamydia	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	6,758	34.7	37,322	190.6	119,670	614.4
New York City (NYC)	5,526	60.7	26,128	289.1	72,445	839.1
Bronx	1,310	87.9	5,220	336.7	17,704	1,130.9
Kings	1,320	47.0	7,592	271.6	21,696	822.4
New York	1,905	101.7	9,086	476.3	17,240	969.5
Queens	915	37.4	3,803	162.5	14,087	629.8
Richmond	76	17.1	427	95.0	1,718	386.8
NYS excl. NYC	1,232	11.5	11,194	105.4	47,225	435.8
Buffalo Region	108	7.8	2,856	197.7	7,798	538.9
Allegany	2	7.0	17	37.5	158	287.2
Cattaraugus	1	1.7	44	64.0	216	313.4
Chautauqua	2	1.6	172	150.2	606	501.8
Erie	91	10.6	2,249	252.2	5,449	611.4
Genesee	3	5.7	41	80.1	156	306.4
Niagara	6	3.0	304	161.0	994	534.8
Orleans	2	5.8	23	61.5	164	434.7
Wyoming	1	2.2	6	16.4	55	154.5
Capital Region	146	9.8	1,315	91.9	6,033	408.0
Albany	55	16.5	535	160.8	1,932	536.4
Clinton	2	2.1	33	40.7	303	335.8
Columbia	6	12.3	27	53.4	201	422.5
Delaware	-	-	6	14.3	95	235.3
Essex	2	5.1	7	23.5	83	272.1
Franklin	-	-	3	6.3	107	210.4
Fulton	2	4.3	32	71.5	213	468.8
Greene	3	6.6	16	34.9	146	351.6
Hamilton	-	-	-	-	4	116.3
Montgomery	4	9.0	29	68.4	153	355.8
Otsego	-	-	29	46.6	220	299.6
Rensselaer	21	13.4	234	151.4	804	507.5
Saratoga	8	3.2	73	34.9	547	270.0
Schenectady	34	22.8	260	180.8	817	558.3
Schoharie	1	1.9	3	10.7	67	218.3
Warren	7	10.7	20	36.4	204	390.3
Washington	1	1.9	8	14.7	137	259.3

Region/County	Early Syphilis		Gonorrhea		Chlamydia	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	102	6.1	1,874	108.7	7,786	427.6
Broome	14	6.8	196	104.0	623	295.8
Cayuga	-	-	109	161.4	259	374.1
Chenango	-	-	12	30.0	99	249.9
Cortland	8	16.8	19	33.4	203	306.6
Herkimer	5	7.7	14	24.4	166	308.3
Jefferson	9	6.8	102	75.1	873	629.7
Lewis	-	-	1	4.6	61	271.9
Madison	1	1.2	15	18.1	201	261.7
Oneida	16	7.5	115	53.7	917	425.0
Onondaga	28	6.3	1,085	239.2	3,211	691.5
Oswego	4	3.5	52	45.8	328	272.9
St Lawrence	5	5.4	32	29.3	294	236.8
Tioga	1	3.0	10	24.3	92	233.1
Tompkins	11	12.4	112	63.9	459	262.6
Rochester Region	223	18.6	2,159	178.6	6,874	560.4
Chemung	15	16.9	43	56.0	319	413.1
Livingston	3	4.2	17	28.2	170	223.9
Monroe	195	27.0	1,867	252.9	5,338	714.5
Ontario	6	7.0	72	73.9	329	330.8
Schuyler	-	-	3	21.7	24	169.3
Seneca	-	-	21	67.8	84	251.0
Steuben	1	1.4	46	54.5	264	327.4
Wayne	2	2.7	84	113.8	291	379.6
Yates	1	6.5	6	22.2	55	224.2
Hudson Valley	322	14.6	1,452	67.6	8,823	400.8
Dutchess	52	17.2	180	63.3	1,169	395.1
Orange	64	17.4	241	65.8	1,563	402.4
Putnam	16	16.7	23	24.5	187	207.1
Rockland	32	10.8	109	37.6	1,105	358.2
Sullivan	8	11.0	36	52.1	273	417.7
Ulster	20	11.5	98	60.1	601	366.7
Westchester	130	14.2	765	86.9	3,925	440.3
Long Island	331	12.2	1,538	58.3	9,911	374.6
Nassau	180	14.1	752	60.4	4,784	381.6
Suffolk	151	10.5	786	56.4	5,127	368.4

Figure 2. Early Syphilis by Year
New York State, 1960 - 2018

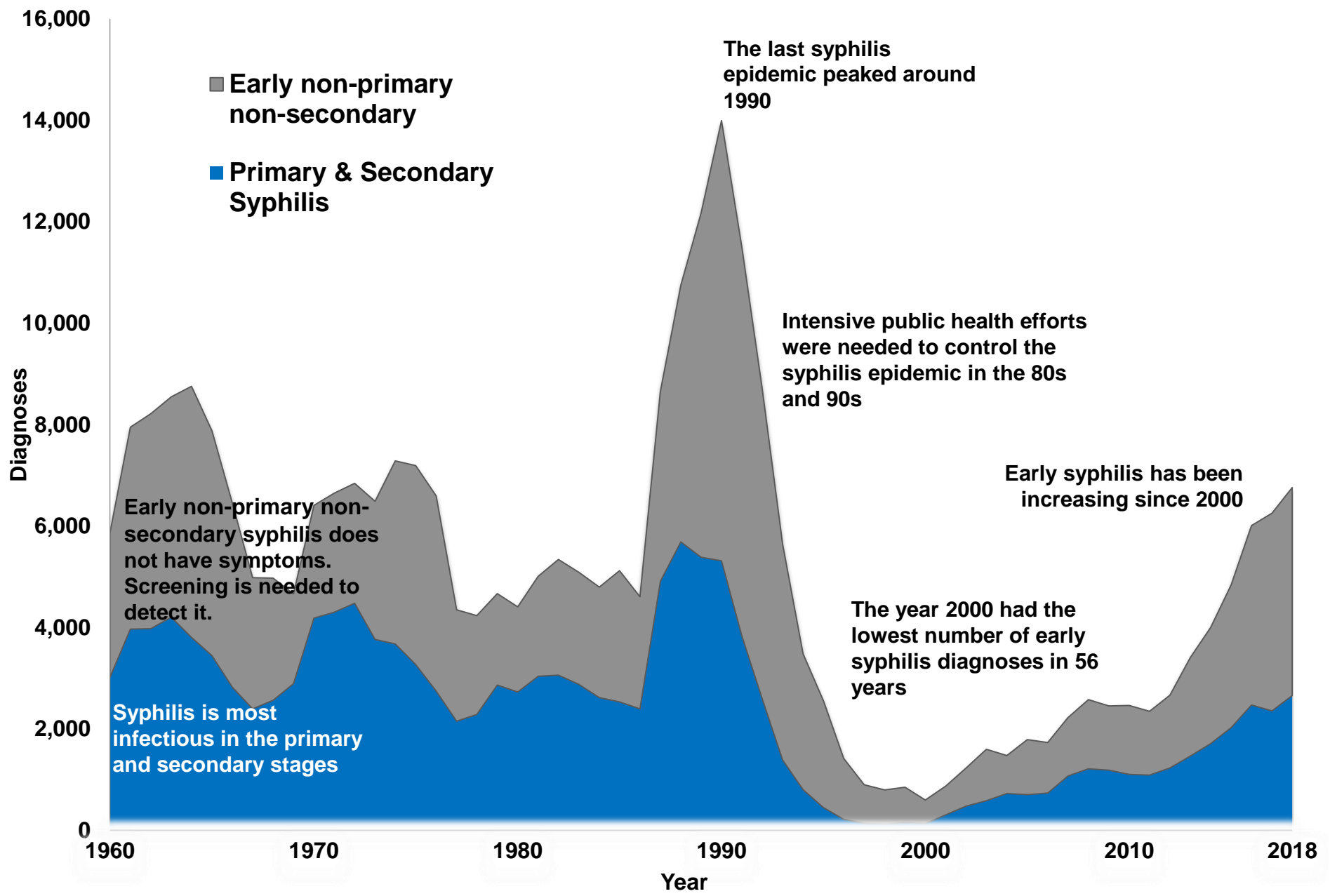


Figure 3. Early Syphilis by Year and Sex
New York State excluding NYC, 1936 - 2018

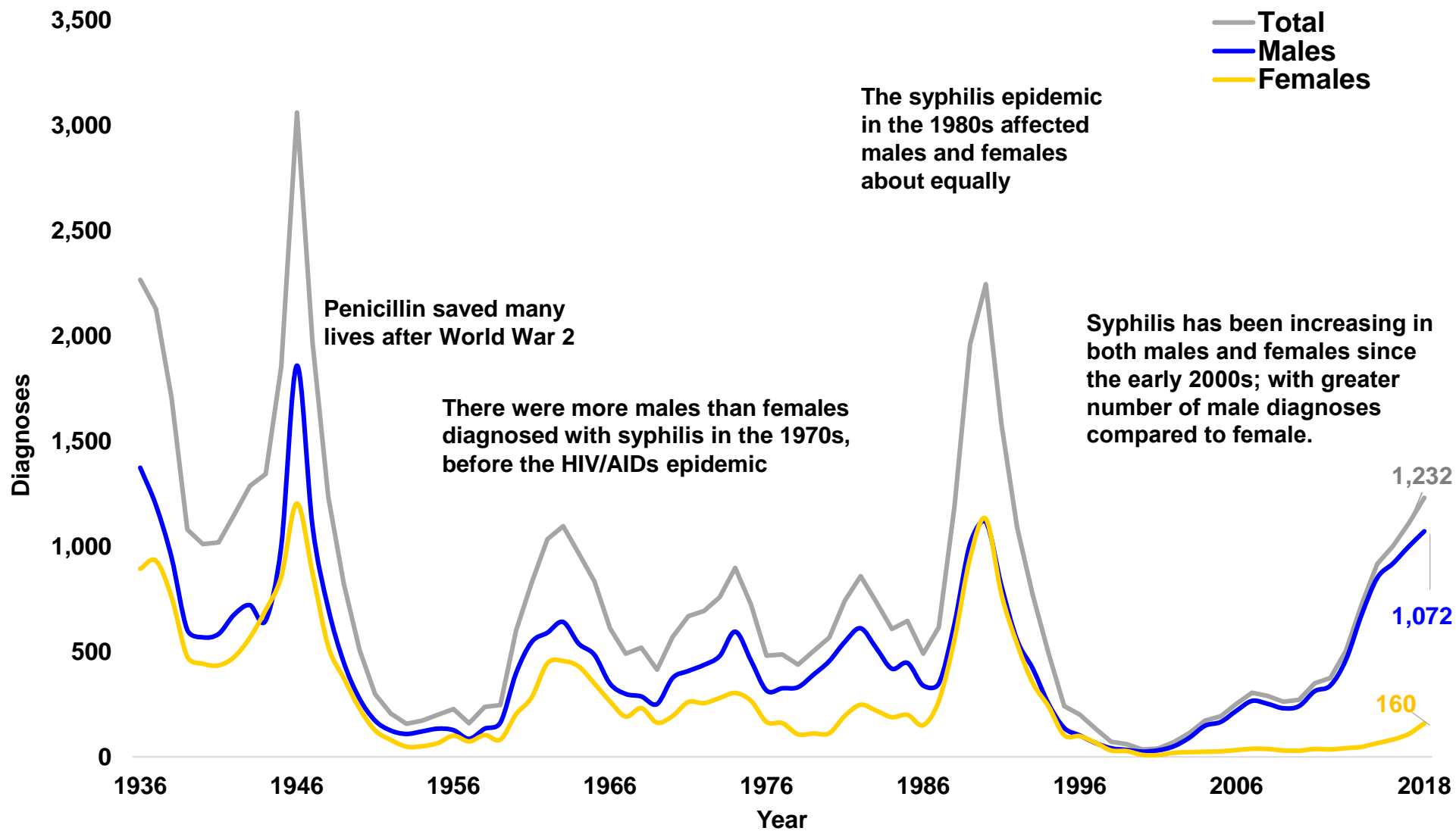
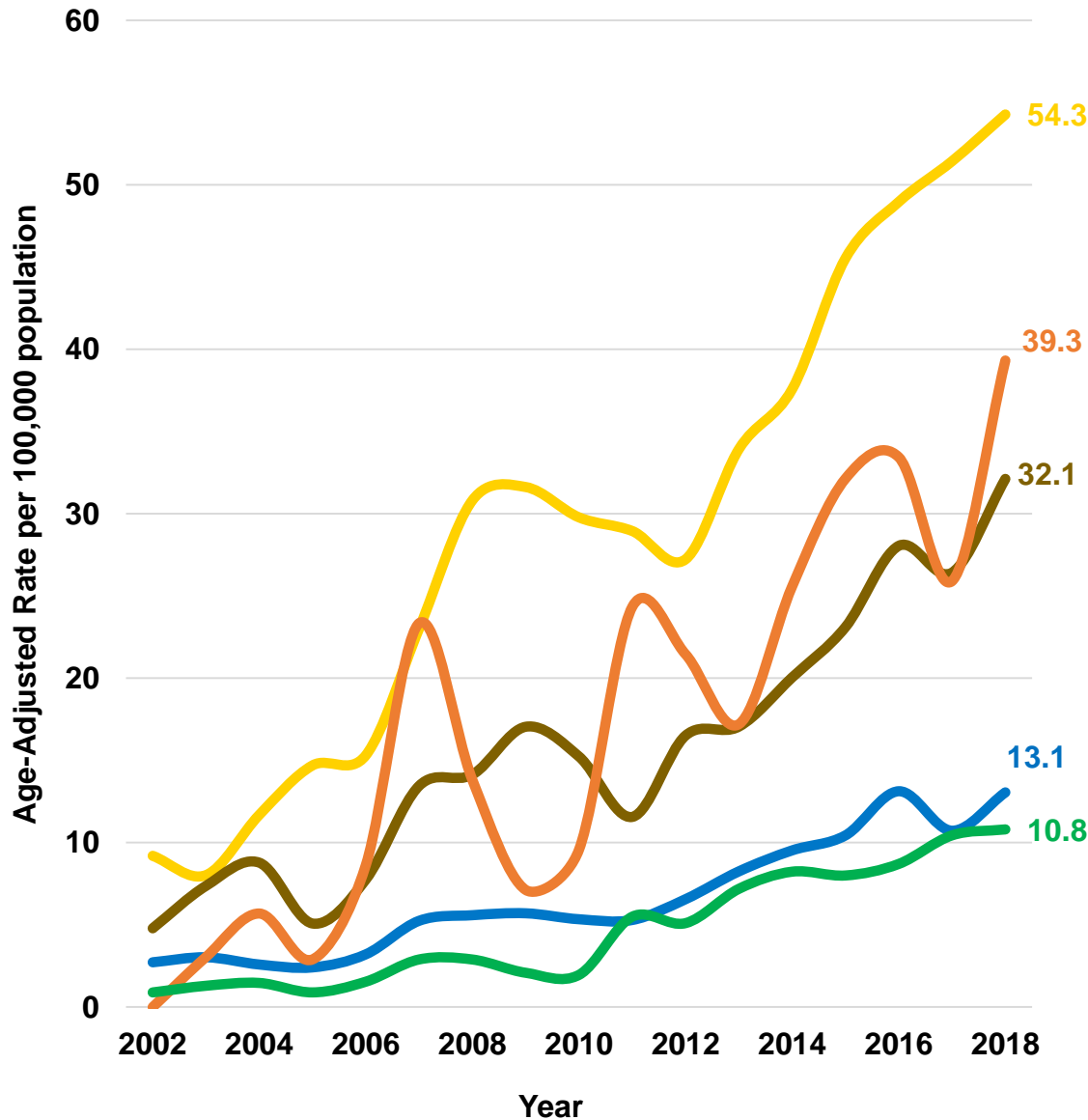


