

# **AIDS IN HISPANICS**

## **COUNTY OF SAN DIEGO, 2008**

**County of San Diego**  

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**Health and Human  
Services Agency,  
HIV/AIDS Epidemiology Unit**





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County of San Diego  
Health and Human Services Agency  
Public Health Services



Contact us for more information at:

Community Epidemiology  
HIV/AIDS Epidemiology  
1700 Pacific Highway, P577  
San Diego, CA 92101

(619) 515-6620  
(619) 515-6675

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(click on 'Reports and Statistics')

Jean Shepard, Director  
Wilma Wooten, M.D., M.P.H.,  
Public Health Officer  
Michele Ginsberg, M.D.,  
Chief, Community Epidemiology Branch

Michael Bursaw, M.P.H., (619) 515-6672  
Ernie Awa, (619) 531-4818  
Lyn Cardoza, (619) 515-6675  
Lorri Freitas, M.P.H., (619) 515-6764  
Lorena Gonzalez-Fabiny, (619) 515-6757  
Minda Johnson, (619) 515-6762  
Francisco McGann, (619) 515-6763  
Susan Salgado, (619) 515-6612  
Samantha Tweeten, Ph.D., (619) 515-6673



## INTRODUCTION

AIDS is seen in all racial/ethnic groups in the County of San Diego; the three most frequent groups are whites, Hispanics, and blacks. Hispanics have the second largest number of cases, following whites, and the second highest rate of AIDS, following blacks, in both men and women. Some similarities across racial/ethnic groups include: the most frequent age at diagnosis in the 30s, more men than women diagnosed, the most frequent mode of transmission in men (Men who have Sex with Men, or MSM), the most common mode of transmission for women (heterosexual contact), and hospital setting being the most frequent place of diagnosis.

One important difference between the racial/ethnic groups is country of origin; the majority of Hispanic cases were born outside the United States, most commonly in Mexico. Hispanics are also younger at the time of their diagnosis and this may impact the direction of prevention practices.

## AIDS DATA SUMMARY

The first Hispanic resident with AIDS in the County of San Diego was diagnosed in

1983. Cumulatively, Hispanics have made up 22% of all those diagnosed with AIDS in the County and this group has had the second highest number of cases diagnosed each year following whites. The proportion of Hispanic cases has increased each year since 1992 to the current, 2007, proportion of 42%. At the same time, the number of Hispanic cases has also increased when other races/ethnicities have declined in numbers. Table 1 presents the total population of the County and the number of AIDS cases diagnosed from 2001 to 2007, and the proportion of Hispanics in both. The proportion of AIDS cases diagnosed in Hispanics in this time period (2001-2007) has been consistently at least 25% higher than the proportion of Hispanics in the general county population. The proportion of Hispanic AIDS cases nationally (18.3% in 2005) is about half that seen in the County (35.0% in 2005). This is in part because of differences in demographics; Hispanics constitute a little more than a quarter of the population of the County of San Diego (29% in 2007), while about 15% of the United States (US) population is Hispanic (US Census, 2006 estimate).

Whites have had the largest number of

**TABLE 1**

Proportion of Hispanics in the San Diego County Population and Among Local AIDS Cases, 2001-2007

Year	San Diego County		AIDS Cases	
	Population*	% Hispanic	Diagnosed	% Hispanic
2001	2,856,000	27	444	33
2002	2,908,505	28	459	32
2003	2,961,579	28	439	36
2004	3,011,526	28	425	35
2005	3,038,579	29	406	35
2006	3,064,113	29	395	42
2007	3,098,269	29	281	42

\*SANDAG population estimates.

AIDS cases in the County each year, but Hispanics have had a higher rate of AIDS than whites since the mid-1990s. This rate, measured per 100,000 persons, more accurately reflects the relative disease burden in each group. The rate of AIDS in Hispanics is 50-75% higher than of whites, but about half that seen in blacks (see Table 2 and Figure 1). Unlike the proportion of cases, the rate of AIDS diagnoses in Hispanics in 2005 (16 per

100,000) in San Diego County is similar to the US rate (18 per 100,000) estimated by the Centers for Disease Control and Prevention (CDC) in the same year.

Asian/Pacific Islander cases are not included in the tables presented because of small numbers of cases in this racial/ethnic group.

**GENDER**

More men than women are diagnosed with

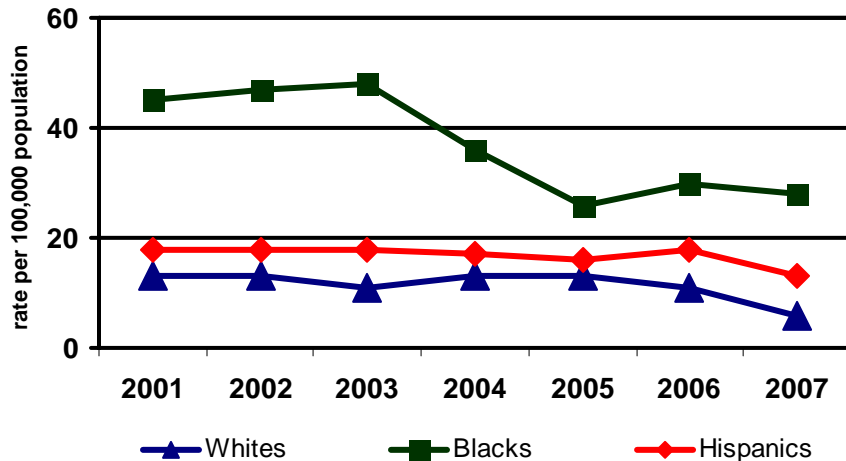
**TABLE 2**

Number and Rate of AIDS Cases in Whites, Blacks, and Hispanics, 2001 to 2007, San Diego County

