

San Mateo County Sexually Transmitted Disease and HIV-AIDS Surveillance Annual Report, 2015



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Introduction and Acknowledgements

This is the 2015 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, and may decrease when duplicate reports are removed or cases are subsequently identified as out of our jurisdiction. 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, and Karen Pfister.

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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 infected with HIV
- Ensure availability and access to effective STD and HIV diagnostic, treatment and counseling services for persons at risk for STDs
- Provide linkage to care services for newly infected HIV patients as well as HIV infected patients who have fallen out of care
- Develop program policy and procedures that are responsive to morbidity
- Provide STD and HIV prevention and treatment information through the Health System web site: <http://www.smchealth.org/std>
- Conduct case and behavioral surveillance, analysis and reporting of syphilis, gonorrhea, chlamydia, and HIV disease trends using demographic, clinic, 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 services 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 support, and/or conduct activities related to insights and solutions to STD prevention and treatment.

External partners include: California Department of Public Health, San Francisco Department of Public Health, San Francisco Mayor's Office of Housing, California Conference of Local AIDS Directors, California STD 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 2015:

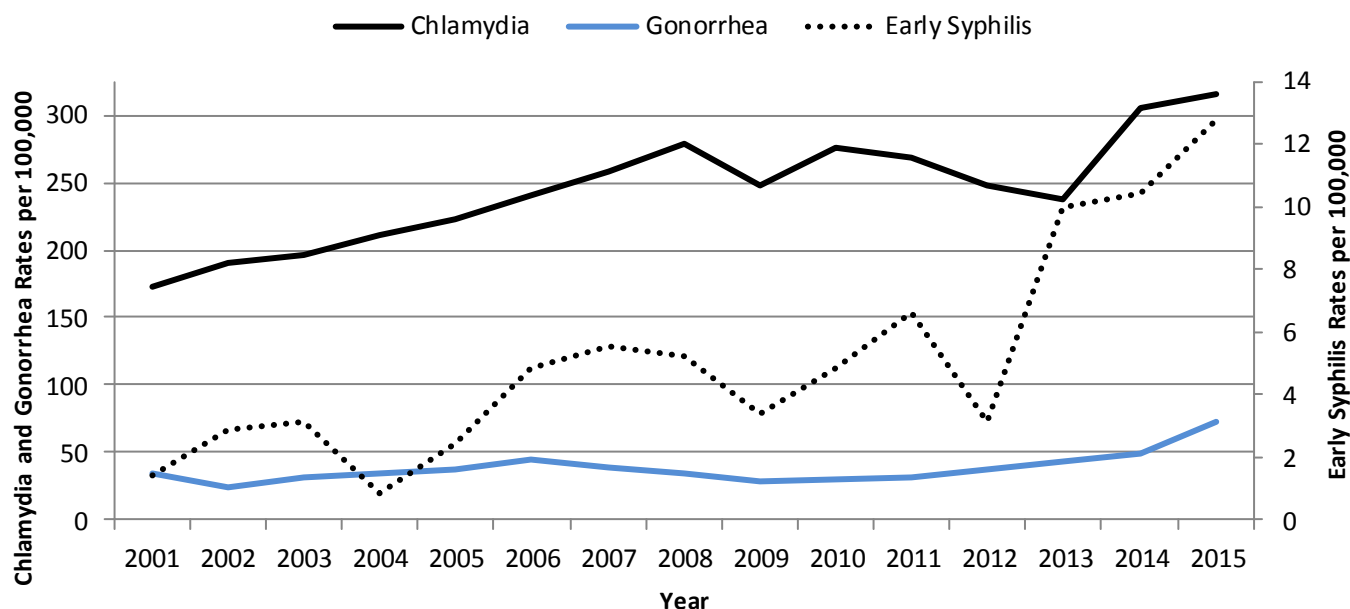
- San Mateo County General Fund
- Federal Health Resources and Services Administration (HRSA) - Ryan White Part A as part of the San Francisco Eligible Metropolitan Area (EMA)
- Federal Centers for Disease Control & Prevention (CDC) - HIV Prevention Funds as part of the San Francisco Eligible Metropolitan Area (EMA)
- 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 Substance Abuse and Mental Health Services Association (SAMHSA)
- California Department of Public Health – Office of AIDS
 - HRSA - Ryan White Part B
 - HRSA - Minority AIDS Initiative (MAI)
- California Department of Public Health – STD Control Branch
 - Chlamydia Screening Project (ClASP)
 - STD Community Interventions Program (SCIP)

All Bacterial STDS In San Mateo County (SMC)

Overview

- SMC early syphilis cases (acquired in the last year) increased 23% in 2015 compared to 2014. SMC HIV co-infected early syphilis cases increased 59% compared to early syphilis cases in 2014. Females comprised 7% of SMC early syphilis cases in 2015 compared to 3% in 2014.
- SMC gonorrhea (GC) case numbers and rates are the highest reported since 2000, with a 50% increase in cases compared to 2014. The 2015 GC increase is much steeper in males compared to females.
- Chlamydia trachomatis (CT) cases increased 4% in 2015 compared to 2014.
- Statewide and nationally, all three notifiable STDs increased compared to 2014 and the prior five years.
- SMC rates are below California rates for all three notifiable STDs.
- Disparities persist, the highest rates are among youth, men who have sex with men (MSM) and African Americans.
- The drivers of these increases are likely multifactorial with possible reasons including increased transmission, increased oral and rectal screening in MSM, and less condom use in the setting of HIV pre-exposure prophylaxis (PreP).
- We urge routine STD screening and timely treatment for patients at risk for STDs or the most devastating consequences of STDs, such as congenital syphilis.

Figure 1. STD Rates by Year in San Mateo County, 2001-2015



Early Syphilis is defined as primary, secondary, and early latent syphilis stages of disease. Note difference in scale for Early Syphilis. 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

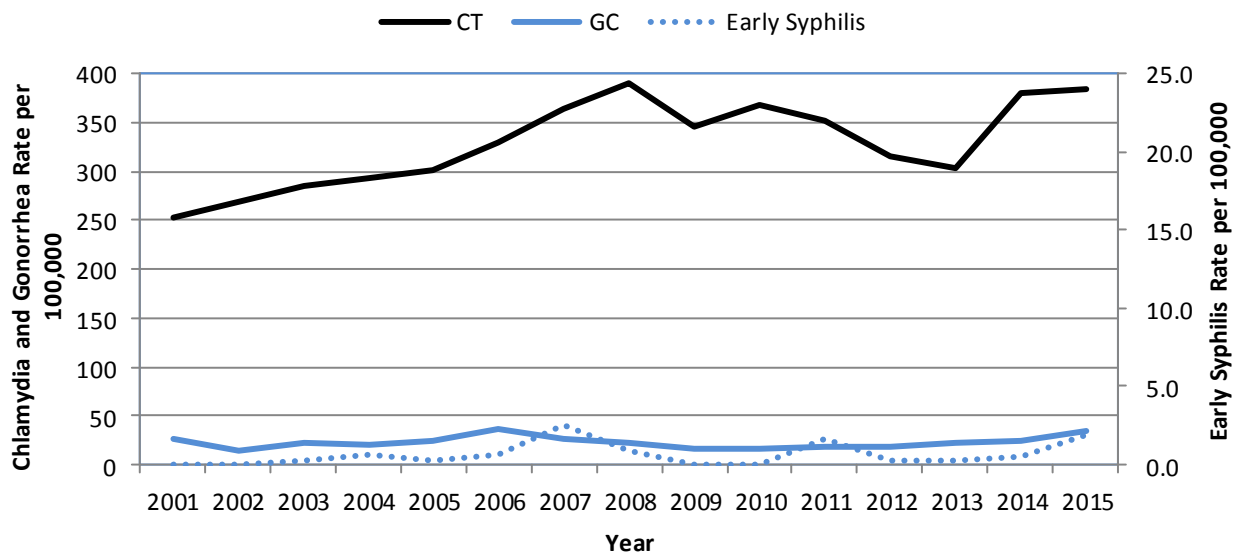
Table 1. STD Cases and Rates by Year Reported in San Mateo County, 2001-2015

Reported Cases															
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Chlamydia	1218	1342	1376	1480	1560	1687	1823	1986	1773	1980	1949	1820	1760	2277	2376
Gonorrhea	241	169	215	239	259	310	273	241	206	216	231	269	321	362	542
Syphilis (Total)	41	51	44	13	47	57	74	58	37	51	67	48	92	117	154
Primary	2	5	9	2	5	10	4	15	8	9	7	7	16	22	12
Secondary	6	9	5	2	10	17	22	11	11	13	28	7	38	31	43
Early Latent	2	6	8	2	2	7	13	11	5	13	13	9	20	25	41
(Total Early Syphilis ¹)	10	20	22	6	17	34	39	37	24	35	48	23	74	78	96
Late Latent	31	31	22	7	30	23	35	21	13	16	19	25	18	39	57
Neurosyphilis²	2	2	1	0	1	0	0	0	2	0	2	2	1	0	2
Congenital Syphilis³	0	0	0	0	0	0	1	2	0	0	2	0	0	0	1
Rate⁴															
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Chlamydia	172.2	190.9	196.2	211.0	223.1	241.2	258.8	279.2	247.5	275.2	267.8	247.4	237.2	305.3	315.6
Gonorrhea	34.1	24.0	30.7	34.1	37.0	44.3	38.8	33.9	28.8	30.0	31.7	36.6	43.3	48.4	72.0
Syphilis (Total)	5.8	7.3	6.3	1.9	6.7	8.1	10.5	8.2	5.2	7.1	9.2	6.5	12.4	15.7	20.5
Primary	0.3	0.7	1.3	0.3	0.7	1.4	0.6	2.1	1.1	1.3	1.0	1.0	2.2	2.9	1.6
Secondary	0.8	1.3	0.7	0.3	1.4	2.4	3.1	1.5	1.5	1.8	3.8	1.0	5.1	4.1	5.7
Early Latent	0.3	0.9	1.1	0.3	0.3	1.0	1.8	1.5	0.7	1.8	1.8	1.2	2.7	3.3	5.4
(Total Early Syphilis ¹)	1.4	2.8	3.1	0.9	2.4	4.9	5.5	5.2	3.4	4.9	6.6	3.1	10.0	10.4	12.8
Late Latent	4.4	4.4	3.1	1.0	4.3	3.3	5.0	3.0	1.8	2.2	2.6	3.4	2.4	5.2	7.6
Neurosyphilis²	0.3	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.3	0.3	0.1	0.0	0.03
Congenital Syphilis³	0.0	0.0	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

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) .

