SANTA BARBARA COUNTY

HIV ANNUAL REPORT 2018

Santa Barbara County

PUBLIC Health

DEPARTMENT

ACKNOWLEDGMENTS

This report was prepared by the HIV Surveillance Program. We wish to thank our colleagues in Disease Control and Prevention and the Epidemiology Unit.

In addition, we wish to acknowledge the contribution of persons with HIV, HIV health care providers, community groups, researchers, and members of the community. Publication of this report would not have been possible without their cooperation, dedication, and hard work.

Santa Barbara County Public Health Department	
Director	Dr. Van Do-Reynoso, PhD, MPH
Health Officer	Dr. Henning Ansorg, MD
HIV Medical Director	Dr. Lynn Fitzgibbons, MD
Community Health	
Deputy Director	Paige Batson, MSN, RN, MA
Assistant Deputy Director	Edward Tran, MSN, RN
Senior Epidemiologist	Joy Kane, MPH
HIV Surveillance	
Epidemiologist	Michelle Wehmer, MPH
HIV Prevention	
Program Administrator	Adriana Almaguer
Staff	Eva Avila Connie Duarte Susie Herrera Antoinette Macias

ABBREVIATIONS

ART	Antiretroviral therapy
CDC	Centers for Disease Control and Prevention
CDPH OA	California Department of Public Health Office of AIDS
CHC	Community Health Clinic of the Central Coast
HIV	Human immunodeficiency virus
MSM	Men who have sex with men
MSM-PWID	Men who have sex with men and who also inject drugs
PLWH	Persons living with HIV
PMD	Private medical doctor
PrEP	Pre-exposure prophylaxis
PWID	People who inject drugs
SBCPHD	Santa Barbara County Public Health Department
SBNC	Santa Barbara Neighborhood Clinics
STI	Sexually transmitted infection

LETTER FROM THE MEDICAL DIRECTOR

Greetings,

Thank you for taking the time to review the state of the HIV epidemic in Santa Barbara County. As you will see, we have made tremendous progress since the dark and early days with HIV, with remarkable treatment and prevention advances such that many patients are now living as long and as well as their HIV-negative friends, partners and neighbors. Indeed, what was once regarded as life-threatening has evolved into a treatable, controllable, chronic condition for many. Unfortunately, however, our patients' struggle to treat and control HIV is often complicated by the very conditions that placed them at risk, namely mental illness and substance use disorders. We continue to lose patients to HIV complications every year, often when these concurrent problems are poorly controlled. We thank our partners in Santa Barbara County, who work tirelessly to improve the lives of those struggling with mental illness and substance use disorders, and are confident that these efforts will strengthen our fight against new HIV infections.

As you see here, there continues to be transmission of HIV in our community, likely by those who are tragically unaware of their HIV status and continue to infect others. As we look at the patients who learned of their HIV infection in 2018, we see that a third of newly diagnosed patients had advanced infection, or AIDS, at the time of their diagnosis. These patients likely lived for years unknowingly with this infection, and potentially with many missed opportunities for testing. Routine HIV testing is imperative, and readily available in our community through many primary care offices, community clinics and Pacific Pride Foundation. Additionally, with the availability of HIV pre-exposure prophylaxsis (PrEP), we encourage providers to consider this option to prevent HIV for at-risk patients.

In reviewing this HIV Annual Report, we ask you to consider (1) the current treatment and prevention options for HIV, (2) the excellent prognosis for most patients with HIV in 2019, and (3) the tragedy of missed opportunities in HIV testing for those who were diagnosed too late. Please join us in encouraging everyone in Santa Barbara County, including partners, friends, neighbors and patients, to "know your status"!

Sincerely,

Lynn N. Fitzgibbons M.D.

Medical Director, HIV Program

Santa Barbara County Public Health Department

EXECUTIVE SUMMARY

Reporting of the HIV epidemic in Santa Barbara County (SBC) began in 1986. Over the course of the epidemic, certain populations have been disproportionately affected by HIV. Fortunately most people living with HIV can live long and healthy lives if they are diagnosed and get treatment. The Santa Barbara County Public Health Department believes everyone should have access to HIV diagnostic and treatment services.

The following report examines seven aspects of the epidemic in Santa Barbara County.

1. **Residents living with HIV**
   a. In 2018, 549 residents were living with HIV, of which 46% were Hispanic and 45% white non-Hispanic.
   b. Compared to California and the U.S., SBC residents living with HIV were older (58% were persons 50 years or older).
   c. Of the 32 newly HIV diagnosed residents, all were male and 39% were between 30-39 years old at diagnosis.
2. **HIV Incidence Trends**
   a. Since the beginning of the epidemic to 2018, there was a proportional increase of new cases residing in north county from 6% to 28%.
   b. The HIV infection rate in Santa Barbara County has remained relatively stable for the past five years at approximately 6.2 cases per 100,000.
   c. The proportion of newly diagnosed HIV cases in SBC that are male increased by 9% from 2004-2008 (17 cases) to 2014-2018 (26 cases). In 2018, all 32 newly diagnosed HIV cases were male.
   d. The number of people newly diagnosed with HIV that are Hispanic has been increasing over the last ten years. The average number of newly diagnosed Hispanic cases doubled from 8 cases in 2009-2011 to 16 cases in 2016-2018.
   e. Between 2014-2018, approximately 54% of all new HIV cases resided in 3 south county cities (Santa Barbara, Goleta, and Carpinteria).
   f. Santa Barbara City 5-year infection rate (11.9 cases per 100,000) was the highest for any city in SBC.
   g. When analyzing birth sex and age at diagnosis, the highest 5-year infection rate was seen in males 30-39 years old followed by males 20-29 years.
3. **Testing**
   a. Private medical providers tested over a third of the newly diagnosed HIV residents.
   b. The Public Health Department and Planned Parenthood also diagnosed approximately a quarter of new HIV patients.
   c. The high percentage of hospital diagnosed patients (11%) is concerning and linked with the identification of some of the dually diagnosed HIV/AIDS patients.

EXECUTIVE SUMMARY (CONTINUED)

4. Late stage HIV/AIDS diagnosis

a. Late stage HIV/AIDS diagnosis increased to 31.3% in 2018.

b. Late stage diagnosis was higher among Hispanics, persons aged 40 years or older at time of diagnosis, and heterosexual persons.

5. HIV-3/AIDS Cases

a. Between 2014-2018, the averages of both new HIV-3 diagnoses and HIV-3 deaths equaled 7 cases per year. explaining the steady count of persons living with HIV-3/AIDS in that same time period.

6. Deaths

a. Since 1981, the cumulative number of deaths among Santa Barbara County HIV diagnosed cases was 582.

b. Between 2009 to 2018, 48 deaths occurred among people living with HIV in SBC.

   i. 92% of the deaths were males.

   ii. The proportions of deaths in whites and MSM-PWID increased.

   iii. The majority of deaths during each of these years continues to occur among MSM and persons aged 50 years and older.

7. Continuum of Care

a. Engagement in care of persons living with HIV increased to 82% in 2017 from 73% in 2016, meeting the Office of AIDS program goal of 76%.

b. The program goal of attaining viral suppression (a documented viral load test below 200) among 64% of persons living with HIV was exceeded, the suppression rate increased from 64% in 2016 to 73% in 2017.

PERSONS LIVING WITH HIV

Santa Barbara County (SBC) has conducted HIV case surveillance through active and passive reporting methods and analyzed data over the course of the HIV epidemic. As of December 31, 2018, there were 549 known SBC residents diagnosed and living with HIV (Table 1). Persons living with HIV (PLWH) are defined as people diagnosed with HIV regardless of disease staging and reported to the public health department. PLWH include new HIV diagnosed residents (incident cases) as well as residents living with HIV (prevalent cases),

Similar to PLWH reported in California (2017 data) and the U.S. (2016 data), SBC PLWH were more likely to be men and men who have sex with men (MSM). SBC PLWH were older than the state and national data.

Compared to persons newly diagnosed with HIV in California (2017 data) and the U.S. (2017 data), newly HIV diagnosed SBC residents were more likely to be men and Hispanic, but similar to the state and national data, the 30-39 year age grouping had the highest proportion of new diagnoses. SBC's newly HIV diagnosed persons appear to have a lower transmission of HIV via MSM due to the lack of transmission mode/risk factor identification in approximately 40% of the residents.

Table 1: Characteristics of Persons Living with HIV as of December 2018[1], Santa Barbara County

	Persons Living with HIV cases[1]				Newly Diagnosed HIV cases[2]				
	2018 SBC (N=549)		2017 CA (N=135,082)[3]	2016 US (N=1,008,929)		SBC (N=32)		2017 CA (N=4,791)[3]	2017 US (N=38,281)º
	Number	(%)	(%)	(%)		Number	(%)	(%)	(%)
Birth Sex¶									
Male	471	86%	88%	75%		32	100%	89%	81%
Female	78	14%	12%	23%		0	0%	11%	19%
				0%					
Race/Ethnicity									
White	245	45%	39%	30%		11	34%	26%	26%
Hispanic	253	46%	36%	23%		16	50%	47%	25%
African American	27	5%	17%	41%		0	0%	17%	44%
Asian/Pacific Islander	12	2%	4%	1%		0	0%	7%	3%
Multi-race	7	1%	3%	4%		0	0%	3%	2%
American Indian/Other/Unknown	5	1%	0%	0%		5	16%	0%	1%
Age (as of 12/31/2018)									
0-24	20	4%	3%	4%		5	16%	20%	21%
25-29	24	4%	6%	7%		–		20%	20%
30-39	77	14%	17%	17%		10	31%	28%	26%
40-49	113	21%	23%	24%		6	19%	17%	16%
50-59	176	32%	32%	31%		–		11%	12%
60-64	70	13%	10%	9%		–		2%	3%
>=65	69	13%	10%	8%		–		2%	2%
Transmission Category									
MSM	336	61%	68%	54%		19	59%	63%	67%
PWID	36	7%	6%	13%				5%	6%
MSM-PWID	34	6%	7%	5%				4%	3%
Heterosexual	71	13%	15%	26%				11%	24%
Other*/Unidentified	72	13%	5%	2%	Other**	13	41%	11%	0%
Total	**549**					**32**			

Due to suppression rules, categorical variables have been aggregated when cell counts are less than 5 or reported with a dash.

[1] Reported Santa Barbara County residents living with HIV as of December 31, 2018, reported through March 31, 2019.

[2] Newly diagnosed HIV patients residing in SBC at time of diagnosis, reported through March 31, 2019.

[3] CA data reported as of 1/09/2019 for cases diagnosed as of December 31, 2017.

