San Mateo County (SMC) Sexually Transmitted Infections (STI) and HIV-AIDS Surveillance Annual Report, 2021

www.smchealth.org/hivstds · **Provider STI Reporting 650-573-2346 · STI Clinic: 650-573-2385**

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SAN MATEO
COUNTY HEALTH

INTRODUCTION AND ACKNOWLEDGEMENTS

This is the 2021 report of data and program highlights from the STI/HIV Program in San Mateo County Health. For questions and feedback on this report or on the STI/HIV Program, please contact the Epidemiology unit.

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Note on data for previous years:
Numbers in the document listed for past years may not match totals in previous reports. Totals may increase due to late reports, may decrease when duplicate reports are removed or cases are subsequently identified as out of our jurisdiction, or when case definitions are changed. In addition, disease rates may have changed due to updated denominator data from the U.S. Census Bureau or the California Department of Finance.

The following contributed to the creation of this report: Sharon Jones, Marco Vergara, Wesley Yuen, Anna Branzuela, Losaline Baker, Jose Velazquez, Roberto Gonzalez, Ana Martinez, Corina Chung, Edwina Williams.

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San Mateo County Health STI/HIV Program Overview

The STI/HIV Program was created in November 2008, with the merging of the long-standing STI and AIDS Programs, in order to integrate STI and HIV services within San Mateo County Health. The program aims to identify, prevent and treat Sexually Transmitted Infections (STIs) and HIV, as well as monitor STI/HIV disease trends in San Mateo County.

Services of the STI/HIV Program

- Provide comprehensive primary and specialty medical care, psychosocial support and case management for persons living with HIV
- Provide STI and HIV screening and treatment through San Mateo County STI Clinic as well as mobile outreach and testing for high-risk populations
- Provide linkage to care services for newly diagnosed HIV-infected residents as well as HIV-infected patients who have fallen out of care
- Provide partner services for newly diagnosed HIV-infected patients as well as those already in care
- Provide HIV PrEP (Pre-Exposure Prophylaxis) information, referrals and linkage for at-risk individuals
- Provide STI and HIV prevention and treatment information through the San Mateo County Health web site: http://www.smchealth.org/std
- Conduct case and behavioral surveillance, analysis and reporting of syphilis, gonorrhea, chlamydia, and HIV
- Conduct analysis of disease trends using demographic, clinical, and interview data
- Conduct STI prevalence monitoring in high-risk settings such as STI clinic and correctional facilities
- Conduct disease intervention services, including field-delivered therapy and partner delivered therapy where appropriate
- Support training opportunities and distribute STI/HIV clinical educational materials to health care providers
- Partner with public and private laboratories offering STI/HIV testing
- Collaborate with public and private key stakeholders to identify and solve health problems

External partners include: California Department of Public Health, San Francisco Department of Public Health, San Francisco Mayor's Office of Housing and Community Development, California STD/HIV Controllers Association.

Community partners include: Mental Health Association of San Mateo County, AIDS Community Research Consortium.

Funding and Grants

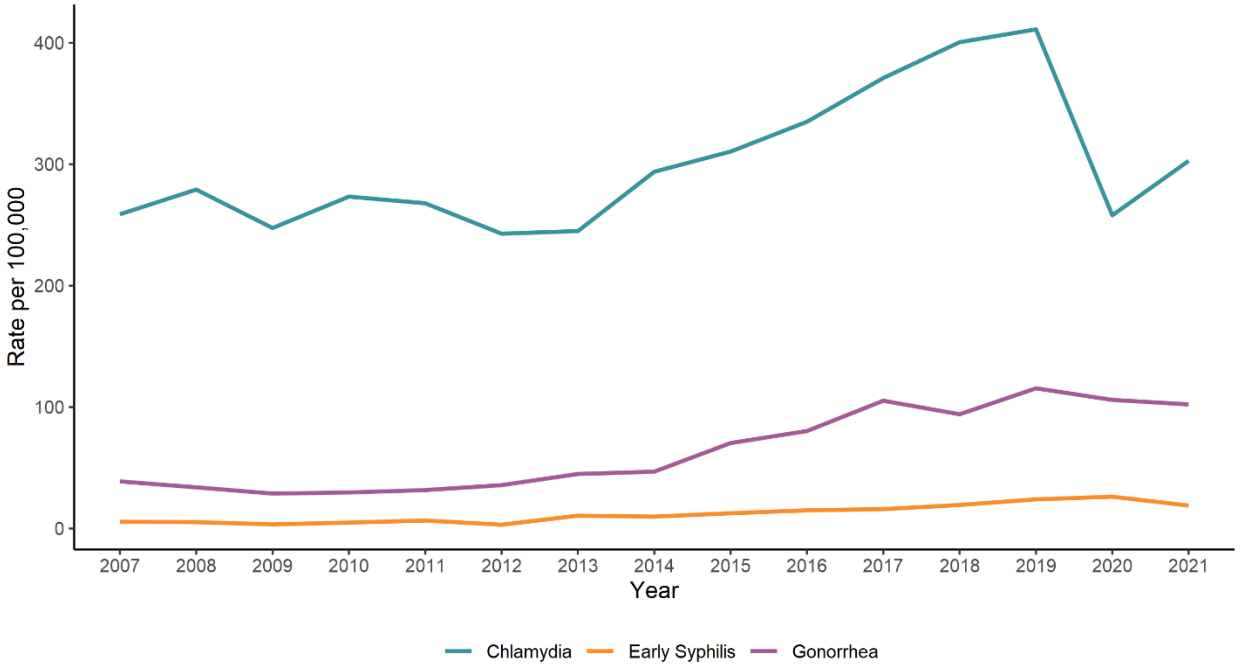
The STI/HIV Program received funding from the following sources in 2018:

- San Mateo County General Fund
- Federal Health Resources and Services Administration (HRSA) - Ryan White Part A as part of the San Francisco Eligible Metropolitan Area (EMA)
- Federal Centers for Disease Control & Prevention (CDC) - HIV Prevention Funds through the California Department of Public Health – Office of AIDS
- Federal Housing and Urban Development (HUD) - Housing Opportunities for People with AIDS (HOPWA) as part of the San Francisco Eligible Metropolitan Statistical Area (EMSA)
- Federal Health Resources and Services Administration (HRSA) - Ryan White Part B through the California Department of Public Health – Office of AIDS
- Federal Health Resources and Services Administration (HRSA) - Ryan White Minority AIDS Initiative (MAI) through the California Department of Public Health – Office of AIDS
- California Department of Public Health (CDPH) – Core STD Program Management through STD Control Branch

Overview

- In March 2020, SMC STI program resources shifted to COVID-19, diverting the STI workforce and reducing STD clinic hours. The pandemic decreased case reporting and caused STI diagnostic molecular test kit shortages. This shift occurred at a critical time, when STDs had been steadily increasing nationally, statewide and locally
- Ratio of female to male total syphilis cases has decreased from 1:6 in 2017 to 1:3 in 2021 with an associated increase in congenital syphilis cases. This change of increasing syphilis incidence in females is important for clinicians to change their syphilis screening practices to include not only men who have sex with men (MSM) but females.
- Total syphilis decreased 17% in 2021 compared to 2020, with most of the decrease in men who saw a rate decrease of 55.6 males per 100,000 in 2020 to 44.4 in 2021 while females had a stable rate in 2020 and 2021. (12.5 per 100,000 in 2021 compared to 12 per 100,000 in 2020)
- Early syphilis decreased 39% in 2021 compared to 2020, with most of the decrease in men (46.2 per 100,000 males in 2020 compared to 31.3 in 2021) and stable female case rate (6.1 per 100,000 females in 2020 compared to 5.9 in 2021)
- SMC had three congenital syphilis cases in 2021 compared to one congenital syphilis case in 2020
- Prenatal syphilis testing Senate bill 306 became California law January 1, 2022: All pregnant persons should be screened for syphilis at least twice during pregnancy: once at either confirmation of pregnancy or first prenatal visit (ideally first trimester) and again during third trimester (ideally between 28-32 weeks gestation), regardless of whether such testing was done during first two trimesters
- SMC had seven neurosyphilis cases in 2021 compared to four in 2020 and one in 2019. Neurosyphilis and ocular syphilis need 10-14 days of intravenous penicillin treatment.
- CT cases increased 17% from 2020 to 2021. The increase was most significant in females with a rate increase from 279.5 per 100,000 female residents in 2020 to 336.7 in 2021.
- Gonorrhea cases decreased 4% in 2021 compared to 2020 with both male and female cases having modest decreases in 2021 compared to 2020.
- Females comprised 34% of gonorrhea cases in 2021, an increasing percentage from 2020 and 2019 when females comprised about one quarter of SMC gonorrhea cases.
- Over half of newly reported HIV cases in 2021 (n=46) were LatinX despite making up only about a quarter of the population of San Mateo County
- 20% of newly reported HIV cases in 2021 had no reported risk factor
- Between 2016-2021, females comprise 10% of late testers for newly reported cases, 28% of late testers were 50 years or older, 29% of Late Testers had no specified risk factor.
- In March 2021, the SMC Public Health Lab instituted mycoplasma genitalium testing. This organism is an important cause of recurrent and persistent urethritis
- Programmatic priorities are Syphilis Screening in pregnant persons, gonorrhea resistance surveillance and educating providers on 2021 CDC STI Treatment guidelines.

Figure 1. STI Rates by Year in San Mateo County, 2007-2021



Early Syphilis is defined as primary, secondary, and early latent syphilis stages of disease. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS).

Table 1. STI Cases and Rates by Year Reported in San Mateo County, 2007-2021

Cases

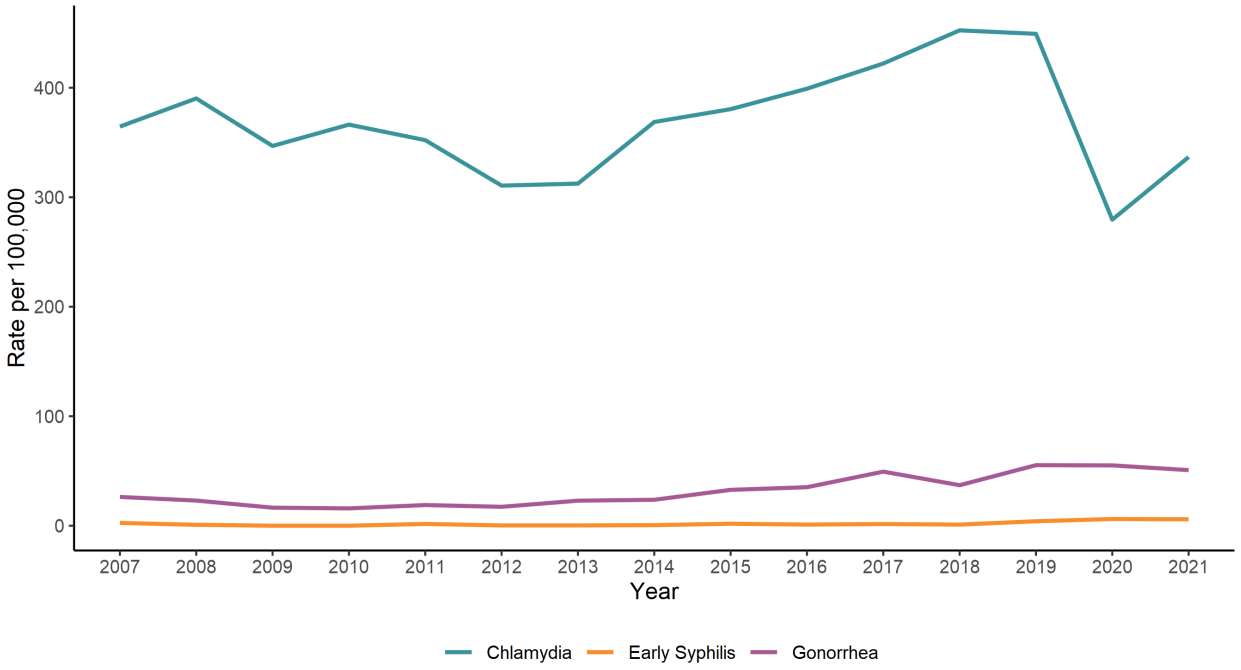
Disease	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Chlamydia	1,823	1,986	1,773	1,972	1,957	1,803	1,839	2,228	2,378	2,579	2,867	3,104	3,191	2,000	2,347
Gonorrhea	273	241	206	214	231	265	337	355	539	618	813	729	896	821	792
Total Syphilis	75	60	37	51	69	48	101	117	153	168	192	219	275	263	225
Primary	4	15	8	9	7	7	18	20	12	19	36	25	43	33	23
Secondary	22	11	11	13	28	7	39	30	43	41	26	52	47	61	43
Early Latent	13	11	5	13	13	9	22	24	41	55	61	73	96	109	80
Early Syphilis[1]	39	37	24	35	48	23	79	74	96	115	123	150	186	203	146
Late Latent	35	21	13	16	19	25	22	43	56	53	69	69	88	59	76
Neurosyphilis[2]	0	0	2	0	2	2	1	0	2	2	4	0	1	4	7
Congenital Syphilis[3]	1	2	0	0	2	0	0	0	1	0	0	0	2	1	3

Rate per 100,000[4]

