



2018 HIV DISEASE FACT SHEET – RELEASED 3/1/2019

This document provides an overview of human immunodeficiency virus (HIV) disease cases in Orange County. The term HIV disease is used to describe the entire HIV spectrum, from initial HIV infection to advanced HIV disease (also known as AIDS). HIV disease surveillance is an ongoing process, and therefore cases diagnosed in 2018 are considered preliminary due to reporting delays. The number of cases diagnosed in each year may change due to removal of cases that are found as duplicates in other jurisdictions and therefore numbers on previous fact sheets should not be compared to this fact sheet.

Since reporting began in 1981, Orange County has received **13,305** reports of newly diagnosed HIV infections. Specifically in 2018, Orange County had the following reported:

- 280 persons were newly diagnosed with HIV disease.
- 57 persons were concurrently¹ diagnosed with AIDS indicating that the individual was living with HIV disease but unaware of their status for a significant amount of time.

At the end of 2018, there were 6,369 persons living with HIV (PLWH) in Orange County² who are aware of their HIV status. Additionally, there are an estimated 893 persons who are unaware of their HIV status. The Centers for Disease Control and Prevention (CDC) calculation methodology estimates that 87.7% of PLWH know their status. Therefore, the total estimated number of PLWH in Orange County is **7,262**.³

Viral load is an indicator of health and adherence to medication. A high viral load is indicative of illness. Viral load suppression (less than 200 copies/ml) is suggestive of improved health. In Orange County, of the 7,262 PLWH (aware and unaware of HIV status), 4,418 (60.8%) are known to have a suppressed viral load.

Figure 1 displays the HIV Continuum of Care. Of the total estimated to be infected (7,262), 87.7% have been diagnosed, 81.7% had ever linked to HIV care⁴, 66.4% were retained in HIV care⁵, while 62.8% PLWH are estimated to be receiving anti-retroviral therapy (ART)⁶ and 60.8% had a viral load test result less than 200 copies/ml the last time they were tested in 2018.

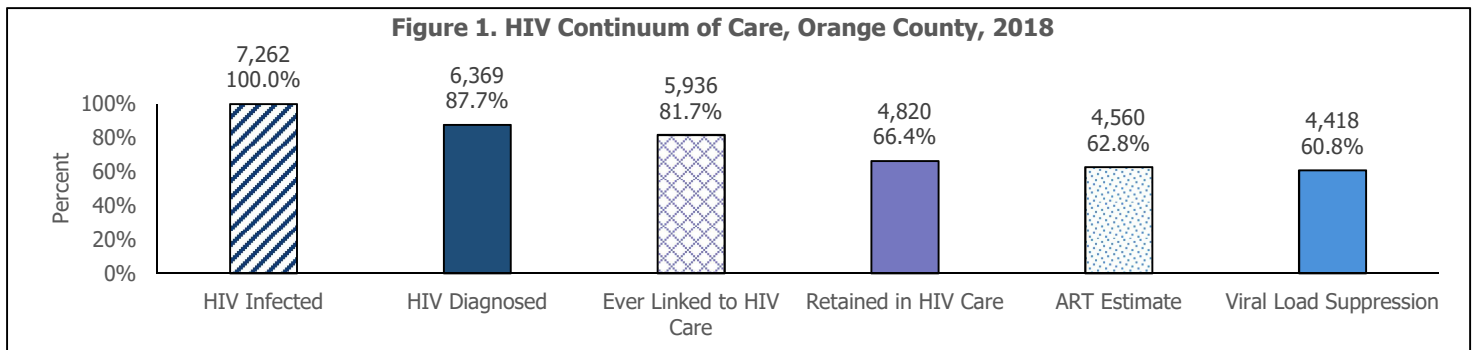
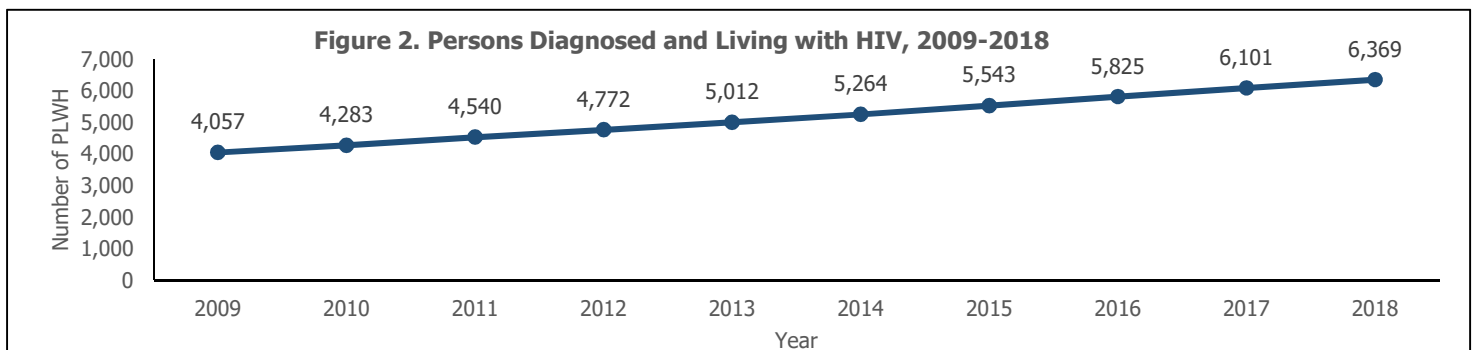


