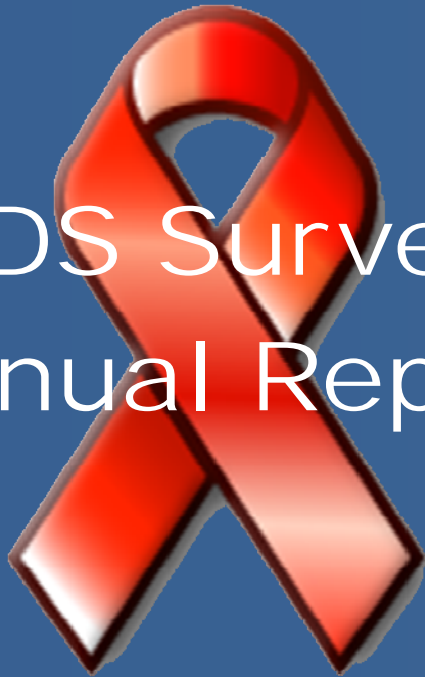


Sacramento County

HIV/AIDS Surveillance Annual Report



2014

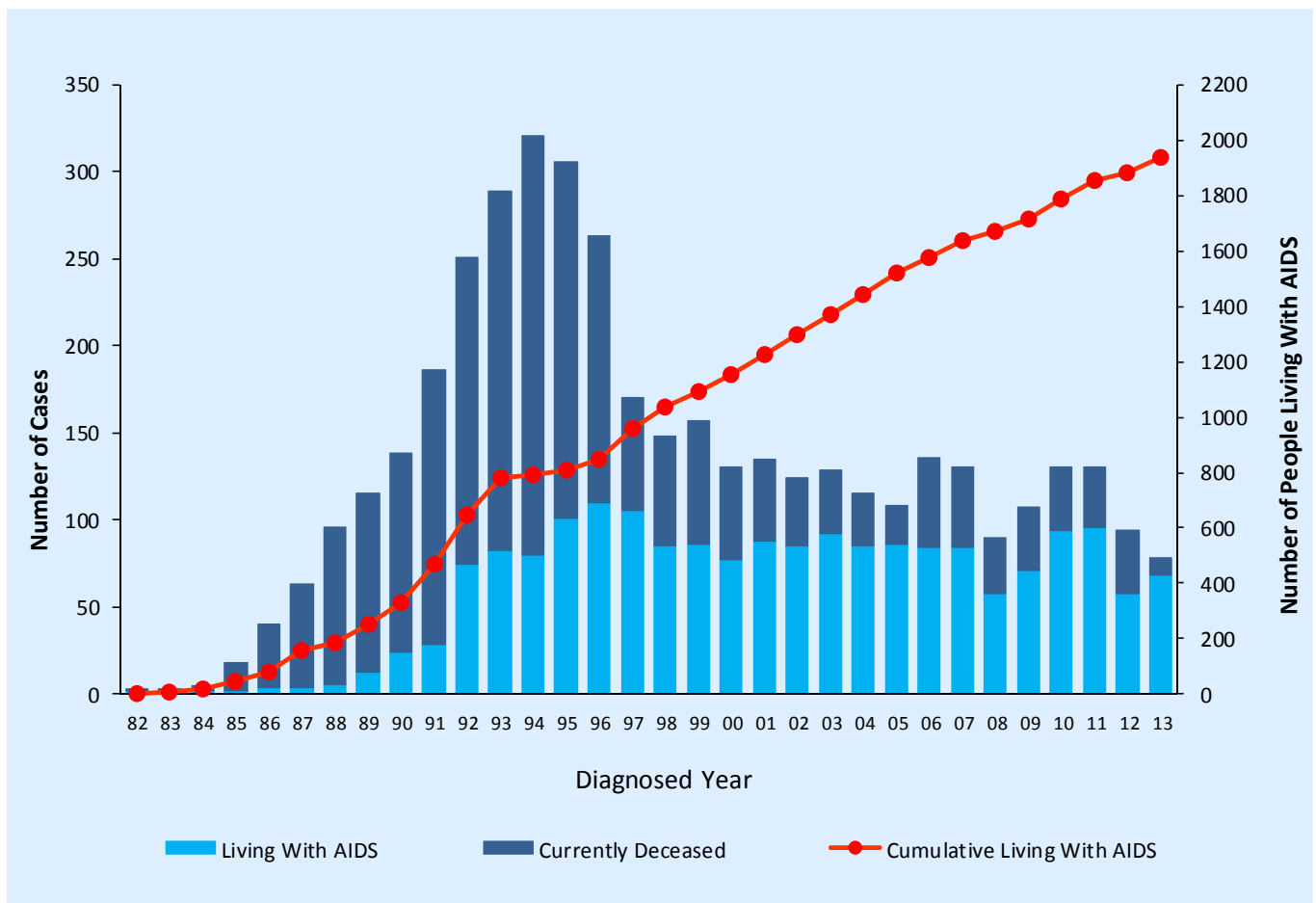
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Case Summary

- Sacramento County has collected Acquired Immune Deficiency Syndrome (AIDS) data since 1982. By the end of 2013, a total of 4,208 cumulative cases of AIDS were diagnosed and reported to Sacramento County; of those cases, 2,269 (53.9%) were deceased, and 1,939 (46.1%) were living with AIDS.
- California started the HIV name-reporting system in 2006. From 2006 to the end of 2013 a total of 1,611 HIV cases have been diagnosed and reported in Sacramento County. Of those cases, 82 (5.1%) were deceased and 1,529 (94.9%) were living with HIV.
- In 2013, 69 new AIDS cases were diagnosed and reported in Sacramento County. Of those cases, 26 (37.7%) identified as Caucasian, 22 (31.9%) identified as African American, 18 (26.1%) identified as Hispanic and 3 (4.3%) identified as Asian or Pacific Islander (API).
- In 2013, there were 132 new HIV cases diagnosed and reported to Sacramento County. Of those cases, 44 (33.3%) identified as Caucasian, 36 (27.3%) Hispanic, 35 (26.5%) identified as African American, 10 (7.6%) identified as API and 7 (5.3%) identified as “other” or “unknown” races. The Caucasian group and men who have sex with men (MSM) comprise the majority of total HIV/AIDS cases as of 2013 year-end.
- Cases are living longer with a diagnosis of HIV or AIDS; the death rate has decreased from 2.7 in 2006 to 1.9 per 100,000 population in 2012.
- Young adults in Sacramento County are being infected with HIV: the age group of 20-49 represented 85% of all HIV/AIDS cases as of 2013 year-end. For HIV, the 20-29 age group saw an increase from 27% of cases in 2006 to 40% in 2013.
- From the period 2006-2013, males have significantly higher HIV/AIDS incidence rates than females in Sacramento County. AIDS incidence rates have decreased for both males and females from 2006 to 2012.
- Hispanics more than doubled in the number of HIV cases in 2013 compared to 2006 (35 vs. 14, respectively). African Americans had the highest HIV incidence rates from 2006-2013, but Hispanics had a greater increase of HIV incidence rate from 5.1 in 2006 to 11.3 per 100,000 population, in 2013.
- Characteristics of people dying from HIV/AIDS have changed from 2006-2012
 - The proportion of persons age 50 and older increased from 41.3% to 70.0%
 - The proportion of females increased from 11% to 26%.
 - The proportion of African Americans increased from 25% to 34%.
 - Injection drug use (IDU) deaths constituted 24% versus 16%.