Figure 4. Primary and Secondary Syphilis Rates by Race/Ethnicity and Year, Males

New York State, 2001 - 2018



What this figure shows

Non-Hispanic black males have had the largest increases in syphilis

Although rates are high among American Indian/Alaskan Native population, this group represents a small proportion of the morbidity

Number and Proportion of Diagnoses in 2018

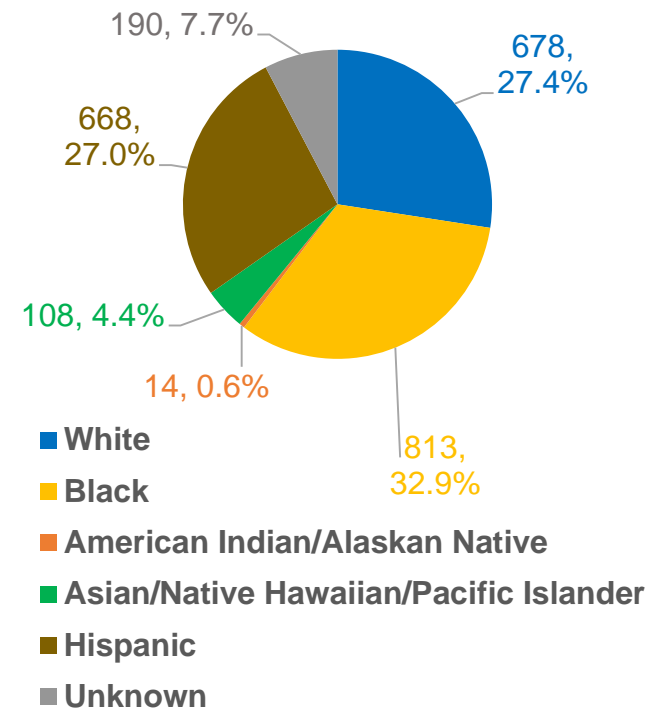


Figure 5. Primary and Secondary Syphilis Rates by Age and Sex New York State, 2018

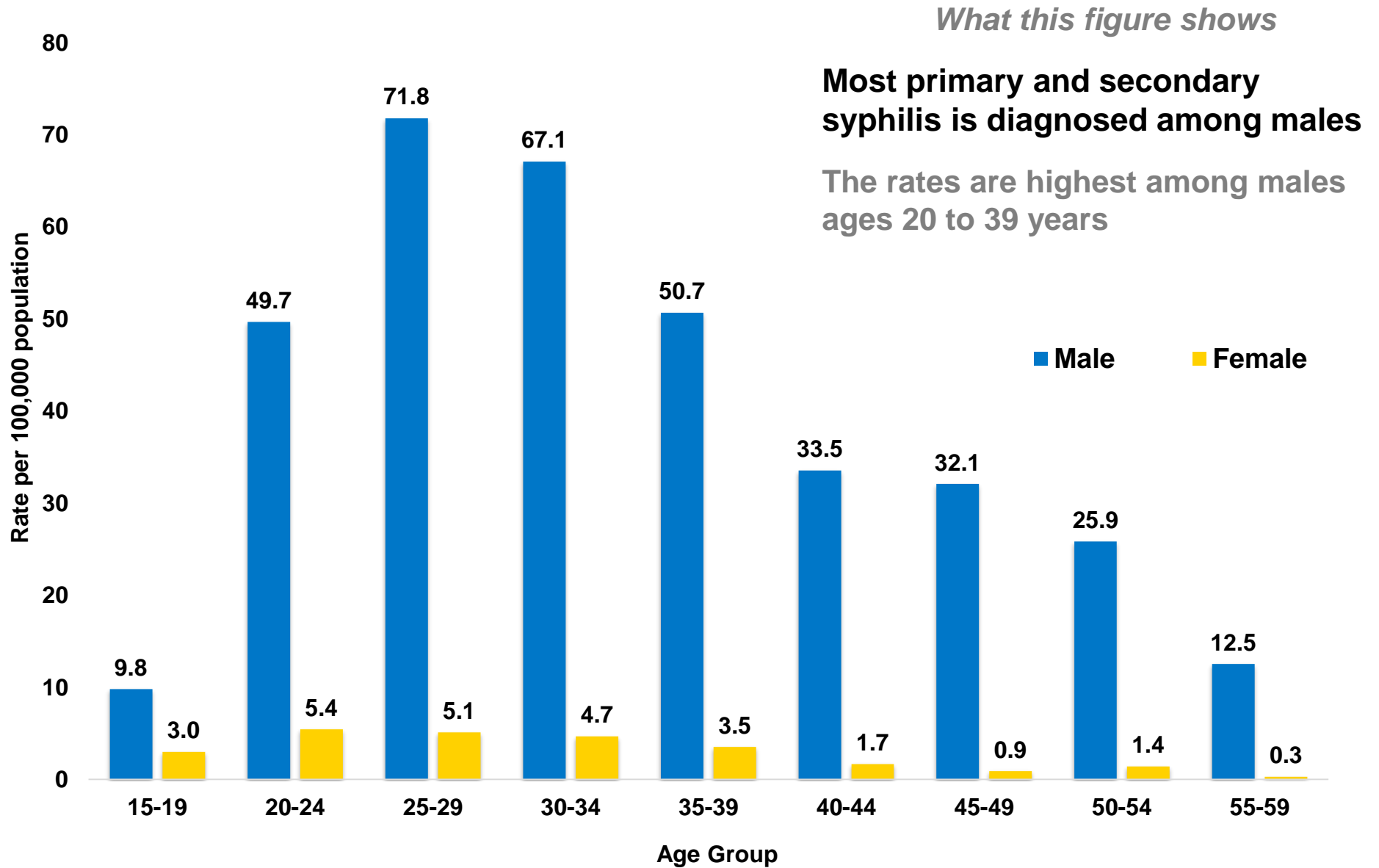
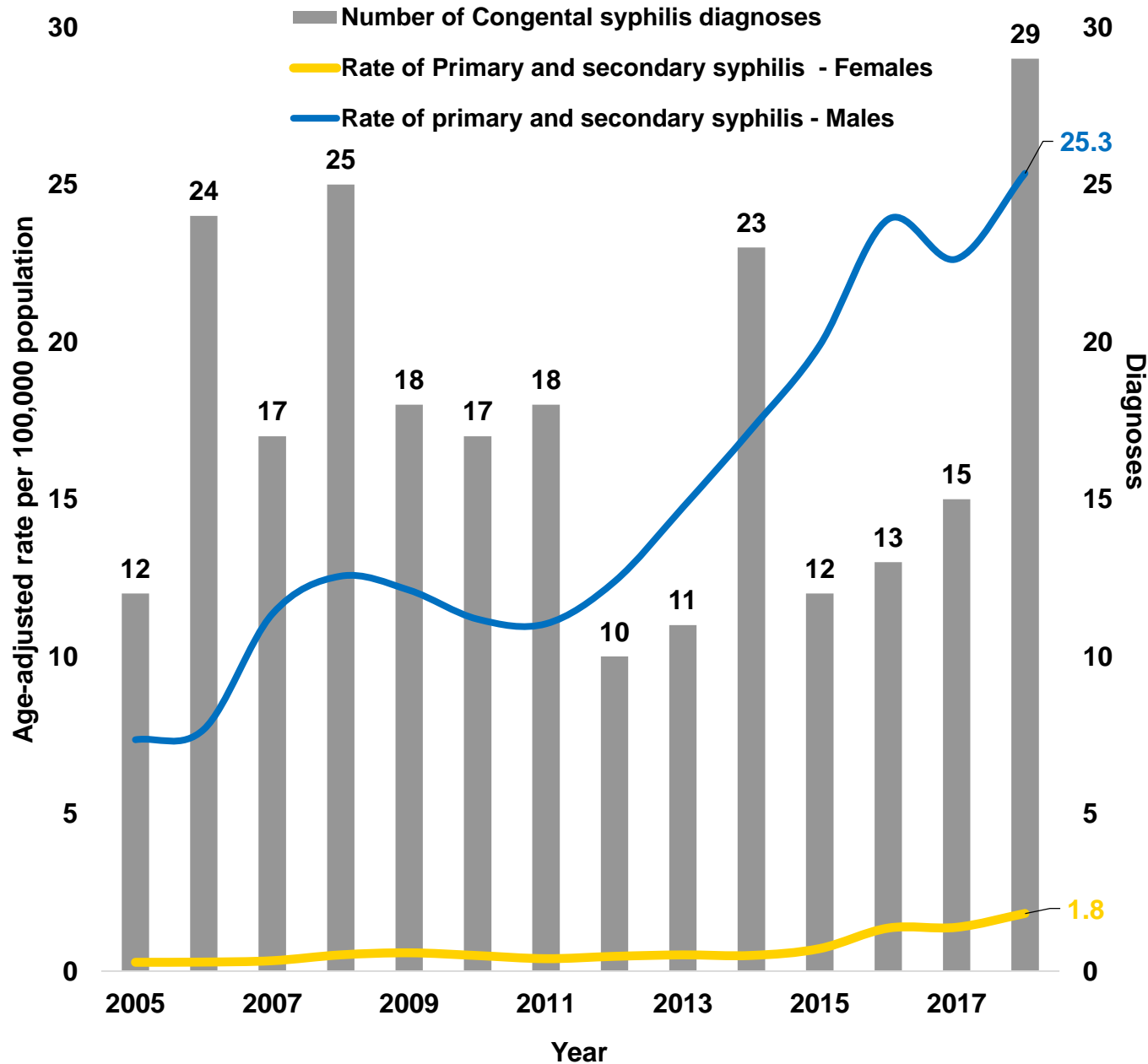


Figure 6. Congenital Syphilis Diagnoses with Primary & Secondary Syphilis Rates
New York State, 2005 - 2018



What this figure shows

The number of congenital syphilis diagnoses has increased even though the rate of primary and secondary syphilis among females is relatively low

The rate of primary and secondary syphilis among females has increased 264% in past 5 years (0.5 to 1.8 per 100,000)

Table 2. Syphilis by Region/County
New York State, 2018

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)	2,656	13.5	4,102	21.2	3,404	17.2
New York City (NYC)	2,026	22.0	3,500	38.7	2,853	31.3
Bronx	460	30.4	850	57.4	636	43.2
Kings	496	17.3	824	29.7	832	30.0
New York	687	36.2	1,218	65.5	660	34.5
Queens	356	14.3	559	23.1	682	27.7
Richmond	27	6.0	49	11.1	43	9.9
NYS excl. NYC	630	5.9	602	5.6	551	4.8
Buffalo Region	61	4.5	47	3.3	74	4.7
Allegany	2	7.0	-	-	2	6.3
Cattaraugus	-	-	1	1.7	1	1.2
Chautauqua	2	1.6	-	-	3	2.4
Erie	49	5.8	42	4.8	57	6.1
Genesee	2	3.9	1	1.8	2	3.0
Niagara	4	1.9	2	1.1	8	3.2
Orleans	2	5.8	-	-	1	2.2
Wyoming	-	-	1	2.2	-	-
Capital Region	78	5.3	68	4.5	60	3.9
Albany	36	11.0	19	5.5	21	6.6
Clinton	2	2.1	-	-	4	4.5
Columbia	1	1.3	5	11.0	4	8.7
Essex	2	5.1	-	-	1	1.5
Fulton	2	4.3	-	-	1	2.2
Greene	-	-	3	6.6	1	2.1
Montgomery	3	6.8	1	2.2	-	-
Otsego	-	-	-	-	1	0.9
Rensselaer	9	5.7	12	7.8	4	2.4
Saratoga	2	1.0	6	2.2	6	2.6
Schenectady	18	12.5	16	10.3	16	9.6
Schoharie	-	-	1	1.9	-	-
Warren	3	4.8	4	5.9	1	2.4
Washington	-	-	1	1.9	-	-