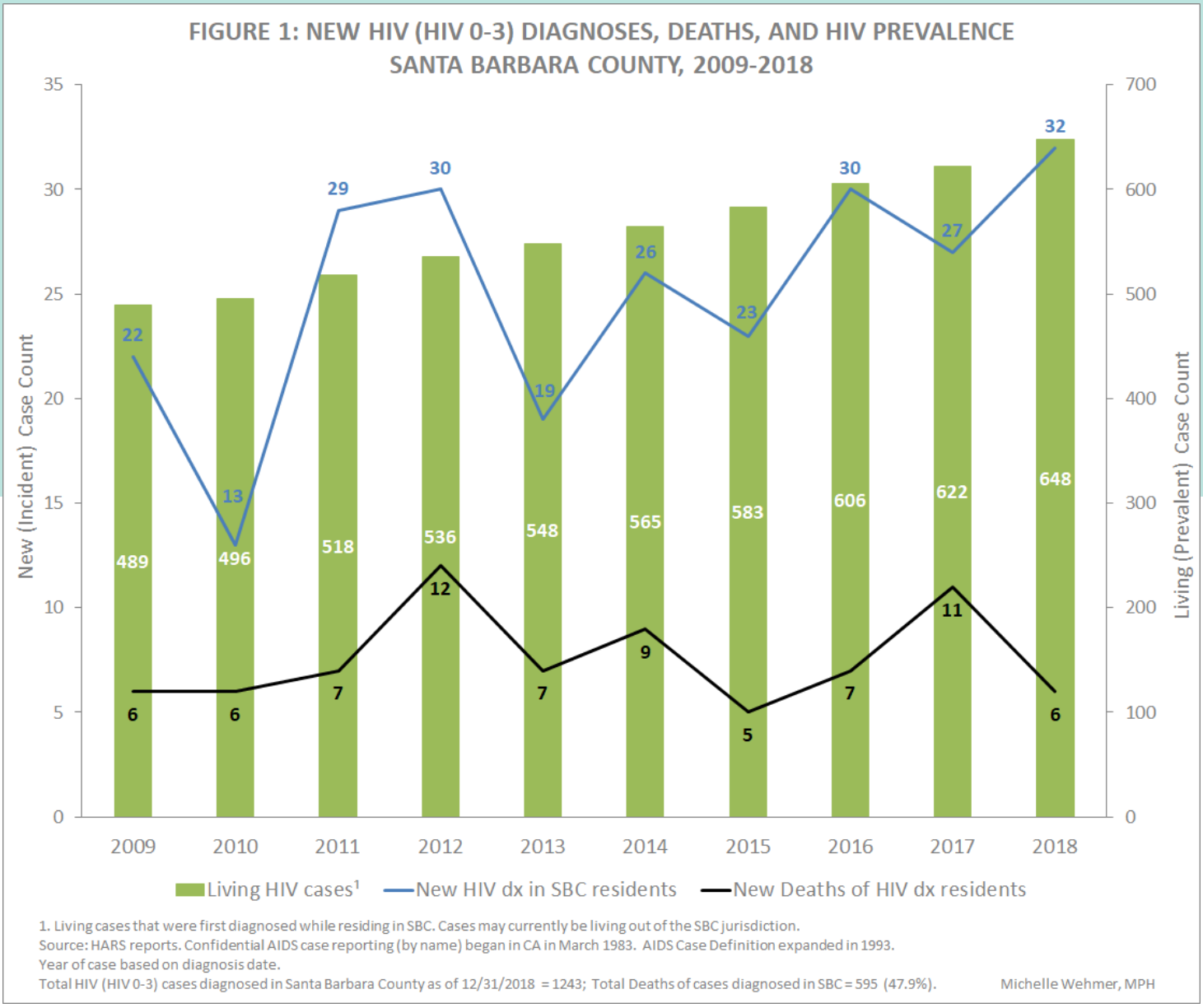
º US data is reported through June 30, 2018 and reflect cases diagnosed through December 31, 2017. U.S. living case data are available through December 31, 2016 due to delays in death reporting. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2017-vol-

¶Table 22b. US HIV diagnosis data did not report birth sex of patients less than 13 (N=99).

*Other includes perinatal, Other, No risk factor identified/reported

** MSM & PWID, Hetero, No risk factor identified

Referring to Figure 1, the number of PLWH includes persons who were diagnosed with HIV during or prior to the year shown and not known to have died by the end of that year. The number of PLWH has been steadily increasing and peaked in 2018 at 648. These data includes people who have been diagnosed with HIV (all disease stages) and reported to the health department. People who are unaware (undiagnosed) and persons diagnosed with an anonymous HIV test are not included unless they also tested confidentially or entered care in SBC. Death reporting in 2018 is approximately 90% complete. With small, upward revisions of new diagnoses and annual deaths expected, these figures may underestimate the true prevalence and incidence of HIV in SBC.



1. Living cases that were first diagnosed while residing in SBC. Cases may currently be living out of the SBC jurisdiction.
Source: HARS reports. Confidential AIDS case reporting (by name) began in CA in March 1983. AIDS Case Definition expanded in 1993.
Year of case based on diagnosis date.
Total HIV (HIV 0-3) cases diagnosed in Santa Barbara County as of 12/31/2018 = 1243; Total Deaths of cases diagnosed in SBC = 595 (47.9%).

Michelle Wehmer, MPH

HIV INCIDENCE TRENDS

The volume of new diagnoses has been increasing over the last 15 years as seen in Table 2. Although the percentage of HIV-only diagnosis (defined as a confirmed HIV case with a CD4 count greater than 200, or where a CD4 was undocumented and no AIDS defining illnesses charted) has been increasing, suggesting the occurrence of earlier prognosis of disease. However, in 2018 the 31% of cases diagnosed were dual HIV/AIDS diagnoses. This is alarming and indicates need for continued universal screening and community education and outreach. The 5-year averages of newly HIV diagnoses in Santa Barbara County male residents increased 9% from 17 cases (85% of cases) in 2004-2008 to an average of 26 cases (93% of cases) in 2014-2018. The new cases reported in 2018 reflect this trend with 100% of the cases being male.

Table 2: Selected Characteristics of Persons Recently Diagnosed with HIV Infection (HIV 1-3), Santa Barbara County[1]

	2004-2008			2009-2013			2014-2018			2018	
	N	5 YR AVE	%	N	5 YR AVE	%	N	5 YR AVE	%	N	%
Total	98	20		113	23		138	28		32	
Diagnosis											
HIV-only	58	12	59%	64	13	57%	97	19	70%	22	69%
HIV and later AIDS	18	4	18%	21	4	19%	13	3	9%	0	0%
HIV/AIDS co-diagnosed	22	4	22%	28	6	25%	28	6	20%	10	31%
Birth Sex											
Male	83	17	85%	97	19	86%	129	26	93%	32	100%
Female	15	3	15%	16	3	14%	9	2	7%	0	0%
Race/Ethnicity											
White	31	6	32%	39	8	35%	50	10	36%	12	38%
Latino	58	12	59%	63	13	56%	73	15	53%	16	50%
Asian/Pacific Islander	–	–	–	–	–	–	5	1	4%	–	–
Black	6	1	6%	6	1	5%	6	1	4%	–	–
American Indian/Alaska Nat	–	–	–	0	0	0%	0	0	0%	–	–
Multi-race	–	–	–	–	–	–	–	–	–	–	–
Age at Diagnosis											
<20	–	–	–	5	1	4%	9	2	7%	–	–
20-29	35	7	36%	30	6	27%	41	8	30%	7	22%
30-39	27	5	28%	36	7	32%	38	8	28%	10	31%
40-49	24	5	24%	24	5	21%	25	5	18%	6	19%
50-59	7	1	7%	13	3	12%	18	4	13%	–	–
60+	–	–	–	5	1	4%	7	1	5%	–	–
Transmission Category											
MSM	58	12	59%	62	12	55%	85	17	62%	19	59%
MSM/PWID	7	1	7%	5	1	4%	6	1	4%	–	–
PWID	8	2	8%	5	1	4%	–	–	–	0	0%
Heterosexual Contact	23	5	23%	14	3	12%	–	–	–	–	–
Risk not Specified/Unknown	–	–	–	27	5	24%	39	8	28%	9	28%
Other	0	0	0%	0	0	0%	–	–	–	0	0%

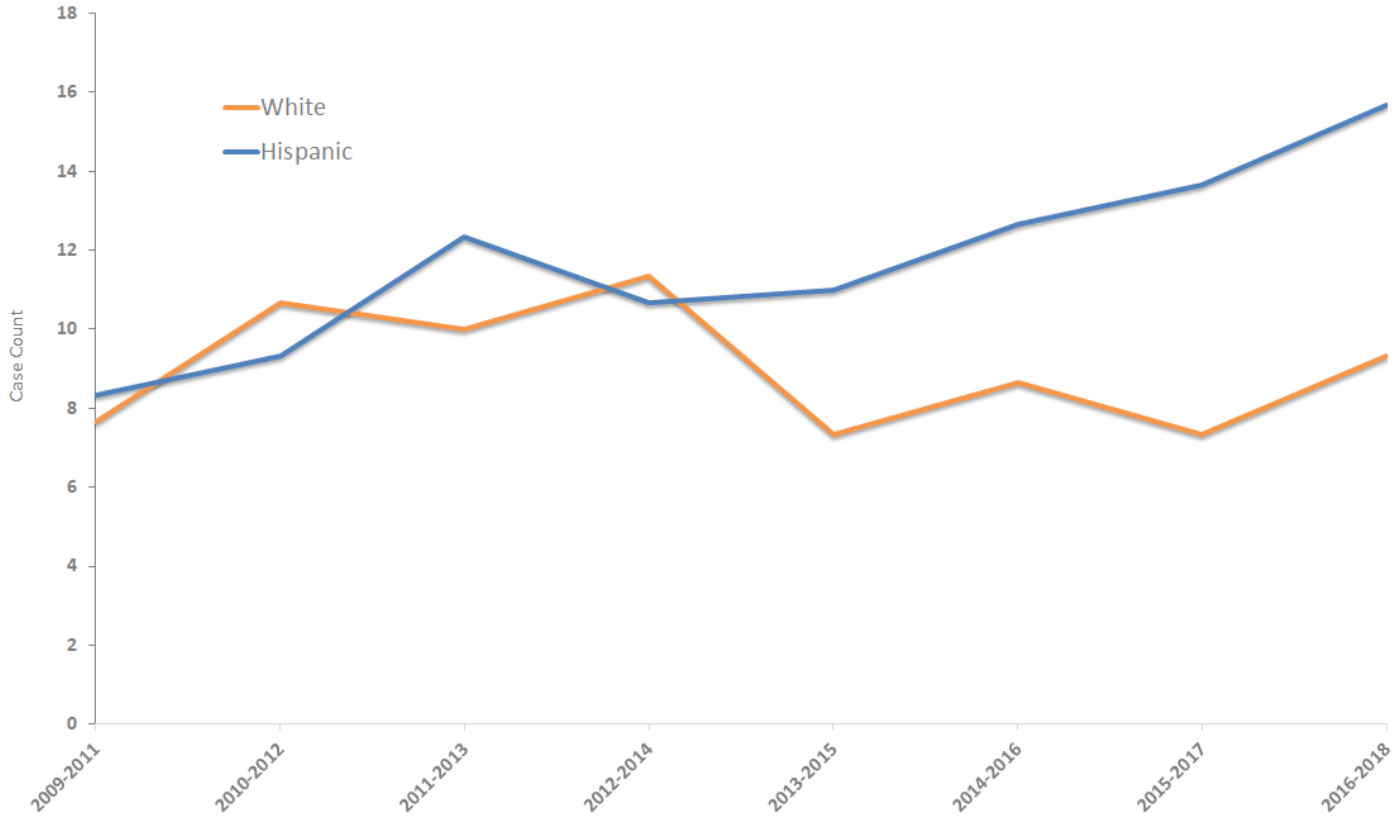
– Due to suppression rules, cell counts less than 5 are not reported.

[1] All Santa Barbara County residents living with HIV as of December 31, 2018, reported through March 31, 2019.

Race and ethnicity of newly diagnosed

Three-year rolling averages were calculated for the following two figures due to the small number of patients observed when stratified across race/ethnicity and by transmission category.

