San Mateo County Sexually Transmitted Disease and HIV-AIDS Surveillance Annual Report, 2017



Introduction and Acknowledgements

This is the 2017 report of data and program highlights from the STD/HIV Program in the San Mateo County Health System. For questions and feedback on this report or on the STD/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: Matt Geltmaker, Sharon Jones, Darryl Lampkin, Teresa Lopez, Judith Ochoa, Marco Vergara, Wesley Yuen, Mary Luc, and Karen Pfister.

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Overview of the Sexually Transmitted Diseases/ HIV Program

San Mateo County Health System STD/HIV Program Overview

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

Services of the STD/HIV Program

- Provide comprehensive primary and specialty medical care, psychosocial support and case management for persons living with HIV
- Provide STD and HIV screening and treatment through San Mateo County STD Clinic as well as mobile outreach and testing for high-risk populations
- Provide linkage to care services for newly diagnosed HIV-positive residents as well as HIV-positive patients who have fallen out of care
- Provide partner services for newly diagnosed HIV-positive patients as well as those already in care
- Provide HIV PrEP (Pre-Exposure Prophylaxis) information, referrals and linkage for high-risk individuals
- Provide STD 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 STD prevalence monitoring in high-risk settings such as STD clinic and correctional facilities
- Conduct disease intervention services, including field-delivered therapy and partner delivered therapy where appropriate
- Support training opportunities and distribute STD/HIV clinical educational materials to health care providers
- Partner with public and private laboratories offering STD/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, California STD/HIV Controllers Association.

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

Funding and Grants

The STD/HIV Program received funding from the following sources in 2017:

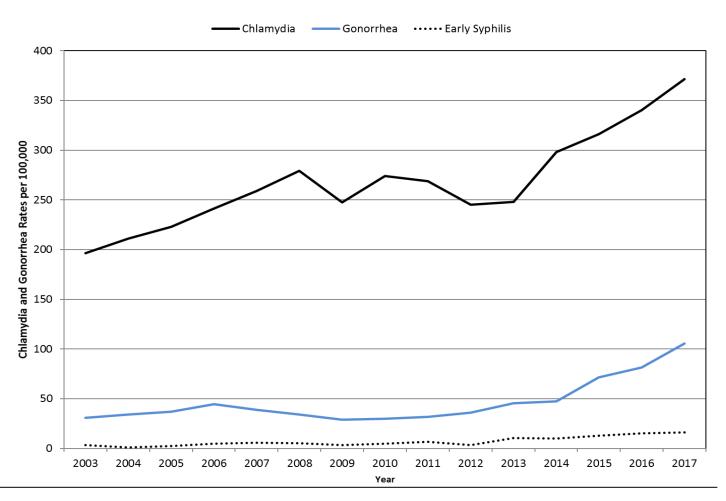
- San Mateo County General Fund
- Federal Health Resources and Services Administration (HRSA) Ryan White Part A as part of the San Francisco Eligible Metropolitan Area (EMA)
- Federal Centers for Disease Control & Prevention (CDC) HIV Prevention Funds through the California Department of Public Health 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

All Bacterial STDs In San Mateo County (SMC)

Overview

- SMC early syphilis cases (acquired in the last year) increased 7% in 2017 compared to 2016. Females comprised only 5% of SMC early syphilis cases in 2017.
- SMC gonorrhea (GC) case numbers and rates are the highest reported since 2000, with a 32% increase in cases compared to 2016. The GC male to female ratio is approximately 3:1. GC increased 41% in women and 29% in men compared to 2016.
- Chlamydia trachomatis (CT) cases increased 11% in 2017 compared to 2016.
- Statewide and nationally, all three notifiable STDs increased compared to 2016 and the prior five years.
- SMC rates are below California rates for all three notifiable STDs.
- The drivers of these increases are likely multifactorial with possible reasons including increased disease
 incidence, increased oral and rectal screening in men who have sex with men (MSM,) less condom use in
 the setting of HIV pre-exposure prophylaxis (PrEP) and the role of apps in meeting sexual partners.
- Programmatic priorities are MSM screening for rectal and throat GC and CT, provider adherence to
 recommended dual treatment regimens for GC to prevent emergence of resistance, assuring timely
 syphilis treatment and partner services especially for women of reproductive age and improving HIV PrEP
 access and rapid linkage to care and antiretroviral start for newly HIV infected persons.

Figure 1. STD Rates by Year in San Mateo County, 2003-2017



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).

All Bacterial STDs

0.7

1.1

3.1

3.1

0.1

0.3

0.3

0.9

1.0

0.0

Secondary

Early Latent

Late Latent

Neurosyphilis²

(Total Early Syphilis¹)

Table 1. STD Cases and Rates by Year Reported in San Mateo County, 2003-2017

Reported Cases

2.4

1.0

4.9

3.3

0.0

1.4

0.3

2.4

4.3

0.1

3.1

1.8

5.5

5.0

0.0

							IXODX	<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>	4000						
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Chlamydia	1376	1480	1560	1687	1823	1986	1773	1972	1957	1803	1839	2228	2378	2579	2873
Gonorrhea	215	239	259	310	273	241	206	214	231	265	337	355	539	618	815
Syphilis (Total)	44	13	47	57	75	60	37	51	69	48	101	117	153	168	192
Primary	9	2	5	10	4	15	8	9	7	7	18	20	12	19	36
Secondary	5	2	10	17	22	11	11	13	28	7	39	30	43	41	26
Early Latent	8	2	2	7	13	11	5	13	13	9	22	24	41	55	61
(Total Early Syphilis ¹)	22	6	17	34	39	37	24	35	48	23	79	74	96	115	123
Late Latent	22	7	30	23	35	21	13	16	19	25	22	43	56	53	69
Neurosyphilis ²	1	0	1	0	0	0	2	0	2	2	1	0	2	2	4
Congenital Syphilis ³	0	0	0	0	1	2	0	0	2	0	0	0	1	0	0
								Rate ⁴							
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Chlamydia	196.2	211.0	223.1	241.2	258.8	279.2	247.5	274.1	268.9	245.1	247.9	298.1	315.9	340.4	371.7
Gonorrhea	30.7	34.1	37.0	44.3	38.8	33.9	28.8	29.7	31.7	36.0	45.4	47.5	71.6	81.6	105.4
Syphilis (Total)	6.3	1.9	6.7	8.1	10.5	8.2	5.2	7.1	9.5	6.5	13.6	15.7	20.3	22.2	24.8
Primary	1.3	0.3	0.7	1.4	0.6	2.1	1.1	1.3	1.0	1.0	2.4	2.7	1.6	2.5	4.7

Congenital Syphilis³ 0.0 0.0 0.0 0.0 10.1 20.5 0.0 0.0 22.1 0.0 0.0 0.0 11.2 0.0 ¹Early 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. ³Rates equal cases per 100,000 live births per year based on CA Department of Finance, Demographic Research Unit, Historical and Projected Births by County. ⁴Rates 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) .