The number of new AIDS cases diagnosed each year among Sacramento County residents reached a peak of 356 cases in 1994 and has declined since then. Figure 1 shows vital status (currently living or deceased as of December 31st 2013) of AIDS cases by the year in which they were diagnosed. The cumulative number of cases living with AIDS has continued to rise as deaths have declined, most noticeably since antiretroviral therapy (ART) became widely available in 1995. There were 1,938 Sacramento County residents living with AIDS by the end of 2013.

Figure 1 Vital Status of AIDS Cases by Year of Diagnosis, Sacramento County, 1982-2013



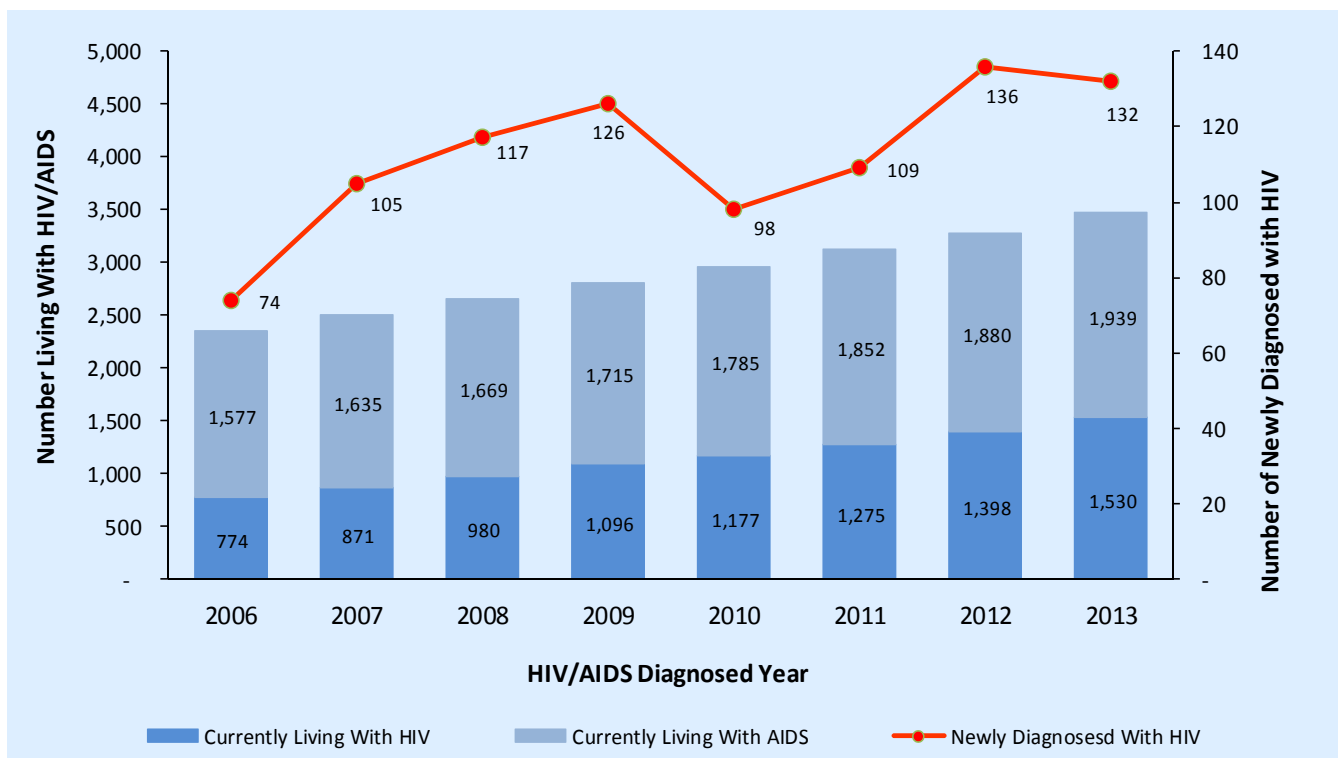
Cumulative living with AIDS: Cases are calculated by adding the number of living cases from one year to the next.

Data shows persons living with AIDS/Deceased as of December 31, 2013

Data source: Office of AIDS EHARS HIV/AIDS Data System (As of 6/30/2014), Department of Public Health, State of California

Figure 2 illustrates the cumulative (numbers from one year added to the next) number of persons newly diagnosed with HIV infection (Red Line), and the number of persons living with HIV/AIDS between 2006 and 2013. The number of new HIV cases increased from 2006 to 2013, but there was a dip in 2010. The number of persons living with HIV/AIDS increased from 2,354 in 2006 to 3,472 in 2013. The increasing number of living cases is a reflection of a steady addition of newly diagnosed cases coupled with a decline in deaths in each year. These data only include persons who have been diagnosed and reported to the County.

Figure 2 Cumulative HIV/AIDS Cases by Vital Status, Sacramento County, 2006-2013



Those currently living with HIV increased 97.7% from 774 in 2006 to 1,530 in 2013, while those currently living with AIDS increased 23.3% from 1,577 in 2006 to 1,939 in 2013.

