

HIV/AIDS in Older Persons

San Diego County
2015

County of San Diego
Health and Human Services Agency



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Health and Human Services Agency
Public Health Services



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This report presents information on the impact of the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) on San Diego county residents 50 years of age and older. Since the first older person was diagnosed with AIDS in the county in 1981, there have been 1,974 persons diagnosed who were 50 years of age and older. This includes 259 adults aged 65 and older. Individuals 50 years of age or older comprise 9.2% of the cumulative non-pediatric (aged 13 years or older) HIV disease cases diagnosed in the county. The percentage of those aged 50 years and older at diagnosis has risen to 16.2% in recent years (2010-2014), a change that is statistically significant ($p < 0.001$) (see Table 1).

Older persons generally have not been a focus in HIV/AIDS prevention and testing programs. In addition, older persons with HIV disease have challenges obtaining ser-

vices that recognize coincidental health conditions associated with aging. Of persons living with HIV or AIDS (PLWHA) who were diagnosed when they were less than 50 years of age, 43.2% are now 50 years of age or older, and 8.1% are 60 years of age and older.

The data analyzed for this report include only adult and adolescent cases over 12 years of age. The HIV diagnosis date given in the following sections and tables is the first date of an HIV disease diagnosis, regardless of HIV or AIDS status.

Gender

Whether over or under 50 years of age, more men than women are diagnosed with HIV each year in San Diego county (see Table 1). The percentage of males 50 years and older with an AIDS diagnosis has declined significantly from 93% in 1981-1989 to 86%

Table 1

Percent of PLWHA and recent HIV diagnoses over 5-year time periods at time of diagnosis, by age group and sex, San Diego County

	Male				Female			
	Age < 50 years		Age 50+ years		Age < 50 years		Age 50+ years	
	PLWHA*	Diagnoses**	PLWHA*	Diagnoses**	PLWHA*	Diagnoses**	PLWHA*	Diagnoses**
1981-1989	96.0%	95.7%	83.3%	92.9%	4.0%	4.3%	16.7%	7.1%
1990-1994	89.8%	91.9%	90.4%	91.3%	10.2%	8.1%	9.6%	8.7%
1995-1999	88.6%	88.7%	90.1%	91.0%	11.4%	11.3%	9.9%	9.0%
2000-2004	90.3%	90.0%	84.5%	82.4%	9.7%	10.0%	18.5%	17.6%
2005-2009	90.9%	90.8%	84.1%	83.8%	9.1%	9.2%	15.9%	16.2%
2010-2014	91.6%	91.6%	85.6%	86.1%	8.4%	8.4%	14.4%	13.9%
Total %	91.0%	91.9%	85.3%	87.9%	9.0%	8.1%	14.7%	12.1%
Total	11,003	17,736	867	1,727	1,089	1,555	150	238

*Living as of 31 December 2014

**Diagnoses of HIV disease, regardless of stage of disease, in the time period indicated.

in 2010-2014 ($p=0.002$).

The proportion of males and females in the older case group is similar to that seen in the younger cases. In the most recent time period, there is an increase in the percentage of females in the older group compared to the younger group. There is an overall trend for HIV disease diagnoses at later ages. It should be noted that the number of older female cases in each time period is small and trends should be interpreted with caution.

Race/Ethnicity

In PLWHA, those who are older are significantly more likely to be white ($p<0.001$), and less likely to be black ($p<0.001$) or Hispanic ($p<0.001$) (see Table 2). For those diagnosed with HIV disease in recent years (2010-2014), these differences are even more pronounced.

There are differences across race/

ethnicities by gender (see Table 3). Older male cases are more likely to be white than younger cases, both recently ($p=0.021$) and in PLWHA ($p<0.001$). Also, both older male recent ($p=0.027$) and PLWHA ($p<0.001$) cases are less likely to be Hispanic than younger cases. These differences are not seen among black male recent ($p=0.079$) or PLWHA ($p=0.078$) cases.

