County of San Diego

Health and Human Services Agency

HIV/AIDS Epidemiology Report 2004

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HIV/AIDS Epidemiology Report

2004

COUNTY OF SAN DIEGO

Health and Human Services Agency
Public Health Services

An Annual Report

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I. Executive Summary

The state of California has the second highest number of Acquired Immunodeficiency Syndrome (AIDS) cases in the United States. San Diego County has the third highest number of AIDS cases in California. There have been 12,034 AIDS cases reported since 1981 and 4,155 cases of Human Immunodeficiency Virus (HIV) reported since July 2002 in San Diego County. Highlights of this report are summarized below:

AIDS Cases

- White men constitute the largest number of new cases per year and have since the beginning of the epidemic. Until 1999, more than 50% of all cases by racial/ethnic group were white. Since 2000, more than 50% of AIDS cases per year have been reported among persons of color (African American, Asian, Pacific Islander, Hispanic, and Native American).

- For many years the rate of AIDS has been highest in the African American community, followed by the Hispanic community.

- Women constitute 7% of total cases and 10 – 11% of cases diagnosed since 1997. In 2003, the number of women diagnosed decreased from the previous year, yet the percent of cases attributed to women increased to 13%.

- "Men who have Sex with Men" (MSM) continues to be the primary mode of transmission for male AIDS cases, followed by injection drug use (IDU).

- For women, the primary mode of transmission is heterosexual contact, followed by IDU.

HIV Cases

- 4,155 cases of HIV have been reported in San Diego County since the inception of HIV reporting statewide in 2002.

HIV and Local Data

- The HIV infection rate among HCT (HIV Counseling and Testing) testers has increased each year 2001-2003, from 1.3% to 2.3%.

- Male HCT testers have had an increase in HIV infection rates each year 2001-2003, while women have had an increase in 2002 and 2003.

- African Americans historically have had the highest HIV infection rates among HCT testers, followed by Hispanics. In 2001 and again in 2003 Hispanics had the highest rates. The rate increased for whites in 2002, resulting in a rate similar to African Americans and Hispanics through 2003.

- Rates of HIV infection have increased over the last 5 years for the all age groups except those under age 20.

- HCT testers from the Central region generally have the highest HIV infection rate; however, the South region has had an increase for the last two years and in 2003 had the highest rate.

- Among HCT testers, men who have male sexual partners, the MSM group, continue to have higher HIV infection rates than other risk groups. Rates increased for this group each year from 2001-2003.

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II. AIDS Cases

1.0 Overall AIDS Case Data

California has the second highest number of AIDS cases reported in the United States. By December 31, 2003, there were 133,858 Acquired Immunodeficiency Syndrome (AIDS) cases reported in California. A total of **12,034** of those cases were reported among San Diego County residents, making San Diego County the third largest contributor of AIDS cases in California, following Los Angeles and San Francisco. A total of **538** cases were reported in 2003, of which **334** were also diagnosed in 2003. The additional 204 cases reported were diagnosed in preceding years with reporting delayed until 2003. Additional AIDS cases diagnosed in 2003 are expected to be reported throughout 2004 and into 2005. Refer to Appendix 2 for more information on data sources, reliability and limitations as well as Appendix 3 for AIDS case definition, reporting regulations, and reporting delays.

The first cases of AIDS among residents of San Diego County (2) were diagnosed in 1981. During 1993, 1,144 cases were diagnosed among local residents when the AIDS Surveillance Case Definition expanded (*see Figure 1)*. The 1993 peak in AIDS cases is likely the result of changes in the case definition. Since 1999 the number of new cases has been in the mid-400 range. Year 2003 is also expected to be in the mid-400 range when all cases have been reported.