Year	Race/Ethnicity					
	White		Black		Hispanic	
	Diagnosed	Rate	Diagnosed	Rate	Diagnosed	Rate
2001	203	13	77	45	146	18
2002	223	13	75	47	146	18
2003	183	11	81	48	159	18
2004	202	13	58	36	147	17
2005	204	13	43	26	142	16
2006	170	11	49	30	161	18
2007*	101	6	46	28	118	13

\*Additional 2007 cases are expected to be reported through out 2008.  
Rates are per 100,000 population.

**FIGURE 1**  
Rate of AIDS cases in Whites, Blacks, and Hispanics, in San Diego County, 2001-2007



AIDS each year in all racial/ethnic groups. The AIDS case rate in Hispanic males is about twenty-five percent greater than the rate in white males, but about half that seen in black males (see Table 3).

The proportion of female AIDS cases in Hispanics is more than twice that seen in whites, but less than half of that seen in blacks. Among Hispanic cases, in each time period the proportion of females is statistically significantly greater than the proportion seen in whites and statistically significantly lower than the proportion seen in blacks (see Table 4 and Figure 2). In recent years (2003-2007), the proportion of female cases in Hispanics is almost twice that seen in whites with less difference between blacks and Hispanics. The proportion of female Hispanic, white, and black cases in San Diego County in recent years (2003-2007) is about half of the CDC's national estimate for 2003.

The proportion of females in all AIDS cases has increased significantly ( $p < 0.001$ ) over

5-year time periods. This increase is also seen over 5-year time periods when looking at Hispanics ( $p < 0.001$ ), whites ( $p < 0.001$ ), and blacks ( $p = 0.033$ ) (see Table 4).

#### AGE AT DIAGNOSIS

Of cumulative AIDS cases in Hispanics, the mean age at diagnosis is 36.2 years which is significantly younger than in whites (38.7 years,  $p < 0.001$ ) and blacks (37.0 years,  $p = 0.033$ ) (see Table 5). In recent years, 2003-2007, Hispanics (mean age 38.4 years) have remained statistically significantly younger at diagnosis than whites (42.2 years,  $p < 0.001$ ), but not younger than blacks (39.3 years).

Over time, the mean age at diagnosis has increased in all racial/ethnic groups, but has remained in the 30-39 year age range. Cumulatively, Hispanics have a significantly higher proportion of cases in the 20-29 year age group than either whites ( $p < 0.001$ ) or blacks ( $p < 0.001$ ) (see Figure 3) reflecting their overall younger age at diagnosis.

**TABLE 3**

Rate of AIDS in Male and Female Whites, Blacks, and Hispanics, 2001-2007, San Diego County

Year	Race/Ethnicity					
	White		Black		Hispanic	
	Male	Female	Male	Female	Male	Female
2001	24	2	74	18	32	5
2002	25	2	72	17	31	4
2003	21	1	80	13	31	6
2004	24	1	56	13	29	5
2005	24	1	45	9	28	5
2006	20	1	44	13	31	6
2007	11	1	43	13	23	3

Rates per 100,000 population.

**TABLE 4**

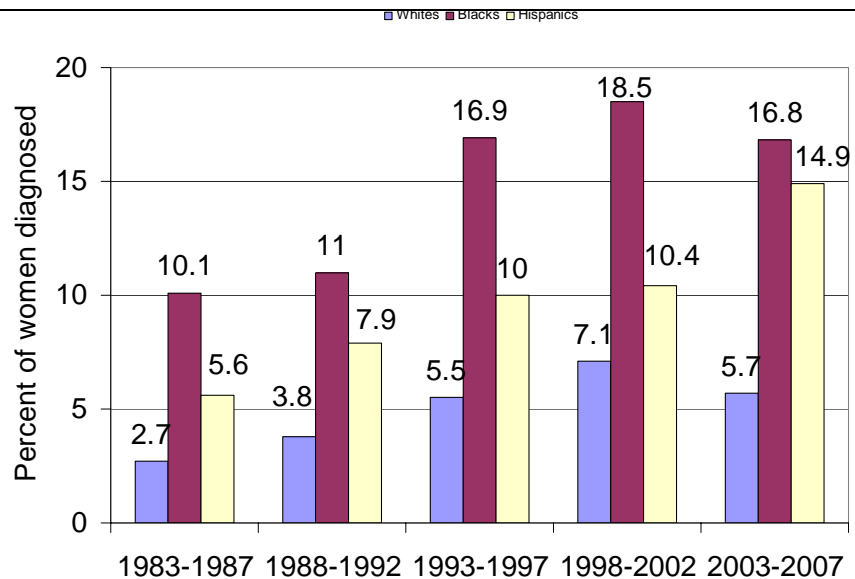
Percent of AIDS Cases that are Female by Race/Ethnicity Over Time, San Diego County