Disease	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Chlamydia	258.8	279.2	247.5	273.4	267.9	242.8	245.0	293.9	310.5	335.1	371.1	400.6	411.2	258.0	302.8
Gonorrhea	38.8	33.9	28.8	29.7	31.6	35.7	44.9	46.8	70.4	80.3	105.2	94.1	115.5	105.9	102.2
Total Syphilis	10.5	8.2	5.2	7.1	9.4	6.5	13.5	15.4	20.0	21.8	24.9	28.3	35.4	33.9	29.0
Primary	0.6	2.1	1.1	1.2	1.0	0.9	2.4	2.6	1.6	2.5	4.7	3.2	5.5	4.3	3.0
Secondary	3.1	1.5	1.5	1.8	3.8	0.9	5.2	4.0	5.6	5.3	3.4	6.7	6.1	7.9	5.5
Early Latent	1.8	1.5	0.7	1.8	1.8	1.2	2.9	3.2	5.4	7.1	7.9	9.4	12.4	14.1	10.3
Early Syphilis[1]	5.5	5.2	3.4	4.9	6.6	3.1	10.5	9.8	12.5	14.9	15.9	19.4	24.0	26.2	18.8
Late Latent	5.0	3.0	1.8	2.2	2.6	3.4	2.9	5.7	7.3	6.9	8.9	8.9	11.3	7.6	9.8
Neurosyphilis[2]	0.0	0.0	0.3	0.0	0.3	0.3	0.1	0.0	0.3	0.3	0.5	0.0	0.1	0.5	0.9
Congenital Syphilis[3]	10.1	20.5	0.0	0.0	22.2	0.0	0.0	0.0	11.1	0.0	0.0	0.0	24.2	12.9	40.0

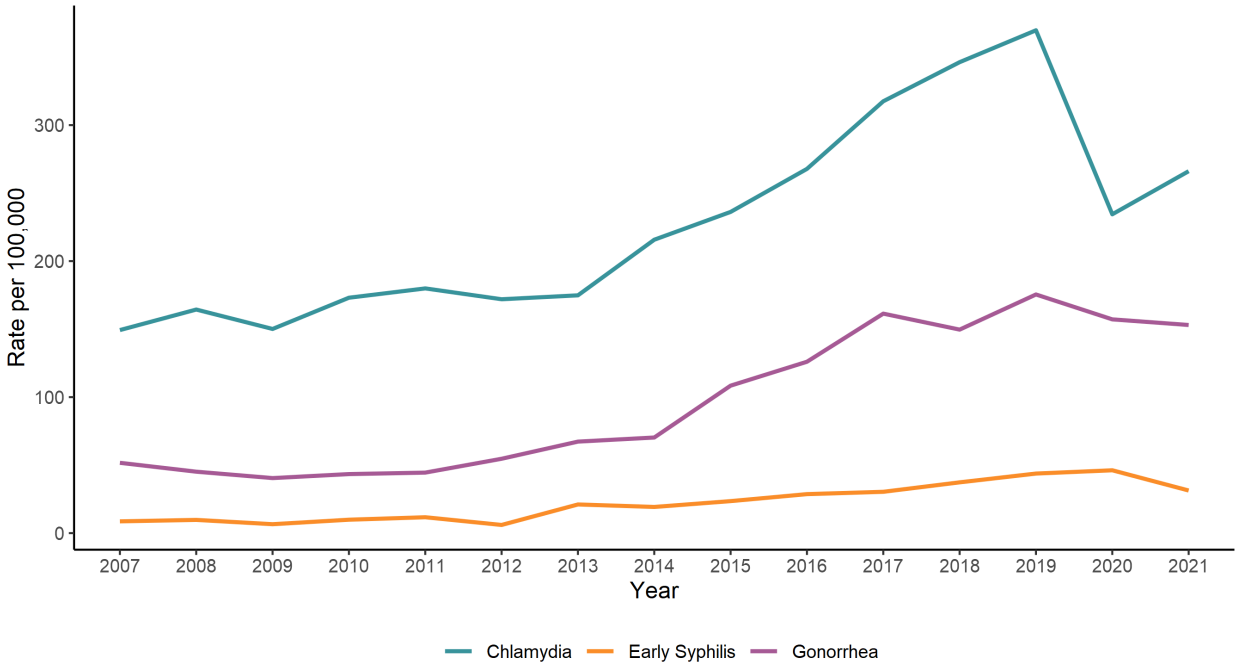
[1]Early syphilis includes primary, secondary and early latent syphilis stages. [2]Neurosyphilis cases are a sequelae of syphilis and not a stage, neurosyphilis cases are captured under other syphilis stages. [3]Rates equal cases per 100,000 live births per year based on CA Department of Finance, Demographic Research Unit, Historical and Projected Births by County. [4]Rates equal cases per 100,000 residents per year based on population data from the California Department of Finance. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS) .

Figure 2. STI Rates for Females by Year in San Mateo County, 2007-2021



Early Syphilis is defined as primary, secondary, and early latent syphilis stages of disease. Rates equal cases per 100,000 female residents per year based on population data from the California Department of Finance. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS).

Figure 3. STI Rates for Males by Year in San Mateo County, 2007-2021



Early Syphilis is defined as primary, secondary, and early latent syphilis stages of disease. Rates equal cases per 100,000 female residents per year based on population data from the California Department of Finance. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS).

Overview

- Early syphilis decreased 39% in 2021 compared to 2020, with most of the decrease in men (46.2 per 100,000 males in 2020 compared to 31.3 in 2021) and stable female case rate (6.1 per 100,000 females in 2020 compared to 5.9 in 2021)
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- Ratio of female to male total syphilis cases has decreased from 1:6 in 2017 to 1:3 in 2021, with associated increase in congenital syphilis. This change of increasing syphilis incidence in females is important for clinicians to change their syphilis screening practices to include not only men who have sex with men (MSM) but females.
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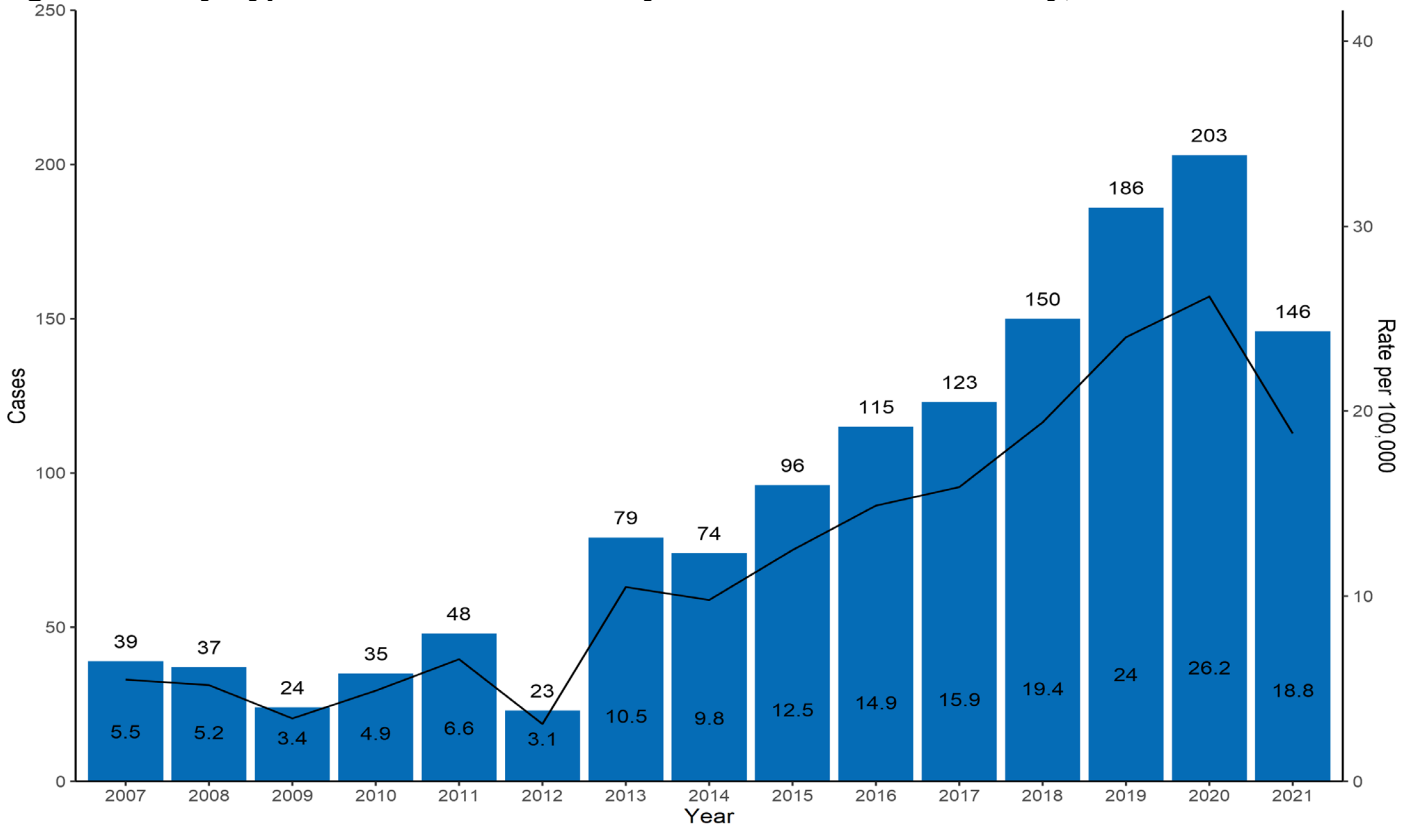
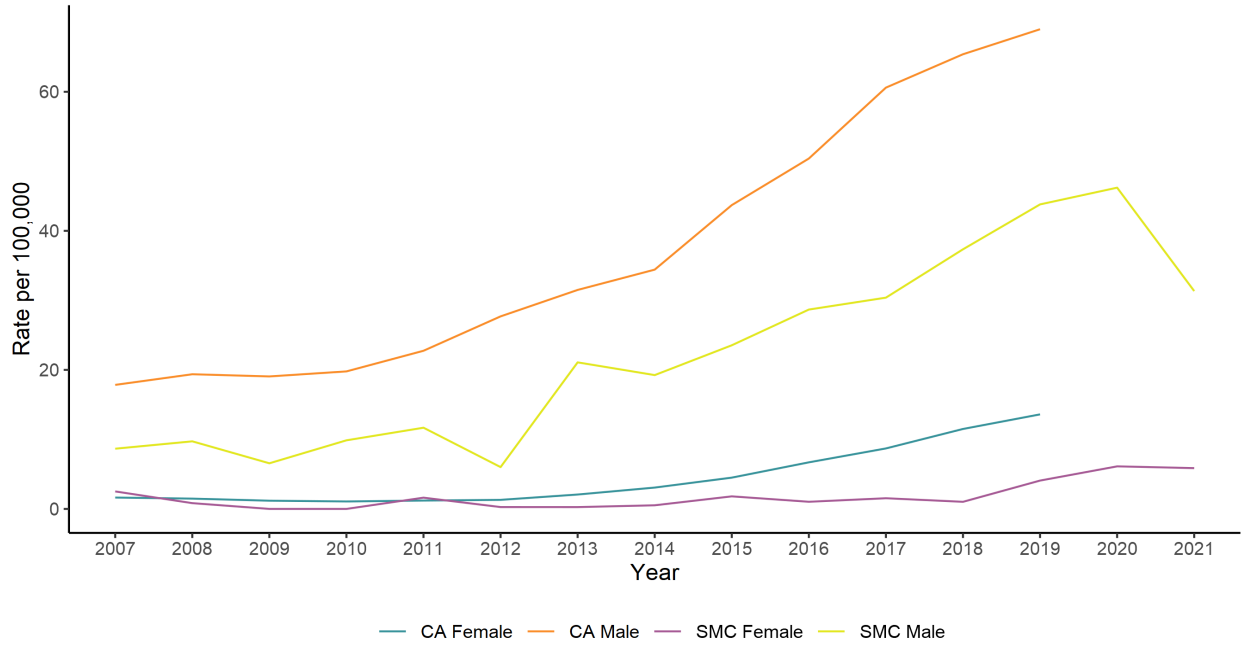
- Prenatal syphilis testing Senate bill 306 became California law January 1, 2022: All pregnant persons should be screened for syphilis at least twice during pregnancy: once at either confirmation of pregnancy or first prenatal visit (ideally first trimester) and again during third trimester (ideally between 28-32 weeks gestation), regardless of whether such testing was done during first two trimesters
- SMC had seven neurosyphilis cases in 2021 compared to four in 2020 and one in 2019. Neurosyphilis and ocular syphilis need 10-14 days of intravenous penicillin treatment.
- Self-reported MSM, anonymous sex and HIV co- infection for early syphilis cases all increased in 2021 compared to 2020