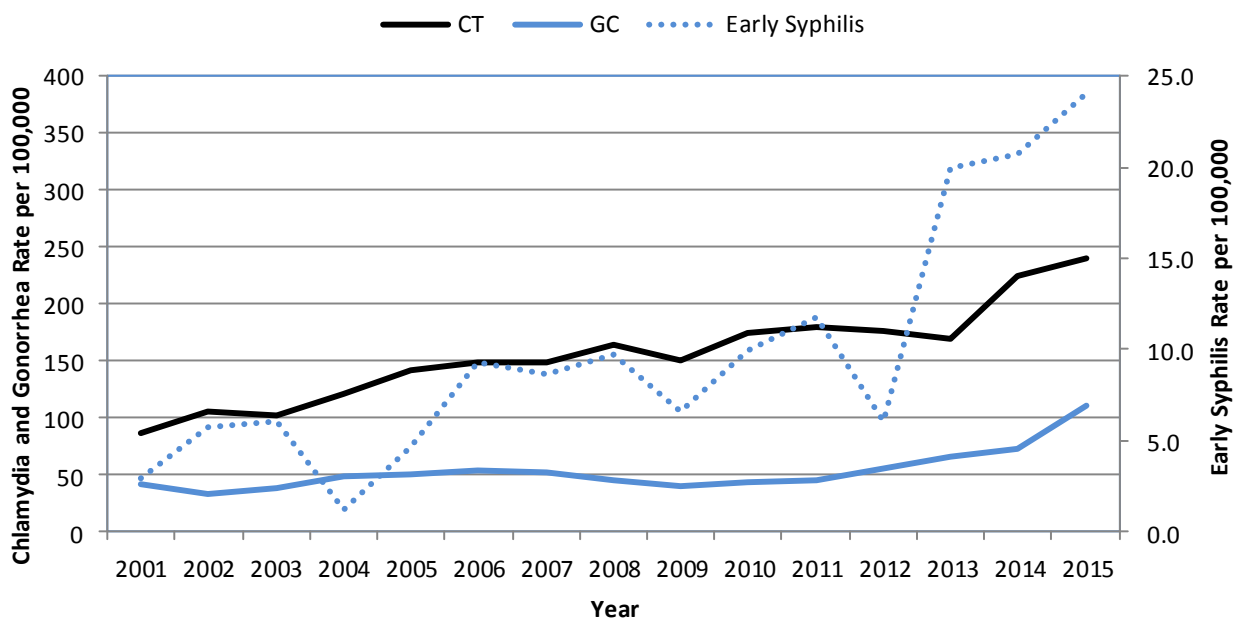
All Bacterial STDs

Figure 2. STD Rates For Females by Year in San Mateo County, 2001-2015



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, 2001-2015



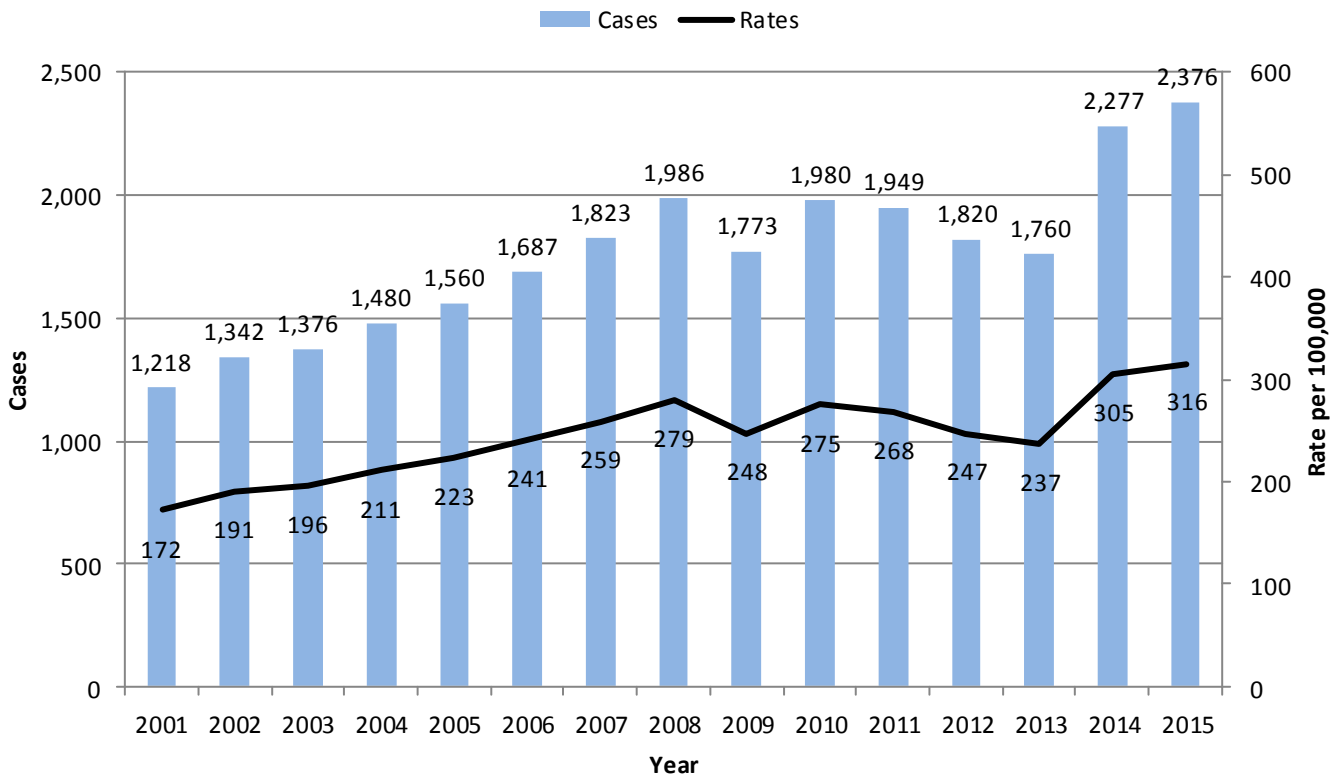
Early Syphilis is defined as primary, secondary, and early latent syphilis stages of disease. Note difference in scale for Early Syphilis. Rates equal cases per 100,000 male residents per year based on population data from the California Department of Finance. Data for San Mateo County is compiled from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

Chlamydia

Overview

- SMC chlamydia trachomatis (CT) cases increased 4% between 2014 and 2015.
- SMC females saw a modest increase in CT rates from 2014 to 2015 and male CT rates had a larger increase during this time.
- 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. Annual screening is recommended for sexually active women age 25 and under.
- Given approximately half of all CT cases are asymptomatic, screening in women age 25 and under, men who have sex with men, and high risk heterosexuals is recommended at least annually or more frequently based on risk.
- CA Healthy Youth Act passed in 2016 mandates medically accurate instruction on STDs in schools.

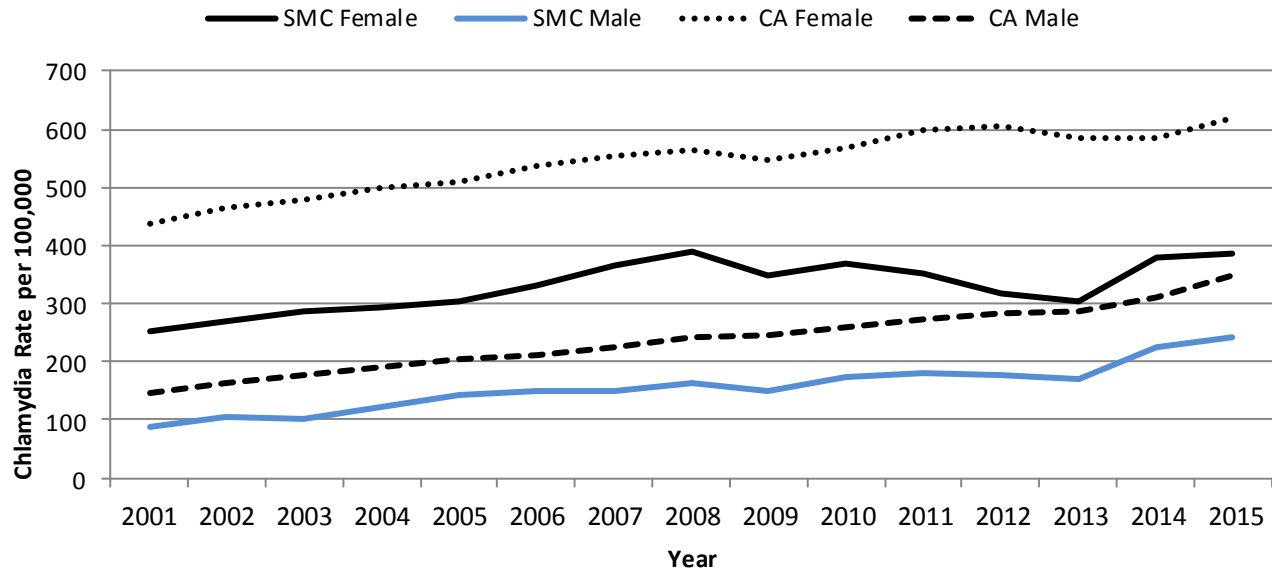
Figure 4. Chlamydia Cases and Rates San Mateo County, 2001-2015



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.

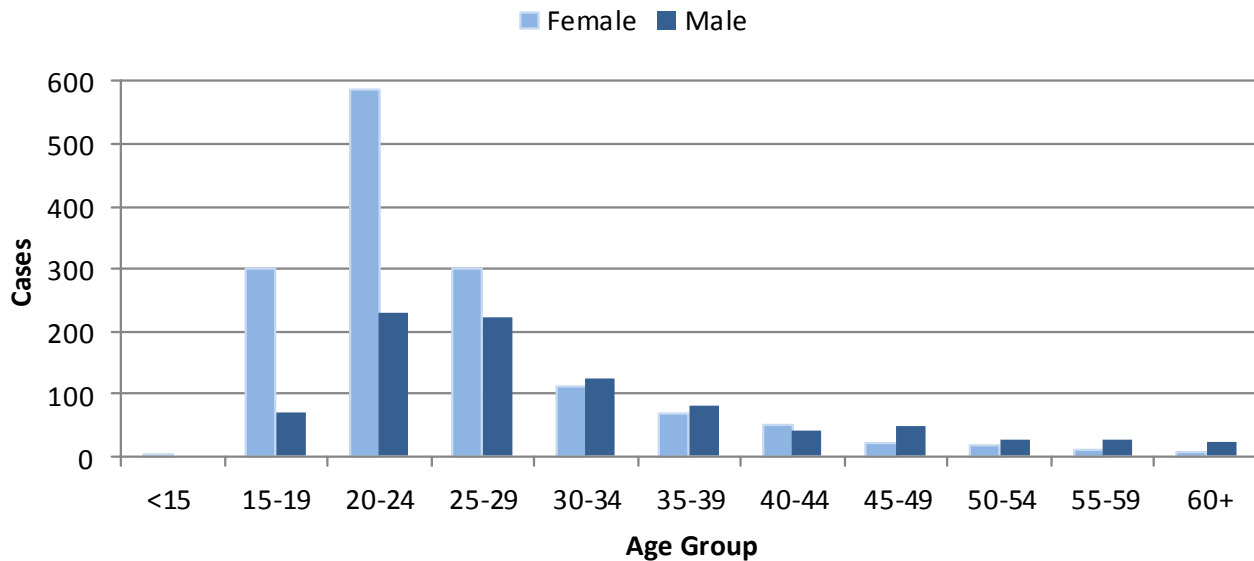
Chlamydia

Figure 5. Chlamydia Rates By Gender and Year in San Mateo County and State of California, 2001-2015



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 gender specific residents per year based on population data from the California Department of Finance.