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	52	3.1	50	2.9	24	1.4
Broome	8	3.6	6	3.1	2	1.2
Cortland	4	6.9	4	9.8	-	-
Herkimer	-	-	5	7.7	-	-
Jefferson	3	2.7	6	4.1	1	0.8
Madison	-	-	1	1.2	3	5.5
Oneida	9	4.3	7	3.3	4	1.7
Onondaga	15	3.2	13	3.1	6	1.1
Oswego	3	2.6	1	0.8	1	1.0
St Lawrence	5	5.4	-	-	1	1.4
Tioga	1	3.0	-	-	2	3.8
Tompkins	4	6.1	7	6.3	4	4.6
Rochester Region	161	13.4	62	5.2	69	5.1
Chemung	12	14.4	3	2.5	3	4.3
Livingston	3	4.2	-	-	2	3.1
Monroe	139	19.2	56	7.8	54	6.7
Ontario	4	4.7	2	2.2	3	2.1
Seneca	-	-	-	-	2	7.3
Steuben	1	1.4	-	-	1	0.6
Wayne	1	1.4	1	1.3	2	2.7
Yates	1	6.5	-	-	2	4.5
Hudson Valley	157	7.0	165	7.6	177	7.5
Dutchess	36	12.0	16	5.2	22	5.9
Orange	26	6.8	38	10.6	8	2.1
Putnam	6	6.2	10	10.5	9	9.2
Rockland	5	2.0	27	8.8	22	7.2
Sullivan	4	6.0	4	5.0	4	4.7
Ulster	11	6.3	9	5.2	12	6.4
Westchester	69	7.4	61	6.8	100	10.5
Long Island	121	4.5	210	7.7	147	4.8
Nassau	66	5.3	114	8.8	42	3.1
Suffolk	55	3.8	96	6.6	105	6.4

**Table 3. Early Syphilis by Region/County and Sex
New York State, 2018**

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	6,241	64.9	503	5.1	6,758	34.7
New York City (NYC)	5,169	117.3	343	7.3	5,526	60.7
Bronx	1,169	165.9	132	16.5	1,310	87.9
Kings	1,237	92.1	83	5.8	1,320	47.0
New York	1,839	200.7	63	6.6	1,905	101.7
Queens	855	70.9	59	4.8	915	37.4
Richmond	69	31.5	6	2.9	76	17.1
NYS excl. NYC	1,072	19.7	160	3.1	1,232	11.5
Buffalo Region	97	13.9	11	1.6	108	7.8
Allegany	2	14.0	-	-	2	7.0
Cattaraugus	1	3.3	-	-	1	1.7
Chautauqua	2	3.1	-	-	2	1.6
Erie	82	19.3	9	2.1	91	10.6
Genesee	3	10.7	-	-	3	5.7
Niagara	5	4.8	1	1.1	6	3.0
Orleans	2	11.5	-	-	2	5.8
Wyoming	-	-	1	5.9	1	2.2
Capital Region	116	15.1	30	4.3	146	9.8
Albany	46	27.7	9	5.8	55	16.5
Clinton	2	4.0	-	-	2	2.1
Columbia	6	24.6	-	-	6	12.3
Essex	2	9.2	-	-	2	5.1
Fulton	2	8.6	-	-	2	4.3
Greene	3	11.9	-	-	3	6.6
Montgomery	2	9.2	2	9.2	4	9.0
Rensselaer	18	23.5	3	3.5	21	13.4
Saratoga	8	6.5	-	-	8	3.2
Schenectady	18	24.0	16	21.9	34	22.8
Schoharie	1	3.8	-	-	1	1.9
Warren	7	21.6	-	-	7	10.7
Washington	1	3.5	-	-	1	1.9

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	91	10.6	11	1.4	102	6.1
Broome	12	11.3	2	2.2	14	6.8
Cortland	8	33.6	-	-	8	16.8
Herkimer	4	11.9	1	3.5	5	7.7
Jefferson	9	12.2	-	-	9	6.8
Madison	1	2.3	-	-	1	1.2
Oneida	12	10.8	4	3.9	16	7.5
Onondaga	27	12.4	1	0.4	28	6.3
Oswego	4	6.7	-	-	4	3.5
St Lawrence	2	3.0	3	8.2	5	5.4
Tioga	1	5.8	-	-	1	3.0
Tompkins	11	25.3	-	-	11	12.4
Rochester Region	176	29.1	47	8.3	223	18.6
Chemung	12	25.9	3	7.8	15	16.9
Livingston	3	8.3	-	-	3	4.2
Monroe	153	42.8	42	11.9	195	27.0
Ontario	5	11.7	1	2.4	6	7.0
Steuben	-	-	1	2.9	1	1.4
Wayne	2	5.4	-	-	2	2.7
Yates	1	13.1	-	-	1	6.5
Hudson Valley	286	25.7	36	3.3	322	14.6
Dutchess	46	30.1	6	3.2	52	17.2
Orange	52	28.0	12	6.6	64	17.4
Putnam	13	25.8	3	7.1	16	16.7
Rockland	30	19.8	2	1.5	32	10.8
Sullivan	7	18.0	1	3.3	8	11.0
Ulster	17	18.9	3	3.6	20	11.5
Westchester	121	26.7	9	2.1	130	14.2
Long Island	306	22.3	25	1.9	331	12.2
Nassau	164	25.6	16	2.6	180	14.1
Suffolk	142	19.4	9	1.3	151	10.5

**Table 4. Primary and Secondary Syphilis by Region/County and Sex
New York State, 2018**

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	2,471	25.4	179	1.8	2,656	13.5
New York City (NYC)	1,918	42.9	102	2.2	2,026	22.0
Bronx	418	57.7	39	5.1	460	30.4
Kings	478	34.9	18	1.2	496	17.3
New York	658	70.8	27	3.0	687	36.2
Queens	339	27.6	17	1.4	356	14.3
Richmond	25	11.3	1	0.5	27	6.0
NYS excl. NYC	553	10.2	77	1.5	630	5.9
Buffalo Region	57	8.3	4	0.6	61	4.5
Allegany	2	14.0	-	-	2	7.0
Chautauqua	2	3.1	-	-	2	1.6
Erie	46	11.1	3	0.7	49	5.8
Genesee	2	7.4	-	-	2	3.9
Niagara	3	2.7	1	1.1	4	1.9
Orleans	2	11.5	-	-	2	5.8
Capital Region	60	7.9	18	2.5	78	5.3
Albany	29	18.0	7	4.4	36	11.0
Clinton	2	4.0	-	-	2	2.1
Columbia	1	2.6	-	-	1	1.3
Essex	2	9.2	-	-	2	5.1
Fulton	2	8.6	-	-	2	4.3
Montgomery	2	9.2	1	4.9	3	6.8
Rensselaer	8	10.2	1	1.1	9	5.7
Saratoga	2	1.9	-	-	2	1.0
Schenectady	9	12.7	9	12.4	18	12.5
Warren	3	9.8	-	-	3	4.8

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	45	5.2	7	1.0	52	3.1
Broome	7	6.0	1	1.2	8	3.6
Cortland	4	14.0	-	-	4	6.9
Jefferson	3	5.0	-	-	3	2.7
Oneida	6	5.5	3	2.9	9	4.3
Onondaga	15	6.5	-	-	15	3.2
Oswego	3	5.1	-	-	3	2.6
St Lawrence	2	3.0	3	8.2	5	5.4
Tioga	1	5.8	-	-	1	3.0
Tompkins	4	12.4	-	-	4	6.1
Rochester Region	134	22.2	27	4.8	161	13.4
Chemung	9	20.8	3	7.8	12	14.4
Livingston	3	8.3	-	-	3	4.2
Monroe	116	32.3	23	6.7	139	19.2
Ontario	4	9.6	-	-	4	4.7
Steuben	-	-	1	2.9	1	1.4
Wayne	1	2.8	-	-	1	1.4
Yates	1	13.1	-	-	1	6.5
Hudson Valley	142	12.7	15	1.3	157	7.0
Dutchess	31	20.5	5	2.8	36	12.0
Orange	22	11.6	4	2.1	26	6.8
Putnam	5	9.3	1	2.7	6	6.2
Rockland	5	4.0	-	-	5	2.0
Sullivan	4	11.5	-	-	4	6.0
Ulster	9	10.1	2	2.3	11	6.3
Westchester	66	14.4	3	0.6	69	7.4
Long Island	115	8.5	6	0.5	121	4.5
Nassau	62	9.9	4	0.6	66	5.3
Suffolk	53	7.3	2	0.3	55	3.8

Table 5. Early Syphilis by Sex and Age
New York State, 2018

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Male						
10-14	1	0.2	0	0.0	1	0.3
15-19	113	18.2	69	29.7	44	11.3
20-24	666	97.3	470	169.2	196	48.2
25-29	1,299	170.2	1,075	272.7	224	60.7
30-34	1,245	176.6	1,073	294.5	172	50.5
35-39	876	137.9	789	257.1	87	26.5
40-44	629	108.8	560	211.5	69	22.0
45-49	527	83.7	454	171.6	73	20.0
50-54	469	70.9	382	146.1	87	21.8
55-59	231	34.9	166	66.5	65	15.7
60-64	110	18.9	79	36.1	31	8.5
65-69	43	9.1	29	16.4	14	4.7
70+	30	3.4	21	6.4	9	1.6
Female						
10-14	0	0.0	0	0.0	0	0.0
15-19	34	5.7	19	8.3	15	4.0
20-24	103	15.1	68	23.0	35	9.1
25-29	114	14.9	84	20.1	30	8.7
30-34	90	12.7	63	16.8	27	8.2
35-39	62	9.5	49	15.2	13	4.0
40-44	42	7.0	29	10.2	13	4.1
45-49	20	3.0	9	3.1	11	2.9
50-54	23	3.3	11	3.8	12	2.9
55-59	4	0.6	2	0.7	2	0.5
60-64	2	0.3	2	0.8	0	0.0
65-69	1	0.2	0	0.0	1	0.3
70+	5	0.4	4	0.8	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	1	0.1	0	0.0	1	0.1
15-19	150	12.3	91	19.7	59	7.8
20-24	770	56.4	539	94.0	231	29.2
25-29	1,416	92.8	1,162	143.0	254	35.6
30-34	1,341	95.0	1,142	154.3	199	29.7
35-39	938	72.9	838	133.0	100	15.2
40-44	672	57.0	590	107.5	82	13.0
45-49	547	42.4	463	84.0	84	11.4
50-54	492	36.0	393	71.6	99	12.1
55-59	235	17.1	168	31.6	67	7.9
60-64	112	9.2	81	16.9	31	4.2
65-69	44	4.3	29	7.3	15	2.4
70+	35	1.6	25	3.0	10	0.8

**Table 6. Primary and Secondary Syphilis by Sex and Age
New York State, 2018**

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	61	9.8	39	16.8	22	5.6
20-24	340	49.7	236	84.9	104	25.6
25-29	548	71.8	440	111.6	108	29.3
30-34	473	67.1	385	105.7	88	25.8
35-39	322	50.7	276	89.9	46	14.0
40-44	194	33.5	151	57.0	43	13.7
45-49	202	32.1	164	62.0	38	10.4
50-54	171	25.9	130	49.7	41	10.3
55-59	83	12.5	55	22.0	28	6.8
60-64	43	7.4	23	10.5	20	5.5
65-69	21	4.5	13	7.4	8	2.7
70+	12	1.4	5	1.5	7	1.3
Female						
10-14	0	0.0	0	0.0	0	0.0
15-19	18	3.0	12	5.2	6	1.6
20-24	37	5.4	16	5.4	21	5.5
25-29	39	5.1	27	6.4	12	3.5
30-34	33	4.7	22	5.9	11	3.3
35-39	23	3.5	15	4.6	8	2.4
40-44	10	1.7	5	1.8	5	1.6
45-49	6	0.9	2	0.7	4	1.1
50-54	10	1.4	1	0.3	9	2.2
55-59	2	0.3	1	0.4	1	0.2
60-64	1	0.2	1	0.4	0	0.0
65-69	0	0.0	0	0.0	0	0.0
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	0	0.0	0	0.0	0	0.0
15-19	79	6.5	51	11.0	28	3.7
20-24	378	27.7	253	44.1	125	15.8
25-29	588	38.5	468	57.6	120	16.8
30-34	509	36.1	410	55.4	99	14.8
35-39	345	26.8	291	46.2	54	8.2
40-44	205	17.4	157	28.6	48	7.6
45-49	208	16.1	166	30.1	42	5.7
50-54	181	13.2	131	23.9	50	6.1
55-59	85	6.2	56	10.5	29	3.4
60-64	44	3.6	24	5.0	20	2.7
65-69	21	2.1	13	3.3	8	1.3
70+	12	0.6	5	0.6	7	0.5

**Table 7. Early Syphilis by Region/County and Year
New York State, 2016 - 2018**

Region/County	2016		2017		2018	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	6,008	30.8	6,252	32.1	6,758	34.7
New York City (NYC)	5,006	55.0	5,144	56.2	5,526	60.7
Bronx	995	65.5	1,050	69.9	1,310	87.9
Kings	1,285	46.0	1,398	49.3	1,320	47.0
New York	1,861	99.9	1,782	95.2	1,905	101.7
Queens	806	33.1	844	34.3	915	37.4
Richmond	59	12.9	70	15.3	76	17.1
NYS excl. NYC	1,002	9.5	1,108	10.4	1,232	11.5
Buffalo Region	102	7.3	95	6.7	108	7.8
Allegany	2	5.5	1	1.6	2	7.0
Cattaraugus	1	1.5	-	-	1	1.7
Chautauqua	4	4.0	2	1.7	2	1.6
Erie	86	10.0	79	8.9	91	10.6
Genesee	1	1.8	4	7.2	3	5.7
Niagara	5	2.4	8	4.3	6	3.0
Orleans	3	8.4	-	-	2	5.8
Wyoming	-	-	1	2.5	1	2.2
Capital Region	120	8.1	177	12.1	146	9.8
Albany	59	18.5	85	27.7	55	16.5
Clinton	6	6.4	8	9.5	2	2.1
Columbia	6	9.9	10	17.1	6	12.3
Delaware	1	2.3	1	2.0	-	-
Essex	-	-	-	-	2	5.1
Franklin	-	-	1	2.6	-	-
Fulton	1	2.2	2	4.4	2	4.3
Greene	3	6.1	2	4.4	3	6.6
Hamilton	-	-	1	7.0	-	-
Montgomery	-	-	3	7.8	4	9.0
Otsego	2	5.0	3	6.2	-	-
Rensselaer	16	9.9	22	13.8	21	13.4
Saratoga	12	5.4	12	5.8	8	3.2
Schenectady	11	7.6	22	13.5	34	22.8
Schoharie	-	-	1	1.9	1	1.9
Warren	3	5.2	4	7.1	7	10.7
Washington	-	-	-	-	1	1.9