Unlike male cases, older female PLWHA do not differ from younger female PLWHA across race/ethnicity ($p=0.089$). In recent cases, older female cases are less likely to be Hispanic than younger female cases ($p=0.002$) and more likely to be white ($p<0.001$).

Mode of Transmission

Male and female cases have different risk factors for transmission across age groups (see Table 4). In all male cases, the

Table 2

Number and Percent of PLWHA and recent (2010-2014) HIV diagnoses, by age group and race/ethnicity, San Diego County

Race/ Ethnicity	PLWHA*		Recent**	
	<50 years	50+ years	<50 years	50+ years
White	5,998 (49.6%)	588 (57.8%)	717 (35.2%)	224 (56.7%)
Black	1,560 (12.9%)	109 (10.7%)	267 (13.1%)	47 (11.9%)
Hispanic	3,978 (32.9%)	292 (28.7%)	902 (44.3%)	111 (28.1%)
Other†	556 (4.6%)	28 (2.8%)	151 (7.4%)	13 (3.3%)
Total Cases	12,092	1,017	2,037	395

*Living as of 31 December 2014.

**HIV disease diagnosis 2010-2014.

†Includes Asian, Pacific Islander, Native American, Native Alaskan, and multiple race.

Table 3

Race/ethnicity in PLWHA and recent (2010-2014) HIV diagnoses, by age group and sex, San Diego County

	PLWHA*		Recent**	
	<50 years	50+ years	<50 years	50+ years
Male Cases				
White	5,656 (51.4%)	530 (61.1%)	668 (35.8%)	198 (58.2%)
Black	1,287 (11.7%)	82 (9.5%)	231 (12.4%)	36 (10.6%)
Hispanic	3,576 (32.5%)	234 (27.0%)	834 (44.7%)	96 (28.2%)
Other*	484 (4.4%)	21 (2.4%)	133 (7.1%)	10 (2.9%)
Total cases	11,003	867	1,866	340
Female Cases				
White	339 (31.1%)	72 (38.7%)	49 (28.7%)	26 (47.3%)
Black	276 (25.3%)	33 (18%)	36 (21.1%)	11 (20.0%)
Hispanic	401 (36.8%)	72 (38.7%)	67 (39.2%)	15 (27.3%)
Other†	73 (6.7%)	8 (4.6%)	19 (11.1%)	3 (5.5%)
Total cases	1,089	185	171	55

*Living as of 31 December 2014.

**HIV disease diagnosis 2010-2014.

†Includes Asian, Pacific Islander, Native American, Native Alaskan, and multiple race.

Note: Percents may not total 100 due to rounding.

most often reported risk is Men who have Sex with Men (MSM). Recent (2010-2014) ($p < 0.001$) and PLWHA ($p = 0.001$) older male cases are less likely to be MSM than younger cases. Both recent ($p = 0.006$) and PLWHA ($p < 0.001$) older cases are more likely to report heterosexual risk and are more likely to report Injecting Drug Use (IDU) as mode of transmission ($p < 0.001$). Younger PLWHA are more likely to report both MSM and IDU (MSM+IDU) than older PLWHA ($p = 0.019$), but significant differences are not seen in recent cases.

Significant differences in mode of transmission are not seen in recent female cases

and PLWHA across age groups.

Residence at Diagnosis

San Diego county is divided into six regions by the Health and Human Services Agency (HHSA) for planning and programmatic purposes. Most HIV disease cases diagnosed in the county resided in the Central HHSA Region at the time of diagnosis. Those aged 50 years and over were less likely than those under 50 years of age to live in the Central Region (see Table 5). In PLWHA, a smaller proportion of older persons lived in the Central Region at time of diagnosis ($p < 0.001$) than younger cases, but a greater

Table 4

Mode of transmission in PLWHA and recent (2010-2014) HIV disease diagnoses, by age group and gender, San Diego County

