# AIDS IN WOMEN County of San Diego, 2008

County of San Diego 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



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The first female AIDS case in the County of San Diego was diagnosed in 1984. Over the course of the epidemic, females have comprised 1,054 (7.8%) of the 13,436 AIDS cases diagnosed in the county; the proportion of AIDS cases that are female has increased significantly (p<0.001) over time (see Table 1). In recent years (2003-2007), the proportion of women has increased to 11% of all AIDS cases diagnosed in the County. This is in contrast to the 25.7% of cases that are female reported by the Centers for Disease Control and Prevention (CDC) for 2005.

#### MODE OF TRANSMISSION

In male AIDS cases, the predominant risk for transmission identified is "Men who have Sex with Men" (MSM), while more than half (55%) of all female AIDS cases in San Diego county are associated with heterosexual contact (see Figure 1) and there has been a significant increase (p<0.001) in the proportion of cases attributed to heterosexual contact over 5-year periods (see Table 2). Of the 574 women with heterosexual transmission, almost 38% had an Injecting Drug User (IDU) as a sexual partner, almost a third had a bisexual male partner, and more than a quarter had sex with a partner known to have HIV or AIDS with no risk specified (see Table 3). Less than 3% had a sexual partner who had had a transfusion or transplant, or who had hemophilia. In 2005, the CDC estimated that 40% of female cases were associated with heterosexual contact. Of these women, 13% had an IDU sex partner which is significantly (p<0.001) less than that seen in the San Diego county, but almost 81% had a partner known to have HIV or AIDS (risk factor not specified) compared to 28% in the County, and only 5% had a bisexual male partner compared to 30% in the County.

Following heterosexual contact, the next most common risk group identified is Injecting Drug Use (IDU), which accounts for more than a third of all female AIDS

<u>Table 1:</u>

Number and Percent of Female and Male AIDS Cases by Five-Year Time Periods, County of San Diego

		Female	Male			
		percent of cases		percent of cases		
Time period	number	for time period	number	for time period		
1981-1987	32	3.7%	839	96.3%		
1988-1992	209	5.3%	3,759	94.7%		
1993-1997	361	8.3%	3,985	91.7%		
1998-2002	238	10.3%	2,067	89.7%		
2003-2007	214	11.0%	1,732	89.0%		
Total cases	1,054	7.8%	12,382	92.2%		

#### FIGURE 1:

Recent (2000-2004) and Cumulative Modes of HIV Transmission in Females, San Diego County



cases diagnosed in the County (see Table 2). Although there was an increase in the proportion of cases attributed to IDU from the 1988-1992 to 1993-1997 time periods, there has been a consistent decline in this proportion since that time as well as a decline in

cases associated receiving blood or blood products and transplantation.

#### **RACE/ETHNICITY**

Cumulatively, there have been more whites among female AIDS patients, 38%,

#### TABLE 2:

Modes of HIV Transmission in Females Over 5-year Time Periods, San Diego County

		_			
	1988-1992	1993-1997	1998-2002	2003-2007	Cumulative*
Heterosexual contact	41.1%	47.6%	60.1%	75.2%	54.5%
IDU	36.4%	40.7%	37.0%	20.1%	34.4%
Transfusion/Transplantation	17.3%	6.7%	0.8%	0.9%	7.0%
Mother w/HIV	4.8%	3.3%	1.3%	2.8%	3.0%
Other**	0.5%	1.7%	0.8%	0.9%	1.9%
Total in group	209	361	238	214	1,054

\*1984-2007

\*\*Includes clotting disorders, risk not specified, and other confirmed risks.

Percents may not total 100 due to rounding.

<u>Table 3</u> :	Sex with a/an	Percent
Sexual Partners of Women	IDU	37.8
Diagnosed with AIDS and with Heterosexual Contact	Bisexual male	31.4
as Mode of Transmission.	Partner known to have HIV/AIDS	28.4
County of San Diego	Known hemophiliac/transfusion recipient	2.4
	Total with heterosexual contact	574

than other races/ethnicities (see Table 4), but this proportion has significantly decreased over 5-year time periods (p<0.001). As the proportion of whites has decreased, the proportion of Hispanic cases has increased significantly (p<0.001) over the same 5-year time periods. There has been no significant change in the proportion of blacks (p=0.921) or Asians/Pacific Islanders (p=0.775). The proportion of whites in cumulative female AIDS cases is significantly smaller (p<0.001) than the proportion seen in cumulative male cases, while the proportion of black (p<0.001) and Hispanic (p<0.001) female AIDS cases is significantly larger than that seen in male cases. There is no significant difference between females and males in the proportion of Asian/ Pacific Islander cases (p=0.572).