Figure 2 shows the number of diagnosed PLWH at the end of each year between 2009 and 2018. These are the most current numbers as of the creation of this report, and therefore will vary from numbers reported in previous fact sheets.



¹ Concurrently diagnosed are persons who had an AIDS defining condition (CD4 count below 200 cells/μL and/or a diagnosis of a disease that is an indicator condition for AIDS) within one month (31 days) of their HIV diagnosis.

² This includes all individuals reported to be living in Orange County regardless of where they were living when they were diagnosed with HIV disease.

³ The total number of persons estimated to be living with HIV disease is based on the Centers for Disease Control and Prevention calculation methodology updated in 2016. The calculation is the number of persons known to be living with HIV disease (6,369) divided by 0.877. The difference between this calculation (7,262) and 6,369 is the additional number of persons estimated to be living with HIV disease but are unaware of their diagnosis (893).

⁴ Persons who had at least one viral load and/or CD4 count blood test after HIV diagnosis.

⁵ Persons who had at least two viral load or CD4 results with at least three months in-between the first and last result. For persons diagnosed prior to 2018, the two results occurred in 2017 and/or 2018. For persons diagnosed in 2018, the results occurred between January 2018 and February, 5, 2019.

⁶ As determined by having achieved viral suppression or a decrease in viral load between the last two tests during 2018.

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Figure 3 shows the rate of HIV disease transmission per every 100 persons living with HIV disease. Since 2009, the transmission rate has decreased 46.3%, from 8.2 to 4.4. A decrease in the transmission rate indicates that the amount of new HIV infections is not increasing despite the increase in the number of PLWH.