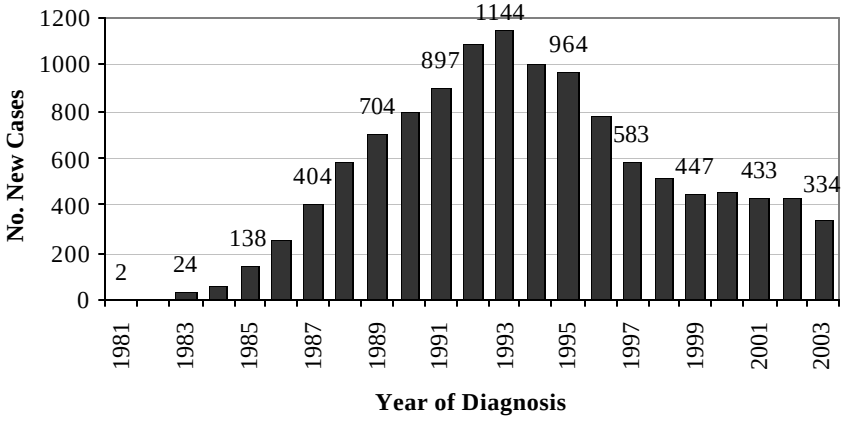
2.0 Demographic Variables

The demographics of AIDS in San Diego are changing slowly. White men between 30 and 39 years of age who were living in the Central region at time of diagnosis continue to be the group most frequently diagnosed with AIDS in San Diego County. While there has been a gradual increase in average age at time of diagnosis, it remains in the 30 – 39 year age group. Women are starting to make up larger percentages of the cases reported each year, yet the numbers are still small for this group. Examination by racial/ethnic group shows the number of new cases decreasing among whites, while larger percentages of new cases are being diagnosed among persons of color. There has been a shift in residence at time of diagnosis with the second most frequent region of residence moving from the North Central to the South.

New AIDS Cases

FIGURE 1

AIDS Cases by Year of Diagnosis, San Diego County



2.1 Gender

The first adult woman was diagnosed with AIDS in San Diego County in 1985; the first pediatric female was diagnosed in 1984. Women continue to constitute less than 10% of the cumulative cases. There have been 11,146 (93%) male cases and 888 (7%) female cases as of December 31, 2003. From 2000 to 2003, females were 11% of the total cases reported. The percent of cases diagnosed in females has steadily climbed from 1984 to 1997. Between 1997 and 2002, the percent per year has stayed around 10%, fluctuating from 9% to 11%. In 2003, women made up the largest percent of cases for any year at about 13%.

Nationwide, women constitute a larger proportion of cases than is seen in State or locally reported cases (*see Table 1*).

2.2 Racial/Ethnic Group

Cumulatively (as of 12/31/02), whites made up 41% of all cases in the United States. In California, this group makes up 58% of the cases and locally, 64% (as of 12/31/03). Twenty-one percent of all San Diego County AIDS cases are Hispanic, which is the same proportion statewide and close to the proportion nationally (18%). The proportion of African American cases in San Diego County is 12%, which is lower than the state and national levels. At the state level African Americans constitute 18% of AIDS cases (through 12/31/03) and at the national level, 39% (through 12/31/02) (*see Figure 2*). During the most recent year (2003), persons of color comprised 57% of San Diego County's AIDS cases. For a more complete breakdown of Hispanic and Asian/Pacific Islander cases, please see Appendix 5.

In contrast to what is seen at the national level, whites continue to make up the largest proportion of cumulative local cases. Gradually, however, persons of color, Hispanics and African Americans in particular, are making up increasingly larger proportions of the new AIDS cases (*see Figure 3*). The breakdown by racial/ethnic group for recent cases looks more similar to the national breakdown except that the second and third most frequent groups are reversed. Nationally, African Americans make up the second most frequently diagnosed group followed by Hispanics. Locally, Hispanics make up the second most frequently diagnosed group followed by African Americans.

AIDS Cases by Gender

TABLE 1

AIDS Diagnosis Among Ages 13 and Older by Gender and Area of Residence

	United States* Through 12/31/02		California Through 12/31/03		San Diego Through 12/31/03		San Diego 2000-2002	
Gender	#	%	#	%	#	%	#	%
Male	718,002	81%	122,632	92%	11,117	93%	1,182	89%
Female	159,271	18%	10489	8%	859	7%	141	11%
Total	**877,275**		**133,121**		**11,976**		**1,323**	

*Notes: 2002 is the most recent year available for national data. Total for national includes 2 cases of unknown gender

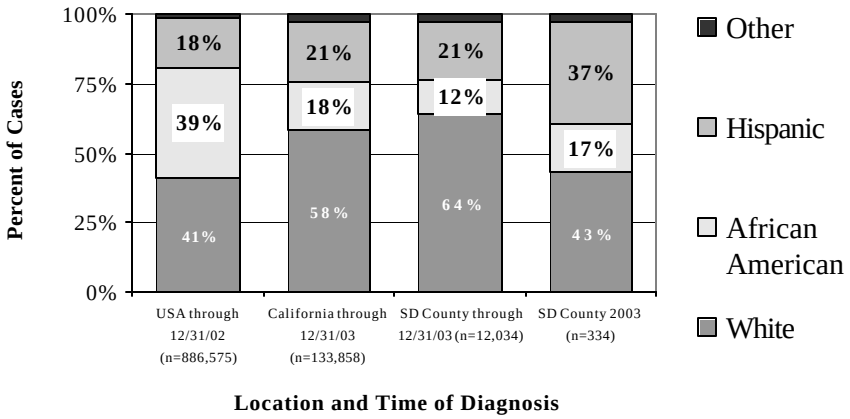
AIDS Cases by Racial/Ethnic Group

FIGURE 2

Comparison of Cases by Racial/Ethnic Group, Location and Time Period of Diagnosis