	PLWHA*		Recent**	
	<50 years	50+ years	<50 years	50+ years
Male Cases				
MSM	9,098 (82.3%)	654 (74.7%)	1,545 (82.8%)	236 (69.4%)
IDU	486 (4.4%)	70 (8.0%)	69 (3.7%)	30 (8.8%)
MSM+IDU	995 (9.0%)	42 (4.8%)	86 (4.6%)	9 (2.6%)
Heterosexual	343 (3.1%)	81 (9.3%)	114 (6.1%)	51 (15.0%)
Other†	133 (1.2%)	28 (3.2%)	52 (2.8%)	14 (4.1%)
Total Cases	11,055	875	1,866	340
Female Cases				
IDU	247 (22.6%)	20 (13.2%)	20 (11.7%)	8 (14.5%)
Heterosexual	796 (72.7%)	122 (80.8%)	134 (78.4%)	45 (81.8%)
Other†	52 (4.7%)	9 (6.0%)	17 (9.9%)	2 (3.6%)
Total Cases	1,095	151	171	55

*Living as of 31 December 2014.

**HIV disease diagnosis 2010-2014.

†Includes maternal transmission, blood products/transplant, and risk not specified.

NOTE: Percentages may not total 100 due to rounding.

Table 5

Region of residence at time of HIV diagnosis for PLWHA and recent (2010-2014) HIV diagnoses by age group, San Diego County

HHS Region	PLWHA*		Recent**	
	<50 years	50+ years	<50 years	50+ years
Central	6,707 (55.2%)	457 (44.5%)	957 (47.0%)	162 (41.0%)
East	814 (6.7%)	94 (9.2%)	165 (8.1%)	41 (10.4%)
South	1,750 (14.4%)	187 (18.2%)	409 (20.1%)	70 (17.7%)
North Coastal	899 (7.4%)	101 (9.8%)	165 (8.1%)	44 (11.1%)
North Inland	498 (4.1%)	50 (4.9%)	86 (4.2%)	18 (4.6%)
North Central	1,458 (12.0%)	130 (12.7%)	251 (12.3%)	57 (14.4%)
Unknown	24 (0.2%)	7 (0.7%)	4 (0.2%)	3 (0.8%)
Total Cases	12,150	1,026	2,037	395

*Living as of 31 December 2014.

**HIV disease diagnosis 2010-2014.

Note: Percents may not total 100 due to rounding.

proportion lived in the East ($p=0.012$), South ($p=0.010$), and North Coastal ($p=0.002$). Significant differences remain when controlling for race/ethnicity. In recent cases, younger cases are more likely to be diagnosed while living in the central region ($p=0.030$) than older cases, but older cases are more likely to live in the North Coastal region ($p=0.045$).

Most HIV disease diagnoses have been in people living in the City of San Diego at the time of diagnosis (see Table 6). About 72% of PLWHA less than 50 years of age were living in San Diego, a significantly great-

er proportion than the 62% of those aged 50 years and older ($p<0.001$). Older PLWHA were more likely to live in Chula Vista than younger PLWHA ($p=0.002$). Other cities have similar proportions of older and younger PLWHA. In recent cases, the only significant difference was in the percent living in San Diego at diagnosis; younger cases were more likely to be in San Diego at diagnosis than older cases ($p=0.012$).

Country of Origin

There were no significant differences

Table 6

City of residence at time of HIV diagnosis for PLWHA and recent HIV diagnoses by age group, San Diego County