The case rate amongst white, black, and Hispanic female AIDS cases has decreased from 1995 to 2005, but remained stable in recent years, and has declined in males across all races/ethnicities. The rate of AIDS in females and males is consistently highest in blacks, followed by Hispanics, and the rate of AIDS is higher in males than females across all races/ethnicities (see Table 5). In recent years (2003-2007), AIDS case rates for females in the County

#### TABLE 4:

			Females			Males	
	1988-1992	1993-1997	1998-2002	2003-2007	cumulative*	cumulative*	
White	51.7%	40.2%	33.6%	22.9%	38.0%	63.0%	
Black	22.0%	26.0%	28.2%	22.0%	24.8%	11.5%	
Hispanic	23.0%	27.4%	32.4%	50.5%	32.0%	22.8%	
Asian/Pacific							
Islander	3.3%	5.5%	4.6%	3.3%	4.4%	2.0%	
Other**	0.0%	0.8%	1.3%	1.4%	0.9%	0.7%	
Total in group	209	361	238	214	1,054	12,376	
*1981-1987	**Includes Native Americans.						

Race/Ethnicity in Female AIDS cases over 5-year Time Periods and Male AIDS Cases, San Diego County

#### <u>TABLE 5</u>:

AIDS Case Rates in Female and Male Cases Over Time by Race/Ethnicity, San Diego County

	Female				Male					
Race/Ethnicity	1990	1995	2000	2005	2007	1990	1995	2000	2005	2007
White	2.7	4.4	2.0	1.0	1.1	63.1	70.4	24.6	24.5	11.5
Black	17.5	18.5	15.1	9.1	10.2	84.9	120.7	74.8	45.0	43.2
Hispanic	6.5	7.2	5.3	2.8	2.6	47.4	59.1	37.7	28.2	23.4
Asian/Other*	**	7.0	**	**	**	13.3	15.8	7.5	7.5	7.3
All races/ethnicities	4.1	6.1	3.5	2.5	1.9	57.4	65.2	24.2	24.2	16.2

\*Includes Native Americans.

\*\*Rates not calculated for fewer than 5 events.

Rates per 100,000 population.

differed from the CDC national estimates. The CDC 2005 estimate for cases in white female (2.0 per 100,000) is greater than the 1.0 per 100,000 seen in the County and the CDC 2005 estimate for Hispanic females (11.2 per 100,000) is four times the 2.8 per 100,000 rate seen in the County (see Table 5). The CDC estimate for black females (45.5 per 100,000) is five times the 9.1 per 100,000 seen in the County.

#### AGE AT DIAGNOSIS

There are no significant difference in the mean age at diagnosis between recent (2003-2007) female and male AIDS cases (p=0.753) although cumulatively, female cases are statistically, if not clinically, significantly younger (p=0.048) (see Table 6). In recently (2003-2007) diagnosed female cases there are no differences in mean age between races/ethnicities, but over the entire epidemic whites (mean age39.3 years) are significantly older than blacks (mean age 36.6 years, p=0.030) and Hispanics (mean 34.9 years, p<0.001). There is no statistical difference in age at diagnosis between Hispanic and black female cases.

Over the course of the epidemic, both

$T_{1} = 0$		Fe	male	Male		
Age at AIDS Diagnosis	Age measure (years)	2003-2007	cumulative*	2003-2007	cumulative*	
tive Adolescent and	Mean age	40.0	37.2	40.2	38.0	
Adult Female and Male	Median age	39.0	36.0	39.5	37.0	
AIDS Cases,	Range	1-70	birth-88	4-84	birth-92	
San Diego County	Total cases	214	1,054	1,732	12,382	
	*1981-2007					

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female and male cases have had the most diagnoses in the 30-39-year age group (36% and 48% respectively), although the peak in this age group is not as pronounced in females (see Figure 2). In recent years (2003-2007), although most cases are still seen in 30-39-year olds, there are increasing numbers of female and male cases in the 40-49year age group.