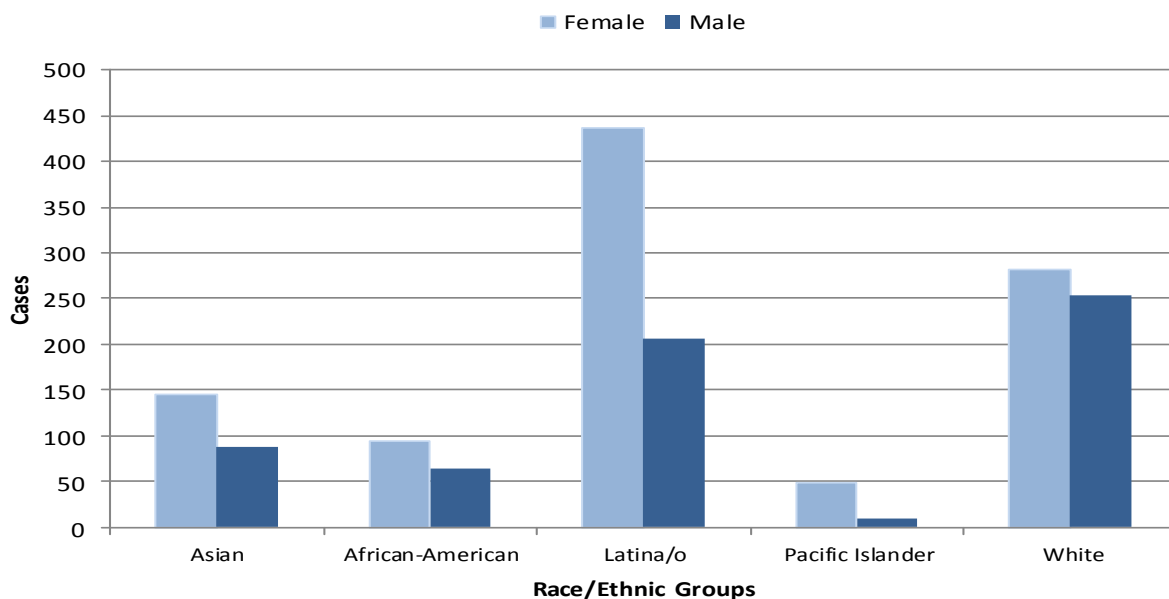
Figure 6. Chlamydia Cases by Gender and Age in San Mateo County, 2015



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

Chlamydia

**Figure 7. Chlamydia Cases by Gender and Selected Race/Ethnic Groups
San Mateo County, 2015 (n=1,627)**



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 Gender in San Mateo County Residents, 2014 and 2015

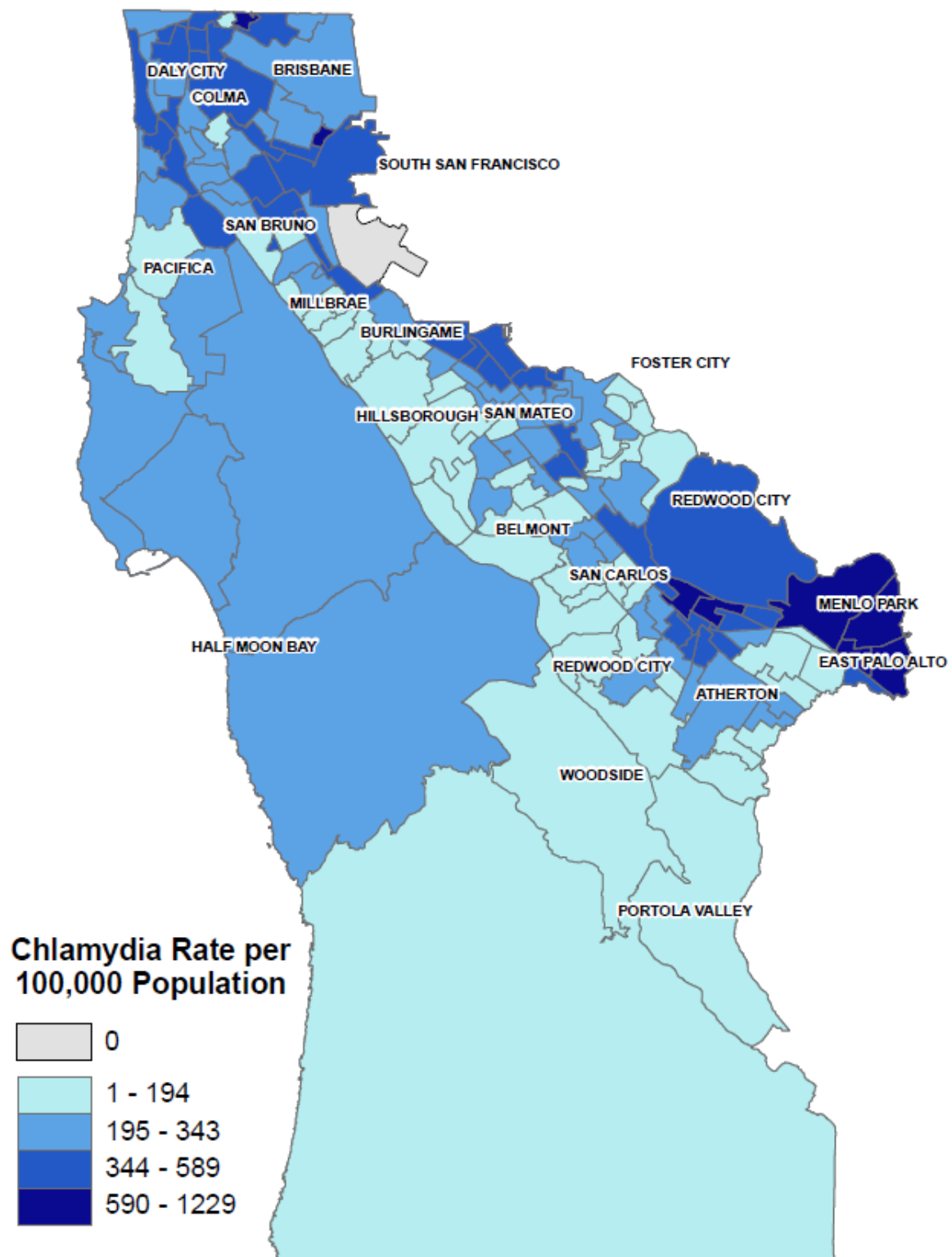
	<u>Women</u>						<u>Men</u>					
	2014			2015			2014			2015		
	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹
County Total	2,277	100	304.7	2,376	100	315.6	2,277	100	304.7	2,376	100	315.6
Gender Total	1,444	63.4	380.2	1,474	62.0	385.3	828	36.4	225.3	892	37.5	241.0
Age												
<15	8	0.6	12.0	4	0.3	6.0	0	0.0	0.0	0	0.0	0.0
15-19	277	19.2	1306.4	299	20.3	1405.2	71	8.6	321.6	69	7.7	308.5
20-24	584	40.4	2949.2	586	39.8	2820.7	228	27.5	1054.3	228	25.6	1028.7
25-29	265	18.4	1289.2	300	20.4	1526.1	187	22.6	818.2	221	24.8	993.3
30-34	130	9.0	516.7	110	7.5	445.4	121	14.6	465.2	123	13.8	479.4
35-39	87	6.0	333.7	70	4.7	266.3	74	8.9	284.3	81	9.1	308.0
40-44	29	2.0	104.9	51	3.5	188.9	57	6.9	208.6	40	4.5	149.4
45-49	25	1.7	90.4	20	1.4	71.1	32	3.9	119.4	50	5.6	185.6
50-54	16	1.1	55.4	17	1.2	59.1	33	4.0	120.4	28	3.1	102.1
55-59	13	0.9	47.4	9	0.6	32.5	11	1.3	42.6	26	2.9	99.2
60+	5	0.3	5.6	5	0.3	5.5	13	1.6	18.1	24	2.7	32.2
Missing	5	0.3	-	3	0.2	-	1	0.1	-	2	0.2	-
Race/Ethnicity												
American Indian/Alaskan	3	0.2	488.6	4	0.3	645.2	0	0.0	0.0	5	0.6	859.1
Asian	152	10.5	150.4	145	9.8	141.3	95	11.5	107.4	87	9.8	97.0
African-American	71	4.9	755.3	95	6.4	1011.1	51	6.2	528.4	65	7.3	674.1
Latina/o	450	31.2	472.4	436	29.6	451.6	192	23.2	196.5	207	23.2	209.2
Multirace	7	0.5	55.5	11	0.7	85.5	2	0.2	15.9	0	0.0	0.0
Pacific Islander	41	2.8	729.8	49	3.3	862.2	13	1.6	233.8	9	1.0	157.6
White	190	13.2	122.4	281	19.1	181.5	174	21.0	113.8	253	28.4	165.7
Other/Unknown ³	530	36.7	-	453	30.7	-	301	36.4	-	266	29.8	-
Clinical Site of Infection												
Urine	608	42.1	-	530	36.0	-	523	63.2	-	430	48.2	-
Genitourinary	561	38.9	-	463	31.4	-	24	2.9	-	18	2.0	-
Rectal/Pharyngeal	12	0.8	-	4	0.3	-	139	16.8	-	110	12.3	-
Other/Unknown	263	18.2	-	477	32.4	-	142	17.1	-	334	37.4	-

Case data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE). ¹ Rates equal cases per 100,000 gender 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 5 transgender CT cases in 2014 and 10 transgender CT cases in 2015.

The Geography of Chlamydia in San Mateo County

- The highest rates of chlamydia infections in 2015 were seen in census tracts in parts of Daly City, San Mateo, South San Francisco, Redwood City, Menlo Park, and East Palo Alto.