Table 1 shows the persons living HIV/AIDS case distribution by gender, race/ethnicity, risk factor and age

group. For combined HIV/AIDS cases (the last column), males represented 86.3% of all cumulative HIV/AIDS cases, and females represented 13.7%. Caucasians represented nearly 59% of all HIV/AIDS cases; followed by African Americans (22.7%) and Hispanics (13.8%). Looking at risk factors, to HIV/AIDS, MSM represented 57% of HIV/AIDS cases. The 20-49 age group represented 85% of all HIV/AIDS cases.

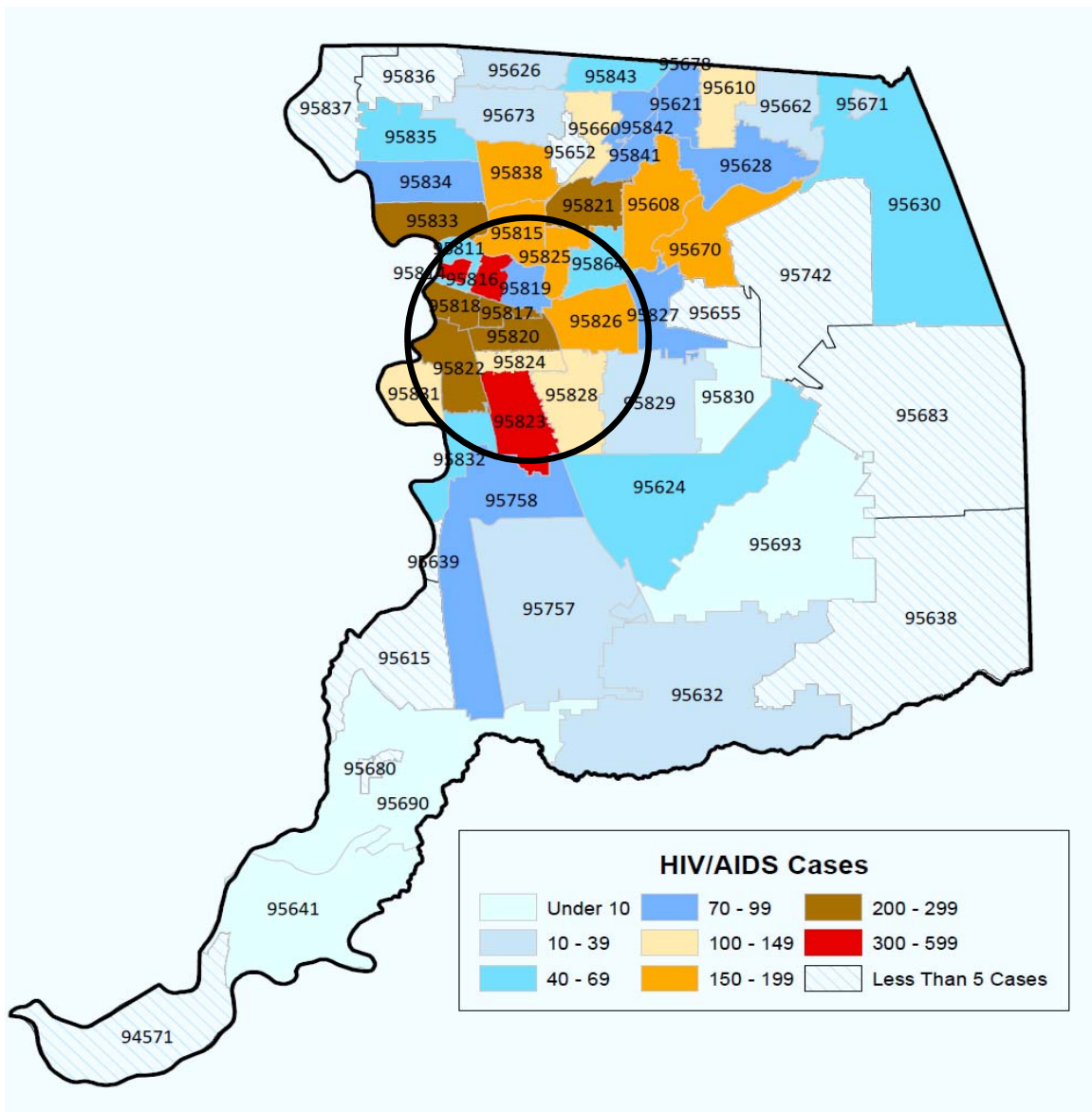
Table 1 Diagnosed and Reported HIV/AIDS Cases in Sacramento as of December 31, 2013

Indicators	HIV Cases				AIDS Cases				Combined HIV/AIDS Cases			
	Living		Cumulative		Living		Cumulative		Living		Cumulative	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Gender												
Male	1,280	83.7	1,345	83.5	1,625	83.8	3,679	87.4	2,905	83.8	5,024	86.3
Female	249	16.3	266	16.5	313	16.2	529	12.6	562	16.2	795	13.7
Race/Ethnicity												
Caucasian	794	51.9	845	52.5	1,079	55.7	2,571	61.1	1,873	54.0	3,416	58.7
African American	371	24.3	390	24.2	468	24.1	933	22.2	839	24.2	1,323	22.7
Hispanic	256	16.7	264	16.4	297	15.3	541	12.9	553	16.0	805	13.8
Asian/PI	71	4.6	71	4.4	62	3.2	87	2.1	133	3.8	158	2.7
American Indian/Alaska Native	14	0.9	15	0.9	15	0.8	34	0.8	29	0.8	49	0.8
Multi-Race	15	1.0	18	1.1	16	0.8	37	0.9	31	0.9	55	0.9
Unknown	8	0.5	8	0.5	1	0.1	5	0.1	9	0.3	13	0.2
Risk Factors												
MSM	875	57.2	914	56.7	1,046	54.0	2,429	57.7	1,921	55.4	3,343	57.4
IDU only	57	3.7	64	4.0	126	6.5	328	7.8	183	5.3	392	6.7
Heterosexual contact only	297	19.4	310	19.2	396	20.4	563	13.4	693	20.0	873	15.0
MSM & IDU	100	6.5	107	6.6	183	9.4	465	11.1	283	8.2	572	9.8
IDU & Heterosexual contact	55	3.6	63	3.9	92	4.7	225	5.3	147	4.2	288	4.9
Perinatal exposure	13	0.9	14	0.9	17	0.9	27	0.6	30	0.9	41	0.7
Other	132	8.6	139	8.6	78	4.0	171	4.1	210	6.1	310	5.3
Age Group												
Less than 13	17	1.1	18	1.1	13	0.7	25	0.6	30	0.9	43	0.7
13-19	63	4.1	63	3.9	23	1.2	27	0.6	86	2.5	90	1.5
20-29	471	30.8	479	29.7	316	16.3	684	16.3	787	22.7	1,163	20.0
30-39	468	30.6	486	30.2	719	37.1	1674	39.8	1,187	34.2	2,160	37.1
40-49	333	21.8	365	22.7	618	31.9	1239	29.4	951	27.4	1,604	27.6
50 and Older	177	11.6	200	12.4	249	12.8	559	13.3	426	12.3	759	13.0
Total	1,529	100.0	1,611	100.0	1,938	100.0	4,208	100.0	3,467	100.0	5,819	100.0