#### **CURRENT AGE (2007)**

The average age of female AIDS cases

in the County alive in 2007 is about 46 years (see Table 7). Although male AIDS cases alive in 2007 were statistically significantly older (p=0.001) than female cases, their mean age of 47.6 years is unlikely to be clinically significantly greater.

#### AGE AT DEATH

Of all resident female AIDS cases in San Diego county who have died, the mean age at the time of death is 41.2 years. There is no difference between female and male

#### FIGURE 2:

Recent (2003-2007) and Cumulative AIDS Cases by Gender and Age Group at Time of Diagnosis, San Diego County



	Females	Males
Mean age (years)	45.9	47.6
Median age (years)	45.0	47.0
Range (years)	3-79	5-87
Total cases	679	6,744
	Mean age (years) Median age (years) Range (years) Total cases	FemalesMean age (years)45.9Median age (years)45.0Range (years)3-79Total cases679

(40.9 years) AIDS cases in the mean age at death.

#### TIME FROM HIV TO AIDS

There is no statistical difference (p=0.344) in the mean time from reported HIV diagnosis and AIDS diagnosis between cumulative female (2.5 years) and male (2.6 years) cases in the County. Significantly fewer (p=0.042) female cases (48.2%), however, had less than a year between HIV diagnosis and AIDS diagnosis than male cases (51.5%) (see Figure 3).

In recent years treatment options have expanded, not just for those with an AIDS diagnosis, but also for those whose disease has not progressed beyond HIV infection. Increased treatment options for patients with HIV should lengthen the time from HIV diagnosis to AIDS diagnosis if people test early enough in the course of their infections and go into treatment. Between the 1981-1987 and 1993-1997 time periods, there was a significant decline in the proportion of cases with less than a year from HIV to AIDS diagnosis (see Figure 4). After this decline, there is an increase the proportion of female and male cases with less than a year from HIV to AIDS diagnosis, which then remains stable over the recent time period.

It is possible that the change in case definition to include those whose disease is not as advanced (i.e., with decreased CD4+ counts but no identified opportunistic infections) may decrease the time from HIV diagnosis to AIDS diagnosis in some cases by identifying them as AIDS cases earlier in their disease progression. This may be balanced, in patients who are in care for their HIV disease, by treatment options that prolong the HIV only phase of disease by pre-

#### FIGURE 3:

Years from HIV Diagnosis to AIDS Diagnosis in Cumulative Female and Males AIDS Cases, San Diego County



#### FIGURE 4:

Female and Male AIDS Cases with Less Than One Year Between HIV Diagnosis and AIDS Diagnosis over Five-Year Time Periods, San Diego County



venting declines in CD4 counts that result in an AIDS diagnosis. It is important to remember that the time of diagnosis may be considerably later in time than the point of infection and the increase in proportion with less than a year between HIV diagnosis and AIDS diagnosis in the last ten years is likely due to cases testing later in the course of their infections.

#### TIME FROM AIDS TO DEATH

Over the course of the epidemic, the mean time from AIDS diagnosis to death, among those who have died, is 26.4 months for female cases and 24 months for male cases; this difference is not significant (see Table 8). The average length of time was not significantly different between the 1981-1987 and 1988-1992 time-periods, but did increase significantly (p<0.001) in the 1993-1997 diagnosis time period in both females

and males. The length of time from AIDS diagnosis to death amongst deceased cases in the 1993-1997 time period was also longer than that seen in the 1998-2002 time period (p=0.015). It is not possible to make inferences on survival in the 2003-2007 time-period because of expected increases in case deaths over time.

There are no difference in time from diagnosis to death in female cases across races/ethnicities or modes of transmission. Age is significantly (p=0.003) associated with survival time with increasing age associated with decreasing survival times, although the increases in age do not appear to be clinically significant.