Time period	Race/Ethnicity					
	White		Black		Hispanic	
	all cases	% women	all cases	% women	all cases	% women
1983-1987	697	2.7	69	10.1	89	5.6
1988-1992	2866	3.8	420	11.0	609	7.9
1993-1997	2648	5.5	556	16.9	991	10.0
1998-2002	1127	7.1	363	18.5	743	10.4
2003-2007	860	5.7	280	16.8	727	14.9
Cumulative*	8204	4.9	1688	15.5	3159	10.7

\*Includes cases from 1981-2007.

**FIGURE 2**

Percentage of White, Black, and Hispanic Women Diagnosed with AIDS in San Diego County, in Five-Year Time Periods



**TABLE 5**

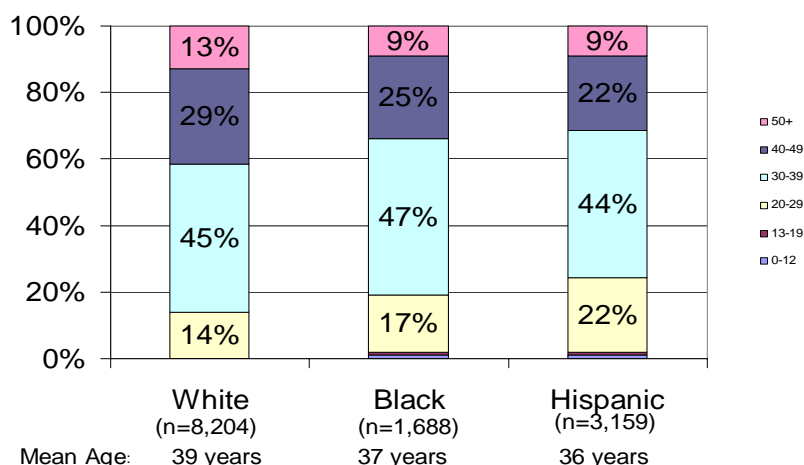
Mean and Median Age, and Age Range at Time of AIDS Diagnosis in Whites, Blacks, and Hispanics, Recent and Cumulative Cases, San Diego County

	Race/Ethnicity					
	White		Black		Hispanic	
	2003-2007	Cumulative	2003-2007	Cumulative	2003-2007	Cumulative
Mean age (years)	42.2	38.7	39.3	37.0	38.4	36.2
Median age (years)	42.0	38.0	38.0	36.0	38.0	35.0
Range (years)	4-84	0-92	5-89	0-71	1-83	0-83
Total cases	860	8,204	280	1,688	727	3,159



**FIGURE 3**

Percent of Cumulative AIDS Cases in 10-year Age Groups in Whites, Blacks, and Hispanics, San Diego County



NOTE: Percentages for 0-12 and 13-19 age groups too small to appear on graphic.

While the number of cumulative pediatric cases (diagnosis in those 12 years of age and younger) is similar for blacks and whites, the number seen in Hispanics is more than twice that seen in the other racial/ethnic groups. In addition, the proportion of pediatric cases in Hispanics (1.1%) is almost a third higher than in blacks (0.8%) and almost six times that seen in whites (0.2%). Small numbers of pediatric cases mean that the significance of these differences cannot be determined and these data should be interpreted with caution.

### CURRENT AGE

Slightly more than half (52%) of the individuals who were diagnosed with AIDS in the

County of San Diego were deceased by December 31, 2007. Among Hispanic cases alive in 2007, the mean age was 44.3 years (see Table 6). Among those alive in 2007, Hispanics were significantly younger than whites (49.1 years,  $p < 0.001$ ) and blacks (46.4 years,  $p < 0.001$ ) reflecting their younger age at diagnosis.

### AGE AT DEATH

About 39% of all Hispanics diagnosed with AIDS in the County of San Diego had died by the end of 2007. The average age of death since 1985 in these cases is 41.6 years. Hispanics are, on average, somewhat younger than whites, but similar to blacks at time of death. In recent years (2003-2007), the average age at death for

**TABLE 6**

Current Age of White, Black, and Hispanic Individuals Living with AIDS, San Diego County, 2007

	Race/Ethnicity		
	White	Black	Hispanic
Mean age (years)	49.1	46.4	44.3
Median age (years)	48.0	46.0	44.0
Range (years)	9-85	9-81	3-87
Total cases	3,400	863	1,924

Hispanics has increased to 46.6 years. Unlike previous time periods, this age at death is still somewhat younger than whites, but older than blacks. This increase in age at death reflects both diagnoses at older ages and increased life expectancy that come with more and better therapy options.