Depicted in Figure 2, over the last ten years, the number of newly HIV diagnosed Hispanic people has been on the rise. In the past decade the average number of cases doubled from 8 cases in 2009-2011 to 16 cases in 2016-2018. Meanwhile the number of newly diagnosed white people averaged to 9 cases a year.



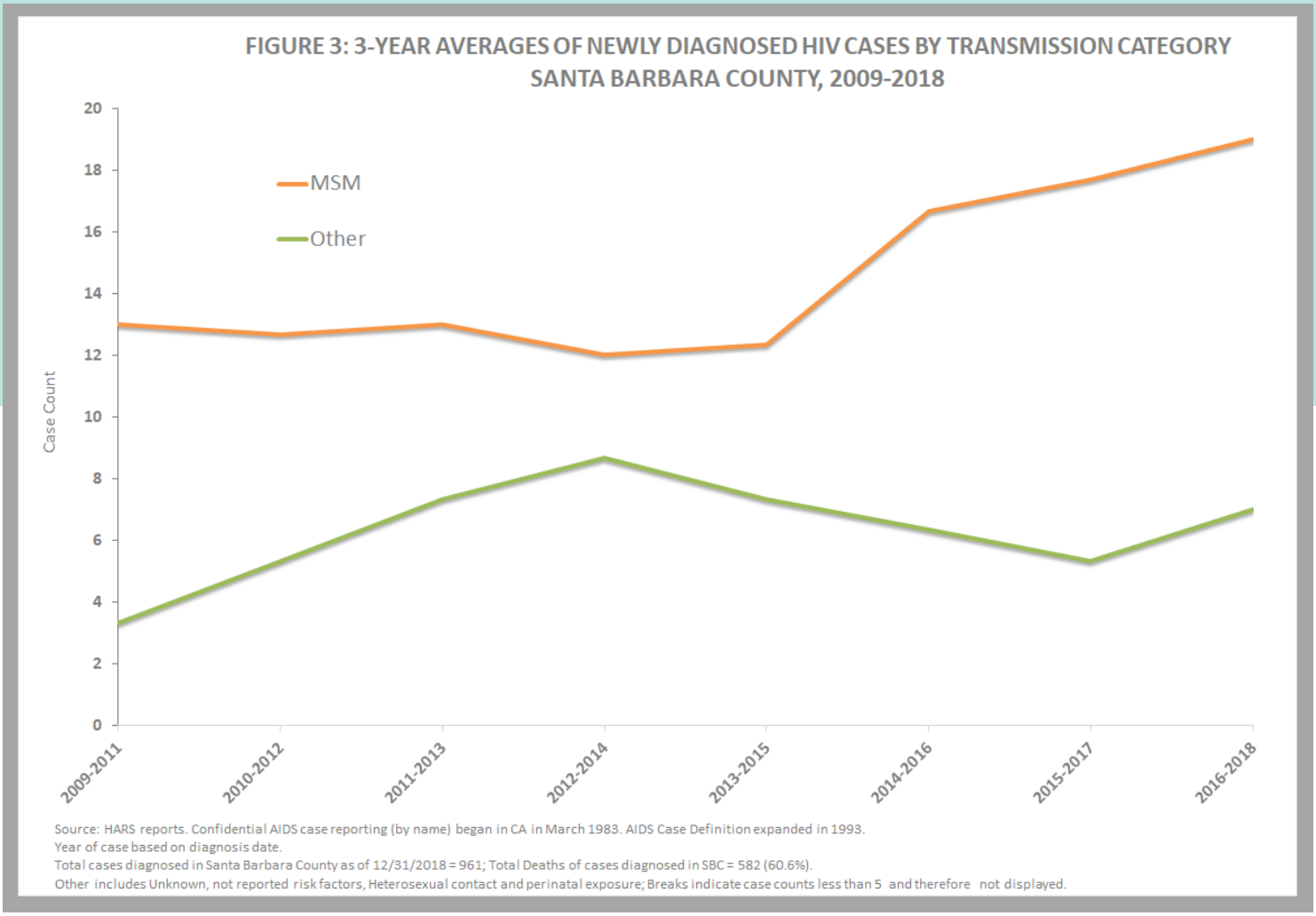
Source: HARS reports. Confidential AIDS case reporting (by name) began in CA in March 1983. AIDS Case Definition expanded in 1993.
Year of case based on diagnosis date.
Total cases diagnosed in Santa Barbara County as of 12/31/2018 = 961; Total Deaths of cases diagnosed in SBC = 582 (60.6%).

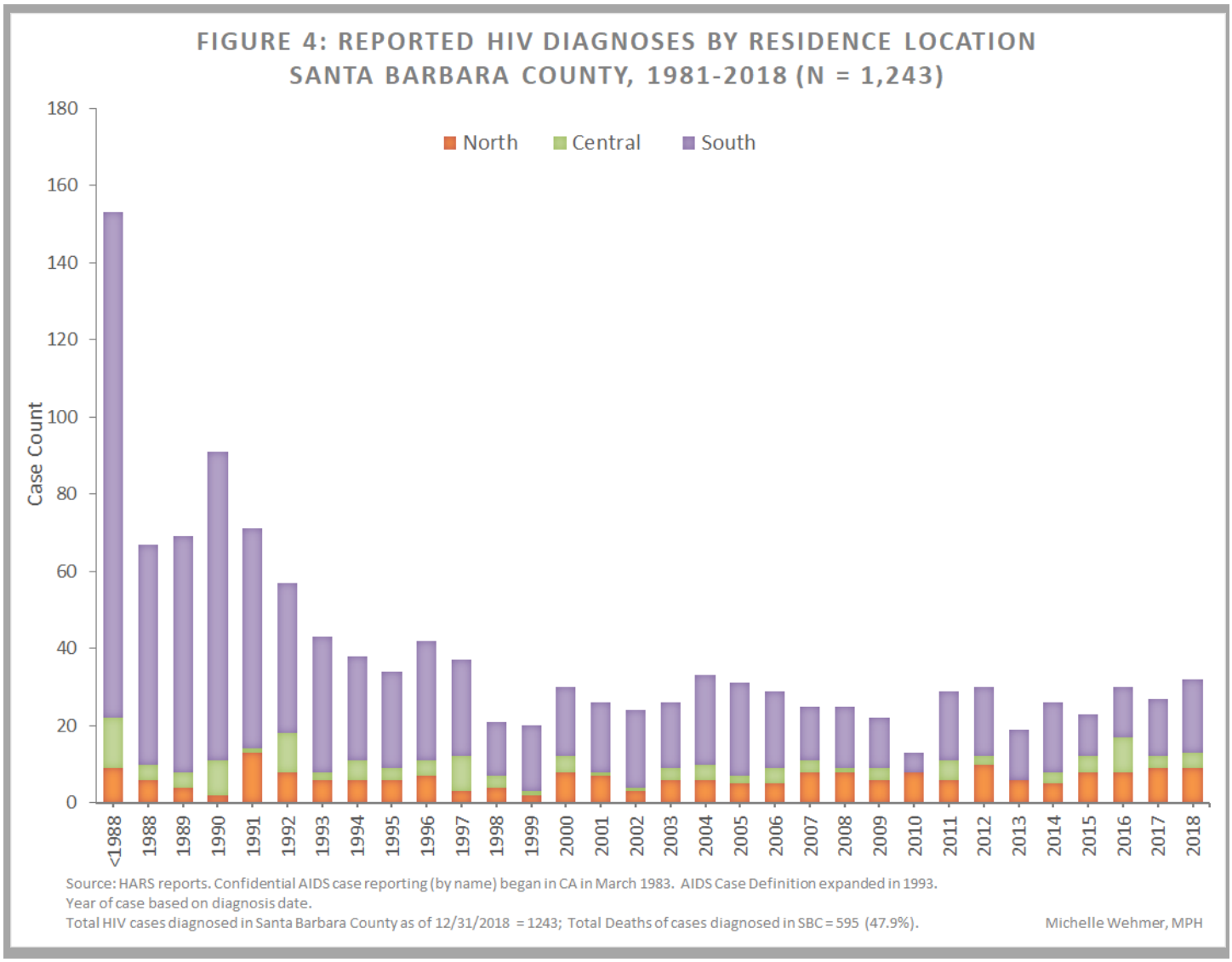
Michelle Wehmer, MPH

Transmission category

Three-year rolling averages of transmission category identified men that have sex with men (MSM) as the leading risk factor reported by newly diagnosed HIV residents. Over the decade the number of average cases reporting MSM increased approximately 46%.

The **Other** transmission category consists of perinatal exposure, heterosexual contact and unknown risk factor, and the majority of the category consists of unknown exposure. Stronger patient-provider relationships and sexual health training are needed to elicit accurate data collection. The case count of persons with intravenous drug use (PWID) and MSM-PWID were below 5 for each 3-year period and not displayed in Figure 3.