City of Residence at Diagnosis	PLWHA [†]		Recent [‡]	
	<50 years	50+ years	<50 years	50+ years
San Diego	8,772 (72.2%)	640 (62.4%)	1,383 (67.9%)	244 (61.8%)
Chula Vista	608 (5.0%)	84 (8.2%)	145 (7.1%)	31 (7.8%)
Oceanside	377 (3.1%)	38 (3.7%)	73 (3.6%)	15 (3.8%)
El Cajon	243 (2.0%)	34 (3.3%)	57 (2.8%)	18 (4.6%)
Escondido	207 (1.7%)	25 (2.4%)	39 (1.9%)	10 (2.5%)
San Ysidro	194 (1.6%)	22 (2.1%)	26 (1.3%)	2 (0.5%)
Spring Valley	158 (1.3%)	19 (1.9%)	35 (1.7%)	8 (2.0%)
Vista	210 (1.7%)	17 (1.7%)	38 (1.9%)	9 (2.3%)
Carlsbad	121 (1.0%)	16 (1.6%)	22 (1.1%)	7 (1.8%)
National City	182 (1.5%)	16 (1.6%)	45 (2.2%)	6 (1.5%)
La Mesa	155 (1.3%)	16 (1.6%)	24 (1.2%)	7 (1.8%)
Other*	923 (7.6%)	99 (9.6%)	150 (7.3%)	38 (9.6%)
Total Cases	12,150	1,026	2,037	395

*Each of the following has less than 1.5% of the remaining older cases: Alpine, Bonita, Bonsall, Borrego Springs, Boulevard, Camp Pendleton, Campo, Cardiff-by-the-Sea, Coronado, Del Mar, Descanso, Encinitas, Guatay, Imperial Beach, Jamul, Julian, La Jolla, Lakeside, Lemon Grove, Leucadia, Mount Laguna, Pauma Valley, Pine Valley, Poway, Ramona, Ranchita, Rancho Santa Fe, San Luis Rey, San Marcos, Santa Ysabel, Santee, Solana Beach, and Valley Center.

[†]Living as of 31 December 2014.

[‡]HIV disease diagnosis 2010-2014.

between older and younger PLWHA ($p=0.659$) or recent cases ($p=0.187$) born in the United States (US) (see Table 7). There were no significant changes in proportion of older or younger PLWHA born in the US over time ($p=0.561$). When the proportion of cases born in the US was examined by race/ethnicity, no differences (either recent or in PLWHA) were seen in whites or blacks, but both older PLWHA ($p<0.001$) and recent ($p=0.012$) Hispanic cases were more likely to have been born outside the US than younger PLWHA or younger recent cases.

Facility of Diagnosis

Private providers and clinicians who worked in health maintenance organizations (HMOs) diagnosed the greatest proportions of recent HIV disease cases and PLWHA (see Table 8). Older recent ($p<0.001$) HIV diagnoses and PLWHA ($p<0.001$), however, were more likely to have been diagnosed in the hospital setting than younger cases and

PLWHA. Older PLWHA were less likely than younger PLWHA to be diagnosed in an outpatient clinic ($p=0.012$), but this difference was not seen in recent cases.

Older recent cases ($p<0.001$) and PLWHA ($p<0.001$) were less likely to be diagnosed in an HIV clinic than younger recent cases and PLWHA. Older PLWHA ($p=0.021$) and recent cases ($p<0.001$) were also less likely to be diagnosed in an STD or family planning clinic than their younger counterparts. No differences were seen in the proportion of diagnoses in correctional facilities.

Time From HIV to AIDS

Since the 1995-1999 time period, there has been a significant increase in the percentage of cases with less than a year between HIV and AIDS diagnoses, so-called “late testers” ($p<0.001$) (see Figure 1). In each time period older cases had significantly greater proportion with less than a year between diagnoses ($p<0.001$ for each time

Table 7

Place of birth of PLWHA and recent (2010-2014) HIV diagnoses, by age group, San Diego County

Place of Birth	PLWHA†		Recent‡	
	<50 yrs	50+ yrs	<50 yrs	50+ yrs
United States*	9,368 (77.1%)	785 (76.5%)	1,538 (75.5%)	315 (79.7%)
Mexico	1,993 (16.4%)	169 (17.4%)	336 (16.5%)	55 (13.9%)
Other	789 (6.5%)	72 (7.0%)	160 (7.9%)	25 (6.3%)
Total cases	12,150	1,026	2,037	395

*Includes US dependencies.