Region/County	2016		2017		2018	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	86	4.9	86	5.2	102	6.1
Broome	5	2.0	4	2.3	14	6.8
Cayuga	1	1.3	1	1.5	-	-
Chenango	1	1.1	1	1.8	-	-
Cortland	4	8.3	6	16.9	8	16.8
Herkimer	2	3.4	1	1.0	5	7.7
Jefferson	-	-	5	3.7	9	6.8
Madison	7	10.3	5	6.3	1	1.2
Oneida	8	3.8	5	2.0	16	7.5
Onondaga	36	7.6	39	8.8	28	6.3
Oswego	4	3.0	2	1.8	4	3.5
St Lawrence	6	5.3	4	3.8	5	5.4
Tioga	-	-	2	5.5	1	3.0
Tompkins	12	11.4	11	9.7	11	12.4
Rochester Region	97	7.9	122	10.1	223	18.6
Chemung	6	7.5	9	10.5	15	16.9
Livingston	-	-	1	1.4	3	4.2
Monroe	79	10.6	98	13.7	195	27.0
Ontario	4	3.6	2	2.1	6	7.0
Schuyler	-	-	3	19.7	-	-
Seneca	2	5.9	3	8.6	-	-
Steuben	1	1.3	3	3.2	1	1.4
Wayne	4	4.8	3	3.2	2	2.7
Yates	1	6.7	-	-	1	6.5
Hudson Valley	253	11.8	314	14.3	322	14.6
Dutchess	53	19.0	58	20.2	52	17.2
Orange	33	9.7	51	14.0	64	17.4
Putnam	14	15.1	10	10.7	16	16.7
Rockland	24	7.8	31	10.3	32	10.8
Sullivan	7	10.0	9	13.0	8	11.0
Ulster	9	5.6	16	8.2	20	11.5
Westchester	113	12.7	139	15.4	130	14.2
Long Island	344	13.0	314	11.9	331	12.2
Nassau	183	14.5	164	13.2	180	14.1
Suffolk	161	11.6	150	10.8	151	10.5

Table 8. Early Syphilis by Year and Region
New York State, 1958 - 2018

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	24.1	350	3.1
2012	2,666	13.6	2,291	27.3	375	3.3
2013	3,411	17.3	2,907	34.4	504	4.5
2014	4,000	20.2	3,276	38.4	724	6.4
2015	4,837	24.4	3,920	45.7	917	8.2
2016	6,008	30.3	5,006	58.1	1,002	8.9
2017	6,252	31.5	5,144	59.7	1,108	9.9
2018	6,758	34.0	5,526	64.1	1,232	11.0

Table 9. Primary and Secondary Syphilis by Year and Region
New York State, 1953 - 2018

Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1953	723	4.4	658	8.1	65	0.8
1954	710	4.5	617	7.7	93	1.2
1955	699	4.3	566	7.0	133	1.6
1956	739	4.5	605	7.5	134	1.6
1957	730	4.4	635	7.8	95	1.1
1958	1,045	6.2	911	11.4	134	1.5
1959	1,610	9.5	1,446	18.6	164	1.8
1960	3,016	17.9	2,607	33.7	409	4.5
1961	3,966	23.3	3,384	43.6	582	6.3
1962	3,975	23.1	3,333	42.9	642	6.8
1963	4,204	24.3	3,489	45.0	715	7.5
1964	3,802	21.7	3,165	40.9	637	6.5
1965	3,445	19.4	2,889	36.8	556	5.6
1966	2,822	15.9	2,445	31.4	377	3.8
1967	2,396	13.3	2,086	25.9	310	3.1
1968	2,564	14.1	2,231	27.7	333	3.3
1969	2,890	15.9	2,616	32.4	274	2.7
1970	4,185	22.6	3,779	46.8	406	3.9
1971	4,300	23.2	3,844	48.7	456	4.3
1972	4,479	24.0	4,041	50.6	438	4.1
1973	3,763	20.3	3,325	42.1	438	4.1
1974	3,676	19.8	3,145	40.5	531	4.9
1975	3,266	17.7	2,864	37.8	402	3.7
1976	2,746	15.2	2,494	33.2	252	2.4
1977	2,153	12.0	1,881	25.1	272	2.6
1978	2,283	12.6	2,058	27.8	225	2.1
1979	2,865	15.9	2,561	35.5	304	2.8
1980	2,729	15.1	2,393	33.2	336	3.1
1981	3,036	17.5	2,581	36.7	455	4.4
1982	3,059	17.6	2,580	37.1	479	4.6
1983	2,879	16.5	2,459	35.6	420	4.0
1984	2,618	14.9	2,280	32.5	338	3.2
1985	2,531	14.5	2,169	30.3	362	3.5

Year	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
1986	2,397	13.5	2,112	29.2	285	2.7
1987	4,910	27.5	4,542	62.1	368	3.5
1988	5,688	31.7	5,042	68.4	646	6.1
1989	5,384	30.1	4,362	59.2	1,022	9.7
1990	5,313	29.6	4,265	57.8	1,048	9.9
1991	3,825	21.3	3,133	42.8	692	6.5
1992	2,596	14.5	2,246	30.7	350	3.3
1993	1,387	7.7	1,129	15.3	258	2.4
1994	801	4.4	626	8.4	175	1.6
1995	447	2.5	362	4.8	85	0.8
1996	214	1.2	138	1.8	76	0.7
1997	138	0.8	97	1.3	41	0.4
1998	118	0.6	81	1.1	37	0.3
1999	150	0.9	130	1.7	20	0.2
2000	132	0.6	117	1.5	15	0.1
2001	304	1.6	282	3.5	22	0.2
2002	478	2.5	434	5.4	44	0.4
2003	584	3.0	531	6.6	53	0.5
2004	727	3.8	621	7.7	106	1.0
2005	705	3.7	616	7.7	89	0.8
2006	736	3.9	578	7.2	158	1.4
2007	1,072	5.6	916	11.4	156	1.4
2008	1,211	6.3	1,065	13.2	146	1.3
2009	1,184	6.1	1,056	13.0	128	1.1
2010	1,101	5.7	955	11.7	146	1.3
2011	1,088	5.6	894	10.8	194	1.7
2012	1,229	6.3	996	11.9	233	2.1
2013	1,464	7.4	1,167	13.8	297	2.6
2014	1,708	8.6	1,307	15.3	401	3.6
2015	2,021	10.2	1,521	17.7	500	4.4
2016	2,470	12.5	1,940	22.5	530	4.7
2017	2,355	11.9	1,799	20.9	556	5.0
2018	2,656	13.4	2,026	23.5	630	5.6

Figure 7. Gonorrhea by Year and Region
New York State, 1960 - 2018

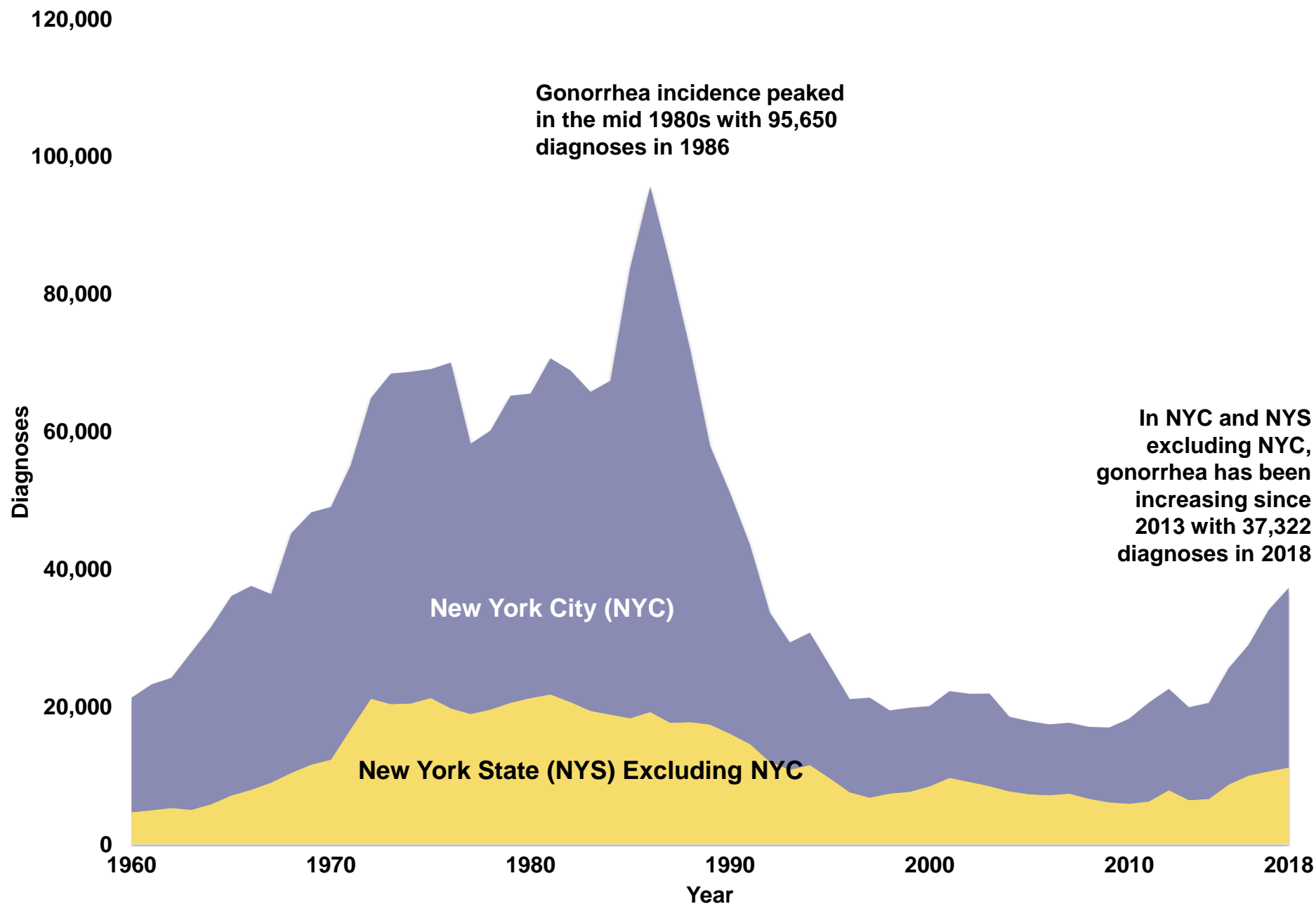
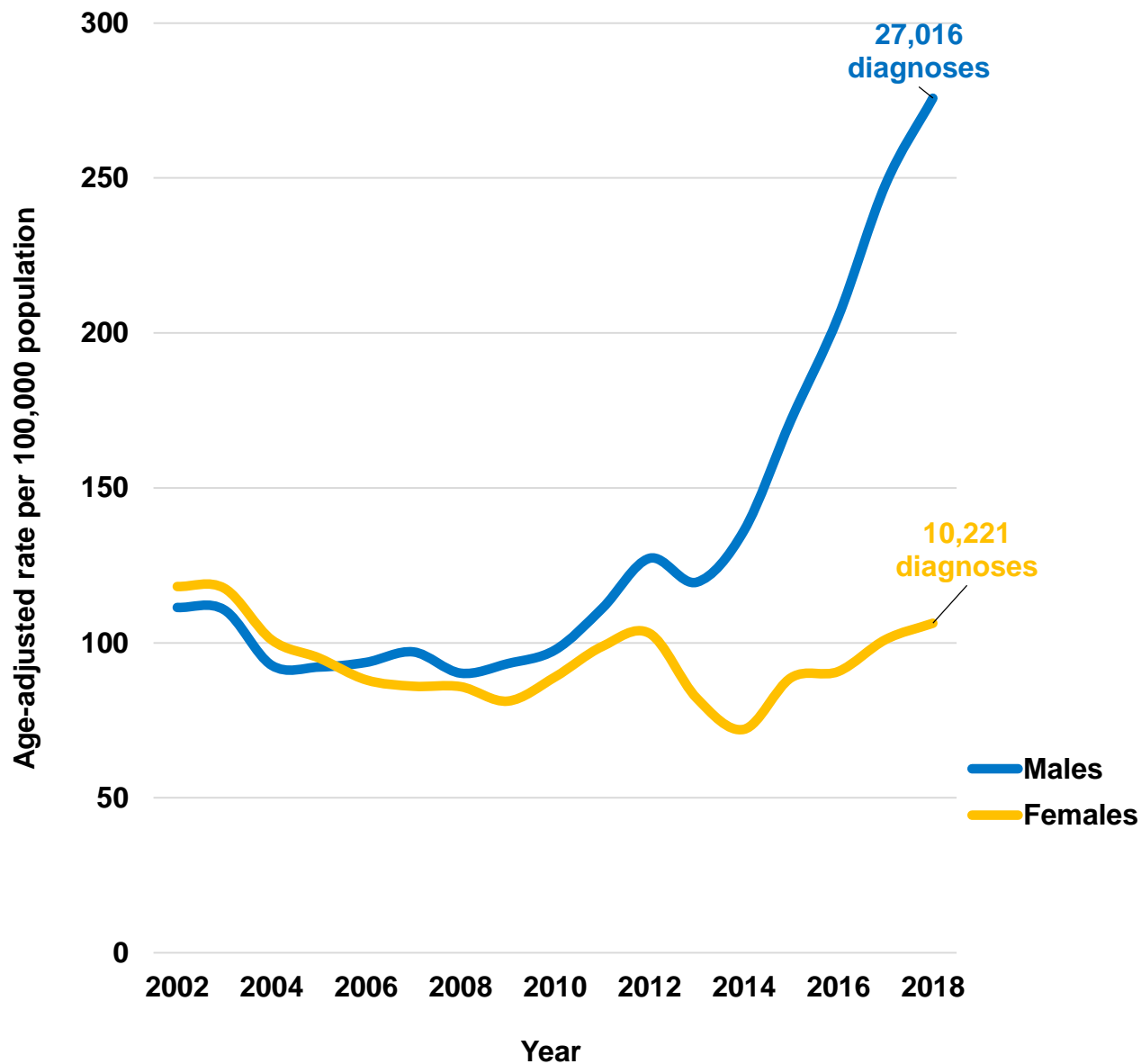