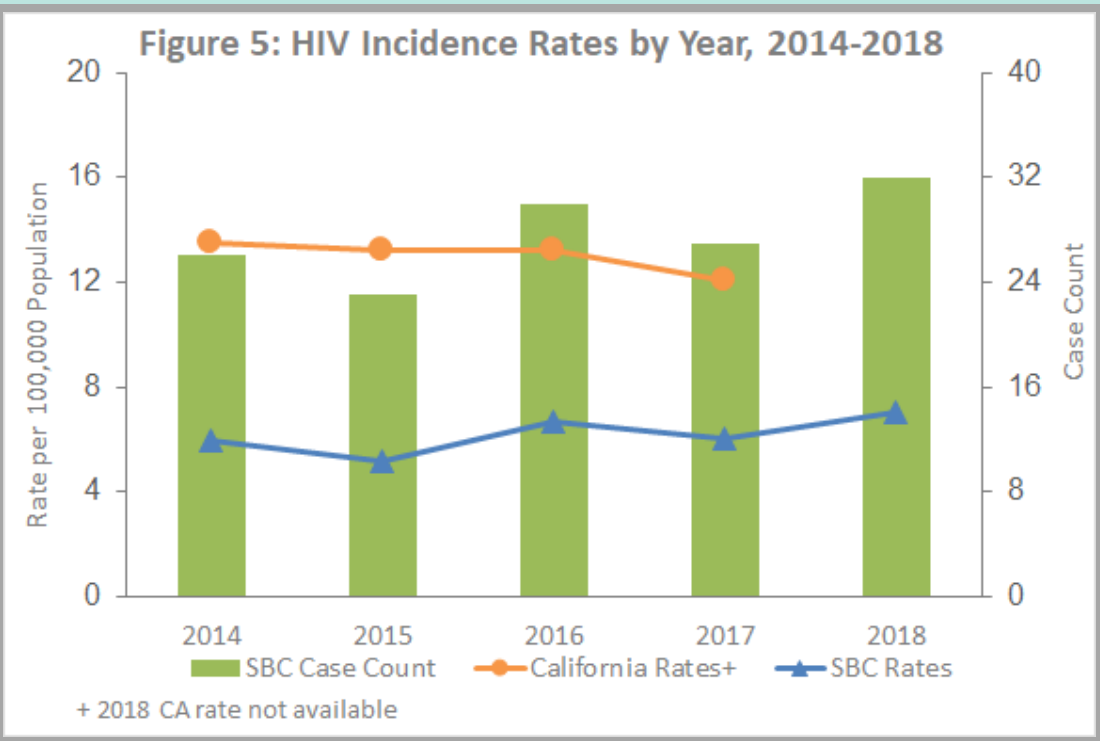


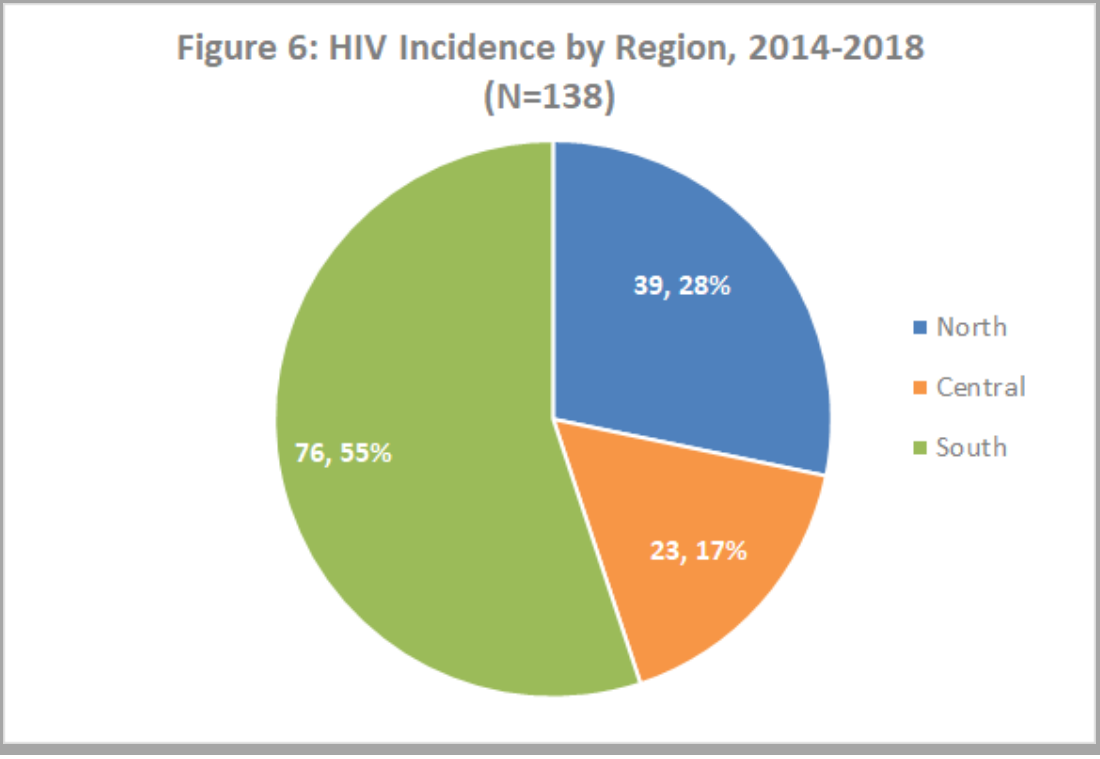
Over the course of the HIV epidemic beginning in 1981, the majority of Santa Barbara County cases have been identified in residents of the southern region of the county (73% of all cases reported). In the first 7 years (1981-1987), 85% of all reported cases resided in south county, but this percentage has substantially decreased over the years as proportionately more cases have been reported out of north county. Although the case count in north county has remained constant over the years hovering around 9 cases a year, as the volume of incident cases has decreased county-wide, this count equates to a proportional increase of new cases residing in north county from 6% at the beginning of the epidemic to 28% in 2018.

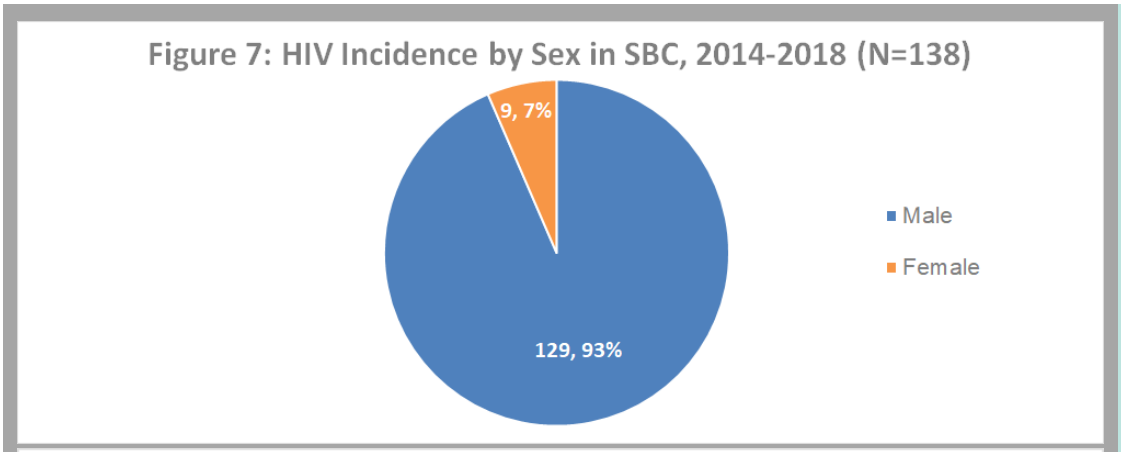
Refer to technical notes at the end of the report for geographic regional breakdown.

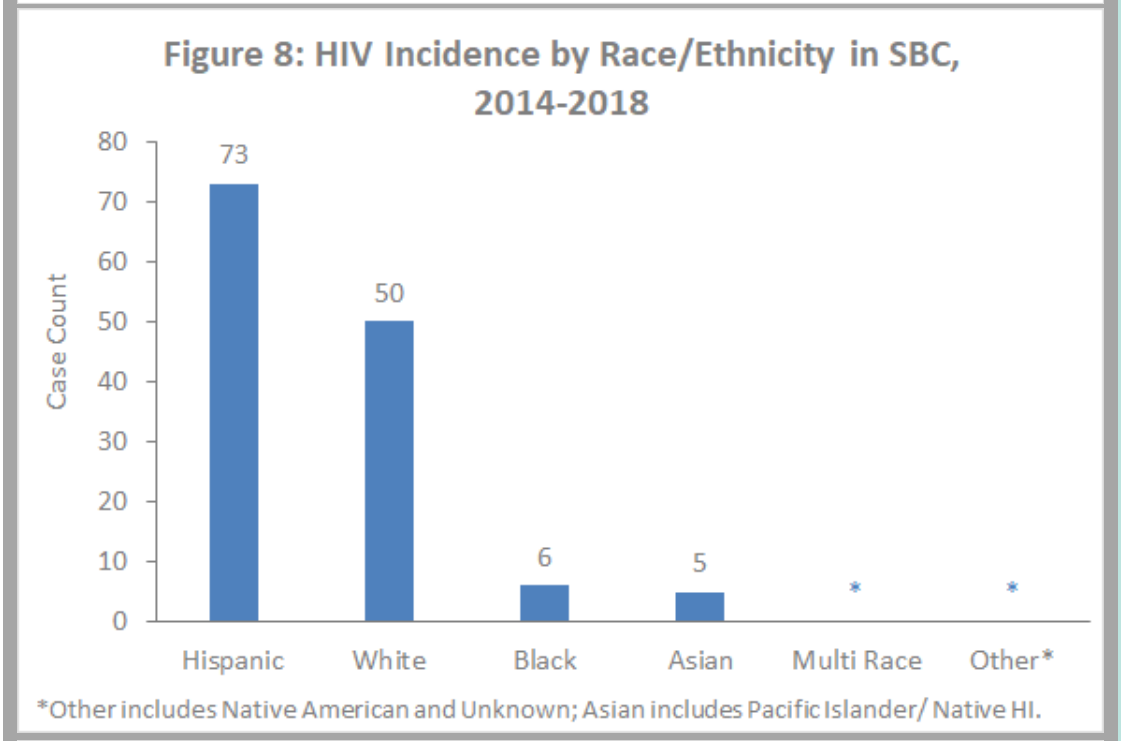
HIV INCIDENCE, 2014-2018

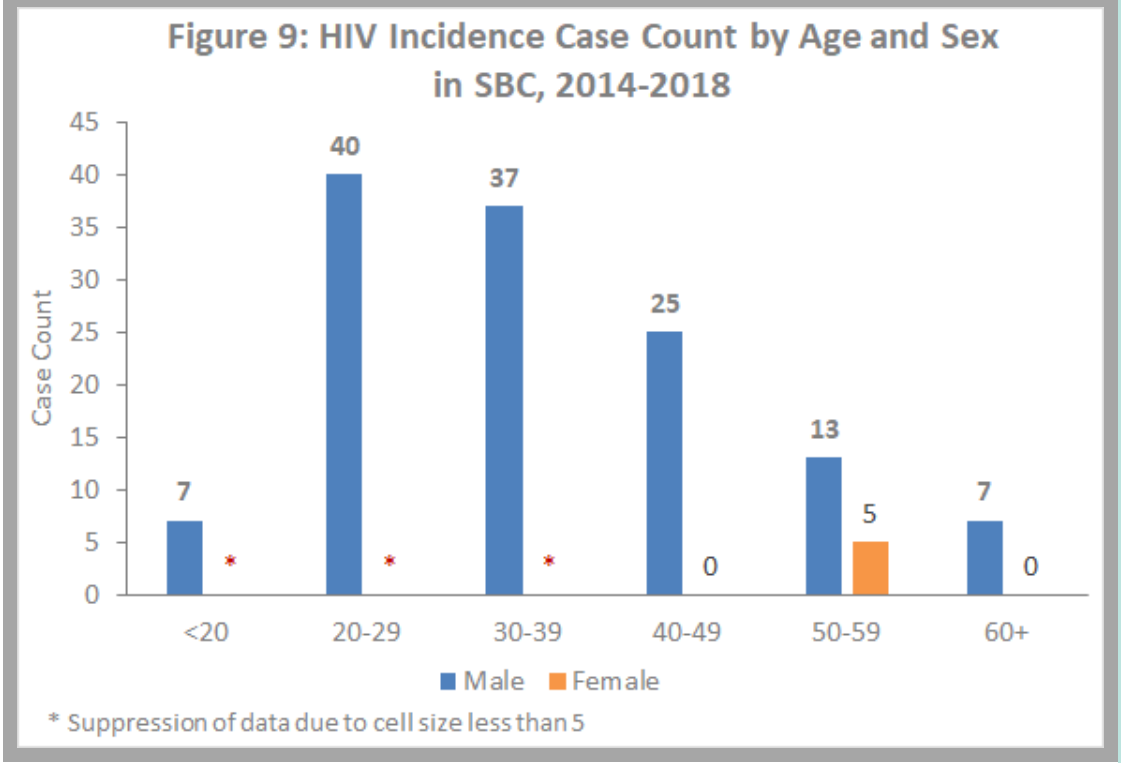
The average rate of HIV infection in SBC is 6.2 cases per 100,000 residents over the past 5 years. Between 2014 to 2018, there were 138 reported HIV infections in SBC residents (Figure 5). Over the last 5 years, the majority of incident HIV patients resided in South County at the time of diagnosis (Figure 6). When race/ethnicity was taken into account there were proportionally more Hispanic residents diagnosed with HIV in comparison to other races (Figure 8). HIV diagnoses disproportionately affect males, and in 2018, all cases affected male residents. The highest rate of infection was among young men between the ages of 25 and 34. Within the county, the city of Santa Barbara had the highest rate of HIV, which was approximately 1.9 times higher than the overall county rate.