AIDS reporting started in 1982. HIV name-reporting began in California from April 2006. Statistics calculated in table 1 are diagnosed HIV/AIDS cases through December 2013. MSM = Men who have sex with men; MSM category includes both men who identify as homosexual and men who identify as bisexual. IDU = Injection drug use.

Source: California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section, data as of June 30, 2014

Map 1 Cumulative HIV/AIDS Cases by Zip Code, Sacramento County, As of 2013



Map 1 shows the spatial distribution of cumulative HIV/AIDS cases by zip code as of 2013. Nearly 50% of HIV/AIDS cases were located in the following zip codes: 95814, 95816, 95823, 95818, 95820, 95817, 95822, 95821, and 95833. Each of these zip codes had over 200 HIV/AIDS cases. Zip code 95814 had the highest number of HIV/AIDS cases over the years (583 cases), followed by zip code 95816 (463) and 95823 (375). The following zip codes have between 101-200 HIV/AIDS cases: 95815, 95825, 95838, 95608, 95826, 95670, 95831, 95828, 95824, 95660 and 95610, and are shown in the black circled area.

Source: California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section, data as of June 30, 2014

HIV by Race/Ethnicity

From 2006 to 2013, the total number of newly diagnosed HIV cases increased from 70 in 2006 to 131 in 2013 for all race/ethnicities. Hispanics more than doubled in 2013 compared to 2006 (35 vs. 14) [Figure 3]. African Americans had the highest HIV incidence rates across all the listed years, but Hispanics had a greater increase in HIV incidence rates from 5.1 in 2006 to 11.3 per 100,000 population in 2013 [Figure 4]. Caucasian incidence rates peaked in 2009 and have since decreased.

Figure 3 HIV Cases by Race/Ethnicity, Sacramento County, 2006-2013

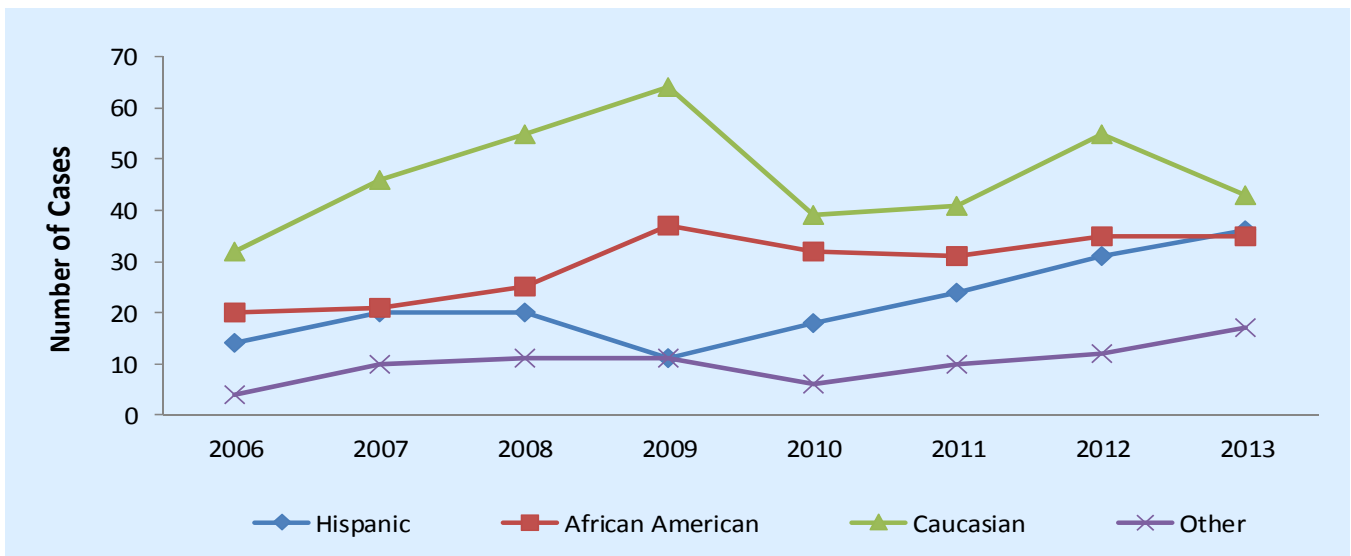
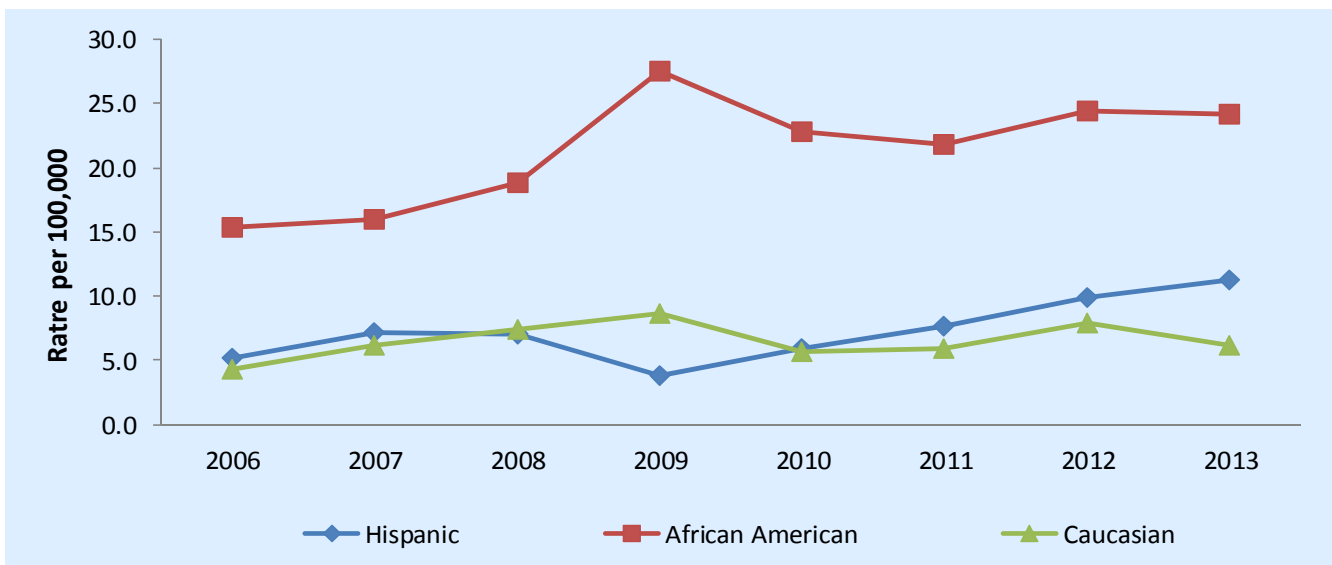