Figure 4. Early Syphilis Cases and Rates by Year in San Mateo County, 2007-2021



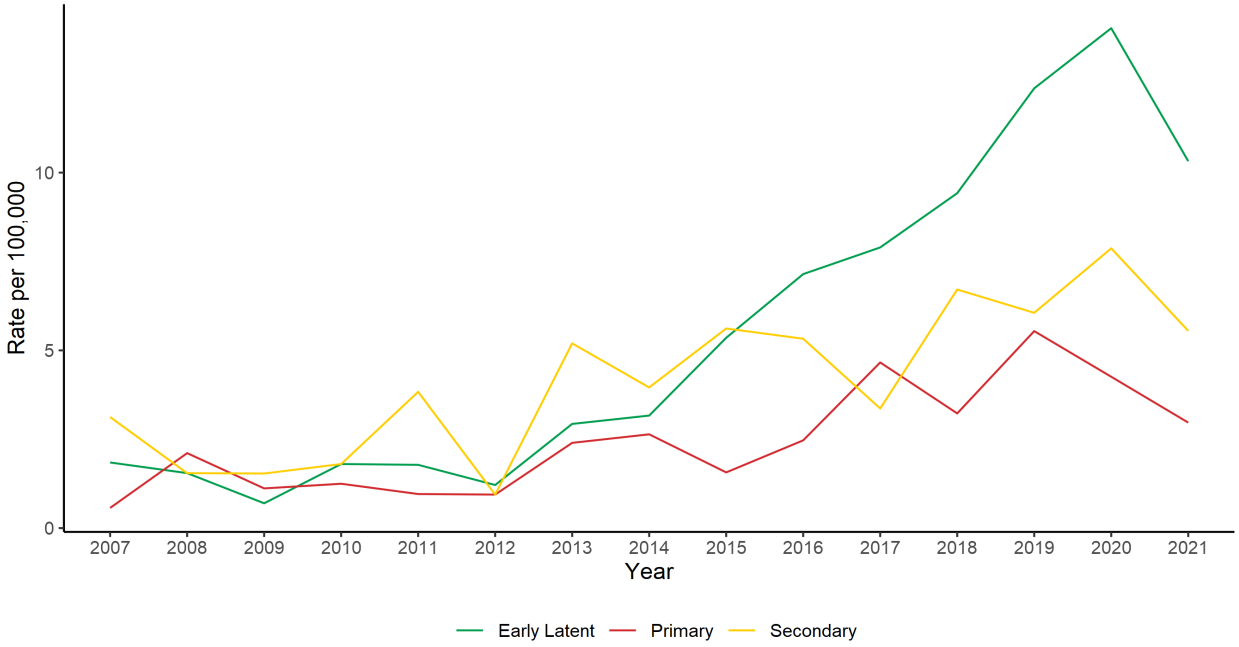
Early Syphilis includes primary, secondary, and early latent stages of syphilis. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based on population data from the California Department of Finance

Figure 5. Early Syphilis Rates by Sex and Year in San Mateo County and State of California, 2007-2021



Early Syphilis includes primary, secondary, and early latent stages of syphilis. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Data for California rates was provided by the California Department of Public Health STD Control Branch. California rates not available for 2019 and 2020.

Figure 6. Early Syphilis Rates by Stage and Year in San Mateo County, 2007-2021



Early Syphilis includes primary, secondary, and early latent stages of syphilis. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based on population data from the California Department of Finance

Table 2. Syphilis Cases and Rates by Syphilis Stage, Early Syphilis Demographic Characteristics and Risk Factors, San Mateo County, 2020 and 2021

		2021			2020		
		Cases	Percent	Rate[1]	Cases	Percent	Rate[1]
Total	Total Syphilis	225	100.0	29.0	263	100.0	33.9
	Primary	23	10.2	3.0	33	12.5	4.3
	Secondary	43	19.1	5.5	61	23.2	7.9
	Early Latent	80	35.6	10.3	109	41.4	14.1
	Late Latent	76	33.8	9.8	59	22.4	7.6
	Neurosyphilis	7	3.1	0.9	4	1.5	0.5
	Congenital Syphilis	3	1.3	40.0	1	0.4	12.9
Total	Early Syphilis[2]	146	100.0	18.8	203	100.0	26.2
Sex	Male	120	82.2	31.3	177	87.2	46.2
	Female	23	15.8	5.9	24	11.8	6.1
	Transgender/Other/Unknown[3]	3	2.1	-	2	1.0	-
Age	0-14	0	0.0	0.0	0	0.0	0.0
	15-19	2	1.4	4.7	7	3.4	16.7
	20-24	10	6.8	27.0	22	10.8	59.2
	25-29	28	19.2	63.4	38	18.7	86.6
	30-34	29	19.9	61.7	44	21.7	90.0
	35-39	19	13.0	35.5	24	11.8	44.7
	40-44	16	11.0	29.3	28	13.8	51.5
	45-49	16	11.0	28.4	16	7.9	27.8
	50-54	13	8.9	22.5	11	5.4	19.2
	55-59	4	2.7	7.4	10	4.9	18.4
	60+	9	6.2	4.6	3	1.5	1.6
Race/Ethnicity	American Indian/Alaska Native	0	0.0	0.0	1	0.5	76.3
	Asian	18	12.3	9.2	25	12.3	12.8
	Black/African-American	5	3.4	25.3	13	6.4	66.0
	Latinx/Hispanic	63	43.2	30.9	76	37.4	37.4
	Multiracial	3	2.1	10.7	1	0.5	3.6
	Pacific Islander/Native Hawaiian	4	2.7	35.9	3	1.5	27.0
	White	38	26.0	12.1	64	31.5	20.2
	Other/Unknown	15	10.3	-	20	9.9	-
Self Reported Risk Factors[4]	MSM[5]	80	54.8	-	43	21.2	-
	Anonymous	37	25.3	-	25	12.3	-
	HIV Coinfection[6]	45	30.8	-	25	12.3	-

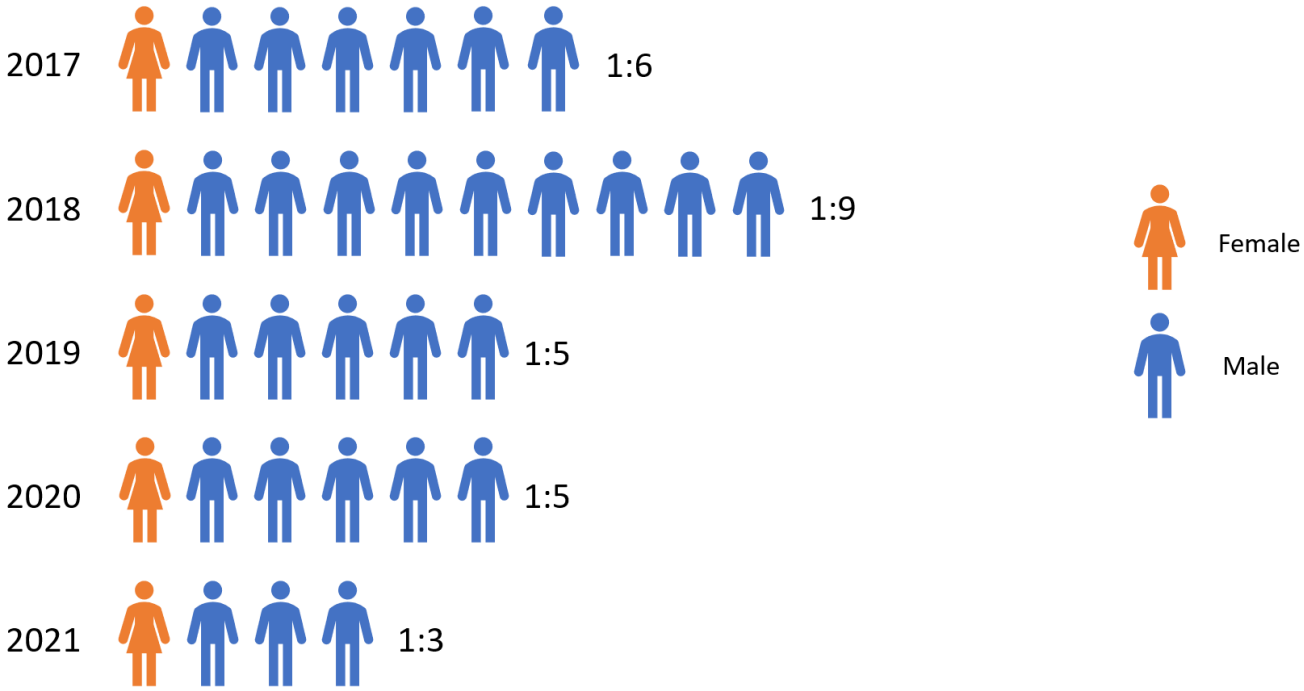
[1]Rates equal cases per 100,000 residents per year based on population data from the California Department of Finance. [2]Early Syphilis includes primary, secondary, and early latent stages of syphilis. [3]Due to data limitations (unable to distinguish between sex at birth and gender) and confidentiality concerns, transgender women, transgender men, and gender diverse persons are combined. [4]Data missing for cases that could not be located or refused to be interviewed. [5]Data on sex of partner for men was available for % (n=125) of 177 total male cases in 2020 and for % (n=26) of 120 total male cases in 2021. [6]Data for HIV coinfections was not available (missing or refused) for 135 cases in 2020 and for 40 cases in 2021. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system.

Table 3. Syphilis Cases and Rates by Demographic Characteristics for All Syphilis Stages, San Mateo County, 2020 and 2021

		2021			2020		
		Cases	Percent	Rate[1]	Cases	Percent	Rate[1]
	Total Syphilis	225	100.0	29.0	263	100.0	33.9
Sex	Male	170	75.6	44.4	213	81.0	55.6
	Female	49	21.8	12.5	47	17.9	12.0
	Transgender/Other/Unknown[2]	6	2.7	-	3	1.1	-
Age	0-14	3	1.3	2.3	1	0.4	0.8
	15-19	7	3.1	16.5	10	3.8	23.9
	20-24	17	7.6	45.9	31	11.8	83.4
	25-29	49	21.8	110.9	51	19.4	116.3
	30-34	41	18.2	87.3	54	20.5	110.4
	35-39	27	12.0	50.5	33	12.5	61.5
	40-44	29	12.9	53.1	33	12.5	60.6
	45-49	18	8.0	32.0	19	7.2	33.0
	50-54	14	6.2	24.2	14	5.3	24.4
	55-59	8	3.6	14.8	14	5.3	25.7
	60+	12	5.3	6.1	3	1.1	1.6
Race/Ethnicity	American Indian/Alaska Native	0	0.0	0.0	1	0.4	76.3
	Asian	27	12.0	13.8	35	13.3	17.9
	Black/African-American	12	5.3	60.6	16	6.1	81.2
	Latinx/Hispanic	107	47.6	52.5	100	38.0	49.2
	Multiracial	3	1.3	10.7	1	0.4	3.6
	Pacific Islander/Native Hawaiian	5	2.2	44.9	5	1.9	45.0
	White	47	20.9	14.9	77	29.3	24.4
	Other/Unknown	24	10.7	-	28	10.6	-

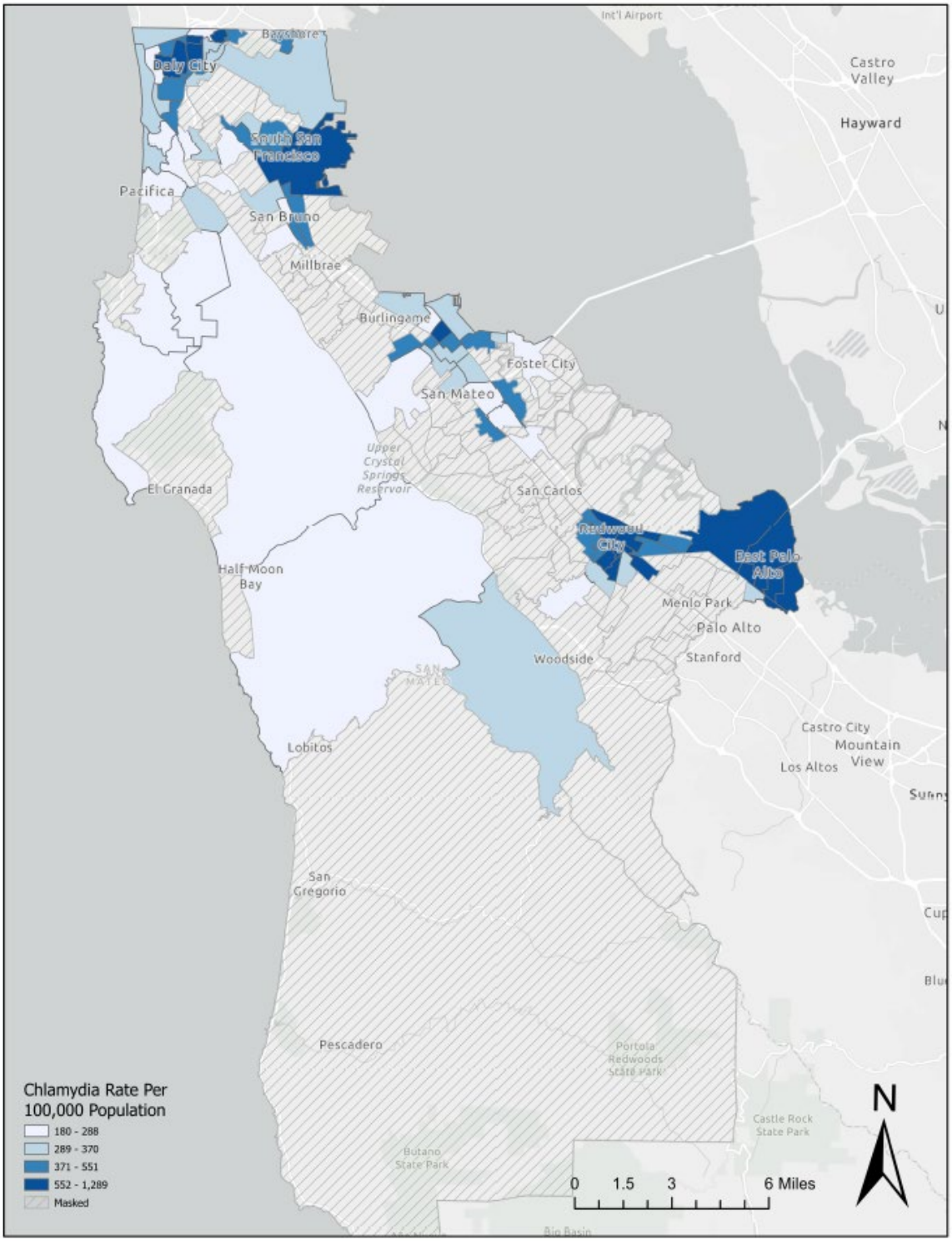
[1]Rates equal cases per 100,000 sex, age, and race/ethnic residents per year based on population data from the California Department of Finance. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system. [2]Due to data limitations (unable to distinguish between sex at birth and gender) and confidentiality concerns, transgender women, transgender men, and gender diverse persons are combined

Figure 7. Ratio of Female to Male Total Syphilis Cases by Year, San Mateo County, CA, 2017-2021



The highest rates of early syphilis infections for 2016-2021 were seen in census tracts in parts of Brisbane, Daly City, East Palo Alto, Redwood City, and San Mateo. Rates for zip codes with fewer than 20 cases or with low populations may be unstable.