Notes: 2002 is the most recent year available for national data.

'Other' includes Asian, Pacific Islander, Native American, Native Alaskan and unknown.



To understand the impact AIDS has on different racial/ethnic communities in San Diego, the rate of AIDS in those communities should be compared. In 2003, San Diego County had a rate of 11 diagnosed AIDS cases per 100,000 persons living in the county. Because the number of new cases diagnosed in 2003 is expected to increase as more cases diagnosed in 2003 are reported through 2004 and into 2005, the rate for that year is also expected to increase. In 2001 and in 2002, the rate of AIDS in San Diego County was 15 per 100,000 people. Healthy People 2010 estimated that there were 19.5 AIDS cases per 100,000 adolescents and adults in the United States in 1998 and set a goal of 1 new case per 100,000 persons.

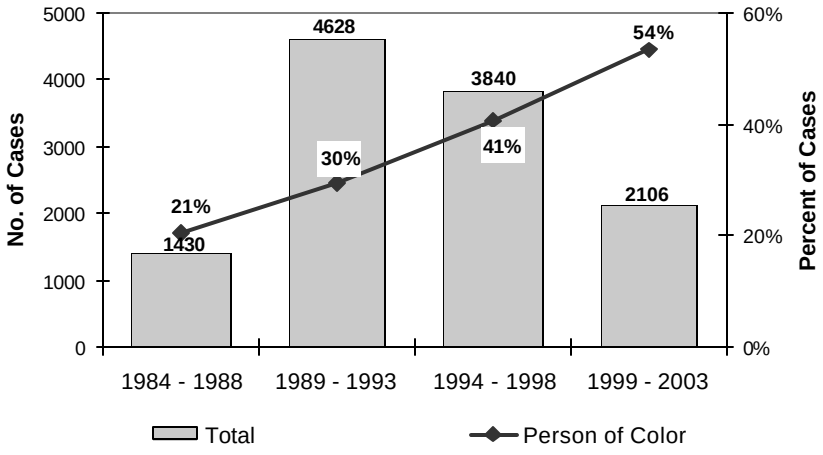
Rates adjust for population distribution. When rates by racial/ethnic group are computed, the picture of AIDS in San Diego looks quite different than it does when examining the raw numbers of those same groups. See Appendix 4 for procedures used to calculate rates. Since 1986, African Americans have had the highest rate of AIDS in San Diego County. In 2003, the rate for AIDS in the African American community was 36 per 100,000. In 2002, the rate was 47 per 100,000. Again, as new cases diagnosed in year 2003 are reported, the rate of AIDS in this community for that year will increase. The rate of Hispanics

AIDS and Persons of Color

FIGURE 3

Number of New AIDS Cases in a Time Period and Percentage Attributed to Persons of Color*, San Diego County

* Persons of Color defined as individuals of African, Hispanic, Asian/Pacific Islander, or Native American heritage.



surpassed that of whites in 1996 and has remained the second highest rate since. Figure 4 displays the rate of AIDS in various racial/ethnic groups in San Diego County from 1998 to 2002. Data from 2003 is not included because it is preliminary. For more discussion on calculating rates and more specific rates by year and racial/ethnic group, please see Appendix 4.

2.3 Age

At the national, state, and local level, individuals in their 30's are most frequently diagnosed with AIDS. Nationally, 39% of cumulative cases (886,575) are in the 35 – 44 year age group and 34% are in the 25-34 age group. Individuals 30-39 years old are 44% of state cases, and 46% of San Diego County cases. The second largest group for both the State and local area is the 40-49 years followed by 20-29 years.