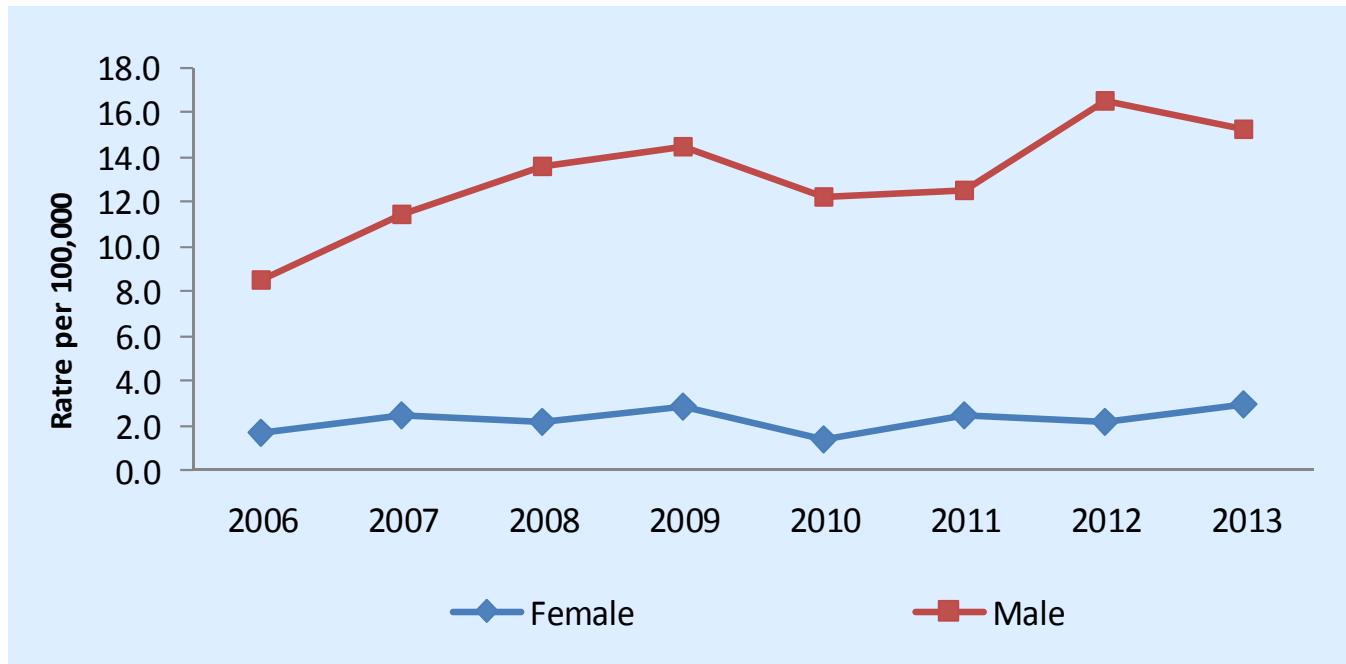
Figure 4 HIV Incidence Rates by Race/Ethnicity, Sacramento County, 2006-2013



HIV by Gender

Males have much higher HIV incidence rates compared to females [Figure 5]. Both males and females had significant increases in incidence rates: males increased from 8.5 in 2006 to 15.3 per 100,000 in 2013 (80.4%), while females increased from 1.7 to 3.0 per 100,000 in 2013 (76.2%).

Figure 5 HIV Incidence Rates by Gender, Sacramento County, 2006-2013



HIV by Exposure

Most males diagnosed with HIV infection in Sacramento County are MSM across all listed years. In 2013, 62.4% of HIV cases were MSM. Male HIV cases with heterosexual contact decreased from 2006 to 2013: they were only 6.4% of HIV cases in 2013. Heterosexual contact is the leading exposure category for female HIV cases (Table2).

Table 2 Number of HIV Cases by Exposure Category, Sacramento County, 2006-2013

Year	Male									Female						Total	
	MSM		IDU		Heterosexual		Other		Total	Heterosexual		IDU		Other			Total
	Num	%	Num	%	Num	%	Num	%		Num	%	Num	%	Num	%		
2006	40	65.6	8	13.1	12	19.7	1	1.6	61	8	61.5	5	38.5	0	0.0	13	74
2007	56	65.1	16	18.6	13	15.1	1	1.2	86	14	73.7	4	21.1	1	5.3	19	105
2008	74	74.7	10	10.1	13	13.1	2	2.0	99	15	83.3	2	11.1	1	5.6	18	117
2009	74	71.2	11	10.6	13	12.5	6	5.8	104	14	63.6	3	13.6	5	22.7	22	126
2010	62	70.5	7	8.0	11	12.5	8	9.1	88	2	20.0	3	30.0	5	50.0	10	98
2011	67	74.4	9	10.0	4	4.4	10	11.1	90	9	47.4	4	21.1	6	31.6	19	109
2012	72	60.0	9	7.5	7	5.8	32	26.7	120	11	68.8	1	6.3	4	25.0	16	136
2013	68	61.8	6	5.5	7	6.4	29	26.4	110	13	59.1	2	9.1	7	31.8	22	132

HIV by Age

Table 3 shows the annual number of HIV diagnoses between 2006 and 2013 by age groups. About 80% of HIV cases were distributed in the 20 to 49 age group. From 2006 to 2013, the proportion of HIV cases increased from 27.0% to 39.8% for the 20 to 29 years-old age group. The proportion for age group 30 to 49 decreased from 59.4% to 36.1%.