The majority of both female (63.7%) and male (70.3%) deceased cases have had less than three years between AIDS diagnosis and death (see Figure 5). A significantly greater proportion of female than male

#### TABLE 8:

Time from AIDS Diagnosis to Death (months) by 5-year Time Periods in Deceased Female and Male AIDS Cases, San Diego County

		Time period of diagnosis							
Gender	Months, from AIDS diagnosis to death	1981- 1988	1988- 1992	1993- 1997	1998- 2002	2003- 2007*			
	mean	37.8	27.4	46.4	36.0	10.6			
	median	20.8	22.3	32.5	32.0	11.7			
nale	range	0-117	1-119	0-159	3-101	2-17			
Fen	number deceased**	32	175	163	61	21			
	total cases in time period	32	209	361	238	214			
	percent deceased	100.0%	83.7%	45.2%	25.6%	9.8%			
	mean	22.3	27.3	36.8	28.6	13.5			
	median	15.0	21.0	23.0	18.0	8.0			
ale	range	0-150	0-200	0-178	0-110	0-52			
M	number deceased**	824	3,331	1,841	415	170			
	total cases in time period	839	3,759	3,985	2,067	1,732			
	percent deceased	98.2%	88.6%	46.2%	20.1%	9.8%			

\*The number of cases in this time frame is expected to increase over time.

\*\*Deceased as of December 31, 2007.

cases have three or more years between AIDS diagnosis and death (p<0.001). A significantly (p=0.020) greater proportion of deceased female (27.7%) cases than male (22.9%), however had less than a year between AIDS diagnosis and death. When the distribution of cases with less than one year between AIDS diagnosis and death is examined over time periods (see Figure 6), significant differences between female and male cases are seen only in the 1988-1992 (p=0.049) time period; female cases are more likely to have survival of less than one year in this time period.

In 1993, the AIDS case definition was

changed by the CDC to include patients in whom the absolute CD4 count dropped below 200 or the proportion of CD4 cells below 14%. Most of the cases with survival less than one year were diagnosed before 1995, many before the 1993 change in case definition to include lowered CD4 counts and percentages. These cases are more likely to have more advanced disease at the time of diagnosis than later cases after the 1993 case definition change. There are fewer cases with survival less than one year in the 1993-1997 time period indicating more patients surviving longer. In the 1998-2002 and 2003-2007 time periods, however, the





proportion of these cases has increased. This is likely due to cases being tested later in their disease progression, with many having an AIDS diagnosis based on lower CD<sub>4+</sub> counts or percentages. Effectively, cases are likely to be tested for HIV longer after HIV infection has occurred.

#### SURVIVAL

As of the end of 2007, there is a significantly (p<0.001) greater proportion of all female AIDS (57%) cases still alive compared to male cases (47%), and this difference remains when race/ethnicity and age are taken into account. When time period

**FIGURE 6:** Deceased Female and Male AIDS Cases with Time from AIDS Diagnosis to Death Less Than 1 Year by 5-Year Time Periods, San Diego County



of diagnosis is taken into account however, the proportion of living female cases are significantly (p=0.032) greater than male cases only in the 1988-1992 time period. This is likely due to small numbers of female cases.

When the proportion of County AIDS cases diagnosed in 2001 (the only year data is available from the CDC) surviving more than 12, 24, and 36 months is compared to data available from the CDC, no significant differences are seen between national and County data (see Table 9). There is also no significant difference between male and female San Diego County cases in terms of survival.

#### **COUNTRY OF ORIGIN**

The majority of AIDS cases diagnosed in the County of San Diego, both female and male, were born in the United States (see Table 10). A significantly (p<0.001) higher proportion of cumulative female AIDS cases (27.1) were born outside the US than male cases (15.5). This is not unexpected as male cases have a higher proportion of whites, more than 97% of whom were born in the US. Female cases are more likely to be Hispanic and a greater proportion of Hispanic cases were born outside the US. This significant difference, however, is maintained when controlling for race/ethnicity (p=0.001). Both male and female cases have had increasing proportions of cases born outside the US over 5year time periods (p<0.001) (see Table 11). It should be remembered that this information only shows country of birth and in no way reflects how long a given case has lived in the US. For example, a case may have arrived in the US at age 3-months, but not been infected until age 30 years.

TABLE 9:			Su	8		
Proportion of AIDS Cases	Gender		>12	>24	>36	
Diagnosed in 2001 Sur-	Female	CDC	0.91	0.87	0.85	
viving More than 12, 24,		CoSD*	0.92	0.87	0.84	
and 36 Months, by Gen-	Male	CDC	0.91	0.87	0.85	
(national) Data.		CoSD*	0.86	0.84	0.82	
San Diego County	*County of San Diego					
TABLE 10:	Origin		Females	Males	All cases	
Country of Origin of	USA		70.3%	83.3%	82.2%	
Cumulative Female and	US Depend	ency	1.3%	0.6%	0.6%	
Male AIDS Cases,	Other	Other 28.3%		16.1%	17.1%	
San Diego County	total in grou	р	1,050	12,378	13,428	
	*Percentages may not equal 100 due to cases of unknown origin.					