Figure 8. Gonorrhea Rates by Sex and Year
New York State, 2001 - 2018

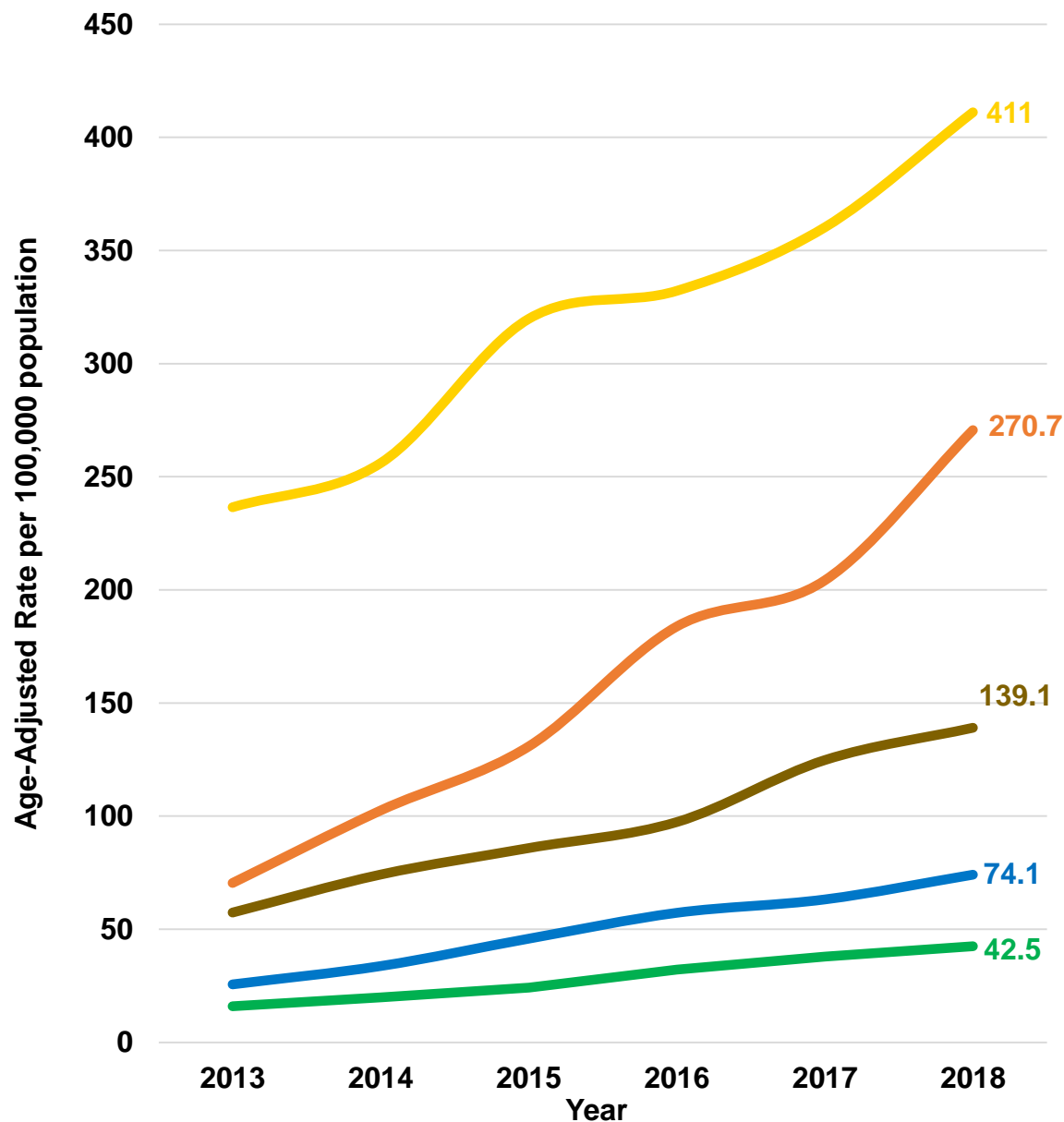


What this figure shows

The vast majority of the recent 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, a trend which has continued to grow.

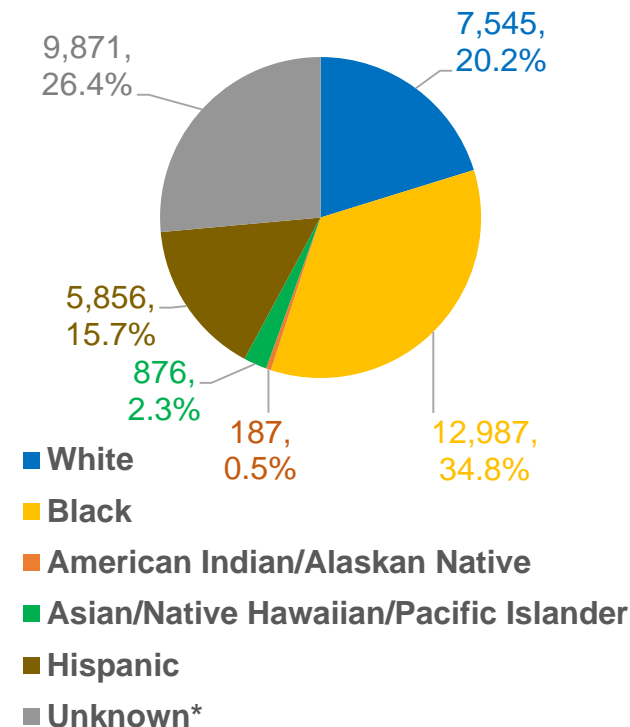
Figure 9. Gonorrhea Rates by Race/Ethnicity and Year
New York State, 2013 - 2018



What this figure shows

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

Number and Proportion of Diagnoses in 2018



*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, 2018

What this figure shows

Rates among males exceed those among females in all age groups, with the exception of persons aged 15 to 19

Among males, the highest gonorrhea rates are among 20 to 34 year olds

Among females, gonorrhea rates are highest among 15 to 24 year olds

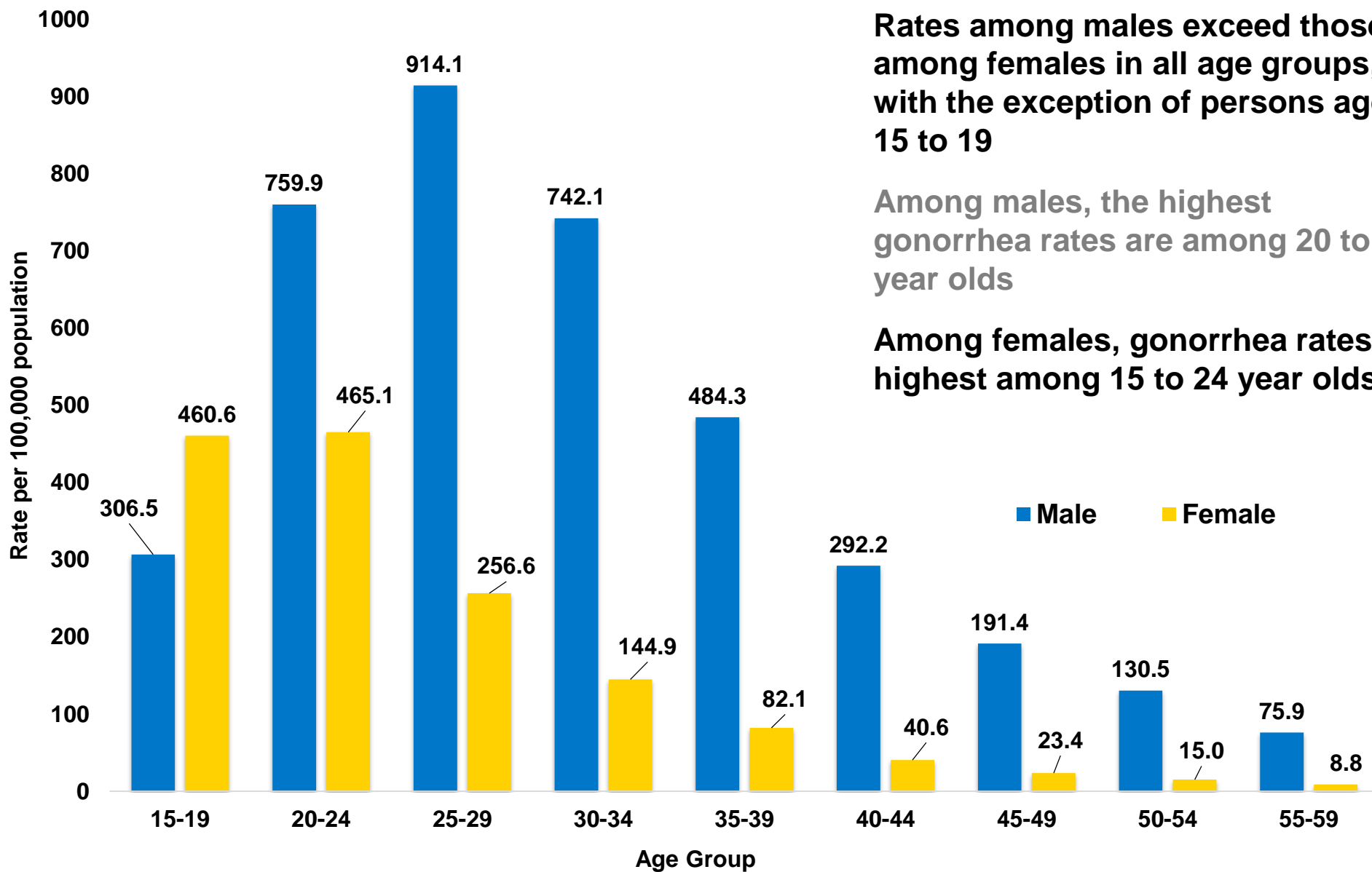


Table 10. Gonorrhea by Region/County and Sex
New York State, 2018

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	27,016	275.8	10,221	106.3	37,322	190.6
New York City (NYC)	20,560	456.1	5,483	130.5	26,128	289.1
Bronx	3,428	456.6	1,766	227.3	5,220	336.7
Kings	5,875	422.6	1,689	130.8	7,592	271.6
New York	8,047	848.5	1,023	123.0	9,086	476.3
Queens	2,934	246.4	858	79.3	3,803	162.5
Richmond	276	122.0	147	67.3	427	95.0
NYS excl. NYC	6,456	119.9	4,738	90.9	11,194	105.4
Buffalo Region	1,570	214.3	1,286	182.0	2,856	197.7
Allegany	8	31.5	9	43.0	17	37.5
Cattaraugus	23	64.3	21	63.8	44	64.0
Chautauqua	90	155.5	82	145.2	172	150.2
Erie	1,270	283.4	979	222.7	2,249	252.2
Genesee	20	75.5	21	85.9	41	80.1
Niagara	145	149.4	159	173.9	304	161.0
Orleans	11	58.2	12	67.0	23	61.5
Wyoming	3	12.4	3	20.4	6	16.4
Capital Region	717	98.1	598	85.9	1,315	91.9
Albany	315	193.1	220	129.4	535	160.8
Clinton	15	33.7	18	48.4	33	40.7
Columbia	18	69.1	9	38.4	27	53.4
Delaware	4	18.8	2	9.7	6	14.3
Essex	6	35.4	1	8.0	7	23.5
Franklin	-	-	3	15.4	3	6.3
Fulton	13	55.0	19	88.6	32	71.5
Greene	8	27.7	8	45.4	16	34.9
Montgomery	16	75.7	13	62.3	29	68.4
Otsego	21	74.6	8	18.4	29	46.6
Rensselaer	110	146.5	124	162.9	234	151.4
Saratoga	43	40.3	30	29.1	73	34.9
Schenectady	134	187.2	126	175.9	260	180.8
Schoharie	2	12.4	1	9.3	3	10.7
Warren	9	34.0	11	38.9	20	36.4
Washington	3	10.4	5	20.2	8	14.7

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	965	110.1	909	107.3	1,874	108.7
Broome	104	108.3	92	100.2	196	104.0
Cayuga	48	133.3	61	193.7	109	161.4
Chenango	9	44.3	3	15.2	12	30.0
Cortland	10	35.5	9	31.9	19	33.4
Herkimer	12	41.2	2	7.3	14	24.4
Jefferson	59	74.7	43	77.3	102	75.1
Lewis	1	9.0	-	-	1	4.6
Madison	12	27.1	3	8.9	15	18.1
Oneida	56	49.4	59	58.8	115	53.7
Onondaga	515	234.1	570	244.9	1,085	239.2
Oswego	25	42.5	27	49.1	52	45.8
St Lawrence	21	36.2	11	21.8	32	29.3
Tioga	7	33.4	3	15.1	10	24.3
Tompkins	86	96.1	26	31.3	112	63.9
Rochester Region	1,224	202.7	935	155.5	2,159	178.6
Chemung	20	51.8	23	60.6	43	56.0
Livingston	7	20.5	10	37.9	17	28.2
Monroe	1,082	298.2	785	211.5	1,867	252.9
Ontario	39	78.5	33	69.0	72	73.9
Schuyler	3	43.6	-	-	3	21.7
Seneca	9	59.5	12	81.3	21	67.8
Steuben	24	53.3	22	56.1	46	54.5
Wayne	38	101.0	46	127.6	84	113.8
Yates	2	15.5	4	29.3	6	22.2
Hudson Valley	921	84.7	531	50.2	1,452	67.6
Dutchess	120	80.5	60	45.2	180	63.3
Orange	136	73.2	105	59.6	241	65.8
Putnam	18	37.4	5	11.0	23	24.5
Rockland	77	51.9	32	22.9	109	37.6
Sullivan	17	44.3	19	60.8	36	52.1
Ulster	62	72.7	36	46.8	98	60.1
Westchester	491	112.6	274	61.6	765	86.9
Long Island	1,059	79.4	479	36.8	1,538	58.3
Nassau	522	83.7	230	37.2	752	60.4
Suffolk	537	75.5	249	36.6	786	56.4