1.5

1.5

5.2

3.0

0.0

1.5

0.7

3.4

1.8

0.3

1.8

1.8

4.9

2.2

0.0

3.8

1.8

6.6

2.6

0.3

1.0

1.2

3.1

3.4

0.3

5.3

3.0

10.6

3.0

0.1

4.0

3.2

9.9

5.8

0.0

5.7

5.4

12.8

7.4

0.3

5.4

7.3

15.2

7.0

0.3

3.4

7.9

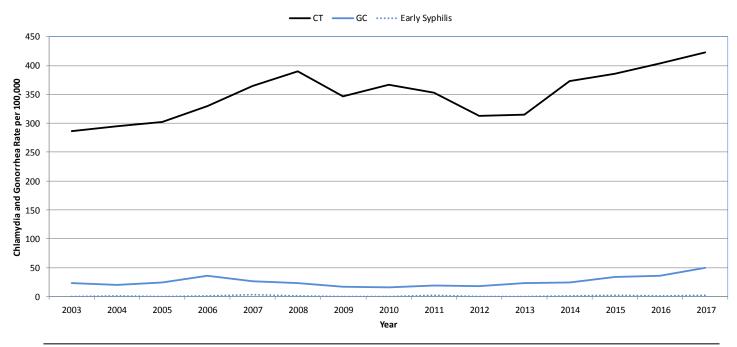
15.9

8.9

0.5

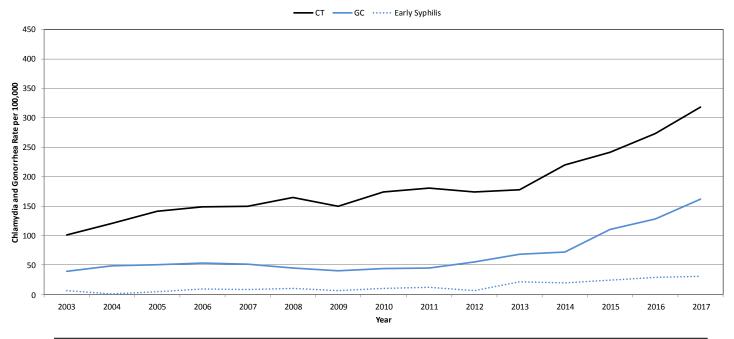
0.0

Figure 2. STD Rates For Females by Year in San Mateo County, 2003-2017



Early Syphilis is defined as primary, secondary, and early latent syphilis stages of disease. Note difference in scale for Early Syphilis. 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. STD Rates For Males by Year in San Mateo County, 2003-2017



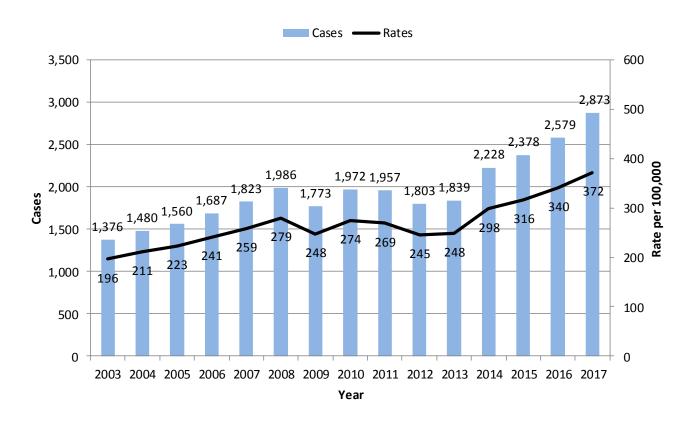
Early Syphilis is defined as primary, secondary, and early latent syphilis stages of disease. Note difference in scale for Early Syphilis. Rates equal cases per 100,000 male residents per year based on population data from the California Department of Finance. Data for San Mateo County is compiled from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

Chlamydia

Overview

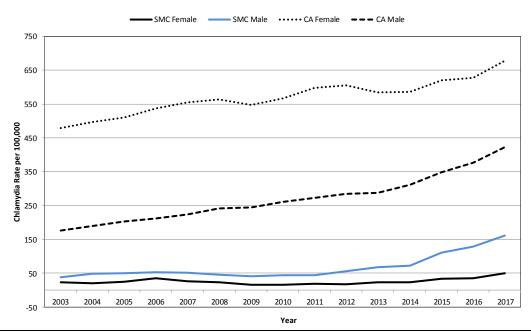
- SMC chlamydia trachomatis (CT) cases increased 19% in men and 6% in women in 2017 compared to 2016.
- SMC CT rates remain below California CT rates for both males and females.
- The largest number of female CT cases were in women age 20-24 years.
- Given approximately half of all CT cases are asymptomatic, screening in women age 25 and under, MSM, and high risk heterosexuals is recommended at least annually or more frequently based on risk.
- In August 2017, the California Department of Public Health implemented auto-closing of CT cases statewide in CalREDIE, the state surveillance database, due to the high volume of cases. This means CT infections are not investigated for treatment by Health Department staff unless the provider requests assistance or pregnancy documented by provider when case reported.

Figure 4. Chlamydia Cases and Rates by Year San Mateo County, 2003-2017



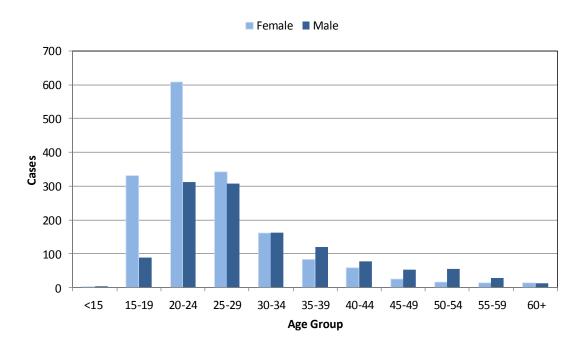
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based on population data from the California Department of Finance.

Figure 5. Chlamydia Rates By Sex and Year in San Mateo County and State of California, 2003-2017



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. Rates equal cases per 100,000 sex specific residents per year based on population data from the California Department of Finance.