The majority of cases born outside of the US were born in Mexico. Female cases born outside the US were less likely (p<0.001) to be born in Mexico than male cases; of those born outside of the US, female cases were more likely to come from Africa and less likely to come from Europe than male cases. There was little difference between male and female cases in the proportion of those coming from South America and Asia.

#### **RESIDENCE AT DIAGNOSIS**

Although the majority of AIDS cases in San Diego county lived in the city of San Diego at the time of their diagnoses, females cases (57.6%) were significantly (p<0.001) less likely than male cases (74.6%) to have lived in the city of San Diego at the time of diagnosis. This difference is maintained when race/ethnicity is taken into account and is seen over 5-year time periods. Although there is a significant (p<0.001) decrease in the proportion of male cases diagnosed while living in the city of San Diego over 5-year time periods, there is no significant (p=0.880) change in proportion in female cases.

Other than San Diego, the cities of Chula Vista, El Cajon, Escondido, and Oceanside had more than 3% each of the female cases, while only Chula Vista has more than 3% of male cases. This reflects, in part, the racial differences between female and male cases. There is a greater proportion of Hispanics and blacks in female cases and these race/ethnicities are more likely to live in other cities within the county.

Most AIDS cases diagnosed in the County of San Diego, 58%, were residing in the HHSA Central region at the time of diagnosis (see Table 12). A significantly smaller (p<0.001) proportion of female cases (41%) than male cases (59%) were living in this region at the time of diagnosis. The proportion of female cases in the Central region has increased since the 1981-1987 time period, but not significantly (p=0.201); the proportion of male cases in this region has

TABLE 11:

United States Origin of Male and Female AIDS Cases over 5-Year Time Periods, San Diego County

	Percent born in US					
Time period	Male	Female	All cases			
1981-1987	92.8%	81.3%	92.4%			
1988-1992	90.0%	82.8%	89.6%			
1993-1997	85.1%	75.6%	84.4%			
1998-2002	73.8%	66.0%	72.9%			
2003-2007	70.9%	51.9%	68.9%			

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decreased significantly (p<0.001) over 5-year time periods. In the South region, the proportions of both female (p=0.001) and male (p<0.001) cases has increased significantly over 5-year time periods. The proportion of both female and male cases has decreased significantly (p<0.001) in the North Central region, but female cases have also decreased significantly (p<0.001) in the North Inland region over time.

The residence at diagnosis does not necessarily represent the location of current residence or the area in which health or social services are sought or obtained. It is not unusual for a case to move to a different zip code area, city, or region after diagnosis. A case who does not move may still seek medical care elsewhere within the County.

#### **FACILITY OF DIAGNOSIS**

In both female (56.0%) and male AIDS

cases (46.8%), the most common point of diagnosis in San Diego county was the hospital setting (inpatient and outpatient). Female cases were significantly (p<0.001) more likely to be diagnosed in this setting than male cases even when controlling for race/ethnicity. Female cases were significantly less likely to be diagnosed in a physician's office (p<0.001) than male cases, even when controlling for race/ethnicity.

#### LIMITATIONS

The data presented in this report are dependent on accurate reporting from healthcare providers, laboratories, and patients. Patients, for many reasons, may not wish to provide accurate current or historical information to their healthcare providers for reporting. Healthcare providers may not report complete information because it is not available to them, they wish

#### TABLE 12:

Female and Male AIDS Cases by Health and Human Services Agency Regions Over Five-Year Time Periods, San Diego County