### MODE OF HIV TRANSMISSION

Men who have Sex with Men (MSM) has been and continues to be the most commonly reported mode of HIV transmission among men with AIDS, regardless of ethnic/racial group (see Table 7). Although the proportion of MSM has statistically significantly declined in whites over 5-year time periods, it has been stable in Hispanics with 77% of cases attributed to this mode of transmission. It is important to keep in mind that the MSM mode of transmission is behaviorally defined, that is, it does not involve sexual orientation. A male case who has male sex partners will be in the MSM category whether or not he considers himself to be gay or straight.

Injecting drug use (IDU) as a mode of transmission in men/adolescents has declined somewhat in Hispanics (from 10% to 8%,  $p < 0.001$ ) and blacks (although not significantly), but is significantly less common in Hispanic men/adolescents than black men/adolescents ( $p < 0.001$ ). From 1988 to 1997, a greater proportion of Hispanic men/adolescents report IDU as risk for transmission than whites ( $p < 0.001$ ), but this is not seen in recent time periods (1998-2007). The proportion of Hispanic men/adolescents with both MSM and IDU has significantly decreased over time from about 10-11% to less than 7% (see Figure 4). Heterosexual transmission for males has increased significantly over 5-year time intervals in blacks, whites, and Hispanics.

In recent years (2003-2007), the proportion of MSM in Hispanics (77%) is higher in San Diego County than the CDC 2003 national estimate (51%). The CDC estimates for IDU (30%) and heterosexual transmission (12%) in Hispanics were higher than the proportions

**TABLE 7**

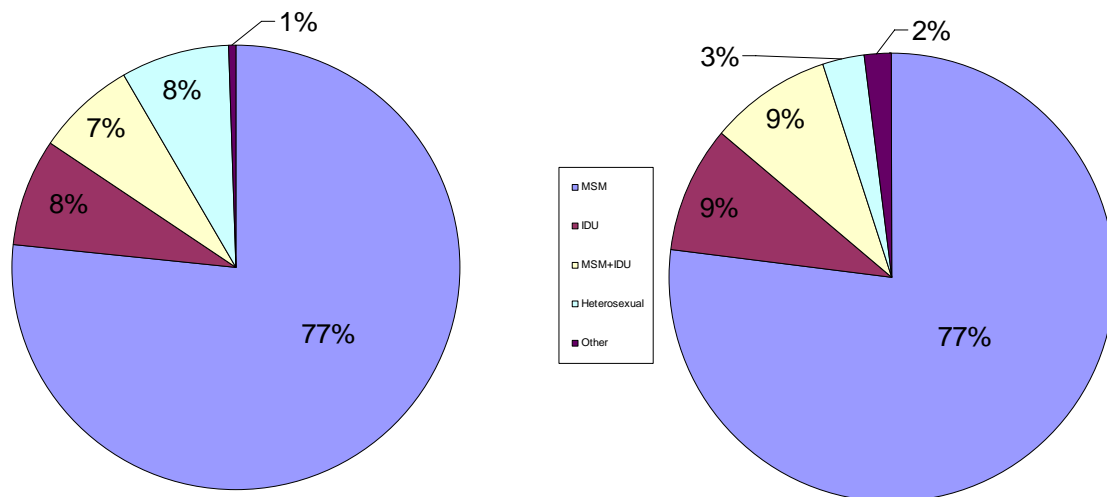
Mode of HIV Transmission Among Adult/Adolescent AIDS Cases, by Race/Ethnicity, San Diego County

	Race/Ethnicity					
	White		Black		Hispanic	
	2003-2007	Cumulative	2003-2007	Cumulative	2003-2007	Cumulative
MSM	77%	82%	66%	65%	77%	77%
IDU	7%	4%	12%	16%	7%	9%
MSM+IDU	12%	11%	12%	14%	7%	9%
Heterosexual	3%	1%	9%	4%	8%	3%
Other*	1%	2%	1%	1%	1%	2%
Total in group	811	7,803	233	1,427	619	2,822

\*Includes transfusion, transplantation, hemophilia, maternal, and not specified.

**FIGURE 4**

Recent (2003-2007) and Cumulative Modes of HIV Transmission in Hispanic Males, San Diego County



seen in San Diego County (7% and 10%, respectively).

In adult/adolescent women, heterosexual contact is the most commonly reported mode of HIV transmission (Table 8). The proportion of cases in Hispanic women/adolescents listing heterosexual contact as mode of transmission has increased significantly ( $p < 0.001$ )

over time and the proportion is significantly greater than that seen in whites ( $p < 0.001$ ) and blacks ( $p = 0.003$ ). The proportion of IDU in Hispanic adult/adolescent women did not decrease significantly until the most recent time period, but is significantly lower than that seen in whites ( $p < 0.001$ ) in all but the earliest time periods. Hispanic female cases dif-

**TABLE 8**

Mode of HIV Transmission Among Adult/Adolescent Women AIDS Cases by Race/Ethnicity, County of San Diego

	Race/Ethnicity					
	White		Black		Hispanic	
	2003-2007	Cumulative	2003-2007	Cumulative	2003-2007	Cumulative
Heterosexual	59%	45%	80%	56%	82%	68%
IDU	39%	44%	17%	41%	12%	24%
Blood/tissue#	0%	8%	2%	3%	1%	6%
Other**	2%	3%	0%	<1%	5%	3%
Total in group	49	394	46	256	107	319

\*Includes partner with known HIV, risk not specified, and maternal transmission.