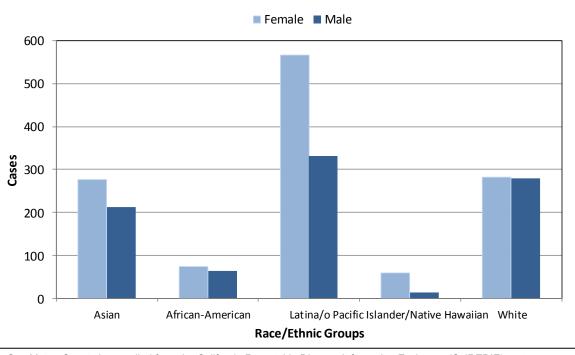
Figure 6. Chlamydia Cases by Sex and Age in San Mateo County, 2017



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

Chlamydia

Figure 7. Chlamydia Cases by Sex and Selected Race/Ethnic Groups San Mateo County, 2017 (n=2,159)



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

Chlamydia

Table 2. Chlamydia Cases and Rates by Demographic and Clinical Characteristics by Sex in San Mateo County, 2016 and 2017

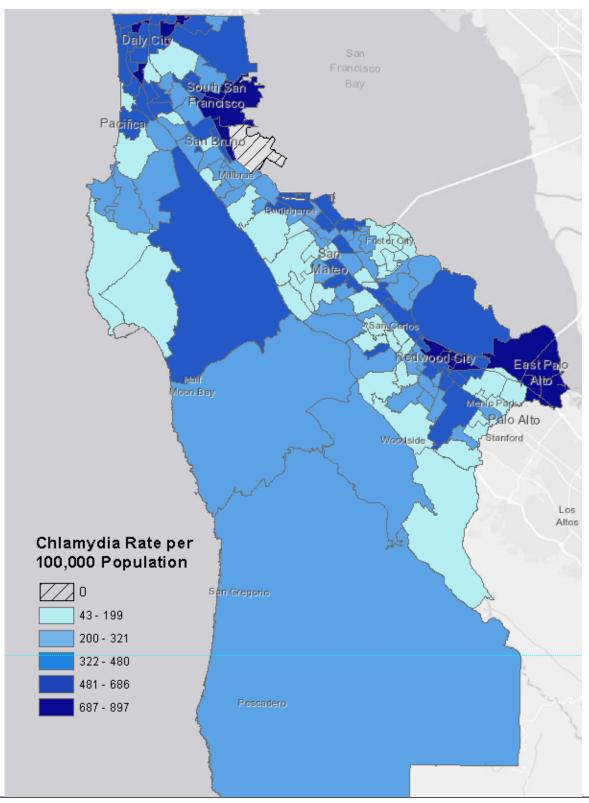
<u>Women</u>							<u>Men</u>					
		2016			2017			2016			2017	
	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹
County Total	2,579	100	340.4	2,873	100	371.7	2,579	100	340.4	2,873	100	371.7
Sex Total	1,555	60.3	403.9	1,654	57.6	422.4	1,018	39.5	273.2	1,214	42.3	318.3
Age												
<15	9	0.6	13.6	3	0.2	4.5	0	0.0	0.0	1	0.1	1.1
15-19	306	19.7	1423.9	331	20.0	1668.5	87	8.5	385.2	88	7.2	419.9
20-24	608	39.1	2815.2	609	36.8	3084.2	247	24.3	1087.5	313	25.8	1525.8
25-29	287	18.5	1509.5	342	20.7	1605.5	241	23.7	1113.7	307	25.3	1291.5
30-34	170	10.9	701.6	160	9.7	620.0	157	15.4	616.5	162	13.3	598.8
35-39	74	4.8	280.5	82	5.0	307.3	114	11.2	431.8	119	9.8	437.5
40-44	53	3.4	198.8	58	3.5	209.5	61	6.0	232.5	78	6.4	279.6
45-49	19	1.2	67.2	25	1.5	83.0	52	5.1	190.3	53	4.4	178.7
50-54	12	0.8	42.2	16	1.0	56.0	26	2.6	95.7	54	4.4	193.2
55-59	9	0.6	32.1	13	8.0	47.1	22	2.2	83.0	27	2.2	103.1
60+	8	0.5	8.5	13	0.8	13.3	10	1.0	13.0	11	0.9	13.8
Missing	0	0.0	-	2	0.1	-	1	0.1	-	1	0.1	-
Race/Ethnicity												
American Indian/Alaskan	3	0.2	479.2	3	0.2	499.2	1	0.1	170.1	3	0.2	500.0
Asian	199	12.8	191.3	277	16.7	264.1	113	11.1	124.4	213	17.5	228.7
African-American	80	5.1	852.7	73	4.4	765.3	62	6.1	644.2	64	5.3	665.9
Latina/o	579	37.2	592.2	567	34.3	570.0	279	27.4	278.5	332	27.3	324.9
Multirace	13	0.8	99.2	9	0.5	66.5	1	0.1	7.6	2	0.2	14.6
Pacific Islander	44	2.8	766.2	59	3.6	990.4	20	2.0	341.9	13	1.1	243.0
White	273	17.6	176.8	282	17.0	179.0	285	28.0	187.0	279	23.0	177.9
Other/Unknown ³	364	23.4	-	384	23.2	-	257	25.2	-	308	25.4	-
Clinical Site of Infection												
Urine	624	40.1	-	664	40.1	-	599	58.8	-	662	54.5	-
Genitourinary	620	39.9	-	689	41.7	-	22	2.2	-	19	1.6	-
Rectal/Pharyngeal	3	0.2	-	6	0.4	-	179	17.6	-	252	20.8	-
Other/Unknown	308	19.8	-	295	17.8	-	218	21.4	-	281	23.1	-

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 to testing laboratories and no follow-up interviews are conducted for chlamydia cases. Note: There were 6 transgender CT cases in 2016 and 5 transgender CT cases in 2017.

The Geography of Chlamydia in San Mateo County

The highest rates of chlamydia infections in 2017 were seen in census tracts in parts of Daly City, East Palo Alto, Redwood City, and South San Francisco.