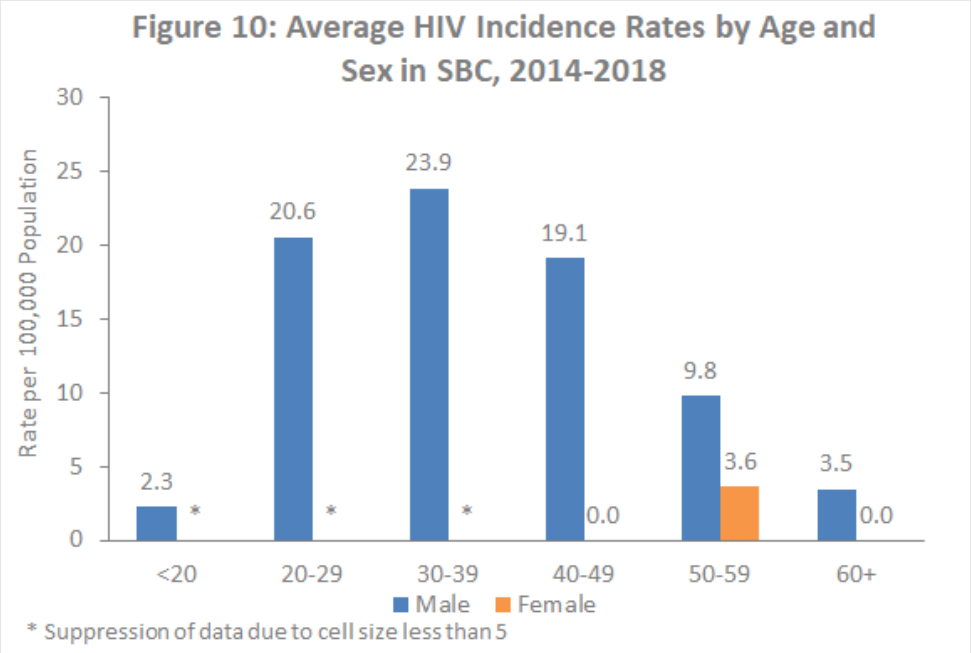
Figures 7 and 8 show the distribution of HIV diagnoses by birth sex and race/ethnicity in Santa Barbara County residents over the last 5 years. Males were 14-times more likely to be diagnosed than females residents in SBC.

The Hispanic population had the greatest count of diagnoses comprising of almost 53% of all new diagnoses.

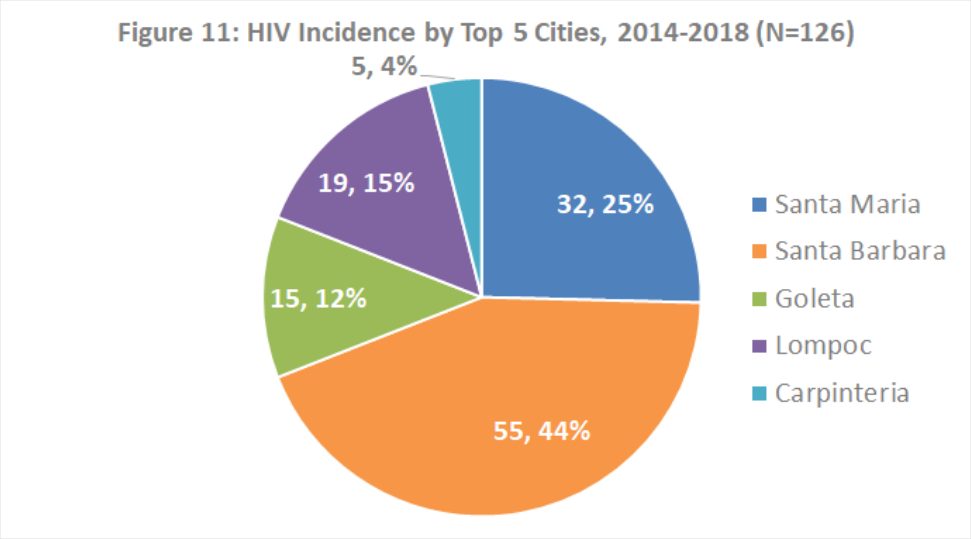
Between 2014-2018, males 20-29 years old had the highest HIV diagnoses by count followed by males 30-39 years of age (Figure 9).

The highest infection rate was seen in males 30-39 years old at approximately 24 cases per 100,000 residents, followed by males 20-29 years with 21 cases (Figure 10).

The only significant incident rate for a female age group was 50-59 years at approximately 4 cases per 100,000.

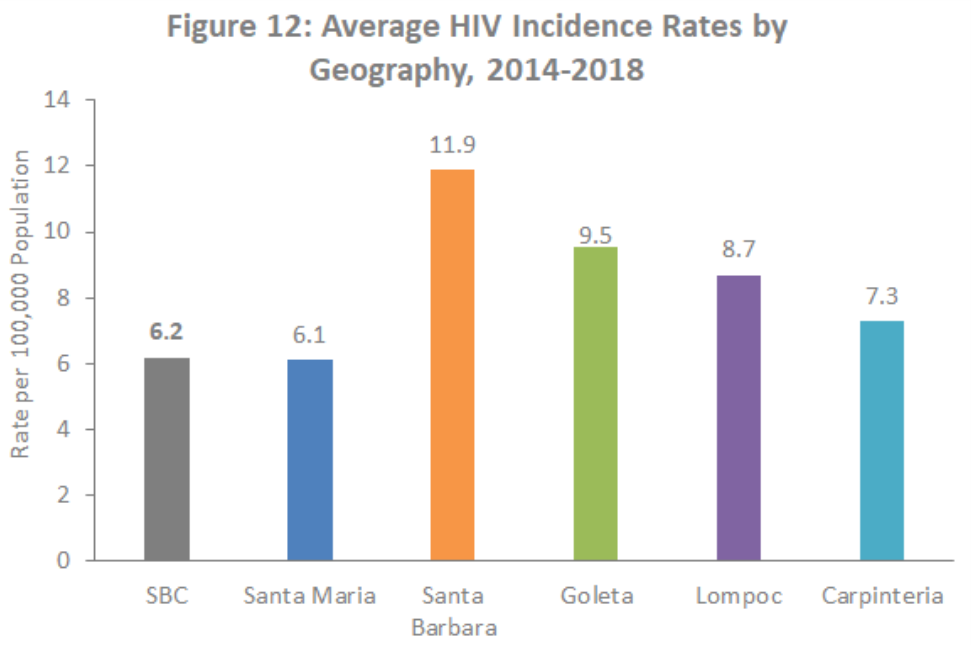


Per Figure 11, when comparing the top 5 populated SBC cities, 60% of HIV infections were diagnosed in three south county cities (Carpinteria, Goleta, and Santa Barbara).

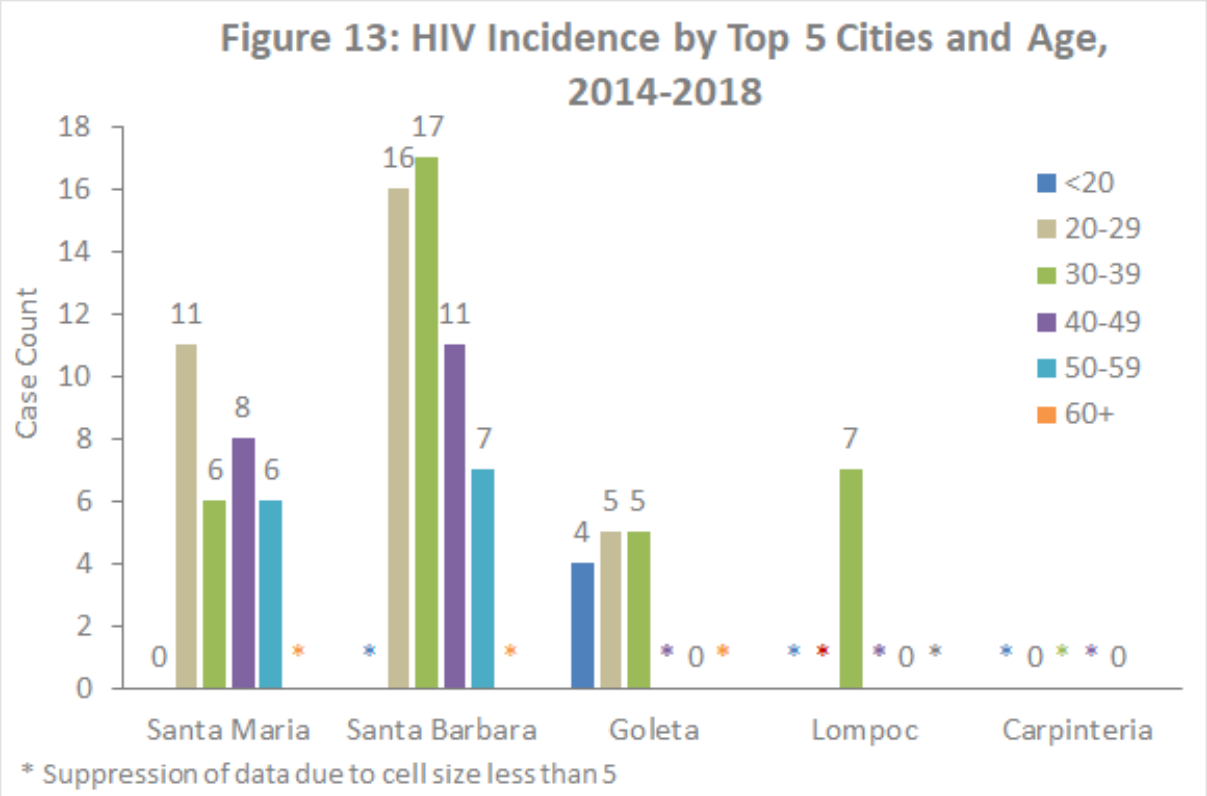


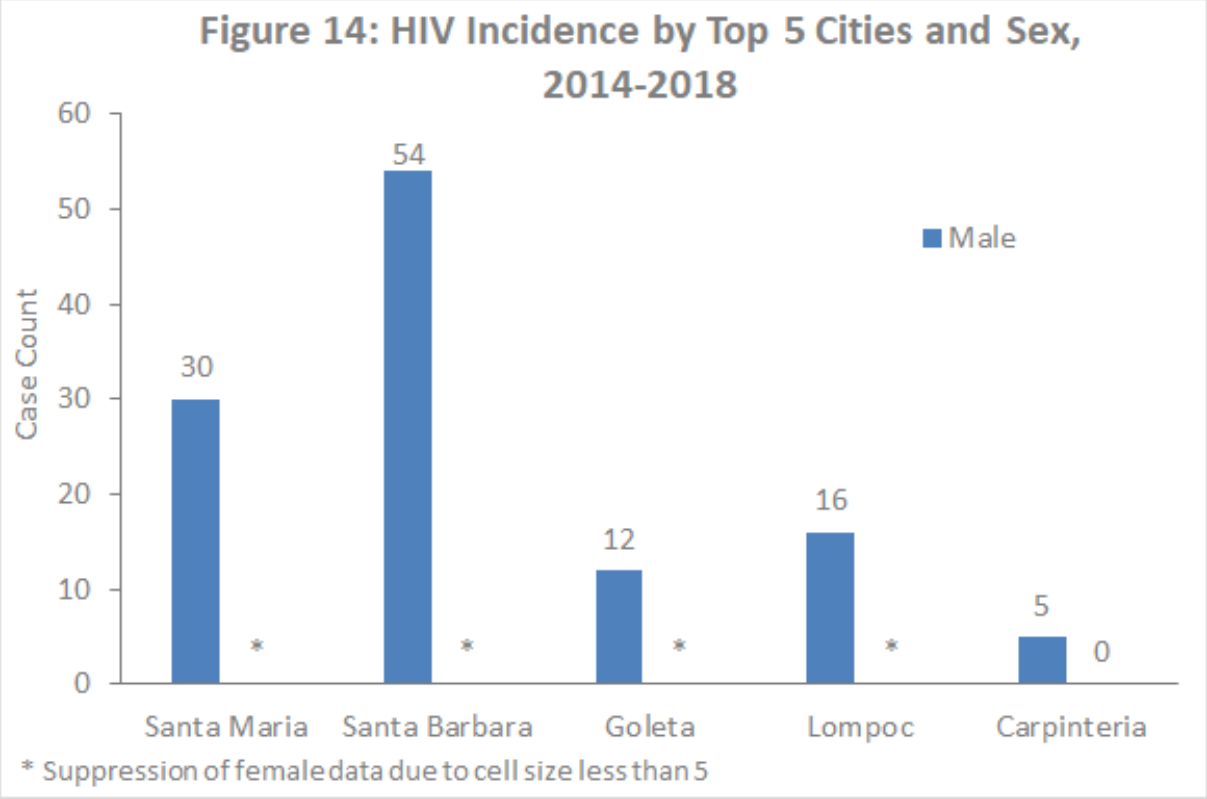
The 5-year average HIV infection rate for Santa Barbara County was approximately 6.2 per 100,000.