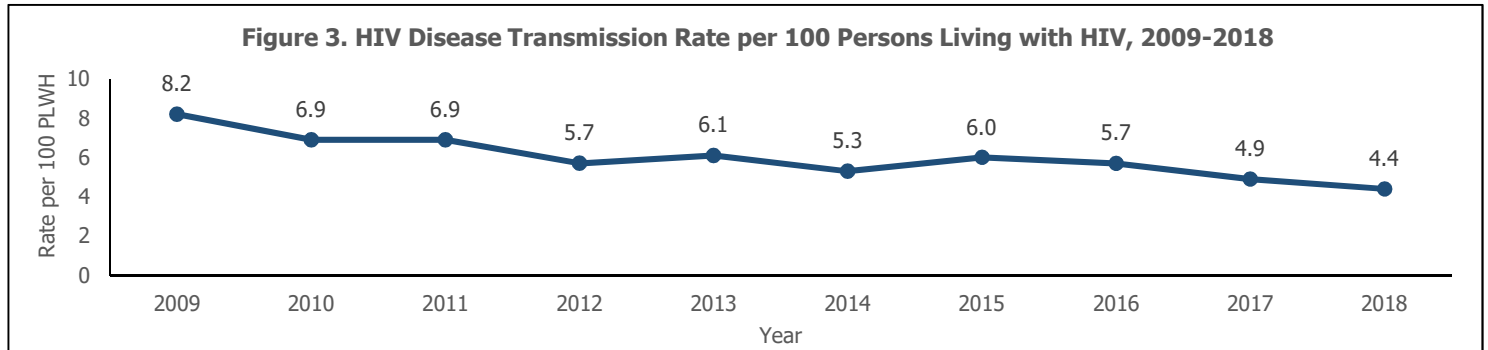


Figure 4 shows the number of new HIV disease diagnoses each year for Orange County residents as a bar, and the number of those diagnoses that were concurrently diagnosed with AIDS as a line. Concurrent diagnoses