Figure 8. Chlamydia Rates by Census Tract in San Mateo County, 2017



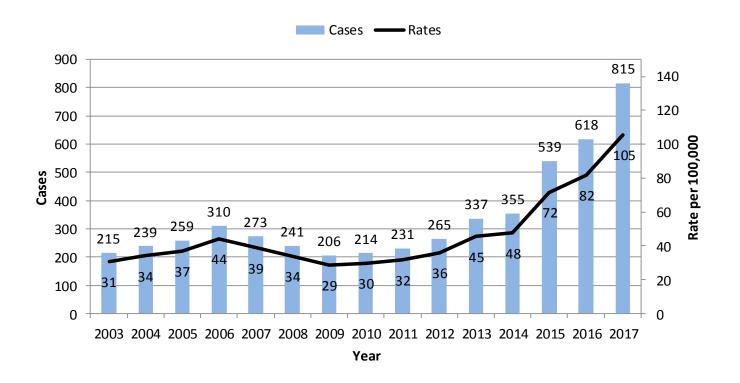
Case data based on California Reportable Disease Information Exchange (CalREDIE) San Mateo County. Rates equal count of 2017 chlamydia cases per census tract population.

Gonorrhea

Overview

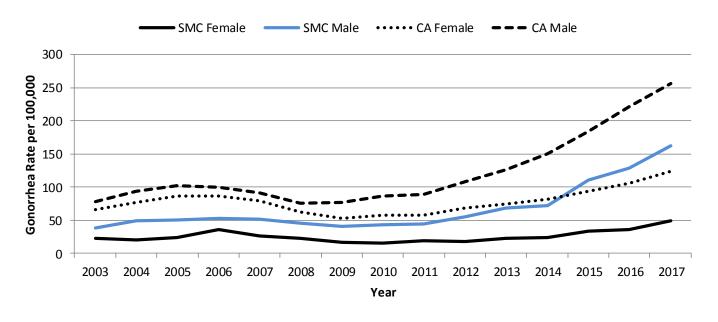
- SMC gonorrhea (GC) case numbers and rates are the highest reported since 2000, with a 41% increase in female GC cases and a 29% increase in male GC cases in 2017 compared to 2016.
- In California, 2017 gonorrhea cases increased 16% compared to 2016, with the highest statewide gonorrhea case numbers and rates since the early 1990s.
- Over one quarter, 27% of GC cases occurred in persons under 25 years of age compared to one third of statewide GC cases.
- In males, rectal and throat GC made up the majority of reported infections.
- California rates of decreased susceptibility to antibiotics used in current gonorrhea treatments remains
 low. The San Mateo County (SMC) Public Health Lab participates in a surveillance gonorrhea culture pilot
 project to maintain lab culture capacity.

Figure 9. Gonorrhea Cases and Rates by Year San Mateo County, 2003-2017



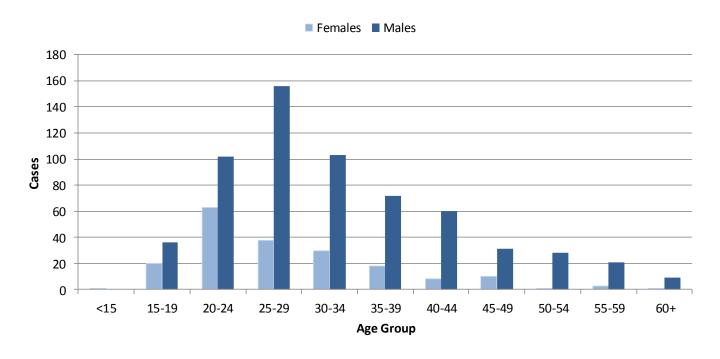
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based on census data from the California Department of Finance.

Figure 10. Gonorrhea Rates By Sex and Year in San Mateo County and State of California, 2003-2017



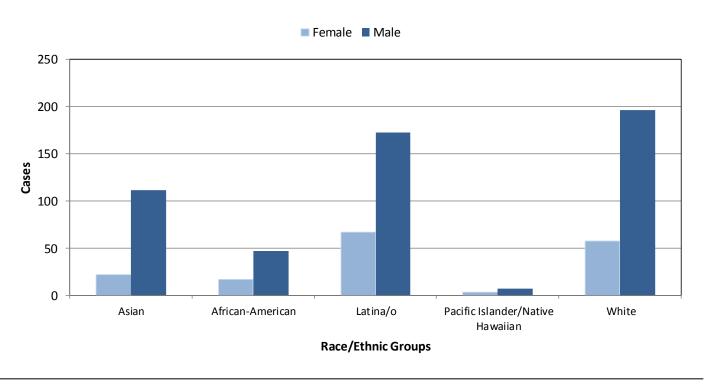
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Data for California rates was provided by the California Department of Public Health STD Control Branch. Rates equal cases per 100,000 sex specific residents per year based on population data from the California Department of Finance.

Figure 11. Gonorrhea Cases by Sex and Age in San Mateo County, 2017



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

Figure 12. Gonorrhea Cases By Sex and Selected Race/Ethnic Groups in San Mateo County, 2017 (n=533)



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

Gonorrhea

Table 3. Gonorrhea Cases and Rates by Demographic and Clinical Characteristics by Sex in San Mateo County, 2016 and 2017