#Includes recipients of blood, blood products, tissues, and artificial insemination.

Note: percentages may not total 100 due to rounding.

fer from black cases in proportion of IDU only in earlier time periods ( $p=0.006$ ). The CDC 2003 national estimates for the proportion of AIDS cases in Hispanic women reporting heterosexual transmission (82%) is higher than that seen overall in the County (75%) in recent years and the CDC 2005 estimate (70%) for all cases. Correspondingly, the proportion of female Hispanic cases (12%) reporting IDU as risk of transmission is lower than the County (20%) overall and the 2005 CDC (27%) estimate for all female cases.

### COUNTRY OF ORIGIN

More than half (59%) of Hispanics diagnosed with AIDS in San Diego County were born outside of US territory and this has increased to almost 72% in recent years (Table 9). This is in contrast to whites and blacks of whom more than 95% were born in the US or its dependencies. The majority of Hispanic cases (54.4%) were born in Mexico and in recent years this has increased to almost 70%. Of cumulative Hispanic cases born outside the US, 92.2% were born in Mexico and 95.6% in

recent years were born in Mexico. Less common countries of origin include Cuba, Colombia, Guatemala, Honduras, Panama, Brazil, and Costa Rica which collectively account for 5.2% of Hispanic cases born outside the US.

There are differences between Hispanic AIDS cases born in the US and foreign-born Hispanic AIDS cases. Those born outside of the US are, on average, significantly older at diagnosis than those born in the US (37.8 years vs. 35.9 years,  $p<0.001$ ). Foreign-born Hispanic AIDS cases also have less time from first reported HIV diagnosis to AIDS diagnosis (1.2 years vs. 1.7 years,  $p<0.001$ ) and of survival from AIDS diagnosis to death (1.8 years vs. 2.5 years,  $p<0.001$ ) than US-born Hispanic cases.

It should be remembered that it is not possible, with the current database, to determine how long a person with AIDS born outside the US or its territories has been a resident in the US. For example, a case born outside the US may have lived in the US for all but a few months of his or her life. It is therefore not possible to assess how being born outside the US, or time for acculturation, impacts risk fac-

**TABLE 9**

Country of Origin of Recent and Cumulative AIDS Cases by Race, San Diego County

Origin	Race/Ethnicity					
	White		Black		Hispanic	
	2003-2007	Cumulative	2003-2007	Cumulative	2003-2007	Cumulative
USA	98.7%	97.7%	90.2%	94.8%	26.8%	38.8%
US Dependency	0.0%	0.1%	0.0%	0.1%	1.0%	2.1%
Other	1.3%	2.2%	9.8%	5.1%	71.8%	59.0%
Total in group	859	8,202	276	1,683	727	3,159

Note: columns may not total 100% due to cases with unknown origin.

tors for disease or transmission.

### RESIDENCE AT DIAGNOSIS

The majority (61.3%) of Hispanics diagnosed with AIDS in the County of San Diego were living in the city of San Diego at the time of their diagnosis. This proportion living in the city of San Diego is significantly lower than that seen in whites (76.4%,  $p < 0.001$ ) and in blacks (81.3%,  $p < 0.001$ ). In addition to the city of San Diego, Hispanics cases lived in Chula Vista (9.4%), San Ysidro (5.8%), National City (3.5%), Oceanside (2.9%), or Escondido (2.5%) at the time of diagnosis. Other communities of residence at time of diagnosis had less than 2% of cases each. In recent years (2003-2007), somewhat fewer cases were living in the city of San Diego at the time of diagnosis and Hispanics (54.2%) continued to have a smaller proportion of cases than whites (78.0%,  $p < 0.001$ ) and blacks (76.8%,  $p < 0.001$ ). Hispanic cases in recent years were also resident in Chula Vista (11.0%), San Ysidro (9.9%), National City (3.2%), Vista (3.2%), Oceanside (3.0%), Spring Valley (2.3%), and Escondido (2.2%). Other communities had less than 2% of Hispanic cases at time of diagnosis.

The city of San Diego encompasses a wide geographic area, extending outward from the Health and Human Services Agency (HHS) Central Region. Almost half (47%) of Hispanic cases were living in the Central Region at the time of their diagnosis, compared to 60% of whites ( $p < 0.001$ ) and 69% of blacks ( $p < 0.001$ ). Twenty-seven percent of Hispanic cases lived in the South Region at the time of diagnosis where they comprised almost 61% of

cases in this region—the only region with a non-white majority of cases. The East Region had 6% of all Hispanic cases, while the North Central, Coastal, and Inland Regions had 5-8% of Hispanic cases each.