in 2018 represents a 41.2% decrease from 2009. This decrease may be a result of multiple strategies for early identification of HIV disease and linkage to care.

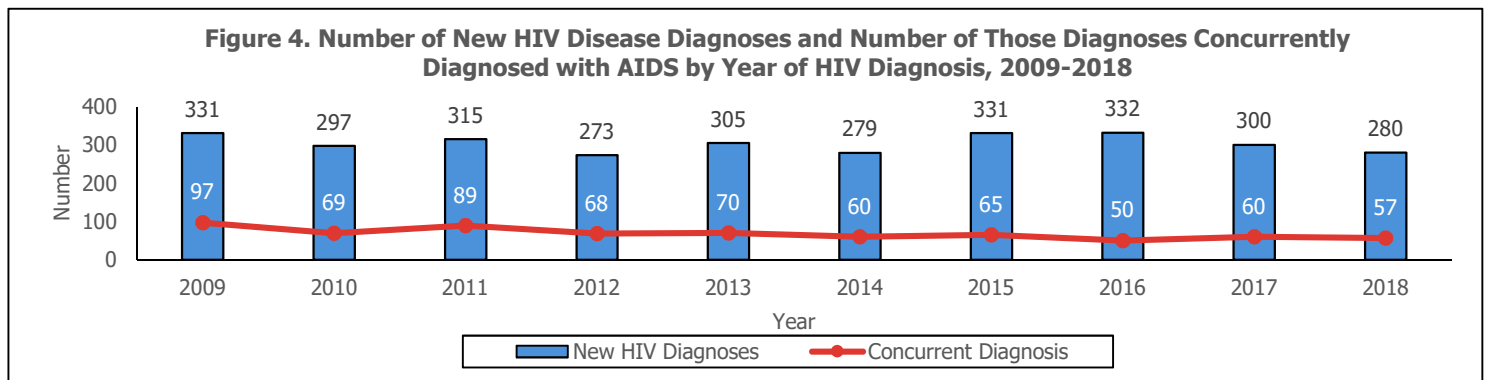
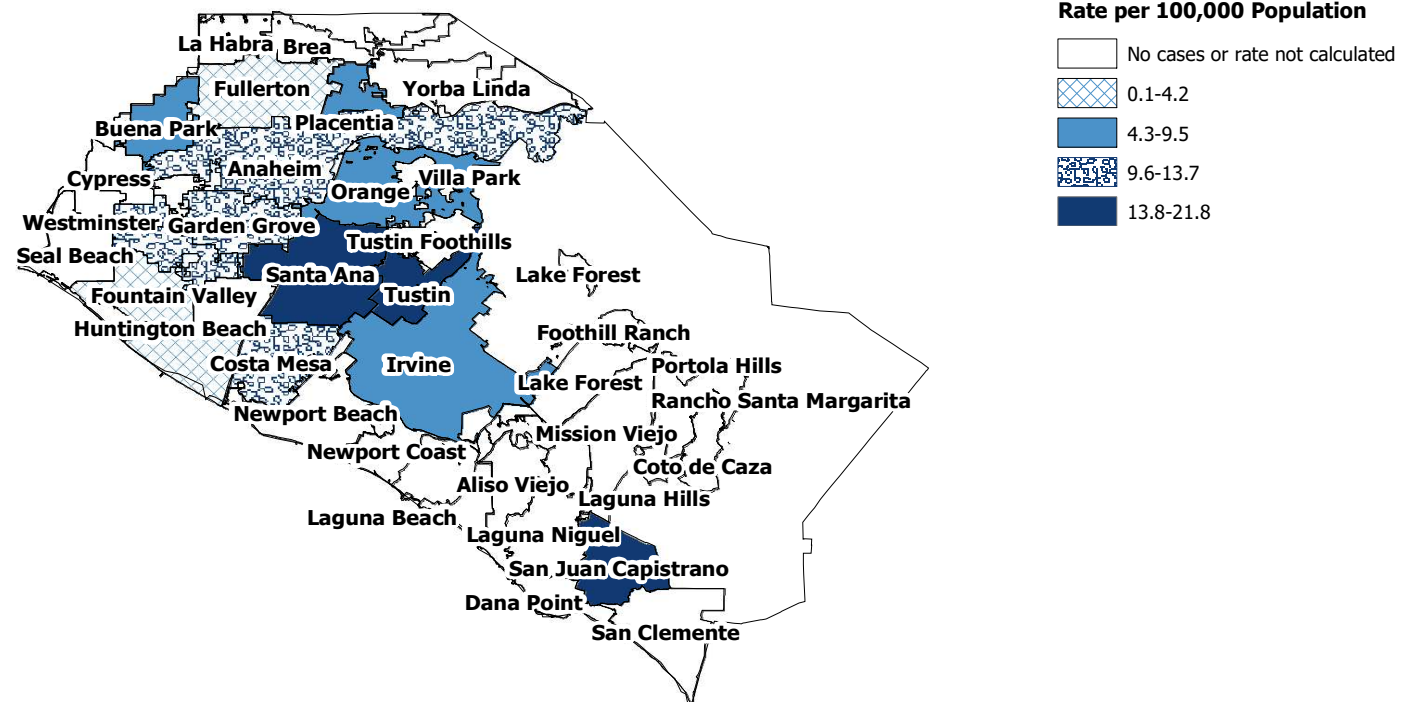