Figure 8. Chlamydia Rates by Census Tract in San Mateo County, 2015



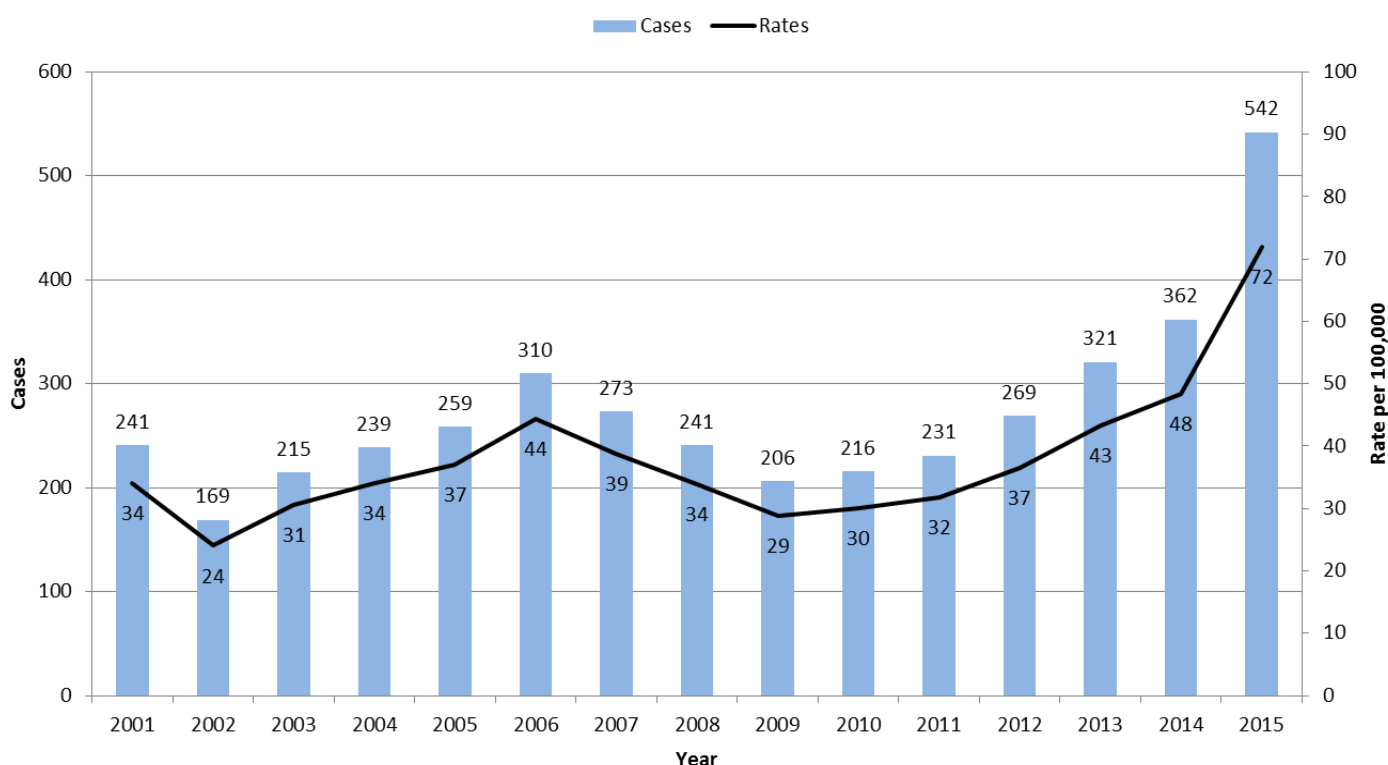
Case data based on California Reportable Disease Information Exchange (CalREDIE) San Mateo County. Rates equal count of 2015 chlamydia cases per census tract population.

Gonorrhea

Overview

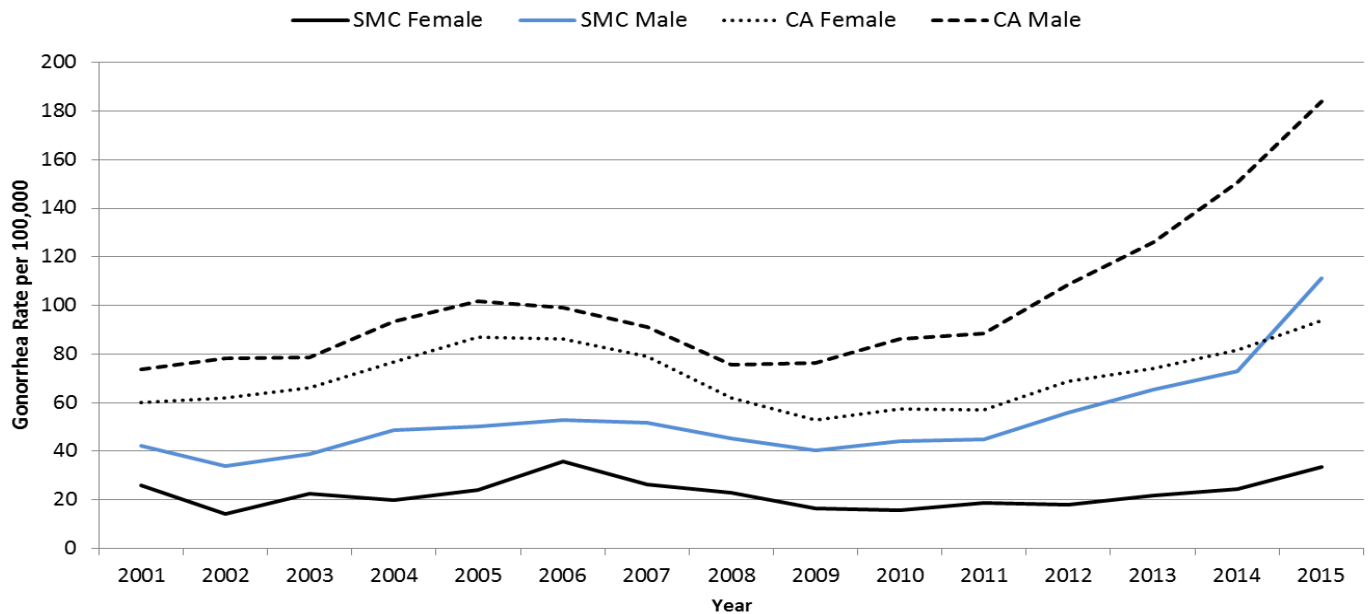
- SMC gonorrhea (GC) case numbers and rates are the highest reported since 2000, with a 50% increase in cases compared to last year.
- While the gonorrhea rate increased in both males and females from 2014 to 2015 the increase was much steeper in males.
- Most gonorrhea cases were in White and Latino race/ethnicities, but rates are highest for African Americans in part due to the small population size of this group.
- Despite 20% male gonorrhea cases missing anatomic site data, MSM made up 35% of gonorrhea cases in 2015.
- In California, gonorrhea cases increased 21% compared to last year, with the highest statewide gonorrhea case numbers and rates since the early 1990s.
- SMC gonorrhea rates for males and females remain below California rates.

Figure 9. Gonorrhea Cases and Rates by Year San Mateo County, 2001-2015



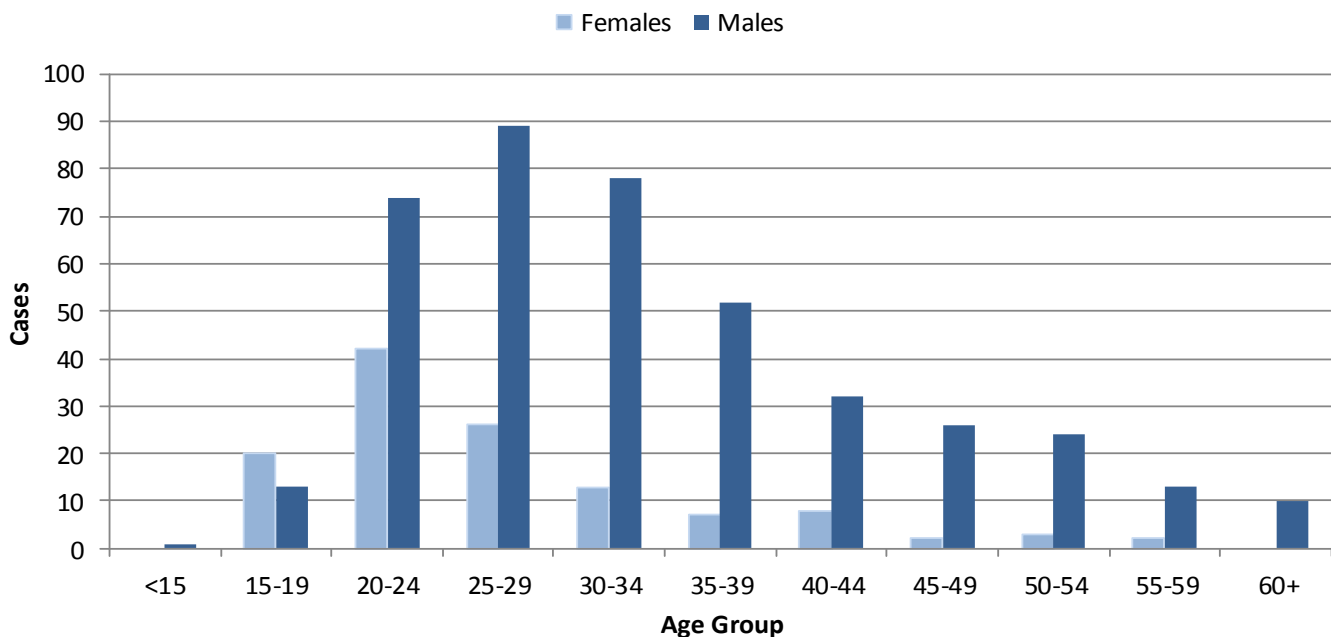
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based on census data from the California Department of Finance.