The age group 30-39 years has consistently been the most frequently diagnosed age group in San Diego County since the beginning of the epidemic. In the time period 1984-1988, the second most frequent age group was 20-29 years and the third most frequent was 40-49 years. Since then, those two age groups have reversed in relative frequency with 40-49 years becoming the second most frequent and 20-29 years following. The percentage of cases diagnosed between 20-29 years of age has continued to decrease since 1988 while the percentage of cases diagnosed between 40-49 years of age has continued to increase. The "less than 20 years" age group continues to be quite small, representing 1% or less of all cases diagnosed in each time period (*see Figure 5*).

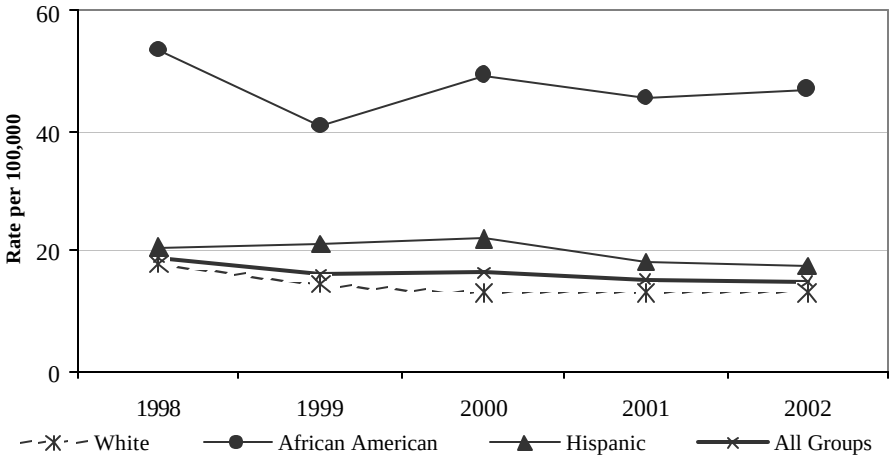
The average age at the time of AIDS diagnosis is 38 years of age. When age at time of diagnosis is examined by race, Hispanics have had a lower median age at diagnosis than that of the other racial/ethnic groups (*see Table 2*).

AIDS Rates by Racial/Ethnic Group

FIGURE 4

Rate of AIDS Cases by Racial/Ethnic Group, San Diego County

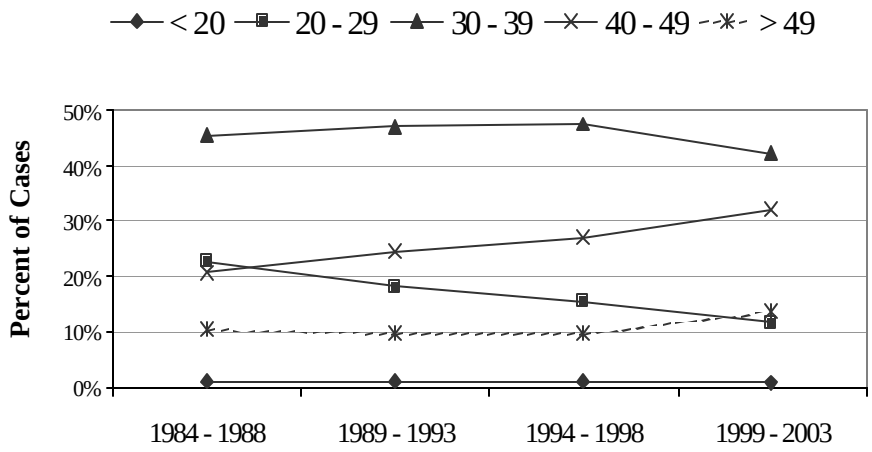
Note: All Groups includes the three shown in the chart and Asian, Pacific Islander, Native American.



AIDS Cases by Age Group

FIGURE 5

AIDS Cases by Age Group at Diagnosis During Different Time Periods, San Diego County



AIDS Cases by Age and Racial/Ethnic Group

TABLE 2

AIDS Cases by Age-Related Measurements and Racial/Ethnic Group Over Time, San Diego County

Time Period	Age Related Measurement	Racial / Ethnic Group			
		White	African American	Hispanic	Other*
1984 – 1988	Median Age	36	32	32.5	34
	Range in years	86	51	69	22
	Youngest Case	2	1	Birth	28
	Total Cases	1136	123	154	17
1989 – 1993	Median Age	36	35	34	35
	Range in years	79	71	75	53
	Youngest Case	Birth	Birth	Birth	16
	Total Cases	3260	514	751	103
1994 - 1998	Median Age	37	36	34	34
	Range in years	77	71	75	66
	Youngest Case	1	Birth	Birth	Birth
	Total Cases	2268	507	942	123
1999 - 2003	Median Age	40	39	37	38
	Range in years	73	68	78	55
	Youngest Case	18	Birth	Birth	18
	Total Cases	978	343	720	73
Cumulative**	Median Age	37	36	35	35
	Range in years	92	71	78	73
	Youngest Case	Birth	Birth	Birth	Birth
	Total Cases	7671	1487	2568	308

* "Other" includes those of Asian, Pacific Islander, Native American, and Native Hawaiian heritage.