Figure 5 displays the rate of persons newly diagnosed with HIV per 100,000 population by city of residence at the time of that diagnosis. Of cities with five or more cases, San Juan Capistrano (8 cases) and Santa Ana (66 cases) have the highest rates at 21.8 and 19.5, respectively; whereas, Huntington Beach has the lowest rate at 3.9. Rates are not calculated for cities where population estimates are unavailable or there were fewer than five cases.

Figure 5. Rate per 100,000 Population of New HIV Disease Diagnoses by City of Residence at Time of Diagnosis, Orange County 2018



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The following figures (6-8) display the three year rolling average rate of cases diagnosed in Orange County from 2009-2011 through 2016-2018. The rate shows the disproportionate impact of HIV on a particular group/population. Using a three year average rate works to stabilize the data by removing variability caused by a small number of cases that tend to fluctuate from year to year. The rolling average allows for comparison between time periods from year to year, rather than comparing one three year time period to the next (i.e. 2012-2014 versus 2015-2017).

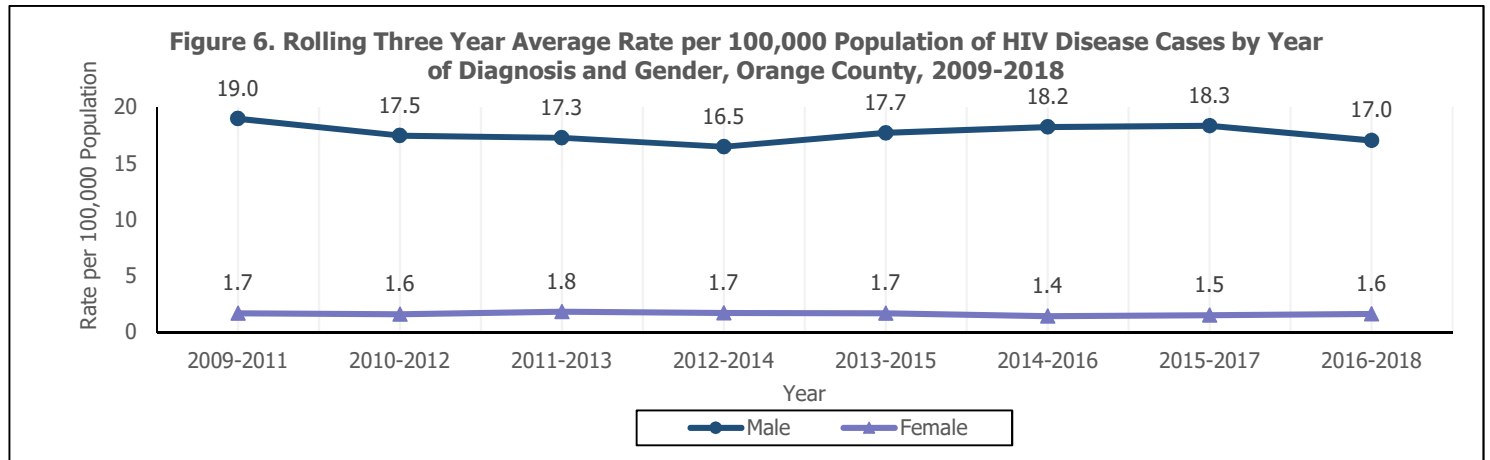


Figure 7 displays the rolling three year average rate of HIV disease cases per 100,000 population by race/ethnicity. As shown, Blacks continue to have the highest case rate, followed by Hispanics, Whites, and Asians. Pacific Islanders, American Indian/Alaskan Natives, and Multiple Race categories are excluded due to their small numbers. Blacks and Hispanics are disproportionately impacted by HIV disease compared to other racial/ethnic groups.