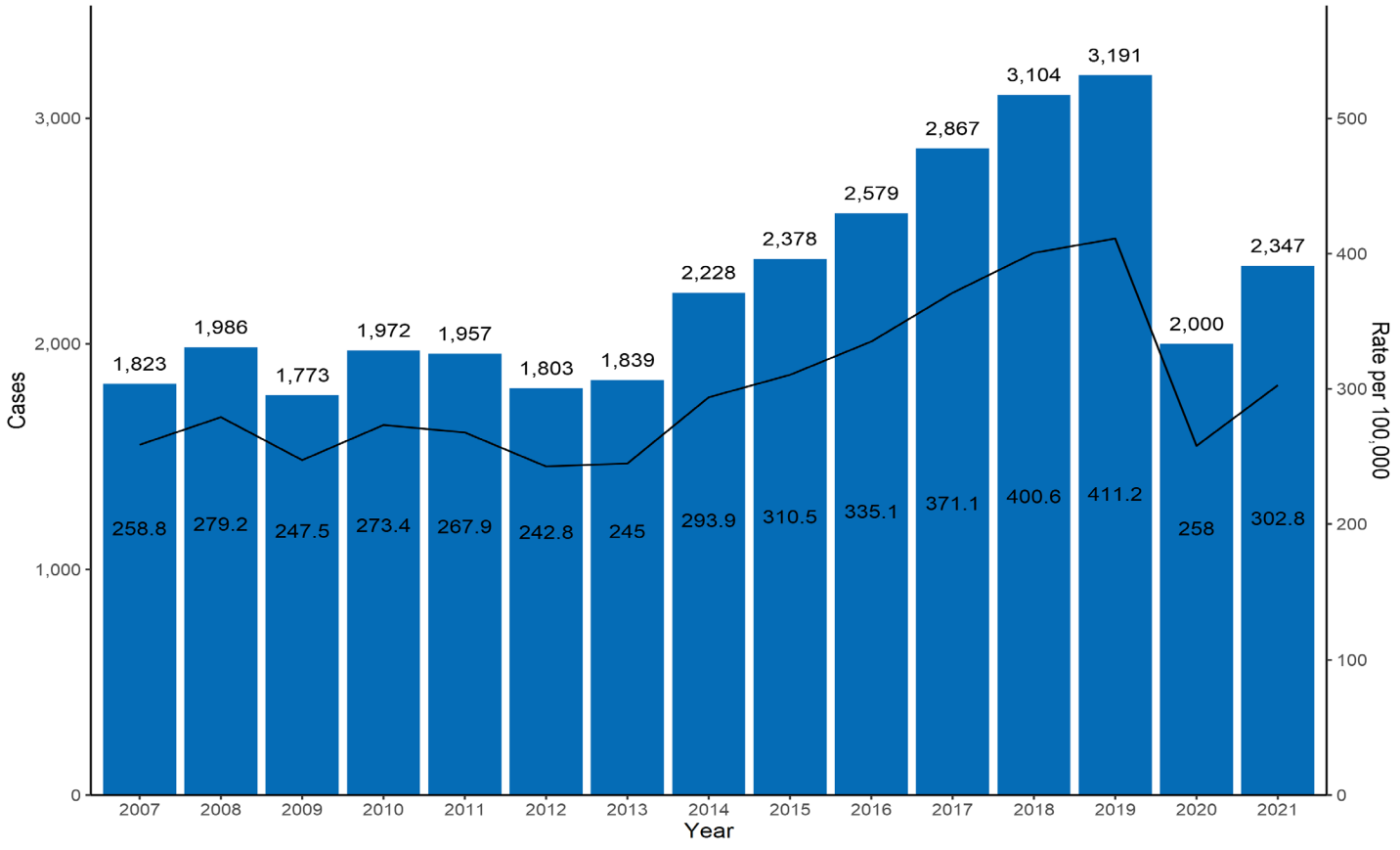
Figure 8. Early Syphilis Rates by Census Tract in San Mateo County, 2017-2021



Overview

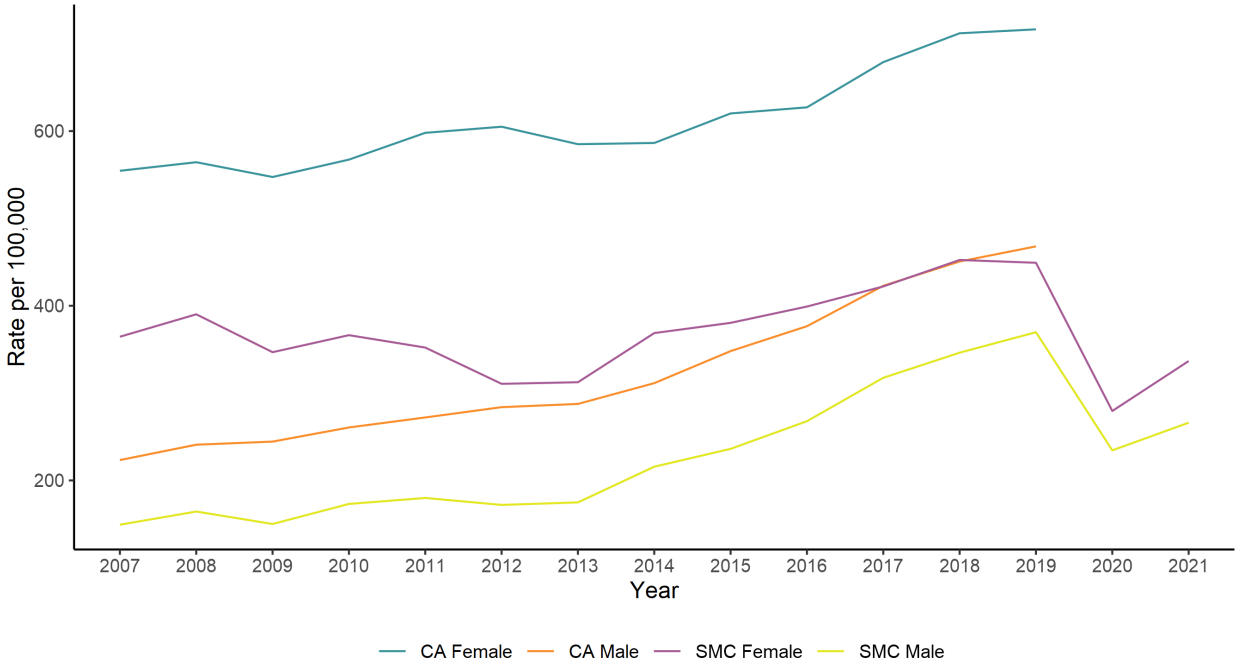
- In 2019, California changed Chlamydia trachomatis (CT) reporting to via a lab report only, with clinicians no longer mandated to report.
- CT cases increased 17% from 2020 to 2021. The increase was most significant in females with a rate increase from 279.5 per 100,000 female residents in 2020 to 336.7 in 2021.
- Anatomic site of infection was missing in 60% of specimens.
- Given approximately half of all CT cases are asymptomatic, screening in women age 25 years and under who have sex, men who have sex with men (MSM), and heterosexuals at risk is recommended at least annually or more frequently based on risk.
- CT rectal testing can be done in women based on shared decision making with clinician.
- Doxycycline is the first line treatment regimen for CT at all anatomic sites.

Figure 9. Chlamydia Cases and Rates by Year in San Mateo County, 2007-2021



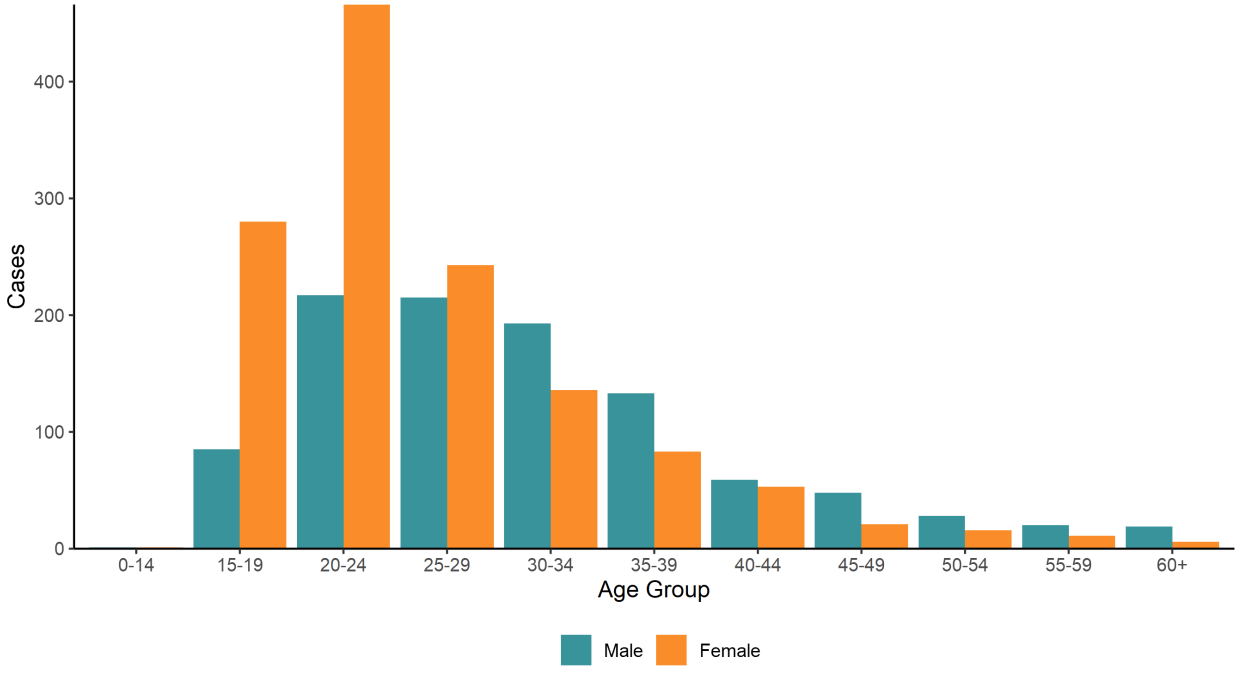
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based on population data from the California Department of Finance.