_	Time period of diagnosis							-		
	1988-	-1992	1993-	-1997	1998-	-2002	2003	-2007	Cumulati	ve Cases
Region	female	male	female	male	female	male	female	male	female	male
Central	39.7%	61.6%	38.5%	60.0%	46.2%	55.2%	43.5%	53.3%	41.2%	58.9%
East	10.5%	7.6%	8.3%	6.1%	10.9%	6.9%	8.9%	7.3%	10.0%	6.8%
South	14.8%	6.2%	13.6%	8.8%	15.5%	14.7%	26.6%	17.0%	16.7%	9.8%
North Coastal	10.5%	5.9%	13.3%	7.5%	10.5%	6.7%	10.7%	6.8%	11.6%	6.7%
North Inland	12.0%	4.0%	9.4%	4.4%	6.3%	4.8%	5.1%	4.3%	8.3%	4.3%
North Central	12.4%	14.8%	16.9%	13.2%	10.5%	11.7%	5.1%	11.2%	12.2%	13.4%
Total	209	3,759	361	3,985	238	2,067	214	1,732	1,054	12,382
<b>D</b>	1 1 0 0 1									

Percent may not total 100 due to rounding.

to protect their patients' privacy, or other reasons. Each of these situations, and others, result in data that may not be accurate and these inaccuracies may impact analysis.

Caution should be exercised in the analysis of the most recent time period (2003-2007) because additional cases are likely to be reported over time. Retrospective case finding will continue; it is expected that cases will continue to be reported. 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 this and future analyses.

Some of the variables under study do not have sufficient numbers of occurrences to make statistical inferences. When small numbers are presented, caution should be exercised in the interpretation of data presented.

In 1993, the AIDS case definition was modified by the CDC to include those patients with evidence of HIV infection 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 likely that this has increased both the number of surviving cases and the length of their survival from diagnosis to death. The change in case definition and the increase in cases identified earlier in the course of disease may make comparisons to earlier cases, diagnosed after the onset of an opportunistic infection or other indication of a profoundly failing immune system, difficult.

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 Community Epidemiology. Some of these cases may have left the area or state and died. This may result in inaccurate assumptions and survival calculations.

The County has a higher proportion of Hispanics and a lower proportion of blacks than do many states, the United States, and even some other counties within California. These racial/ethnic demographic differences make comparisons of the County of San Diego 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.

Comparisons are made in this report to CDC national estimates for rates and percentages of AIDS cases in terms of demographic and risk variables. It should be remembered that these are estimates based on data submitted under many different state and local surveillance systems while the County data is based on individual cases reported. This can make these comparisons difficult to interpret.

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#### SUMMARY

There have been 1,054 female AIDS cases reported in in the County of San Diego since 1984, and females comprise 7.8% of the cumulative AIDS cases.

The most common mode of transmission identified in all female cases (55%) is heterosexual contact, and the proportion has risen over time. The next most common mode of transmission is IDU (37%).

Among females with heterosexual transmission, 38% had an IDU partner, 31% had a bisexual male partner, and 28% had a partner known to have HIV/AIDS.

Female cases are more evenly distributed amongst races/ethnicities than male cases. The proportion of females amongst white cases has decreased significantly while the proportion of Hispanics, blacks, and Asian/Pacific Islanders has increased.

The mean age at diagnosis of cumulative female and male cases is about 38 years. Both female and male cases are most likely to be 30-39 years old at the time of diagnosis, although there has been a shift toward 40-49 years of age in recent years (2003-2007).

In 2007, the average age of both females and males living with AIDS was about 46 years. There is no statistical difference in the mean time from HIV to AIDS diagnosis between female (32.5 yrs) and male (2.6 yrs) cases, but a larger proportion of females than males have more than a year between HIV and AIDS diagnoses.

The average length of time from AIDS diagnosis to death in cumulative female cases is 26 months, not significantly different from male cases.

Female cases are less likely to be white, and more likely to be Hispanic or black, and born outside the US than non-male cases.

The majority of AIDS cases resided in San Diego at the time of diagnosis and in the HHSA Central region. Somewhat fewer female cases than male resided in the Central region. The proportion of female cases in the Central region has been increasing over time, but decreasing in the North Central region.

Female cases were more likely to be diagnosed in the hospital setting, and less likely to be diagnosed in a physician's office than male cases.

#### DATA SOURCES:

County of San Diego, HIV/AIDS Epidemiology Unit database and Annual Report . SANDAG population estimates (for years for which rates are provided). HIV/AIDS Surveillance Report, 2005 (Vol. 17), Centers for Disease Control and Prevention . Profiles of General Demographic Characteristics, 2000, US Dept of Commerce.

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