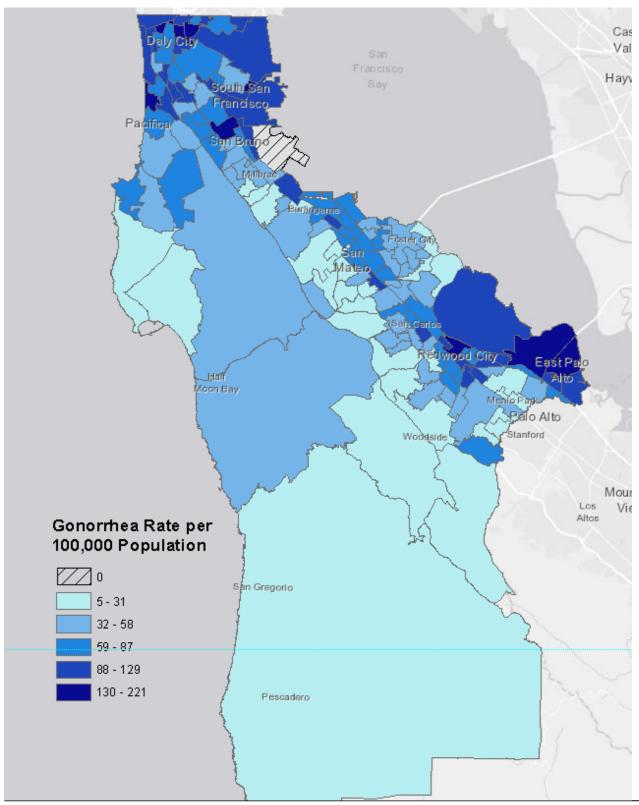
			<u>Wo</u>	<u>men</u>					<u>M</u> e	<u>en</u>		
		2016			2017			2016			2017	
	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹
County Total	618	100	81.6	815	100	105.4	618	100	81.6	815	100	105.4
Sex Total	137	22.2	35.6	193	23.7	49.3	479	77.5	128.6	618	75.8	162.0
Age												
<15	0	0.0	0.0	1	0.5	1.5	1	0.2	1.4	0	0.0	0.0
15-19	18	13.1	83.8	20	10.4	100.8	21	4.4	93.0	36	5.8	171.8
20-24	35	25.5	162.1	63	32.6	319.1	97	20.3	427.1	102	16.5	497.2
25-29	31	22.6	163.0	38	19.7	178.4	115	24.0	531.4	156	25.2	656.3
30-34	27	19.7	111.4	30	15.5	116.2	81	16.9	318.1	103	16.7	380.7
35-39	14	10.2	53.1	18	9.3	67.5	66	13.8	250.0	72	11.7	264.7
40-44	5	3.6	18.8	8	4.1	28.9	32	6.7	122.0	60	9.7	215.1
45-49	4	2.9	14.1	10	5.2	33.2	22	4.6	80.5	31	5.0	104.5
50-54	0	0.0	0.0	1	0.5	3.5	21	4.4	77.3	28	4.5	100.2
55-59	3	2.2	10.7	3	1.6	10.9	12	2.5	45.3	21	3.4	80.2
60+	0	0.0	0.0	1	0.5	1.0	11	2.3	14.2	9	1.5	11.3
Race/Ethnicity												
American Indian/Alaskan	1	0.7	159.7	1	0.5	166.4	1	0.2	170.1	3	0.5	500.0
Asian	20	14.6	19.2	22	11.4	21.0	54	11.3	59.5	111	18.0	119.2
African-American	12	8.8	127.9	17	8.8	178.2	46	9.6	477.9	47	7.6	489.0
Latina/o	44	32.1	45.0	67	34.7	67.4	137	28.6	136.7	172	27.8	168.3
Multirace	0	0.0	0.0	3	1.6	22.2	1	0.2	7.6	2	0.3	14.6
Pacific Islander	4	2.9	69.7	3	1.6	50.4	5	1.0	85.5	7	1.1	130.8
White	32	23.4	20.7	57	29.5	36.2	175	36.5	114.8	196	31.7	125.0
Other/Unknown ²	24	17.5	-	23	11.9	-	60	12.5	-	80	12.9	-
Clinical Site of Infection												
Urine	61	44.5	-	88	45.6	-	206	43.0	-	264	42.7	-
Genitourinary	56	40.9	-	92	47.7	-	28	5.8	-	28	4.5	-
Rectal/Pharyngeal	1	0.7	-	4	2.1	-	197	41.1	-	293	47.4	-
Other/Unknown	19	13.9	-	9	4.7	-	48	10.0	-	33	5.3	-

Case data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE). ¹Rates 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. ²Race/ethnicity data not available for many cases as positive tests for infections are automatically reported to testing laboratories and no follow-up interviews are conducted for gonorrhea cases. Note: There was 2 transgender GC cases in 2016 and 4 transgender GC cases in 2017.

The Geography of Gonorrhea in San Mateo County

• The highest rates of gonorrhea infections in 2013-2017 were seen in census tracts in parts of Daly City, East Palo Alto, Pacifica, Redwood City, San Bruno, and South San Francisco.

Figure 13. Gonorrhea Rates by Census Tract in San Mateo County, 2013-2017



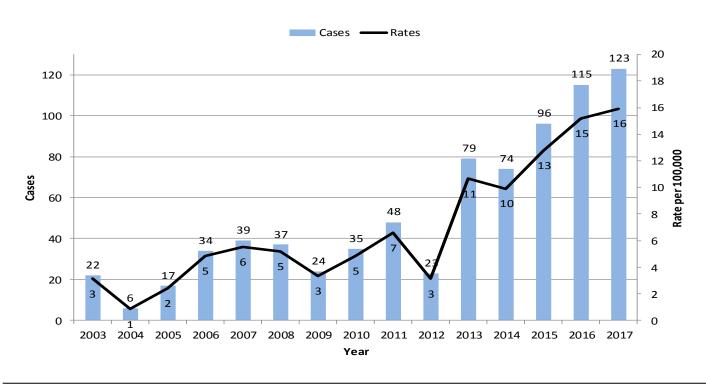
Case data based on California Reportable Disease Information Exchange (CalREDIE) San Mateo County. Rates equal count of 2013-2017 gonorrhea cases per census tract population.

Syphilis

Overview

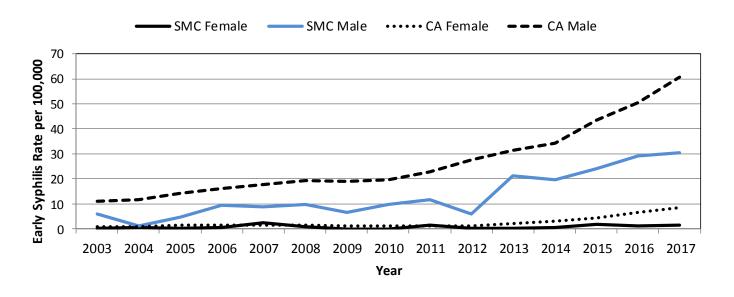
- SMC total syphilis and early syphilis (defined as acquired in the last year) cases and rates increased in 2017 compared to 2016. SMC early syphilis cases increased 7% compared to last year.
- In 2017, 94% of SMC early syphilis cases were diagnosed in men, which is similar to 2016 (95% early syphilis cases in men).
- SMC had no congenital syphilis cases in 2017.
- California early syphilis cases increased 21% in 2017 compared to 2016. SMC male and female syphilis rates remain below California rates.
- SMC clinical providers should offer syphilis serology testing every 4-6 months to sexually active MSM and others at risk for syphilis infection.