Table 3 HIV Infection by Age Group at Diagnosis, Sacramento County, 2006-2013

Age Group	2006		2007		2008		2009		2010		2011		2012		2013	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
0-19	3	4.1	5	4.8	5	4.3	12	9.5	6	6.1	13	11.9	6	4.4	12	9.1
20-29	20	27.0	33	31.4	40	34.2	33	26.2	41	41.8	38	34.9	56	41.2	53	40.2
30-39	24	32.4	31	29.5	29	24.8	36	28.6	18	18.4	28	25.7	31	22.8	28	21.2
40-49	20	27.0	19	18.1	28	23.9	25	19.8	19	19.4	21	19.3	20	14.7	20	15.2
50 and Over	7	9.5	17	16.2	15	12.8	20	15.9	14	14.3	9	8.3	23	16.9	19	14.4
Total	74	100.0	105	100.0	117	100.0	126	100.0	98	100.0	109	100.0	136	100.0	132	100.0

Source: California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section, data as of June 30, 2014

AIDS by Race/Ethnicity

From 2006 to 2013, the total number of newly diagnosed AIDS cases decreased from 84 in 2006 to 68 in 2013. But for African Americans, the newly diagnosed AIDS cases doubled in 2013 compared to 2006 (22 vs. 11). Caucasians had a significant drop from 51 in 2006 to 26 in 2013. Hispanics had relatively stable AIDS numbers in the listed years (Figure 6). For incidence rates, African Americans had higher AIDS rates of all race/ethnicity, with a 44.2% increase from 8.5 per 100,000 population in 2006 to 14.8 in 2013. Caucasians decreased 24.7% from 6.9 in 2006 to 5.2 in 2013 (Figure 7), while Hispanics remained steady.

Figure 6 AIDS Cases by Race/Ethnicity, Sacramento County, 2006-2013

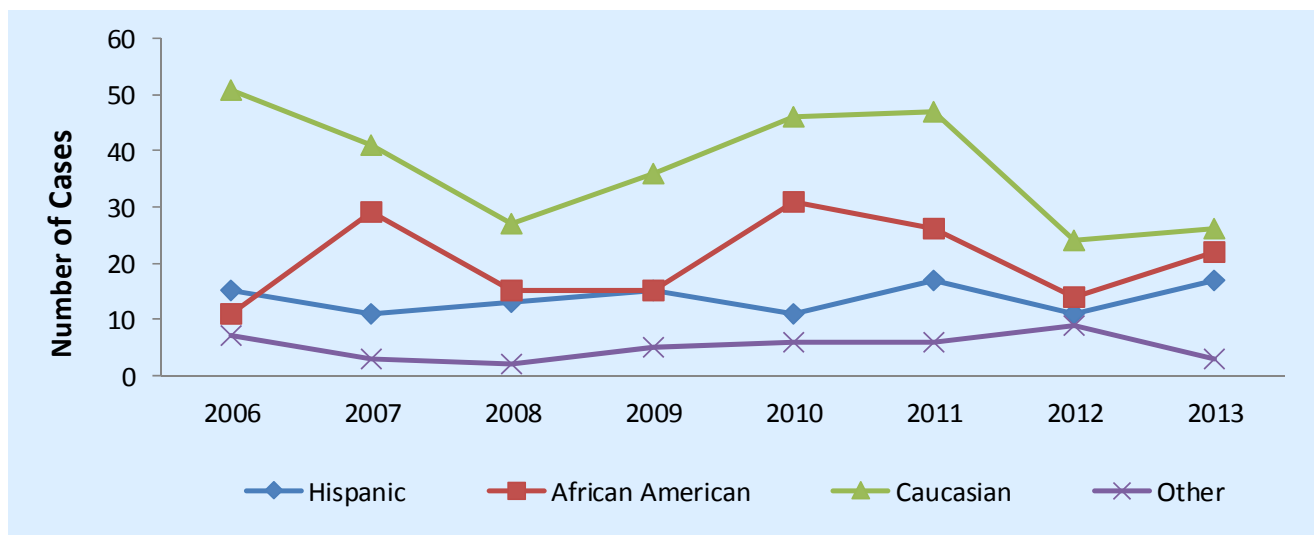
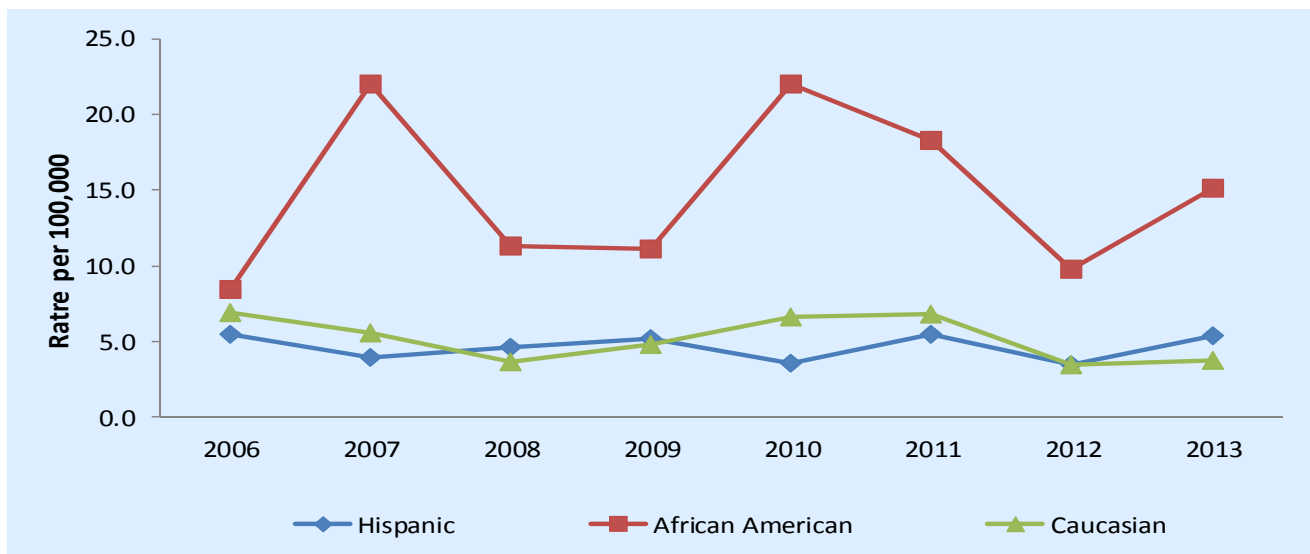