** Includes 30 cases diagnosed between 1981 and 1983

2.4 Pediatric Cases

A pediatric case is one in which a child diagnosed with AIDS was 12 years old or younger. As of 12/31/02, there have been 9,300 pediatric cases in the Nation, constituting 1% of all AIDS cases diagnosed nationwide. Statewide, a smaller percent are pediatric cases, 0.5% (639) of the 133,858 total cases reported as of 12/31/03. Locally, the percent of cases diagnosed in this age group as of 12/31/03 is identical to the state. To date, 58 pediatric cases have been reported. In recent years, the number of new pediatric cases has been very low. Three (3) children in the last 5 years have been diagnosed with AIDS, with none reported in 2003. There have never been more than 8 children diagnosed with AIDS in a single year in San Diego.

2.5 Place of Residence

Place of residence at the time of AIDS diagnosis does not necessarily represent the place of residence at the time of HIV diagnosis or the location of HIV infection. The Health and Human Services Agency (HHSA) geographically divides the County of San Diego into 6 HHSA regions. For more information about the Health Service Areas, see Appendix 6.

While AIDS cases have been diagnosed in all parts of the County, 58% were living in the Central region at the time of their diagnosis (*see Figure 6*). Sixty percent of men and 41% of women diagnosed with AIDS were living in the Central region at the time of their diagnosis. By racial/ethnic group, 60% of white cases, 70% of African American cases, 50% of Hispanic cases, 41% of Asian/Pacific Islander cases, and 64% of Native American cases were living in this region at the time of their AIDS diagnosis.

AIDS Cases by HHSA Region

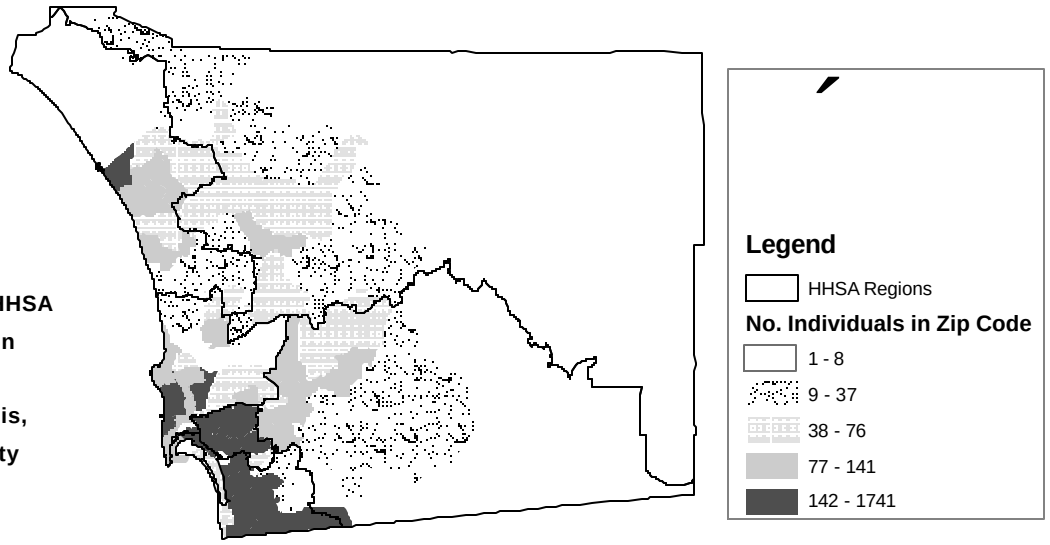


FIGURE 6

AIDS Case Distribution by HHSA Region, based on Zip Code at Time of Diagnosis, San Diego County

Racial/Ethnic Group by HHSA Region

TABLE 3

AIDS Case Distribution by Racial/Ethnic Group and HHSA Region, San Diego County

Racial/ Ethnic Group	HHSA Region					
	Central	North Central	South	North Coastal	East	North Inland
White	65%	76%	30%	67%	69%	69%
African American	15%	7%	11%	10%	11%	5%
Hispanic	18%	14%	56%	20%	18%	21%
Asian/PI	1%	3%	3%	2%	2%	4%
Native American	1%	1%	<1%	1%	1%	1%
Total in Region	7031	1598	1104	899	851	551

Note: Percentages may not add up to 100% due to rounding.

