Epidemiology of HIV in Riverside County, 2018

Epidemiology & Program Evaluation Riverside University Health System – Public Health

Note: Incidence and prevalence numbers may be different from previous reports due to the reallocation of cases by the California Department of Public Health, Office of AIDS, and changes in methodology at the State and local level.

• 2018 data should be considered preliminary.



HIV/AIDS Information

For general information on HIV, frequently asked questions or to find a testing location, please visit:

Riverside County HIV/STD Program website: http://www.rivcohivaids.org/

Or call: (951) 358-5307 Voice (800) 243-7275 Hotline | (800) STD-FACTS (951) 358-5407 Fax



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Terms Used in this Report

This report is based on Human Immunodeficiency Virus (HIV) case surveillance in Riverside County, California.

For HIV surveillance,

- Prevalence: Refers to living persons with HIV disease who are reported to be living in Riverside County, regardless of time of infection or date of diagnosis.
- Incidence: Newly diagnosed cases of HIV in a population during a specific time period.
- Rate: Common method used to compare the burden of a disease across populations of different sizes.
- PLWH: Persons living with HIV or AIDS (HIV Stage 3)



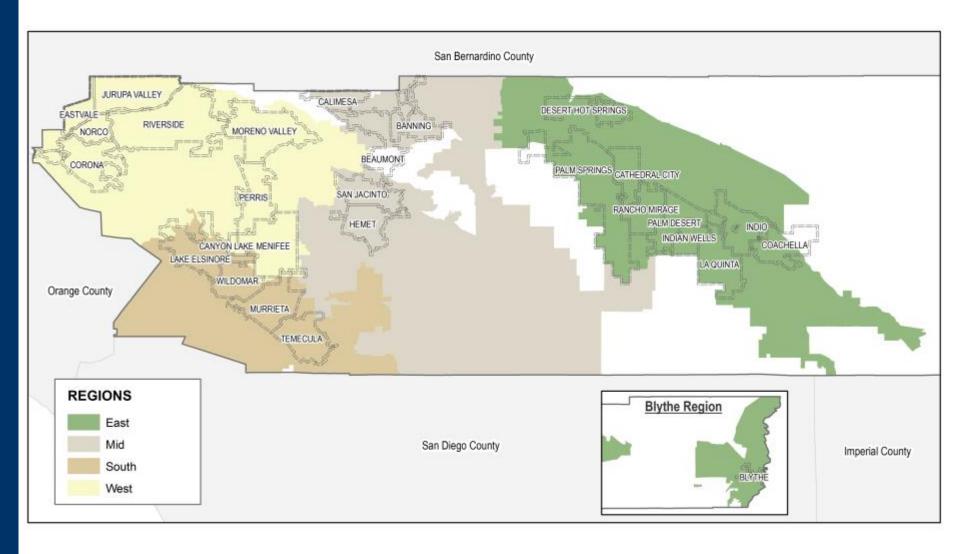
Stages of HIV Infection

- **HIV Stage 1:** Acute HIV infection, within 2 4 weeks after infection.
- HIV Stage 2: Clinical latency (HIV inactivity or dormancy). This period is sometimes called asymptomatic HIV infection or chronic HIV infection. During this phase, HIV is still active but reproduces at very low levels. People may not have any symptoms or get sick during this time.
- **HIV Stage 3:** Acquired immunodeficiency syndrome (AIDS), AIDS is the most severe phase of HIV infection.

Source: <u>https://wwwn.cdc.gov/hivrisk/what_is/stages_hiv_infection.html</u>, accessed 8/12/2019.



Riverside County, CA





Prevalence

People currently living with HIV in Riverside County



Persons living with diagnosed HIV (All Stages) by year, Riverside County and California, 2013 - 2018

Count and Rate per 100,000 Population, Riverside County, CA									
	2013 2014 2015* 2016* 2017 2018**								
Total Cases	5,756	5,977	6,785	8,189	9,017	9,515			
Rate per 100,000 population	252.8	259.2	291.3	346.9	376.4	393.2			

Count and Rate per 100,000 Population, California									
2013 2014 2015 2016 2017 2018									
Total Cases	124,235	126,376	129,316	132,908	135,082	Not Available			
Rate per 100,000 population	323.8	326.2	331.1	337.7	340.3	Not Available			

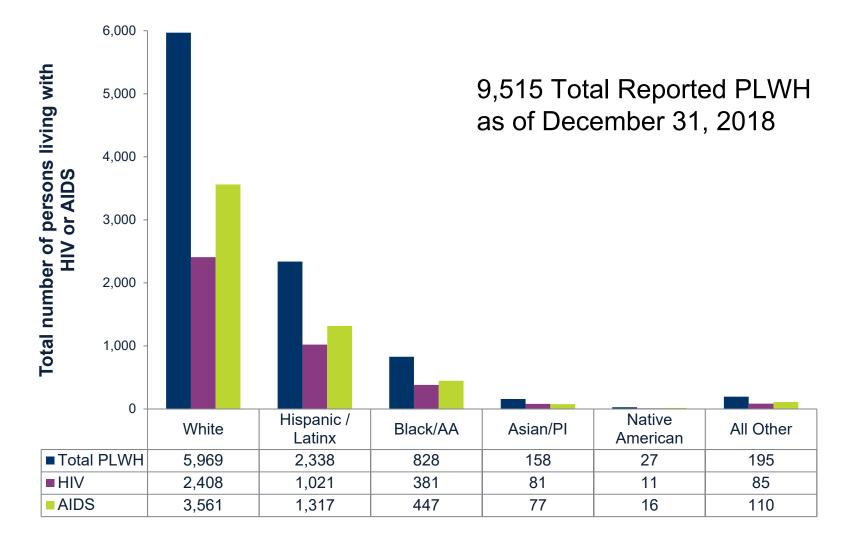
*In 2015/2016 there was a change in prevalence reporting methodology to reflect the number of PLWH currently living in the county rather than those diagnosed in the county.

**2018 data should be considered provisional.



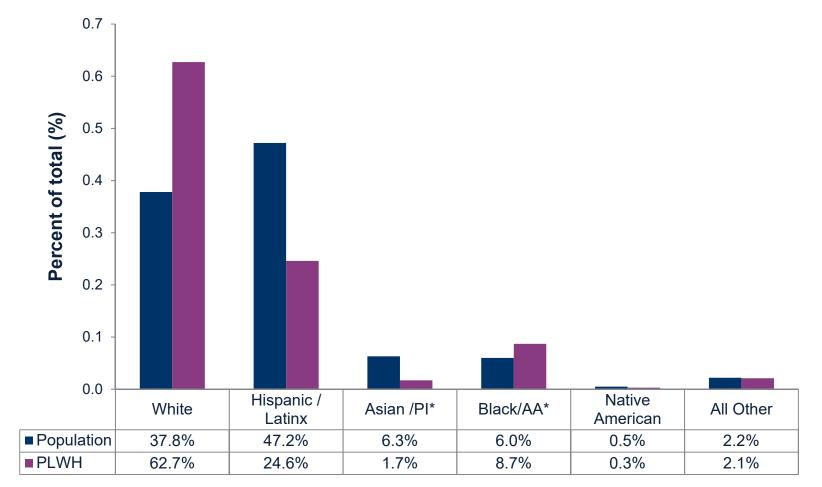
9

Count of Living HIV and AIDS (HIV Stage 3) Cases by Race/Ethnicity, Riverside County, CA 2018