Note: percents may not total 100 due to rounding.

†Living as of 31 December 2014.

‡HIV disease diagnosis 2010-2014.

Table 8

Facility type for PLWHA and recent (2010-2014) HIV diagnoses, by age group, San Diego County

Facility Type	PLWHA†		Recent‡	
	<50 yrs	50+ yrs	<50 yrs	50+ yrs
Private provider, HMO	3,779 (31.1%)	340 (33.1%)	642 (31.5%)	139 (35.2%)
Hospital, inpatient	1,324 (10.9%)	222 (21.6%)	230 (11.3%)	115 (29.2%)
Outpatient clinic	2,151 (17.7%)	150 (14.6%)	200 (9.8%)	29 (7.3%)
Correctional facility	340 (2.8%)	21 (2.0%)	110 (5.4%)	12 (3.0%)
Adult HIV clinic	2,965 (24.4%)	145 (14.1%)	469 (23.0%)	49 (12.4%)
STD/Family Planning clinic	425 (3.5%)	22 (2.1%)	218 (10.7%)	15 (3.8%)
Missing/Unknown	851 (7.0%)	79 (7.7%)	139 (6.8%)	32 (8.1%)
Other*	315 (2.6%)	47 (4.8%)	29 (1.4%)	4 (1.0%)
Total	12,150	1,026	2,037	395

*Includes pediatric HIV clinic, emergency room, TB clinic, and other HIV clinic types.

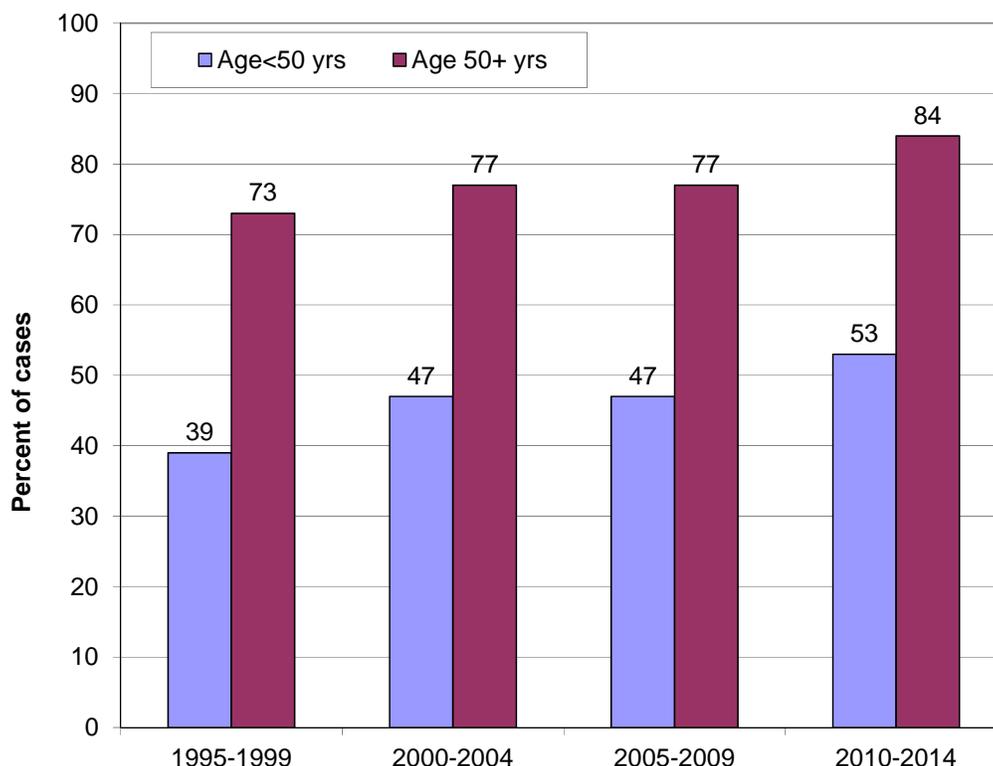
†Living as of 31 December 2014.