Figure 10. Chlamydia Rates by Sex and Year in San Mateo County and State of California, 2007-2021



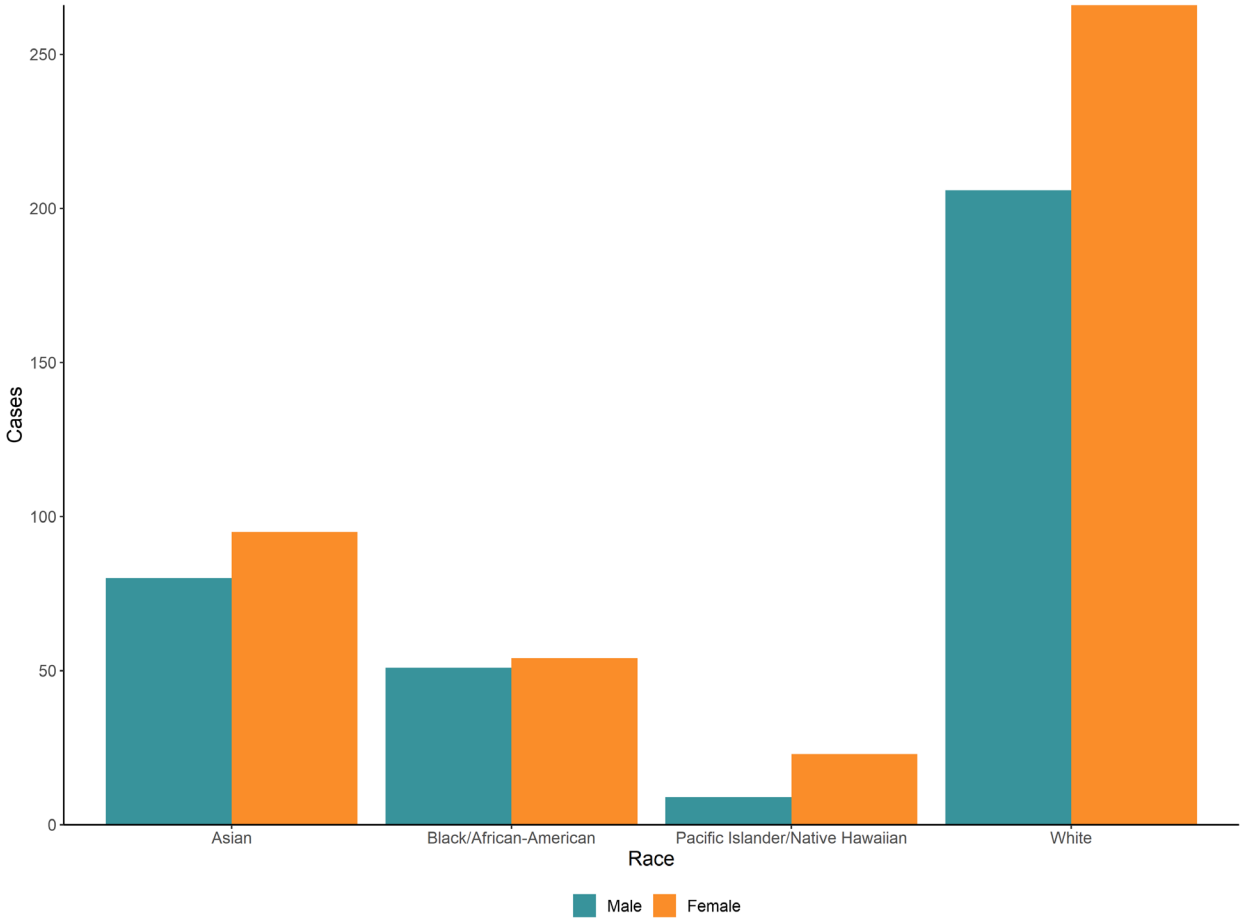
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Data for California rates was provided by the California Department of Public Health STD Control Branch. California rates were not available for 2020 and 2021. Rates equal cases per 100,000 sex specific residents per year based on population data from the California Department of Finance.

Figure 11. Chlamydia Cases by Sex and Age in San Mateo County, 2021



Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system.

Figure 12. Chlamydia Rates by Sex and Selected Race/Ethnic Groups in San Mateo County, 2021



Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system.

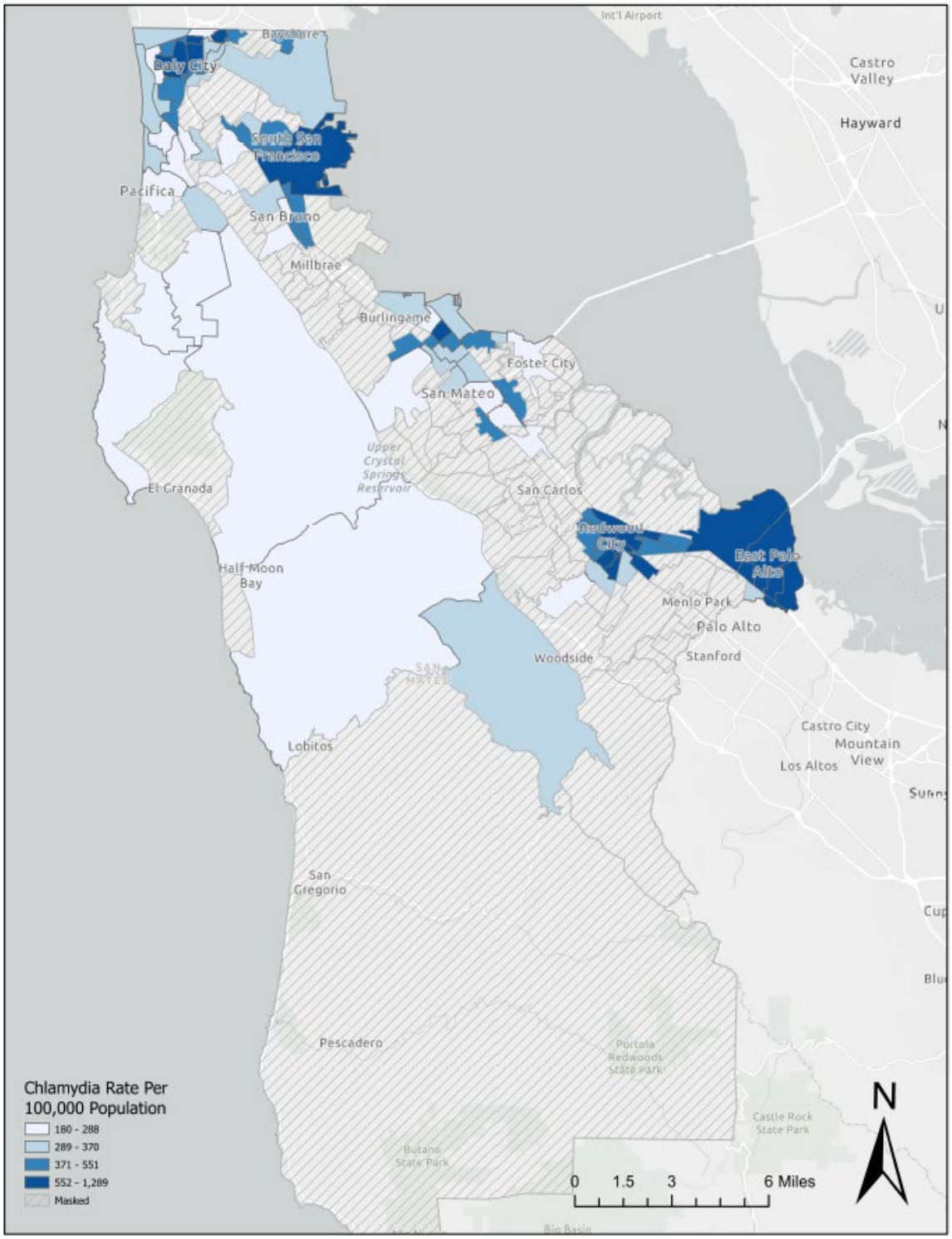
Table 4. Chlamydia Cases and Rates by Demographic and Clinical Characteristics by Sex in San Mateo County, 2020-2021

		Female						Male					
		2021			2020			2021			2020		
		Cases	Percent	Rate	Cases	Percent	Rate	Cases	Percent	Rate	Cases	Percent	Rate
Total	Total	1,320	100.0	336.7	1,096	100.0	279.5	1,019	100.0	266.1	898	100.0	234.4
Age	0-14	1	0.1	1.6	4	0.4	6.1	1	0.1	1.5	0	0.0	0.0
	15-19	280	21.2	1,351.2	221	20.2	1,084.4	85	8.3	391.9	56	6.2	261.2
	20-24	466	35.3	2,581.4	381	34.8	2,113.5	217	21.3	1,140.9	212	23.6	1,106.8
	25-29	243	18.4	1,127.0	226	20.6	1,058.5	215	21.1	950.8	209	23.3	928.2
	30-34	136	10.3	603.1	117	10.7	498.0	193	18.9	790.5	155	17.3	610.2
	35-39	83	6.3	318.5	58	5.3	220.2	133	13.1	485.3	87	9.7	318.4
	40-44	53	4.0	195.9	45	4.1	167.5	59	5.8	214.3	66	7.3	239.5
	45-49	21	1.6	75.2	15	1.4	52.5	48	4.7	169.4	43	4.8	148.3
	50-54	16	1.2	54.8	16	1.5	55.0	28	2.7	97.6	38	4.2	134.8
	55-59	11	0.8	40.2	5	0.5	18.1	20	2.0	75.4	17	1.9	63.4
	60+	6	0.5	5.6	6	0.5	5.7	19	1.9	21.0	15	1.7	17.0
	Missing	4	0.3	0.0	2	0.2	0.0	1	0.1	0.0	0	0.0	0.0
Race/Ethnicity	American Indian/Alaska Native	3	0.2	439.9	1	0.1	148.6	0	0.0	0.0	0	0.0	0.0
	Asian	95	7.2	91.7	133	12.1	128.4	80	7.9	86.7	111	12.4	120.3
	Black/African-American	54	4.1	572.0	27	2.5	286.9	51	5.0	492.8	53	5.9	515.1
	Latinx/Hispanic	210	15.9	208.7	196	17.9	195.5	153	15.0	148.2	182	20.3	176.7
	Multiracial	2	0.2	14.3	2	0.2	14.4	4	0.4	28.3	3	0.3	21.5
	Pacific Islander/Native Hawaiian	23	1.7	394.6	16	1.5	275.3	9	0.9	169.3	2	0.2	37.8
	White	266	20.2	168.5	161	14.7	101.6	206	20.2	131.2	159	17.7	100.9
	Other/Unknown	667	50.5	0.0	560	51.1	0.0	516	50.6	0.0	388	43.2	0.0
Anatomical Site of Infection	Urine	209	15.8	-	266	24.3	-	152	14.9	-	238	26.5	-
	Genitourinary	69	5.2	-	136	12.4	-	8	0.8	-	8	0.9	-
	Rectal	1	0.1	-	1	0.1	-	77	7.6	-	112	12.5	-
	Pharyngeal	1	0.1	-	5	0.5	-	20	2.0	-	21	2.3	-
	Other/Unknown	1,042	78.9	-	692	63.1	-	775	76.1	-	537	59.8	-
Total	Total by Sex	1,320	56.2	336.7	1,096	54.8	279.5	1,019	43.4	266.1	898	44.9	234.4
	County Total	2,347	100.0	302.8	2000	100.0	258.0						

Case data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE). [1]Rates equal cases per 100,000 sex and age or race/ethnicity specific residents per year based on population data from the California Department of Finance. [2]Race/ethnicity data not available for many cases as positive tests for infections are automatically reported from testing laboratories and no follow-up interviews are conducted for chlamydia cases. Note: There were 6 transgender/other/unknown CT cases in 2020 and 8 transgender/other/unknown CT cases in 2021.

The highest rates of chlamydia infections in 2021 were seen in census tracts in parts of East Palo Alto, Redwood City, San Mateo, and South San Francisco. Rates for zip codes with fewer than 20 cases or with low populations may be unstable.

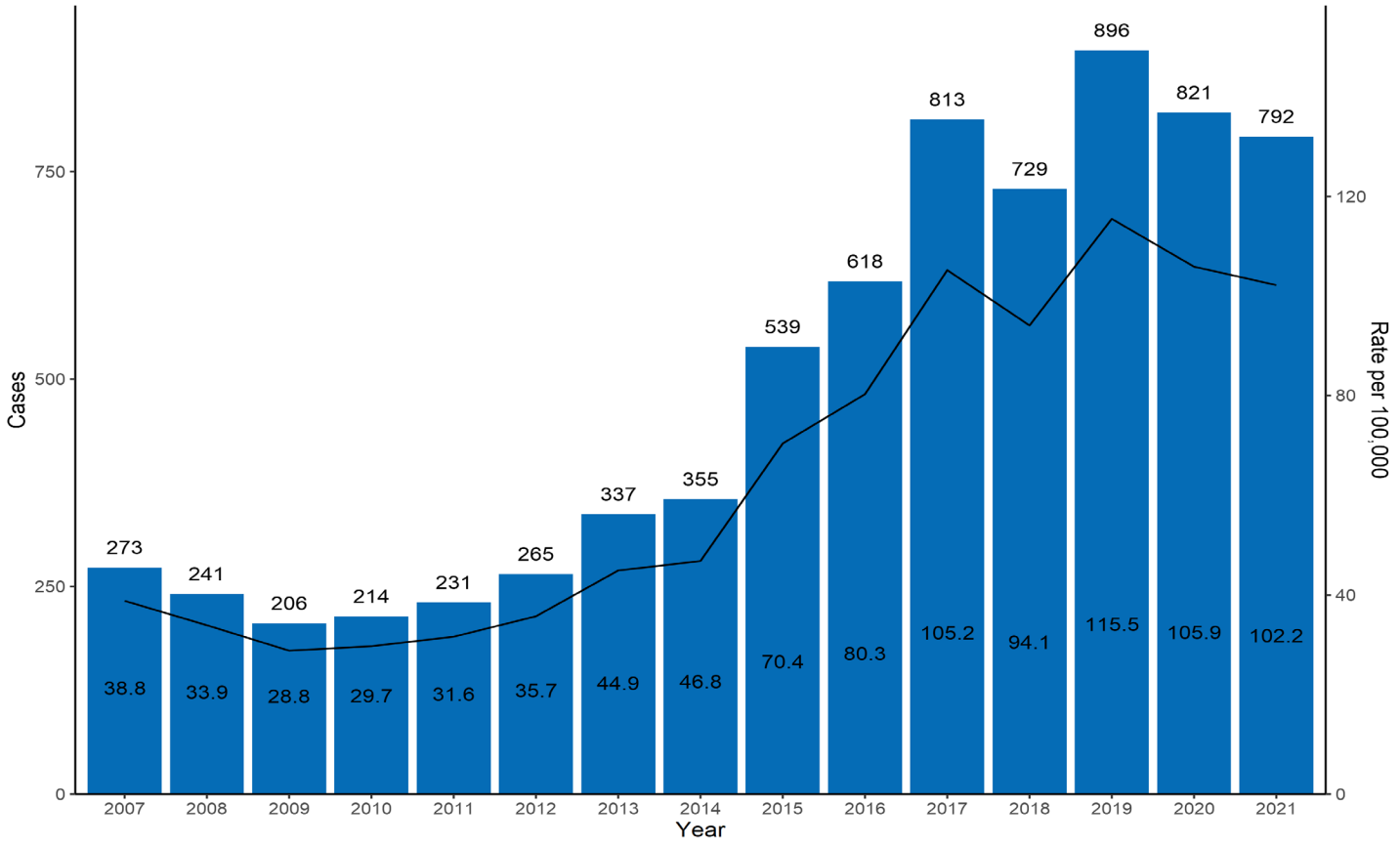
Figure 13. Chlamydia Rates by Census Tract in San Mateo County, 2021