### FACILITY OF DIAGNOSIS

AIDS is one of over eighty diseases which must, by law, be reported by the diagnosing health care provider to the local health department. Individual cases are reported from hospitals, private medical offices, public clinics, prisons, and other locations. In all racial/ethnic groups, more AIDS diagnoses have been made in the inpatient or outpatient hospital setting than in any other setting. Cumulatively, a smaller proportion ( $p < 0.001$ ) of Hispanics (41%) and whites (41%) were diagnosed in the hospital setting than blacks (53%). In recent cases the difference between Hispanics (45%) and blacks (64%) is more pronounced and a significant difference is seen with whites (56%,  $p < 0.001$ ).

A significantly larger proportion of cumulative Hispanic cases (29%) was diagnosed in HIV clinics than whites (14%;  $p < 0.001$ ) or blacks (14%,  $p < 0.001$ ). In recent cases (2003-2007) these differences are more pronounced with 41% of Hispanic cases diagnosed in an HIV clinic compared to whites (12%,  $p < 0.001$ ), although the proportion of blacks (19%,  $p < 0.001$ ) has increased somewhat. A smaller proportion of cumulative Hispanic cases (19%) than whites (27%,  $p < 0.001$ ) were diagnosed by private medical providers or HMOs, but a significantly lower proportion of black cases (15%,  $p = 0.002$ ) were diagnosed in this setting than Hispanic cases. In recent years, the pro-

portion of Hispanics has dropped further (11%).

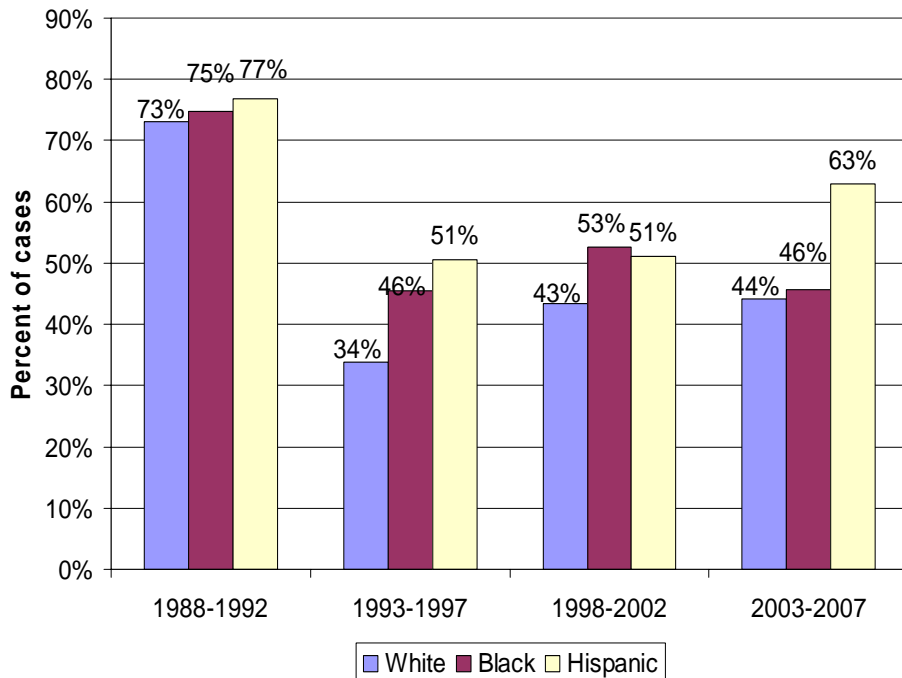
A significantly greater ( $p < 0.001$ ) proportion of cumulative Hispanic cases (1.7%) was diagnosed in a correctional facility when compared to whites (0.8%) and significantly smaller ( $p = 0.042$ ) when compared to blacks (2.6%). In more recent cases there is no significant difference ( $p = 0.778$ ) in the proportion diagnosed in a correctional setting between Hispanic (2.3%) and white (2.6%) cases with the increase in the proportion of white cases. Nor is there a significant difference (0.054) between the proportion of Hispanic and black cases (4.6%) in this setting. These differences should be interpreted with caution because of the relatively small number of cases diagnosed in correctional facilities, particularly in recent years. Also, correctional facility may refer to a

variety of places including county jails, state and federal prisons, and Immigration and Naturalization Service (INS) facilities.

**TIME FROM HIV TO AIDS DIAGNOSES**

Hispanics have the highest proportions of cases with 1 year or less from HIV diagnosis to AIDS in almost all time periods (see Figure 5). There are no statistically significant differences between blacks and whites across the time periods, but Hispanics have significantly higher proportions than blacks or whites with 1 year or less in the 1993-1997 ( $p < 0.001$  for both), the 1998-2002 ( $p = 0.006$  and  $p = 0.002$ , respectively) and 2003-2007 ( $p < 0.001$  for both) time periods. Additionally, while blacks and whites remain relatively stable in the percent at one year or less from the 1998-2002 to 2003-2007 time periods, Hispanics have a significant in-

**FIGURE 5:**  
AIDS Cases with Time from HIV Diagnosis to AIDS Diagnosis in 1 Year or Less, by Race/Ethnicity and Time Period, San Diego County



crease ( $p < 0.001$ ).