*AA=African American, PI=Pacific Islander

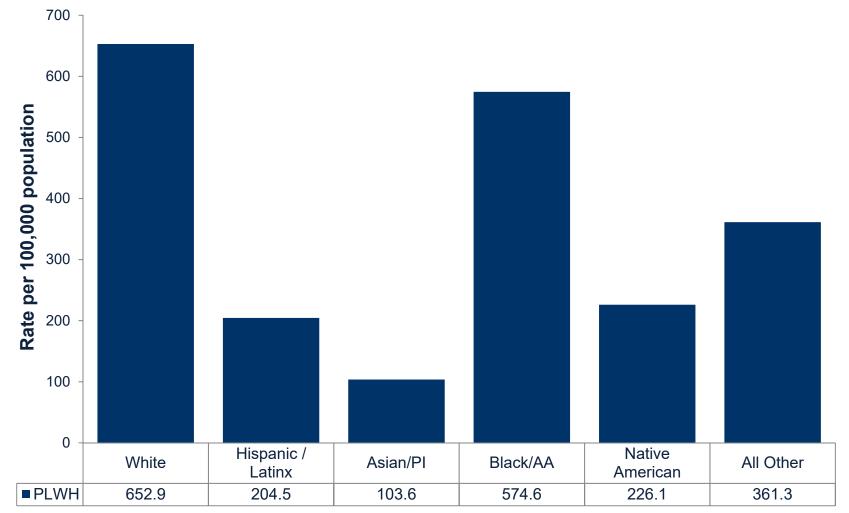
Proportion of the Total Population, Prevalent HIV (All Stages) Cases by Race/Ethnicity, Riverside County, CA 2018



*AA=African American, PI=Pacific Islander



HIV (All Stages) Prevalence (Living) Rates by Race/Ethnicity, Riverside County, CA 2018



*AA=African American, PI=Pacific Islander



HIV (All Stages) Prevalence (Living) by Gender, Riverside County, CA 2018

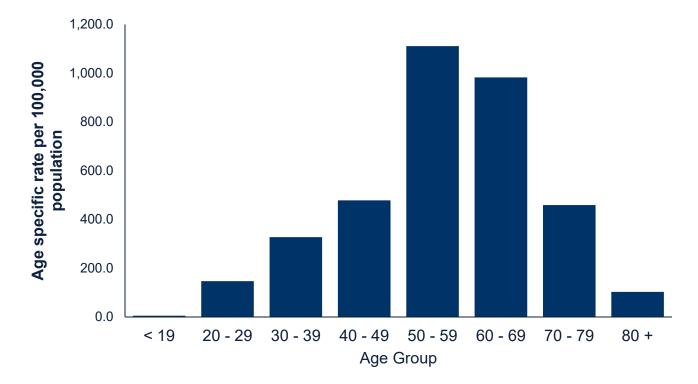
Gender*	Number of Cases	Percent of cases	Rate per 100,000	
cis-Male	8,725	91.7%	726.7	
cis-Female	726	7.6%	59.5	
Transgender male and female	64	0.7%	—	

*Note:

Cis-Male: a person who was born male and whose gender identity is male. Cis-Female: a person who was born female and whose gender identity is female. Transgender: a person whose gender identity does not correspond to that person's gender assigned at birth.

Prevalence rate is not calculated for the transgender population due to uncertainty of the size of the total transgender population.

Age Specific HIV (All Stages) Prevalence Rates with Counts and Percent of Total, Riverside County, CA 2018

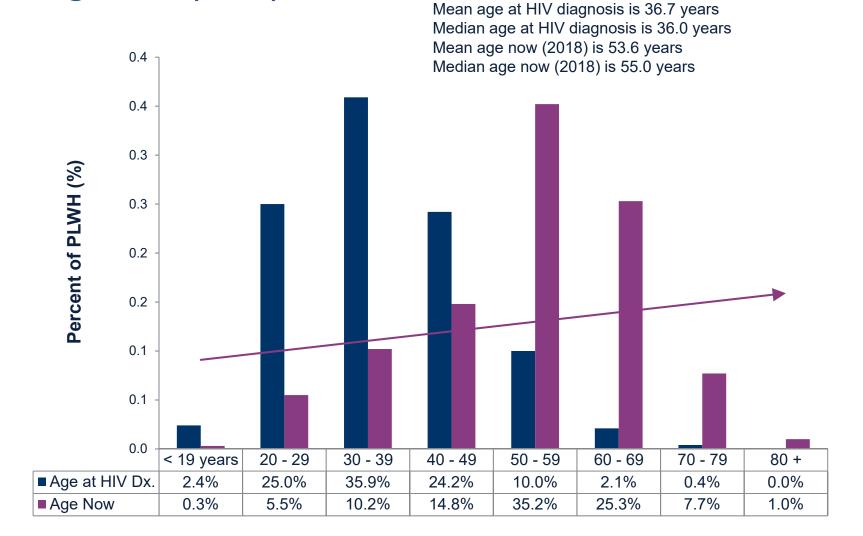


Age Group	< 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 +
Count	32	521	975	1,408	3,347	2,410	728	94
Percent	0.3	5.5	10.2	14.8	35.2	25.3	7.7	1.0
Age Specific Rate Per 100,000	4.7	146.7	327.0	478.2	1,111.0	982.7	458.8	102.4

Note: Based on patients age as of December 31, 2018



PLWH (All Stages) by Age at Time of HIV Diagnosis (Dx) vs. Age Now (2018)

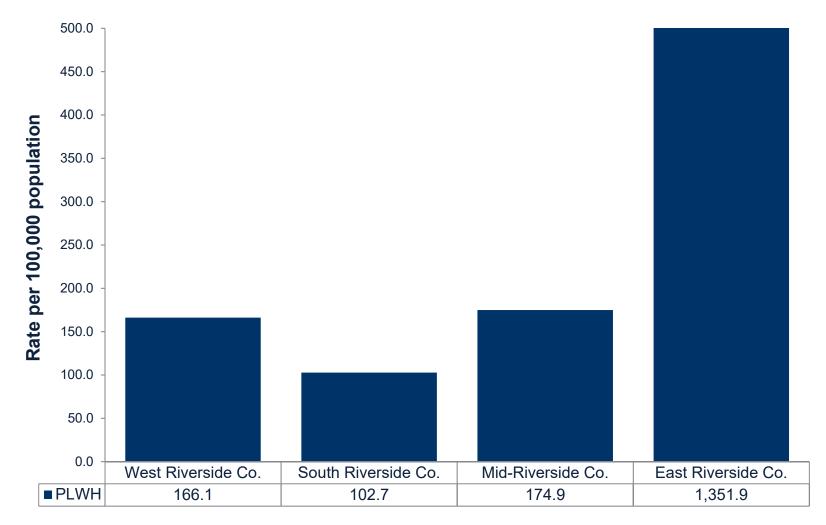


Note: Age Now is based on patients age as of December 31, 2018



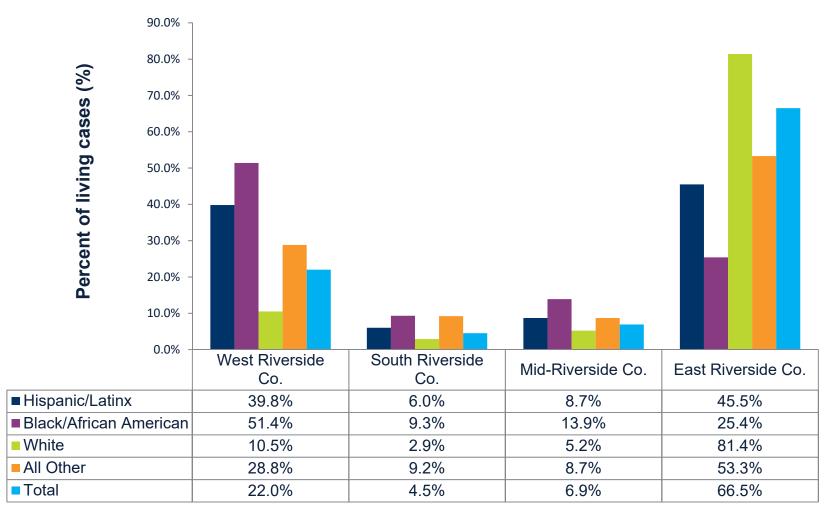
15

HIV (All Stages) Prevalence (Living) by Region, Riverside County, CA 2018



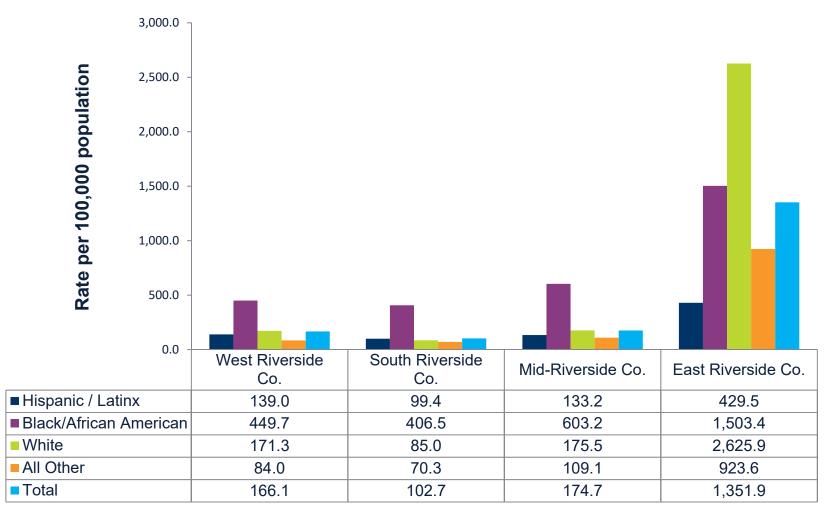


Racial/Ethnic Distribution of PLWH (All Stages) by County Region, 2018





HIV (All Stages) Prevalence Rates by Race/Ethnicity and County Region, Riverside County, CA 2018