‡HIV disease diagnosis 2010-2014.

Note: percents may not total 100 due to rounding.

Figure 1

Percent of AIDS cases progressing to AIDS in less than 1 year after HIV diagnosis over 5-year time periods, by age group, San Diego County



period) than their younger counterparts.

Simultaneous diagnosis, meaning fewer than 30 days between HIV and AIDS diagnoses, also differed between older and younger AIDS cases (see Figure 2), although neither group had significantly changed proportions over five-year time periods. In each time period, older AIDS cases had a greater percentage of those with less than 30 days between diagnoses ($p < 0.001$ for each time period) than younger cases.

Differences in late testing and simultaneous diagnoses may occur because

healthcare providers do not see older persons as being at risk for HIV and do not offer or encourage testing. This is particularly true for female older patients, but is also seen with older MSM patients.

Survival

Cases diagnosed in 2004-2009 were analyzed to determine the proportion of cases surviving more than 12, 24, and 36 months after AIDS diagnosis (see Table 9). The Centers for Disease Control and Prevention

Figure 2

Percent of AIDS cases progressing to AIDS in less than 30 days after HIV diagnosis over 5-year time periods, by age group, San Diego County

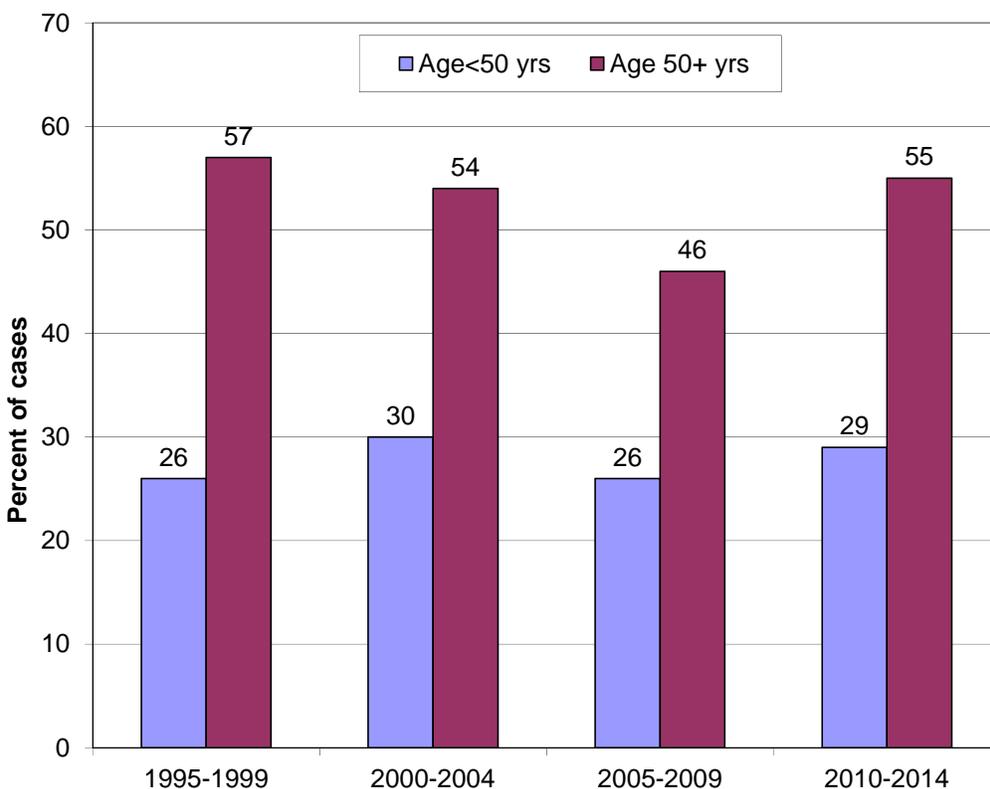


Table 9

Proportion of AIDS cases diagnosed in 2004-2009 surviving more than 12, 24, and 36 months, by age group, San Diego County (CoSD) compared to US (CDC) data