The significantly greater proportion of Hispanic deceased cases with 1 year or less between HIV diagnosis and AIDS diagnosis is most likely due to late testing in the course of infection leading to more advanced disease by the time an HIV diagnosis is made. In cumulative cases, about 40% have HIV and AIDS diagnoses within the same month across races/ethnicities. In more recent years (2003-2007), however, the proportion of whites and blacks drop to about 26% with virtually simul-

taneous diagnoses, but 37% of Hispanics have essentially simultaneous diagnosis. This is statistically significantly greater than whites ( $p < 0.001$ ) and blacks ( $p = 0.003$ ).

#### TIME FROM AIDS DIAGNOSIS TO DEATH

Except in the earliest and the most recent time period, the mean length of time from AIDS diagnosis to death, has been relatively stable (see Table 10). This is in contrast to previous analyses that seemed to indicate a general increase in survival times. It is prob-

**TABLE 10**

Length of Survival (Months) of Deceased AIDS Cases by Race/Ethnicity, in 5-year Increments, San Diego County

Race/ Ethnicity	Months, from diagnosis to death	Time period of diagnosis			
		1988- 1992	1993- 1997	1998- 2002	2003- 2007
White	mean	27.8	38.1	29.7	9.7
	median	22	24.0	20	3.9
	range	<1-200	<1-178	<1-101	<1-50
	number deceased*	2,573	1,222	231	85
	total cases in time period	2,866	2,648	1,127	860
	percent deceased	90%	46%	20%	9%
	Black	mean	24.1	42.3	33.9
median	19	27	28	6	
range	<1-119	<1-159	<1-108	<1-34	
number deceased*	363	262	97	36	
total cases in time period	420	556	363	280	
percent deceased	86%	47%	27%	13%	
Hispanic	mean	27.4	32.1	25.2	16.8
	median	20	20	14.0	9
	range	<1-199	<1-157	<1-110	<1-52
	number deceased*	502	452	132	62
	total cases in time period	609	991	743	727
percent deceased	82%	46%	18%	9%	

Note: The number in each time frame is expected to increase over time.

able that the shift in time periods has impacted these results. It is also important to remember that survival data is based on cases known to have died. It is possible that other cases have died but that the HIV/AIDS Epidemiology Unit has not been notified of these deaths. If no confirmation of death has been provided, the case is assumed to be alive.

Over 5-year time periods whites, blacks, and Hispanics have similar lengths of survival (see Table 10), with no significant differences between the racial/ethnic groups. The proportions of deceased cases in each diagnosis time period also did not differ between the racial/ethnic groups. Of those who have died over the course of the epidemic, cumulative case deaths, whites (mean 29.4 months or 2.5 years), blacks (31.9 months or 2.7 years), and Hispanics (28.8 months or 2.4 years) have similar mean survival times without statistically significant differences.

The longest survival times are seen in whites (200 months or 16.7 years), followed by Hispanics (199 months or 16.6 years) and blacks (159 months or 13.3). In recent time periods, maximum survival times have been similar. The true length of survival for all cases may be difficult to calculate, in part, because of a small number of cases who are not diagnosed with AIDS until their disease is advanced. For example, an opportunistic infection causing death may be the first indication for an AIDS diagnosis. It is possible that some cases may have died but their deaths not reported to the HIV/AIDS Epidemiology Unit making survival estimates difficult.

It is important to remember that only information on those cases who have died is pre-

sented in Table 10. Each subsequent time interval contains a smaller proportion of those diagnosed because each time interval has a smaller proportion of cases who have died. In addition, each subsequent time period will have fewer months available from diagnosis to death. Those diagnosed in 1988-1992 have up to 240 months, in 1993-1997 up to 180 months, and so on. For this reason and because each race/ethnicity group has individuals who die soon after diagnosis, data for 2003-2007 should be interpreted with caution. Not until similar lengths of time have past will this last 5-year interval be comparable to the previous intervals.

The mean length of survival increased in each racial/ethnic groups after 1993 when the AIDS case definition was changed to include lowered CD<sub>4</sub> counts or percentages. This case definition change meant AIDS could be diagnosed earlier in the course of the disease and, in combination with more therapy options, contributes to increased survival time in this time period. However, after the 1993-1997 time period, there is a general decrease in survival time. This is due in part to these times being more recent, so that only those surviving short times are represented, but also to cases being tested later in their infection.