Figure 14. Early Syphilis Cases and Rates by Year San Mateo County, 2003-2017



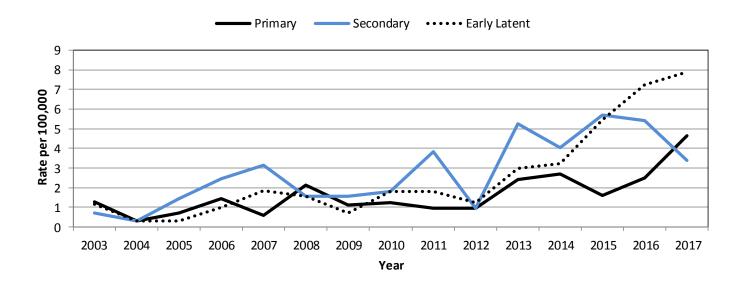
Early Syphilis includes primary, secondary, and early latent stages of syphilis. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based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

Figure 15. Early Syphilis Rates by Sex and Year in San Mateo County and State of California, 2003-2017



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. Rates equal cases per 100,000 residents per year based on population data from the California Department of Finance.

Figure 16. Early Syphilis Rates by Syphilis Stage and Year in San Mateo County, 2003-2017



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.

Syphilis

Table 4. Syphilis Cases and Rates by Syphilis Stage, Demographic Characteristics, and Risk Factors, San Mateo County, 2016 and 2017

		2016			2017	
	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹
Syphilis County Total	168	100	22.2	192	100	24.8
Primary	19	11.3	2.5	36	18.8	4.7
Secondary	41	24.4	5.4	26	13.5	3.4
Early Latent	55	32.7	7.3	61	31.8	7.9
Late Latent	53	31.5	7.0	69	35.9	8.9
Congenital Syphilis	0	0.0	0.0	0	0.0	0.0
Neurosyphilis	2	1.2	0.3	4	2.1	0.5
	_		0.0	•		0.0
Early Syphilis ²	115	100.0	15.2	123	100.0	15.9
Sex						
Female	4	3.5	1.0	6	4.9	1.5
Male	109	94.8	29.3	116	94.3	30.4
Transgender	2	1.7	-	1	0.8	-
Ages						
<15 years old	0	0.0	0.0	0	0.0	0.0
15-19	4	3.5	9.1	5	4.1	12.3
20-24	18	15.7	40.6	13	10.6	32.3
25-29	14	12.2	34.4	26	21.1	57.7
30-34	13	11.3	26.2	21	17.1	39.7
35-39	10	8.7	18.9	14	11.4	26.0
40-44	18	15.7	34.0	10	8.1	18.0
45-49	14	12.2	25.2	13	10.6	21.8
50-54	10	8.7	18.0	8	6.5	14.2
55-59	7	6.1	12.8	8	6.5	14.9
60+	7	6.1	4.1	5	4.1	2.8
Race/Ethnicity						
American Indian/Alaska Native	0	0.0	0.0	0	0.0	0.0
Asian	22	19.1	11.3	19	15.4	9.6
African-American	7	6.1	36.8	2	1.6	10.4
Latina/o	31	27.0	15.7	47	38.2	23.3
Multirace	2	1.7	7.6	0	0.0	0.0
Pacific Islander/Hawaiian	0	0.0	0.0	1	0.8	8.8
White	40	34.8	13.0	45	36.6	14.3
Other/Unknown/Not Specified	13	11.3	-	9	7.3	_
Self Reported Risk Factors ³		-		-		
MSM ⁴	94	86.2	-	101	87.1	-
Anonymous Partners	48	41.7	_	67	54.5	-
HIV Coinfection ⁵	50	43.5	-	49	39.8	-

¹Rates equal cases per 100,000 residents per year based on population data from the California Department of Finance. ²Early Syphilis includes primary, secondary, and early latent stages of syphilis. ³Data missing for cases that could not be located or refused to be interviewed. ⁴Data on sex of partner for men was available for 95% (n=104) of 109 total male cases in 2016 and for 96% (n=111) of 116 total male cases in 2017. ⁵Data for HIV coinfections was not available (missing or refused) for 5 cases in 2016 and for 4 cases in 2017. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system.

Syphilis

Table 5. Syphilis Cases and Rates by Demographic Characteristics for All Syphilis Stages, San Mateo County, 2016 and 2017

		2016			2017	
	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹
All Syphilis Stages	192	100	24.8	168	100	22.2
Sex						
Female	28	14.6	7.2	15	8.9	3.9
Male	163	84.9	42.7	151	89.9	40.5
Transgender	1	0.5	-	2	1.2	-
Ages						
<15 years old	0	0.0	0.0	0	0.0	0.0
15-19	7	3.6	17.2	4	2.4	9.1
20-24	21	10.9	52.2	22	13.1	49.7
25-29	39	20.3	86.5	24	14.3	59.0
30-34	29	15.1	54.9	22	13.1	44.3
35-39	26	13.5	48.3	17	10.1	32.2
40-44	20	10.4	36.0	26	15.5	49.2
45-49	16	8.3	26.8	19	11.3	34.2
50-54	13	6.8	23.0	14	8.3	25.2
55-59	11	5.7	20.4	8	4.8	14.7
60+	10	5.2	5.6	12	7.1	7.0
Race/Ethnicity						
American Indian/Alaska Native	0	0.0	0.0	0	0.0	0.0
Asian	26	13.5	13.1	29	17.3	14.9
African-American	9	4.7	47.0	10	6.0	52.6
Latina/o	75	39.1	37.2	55	32.7	27.8
Multirace	0	0.0	0.0	3	1.8	11.4
Pacific Islander/Hawaiian	1	0.5	8.8	1	0.6	8.6
White	55	28.6	17.5	46	27.4	15.0
Other/Unknown/Not Specified	26	13.5	-	24	14.3	-

¹Rates 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.

The Geography of Early Syphilis in San Mateo County

The highest rates of early syphilis infections for 2013-2017 were seen in census tracts in parts of Pacifica, Redwood City, San Mateo, and South San Francisco.

Figure 17. Early Syphilis Rates by Census Tract in San Mateo County, 2013-2017 Pacifica Joon Bay Stanford Los Altos Early Syphilis Rate per 100,000 Population 70 3 - 11 12 - 22 23 - 41 42 - 66

Case data based on California Reportable Disease Information Exchange (CalREDIE) San Mateo County. Rates equal count of 2013-2017 early syphilis cases per census tract population.

HIV -Overview and Newly Reported Cases

Overview

- Late testers, persons who receive an AIDS diagnosis within one year of an HIV diagnosis decreased from 24% in 2016 to 16% of newly reported HIV cases in 2017.
- Over two thirds, 69%, of newly reported HIV cases in 2017 identified as men who have sex with men (MSM).
- One fifth, 21%, of newly identified HIV cases did not specify a risk exposure category.
- Asian ethnicity increased among newly identified HIV cases to 23% while Latino/a decreased to 29% in 2017 compared to 2016.