Overview

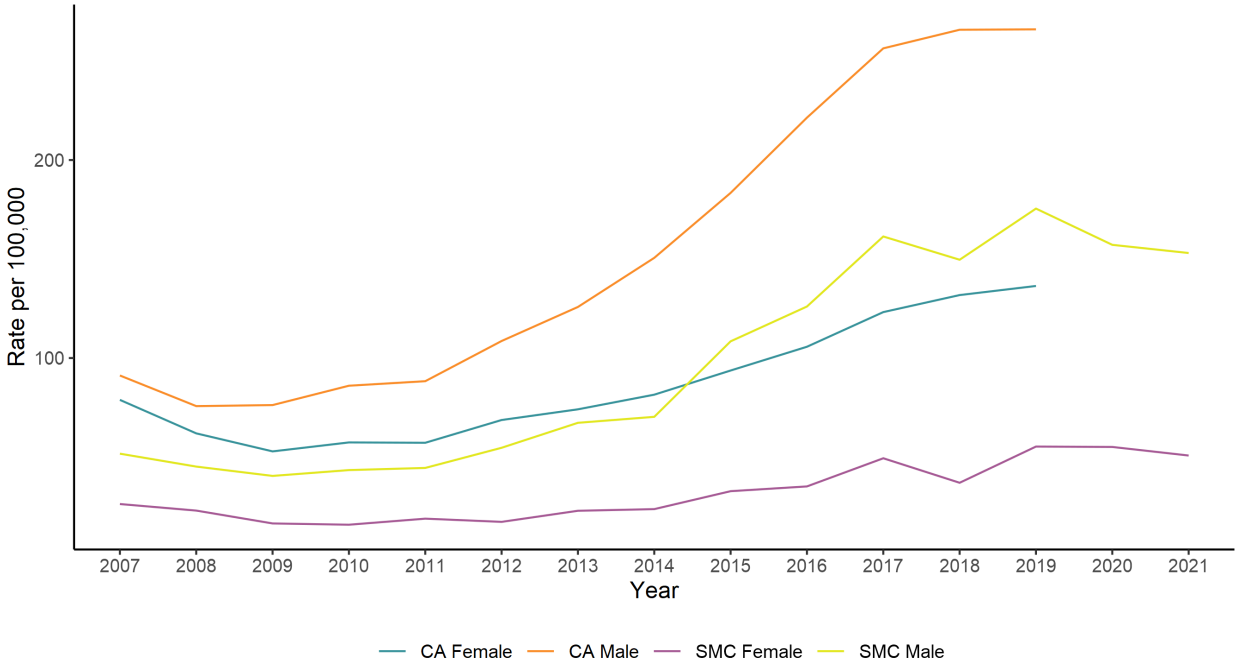
- Gonorrhea cases were fairly stable in 2021 compared to 2020, with a 4% decrease in cases in 2021.
- Both male and female cases had modest decreases in 2021 compared to 2020.
- Females comprised 34% of gonorrhea cases in 2021, an increased percentage from 2020 and 2019 when females comprised about one quarter of SMC gonorrhea cases.
- In 2020, CDC gonorrhea treatment recommendation changed to Ceftriaxone intramuscularly alone when CT has been excluded. This recommendation change was due to Azithromycin microbiome impact and resistance impact on co-occurring organisms.
- A test of cure should be done for all pharyngeal gonorrhea 14 days after treatment.
- The San Mateo County (SMC) STD clinic can culture gonorrhea specimens. The SMC Public Health Lab participates in a surveillance gonorrhea culture project (Strengthening the United States Response to Resistant Gonorrhea, or SURRG) in collaboration with the San Francisco Department of Public Health to maintain lab culture capacity.

Figure 14. Gonorrhea Cases and Rates by Year in San Mateo County, 2007-2021



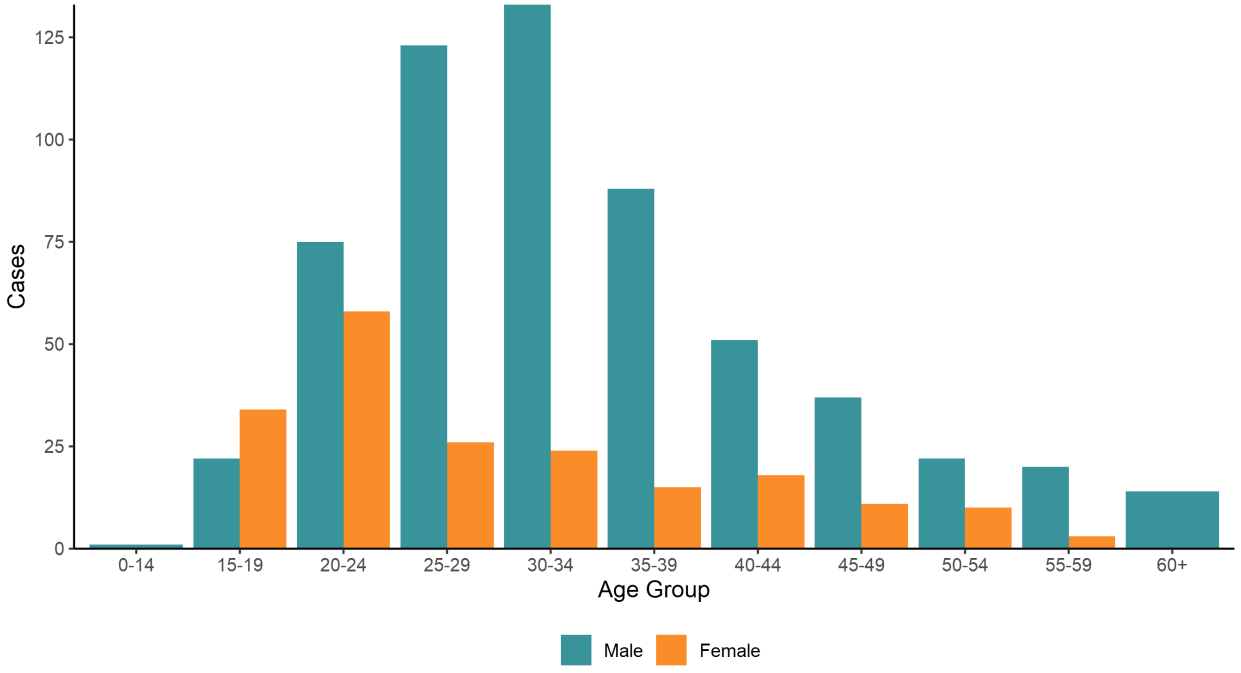
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based on census data from the California Department of Finance.

Figure 15. Gonorrhea Rates by Sex and Year in San Mateo County and State of California, 2007-2021



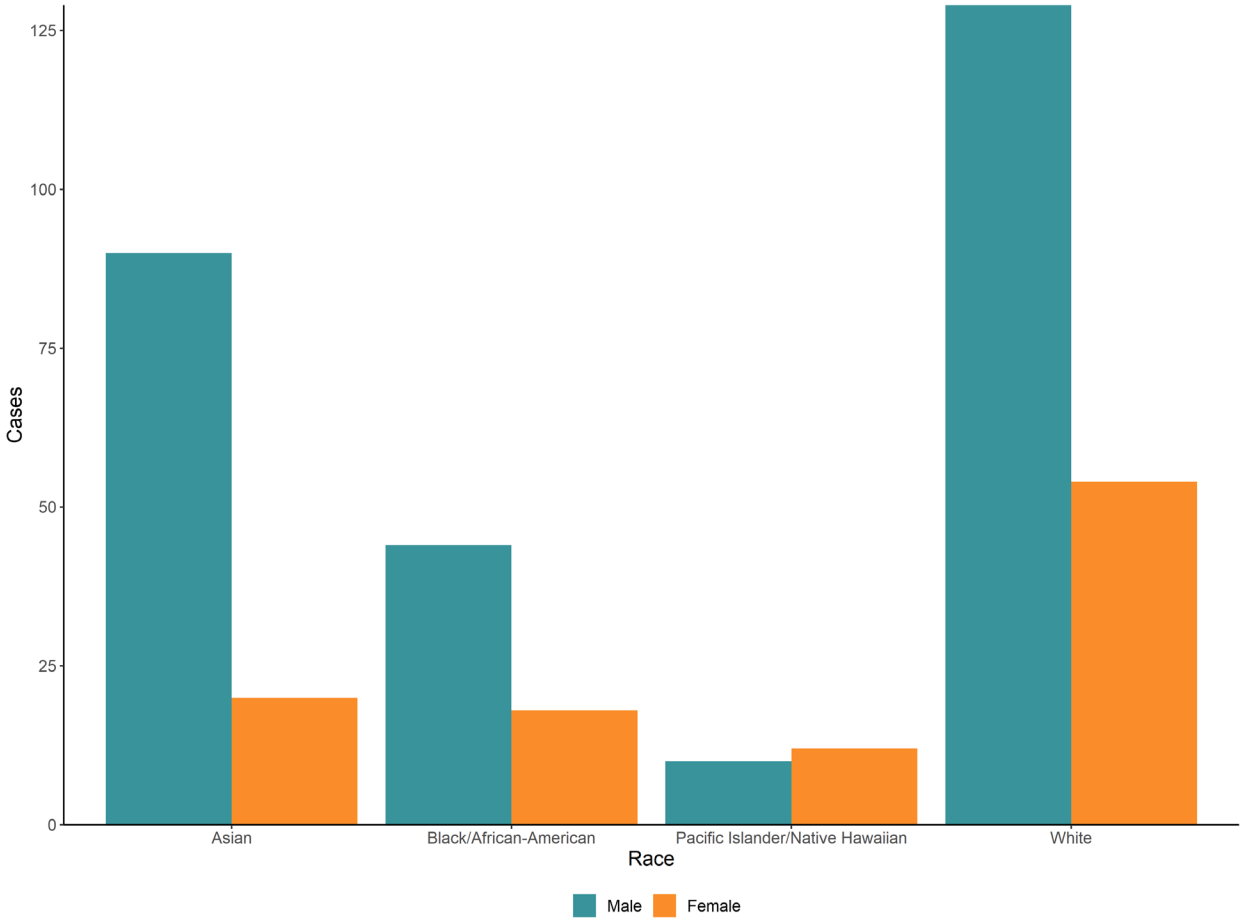
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Data for California rates was provided by the California Department of Public Health STD Control Branch. California rates not available for 2020 and 2021. Rates equal cases per 100,000 sex specific residents per year based on population data from the California Department of Finance.

Figure 16. Gonorrhea Cases by Sex and Age in San Mateo County, 2021



Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system.

Figure 17. Gonorrhea Rates by Sex and Selected Race/Ethnic Groups in San Mateo County, 2021



Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system.