HIV Incidence

New HIV cases by year of diagnosis in Riverside County



New HIV Diagnoses by Year, Riverside County and California, 2013 - 2018

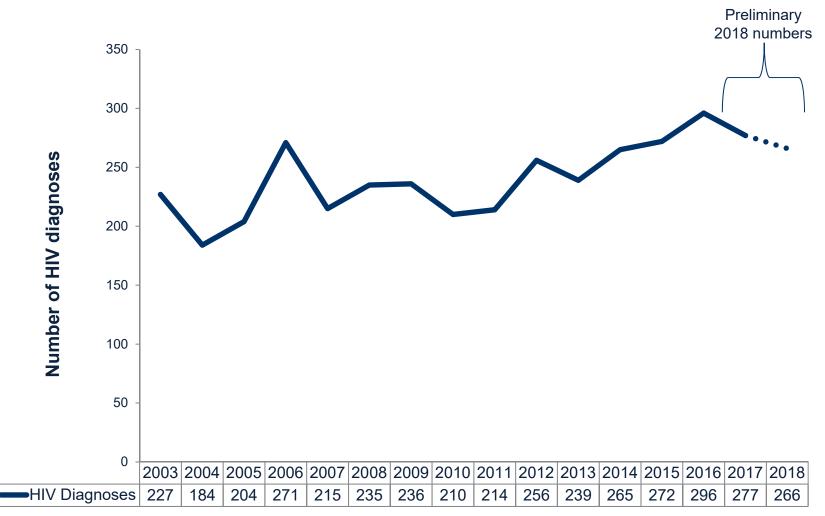
Count and Rate per 100,000 Population, Riverside County, CA									
	2013	2014	2015	2016	2017	2018*			
Total Cases	239	265	272	296	277	266			
Rate per 100,000 population	10.5	11.5	11.7	12.5	11.6	11.0			

Count and Rate per 100,000 Population, California									
2013 2014 2015 2016 2017 2018									
Total Cases	4,752	5,217	5,156	5,182	4,791	Not Available			
Rate per 100,000 population	12.4	13.5	13.2	13.2	12.1	Not Available			

*2018 data should be considered provisional

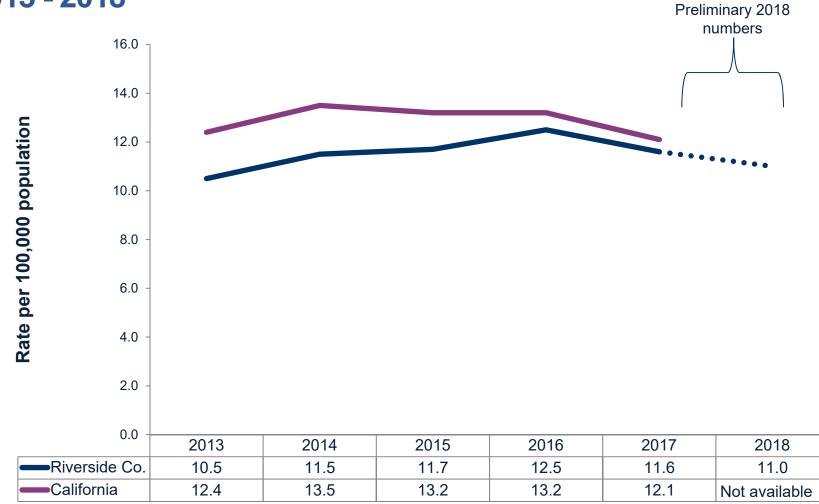


Count of HIV Diagnoses by Year, Riverside County, CA



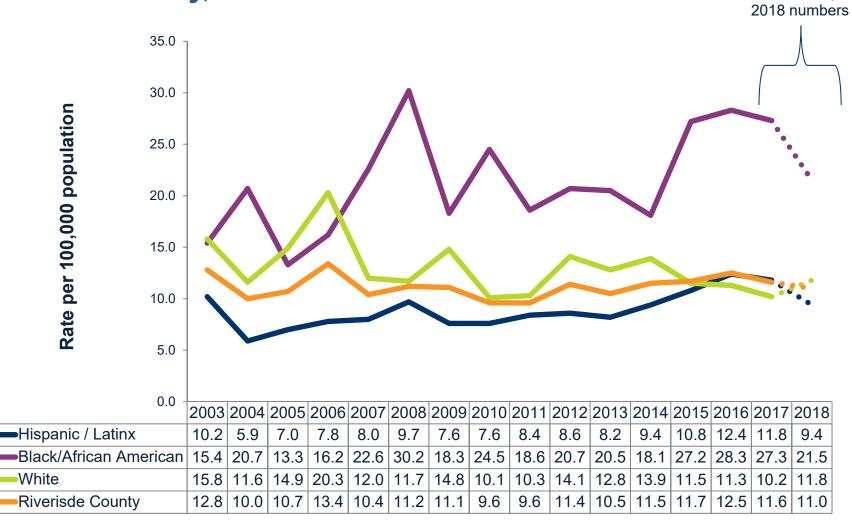


HIV Incidence Rates, Riverside County and California, 2013 - 2018



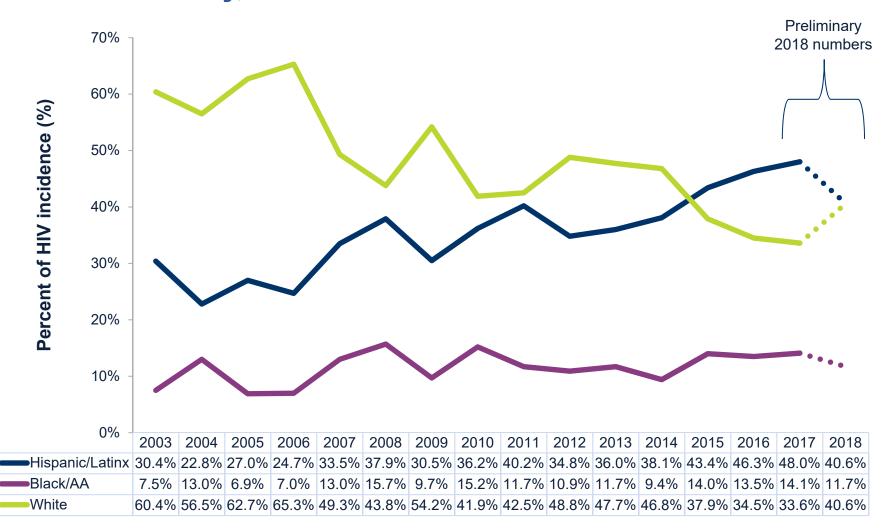


HIV Incidence Rates by Year of Diagnosis and Race/Ethnicity, Riverside County, CA