## SURVIVAL

A comparison of survival across races/ethnicities can be made by choosing one year of diagnosis and determining the proportion of those cases still alive at set times. The latest year available from the CDC is 2001 so comparisons are made for this year only (see Table 11). There are no significant differences when



**TABLE 11**

Proportion of AIDS Cases in San Diego County and Nationally (CDC), Diagnosed in 2001\*, Surviving More Than 12, 24, and 36 Months, by Race/Ethnicity

Race/ Ethnicity	Survival in Months					
	>12		>24		>36	
	CDC	County of San Diego	CDC	County of San Diego	CDC	County of San Diego
White	0.92	0.89	0.88	0.87	0.86	0.86
Black	0.90	0.89	0.86	0.85	0.82	0.82
Hispanic	0.93	0.86	0.90	0.85	0.88	0.83
All Cases	0.91	0.89	0.87	0.86	0.84	0.84

comparing survival of San Diego County AIDS cases across races/ethnicities at 12, 24, or 36 months. There are significant differences, however, when comparing survival in the County to national survival provided by the CDC. There is a small significant difference between national and County case survival at 12 months in whites ( $p=0.001$ ). This is the only significant difference for either white or black cases. Hispanic cases do differ between national and county data at 12 months ( $p=0.002$ ) and 24 months ( $p=0.044$ ), but this difference is not seen at 36 months ( $p=0.60$ ). These differences may result from the differences in demographics between the nation as a whole and San Diego County. It is also probable that the lower proportion of Hispanics surviving for less than twelve months in the County is associated with later testing and entering care at a later point in disease progression.

### PEDIATRIC CASES

There have been 64 AIDS cases in San Diego County reported in those under 13-years

of age, the pediatric cases. More than half, 53%, of these pediatric cases have been Hispanic and more than 50% were diagnosed before 1992, 89% before 2000. All of the pediatric cases have had a mother with HIV or have received blood or blood products, but there are differences across races/ethnicities. All of the black cases were due to maternal transmission, while 85% of the Hispanic and 57% of the white cases were due to maternal transmission. About half of the pediatric cases diagnosed in the county are still living.

### LIMITATIONS

The data contained in this report is dependent on accurate reporting from healthcare providers, laboratories, and patients. Patients, for many reasons, may not wish to provide accurate information to their healthcare providers for reporting. Healthcare providers may not provide complete information, or data entry errors may occur. These inaccuracies may impact analysis.

Caution should be exercised in the analysis of the most recent time period because ad-

ditional cases are likely to be reported over time. Retrospective case finding will continue and it is expected that cases diagnosed in 2007 will be reported in 2008 and into 2009. Case reports are also updated as new information becomes available. When, for example, more information on risks is obtained, the database is updated and 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 the policy of the County of San Diego, Health and Human Service Agency not to report fewer than five individuals for any given variable. When small numbers are presented, caution should be exercised in the interpretation of data. This is particularly true for pediatric AIDS cases and, to a lesser extent, those diagnosed while in a correctional facility.

In 1993 the AIDS case definition was modified by the CDC to include those HIV positive patients in whom the CD4 absolute count dropped below 200 or in whom the percent of CD4 cells fell below 14%. This increased the number of cases substantially and allowed for the identification of cases earlier in their disease progress. It is probable that this has increased both the number of surviving cases and the length of their survival from diagnosis to death.

Whenever possible, case information is updated as to vital status of cases. However, it is possible that some cases may have died, but the death not reported to the HIV/AIDS Epidemiology Unit. Some of these cases may have left the County or state and died. This may result in inaccurate assumptions and sur-

vival calculations.

The County has a higher proportion of Hispanics and a lower proportion of blacks than do many states, the US, and even some other counties within California. These racial/ethnic demographic differences make comparisons of San Diego County to the nation as a whole, and to other counties and states, difficult and must be taken into account when discussing the impact of the AIDS epidemic on the County of San Diego.

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**SUMMARY**

Hispanics have the second highest rate of AIDS in the County of San Diego: 13 per 100,000 in 2007 (although additional cases are expected to be reported).

Hispanics are somewhat over represented in the local AIDS epidemic.

While women make up a relatively small percentage of individuals diagnosed with AIDS in the County of San Diego, the proportion of female cases among Hispanics is twice that seen in whites.

Cases in Hispanics are, on average, younger than whites and blacks at the time of diagnosis, but, like whites and blacks, they are most frequently in the 30-39 years age group at the time of diagnosis.

Men who have Sex with Men (MSM) is the most common mode of transmission in Hispanic males cases; Hispanic female cases are most likely to report heterosexual transmission. Hispanic female cases are less likely to report injecting drug use (IDU) than females of other racial/ethnic groups.

About 58% of Hispanics diagnosed with AIDS locally were alive in 2004, with a mean age of 41 years.

More than half of the pediatric cases have been Hispanic, and the majority were diagnosed before 1992.

**DATA SOURCES:**

County of San Diego, HIV/AIDS Epidemiology Unit database and Annual Report, SANDAG population estimates, 2001-2007, *HIV/AIDS Surveillance Report, 2005* (Vol. 17), Centers for Disease Control and Prevention *Profiles of General Demographic Characteristics, 2000*, US Dept of Commerce *2006 American Community Survey*, US Census

COMMUNITY EPIDEMIOLOGY  
HIV/AIDS EPIDEMIOLOGY  
1700 PACIFIC HWY, RM 107, MS P577  
SAN DIEGO CA 92101

**COUNTY OF SAN DIEGO**  
HEALTH AND HUMAN  
SERVICES AGENCY  
**PHS**  
**Public Health Services**  
COMMUNITY EPIDEMIOLOGY