Figure 10. Gonorrhea Rates By Gender and Year in San Mateo County and State of California, 2001-2015



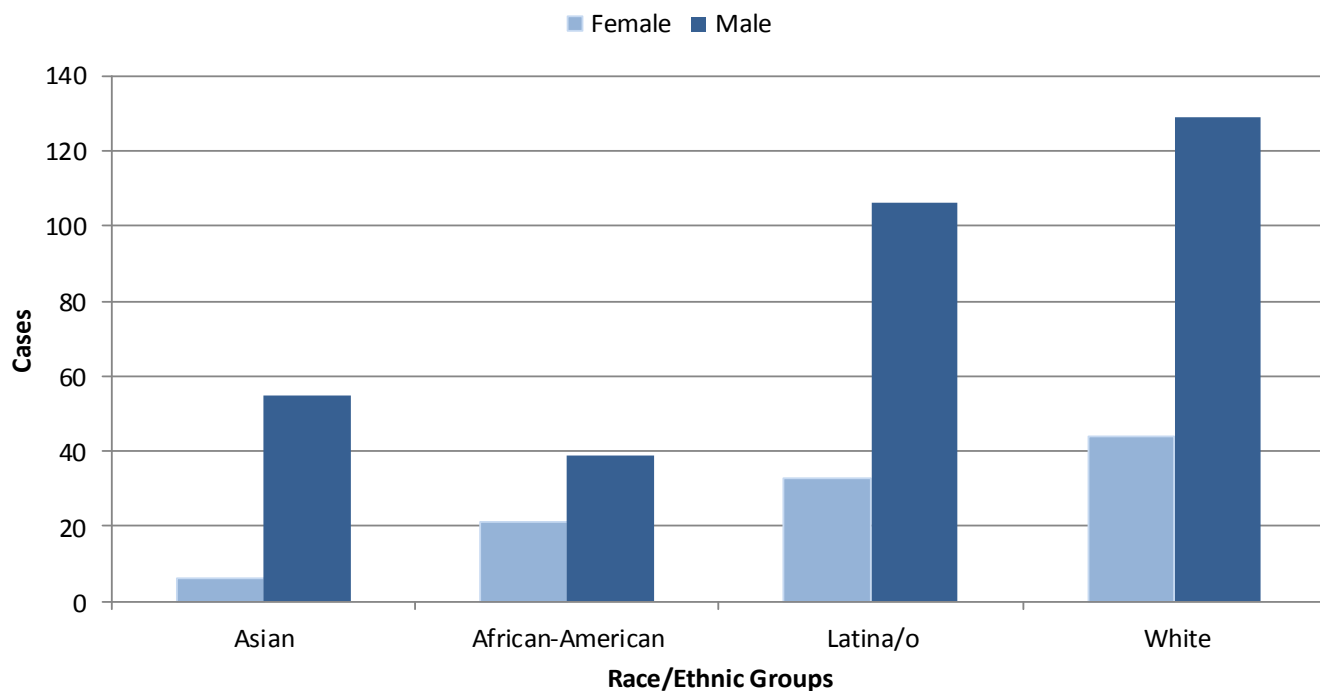
Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Data for California rates was provided by the California Department of Public Health STD Control Branch. Rates equal cases per 100,000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

Figure 11. Gonorrhea Cases by Gender and Age in San Mateo County, 2015



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

Figure 12. Gonorrhea Cases By Gender and Selected Race/Ethnic Groups in San Mateo County, 2015 (n=433)



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

Table 3. Gonorrhea Cases and Rates by Demographic and Clinical Characteristics by Gender in San Mateo County, 2014 and 2015

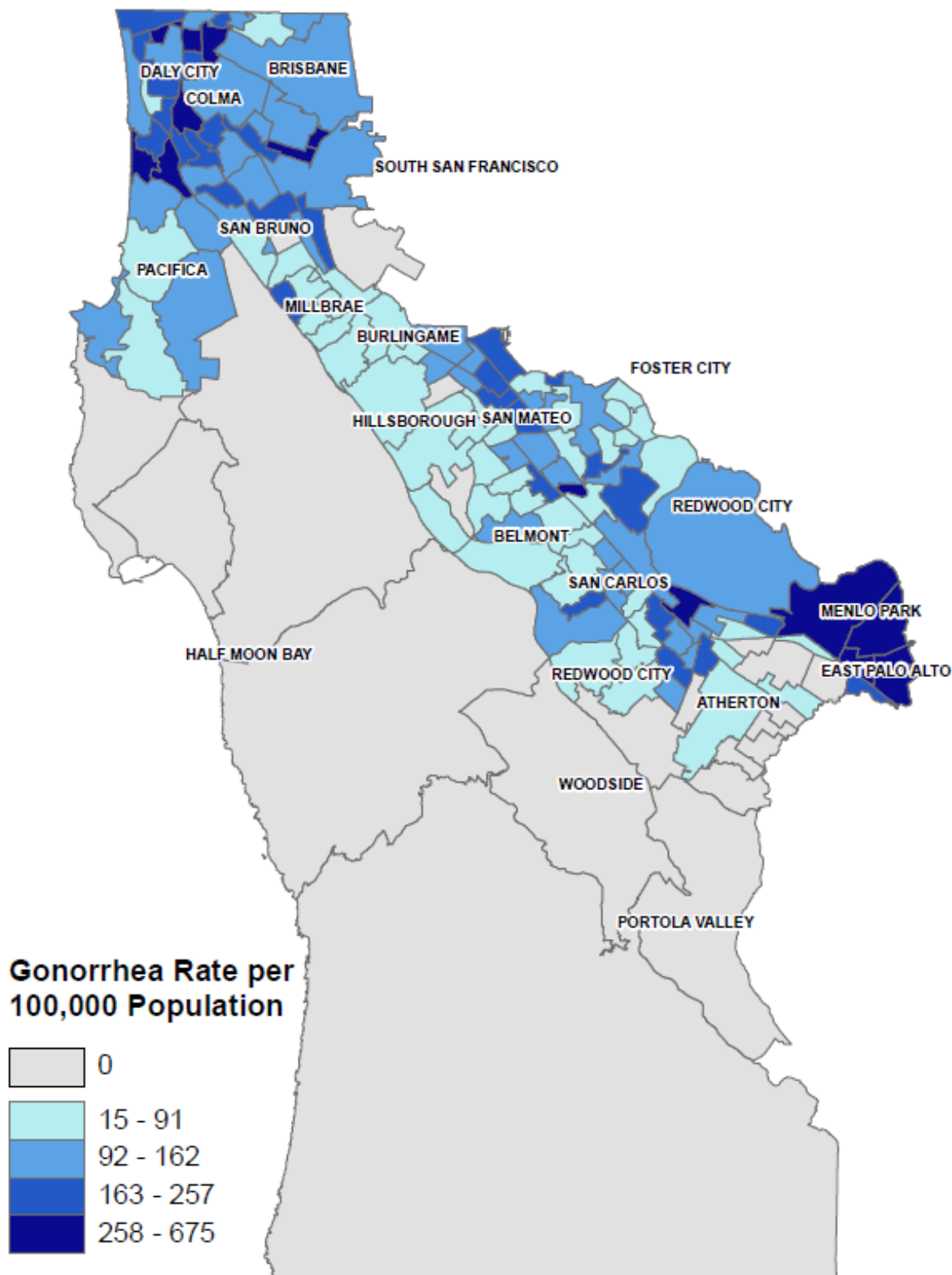
	<u>Women</u>						<u>Men</u>					
	2014			2015			2014			2015		
	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹
County Total	362	100	48.4	542	100	72.0	362	100	48.4	542	100	72.0
Gender Total	93	25.7	24.5	128	23.6	33.5	268	74.0	72.9	412	76.0	111.3
Age												
<15	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	1	0.2	1.4
15-19	17	18.3	80.2	20	15.6	94.0	16	6.0	72.5	13	3.2	58.1
20-24	29	31.2	146.4	42	32.8	202.2	53	19.8	245.1	74	18.0	333.9
25-29	17	18.3	82.7	26	20.3	132.3	54	20.1	236.3	89	21.6	400.0
30-34	4	4.3	15.9	13	10.2	52.6	36	13.4	138.4	78	18.9	304.0
35-39	11	11.8	42.2	7	5.5	26.6	35	13.1	134.5	52	12.6	197.7
40-44	3	3.2	10.9	5	3.9	18.5	29	10.8	106.1	32	7.8	119.5
45-49	5	5.4	18.1	8	6.3	28.4	18	6.7	67.2	26	6.3	96.5
50-54	2	2.2	6.9	2	1.6	6.9	15	5.6	54.7	24	5.8	87.5
55-59	2	2.2	7.3	3	2.3	10.8	8	3.0	31.0	13	3.2	49.6
60+	3	3.2	3.4	2	1.6	2.2	4	1.5	5.6	10	2.4	13.4
Race/Ethnicity												
American Indian/Alaskan	1	1.1	162.9	1	0.8	161.3	0	0.0	0.0	0	0.0	0.0
Asian	5	5.4	4.9	6	4.7	5.8	33	12.3	37.3	55	13.3	61.3
African-American	12	12.9	127.7	21	16.4	223.5	29	10.8	300.5	39	9.5	404.5
Latina/o	31	33.3	32.5	33	25.8	34.2	65	24.3	66.5	106	25.7	107.1
Multirace	1	1.1	7.9	2	1.6	15.6	1	0.4	7.9	1	0.2	7.8
Pacific Islander	2	2.2	35.6	4	3.1	70.4	2	0.7	36.0	3	0.7	52.5
White	16	17.2	10.3	44	34.4	28.4	89	33.2	58.2	129	31.3	84.5
Other/Unknown ²	25	26.9	-	17	13.3	-	49	18.3	-	79	19.2	-
Clinical Site of Infection												
Urine	44	47.3	-	50	39.1	-	102	38.1	-	163	39.6	-
Genitourinary	39	41.9	-	51	39.8	-	26	9.7	-	20	4.9	-
Rectal/Pharyngeal	1	1.1	-	1	0.8	-	113	42.2	-	146	35.4	-
Other/Unknown	9	9.7	-	26	20.3	-	27	10.1	-	83	20.1	-

Case data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE). ¹Rates equal cases per 100,000 gender 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 1 transgender GC case in 2014 and 2 transgender GC cases in 2015.

The Geography of Gonorrhea in San Mateo County

- The highest rates of gonorrhea infections in 2011-2015 were seen in census tracts in parts of Daly City, Pacifica, Redwood City, San Mateo, South San Francisco, Menlo Park, and East Palo Alto.

Figure 13. Gonorrhea Rates by Census Tract in San Mateo County, 2011-2015



Case data based on California Reportable Disease Information Exchange (CalREDIE) San Mateo County. Rates equal count of 2011-2015 gonorrhea cases per census tract population.

Syphilis

Overview

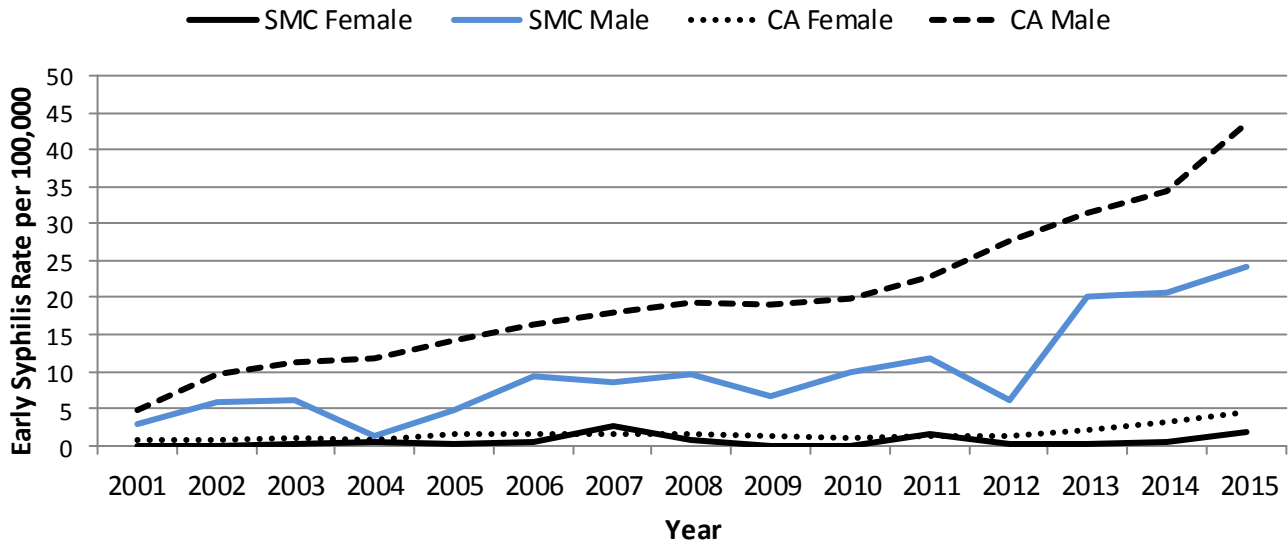
- SMC total syphilis and early syphilis (defined as acquired in the last year) cases and rates increased in 2015 compared to 2014. SMC early syphilis cases increased 23% compared to last year; SMC total syphilis cases increased 32% compared to last year.
- In 2015, 93% of SMC early syphilis cases were diagnosed in men and 66% of these were in men who have sex with men (MSM).
- Females comprised 7% of early syphilis cases in 2015, compared to 3% in 2014. This is especially concerning given the statewide increase in morbidity of syphilis in newborns. In 2015, SMC had one congenital syphilis case.
- HIV co-infected early syphilis cases increased 59% compared to early syphilis cases last year.
- California total syphilis cases increased 26% compared to last year. SMC male and female syphilis rates remain below California rates.
- SMC encourages at least an annual, and consideration of more frequent (every 4-6 months) syphilis screenings in HIV infected MSM.