Table 6. Newly Reported HIV Cases Among County Residents and Percentage of Late Testers by Year of Diagnosis, San Mateo County, 2005-2017¹

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
HIV Cases	41	50	46	57	75	69	51	69	65	58	62
Late Testers ¹	15%	6%	37%	28%	31%	26%	31%	22%	26%	24%	16%
HIV and AIDS Diagnosed within 12 months	5%	0%	13%	9%	7%	7%	4%	7%	6%	2%	3%
HIV and AIDS Diagnosed Simultaneously	10%	6%	24%	19%	24%	19%	27%	14%	20%	22%	13%
Non Late Tester	85%	94%	63%	72%	69%	74%	69%	78%	74%	76%	84%

¹ San Mateo County data are reported through June 30, 2018 from the electronic HIV/AIDS Reporting System (eHARS). ²Late 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, 2011 - 2017¹

	2011	2012	2013	2014	2015	2016	2017
Total Number	75	69	51	69	65	58	62
	Percent						
Sex							
Male	91%	84%	92%	91%	88%	84%	85%
Female	9%	16%	6%	7%	12%	14%	13%
Transgender	0%	0%	2%	1%	0%	2%	2%
Age at Diagnosis							
0 - 19 Years	0%	0%	2%	1%	2%	2%	0%
20 - 29 Years	11%	13%	16%	20%	18%	17%	27%
30 - 39 Years	21%	26%	20%	28%	26%	34%	34%
40 - 49 Years	27%	26%	25%	22%	25%	24%	18%
50 - 59 Years	33%	25%	22%	19%	15%	16%	18%
60+	8%	10%	14%	10%	14%	7%	3%
Missing	0%	0%	2%	0%	0%	0%	0%
Race/Ethnicity							
White	25%	32%	33%	29%	38%	21%	31%
African American	11%	12%	4%	12%	3%	5%	10%
Latina/o	33%	35%	35%	39%	40%	52%	29%
Asian	24%	20%	20%	19%	15%	14%	23%
Multi-Race/Other/Unknown	7%	1%	8%	1%	3%	9%	8%
Exposure Category							
MSM	63%	61%	73%	65%	54%	71%	69%
IDU	1%	6%	2%	3%	5%	3%	0%
Heterosexual Contact ²	7%	16%	2%	10%	11%	16%	8%
MSM/IDU	5%	1%	0%	3%	5%	0%	2%
Other Risk ³	0%	0%	0%	1%	0%	0%	0%
Not specified	24%	16%	24%	17%	26%	10%	21%

¹San Mateo County data are reported through June 30, 2018 from the electronic HIV/AIDS Reporting System (eHARS). ²Sex with MSM, IDU or known HIV infected person. ³Other 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.

HIV- Late Testers, 2012-2017

- Females comprise 12% of late testers between 2012-2017.
- Late HIV testers between 2012-2017 were more likely to be 50+ years of age compared to all newly reported HIV cases. During this period 39% of late testers were older than 50 years.
- Late HIV testers were more likely to be Latino/a than newly diagnosed cases.
- Late HIV testers were more likely to have risk not specified and less likely to identify MSM risk than newly reported HIV cases. One third of HIV late testers between 2012 –2017 did not specify an exposure risk.

Table 8. Characteristics of Late HIV Tests in Residents of San Mateo County, 2012 - 2017¹

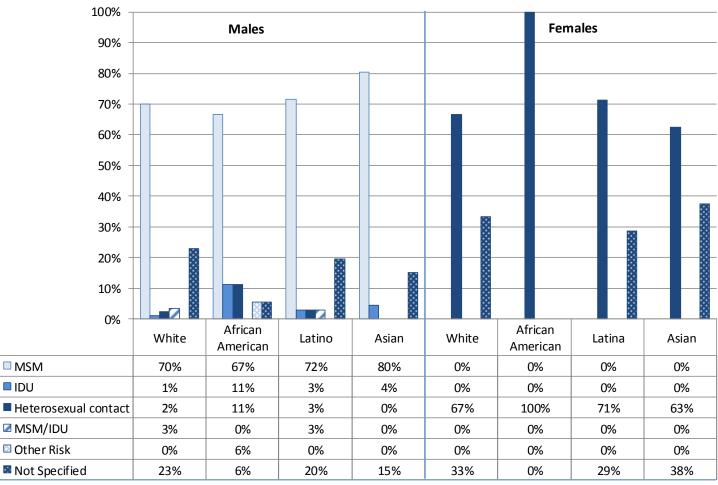
(6 years)	Number	%
Total Number	90	100
Sex		
Male	78	87
Female	11	12
Transgender	1	1
Age at Diagnosis		
0 - 19 Years	1	1
20 - 29 Years	8	9
30 - 39 Years	22	24
40 - 49 Years	24	27
50 - 59 Years	21	23
60+	14	16
Race/Ethnicity		
White	29	32
African American	6	7
Latina/o	37	41
Asian	14	16
Multi-Race/Other/Unknown	4	4
Exposure Category		
MSM	45	50
IDU	2	2
Heterosexual Contact ²	13	14
MSM/IDU	1	1
Other Risk ³	0	0
Not Specified	29	32

¹ San Mateo County data are reported through June 30, 2018 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. ²Sex with MSM, IDU or known HIV infected person. ³Other 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.

HIV- Diagnosed HIV Cases, 2013-2017

- Among male HIV cases diagnosed 2013-2017, the transmission category with the highest percentage of cases (≥67%) across all race/ethnicities is men who have sex with men (MSM).
- Among male HIV cases diagnosed 2013-2017, 23% of White males and 20% of Latino males specified no risk transmission category around time of HIV diagnosis
- For female HIV cases diagnosed 2013-2017, approximately one third did not specify a risk transmission category.