The highest 5-year average HIV rates by city were seen in South County: Santa Barbara city at 11.9 per 100,000, followed by Goleta with an average rate of 9.5 per 100,000 (Figure 12).



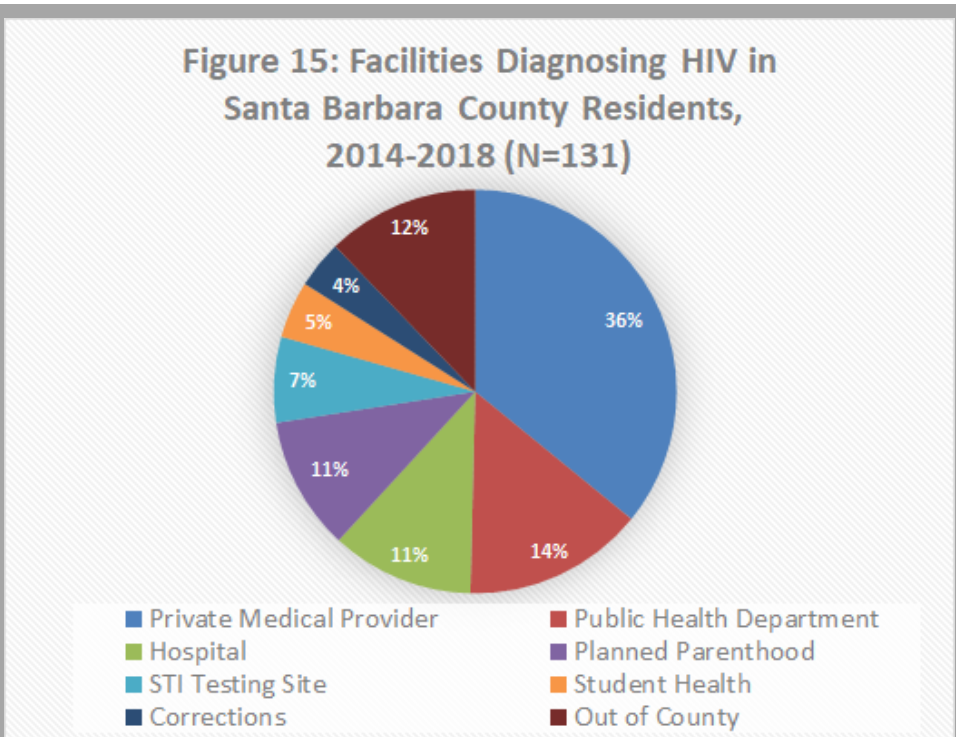
Figures 13 and 14 depict city case counts over the last 5 years stratified by age and sex. No patterns were seen across the top 5 cities. The 20-29 year age group was highest in Santa Maria city while the 30-39 year and then 20-29 year age groups were highest in Santa Barbara city. The majority of cases were diagnosed in men. No female cases were residents of Carpinteria, and female counts found in the other 4 cities was suppressed due to counts less than 5.

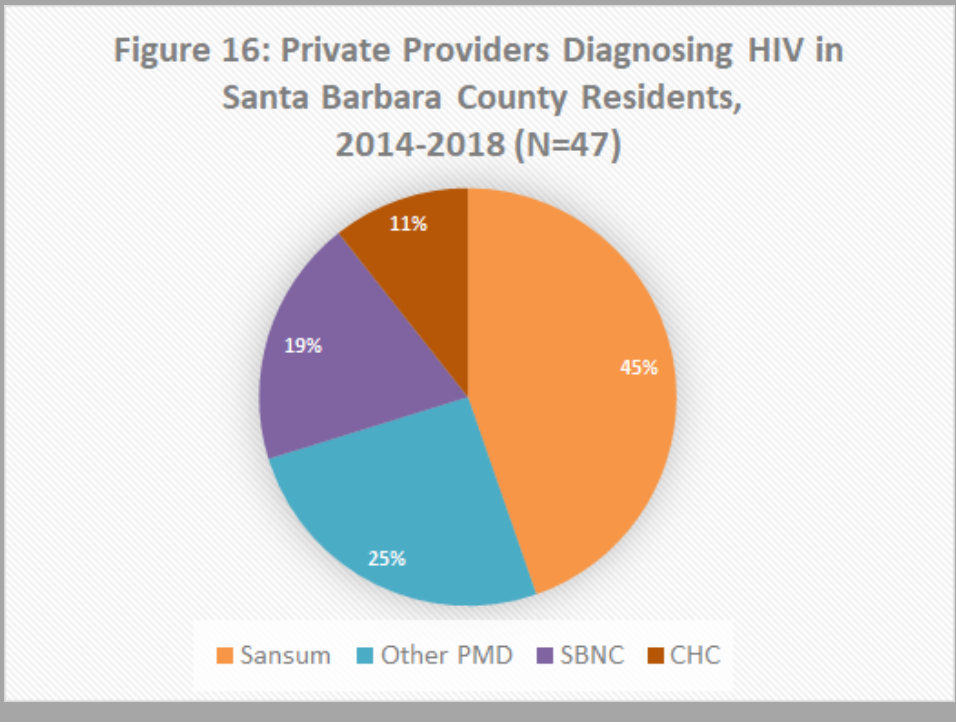




TESTING, 2014-2018

When reviewing where newly diagnosed HIV patients accessed testing, private medical providers identified over a third of the newly diagnosed residents in SBC. The Public Health Department and Planned Parenthood also diagnosed approximately a quarter of new HIV patients combined (Figure 15). The high percentage of hospital diagnosed patients is concerning and linked with the identification of some of the dually diagnosed HIV/AIDS patients addressed earlier in the report. The HIV program hopes that enhanced provider education emphasizing multi-site and universal screening, will increase testing, earlier diagnosis, and therefore result in decreased dual diagnoses. Figure 16 further reviews the private medical providers in the County that have recently identified new HIV patients. South County providers at Sansum and the Santa Barbara Neighborhood Clinics have tested approximately 64% of new patients identified by private providers highlighting the opportunity for more HIV testing by private providers in the other regions in the County.





Persons diagnosed with late stage HIV infection

Late HIV diagnosis is defined as having a stage 3/AIDS diagnosis (CD4 count less than 200 cells/mm^3 or diagnosis of an AIDS defining illness) within three months of HIV diagnosis. The proportion of persons newly diagnosed with HIV whose diagnosis occurred late in the stage of HIV disease had been decreasing since 2012 from 23% to 20% in 2017. In 2018, the proportion of new diagnoses that occurred late increased to 31.3% and was higher among Hispanics, persons aged 40 years or older at time of diagnosis, and heterosexual persons. Efforts should continue to diagnose persons earlier in the course of disease which can improve health outcomes and reduce forward transmission. The racial and transmission risk disparities highlight populations in need of improved efforts to identify early disease. Stage of HIV infection at diagnosis among persons newly diagnosed with HIV in 2010-2018 (Table 3).

Table 3: Stage of HIV Infection at Diagnosis Among Persons Newly Diagnosed with HIV in 2009-2018, Santa Barbara County Residents (N=251)

	Year of Initial HIV Diagnosis									
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Total Number	22	13	29	30	19	26	23	30	27	32
HIV	15		21	23		20		24		22
HIV Stage 3	7	–	8	7	–	6	–	6	–	10
% of New diagnosis with HIV-3	32%	–	28%	23%	–	23%	–	20%	–	31%

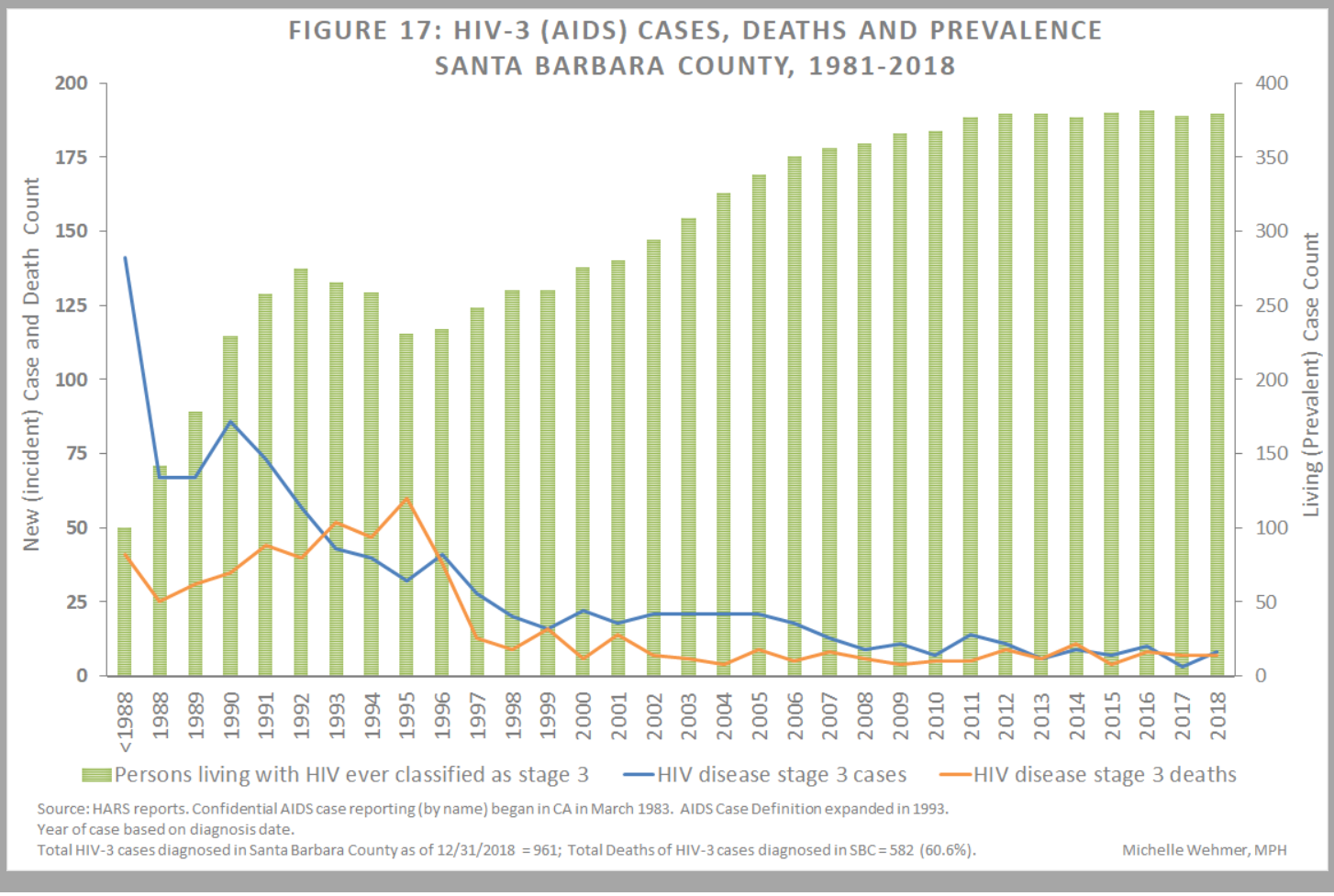
	Stage of Diagnosis (2010-2018)			
	HIV		**HIV Stage 3**	
	Number	(%)	Number	(%)
Birth Sex				
Male	176	90%	50	89%
Female	19	10%	6	11%
Race/Ethnicity				
White	69	35%	20	36%
Hispanic	104	53%	30	54%
Other/Unknown	22	11%	6	11%
Age (at diagnosis)				
<20	11	6%	–	–
20-29	65	33%	8	14%
30-39	52	27%	22	39%
40-49	36	18%	13	23%
50-59	23	12%	8	14%
60+	8	4%	–	–
Transmission Category				
MSM	122	63%	26	46%
PWID/MSM-PWID	13	7%	6	11%
Hetero/Other/Unidentified	60	31%	24	43%
Total	**195**		**56**	