Table 11. Gonorrhea by Sex and Age
New York State, 2018

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Male						
10-14	34	5.8	22	9.3	12	3.5
15-19	1,906	306.5	1,262	542.8	644	165.4
20-24	5,200	759.9	3,484	1,253.9	1,716	422.2
25-29	6,977	914.1	5,484	1,391.2	1,493	404.5
30-34	5,231	742.1	4,381	1,202.3	850	249.6
35-39	3,077	484.3	2,530	824.4	547	166.6
40-44	1,690	292.2	1,341	506.5	349	111.3
45-49	1,205	191.4	904	341.8	301	82.5
50-54	863	130.5	626	239.4	237	59.3
55-59	503	75.9	345	138.2	158	38.3
60-64	203	34.9	106	48.4	97	26.7
65-69	84	17.8	48	27.2	36	12.2
70+	30	3.4	18	5.4	12	2.2
Female						
10-14	151	27.0	112	49.2	39	11.8
15-19	2,764	460.6	1,587	692.2	1,177	317.4
20-24	3,163	465.1	1,626	549.6	1,537	400.1
25-29	1,957	256.6	1,044	249.4	913	265.3
30-34	1,023	144.9	512	136.2	511	154.8
35-39	534	82.1	273	84.5	261	79.7
40-44	244	40.6	120	42.2	124	39.1
45-49	155	23.4	81	28.3	74	19.7
50-54	106	15.0	59	20.5	47	11.3
55-59	63	8.8	34	12.1	29	6.7
60-64	28	4.4	16	6.2	12	3.1
65-69	14	2.6	6	2.7	8	2.5
70+	4	0.3	3	0.6	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	185	16.2	134	28.9	51	7.5
15-19	4,679	382.9	2,858	618.9	1,821	239.5
20-24	8,385	614.6	5,132	894.6	3,253	411.4
25-29	8,962	587.3	6,556	806.6	2,406	337.4
30-34	6,267	444.2	4,906	662.7	1,361	202.9
35-39	3,619	281.4	2,811	446.2	808	123.2
40-44	1,936	164.1	1,463	266.4	473	75.0
45-49	1,362	105.5	987	179.1	375	50.7
50-54	970	71.0	686	125.0	284	34.7
55-59	566	41.1	379	71.3	187	22.1
60-64	231	18.9	122	25.5	109	14.6
65-69	98	9.6	54	13.6	44	7.1
70+	34	1.6	21	2.5	13	1.0

Table 12. Gonorrhea by Region/County and Year
New York State, 2016 - 2018

Region/County	2016		2017		2018	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	29,048	147.7	34,111	174.0	37,322	190.6
New York City (NYC)	19,029	210.3	23,491	260.4	26,128	289.1
Bronx	3,696	235.0	4,945	317.4	5,220	336.7
Kings	5,855	210.7	6,827	246.6	7,592	271.6
New York	6,345	332.8	7,849	409.5	9,086	476.3
Queens	2,810	120.1	3,514	150.6	3,803	162.5
Richmond	323	72.4	356	79.3	427	95.0
NYS excl. NYC	10,019	94.1	10,620	100.0	11,194	105.4
Buffalo Region	2,433	168.5	2,743	190.6	2,856	197.7
Allegany	13	29.7	10	24.8	17	37.5
Cattaraugus	67	97.5	46	71.0	44	64.0
Chautauqua	118	98.8	171	145.6	172	150.2
Erie	1,874	210.9	2,039	229.6	2,249	252.2
Genesee	23	43.6	32	60.6	41	80.1
Niagara	306	162.6	409	217.4	304	161.0
Orleans	21	53.3	31	84.5	23	61.5
Wyoming	11	28.8	5	13.9	6	16.4
Capital Region	1,089	75.9	1,290	89.0	1,315	91.9
Albany	459	138.5	519	155.8	535	160.8
Clinton	14	14.5	6	7.5	33	40.7
Columbia	22	44.2	30	60.6	27	53.4
Delaware	6	14.4	6	15.4	6	14.3
Essex	2	6.3	3	10.7	7	23.5
Franklin	2	3.5	6	11.1	3	6.3
Fulton	23	50.8	21	43.6	32	71.5
Greene	9	19.9	22	51.5	16	34.9
Hamilton	1	7.1	-	-	-	-
Montgomery	15	33.4	35	82.4	29	68.4
Otsego	21	36.9	26	45.3	29	46.6
Rensselaer	169	108.9	176	110.0	234	151.4
Saratoga	65	31.5	71	34.7	73	34.9
Schenectady	244	171.5	321	218.4	260	180.8
Schoharie	3	14.0	13	43.5	3	10.7
Warren	9	17.5	15	28.4	20	36.4
Washington	25	46.9	20	34.5	8	14.7

Region/County	2016		2017		2018	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	1,678	96.9	1,480	85.7	1,874	108.7
Broome	202	108.6	162	85.2	196	104.0
Cayuga	21	30.6	22	30.7	109	161.4
Chenango	6	15.0	8	19.7	12	30.0
Cortland	17	36.6	12	20.3	19	33.4
Herkimer	22	40.9	15	27.4	14	24.4
Jefferson	85	63.0	122	87.9	102	75.1
Lewis	4	12.9	5	20.9	1	4.6
Madison	21	25.8	24	33.5	15	18.1
Oneida	111	50.5	162	76.5	115	53.7
Onondaga	1,006	219.4	773	170.6	1,085	239.2
Oswego	62	54.2	49	40.0	52	45.8
St Lawrence	20	16.8	24	23.5	32	29.3
Tioga	20	49.4	15	35.9	10	24.3
Tompkins	81	58.7	87	63.6	112	63.9
Rochester Region	2,523	207.7	2,104	174.7	2,159	178.6
Chemung	50	65.5	35	46.2	43	56.0
Livingston	14	20.7	10	14.7	17	28.2
Monroe	2,207	299.6	1,891	257.8	1,867	252.9
Ontario	67	66.7	66	67.8	72	73.9
Schuyler	-	-	-	-	3	21.7
Seneca	22	68.2	10	33.7	21	67.8
Steuben	23	27.3	25	28.9	46	54.5
Wayne	133	170.7	62	80.9	84	113.8
Yates	7	37.9	5	29.8	6	22.2
Hudson Valley	1,167	54.3	1,526	70.8	1,452	67.6
Dutchess	108	36.9	210	73.7	180	63.3
Orange	224	62.4	294	79.6	241	65.8
Putnam	18	22.0	27	28.9	23	24.5
Rockland	114	39.0	124	41.0	109	37.6
Sullivan	54	82.2	75	112.9	36	52.1
Ulster	64	37.8	124	75.8	98	60.1
Westchester	585	66.6	672	76.5	765	86.9
Long Island	1,129	43.1	1,477	56.2	1,538	58.3
Nassau	556	44.7	717	57.3	752	60.4
Suffolk	573	41.7	760	55.3	786	56.4

Table 13. Gonorrhea by Year and Region
New York State, 1958 - 2018

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	105.7	14,403	173.7	6,240	55.5
2012	22,631	115.3	14,747	175.9	7,884	70.1
2013	19,960	101.3	13,500	159.6	6,460	57.4
2014	20,594	104.1	13,978	164.0	6,616	58.8
2015	25,632	129.3	16,913	197.1	8,719	77.6
2016	29,048	146.4	19,029	220.9	10,019	89.3
2017	34,111	171.8	23,491	272.4	10,620	94.6
2018	37,322	188.0	26,128	303.0	11,194	99.7

Figure 11. Chlamydia by Year and Region
New York State, 2001 - 2018

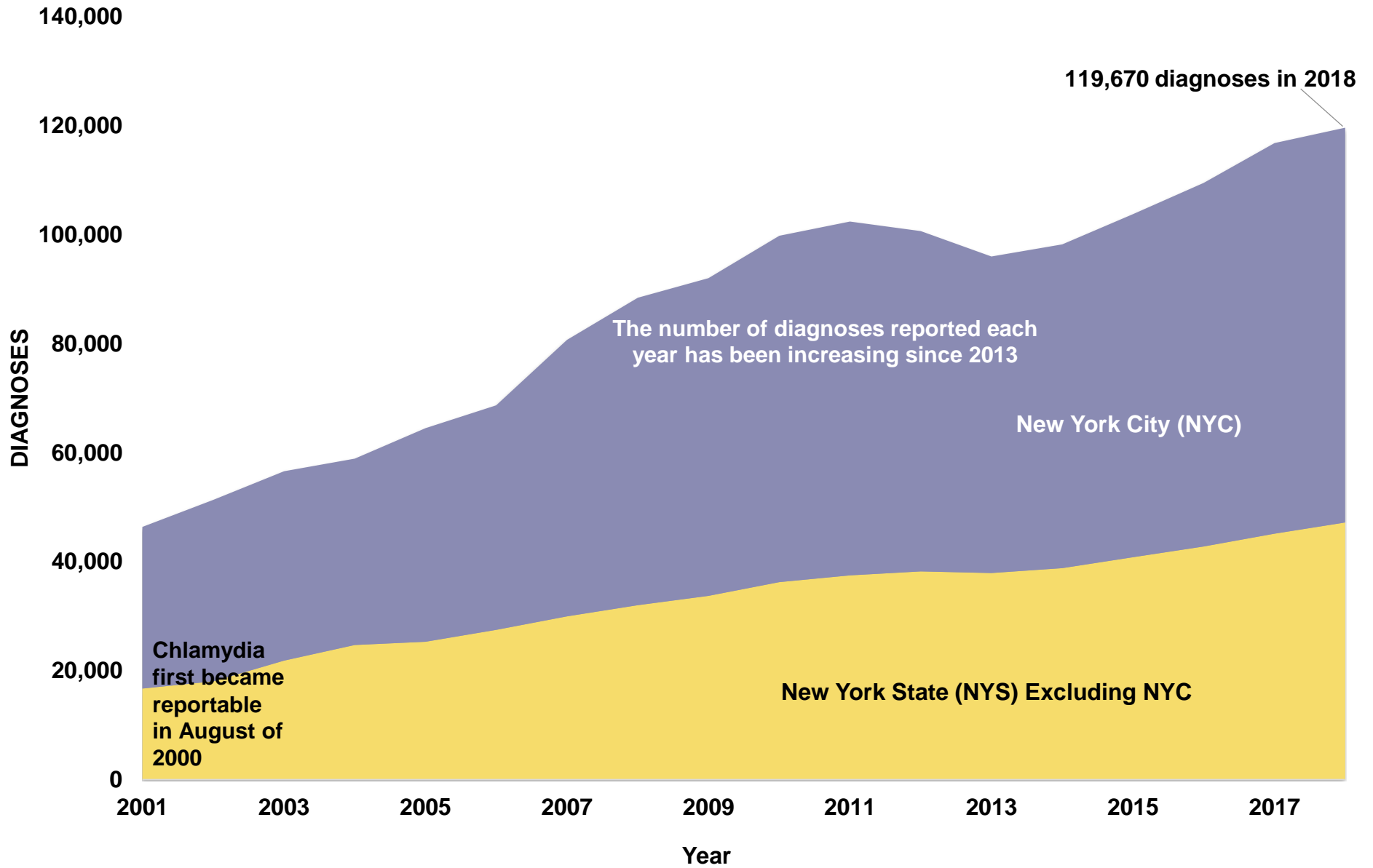
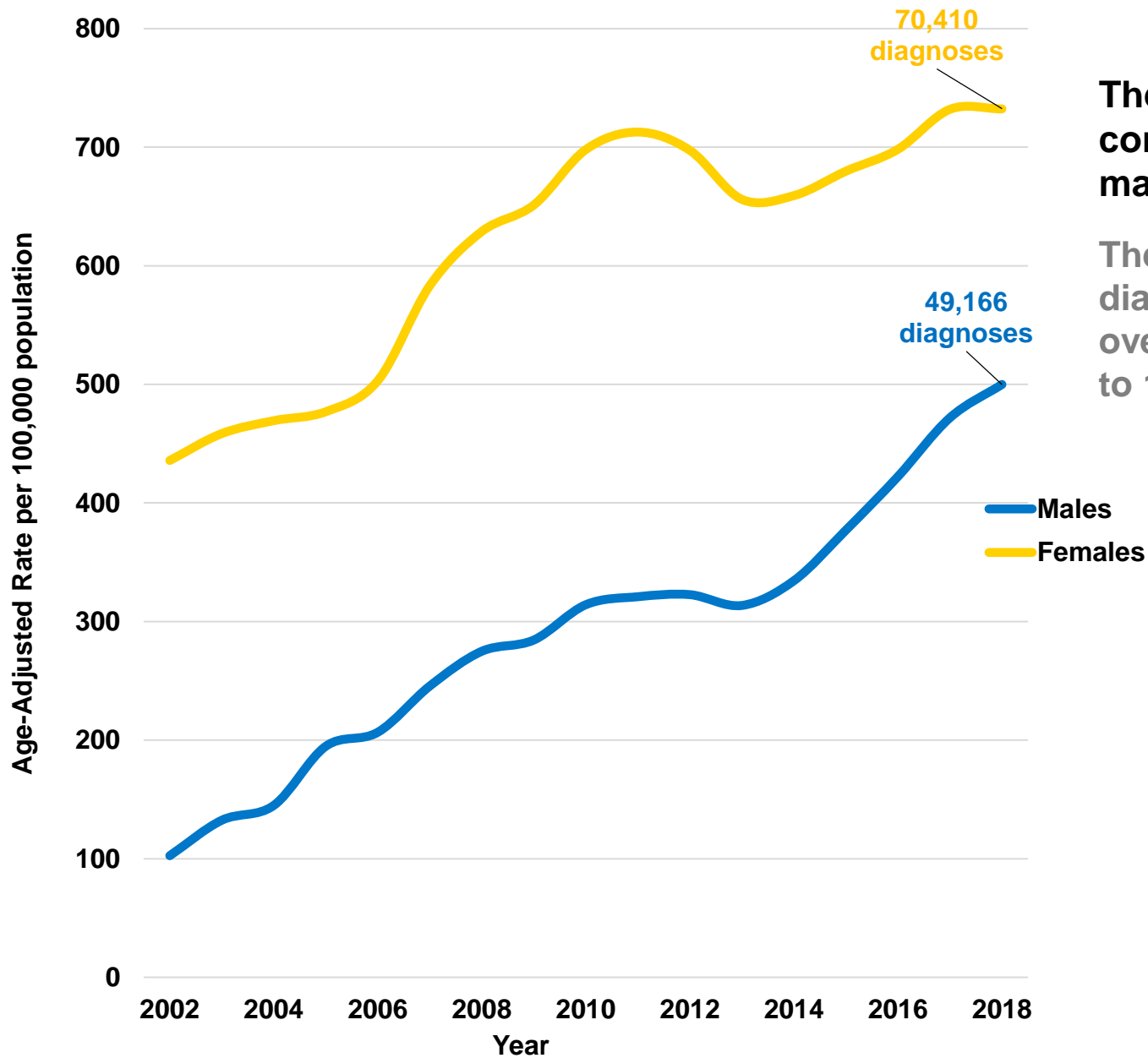