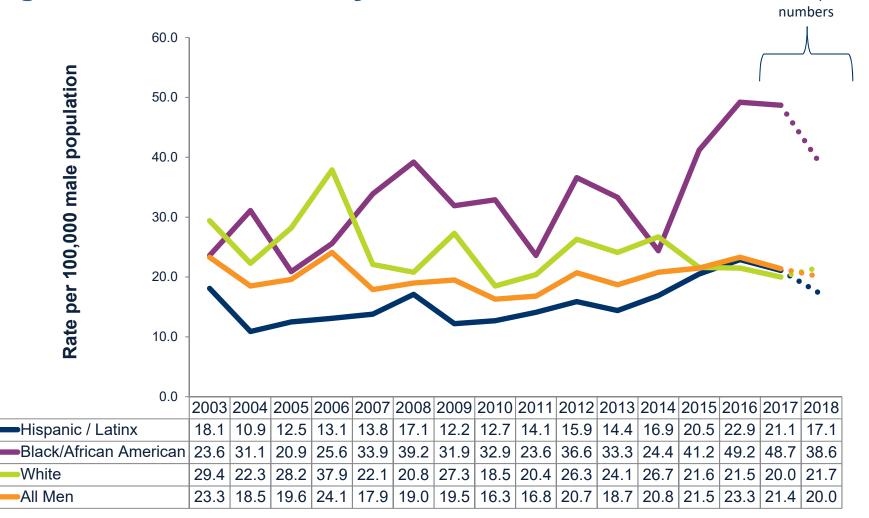


Proportion of HIV Cases by Race/Ethnicity, Riverside County, CA





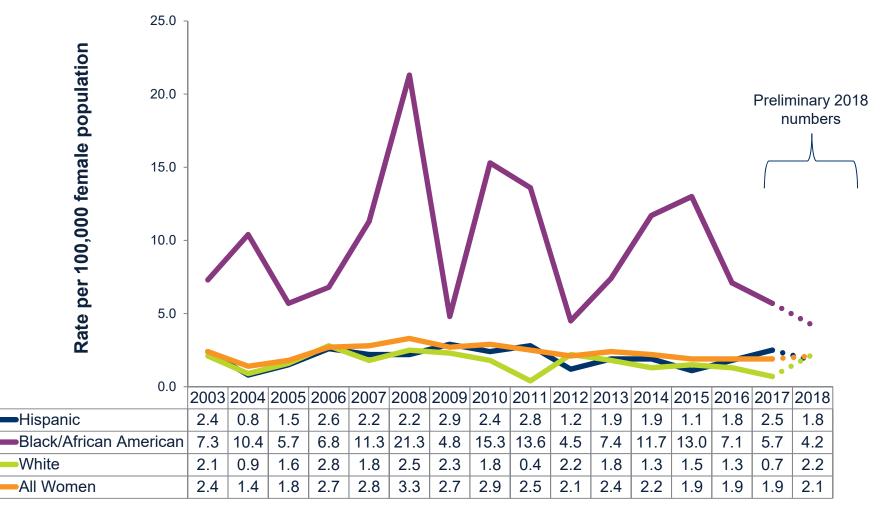
Male* HIV Incidence Rates by Race/Ethnicity and Year of Diagnosis, Riverside County, CA



*Note: Male=Male gender assigned at birth.



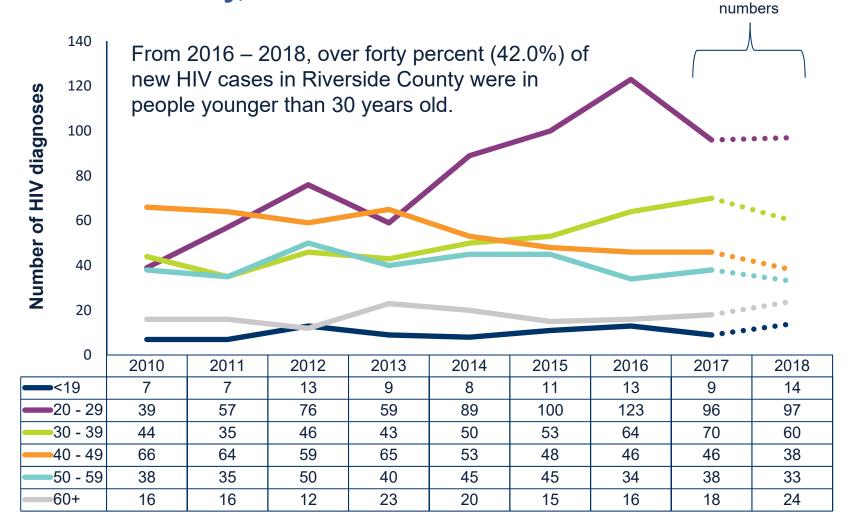
Female* HIV Incidence Rates by Race/Ethnicity and Year of Diagnosis, Riverside County, CA



*Note: Female=Female gender assigned at birth.