Figure 14. Early Syphilis Cases and Rates by Year San Mateo County, 2001-2015



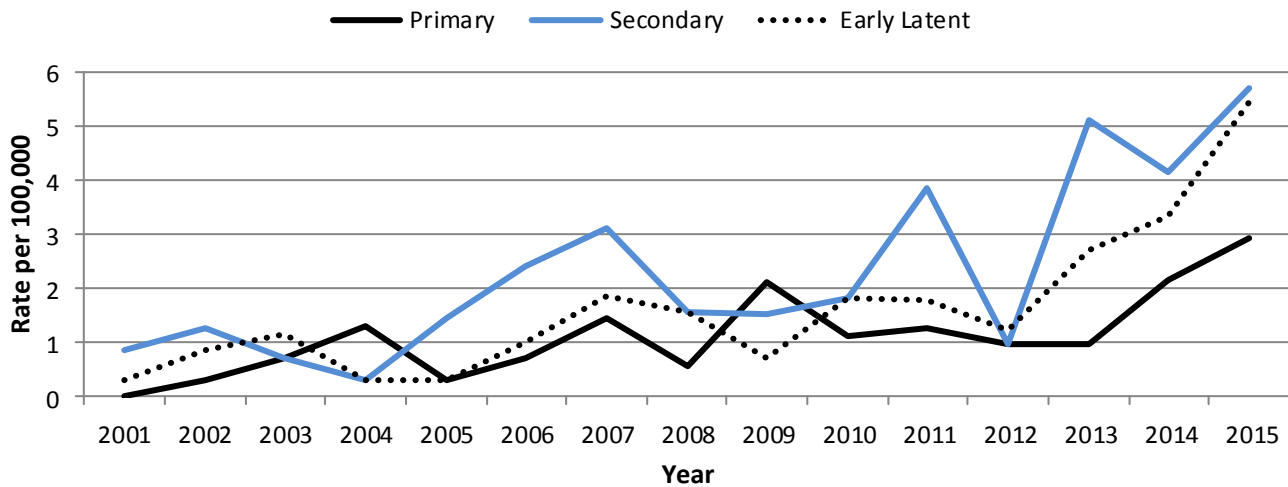
Early Syphilis includes primary, secondary, and early latent stages of syphilis. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system and the Automated Vital Statistics System (AVSS). Rates equal cases per 100,000 residents per year based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

Figure 15. Early Syphilis Rates by Gender and Year in San Mateo County and State of California, 2001-2015



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, 2001-2015



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 4. Early Syphilis Cases and Rates by Syphilis Stage, Demographic Characteristics, and Risk Factors, San Mateo County, 2014 and 2015

	2014			2015		
	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹
Syphilis County Total	117	100	15.7	154	100	20.5
Primary	22	18.8	2.9	12	7.8	1.6
Secondary	31	26.5	4.1	43	27.9	5.7
Early Latent	25	21.4	3.3	41	26.6	5.4
Late Latent	39	33.3	5.2	57	37.0	7.6
Congenital Syphilis	0	0.0	0.0	1	0.6	0.1
Neurosyphilis	0	0.0	0.0	2	1.3	0.3
Early Syphilis²	78	100.0	10.4	96	100.0	12.8
Sex						
Female	2	2.6	0.5	7	7.3	1.8
Male	76	97.4	20.7	89	92.7	24.0
Ages						
<15 years old	0	0.0	0.0	0	0.0	0.0
15-19	0	0.0	0.0	0	0.0	0.0
20-24	9	11.5	21.7	16	16.7	40.1
25-29	10	12.8	23.0	15	15.6	33.2
30-34	9	11.5	17.6	14	14.6	27.2
35-39	13	16.7	25.0	13	13.5	25.0
40-44	8	10.3	14.6	8	8.3	14.4
45-49	11	14.1	20.2	18	18.8	32.7
50-54	9	11.5	16.0	6	6.3	10.7
55-59	6	7.7	11.3	6	6.3	11.1
60+	3	3.8	1.9	0	0.0	0.0
Race/Ethnicity						
American Indian/Alaska Native	0	0.0	0.0	0	0.0	0.0
Asian	9	11.5	4.7	11	11.5	5.7
African-American	3	3.8	15.7	8	8.3	42.0
Latina/o	22	28.2	11.4	41	42.7	21.0
Multirace	1	1.3	4.0	3	3.1	11.7
Pacific Islander/Hawaiian	1	1.3	8.9	0	0.0	0.0
White	38	48.7	12.3	31	32.3	10.1
Other/Unknown/Not Specified	4	5.1	-	2	2.1	-
Self Reported Risk Factors³						
MSM ⁴	50	65.8	-	59	66.3	-
Anonymous Partners	36	46.2	-	29	30.2	-
HIV Coinfection ⁵	27	34.6	-	43	44.8	-

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 79% (n=60) of 76 total male cases in 2014 and for 83% (n=74) of 89 total male cases in 2015. ⁵Data for HIV coinfections was not available (missing or refused) for 34 cases in 2014 and for 39 cases in 2015. Data for San Mateo County is compiled from the California Reportable Disease Information Exchange (CalREDIE) system.

Table 5. Syphilis Cases and Rates by Demographic Characteristics for All Syphilis Stages, San Mateo County, 2014 and 2015

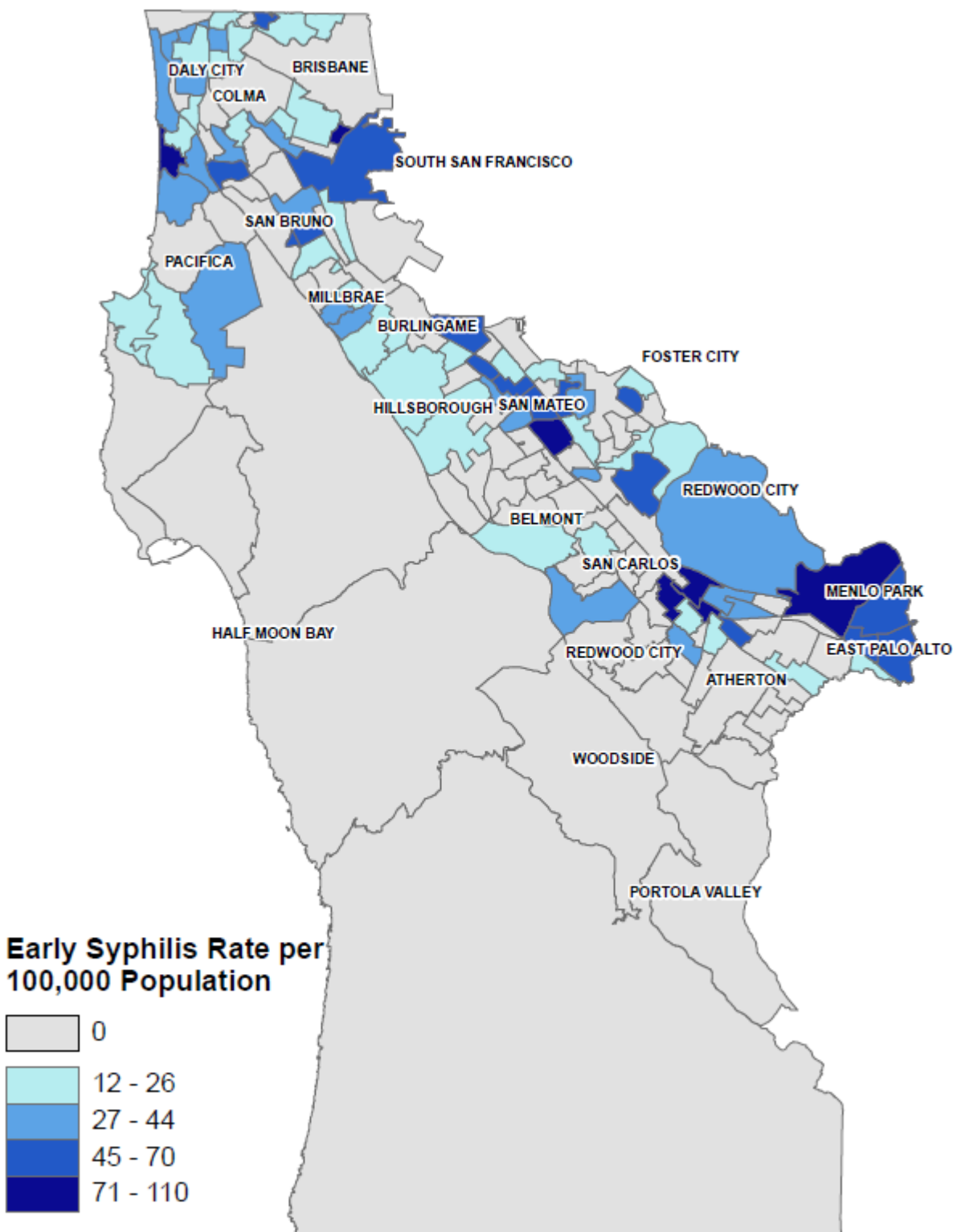
	2014			2015		
	Cases	Percent	Rate ¹	Cases	Percent	Rate ¹
All Syphilis Stages	117	100	15.7	154	100	20.5
Sex						
Female	10	8.5	2.6	18	11.7	4.7
Male	107	91.5	29.1	136	88.3	36.7
Ages						
<15 years old	0	0.0	0.0	1	0.6	0.7
15-19	2	1.7	4.6	4	2.6	9.3
20-24	15	12.8	36.2	21	13.6	52.7
25-29	16	13.7	36.9	24	15.6	53.2
30-34	15	12.8	29.3	25	16.2	48.6
35-39	19	16.2	36.5	21	13.6	40.4
40-44	11	9.4	20.0	15	9.7	27.0
45-49	16	13.7	29.4	22	14.3	40.0
50-54	12	10.3	21.3	10	6.5	17.8
55-59	7	6.0	13.1	8	5.2	14.8
60+	4	3.4	2.5	3	1.9	1.8
Race/Ethnicity						
American Indian/Alaska Native	0	0.0	0.0	0	0.0	0.0
Asian	14	12.0	7.4	19	12.3	9.9
African-American	5	4.3	26.2	10	6.5	52.5
Latina/o	36	30.8	18.7	61	39.6	31.2
Multirace	1	0.9	4.0	3	1.9	11.7
Pacific Islander/Hawaiian	2	1.7	17.9	1	0.6	8.8
White	47	40.2	15.3	42	27.3	13.7
Other/Unknown/Not Specified	12	10.3	-	18	11.7	-

¹Rates equal cases per 100,000 gender, 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 2011-2015 were seen in census tracts in parts of Redwood City and South San Francisco. High rates were also seen in parts of Menlo Park, Pacifica, and San Mateo.