Figure 12. Chlamydia Rates by Sex and Year
New York State, 2001 - 2018

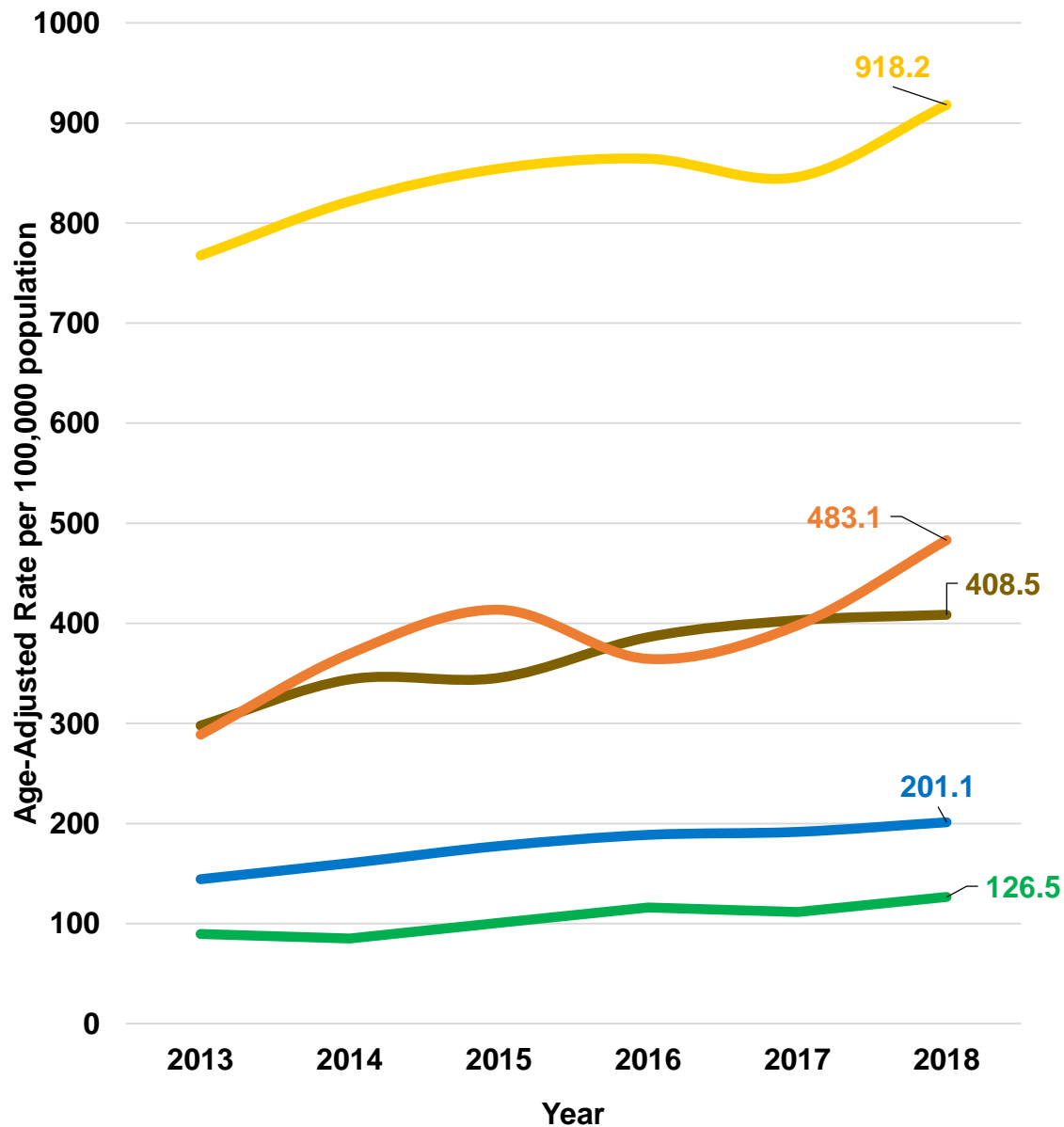


What this figure shows

The rates among females continue to be higher than males

The ratio of female to male diagnoses has decreased over time, from 4.8 in 2001 to 1.4 in 2018

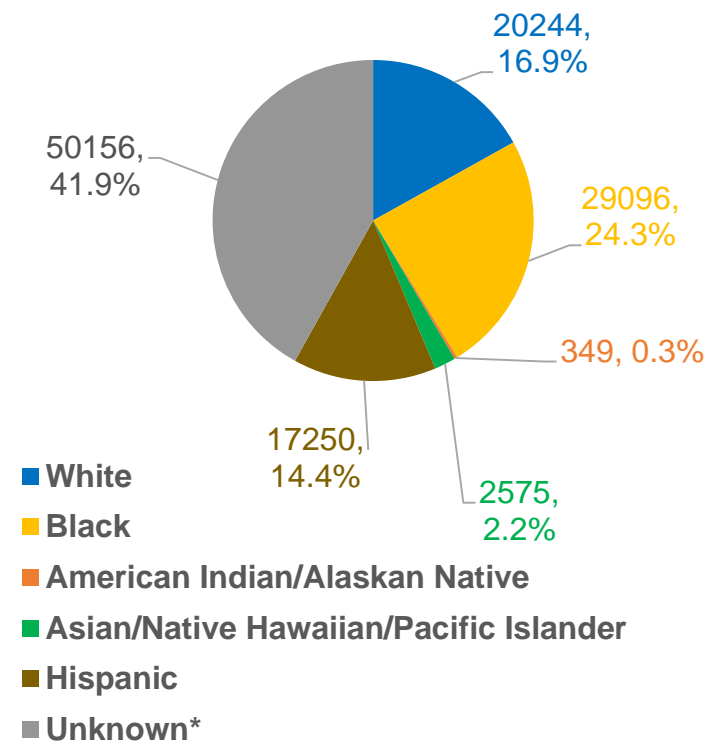
Figure 13. Chlamydia Rates by Race/Ethnicity and Year
New York State, 2013 - 2018



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 2018



*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, 2018

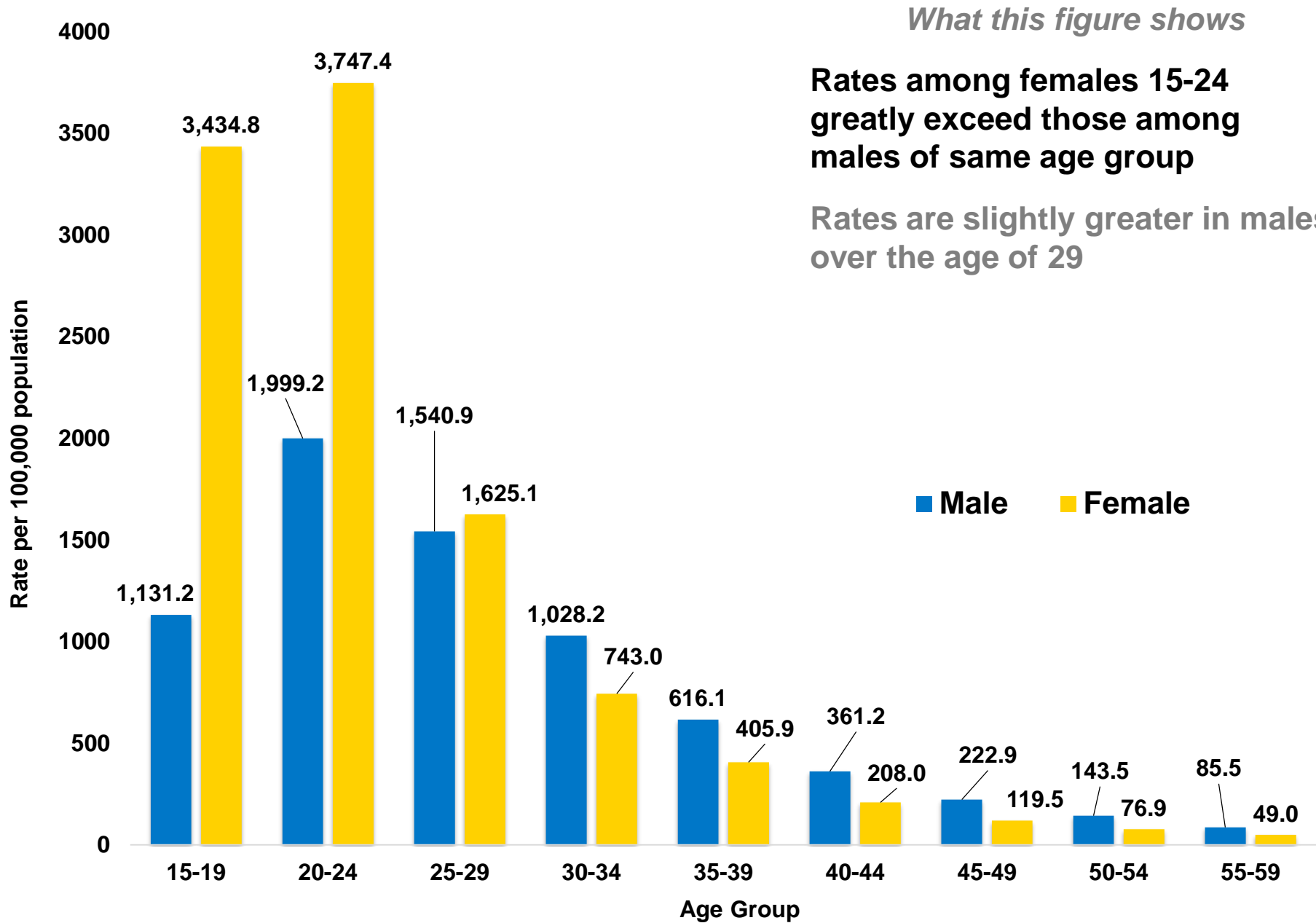


Table 14. Chlamydia by Region/County and Sex
New York State, 2018

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	49,166	499.8	70,410	732.3	119,670	614.4
New York City (NYC)	32,791	745.5	39,560	933.5	72,445	839.1
Bronx	6,589	855.6	11,082	1,416.9	17,704	1,130.9
Kings	9,743	726.2	11,928	920.7	21,696	822.4
New York	10,050	1,090.1	7,172	838.4	17,240	969.5
Queens	5,809	504.2	8,261	755.4	14,087	629.8
Richmond	600	265.4	1,117	512.3	1,718	386.8
NYS excl. NYC	16,375	298.0	30,850	581.3	47,225	435.8
Buffalo Region	2,646	359.5	5,152	726.6	7,798	538.9
Allegany	54	187.5	104	400.8	158	287.2
Cattaraugus	57	167.1	159	470.9	216	313.4
Chautauqua	201	328.3	405	687.9	606	501.8
Erie	1,943	432.5	3,506	795.1	5,449	611.4
Genesee	49	185.4	107	438.3	156	306.4
Niagara	267	278.2	727	802.3	994	534.8
Orleans	56	272.0	108	611.0	164	434.7
Wyoming	19	88.7	36	237.3	55	154.5
Capital Region	1,950	256.2	4,083	571.4	6,033	408.0
Albany	686	393.7	1,246	675.2	1,932	536.4
Clinton	102	214.5	201	464.5	303	335.8
Columbia	64	254.3	137	621.2	201	422.5
Delaware	36	163.5	59	316.1	95	235.3
Essex	28	161.1	55	421.6	83	272.1
Franklin	27	86.6	80	411.1	107	210.4
Fulton	67	285.5	146	666.9	213	468.8
Greene	51	204.0	95	577.0	146	351.6
Hamilton	2	89.6	2	146.8	4	116.3
Montgomery	33	148.0	120	576.5	153	355.8
Otsego	82	245.2	138	343.5	220	299.6
Rensselaer	270	326.7	534	724.0	804	507.5
Saratoga	157	149.2	390	400.2	547	270.0
Schenectady	234	312.6	583	812.2	817	558.3
Schoharie	18	107.5	49	333.3	67	218.3
Warren	60	219.7	144	565.8	204	390.3
Washington	33	109.7	104	454.0	137	259.3

Region/County	Male		Female		Total	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	2,689	291.1	5,097	571.8	7,786	427.6
Broome	214	207.7	409	390.7	623	295.8
Cayuga	80	215.4	179	549.4	259	374.1
Chenango	32	160.6	67	342.7	99	249.9
Cortland	68	216.6	135	387.8	203	306.6
Herkimer	54	205.1	112	416.3	166	308.3
Jefferson	382	446.6	491	891.0	873	629.7
Lewis	12	99.6	49	444.5	61	271.9
Madison	79	212.8	122	308.0	201	261.7
Oneida	302	268.1	615	597.6	917	425.0
Onondaga	1,048	463.8	2,163	913.4	3,211	691.5
Oswego	114	184.3	214	365.5	328	272.9
St Lawrence	91	142.8	203	345.9	294	236.8
Tioga	30	147.0	62	323.9	92	233.1
Tompkins	183	207.5	276	319.0	459	262.6
Rochester Region	2,556	415.8	4,318	710.2	6,874	560.4
Chemung	102	255.6	217	576.0	319	413.1
Livingston	55	140.0	115	316.5	170	223.9
Monroe	2,059	556.8	3,279	878.9	5,338	714.5
Ontario	114	226.6	215	441.2	329	330.8
Schuyler	6	82.4	18	262.2	24	169.3
Seneca	33	168.7	51	358.9	84	251.0
Steuben	75	181.7	189	480.2	264	327.4
Wayne	95	242.6	196	521.9	291	379.6
Yates	17	141.7	38	308.9	55	224.2
Hudson Valley	3,175	285.5	5,648	523.9	8,823	400.8
Dutchess	422	278.7	747	516.4	1,169	395.1
Orange	518	252.8	1,045	581.5	1,563	402.4
Putnam	77	161.3	110	258.7	187	207.1
Rockland	401	262.2	704	459.6	1,105	358.2
Sullivan	80	230.5	193	625.6	273	417.7
Ulster	203	244.0	398	493.2	601	366.7
Westchester	1,474	334.0	2,451	549.0	3,925	440.3
Long Island	3,359	250.8	6,552	504.4	9,911	374.6
Nassau	1,796	284.6	2,988	483.0	4,784	381.6
Suffolk	1,563	220.8	3,564	523.9	5,127	368.4