Number of New HIV Cases by Year and Age, Riverside County, CA





Preliminary 2018

Age Specific HIV Incidence Rates by Year, **Riverside County, CA**

Total

9.6

9.6

11.4

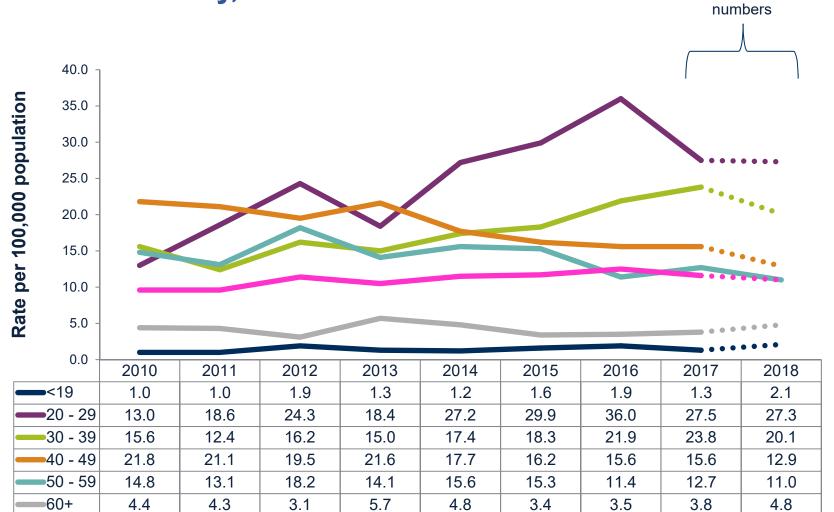
10.5

11.5

11.7

12.5

11.6

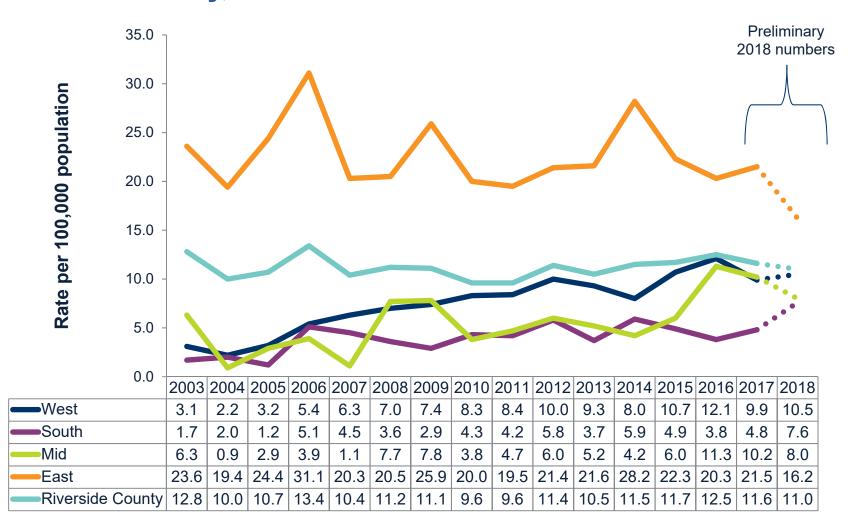




11.0

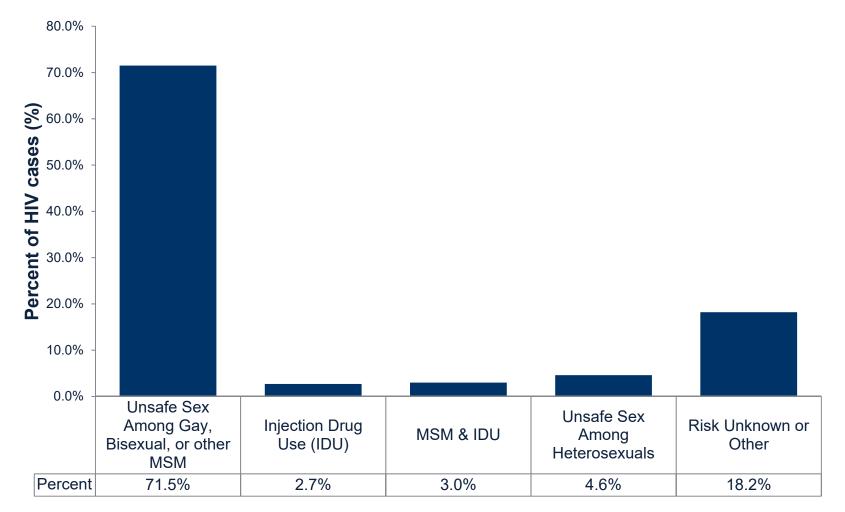
Preliminary 2018

HIV Incidence Rate by Year of Diagnosis and County Region, Riverside County, CA





Reported Risk Factor for HIV Cases Diagnosed from 2014 through 2018, Riverside County, CA



MSM: Men who have sex with men IDU: Injection Drug Use



Continuum of Care

The HIV continuum of care is a model that outlines the steps or stages of HIV medical care that people living with HIV go through from initial diagnosis to achieving the goal of viral suppression, and shows the proportion of individuals living with HIV who are engaged at each stage (https://www.hiv.gov/federal-response/policies-issues/hiv-aids-care-continuum).



 NOTE: The incidence and prevalence numbers in this section are based on the available data at the time the California HIV Surveillance Reports and the Continuum of Care data sets were released by the California Department of Public Health, Office of AIDS. There may be small variations from the numbers described in the rest of this report.



Number and Percent of PLWH In-Care, Retained In-Care, and Virally Suppressed, Riverside County and California, 2017

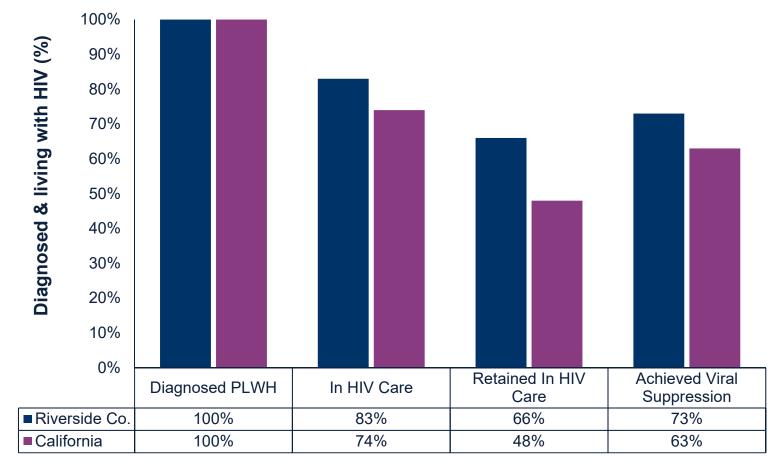
The 2021 California Integrated Plan Objective is 90% in-Care and 80% Virally Suppressed

		In-Care		Reta In-C		Virally Suppressed	
	PLWH	Ν	%	Ν	%	Ν	%
Riverside Co.	9,017	7,500	83%	5,930	66%	6,582	73%
California	135,082	99,476	74%	74,214	48%	85,492	63%

In-Care: Persons who had at least one CD4, viral load, or HIV-1 genotype test during the calendar year. Retained in Care: Persons who have two or more CD4 or viral load or HIV-1 genotype tests that were performed at least 3 months apart during the calendar year are considered to be retained in care. Virally suppressed: Persons whose most recent HIV viral load test result during the calendar year was \leq 200 copies/ml.



The Overall Continuum of HIV Care: All Persons Living with HIV Infection, Riverside County and California, 2017



In-Care: Persons who had at least one CD4, viral load, or HIV-1 genotype test during the calendar year.

Retained in Care: Persons who have two or more CD4 or viral load or HIV-1 genotype tests that were performed at least 3 months apart during the calendar year are considered to be retained in care.

Virally suppressed: Persons whose most recent HIV viral load test result during the calendar year was ≤ 200 copies/ml.



Number and Percent of New HIV Diagnoses In-Care, Retained In-Care, and Virally Suppressed, Riverside County and California, 2017

		In-Care			ined Care	Virally Suppressed	
	PLWH	Ν	%	N	%	Ν	%
Riverside Co.	275*	256	93%	211	77%	203	74%
California	4,791	4,326	90%	3,569	74%	3,441	72%

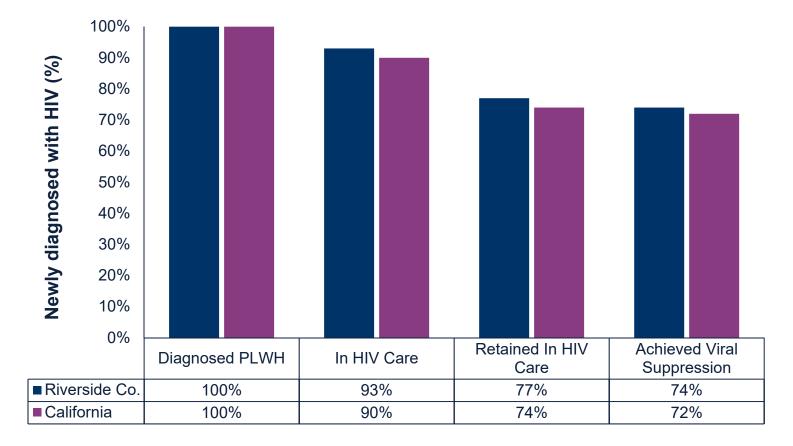
In-Care: Persons who had at least one CD4, viral load, or HIV-1 genotype test within 12 months of diagnosis. Retained in Care: Newly infected persons who have two or more CD4 or viral load or HIV-1 genotype tests that were performed at least 3 months apart within the 12 months from diagnosis are considered to be retained in care. Virally suppressed: Persons whose most recent HIV viral load test result during the calendar year was \leq 200 copies/ml.

*Due to differences in the data at the time of analysis there are small variations from the numbers described in the rest of this report.



Analysis by: California Department of Public Health, Office of AIDS

The Continuum of HIV Care: Persons Newly Diagnosed with HIV Infection, Riverside County and California, 2017

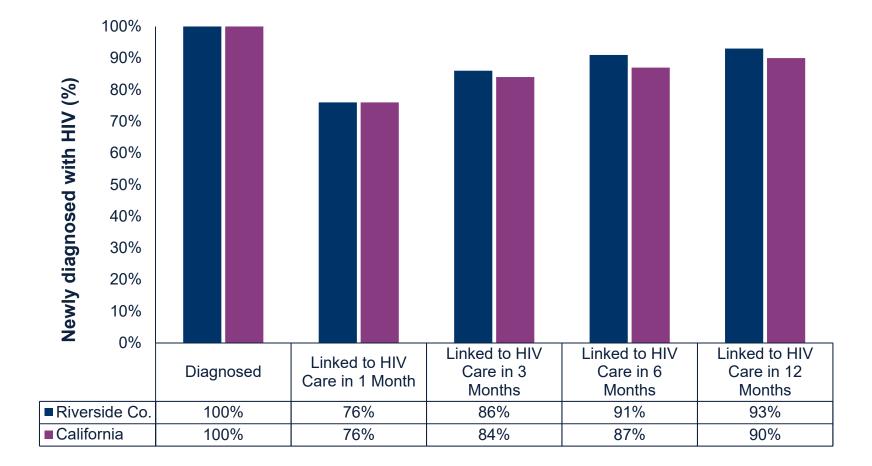


In-Care: Persons who had at least one CD4, viral load, or HIV-1 genotype test within 12 months of diagnosis. Retained in Care: Newly infected persons who have two or more CD4 or viral load or HIV-1 genotype tests that were performed at least 3 months apart within the 12 months from diagnosis are considered to be retained in care. Virally suppressed: Persons whose most recent HIV viral load test result during the calendar year was \leq 200 copies/ml.