Figure 17. Early Syphilis Rates by Census Tract in San Mateo County, 2011-2015



Case data based on California Reportable Disease Information Exchange (CalREDIE) San Mateo County. Rates equal count of 2011-2015 early syphilis cases per census tract population.

Characteristics of Newly Reported San Mateo County (SMC) HIV Cases

Overview

- Between 2006 and 2015, newly reported SMC HIV cases reached a peak in 2011 and have returned to a baseline similar to 2006.
- Late testers among newly reported HIV cases has decreased modestly from 2006 (33%) to 2015 (28%).
- In 2015, females comprised 11% of newly reported HIV cases, a larger percent than 2013 and 2014.
- Between 2011 and 2015, Latinos and Whites comprise the majority of newly reported HIV cases.
- After MSM, risk not specified is the main exposure category since 2013.
- Heterosexual risk was the exposure category for 11% of newly reported HIV cases in 2014 and 2015.

Table 6. Newly Reported HIV Cases and Percentage of Late Testers by Year of Diagnosis, San Mateo County, 2005-2015¹

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HIV Cases	60	49	60	49	61	78	65	50	63	57
Late Testers²	33%	33%	17%	40%	34%	33%	28%	34%	22%	28%
AIDS Diagnosed within 12 months	3%	4%	0%	16%	8%	9%	8%	6%	8%	7%
AIDS Diagnosed Simultaneously	30%	29%	17%	24%	26%	24%	20%	28%	14%	21%
Non Late Tester	67%	67%	83%	59%	66%	67%	72%	66%	78%	72%

¹ San Mateo County data are reported through June 30, 2016 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.

Table 7. Characteristics of Newly Reported HIV Cases by Year of Diagnosis, San Mateo County, 2011 - 2015¹

	2011	2012	2013	2014	2015
Total Number	78	65	50	63	57
	Percent	Percent	Percent	Percent	Percent
Gender					
Male	87%	83%	92%	90%	89%
Female	13%	17%	6%	8%	11%
Transgender	0%	0%	2%	2%	0%
Age at Diagnosis					
0 - 19 Years	0%	0%	2%	2%	2%
20 - 29 Years	15%	23%	22%	25%	23%
30 - 39 Years	23%	17%	18%	29%	33%
40 - 49 Years	27%	32%	30%	19%	23%
50 - 59 Years	27%	22%	16%	16%	9%
60+	8%	6%	12%	10%	11%
Race/Ethnicity					
White	29%	34%	34%	25%	37%
African American	12%	11%	4%	13%	4%
Latina/o	29%	35%	38%	38%	40%
Asian/Pacific Islander	27%	18%	18%	22%	18%
Multi-Race/Other/Unknown	3%	2%	6%	2%	2%
Exposure Category					
MSM	62%	62%	72%	68%	61%
IDU	1%	6%	2%	3%	5%
Heterosexual Contact ²	9%	17%	2%	11%	11%
MSM/IDU	6%	2%	0%	2%	4%
Other Risk ³	0%	0%	0%	2%	0%
Not specified	22%	14%	24%	14%	19%

¹ San Mateo County data are reported through June 30, 2016 from the electronic HIV/AIDS Reporting System (eHARS). ² Sex with MSM, IDU or known HIV infected person. ³ Other risk includes perinatal transmission, exposure to blood transfusion or blood products, or receiving a transplant.

Characteristics of Late HIV Testers in Newly Reported HIV Cases

- Females comprise 14% of late testers between 2011 and 2015.
- Late HIV testers between 2011 and 2015 were more likely to be older than 50 years compared to all newly reported HIV cases.
- Late HIV testers were more likely to have risk not specified or heterosexual risk than all newly reported HIV cases.

Table 8. Characteristics of Late HIV Testers, San Mateo County, 2011 - 2015¹

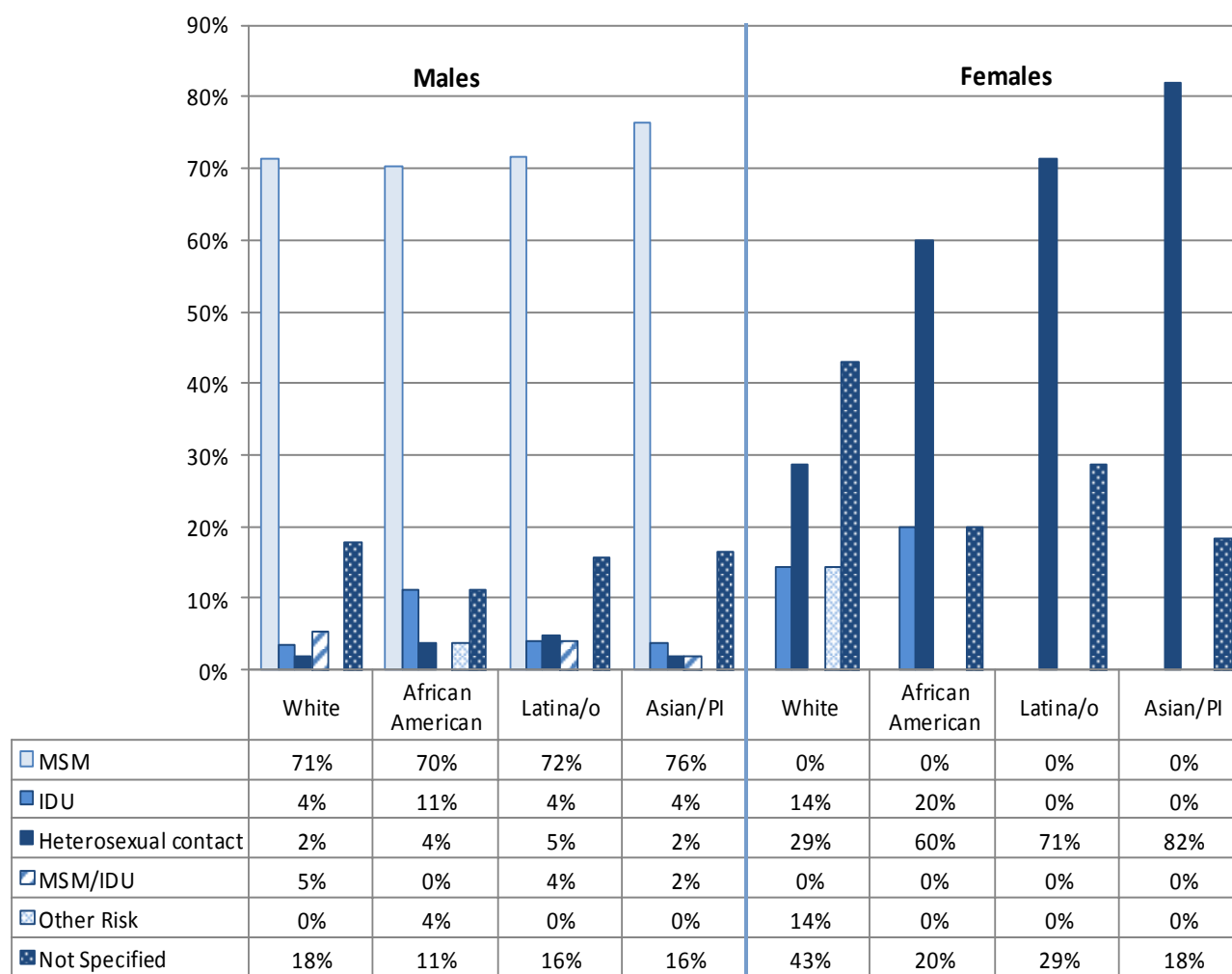
	Number	%
Total Number	96	100
Gender		
Male	83	86
Female	13	14
Transgender	0	0
Age at Diagnosis		
0 - 19 Years	0	0
20 - 29 Years	12	13
30 - 39 Years	19	20
40 - 49 Years	27	28
50 - 59 Years	24	25
60+	14	15
Race/Ethnicity		
White	32	33
African American	9	9
Latina/o	37	39
Asian/Pacific Islander	17	18
Multi-Race/Other/Unknown	1	1
Exposure Category		
MSM	50	52
IDU	3	3
Heterosexual Contact ²	15	16
MSM/IDU	3	3
Other Risk ³	0	0
Not Specified	25	26

¹ San Mateo County data are reported through June 30, 2016 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.

Characteristics of Diagnosed HIV Cases, 2011-2015

- Among male HIV cases diagnosed 2011-2015, the transmission category with the highest percentage of cases ($\geq 70\%$) across all race/ethnicities is men who have sex with men (MSM).
- African American male HIV cases diagnosed during this period reported a modestly higher injection drug use (IDU) (11%) compared to White (4%), Latino (4%) or Asian/PI (4%) males.
- Heterosexual contact is the main risk identified for African American, Latina and Asian/PI HIV cases in women diagnosed 2011-2015, while for White women the main identified risk during this period is not specified.
- Twenty percent of African American female HIV cases diagnosed during this period reported injection drug use compared to 14% of White female cases.