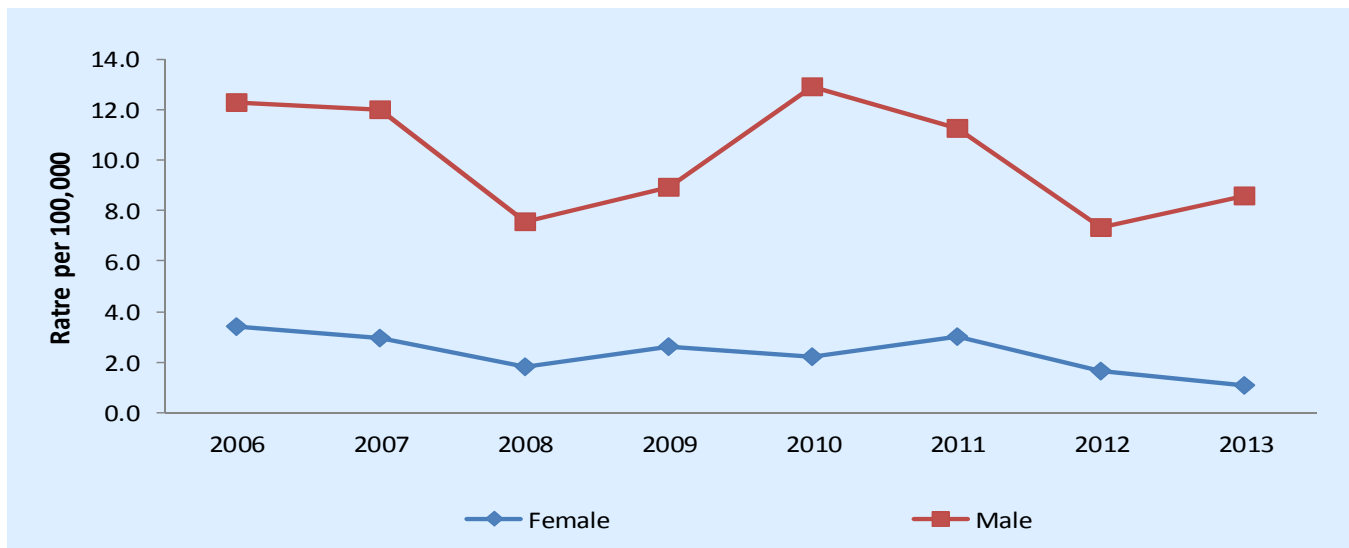
Figure 7 AIDS Incidence Rates by Race/Ethnicity, Sacramento County, 2006-2013



AIDS by Gender

Males had higher AIDS incidence rates compared to females (Figure 8). The incidence rates for both males and females have significantly decreased. Female rates dropped by over 200% from 3.4 in 2006 to 1.1 per 100,000 in 2013; whereas rates for males decreased 43.5% from 12.3 in 2006 to 8.6 per 100,000 in 2013.

Figure 8 AIDS Incidence Rates by Gender, Sacramento County 2006-2013



AIDS by Exposure

The principal mode of exposure across all years was MSM. The second most prevalent exposure connected to having HIV progress to AIDS was due to injection drug use (IUD) for both males and females (Table 4). The AIDS case percentage for male heterosexual contact increased from 13.1% in 2006 to 18.0% in 2013.

Table 4 AIDS Cases by Exposure Category, Sacramento County, 2006-2013

Year	Male									Female						Total	
	MSM		IDU		Heterosexual		Other		Total	Heterosexual		IDU		Other			Total
	No.	%	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%		
2006	57	67.9	14	16.7	11	13.1	2	2.4	84	18	75.0	5	20.8	1	4.2	24	74
2007	49	59.0	16	19.3	16	19.3	2	2.4	83	17	81.0	3	14.3	1	4.8	21	105
2008	35	66.0	6	11.3	11	20.8	1	1.9	53	8	61.5	4	30.8	1	7.7	13	117
2009	37	58.7	14	22.2	9	14.3	3	4.8	63	13	68.4	3	15.8	3	15.8	19	126
2010	47	52.2	18	20.0	22	24.4	3	3.3	90	13	81.3	2	12.5	1	6.3	16	98
2011	43	54.4	13	16.5	12	15.2	11	13.9	79	14	63.6	7	31.8	1	4.5	22	109
2012	24	46.2	7	13.5	4	7.7	17	32.7	52	5	41.7	5	41.7	2	16.7	12	136
2013	34	55.7	6	9.8	11	18.0	10	16.4	61	7	87.5	0	0.0	1	12.5	8	132

AIDS by Age

Table 3 shows the annual number of AIDS diagnoses between 2006 and 2013 by age group. Over 50% of AIDS cases were distributed in the 40-and-older age groups. From 2006 to 2013, the proportion of AIDS cases increased from 12.0% to 17.4% for the 20 to 29 years-old age group and 16.7% to 24.6% for the 50-and-older age group.

Table 5 AIDS Infection by Age Group at Diagnosis, Sacramento County, 2006-2013

Age Group	2006		2007		2008		2009		2010		2011		2012		2013	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
0-19	3	2.8	3	2.9	3	4.5	1	1.2	3	2.8	0	0.0	1	1.6	1	1.4
20-29	13	12.0	11	10.6	12	18.2	13	15.9	17	16.0	26	25.7	14	21.9	12	17.4
30-39	36	33.3	29	27.9	16	24.2	22	26.8	18	17.0	18	17.8	16	25.0	14	20.3
40-49	38	35.2	43	41.3	24	36.4	28	34.1	36	34.0	29	28.7	17	26.6	25	36.2
50+	18	16.7	18	17.3	11	16.7	18	22.0	32	30.2	28	27.7	16	25.0	17	24.6
Total	108	100.0	104	100.0	66	100.0	82	100.0	106	100.0	101	100.0	64	100.0	69	100.0

Source: California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section, data as of June 30, 2014

HIV/AIDS Deaths

361 diagnosed HIV/AIDS cases in Sacramento County died in the period of 2006 to 2012. Table 6 details HIV/AIDS deaths by gender, race/ethnicity, exposure and age group from 2006 to 2012. There was a significant increase in the percentage of deaths for age group 50 years and older, from 41.3% in 2006 to 70.0% in 2012, while the percentage of deaths decreased for age group 40-49, from 42.9% in 2006 to 16.0% in 2012.