Analysis by: California Department of Public Health, Office of AIDS



Linkage to Care for Persons Newly Diagnosed With HIV, Riverside County and California, 2017





Syphilis Co-morbidity



Persons Living With HIV Among Early Syphilis Cases in Riverside County, CA

From 2016 – 2018, on average, 52% of newly diagnosed early syphilis cases were among persons living with HIV.

		Early Syphilis Rate	Early Syphilis	
	All Early	per 100,000	Among PLWH	%
	Syphilis	Population	(Co-morbidity)	Co-morbidity
2016	517	21.9	291	56.3%
2017	532	22.2	268	50.4%
2018	665	27.5	325	48.9%

Note: Early syphilis includes primary, secondary, and early latent diagnoses.



Persons Living With HIV Among Early Syphilis Cases by County Region, Riverside County, CA, 2018

	All Early Syphilis	Early Syphilis Rate per 100,000 Population	Early Syphilis Among PLWH (Co-morbidity)	% Co-morbidity
West Riverside Co.	262	20.8	98	37.4%
South Riverside Co.	50	12.0	19	38.0%
Mid-Riverside Co.	69	18.3	18	26.1%
East Riverside Co.	277	59.3	187	67.5%
Unknown	7	_	3	42.9%

Note: Early syphilis includes primary, secondary, and early latent diagnoses.



Riverside County HIV Summary



Summary

Prevalence:

- There are currently 9,515 people reported living with HIV in Riverside County.
- Of PLWH diagnosed in the county, 63% are White.
- East Riverside County has three times the number of PLWH than any other county region.
- The greatest proportion of African American PLWH are in west Riverside County.
- Over two-thirds (69%) of people living with HIV in Riverside County are 50 years old or older.



Summary Continued

Prevalence cont.:

- There are 64 reported transgender PLWH in Riverside County. This is likely an undercount due to non-disclosure of gender identity status.
 - 42% of transgender PLWH live in west Riverside County, 36% in the east.
 - 61% of transgender PLWH are under 50 years old, 39% are 50 years old or older.
 - 61% transgender PLWH are non-white

Incidence:

- Since 2014, three-quarters (74.5%) of newly diagnosed HIV cases have been Gay, Bisexual or other men who have unprotected sex with men (MSM).
- Over the past three years (2016 2018), over forty percent (42.0%) of new HIV cases in Riverside County were in people younger than 30 years old.
- Over the past three years (2016 2018), nearly twenty percent (19.4%) of all new HIV cases in Riverside County were in people 50 years old or older.



Summary Continued

Incidence Cont.:

- In 2018, though only 6% of the population, African Americans represent 12% of new HIV cases diagnosed in the county.
- Since 2016, there have been 8 new HIV diagnoses among transgender persons.
- On average, 52% of newly diagnosed early syphilis cases were among persons living with HIV.



HIV in East Riverside County



HIV/AIDS in East Riverside County

- There are currently 6,319 people reported to be living with HIV in east Riverside County.
- The prevalence rate of PLWH in Palm Springs (7,300.0 per 100,000) is over 20 times higher than California overall (340.3 per 100,000).
- Two-thirds (66.4%) of all PLWH in Riverside County reside in east Riverside County.
- East Riverside County is home to an older group of PLWH.
 - The median age of persons living with HIV in east Riverside County is 58 years, compared to 49 years in the rest of the county.
 - 42.5% of all people living with HIV in east Riverside County are 60 or older. In the rest of Riverside County, only 17.0% of those living with HIV are over 60.



East Riverside County HIV Incidence, 2009 - 2018

- From 2009 through 2018 there have been 1,021 new HIV cases diagnosed in east Riverside County.
 - Average of 102.1 new cases per year.
- From 2009 through 2018 over 60% all HIV cases diagnosed in east Riverside County are among adults 40 years old or older.

Age group	Percent of new cases
Under 20	1.9%
20 – 29	19.6%
30 - 39	17.2%
40 - 49	26.3%
50 – 59	22.8%
60 - 69	9.6%
70 years old and older	2.5%



East Riverside County HIV Incidence, 2009 - 2018

 Most new HIV diagnoses in east Riverside County are among White non-Hispanic men.

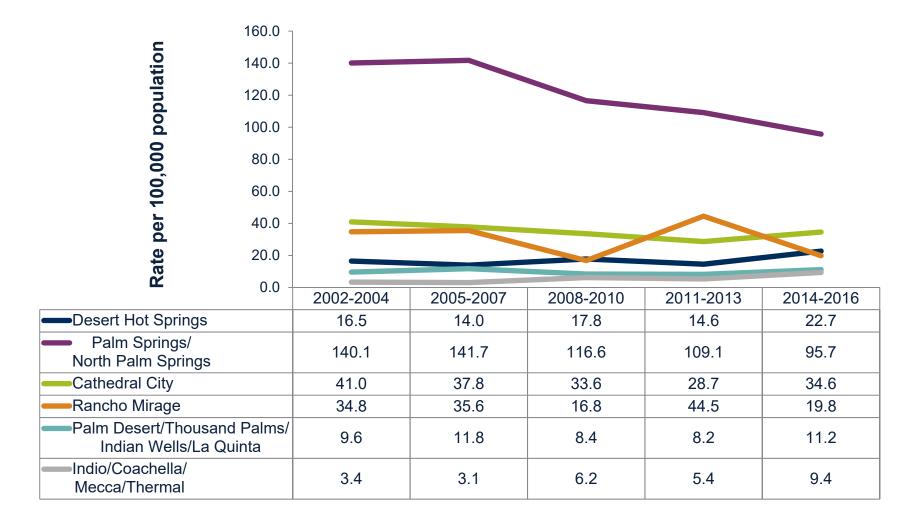
Gender*	Percent of new cases
Male	94.9%
Female	5.1%

Ethnicity	Percent of new cases
Hispanic	31.0%
Black/African American	3.9%
White	60.7%
All Other	4.4%

*Note: Gender = Gender assigned at birth. There were less than 5 reported transgender people diagnosed with HIV in east Riverside County from 2009 – 2018.

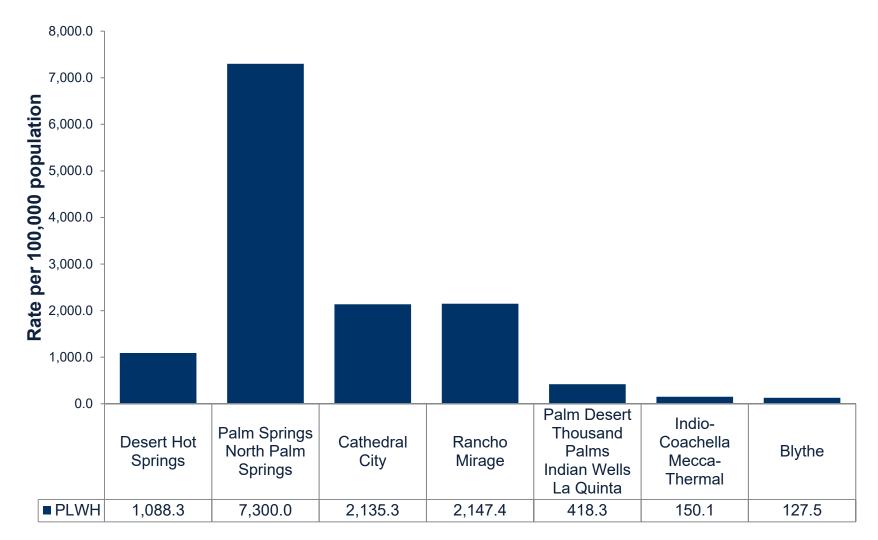


3-Year Average HIV Incidence, Coachella Valley, 2002 - 2016





Prevalence of Persons Living with HIV, East Riverside County, 2017





East Riverside County – Zip Code Key

		Palm Springs/			Palm Desert/Thousand Palms/		
	Desert Hot Springs	North Palm Springs	Cathedral City	Rancho Mirage	Indian Wells/La Quinta	Indio/Coachella/ Mecca/Thermal	Blythe
	92240	92262	92234	92270	92211	92201	92225
	92241	92264			92260	92203	
		92258			92276	92236	
					92210	92254	
					92253	92274	
2003-2007 Population Estimate	35,646	45,360	47,318	14,834	94,218	133,141	
2008-2012 ACS Population Estimate	43,001	46,228	51507	17,215	105,345	158,326	24,292
2013 – 2017 ACS Population Estimate	43,370	48,726	53,717	17,975	111,399	168,599	21,966



HIV in Mid-Riverside County, CA



HIV/AIDS in Mid-Riverside County, CA

- There are currently 660 people reported to be living with HIV in the midsection of the county.
- 6.9% of all PLWH in Riverside County reside in the mid-part of the county.
- From 2009 through 2018, there have been 208 HIV cases diagnosed in the mid-part of the county.
 - Average of 20.8 new cases per year.