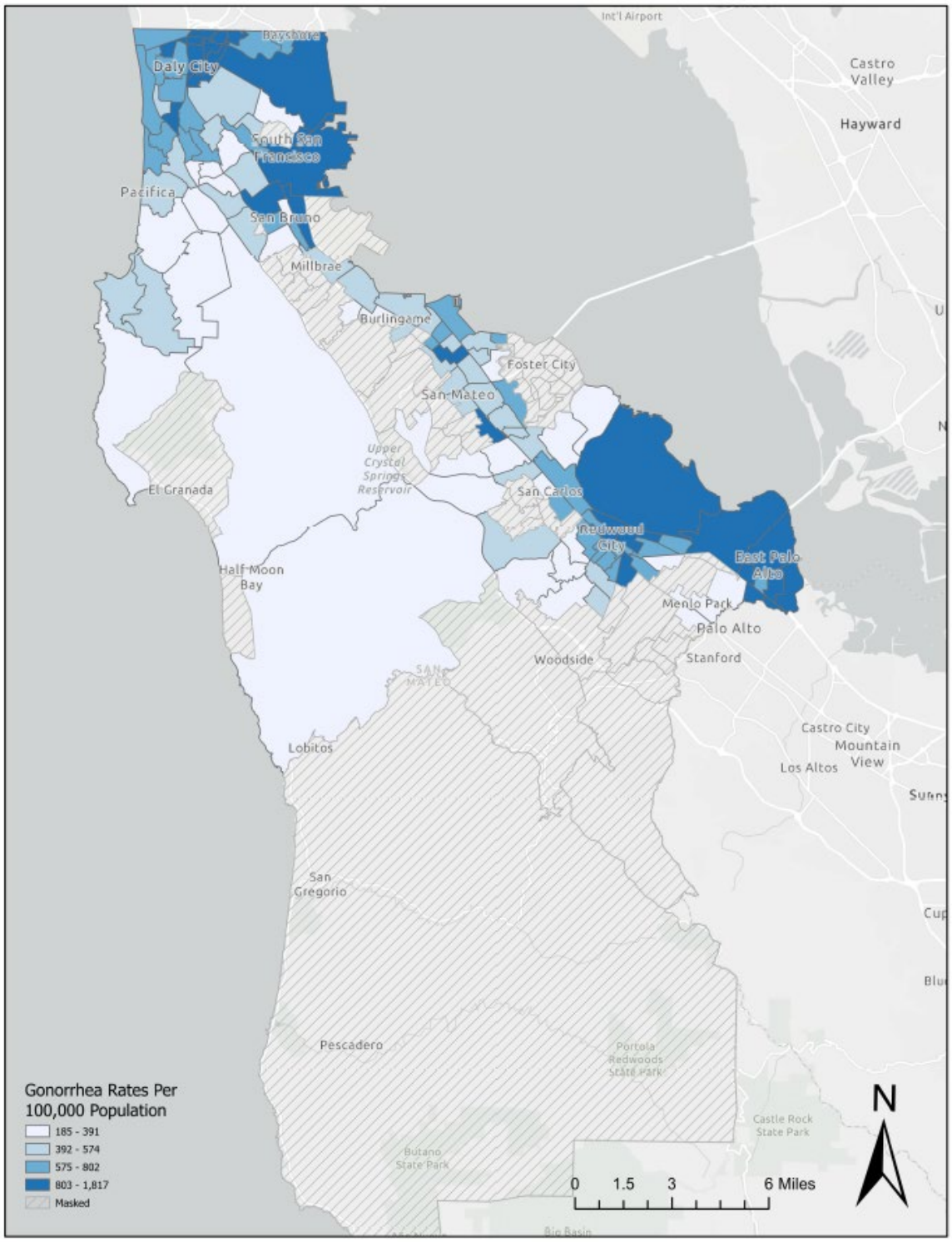
Table 5. Gonorrhea Cases and Rates by Demographic and Clinical Characteristics by Sex in San Mateo County, 2020-2021

		Female						Male					
		2021			2020			2021			2020		
		Cases	Percent	Rate[1]	Cases	Percent	Rate[1]	Cases	Percent	Rate[1]	Cases	Percent	Rate[1]
Total	Total	199	100.0	50.8	216	100.0	55.1	586	100.0	153.0	602	100.0	157.2
Age	0-14	0	0.0	0.0	1	0.5	1.5	1	0.2	1.5	1	0.2	1.5
	15-19	34	17.1	164.1	23	10.6	112.9	22	3.8	101.4	16	2.7	74.6
	20-24	58	29.1	321.3	56	25.9	310.6	75	12.8	394.3	94	15.6	490.7
	25-29	26	13.1	120.6	52	24.1	243.6	123	21.0	543.9	128	21.3	568.5
	30-34	24	12.1	106.4	31	14.4	131.9	133	22.7	544.7	135	22.4	531.5
	35-39	15	7.5	57.6	19	8.8	72.1	88	15.0	321.1	88	14.6	322.1
	40-44	18	9.0	66.5	19	8.8	70.7	51	8.7	185.3	54	9.0	196.0
	45-49	11	5.5	39.4	5	2.3	17.5	37	6.3	130.6	39	6.5	134.5
	50-54	10	5.0	34.2	3	1.4	10.3	22	3.8	76.7	24	4.0	85.1
	55-59	3	1.5	11.0	6	2.8	21.7	20	3.4	75.4	15	2.5	55.9
	60+	0	0.0	0.0	1	0.5	1.0	14	2.4	15.5	8	1.3	9.1
Race/Ethnicity	American Indian/Alaska Native	1	0.5	146.6	0	0.0	0.0	3	0.5	471.0	0	0.0	0.0
	Asian	20	10.1	19.3	24	11.1	23.2	90	15.4	97.5	88	14.6	95.4
	Black/African-American	18	9.0	190.7	26	12.0	276.3	44	7.5	425.1	67	11.1	651.2
	Latinx/Hispanic	66	33.2	65.6	73	33.8	72.8	207	35.3	200.5	192	31.9	186.4
	Multiracial	1	0.5	7.1	5	2.3	36.1	4	0.7	28.3	5	0.8	35.8
	Pacific Islander/Native Hawaiian	12	6.0	205.9	6	2.8	103.3	10	1.7	188.1	2	0.3	37.8
	White	54	27.1	34.2	41	19.0	25.9	129	22.0	82.2	143	23.8	90.8
	Other/Unknown[2]	27	13.6	0.0	41	19.0	0.0	99	16.9	0.0	105	17.4	0.0
Anatomical Site of Infection	Urine	113	56.8	-	116	53.7	-	290	49.5	-	268	44.5	-
	Genitourinary	75	37.7	-	72	33.3	-	18	3.1	-	24	4.0	-
	Rectal	2	1.0	-	4	1.9	-	177	30.2	-	184	30.6	-
	Pharyngeal	9	4.5	-	23	10.6	-	182	31.1	-	203	33.7	-
	Other/Unknown	9	4.5	-	9	4.2	-	19	3.2	-	34	5.6	-
Total	Total by Sex	199	25.1	50.8	216	26.3	55.1	586	74.0	153.0	602	73.3	157.2
	County Total	792	100.0	102.2	821	100.0	105.9						

Case data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE). [1]Rates equal cases per 100,000 sex and age or race/ethnicity specific residents per year based on population data from the California Department of Finance. [2]Race/ethnicity data not available for many cases as positive tests for infections are automatically reported from testing laboratories and no follow-up interviews are conducted for chlamydia cases. Note: There were 3 transgender/other/unknown GC cases in 2020 and 7 transgender/other/unknown GC cases in 2021.

The highest rates of gonorrhea infections in 2017-2021 were seen in census tracts in parts of Brisbane, Daly City, East Palo Alto, San Mateo, Redwood City, and South San Francisco. Rates for zip codes with fewer than 20 cases or with low populations may be unstable.

Figure 18. Gonorrhea Rates by Census Tract in San Mateo County, 2017-2021



Overview

- Late testers, persons who receive an AIDS diagnosis within one year of an HIV diagnosis, were 22% of newly reported HIV cases (n=46) in 2021. This is a slight decrease from 24% in 2020 and 25% in 2019.
- Over half of newly reported HIV cases in 2021 were LatinX
- 20% of newly reported HIV cases in 2021 had no reported risk factor
- Between 2016-2021, 10% of late testers identified as female, 28% of late testers were 50 years or older, 29% of late testers had no specified risk factor.

Table 6. Newly Reported HIV Cases Among County Residents and Percentage of Late Testers by Year of Diagnosis, San Mateo County, 2012-2021[1]

	2012 (n=72)	2013 (n=51)	2014 (n=71)	2015 (n=66)	2016 (n=59)	2017 (n=59)	2018 (n=61)	2019 (n=55)	2020 (n=45)	2021 (n=46)
	Percent									
Late Tester[2]	25	31	23	26	24	17	16	25	24	22
HIV and AIDS Diagnosed within 12 months	7	4	7	6	3	3	0	2	0	2
HIV and AIDS Diagnosed Simultaneously	18	27	15	20	20	14	16	24	24	20
Not Late Tester	75	69	77	74	76	83	84	75	76	78

[1]San Mateo County data are reported through June 30, 2022 from the electronic HIV/AIDS Reporting System (eHARS). [2]Late testers are defined as individuals who receive an AIDS diagnosis within 1 year of their HIV diagnosis or who are diagnosed with HIV and AIDS simultaneously. New cases are among individuals who were San Mateo County residents at the time of diagnosis. Totals may add up to >100% due to rounding.

Table 7. Characteristics of Newly Reported HIV Cases Among County Residents by Year of Diagnosis, San Mateo County, 2017-2021[1]

		2017 n=59	2018 n=61	2019 n=55	2020 n=45	2021 n=46
		Percentage				
Gender	Cisgender Men	83.1	93.4	89.1	93.3	89.1
	Cisgender Women	15.3	6.6	10.9	6.7	10.9
	Transgender/Other/Unknown[2]	1.7	0	0	0	0
Age	0-19	0	0	1.8	0	2.2
	20-29	33.9	42.6	36.4	28.9	39.1
	30-39	28.8	31.1	27.3	24.4	34.8
	40-49	16.9	9.8	18.2	26.7	8.7
	50-59	16.9	9.8	10.9	11.1	8.7
	60+	3.4	6.6	5.5	8.9	6.5
Race/Ethnicity	American Indian/Alaska Native	0	0	0	0	2.2
	Asian	23.7	19.7	16.4	17.8	6.5
	Black/African-American	10.2	9.8	7.3	6.7	8.7
	Latinx	27.1	44.3	54.5	42.2	58.7
	Multirace	6.8	1.6	1.8	2.2	0
	Pacific Islander/Native Hawaiian	1.7	3.3	3.6	0	0
	White	30.5	21.3	16.4	31.1	23.9
Exposure Category	MMSC[3]	69.5	70.5	67.3	55.6	67.4
	IDU[4]	1.7	1.6	1.8	0	0
	Heterosexual Contact[5]	8.5	4.9	7.3	8.9	8.7
	MMSC/IDU	1.7	4.9	9.1	4.4	4.3
	Other[6]	0	0	0	0	0
	Not Specified	18.6	18	14.5	31.1	19.6

[1]San Mateo County data are reported through June 30, 2022 from the electronic HIV/AIDS Reporting System (eHARS). [2]Due to data limitations (unable to distinguish between sex at birth and gender) and confidentiality concerns, transgender women, transgender men, and gender diverse persons are combined. [3]Male-to-male sexual contact. [4]Injecting Drug User. [5]Male-to-male sexual contact, IDU or known HIV infected person. [6]Other risk includes either perinatal transmission, exposure to blood transfusion or blood products, or receiving a transplant. New cases are among individuals who were San Mateo County residents at the time of diagnosis.

Table 8. Characteristics of Late HIV Tests in Residents of San Mateo County, 2016-2021[1]

		n	Percent
Total	Total	69	100.0
Gender	Cisgender Men	62	89.9
	Cisgender Women	7	10.1
	Transgender/Other/Unknown[2]	0	0.0
Age	0-19	1	1.4
	20-29	15	21.7
	30-39	20	29.0
	40-49	14	20.3
	50-59	12	17.4
	60+	7	10.1
Race/Ethnicity	Asian	15	21.7
	Black/African-American	6	8.7
	Latinx	31	44.9
	Multirace	3	4.3
	Pacific Islander/Native Hawaiian	1	1.4
	White	13	18.8
Exposure	MMSC[3]	40	58.0
	IDU[4]	2	2.9
	Heterosexual Contact[5]	5	7.2
	MMSC/IDU	2	2.9
	Other Risk[6]	0	0
	Not Specified	20	29.0

[1]San Mateo County data are reported through June 30, 2022 from the electronic HIV/AIDS Reporting System (eHARS). Late testers are defined as individuals who receive an AIDS diagnosis within 1 year of their HIV diagnosis or who are diagnosed with HIV and AIDS simultaneously. [2]Due to data limitations (unable to distinguish between sex at birth and gender) and confidentiality concerns, transgender women, transgender men, and gender diverse persons are combined. [3]Male-to-male sexual contact. [4]Injecting drug user. [5]Male-to-male sexual contact, IDU or known HIV infected person. [6]Other risk includes either perinatal transmission, exposure to blood transfusion or blood products, or receiving a transplant. Cases are among individuals who were San Mateo County residents at the time of diagnosis.