– Suppression of data due to cell size less than 5

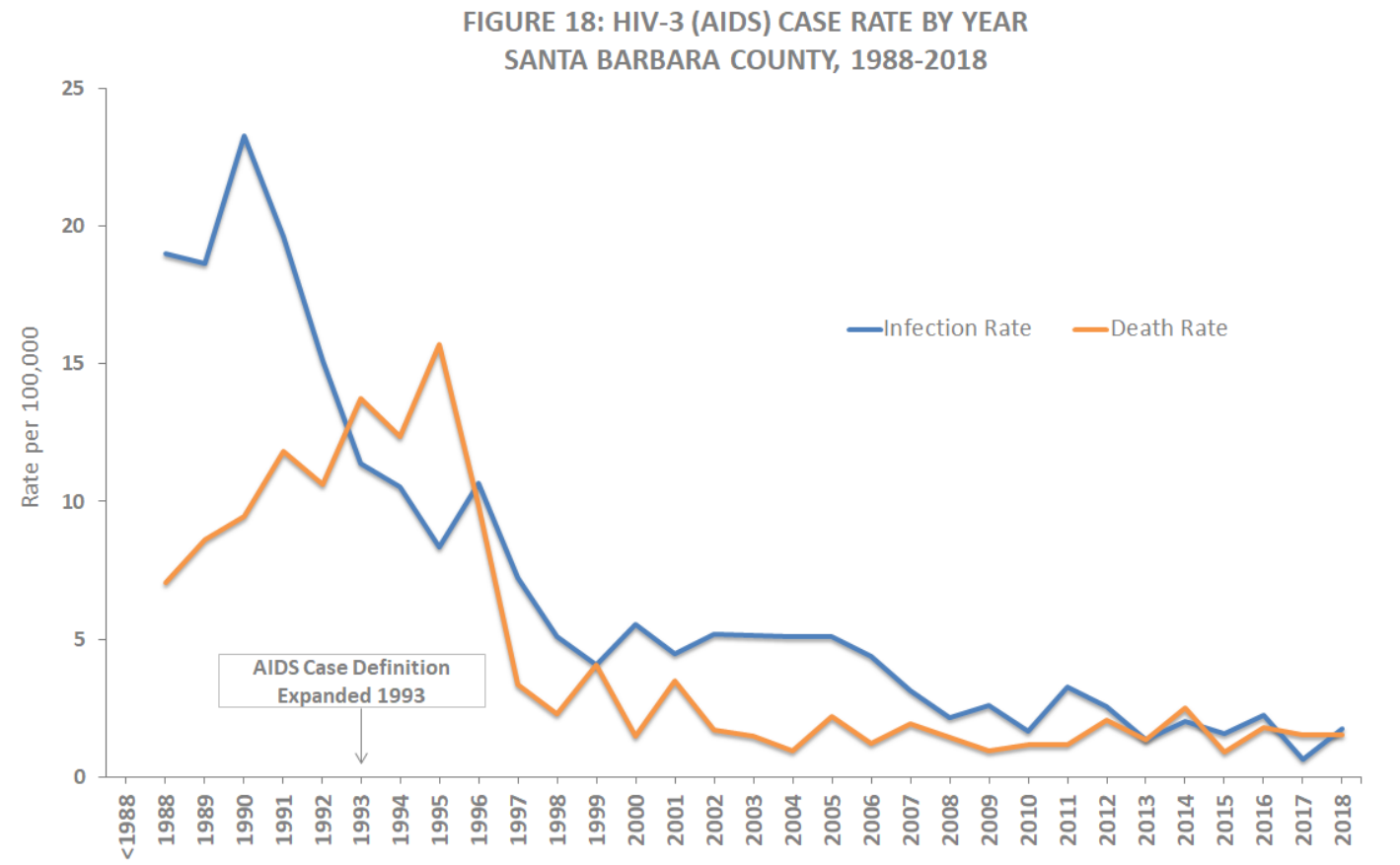
AIDS/HIV-3 CASES, 1981-2018

Figure 17 illustrates the number of persons newly diagnosed with HIV-3 (blue line), number of deaths each year (red line), and number of PLWH-3 (green bars) between 1981 and 2018. The number of new HIV-3 diagnoses declined from 86 in 1990 to 7 in 2018. The numbers of new diagnoses and deaths each year have been converging. In the last 5 years, the averages of both HIV-3 deaths and new HIV-3 diagnoses equaled 7 cases per year resulting in a steady prevalence of PLWH-3 (green bars) in that same time period.

The death rate of PLHW-3 diagnosed in SBC peaked in 1995 at 15.7 deaths per 100,000. In the last ten years, the death rate has hovered around 2 deaths per 100,000 (Figure 18).

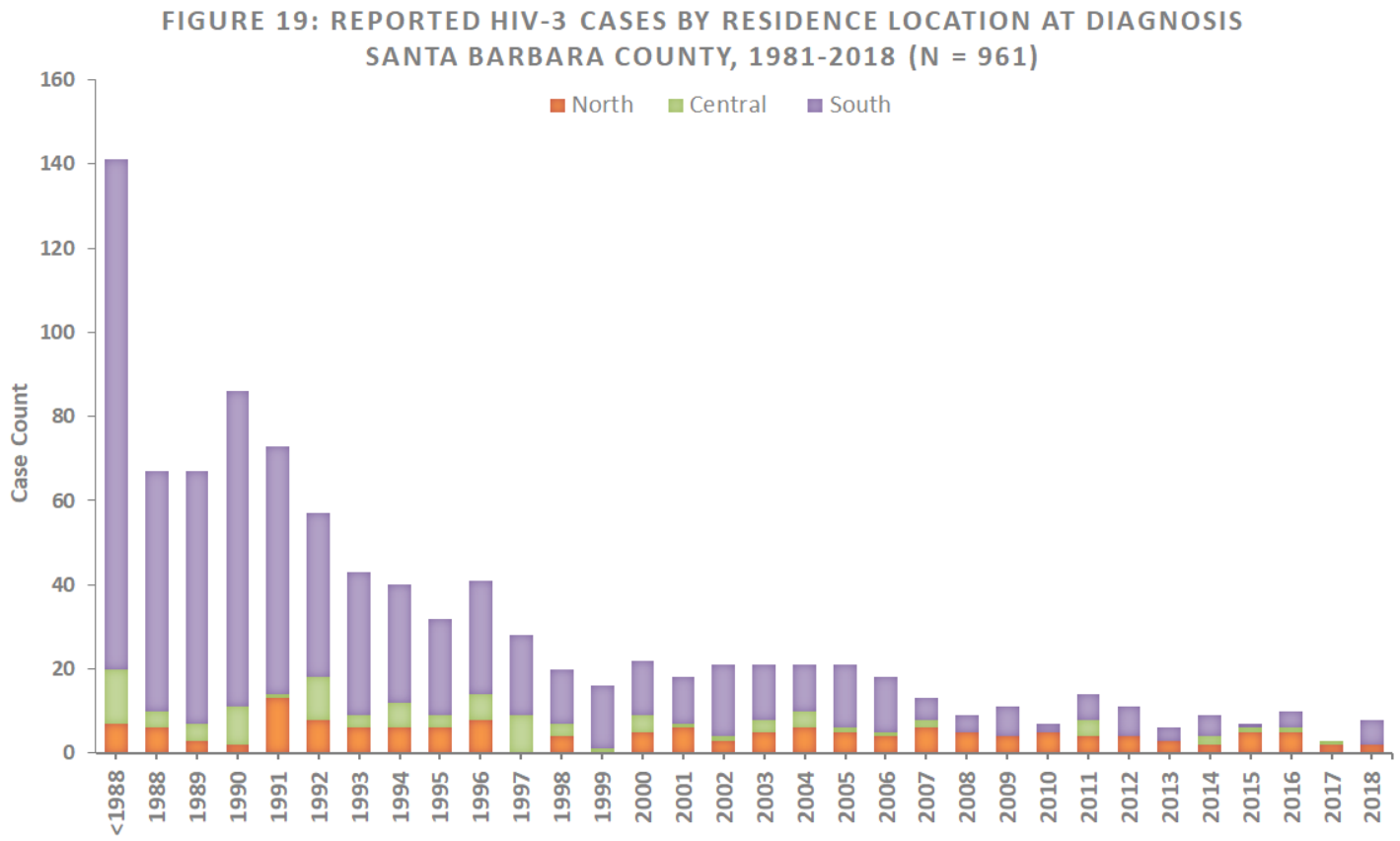


Over the length of the HIV epidemic in SBC, the majority of HIV-3 cases were diagnosed in residents living in south county. However, per Figure 19, the proportion of cases residing in north county has been increasing annually. Refer to technical notes at the end of the report for geographic regional breakdown.



Source: HARS reports. Confidential AIDS case reporting (by name) began in CA in March 1983. AIDS Case Definition expanded in 1993.
Year of case based on diagnosis date.
Total cases diagnosed in Santa Barbara County as of 12/31/2018 = 961; Total Deaths of cases diagnosed in SBC = 582 (60.6%).

Michelle Wehmer, MPH



Source: HARS reports. Confidential AIDS case reporting (by name) began in CA in March 1983. AIDS Case Definition expanded in 1993.
Year of case based on diagnosis date.
Total cases diagnosed in Santa Barbara County as of 12/31/2018 = 961; Total Deaths of cases diagnosed in SBC = 582 (60.6%).

Michelle Wehmer, MPH

DEATHS

Trends in HIV Mortality

As of December 31, 2018, the cumulative number of deaths among Santa Barbara County HIV diagnosed cases was 582.