Mid-Riverside County HIV Incidence, 2009 - 2018

 From 2009 through 2018, over a third of all new HIV cases in mid-Riverside County were among 20 – 29 year olds.

Age group	Percent of new cases
Under 20	3.8%
20 - 29	35.1%
30 - 39	20.7%
40 - 49	20.7%
50 - 59	14.4%
60 years old and older*	5.3%

*Further age breakdown masked due to small numbers



Mid-Riverside County HIV Incidence, 2009 - 2018

• Most new HIV cases in mid-Riverside County are among non-white men.

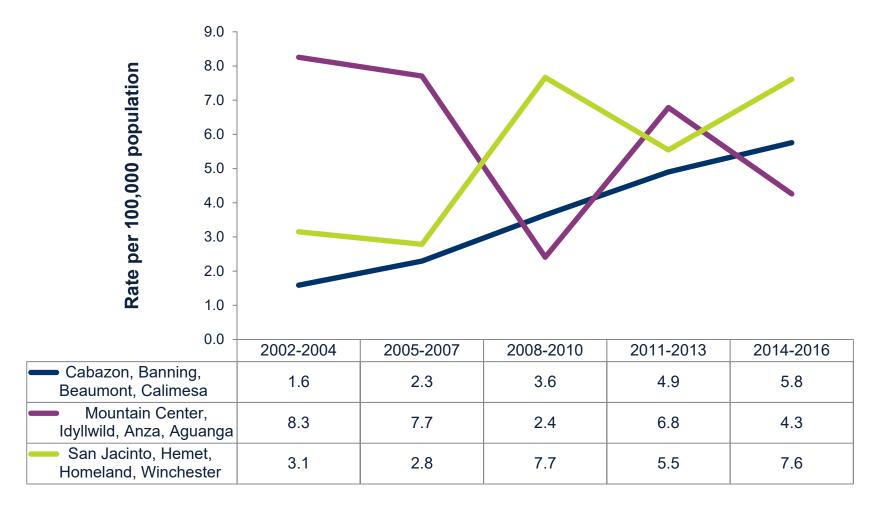
Gender*	Percent of new cases
Male	82.2%
Female	17.8%

Ethnicity	Percent of new cases
Hispanic	34.1%
Black/African American	18.8%
White	39.4%
All Other	7.7%

*Note: Gender = Gender assigned at birth. There were less than 5 reported transgender people diagnosed with HIV in mid-Riverside County from 2009 – 2018.

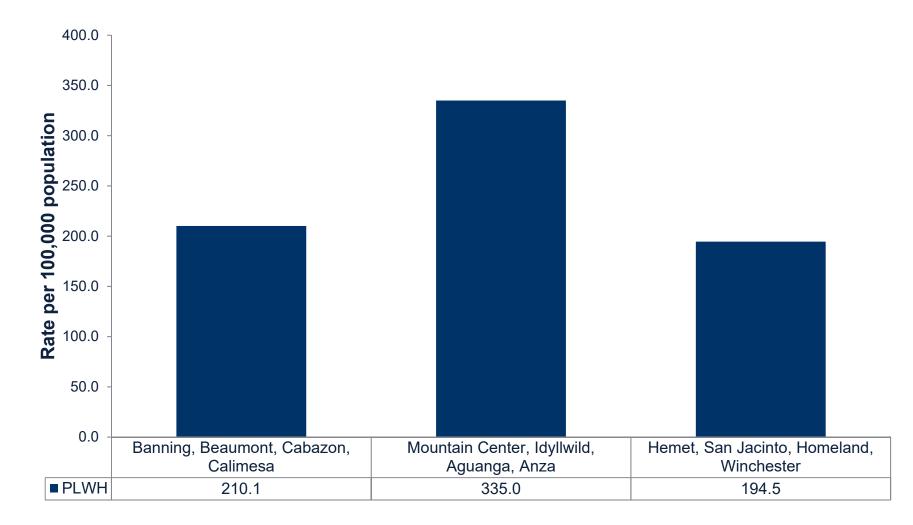


3-Year Average HIV Incidence Rates, Mid-Riverside County, 2002 - 2016





Prevalence of Persons Living with HIV/AIDS, Mid-Riverside County, 2018





Mid-Riverside County Zip-Code Key

	Cabazon, Banning, Beaumont, Calimesa	Mountain Center, Idyllwild, Anza, Aguanga	San Jacinto, Hemet, Homeland, Winchester
	92230	92561	92582
	92220	92549	92583
	92223	92539	92543
	92320	92536	92544
			92545
			92548
			92596
2002-2004 Population Estimate	62,939	12,112	148,158
2005-2007 Population Estimate	72,643	12,977	167,567
2008-2010 Population Estimate	82,346	13,843	186,976
2011-2013 Population Estimate	88,403	14,737	198,394
2014-2016 Population Estimate	92,636	15,646	205,816
2013 – 2017 ACS Population Estimate	97,564	12,240	212,857



HIV in South Riverside County, CA



HIV/AIDS in South Riverside County, CA

- There are currently 424 people reported to be living with HIV in the south section of the county.
- 4.5% of all PLWH in Riverside County reside in the south part of the county.
- From 2009 through 2018, there have been 170 HIV cases diagnosed in the south region of the county.
 - Average of 17 new cases per year.



South Riverside County HIV Incidence, 2009 - 2018

 From 2009 through 2018, over a third of all new HIV cases diagnosed in south Riverside County were among those 20 – 29 years old.

Age group	Percent of new cases
Under 20	7.6%
20 – 29	35.9%
30 - 39	21.2%
40 - 49	23.5%
50 - 59	9.4%
60 years old and older*	2.4%

*Further age breakdown masked due to small numbers



South Riverside County HIV Incidence, 2009 - 2018

Gender*	Percent of new cases		
Male	87.6%		
Female	12.4%		

Ethnicity	Percent of new cases		
Hispanic	36.5%		
Black/African American	12.9%		
White	41.8%		
All Other	8.8%		

*Note: Gender = Gender assigned at birth. There were less than 5 reported transgender people diagnosed with HIV in south-Riverside County from 2009 – 2018.