Table 9. HIV Cases Diagnosed in County Residents from 2017-2021 by Transmission Category and Sex, San Mateo County[1]

	Cisgender Men		Cisgender Women	
Exposure Category	n	Percent	n	Percent
MMSC[2]	176	73.9	0	0.0
IDU[3]	2	0.8	1	3.7
Heterosexual Contact[4]	6	2.5	14	51.9
MMSC/IDU	13	5.5	0	0.0
Other Risk[5]	0	0	0	0.0
Not Specified	41	17.2	12	44.4
Total	238	100.0	27	100.0

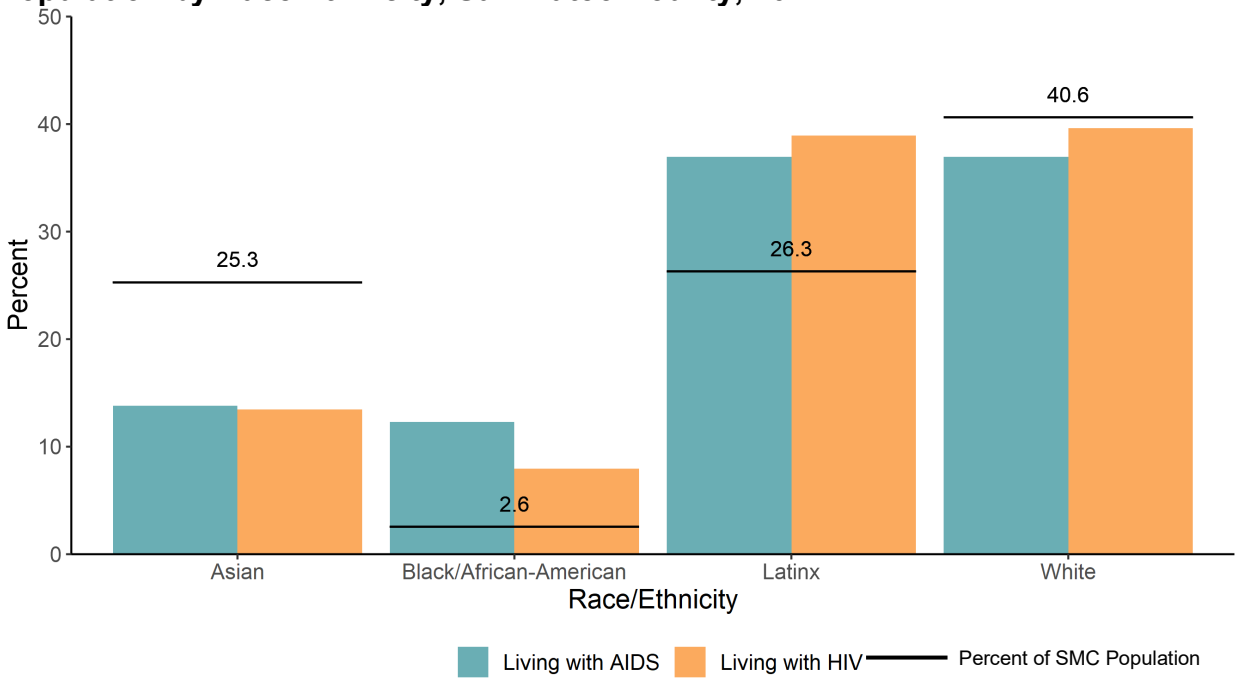
[1]Data is compiled from the June 30, 2022 data set from the electronic HIV/AIDS Reporting System of California (eHARS). Cases are among individuals who were San Mateo County residents at the time of diagnosis. [2]Male-to-male sexual contact. [3]Injecting drug user. [4]Male-to-male sexual contact, IDU or known HIV infected person. [5]Other risk includes either perinatal transmission, exposure to blood transfusion or blood products, or receiving a transplant

Table 10. HIV Cases Diagnosed among Cisgender Men County Residents From 2017-2021 by Transmission Category and Race/Ethnicity, San Mateo County[1]

	Asian		Black/African-American		Latinx		White	
Exposure Category	n	Percent	n	Percent	n	Percent	n	Percent
MMSC[2]	35	85.4	14	73.7	83	76.9	36	62.1
IDU[3]	0	0.0	1	5.3	0	0.0	1	1.7
Heterosexual Contact[4]	0	0.0	1	5.3	2	1.9	3	5.2
MMSC/IDU	1	2.4	1	5.3	5	4.6	5	8.6
Other Risk[5]	0	0.0	0	0.0	0	0.0	0	0.0
Not Specified	5	12.2	2	10.5	18	16.7	13	22.4
Total	41	100.0	19	100.1	108	100.1	58	100.0

[1]Data is compiled from the June 30, 2022 data set from the electronic HIV/AIDS Reporting System of California (eHARS). Cases are among individuals who were San Mateo County residents at the time of diagnosis. [2]Male-to-male sexual contact. [3]Injecting drug user. [4]Male-to-male sexual contact, IDU or known HIV infected person. [5]Other risk includes either perinatal transmission, exposure to blood transfusion or blood products, or receiving a transplant

Figure 19. Percentage of Persons Living with HIV, Living with AIDS, and the County Population by Race/Ethnicity, San Mateo County, 2021



	Asian	Black/ African-American	Latinx	White
Living with AIDS	65	58	174	174
Living with HIV	115	68	332	338

HIV/AIDS data is compiled from the June 30, 2022 data set from the electronic HIV/AIDS Reporting System of California (eHARS). Population denominators based on population data from the California Department of Finance. Persons living with HIV/AIDS are current San Mateo County residents.

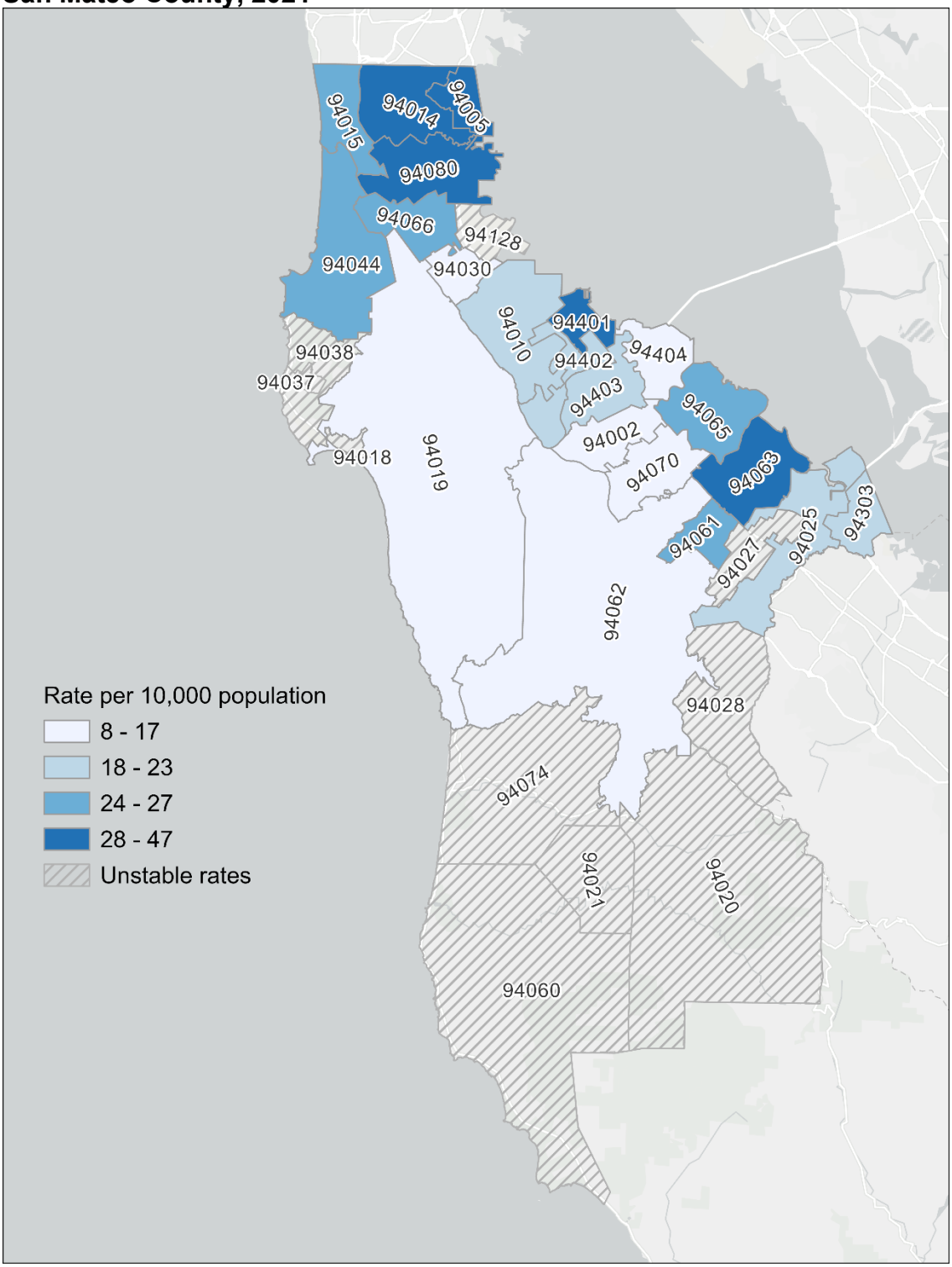
Table 11. Demographic and Exposure Risk Characteristics of Living Persons Diagnosed with HIV/AIDS in San Mateo County (2021) and California (2020)

		SMC[1] (n=1,731)		CA[2] (n=139,703)	
		Cases	Percent	Cases	Percent
Gender	Cisgender Men	1,503	86.8	121,054	86.7
	Cisgender Women	211	12.2	16,402	11.7
	Transgender/Other/Unknown[3]	17	1.0	2,247	1.8
Race/Ethnicity	American Indian/Alaska Native	3	0.2	342	0.2
	Asian	218	12.6	5,987	4.3
	Black/African-American	153	8.8	23,643	16.9
	Latinx	624	36.0	53,824	38.5
	Multirace	53	3.1	4,894	3.5
	Other	15	0.9	0	0.0
	Pacific Islander/Native Hawaiian	20	1.2	263	0.2
	White	645	37.3	50,746	36.3
	Unknown	0	0.0	4	0.0
Current Age	0-19	10	0.6	424	0.3
	20-29	96	5.5	10,152	7.3
	30-39	289	16.7	24,589	17.6
	40-49	320	18.5	27,566	19.7
	50-59	483	27.9	42,395	30.3
	60+	533	30.8	34,577	24.8
Exposure Category	MMSC[4]	1,137	65.7	92,718	66.4
	IDU[5]	94	5.4	7,682	5.5
	Heterosexual Contact[6]	183	10.6	20,754	14.9
	MMSC/IDU	94	5.4	8,758	6.3
	Perinatal/Unknown Risk/Other	223	12.9	7,173	5.5
	Perinatal	10	0.6	-	-
	Other Risk[7]	10	0.6	-	-
	Not Specified	203	11.7	-	-

[1]California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section. Electronic HIV/AIDS Reporting System of California (eHARS) June 30, 2022 data set. [2]California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section. Year 2020 data included as 2021 data is not yet available. [3]Due to data limitations (unable to distinguish between sex at birth and gender) and confidentiality concerns, transgender women, transgender men, and gender diverse persons are combined. [4]Male-to-male sexual contact. [5]Injecting drug user. [6]Male-to-male sexual contact, IDU or known HIV infected person. [6]Other risk includes perinatal transmission or by receiving clotting factor, transfusion, or a transplant. Cases are among individuals who are current San Mateo County residents.

The areas with the highest rates of residents living with HIV are the zip codes of 94005 (Brisbane), 94401 (San Mateo), 94014 (Colma), 94063 (Redwood City), and (94080) South San Francisco. Rates for zip codes with fewer than 20 cases or with low populations may be unstable.

Figure 20. Population Rates of Reported Living HIV Cases by Current Residential Zip Code in San Mateo County, 2021



Summary of Sources for all Bacterial STIs

The STI surveillance systems operated by San Mateo County Public Health and California Department of Public Health (CDPH) are the sources of San Mateo County data in this publication. Case reports and STI laboratory results are submitted to San Mateo County and/or CDPH through the California Reportable Disease Information Exchange (CalREDIE) system. CalREDIE data was used to compile the most recent years of data for this report. Historical data used to create trend graphs for San Mateo County and the State of California included information from the Automated Vital Statistics System (AVSS) and from information supplied by the California Department of Public Health STD Control Branch.

Disease rates for San Mateo were calculated using State of California, Department of Finance, Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060, Sacramento, California, September 2022.

California STD numbers and rates were gathered from the California Department of Public Health, STD Control Branch's report: California Department of Public Health, STD Control Branch (data as reported through 11/20/20).

Race/Ethnicity Grouping

The race and ethnicity information listed and the corresponding census categories are Black (Black or African-American, non-Hispanic); Latinx (Hispanic ethnicity, regardless of race); White (White, non-Hispanic); Asian (Asian, non-Hispanic), Pacific Islander (Pacific Islander/Native Hawaiian, non-Hispanic); American Indian/Alaska Native (American Indian/Alaska Native, non-Hispanic), Multirace (2 or more races, non-Hispanic), and Other/Unknown (Other, non-Hispanic, or where no race or ethnicity information was available).

Summary of Sources for HIV and AIDS

HIV and AIDS cases are reported to local health departments using the California Department of Public Health Office of AIDS HIV/AIDS confidential case report form. The case report form collects demographic information, patient risk history, laboratory data to confirm and stage diagnosis, opportunistic and HIV-associated malignancy diagnoses, and treatment and service referrals.

Data for this report were obtained from the electronic HIV/AIDS Reporting System (eHARS) for San Mateo County, which includes persons who reside in San Mateo County at the time of diagnosis. Cases reported from laboratories, providers, death certificates, and other health departments are reviewed for accuracy and completeness. AIDS case data may not represent the characteristics of persons with more recent infections or persons who never progress to AIDS due to combination antiretroviral therapy. Because of reporting delays, data are not complete at the time of analysis. Hence, a change in the overall numbers in future reports is to be expected.

California HIV numbers were gathered from the California Department of Public Health, Office of AIDS, California HIV Surveillance Report – 2020.

Race/Ethnicity Grouping

Data about certain racial/ethnic groups or risk factors were grouped together when the number of persons with HIV/AIDS in that group was small and did not present significant trends. For example, Multi-race/Other/Unknown in the Race/Ethnicity breakdown represents persons of unknown and multiple race/ethnicity or Native Americans.

Technical Notes

Many rates have been calculated using few cases of disease. Caution should be observed when interpreting rates based on few events and/or small populations. For more information, refer to Guidelines for statistical analysis of public health data with attention to small numbers, Revised, July, 2003. This publication can be found at: https://fhop.ucsf.edu/sites/fhop.ucsf.edu/files/wysiwyg/smallnumbers2003.pdf