Table 6 HIV/AIDS Deaths by Demographic and Risk Characteristics, Sacramento County, 2006-2012

Indicators	Year of Death													
	2006		2007		2008		2009		2010		2011		2012	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Gender														
Male	56	88.9	49	87.5	24	60.0	40	85.1	45	78.9	44	91.7	37	74.0
Female	7	11.1	7	12.5	16	40.0	7	14.9	12	21.1	4	8.3	13	26.0
Race/Ethnicity														
Caucasian	35	55.6	34	60.7	23	57.5	30	63.8	34	59.6	29	60.4	24	48.0
African American	16	25.4	10	17.9	12	30.0	8	17.0	13	22.8	9	18.8	17	34.0
Hispanic	10	15.9	6	10.7	4	10.0	5	10.6	5	8.8	7	14.6	5	10.0
Asian/PI	0	0.0	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0
American Indian/Alaska Native	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.0
Multi-Race	2	3.2	6	10.7	1	2.5	4	8.5	4	7.0	3	6.3	2	4.0
Risk Factors														
MSM	36	57.1	26	46.4	14	35.0	23	48.9	24	42.1	29	60.4	16	32.0
IDU	10	15.9	8	14.3	11	27.5	6	12.8	8	14.0	9	18.8	12	24.0
Heterosexual contact	12	19.0	11	19.6	12	30.0	9	19.1	15	26.3	4	8.3	7	14.0
MSM & IDU	3	4.8	11	19.6	3	7.5	7	14.9	5	8.8	5	10.4	5	10.0
Other	2	3.2	0	0.0	0	0.0	2	4.3	5	8.8	1	2.1	10	20.0
Age Group														
Less than 13	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0
13-19	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20-29	2	3.2	3	5.4	0	0.0	1	2.1	3	5.3	2	4.2	0	0.0
30-39	8	12.7	11	19.6	4	10.0	4	8.5	6	10.5	4	8.3	6	12.0
40-49	27	42.9	22	39.3	13	32.5	21	44.7	21	36.8	12	25.0	8	16.0
50 and Older	26	41.3	20	35.7	23	57.5	21	44.7	27	47.4	30	62.5	35	70.0
Total	63	100	56	100	40	100	47	100	57	100	48	100	50	100

Source: California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section, data as of June 30, 2014

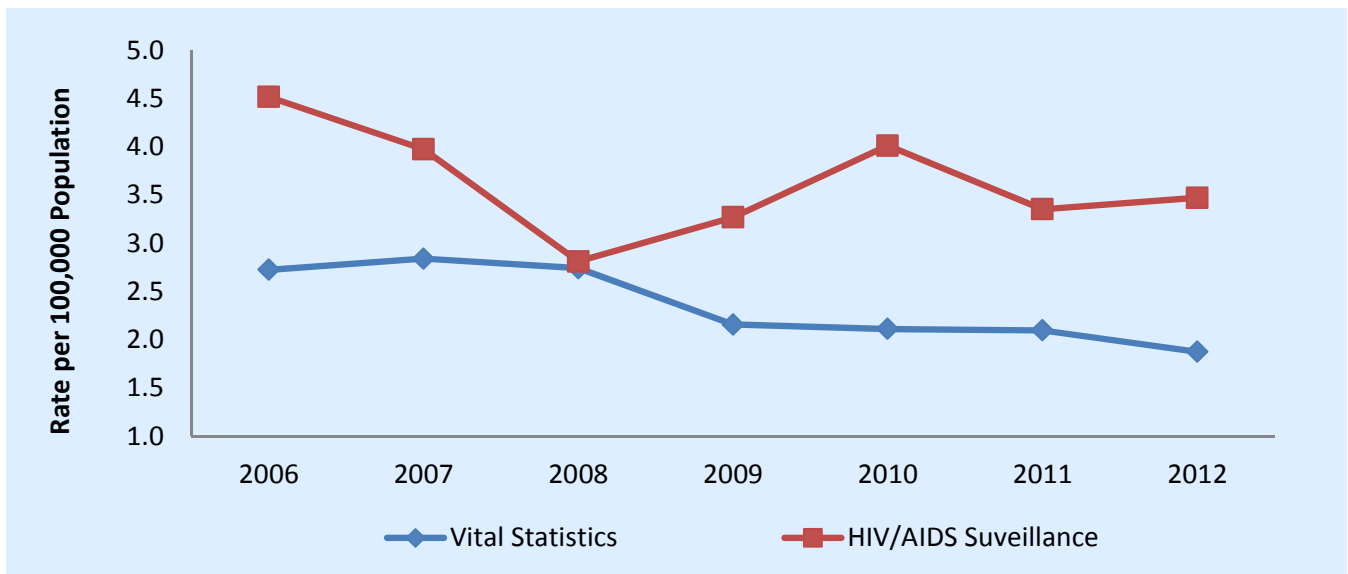
HIV/AIDS Mortality Rates

Comparing the death rates in HIV/AIDS surveillance database to the California Vital Statistics death file for Sacramento County residents, death rates for have declined. In the Vital Statistics Death File, the death rates for the underlying cause of death due to HIV/AIDS decreased from 2.7 in 2006 to 1.9 per 100,000 in 2012. In the Sacramento County HIV/AIDS surveillance system, the HIV/AIDS death rate dropped from 4.5 in 2006 to 3.5 in 2012.

CAVEAT OF THE DATA

The death rates in the HIV/AIDS Surveillance System may be higher than the rates in Vital Statistics death file due to possible under reporting of HIV/AIDS as an underlying cause on the death certificate.

Figure 9 HIV/AIDS Death Rates in Sacramento County, 2006-2012



Source: California Department of Public Health, Office of AIDS, HIV/AIDS Surveillance Section, data as of June 30, 2014
 Vital Stats: California Department of Public Health, death master file





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