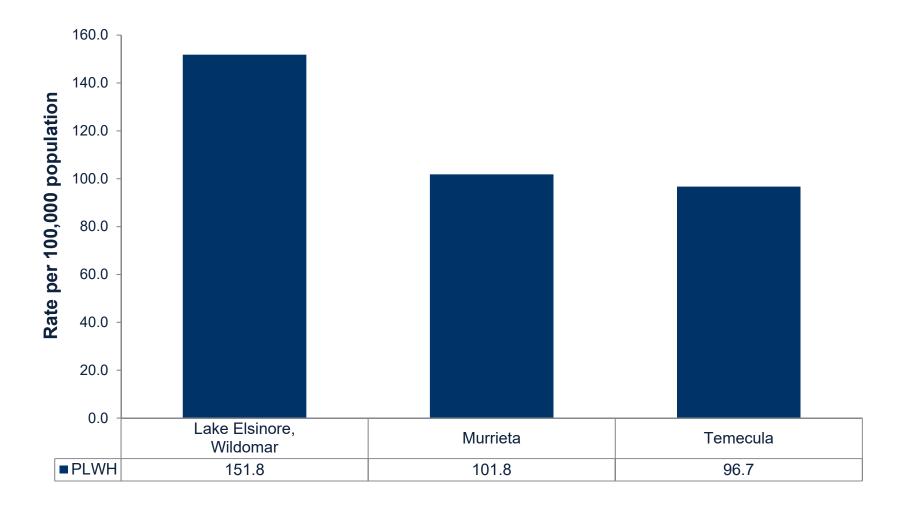


3-Year Average HIV Incidence Rates, South Riverside County, 2002 - 2016





Prevalence of Persons Living with HIV/AIDS, South Riverside County, 2018





South Riverside County Zip-Code Key

	Lake Elsinore, Wildomar	Murrieta	Temecula
	92530	92562	92590
	92532	92563	92591
	92595		92592
2002-2004 Population Estimate	73,304	72,894	86,740
2005-2007 Population Estimate	84,193	91,355	98,605
2008-2010 Population Estimate	95,081	109,817	110,469
2011-2013 Population Estimate	102,634	121,626	119,040
2014-2016 Population Estimate 2013 – 2017	108,519	130,109	125,963
ACS Population Estimate	112,621	127,718	127,242



HIV in West Riverside County, CA



HIV in West Riverside County, CA

- There are currently 2,092 people reported to be living with HIV in west Riverside County.
- Nearly a quarter (22%) of all PLWH in Riverside County reside in the west part of the county.
- West Riverside County is home to a younger and more diverse group of PLWH than the east region.
 - The median age of persons living with HIV in the west part of the county is 47 years, compared to 57 in the rest of the county.
 - 16% of all people living with HIV in west county are 30 or younger. In the rest of Riverside County, only 4.3% of those living with HIV/AIDS are 30 or younger.
 - 70% of all people living with HIV in west Riverside County are non-white. In the rest of Riverside County, only 28% of PLWH are non-white.



West Riverside County HIV Incidence, 2009 - 2018

- From 2009 through 2018, there have been 1,103 HIV cases diagnosed in the west part of the county.
 - Average of 110.3 new cases per year.
- From 2009 through 2018, over two-thirds (69%) of all new HIV cases diagnosed in west Riverside County were among those younger than 40 years old.

Age group	Percent of new cases
Under 20	5.3%
20 – 29	40.4%
30 - 39	23.8%
40 - 49	17.6%
50 – 59	9.9%
60 - 69	2.5%
70 years old and older	0.5%



West Riverside County HIV Incidence, 2008 - 2017

 Most new HIV cases in west Riverside County are among Hispanic men.

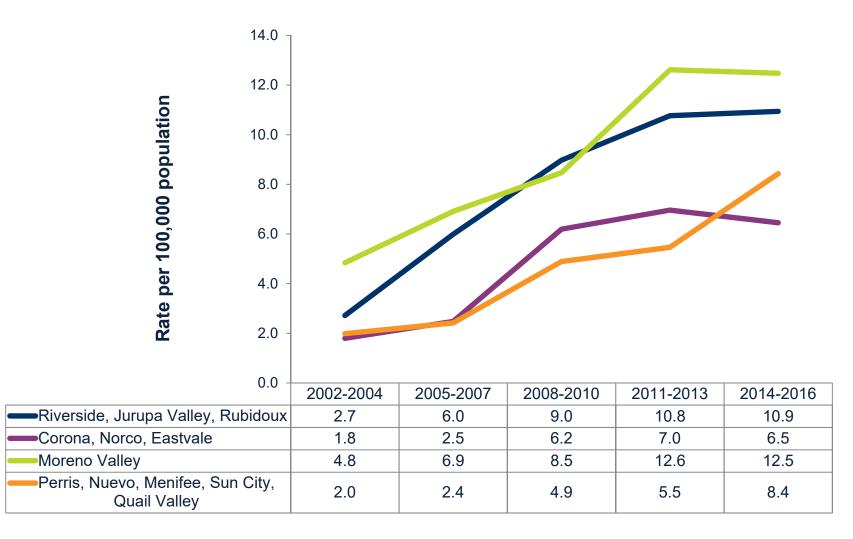
Gender*	Percent of new cases		
Male	86.9%		
Female	13.1%		

Ethnicity	Percent of new cases		
Hispanic	50.0%		
Black/African American	18.9%		
White	25.4%		
All Other	5.7%		

*Note: Gender = Gender assigned at birth. There were 15 (1.4% of cases) reported transgender cases diagnosed with HIV in south-Riverside County from 2009 – 2018.

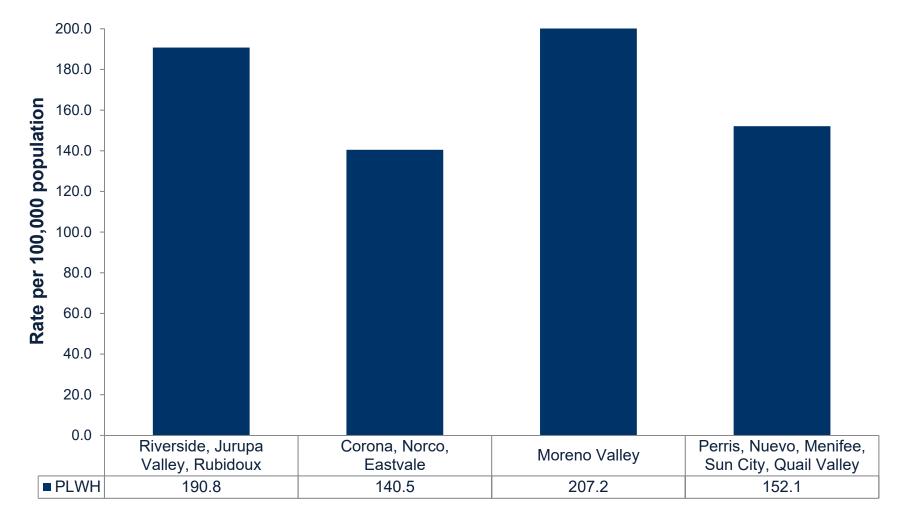


3-Year Average HIV Incidence, West Riverside County, 2002 - 2016





Prevalence of Persons Living with HIV/AIDS, West Riverside County, 2018





West Riverside County Zip-Code Key

	Riverside, Jurupa Valley, Mira Loma, Rubidoux, March ARB	Corona, Norco, Eastvale	Moreno Valley	Perris, Nuevo, Menifee, Sun City, Quail Valley
	91752	92879	92551	92567
	92501	92880	92553	92570
	92503	92881	92555	92571
	92504	92882	92557	92584
	92505	92883		92585
	92506	92860		92586
	92507			92587
	92508			
	92509			
	92518			
2002-2004 Population Estimate	392,547	204,023	158,342	151,160
2005-2007 Population Estimate	417,318	228,405	173,595	177,817
2008-2010 Population Estimate	442,084	252,788	188,849	204,473
2011-2013 Population Estimate	455,220	268,096	198,187	219,590
2014-2016	466,157	278,868	205,717	228,937
Population Estimate 2013 – 2017				
ACS	480,138	280,504	204,123	236,047
Population Estimate				Riverside

Notes & Data Sources:

Unless otherwise noted, all HIV statistics come from HIV and AIDS cases reported to Riverside County Department of Public Health as of December 31, 2018.

* Data extracted from the Enhanced HIV/AIDS Reporting System (eHARS) 2nd quarter (July), 2019

Population:

U.S. Census Bureau, 2000 and 2010 Census 2005 – 2017 U.S. Census Bureau, American Community Survey Estimates 2001 – 2004 California Department of Finance Population Estimates State of California, Department of Finance, Report P-3: State and County Population Projections Dataset. Sacramento, California, May, 2019.

Continuum of Care Data: California Department of Public Health, Office of AIDS, California HIV Surveillance Report — 2017. Local Health Jurisdiction Continuum of Care Analysis, California Department of Public Health, Office of AIDS, March 14 2019, dataset.

Syphilis Data: California Department of Public Health, California Reportable Disease Information Exchange (CalREDIE). Extracted July 18, 2019.



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