Table 15. Chlamydia by Sex and Age
New York State, 2018

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Male						
10-14	121	20.8	82	34.7	39	11.3
15-19	7,035	1,131.2	3,978	1,711.0	3,057	785.1
20-24	13,680	1,999.2	7,788	2,803.0	5,892	1,449.6
25-29	11,761	1,540.9	8,213	2,083.5	3,548	961.4
30-34	7,248	1,028.2	5,531	1,517.8	1,717	504.2
35-39	3,914	616.1	3,036	989.2	878	267.3
40-44	2,089	361.2	1,607	607.0	482	153.7
45-49	1,403	222.9	1,112	420.4	291	79.7
50-54	949	143.5	756	289.1	193	48.3
55-59	566	85.4	416	166.7	150	36.3
60-64	232	39.9	160	73.1	72	19.8
65-69	89	18.9	61	34.6	28	9.5
70+	45	5.1	25	7.6	20	3.6
Female						
10-14	784	140.3	501	220.0	283	85.5
15-19	20,612	3,434.8	10,895	4,751.9	9,717	2,620.4
20-24	25,483	3,747.4	13,328	4,505.1	12,155	3,163.8
25-29	12,395	1,625.1	7,545	1,802.3	4,850	1,409.5
30-34	5,246	743.0	3,356	892.7	1,890	572.5
35-39	2,641	405.9	1,694	524.3	947	289.1
40-44	1,251	208.0	780	274.3	471	148.5
45-49	790	119.5	541	188.8	249	66.5
50-54	542	76.9	408	141.9	134	32.1
55-59	350	49.0	265	94.1	85	19.7
60-64	173	26.9	133	51.3	40	10.4
65-69	56	10.3	47	21.3	9	2.8
70+	32	2.5	27	5.3	5	0.7

Age(yrs)	New York State (NYS)		New York City (NYC)		NYS excl. NYC	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Total						
10-14	905	79.3	583	125.7	322	47.5
15-19	27,655	2,263.1	14,881	3,222.5	12,774	1,680.3
20-24	39,195	2,872.9	21,148	3,686.3	18,047	2,282.6
25-29	24,177	1,584.4	15,779	1,941.2	8,398	1,177.6
30-34	12,508	886.5	8,901	1,202.3	3,607	537.9
35-39	6,564	510.4	4,739	752.2	1,825	278.2
40-44	3,345	283.5	2,392	435.6	953	151.1
45-49	2,196	170.1	1,656	300.5	540	73.0
50-54	1,493	109.3	1,166	212.4	327	40.0
55-59	916	66.6	681	128.2	235	27.8
60-64	405	33.1	293	61.3	112	15.0
65-69	145	14.3	108	27.2	37	6.0
70+	77	3.6	52	6.2	25	1.9

**Table 16. Chlamydia Among Young Females, by Age and Region/County
New York State, 2018**

Region/County	15-19 yrs		20-24 yrs		15-24 yrs	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	20,612	3,434.8	25,483	3,747.4	46,095	3,600.8
New York City (NYC)	10,895	4,751.9	13,328	4,505.1	24,223	4,612.9
Bronx	3,526	7,278.4	3,793	6,709.8	7,319	6,972.2
Kings	3,430	4,866.1	3,781	4,279.8	7,211	4,540.0
New York	1,644	4,407.5	2,609	4,147.4	4,253	4,244.2
Queens	1,936	3,288.9	2,754	3,763.7	4,690	3,552.0
Richmond	359	2,531.6	391	2,626.6	750	2,580.2
NYS excl. NYC	9,717	2,620.4	12,155	3,163.8	21,872	2,896.9
Buffalo Region	1,772	3,649.9	1,984	4,016.1	3,756	3,834.6
Allegany	41	1,962.7	44	2,265.7	85	2,108.7
Cattaraugus	51	1,993.0	67	2,906.7	118	2,426.0
Chautauqua	133	2,864.5	166	4,247.7	299	3,496.7
Erie	1,160	4,011.5	1,380	4,433.7	2,540	4,230.4
Genesee	29	1,647.7	43	2,559.5	72	2,093.0
Niagara	309	4,901.6	231	3,733.0	540	4,322.8
Orleans	43	3,568.5	37	3,025.3	80	3,294.9
Wyoming	6	559.7	16	1,553.4	22	1,046.6
Capital Region	1,404	2,938.9	1,651	3,036.2	3,055	2,990.7
Albany	438	3,726.4	524	3,119.2	962	3,369.2
Clinton	59	2,061.5	93	2,381.0	152	2,245.9
Columbia	49	3,337.9	56	3,698.8	105	3,521.1
Delaware	22	1,481.5	15	1,149.4	37	1,326.2
Essex	19	2,036.4	23	2,754.5	42	2,375.6
Franklin	20	1,478.2	35	2,645.5	55	2,055.3
Fulton	56	3,681.8	53	3,603.0	109	3,643.0
Greene	36	3,324.1	35	3,051.4	71	3,183.9
Hamilton	1	1,075.3	1	1,041.7	2	1,058.2
Montgomery	41	2,806.3	49	3,602.9	90	3,190.4
Otsego	55	1,924.4	67	1,829.1	122	1,870.9
Rensselaer	201	4,152.0	185	3,613.3	386	3,875.1
Saratoga	113	1,634.6	179	2,764.5	292	2,181.1
Schenectady	200	4,199.0	220	4,356.4	420	4,280.0
Schoharie	15	1,255.2	21	2,029.0	36	1,614.3
Warren	39	2,356.5	58	3,293.6	97	2,839.6
Washington	40	2,605.9	37	2,437.4	77	2,522.1

Region/County	15-19 yrs		20-24 yrs		15-24 yrs	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	1,655	2,642.3	2,075	3,006.4	3,730	2,833.2
Broome	153	2,128.0	153	1,607.0	306	1,831.1
Cayuga	56	2,397.3	75	3,357.2	131	2,866.5
Chenango	26	1,790.6	26	2,057.0	52	1,914.6
Cortland	49	2,061.4	69	2,199.6	118	2,140.0
Herkimer	43	2,243.1	36	2,027.0	79	2,139.2
Jefferson	153	4,977.2	219	5,125.2	372	5,063.3
Lewis	22	2,653.8	16	2,156.3	38	2,418.8
Madison	49	1,542.3	53	1,836.5	102	1,682.3
Oneida	190	2,665.9	237	3,261.8	427	2,966.7
Onondaga	680	4,046.4	837	4,954.7	1,517	4,501.8
Oswego	61	1,388.3	95	2,253.3	156	1,811.8
St Lawrence	59	1,300.4	107	2,480.3	166	1,875.5
Tioga	16	1,115.0	22	1,764.2	38	1,416.9
Tompkins	98	1,637.4	130	1,405.3	228	1,496.5
Rochester Region	1,367	3,269.0	1,578	3,638.5	2,945	3,457.1
Chemung	83	3,038.1	80	3,079.3	163	3,058.2
Livingston	26	940.3	60	1,757.0	86	1,391.6
Monroe	1,054	4,223.1	1,170	4,432.8	2,224	4,330.9
Ontario	65	1,842.9	92	2,649.8	157	2,243.2
Schuyler	5	982.3	8	1,814.1	13	1,368.4
Seneca	11	1,203.5	21	2,164.9	32	1,698.5
Steuben	65	2,284.7	61	2,339.0	126	2,310.7
Wayne	47	1,755.7	73	2,969.9	120	2,336.9
Yates	11	1,236.0	13	1,283.3	24	1,261.2
Hudson Valley	1,667	2,114.1	2,236	2,945.5	3,903	2,521.9
Dutchess	229	2,125.7	305	2,801.2	534	2,465.3
Orange	351	2,594.2	415	3,336.3	766	2,949.7
Putnam	30	960.9	47	1,620.7	77	1,278.6
Rockland	204	1,762.6	282	2,599.1	486	2,167.3
Sullivan	57	2,607.5	76	3,645.1	133	3,114.0
Ulster	121	2,181.8	168	2,967.1	289	2,578.5
Westchester	675	2,101.6	943	3,033.2	1,618	2,559.8
Long Island	1,852	2,030.8	2,631	2,856.6	4,483	2,445.7
Nassau	828	1,916.0	1,196	2,747.4	2,024	2,333.2
Suffolk	1,024	2,134.2	1,435	2,954.4	2,459	2,546.8

Table 17. Chlamydia by Region/County and Year
New York State, 2016 - 2018

Region/County	2016		2017		2018	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
New York State (NYS)	109,549	558.7	116,843	600.0	119,670	614.4
New York City (NYC)	66,748	769.3	71,690	833.1	72,445	839.1
Bronx	17,060	1,081.9	17,718	1,132.3	17,704	1,130.9
Kings	19,935	749.7	21,146	804.3	21,696	822.4
New York	15,245	863.9	16,678	940.8	17,240	969.5
Queens	12,933	571.1	14,426	647.6	14,087	629.8
Richmond	1,575	352.1	1,722	385.3	1,718	386.8
NYS excl. NYC	42,801	392.7	45,153	415.9	47,225	435.8
Buffalo Region	7,604	521.1	7,824	538.3	7,798	538.9
Allegany	104	194.7	92	171.0	158	287.2
Cattaraugus	287	406.3	211	307.5	216	313.4
Chautauqua	539	440.2	549	449.7	606	501.8
Erie	5,201	581.0	5,571	623.5	5,449	611.4
Genesee	183	350.4	167	324.1	156	306.4
Niagara	1,051	556.3	1,013	540.7	994	534.8
Orleans	143	380.2	148	400.6	164	434.7
Wyoming	96	273.3	73	203.3	55	154.5
Capital Region	5,668	381.2	5,999	403.7	6,033	408.0
Albany	1,760	490.5	1,877	520.2	1,932	536.4
Clinton	281	307.8	276	299.6	303	335.8
Columbia	180	367.2	189	397.3	201	422.5
Delaware	104	254.5	85	204.8	95	235.3
Essex	50	159.9	78	249.7	83	272.1
Franklin	98	193.5	86	167.8	107	210.4
Fulton	167	364.5	166	363.4	213	468.8
Greene	130	307.1	129	307.7	146	351.6
Hamilton	13	479.8	5	187.2	4	116.3
Montgomery	130	301.6	198	468.2	153	355.8
Otsego	288	379.5	236	298.9	220	299.6
Rensselaer	631	394.9	738	461.8	804	507.5
Saratoga	549	272.7	607	299.4	547	270.0
Schenectady	831	571.7	875	599.0	817	558.3
Schoharie	116	385.4	93	300.5	67	218.3
Warren	191	363.7	202	382.0	204	390.3
Washington	149	276.5	159	300.4	137	259.3

Region/County	2016		2017		2018	
	Diagnoses	Rate	Diagnoses	Rate	Diagnoses	Rate
Central Region	6,854	374.4	7,013	385.1	7,786	427.6
Broome	700	331.6	690	337.1	623	295.8
Cayuga	208	295.4	255	368.5	259	374.1
Chenango	103	250.2	116	290.5	99	249.9
Cortland	167	276.6	171	276.4	203	306.6
Herkimer	142	262.7	124	231.9	166	308.3
Jefferson	713	508.9	787	557.6	873	629.7
Lewis	32	138.8	63	281.8	61	271.9
Madison	194	254.6	196	254.6	201	261.7
Oneida	786	361.8	841	388.8	917	425.0
Onondaga	2,617	560.3	2,684	578.6	3,211	691.5
Oswego	377	304.6	327	268.1	328	272.9
St Lawrence	341	272.4	264	212.1	294	236.8
Tioga	100	248.5	72	185.0	92	233.1
Tompkins	374	222.4	423	243.5	459	262.6
Rochester Region	6,226	501.4	6,446	524.1	6,874	560.4
Chemung	324	412.6	274	353.9	319	413.1
Livingston	130	183.8	143	190.4	170	223.9
Monroe	4,706	622.9	4,988	666.3	5,338	714.5
Ontario	345	348.0	318	314.5	329	330.8
Schuyler	30	209.6	34	238.3	24	169.3
Seneca	111	343.9	101	306.1	84	251.0
Steuben	279	335.7	273	339.6	264	327.4
Wayne	243	315.3	263	342.2	291	379.6
Yates	58	243.0	52	219.3	55	224.2
Hudson Valley	7,911	358.8	8,393	380.9	8,823	400.8
Dutchess	926	312.8	1,074	362.3	1,169	395.1
Orange	1,410	364.9	1,542	398.9	1,563	402.4
Putnam	182	203.9	182	206.7	187	207.1
Rockland	822	265.1	944	305.9	1,105	358.2
Sullivan	259	396.2	271	415.9	273	417.7
Ulster	508	305.2	568	347.4	601	366.7
Westchester	3,804	426.8	3,812	426.7	3,925	440.3
Long Island	8,538	321.8	9,478	358.0	9,911	374.6
Nassau	4,032	322.1	4,561	363.2	4,784	381.6
Suffolk	4,506	321.4	4,917	353.4	5,127	368.4

Table 18. Chlamydia by Year and Region
New York State, 2001 - 2018

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	514.4	63,544	775.5	36,277	323.6
2011	102,460	524.7	64,966	783.4	37,494	333.8
2012	100,687	513.0	62,460	745.0	38,227	340.0
2013	96,020	487.1	58,098	686.8	37,922	337.0
2014	98,262	496.9	59,417	697.3	38,845	345.2
2015	103,825	523.9	62,965	733.6	40,860	363.6
2016	109,549	552.3	66,748	774.7	42,801	381.4
2017	116,843	588.6	71,690	831.4	45,153	402.2
2018	119,670	602.9	72,445	840.2	47,225	420.6

1. The 2018 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 2018 and closed by April 26, 2019.
2. The 2018 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 August 2018. 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 (1969-2017) (www.seer.cancer.gov/popdata), National Cancer Institute, DCCPS, Surveillance Research Program, released January, 2019

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.
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 - 2018.
8. In 2018, CSTE revised the case definition for syphilis, early latent to syphilis, early non-primary non-secondary, and syphilis, late latent to syphilis, unknown duration or late.
9. 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.
10. Strata in which there were no diagnoses reported are presented as “-“.
11. All data were analyzed using SAS® Version 9.4 software (SAS Institute, Inc., Cary, North Carolina).

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