Figure 18. Adult HIV Cases Diagnosed in County Residents From 2013-2017 by Transmission Category, Sex, and Race/Ethnicity, San Mateo County

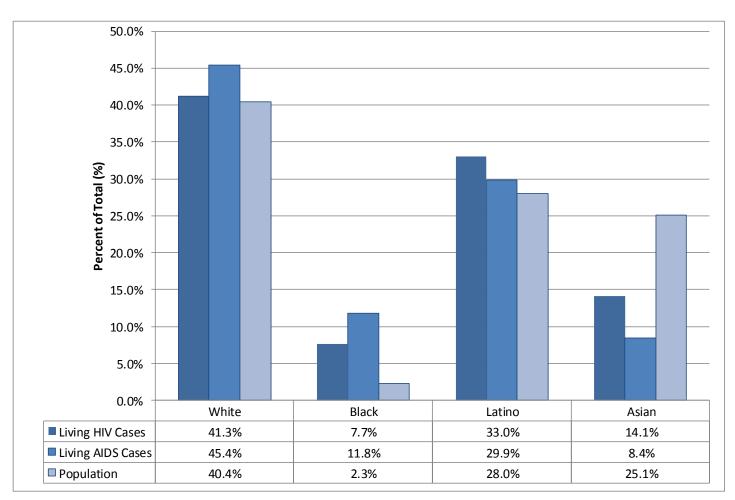


Data is compiled from the June 30, 2018 data set from the electronic HIV/AIDS Reporting System of California (eHARS). Other risk includes either perinatal transmission, exposure to blood transfusion or blood products, or receiving a transplant. Cases are among individuals who were San Mateo County residents at the time of diagnosis.

HIV- Persons Living with HIV/AIDS, 2017

- In 2017, African Americans were over represented among living HIV and AIDS cases based on county population percentage.
- In 2017, Asian Americans were under represented among living HIV and AIDS cases based on county population percentage.

Figure 19. Persons Living with HIV, Living with AIDS, and the County Population by Race/ Ethnicity, San Mateo County, 2017



HIV/AIDS data is compiled from the June 30, 2018 data set from the electronic HIV/AIDS Reporting System of California (eHARS). Population data is from the U.S. Census Bureau, 2016 American Community Survey 1-year estimates. Persons living with HIV/AIDS are current San Mateo County residents.

HIV- People Living with HIV/AIDS, San Mateo County (2017) and CA (2016)

- SMC has a higher percentage of persons living with HIV in the 60+ age category (25%) then California (18%) for years compared
- SMC has a higher percentage of Asians living with HIV and a lower percentage of African Americans than California for years compared.
- SMC has a higher percentage of risk not specified for living HIV cases than California (11% vs. 5%).

Table 9. Demographic and Exposure Risk Characteristics of Living Persons Diagnosed with HIV/AIDS in San Mateo County (2017) and California (2016)

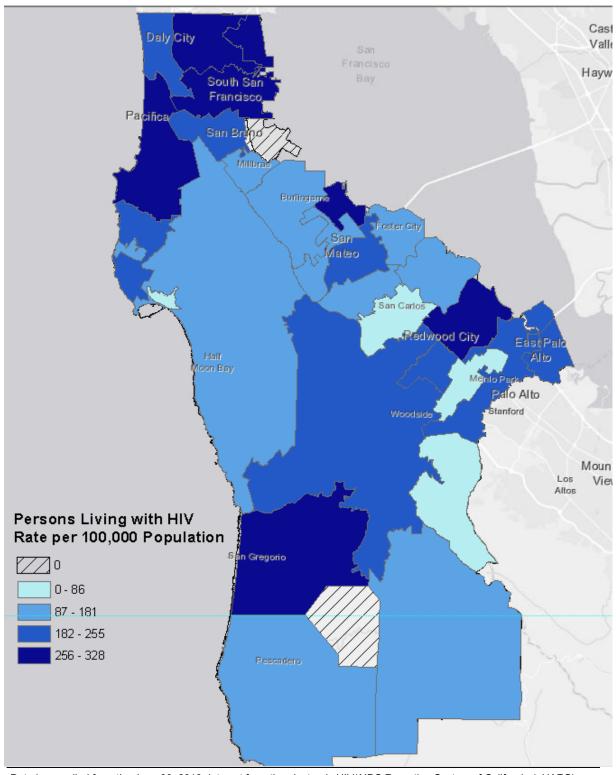
	San Mated	County ¹	Califo	rnia ²
	(N = 1	,704)	(N = 13	2,405)
	Number	%	Number	%
Sex				
Male	1,463	85.9	115,193	87.0
Female	216	12.7	15,528	11.7
Transgender	25	1.5	1,684	1.3
Race/Ethnicity				
White	742	43.5	53,310	40.3
Black	170	10.0	23,124	17.5
Hispanic	533	31.3	46,746	35.3
Asian	187	11.0	5,211	3.9
American Indian/Alaskan Native	5	0.3	405	0.3
Pacific Islander	16	0.9	272	0.2
Multi-Race/Other/Unknown	51	3.0	3,337	2.5
Current Age				
0 - 19	10	0.6	550	0.4
20 - 29	83	4.9	10,663	8.1
30 - 39	263	15.4	22,160	16.7
40 - 49	379	22.2	32,110	24.3
50 - 59	546	32.0	42,951	32.4
60+	423	24.8	23,971	18.1
Exposure Category				
MSM	1,094	64.2	88,251	66.7
IDU	118	6.9	7,979	6.0
Heterosexual contact ³	182	10.7	19,529	14.7
MSM/IDU	98	5.8	9,218	7.0
Other Risk ⁴	24	1.4	1,134	0.9
Not Specified	188	11.0	6,294	4.8

¹ California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section. Electronic HIV/AIDS Reporting System of California (eHARS) June 30, 2018 data set. ² California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section. Year 2016 data included as 2017 data is not yet available. ³Sex with MSM, IDU or known HIV infected person. ⁵Other risk includes perinatal transmission or by receiving clotting factor, transfusion, or a transplant. Cases are among individuals who are current San Mateo County residents.

Geography of Living HIV Cases, San Mateo County

 The highest rates where living HIV/AIDS cases currently reside are seen in the cities of Brisbane, Colma, Pacifica, Redwood City, San Mateo, San Gregorio and South San Francisco.

Figure 20. Population Rates of Reported Living HIV Cases by Current Residential Zip Code in San Mateo County, 2017



Data is compiled from the June 30, 2018 data set from the electronic HIV/AIDS Reporting System of California (eHARS). Cases are among individuals who are current San Mateo County residents.

Summary of Sources and Technical Notes

Summary of Sources for all Bacterial STDs

The STD 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 STD 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, Baseline 2016, Sacramento, California, January 2018.

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 8/31/2018).

Race/Ethnicity Grouping

The race and ethnicity information listed and the corresponding census categories are Black (Black or African-American, non-Hispanic); Latino/Hispanic (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 — 2016.

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: http://www.cdph.ca.gov/data/dataresources/Documents/Guidelines%20for%20Statistics%200723031 Small Num.pdf