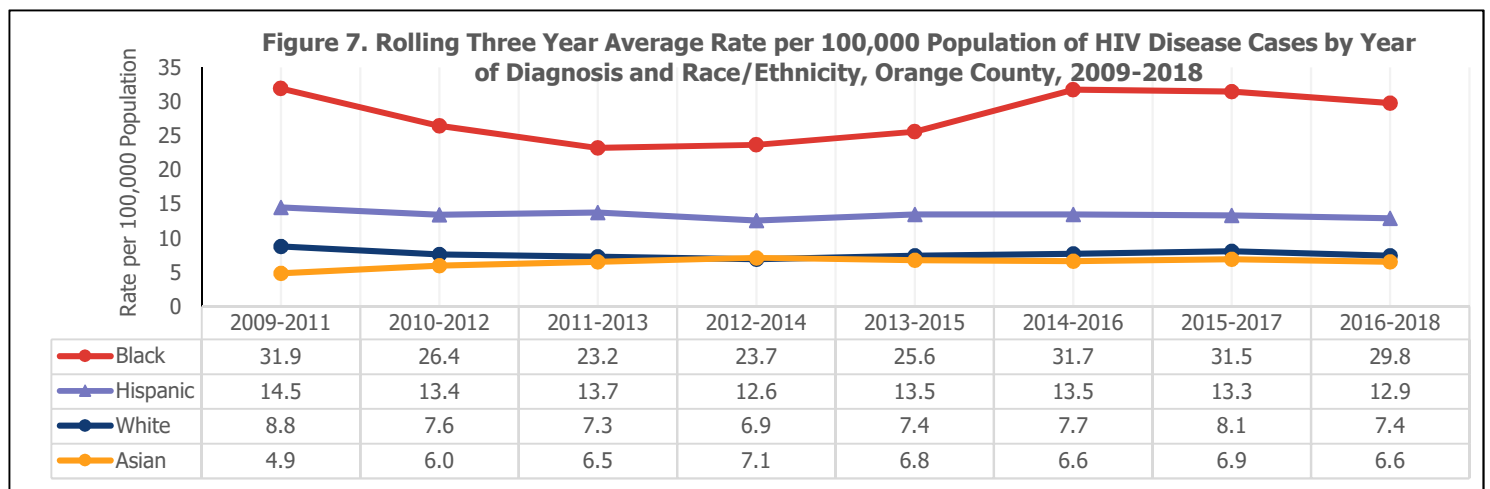
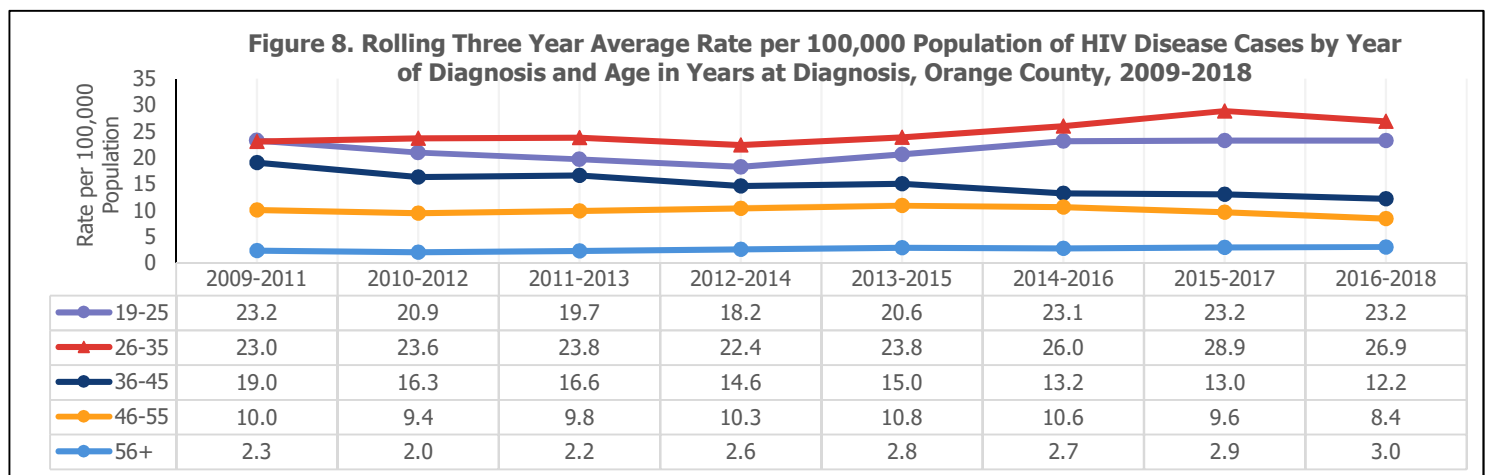


Figure 8 displays the rolling three year average rate of HIV disease cases per 100,000 population by age at diagnosis.



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Figure 9 displays the percent⁷ of total HIV disease cases by mode of exposure each year for 2009-2018. The percent of cases due to heterosexual contact and injection drug use (IDU) have increased and the percent of cases for men who have sex with men (MSM) has decreased since 2009. Although the percent of cases due to both MSM and IDU exposure decreased from 2009, an increase was seen from 2017 to 2018. The line for MSM is not displayed in order to highlight the differences and changes in the other modes of transmission.