Figure 18. Adult HIV Cases Diagnosed From 2011-2015 by Transmission Category, Gender, and Race/Ethnicity, San Mateo County

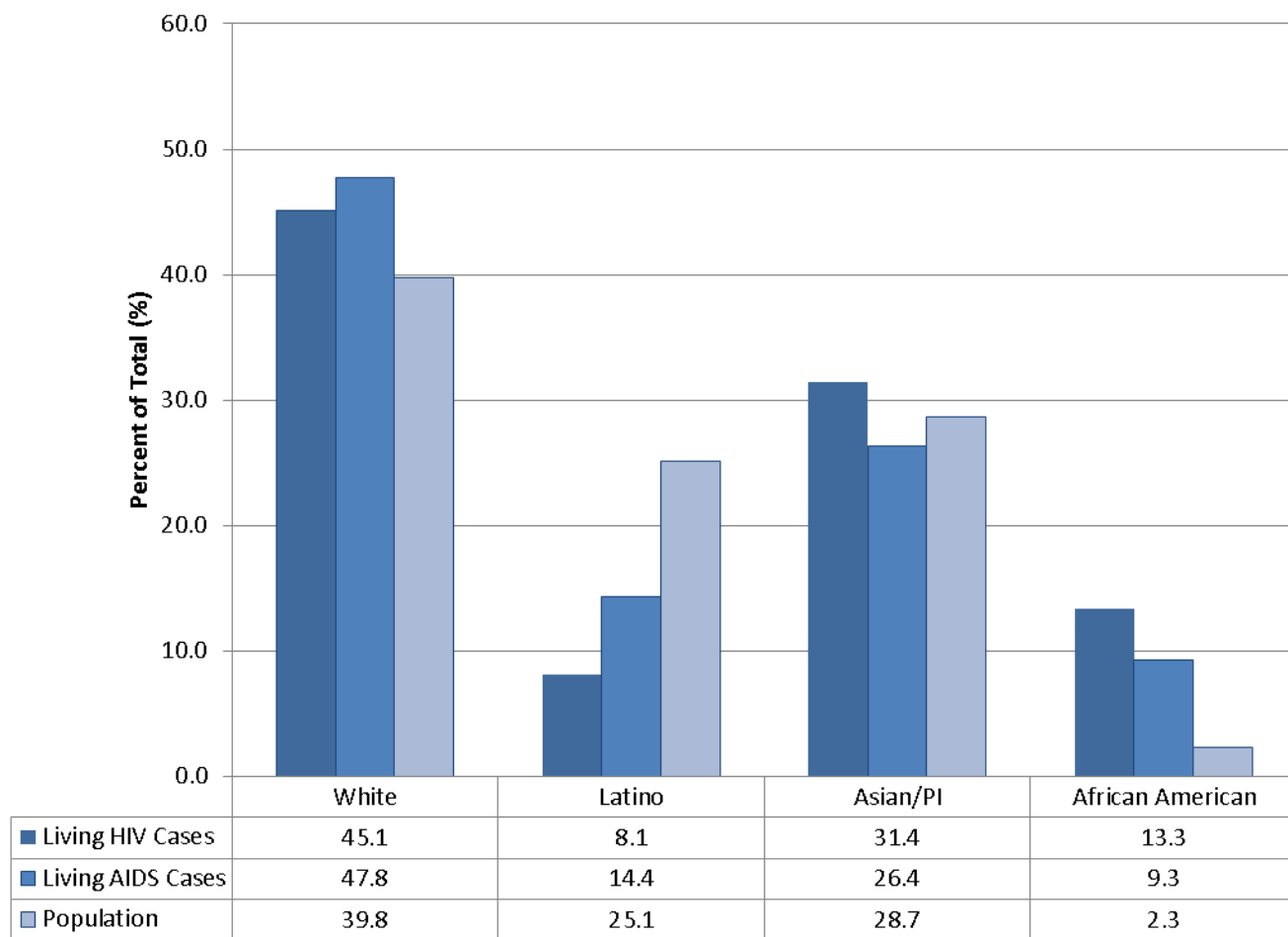


Data is compiled from the June 30, 2016 data set from the electronic HIV/AIDS Reporting System of California (eHARS). Other risk includes either perinatal transmission, exposure to blood transfusion or blood products, or receiving a transplant.

Proportion Living with HIV/AIDS, 2015

- African Americans represent a small proportion of the county population (2.3%) but are the most disproportionately represented amongst both the living HIV (13.3%) and living AIDS cases (9.3%). White persons are modestly overrepresented in living HIV and/or AIDS cases.

Figure 19. Proportion Living with HIV, Living with AIDS, and the County Population by Race/Ethnicity, San Mateo County, 2015



HIV/AIDS data is compiled from the June 30, 2016 data set from the electronic HIV/AIDS Reporting System of California (eHARS). Population data is from the U.S. Census Bureau, 2015 American Community Survey 1-year estimates.

Characteristics of People Living with HIV/AIDS, San Mateo County & CA

- In 2015, SMC has a higher percentages of female living HIV/AIDS cases than California (15% vs. 12%).
- SMC has a higher percentage of Asian/Pacific Islander living HIV/AIDS cases than California (11% vs. 4%).
- SMC has a higher percentage of risk not specified in living HIV/AIDS cases than California (11% vs 4%).

Table 9. Demographic and Risk Characteristics of Living Persons Diagnosed with HIV/AIDS in San Mateo County (2015) and California (2014)

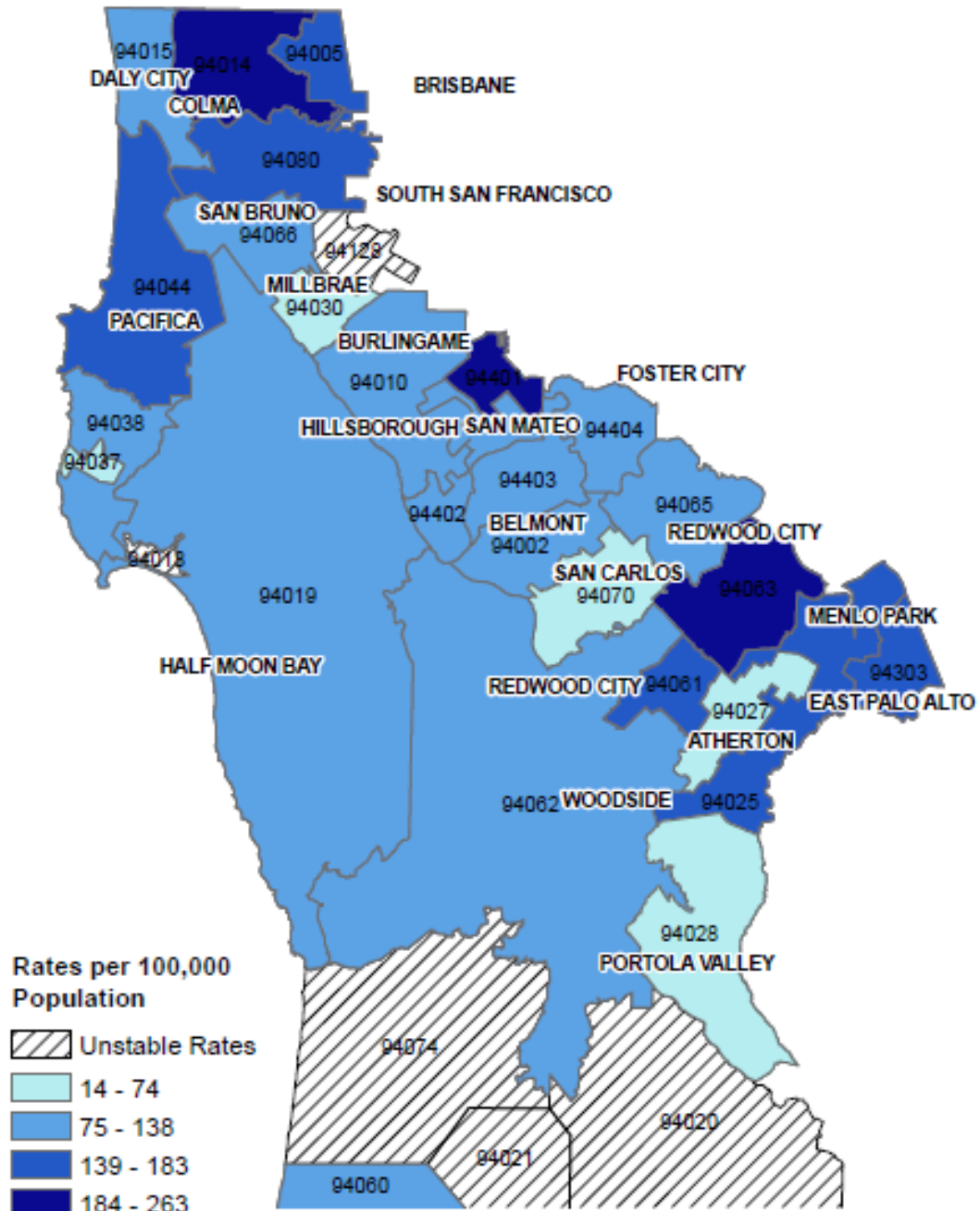
	San Mateo County ¹		California ²	
	(N = 1,616)		(N = 126,241)	
	Number	%	Number	%
Gender				
Male	1,356	83.9	109,792	87.0
Female	244	15.1	14,982	11.9
Transgender	16	1.0	1,467	1.2
Race/Ethnicity				
White	756	46.8	53,076	42.0
Black	195	12.1	22,953	18.2
Hispanic	456	28.2	42,523	33.7
Asian/Pacific Islander	174	10.8	5,060	4.0
American Indian/Alaskan Native	4	0.2	443	0.4
Multi-Race/Other/Unknown	31	1.9	2,186	1.7
Current Age³				
0 - 19	4	0.2	*	*
20 - 29	88	5.4	*	*
30 - 39	210	13.0	*	*
40 - 49	330	20.4	*	*
50 - 59	564	34.9	*	*
60 - 69	335	20.7	*	*
70 - 79	65	4.0	*	*
80+	15	0.9	*	*
Missing	5	0.3	*	*
Exposure Category				
MSM	981	60.7	83,441	66.1
IDU	155	9.6	8,317	6.6
Heterosexual contact ⁴	192	11.9	18,542	14.7
MSM/IDU	91	5.6	9,250	7.3
Other Risk ⁵	21	1.3	1,136	0.9
Not Specified	176	10.9	5,555	4.4

¹ California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section. Electronic HIV/AIDS Reporting System of California (eHARS) June 30, 2016 data set. ² California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section. Year 2014 data included as 2015 data is not yet available. ³n=1611; five individuals with missing age information. *State-level current age not available. ⁴Sex with MSM, IDU or known HIV infected person. ⁵Other risk includes perinatal transmission, exposure to blood transfusion or blood products, or receiving a transplant.

Geography of Living HIV/AIDS Cases, San Mateo County

- The highest rates where living HIV/AIDS cases currently reside are seen in the cities of Daly City, Redwood City, and San Mateo.

Figure 20. Cumulative Prevalence of Reported Living HIV/AIDS Cases by Current Residential Zip Code in San Mateo County, 2015



Data is compiled from the June 30, 2016 data set from the electronic HIV/AIDS Reporting System of California (eHARS).

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, California County Population Estimates and Components of Change by Year, July 1, 2010–2015, Sacramento, California, December 2015.

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.

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