From 2009 to 2018, 48 deaths occurred in which 92% were males. The proportions of deaths in whites and MSM-PWID increased. The majority of deaths during each of these years continues to occur among MSM and persons aged 50 years and older (Table 4).

Table 4: Deaths Among Persons Diagnosed with HIV in 2009-2018, Santa Barbara County

	Cumulative Totals as of 12/31/2018	
Birth Sex		
Male	45	93.8%
Female	5	10.4%
Race/Ethnicity		
White	29	60.4%
Hispanic	18	37.5%
Other	1	2.1%
Transmission Category		
MSM	30	62.5%
PWID/MSM-PWID	17	35.4%
Heterosexual	7	14.6%
Other/Unidentified	9	18.8%
Age at Death		
0-49	16	33.3%
50-59	20	41.7%
60+	12	25.0%
HIV Disease Stage		
HIV only/Stage unknown	16	33.3%
HIV-3	32	66.7%
Cause of Death		
HIV related	15	31.3%
Non-HIV/AIDS related	18	37.5%
Unknown	15	31.3%
Total Number	48	

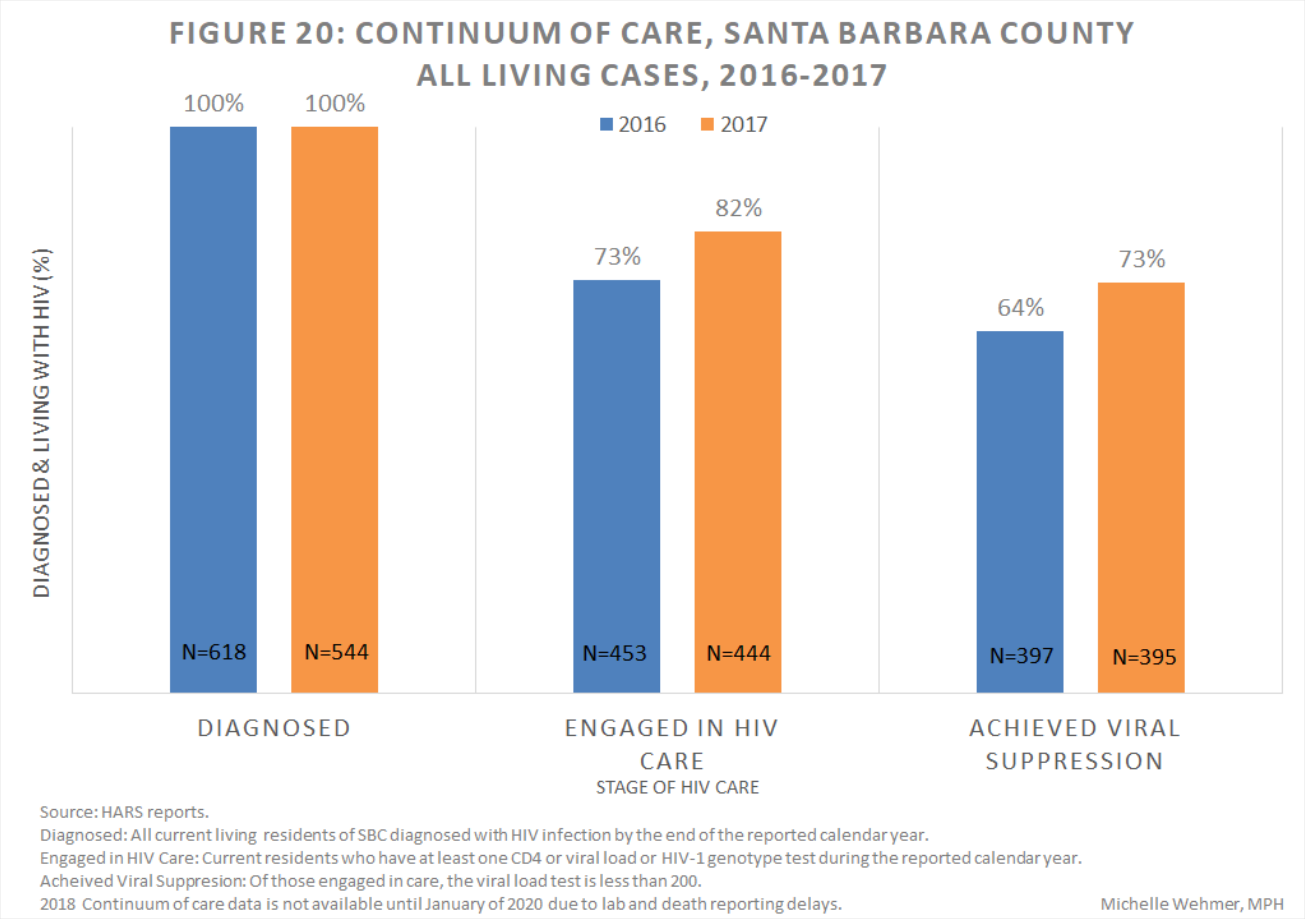
CONTINUUM OF CARE, 2016-2017

The HIV care continuum is a tool to monitor progress and identify opportunities for HIV prevention, care, and treatment interventions. The HIV continuum of care model outlines the sequential steps of HIV medical care that PLWH experience from initial diagnosis to the goal of viral suppression with benchmarks of engagement at each stage. The continuum of care has been used by the SBC HIV program the last 3 years to develop strategies to improve health outcomes for people living with HIV.

Of the PLWH reported in SBC, engagement in HIV care (defined as a documented CD4 lab within the calendar year) increased from 73% in 2016 to 82% in 2017, surpassing the California Department of Public Health Office of AIDS (CDPH OA) goal of 76%. This increase indicates that more people living with HIV are receiving routine medical care in SBC.

The CDPH OA has a goal of attaining viral suppression (a documented viral load test below 200 copies/ml) among 64% of PLWH. The goal was met in SBC when viral suppression increased from 64% in 2016 to 73% in 2017 (Figure 20).

Note: Due to delays in lab and death reporting, the 2018 continuum of care data will be available in January of 2020 and at that time an addendum to this report will be posted online.



TECHNICAL NOTES

City composition of Santa Barbara County Regions:
North County: Santa Maria, Guadalupe, Orcutt, Los Alamos, New Cuyama
Central County: Lompoc, Solvang, Santa Ynez, Los Olivos, Buellton
South County: Carpinteria, Summerland, Montecito, Santa Barbara, Goleta
Unknown: Patients did not disclose an address and/or homeless

Date of Initial HIV Diagnosis

The date of HIV diagnosis for newly diagnosed cases is determined based on the earliest date of any of the following: positive HIV antibody test, positive HIV antigen/antibody combination test, detectable viral load test, or physician-documented diagnosis in absence of sufficient laboratory evidence. The date of initial HIV diagnosis for assessing trends in new HIV diagnoses in this report takes into account patient self-report of a positive HIV test as noted in the medical record that was prior to the confirmed HIV diagnosis made by laboratory or clinical evidence. However, CD4 or undetectable viral load tests prior to the confirmed HIV diagnosis are not used to determine date of initial HIV diagnosis. Data for the most recent year should be interpreted with caution as the number of cases diagnosed may be underestimated due to reporting delays.

Death Ascertainment

Death information among persons reported with HIV is obtained through the following mechanisms: (1) monthly matches with local vital statistics registry, medical record review, and notification from other health department. Cause of death information on death certificates is summarized and coded using the International Classification of Diseases, 10th revision (ICD-10) for deaths that occurred since 1999. A single cause of death is identified from all reported conditions that began the chain of events that resulted in death; this is known as the underlying cause of death. All conditions (including the underlying cause of death) listed on the death certificate are known as the multiple causes of death (http://www.cdc.gov/nchs/icd/icd10.htm). We obtained the ICD codes from the annual Vital Records Death Data files from CDPH. Decedents for the most recent year 2017 were identified through California Integrated Vital Records System (Cal-IVRS) which is 90% complete.

HIV Surveillance Methods

Santa Barbara HIV cases are reported primarily through active surveillance activities in which public health personnel review laboratory and medical records to identify cases and complete the case report forms. HIV cases are also identified through passive reporting, review of death certificates and reports from other health departments. The HIV data in this report include persons who were residents of Santa Barbara at the time they were diagnosed with HIV (all stages of infection) including Santa Barbara residents who were diagnosed in other jurisdictions.

Data to Care - Navigation Comprehensive Services

Patients come to the enhanced surveillance data to care (DTC) program through not-in-care lists generated from HIV surveillance or medical record databases. The DTC program began in 2016 and included persons in eHARS with a most recent address of Santa Barbara who had never had an HIV lab recorded in eHARS after
HIV diagnosis, or had no evidence of a care visit in 12 months or longer (defined as a HIV viral load or CD4 test in eHARS). In addition, there were a number of individuals in the DTC line list who were not eligible for navigation services for reasons such as having moved out of the jurisdiction, already being in HIV care, not being locatable, or being deceased or incarcerated.

TECHNICAL NOTES

Staging HIV Infection

In 2014, the United States surveillance case definition for HIV infection among adults and adolescents aged ≥13 years and children age. HIV infection stage 0: This stage is early HIV infection and is established by a sequence of discordant HIV test results indicative of early HIV infection. The criteria for stage 0 infection can be established by a testing history of 1) a confirmed HIV positive test that occurs 180 days or less after a negative or indeterminate test for HIV infection, 2) a negative or indeterminate HIV antibody test is on or less than 180 days before a positive HIV virologic test and on or less than 60 days after a positive HIV antibody test, or 3) a negative or indeterminate HIV antibody test is on or less than 60 days after a positive HIV virologic test. This sequence of discordant results may be based on testing history (previous laboratory documented or patient's self-report of negative/indeterminate results), or by a HIV testing algorithm. If the criteria for stage 0 are met, the stage is 0 (supersedes other stages) regardless of criteria for other stages (CD4 T-lymphocyte test results and opportunistic illness diagnoses).

HIV infection stage 1-3: HIV infection stage 1-3 is based on age-specific CD4 T-lymphocyte count or CD4 T-lymphocyte percentage of total lymphocytes. p. 100 table (staging of HIV)

HIV infection, stage unknown: No information available on CD4 count or percentage and no reported information on AIDS-defining conditions (every effort is made to collect CD4 counts or percentages at time of diagnosis).

Defining Case Counts and Rates

The STI report contains cases, counts, and rates of reportable STIs in SBC. Rates are utilized in order to measure the frequency of which an event/disease occurs in a defined population and time. This is useful in distinguishing between disease impacts in groups over time. Rates are expressed as the number of cases per 100,000 persons in a population.

Example:

County	Case Count	Population	Rate per 100,000 $\frac{\text{Case Count} * 100,000}{\text{Population}}$
X	2000	100,000	2000
Y	2000	250,000	800

- While both counties have the same number of affected individuals, county X has a higher rate because there are fewer residents within that county. Adjusting for population size allows for more accurate comparisons across regions.

Race/Ethnicity

Hispanic origin includes any race group. All other groups are Non-Hispanic (NH). Two or More Races group are not reported in single race groups. Race/ethnicity results were tabulated using the following
race/ethnic groups: NH American Indian, NH Asian, NH Black, Hispanic, NH Pacific Islander/Native Hawaiian, NH White, and NH Two or More Races.

CONTACT INFORMATION

Santa Barbara Public Health Epidemiology Unit
https://www.countyofsb.org/phd/epi