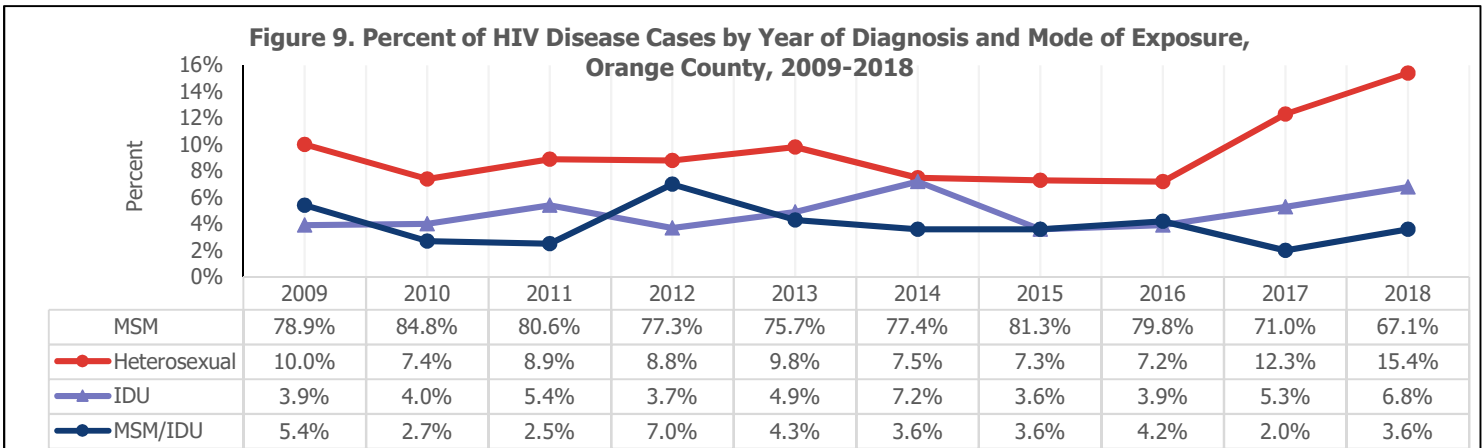


Table 1: Number of HIV Disease Cases Diagnosed, Percent of Total Cases Diagnosed, and Percent Change in the Number of Cases Diagnosed, 2009 versus 2018

	2009		2018		Percent Change in the Number of Cases
	Number	Percent	Number	Percent	
Total Number of HIV Disease Cases	331	100.0%	280	100.0%	
Gender					
Male	300	90.6%	248	88.6%	-17.3%
Female	27	8.2%	27	9.6%	0.0%
Transgender Male-to-Female	*	*	5	1.8%	*
Race/Ethnicity					
Black	17	5.1%	11	3.9%	-35.3%
Hispanic	152	45.9%	153	54.6%	0.7%
White	139	42.0%	84	30.0%	-39.6%
Asian	20	6.0%	30	10.7%	50.0%
Pacific Islander	0	0.0%	*	*	*
Other/More than One Race	*	*	*	*	*
Age at Diagnosis					
0-18 Years	8	2.4%	5	1.8%	-37.5%
19-25 Years	67	20.2%	77	27.5%	14.9%
26-35 Years	91	27.5%	88	31.4%	-3.3%
36-45 Years	100	30.2%	52	18.6%	-48.0%
46-55 Years	50	15.1%	34	12.1%	-32.0%
56 Years and Older	15	4.5%	24	8.6%	60.0%
Reported Mode of HIV/AIDS Exposure					
Men Having Sex With Men (MSM)	261	78.9%	188	67.1%	-28.0%
Heterosexual Contact	33	10.0%	43	15.4%	30.3%
Injection Drug Use (IDU)	13	3.9%	19	6.8%	46.2%
MSM/IDU	18	5.4%	10	3.6%	-44.4%
Other/Unknown	6	1.8%	20	7.1%	233.3%

*Fewer than five cases.

Note: Other race/ethnicity includes Native American/Alaskan Native. Other Mode of Exposure includes recipients of transfusions or transplants, persons who received treatment for hemophilia, and all pediatric modes of transmission.

Data source for HIV disease data: HIV Case Registry, Data as of February 28, 2019.

Data source for population data: State of California, Department of Finance, Population Projections by Race/Ethnicity, Detailed Age, and Gender.

Health Care Agency Public Health Services HIV Disease Surveillance and Monitoring Program 1725-B W. 17 th Street PO Box 6099, Building 50B Santa Ana, California 92706	Phone: (714) 834-8399 Fax: (714) 834-8270 Website: http://ochealthinfo.com/phs/about/dcepi/hiv/surveillance
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⁷ Rates cannot be calculated for mode of exposure due to the lack of a population estimate for each of the risk factors.