Age Group (yrs)	Proportion Surviving					
	>12 months		>24 months		>36 months	
	CoSD	CDC	CoSD	CDC	CoSD	CDC
30-39	0.96#	0.92	0.95#	0.90	0.94#	0.88
40-49	0.91*	0.89	0.89#	0.86	0.88#	0.84
50-59	0.89**	0.83	0.86**	0.78	0.84#	0.75
60+	0.76#	0.72	0.73	0.66	0.68	0.62
<50	0.94	0.94	0.92#	0.89	0.91#	0.87
≥50	0.86**	0.80	0.82**	0.76	0.80#	0.72

*Significantly different from CDC at $p < 0.050$.

**Significantly different from CDC at $p < 0.010$.

#Significantly different from CDC at $p < 0.001$.

(CDC) provides comparable national statistics for those proportions surviving for the same time periods. San Diego county had greater proportions of AIDS cases surviving than those reported by the CDC in all age groups except those 60 years of age and older. In this oldest age group, a significant difference was seen only in those surviving more than 12 months ($p < 0.001$).

In looking at cases younger than 50 years of age, San Diego county had significantly greater survival rates at more than 24 and 36 months ($p < 0.001$ for each) compared to national rates of survival. In cases 50 years of age and older, San Diego county had greater survival than that of national data at greater than 12 months ($p = 0.007$), 24 months ($p = 0.002$), and 36 months ($p < 0.001$).

When looking at San Diego county cas-

es, there was a significant trend of a decreasing proportion surviving with increasing age groups looked at across survival times greater than 12 ($p < 0.001$), 24 ($p < 0.001$), and 36 ($p < 0.001$) months. Increased age at AIDS diagnosis was associated with decreased probability of survival over the times measured.

Limitations

The data contained in this report depend on accurate reporting from healthcare providers, laboratories and patients. Patients, for many reasons, may not provide accurate information to healthcare providers for reporting. Healthcare providers in turn may not report complete or accurate information. These inaccuracies may impact analysis.

Caution should be exercised in the analysis of the most recent time period because additional cases are likely to continue to be reported. Retrospective case finding is an ongoing process. It is expected that cases diagnosed in 2014 will be identified through 2015. Case reports are also updated as new information becomes available. When, for example, more information on risks is obtained, the database is updated. This may impact proportions and rates used in analysis.

Some of the variables under study do not have sufficient numbers of occurrences

to make statistical inferences. It is HHS policy not to provide information when there are fewer than five individuals for any given variable; when small numbers are presented, caution should be exercised in data interpretation.

Whenever possible, case information is updated for vital status. However, it is possible that some cases may have died, but were not reported to HHS. Other cases may have left the area, or state, and died. This may result in inaccurate assumptions and survival calculations.

Data Sources

Centers for Disease Control and Prevention. HIV Surveillance Report, 2013; vol. 25. http://www.cdc.gov/hiv/pdf/g-l/hiv_surveillance_report_vol_25.pdf . Published February 2015. Accessed March 1, 2015.

California Department of Public Health, Office of AIDS. HIV/AIDS Surveillance in California, 2013.

[http://www.cdph.ca.gov/data/statistics/](http://www.cdph.ca.gov/data/statistics/DocumentsHIVSurveillanceReport2013dxBy2014yrenddata.pdf)

DocumentsHIVSurveillanceReport2013dxBy2014yrenddata.pdf.

Published December 2014. Accessed March 1, 2015.

eHARS—enhanced HIV/AIDS Reporting System—data set; San Diego County data provided by CDPH Office of AIDS, 2015.

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