An examination of racial/ethnic group by region of residence at the time of AIDS diagnosis shows that the largest proportion of cases in most regions is white with the exception of the South HHSA region where the largest proportion of cases is Hispanic (*see Table 3*). The vast majority of cases in each region are male (86% - 95%).

There has been no dramatic shift in where individuals with AIDS are living at the time of their diagnosis. The East, North Coastal, and North Inland regions have been relatively stable and low over time. The most notable changes have been a decrease in percent of cases diagnosed in the Central and North Central regions and an increase in percent of cases diagnosed in the South region (*see Table 4*).

Over time, reported AIDS cases in all of the HHSA regions have become more diverse in their racial/ethnic composition. Primarily, this is due to a decrease in number of white cases than any other racial/ethnic group in each region. Over time there has been a proportional decrease in white cases and increases in African American and Hispanic cases. The

AIDS Trends by HHSA Region

TABLE 4

AIDS Case Distribution by HHSA Region Over Time, San Diego County

HHSA Region	Time Period of Diagnosis				Cumulative*
	1984 - 1988	1989 - 1993	1994 - 1998	1999 - 2003	
Central	64%	60%	58%	54%	58%
East	6%	7%	7%	8%	7%
South	6%	7%	10%	15%	9%
North Coastal	5%	7%	8%	8%	7%
North Inland	3%	5%	5%	5%	5%
North Central	16%	14%	12%	11%	13%
Total	1430	4628	3840	2106	12034

*Includes 30 individuals diagnosed between 1981 and 1983

Note: Percentages may not add up to 100% due to rounding.

AIDS Trends by Racial/Ethnic Group and HHSA Region

TABLE 5

AIDS Case Distribution by Racial/Ethnic Group and HHSA Region Over Time, San Diego County

HHSA Region	Time Period	Racial/Ethnic Group				Number in Time Period
		White	African American	Hispanic	Other*	
Central	1984 - 1988	79%	10%	10%	1%	912
	1999 - 2003	49%	20%	29%	3%	1129
East	1984 - 1988	81%	7%	8%	4%	91
	1999 - 2003	52%	15%	29%	4%	166
South	1984 - 1988	51%	10%	37%	3%	79
	1999 - 2003	17%	10%	71%	2%	323
North Coastal	1984 - 1988	84%	9%	7%	<1%	76
	1999 - 2003	53%	17%	26%	4%	161
North Inland	1984 - 1988	83%	<1%	17%	<1%	48
	1999 - 2003	52%	9%	35%	5%	104
North Central	1984 - 1988	89%	3%	8%	<1%	224
	1999 - 2003	67%	12%	19%	2%	223

* 'Other' includes those of Asian, Pacific Islander, and Native American heritage.
Note: Percentages may not add up to 100% due to rounding.

above table (5) examines the six regions by racial/ethnic group and compares an early 5 year period (1984 – 1988) with the most recent 5 years of the epidemic (1999 – 2003).

Women with AIDS are most frequently residing in the Central region at the time of their diagnosis. While women's cases tend to be more evenly distributed throughout San Diego County than men's, there is an increased concentration of women in the Central region. In the time period 1984-1988, 36% of all women were residing in the Central Region. In the most recent 5-year period (1999-2003), 45% of the women were living in this region.

In total, women make up 7% of all cases diagnosed in San Diego County. This proportion changes by year of diagnosis and also by region of San Diego County. The following table (6) shows the percent of cases, per time period and region, diagnosed in women. This proportion has increased in each region over time. In the Central region, where the bulk of the female cases were living at the time of their diagnosis, women are about 5% of the 7,031 cases diagnosed in that region. The proportion was as low as 2% in the 1984-1988 time period and increased to

Female Cases by HHSA Region

TABLE 6

AIDS Case Distribution of Females in HHSA Regions Over Time, San Diego County

HHSA Region	Time Period of Diagnosis								Cumulative	
	1984 - 1988		1989 - 1993		1994 - 1998		1999 - 2003			
	% Female	No.	% Female	No.	% Female	No.	% Female	No.	% Female	No.
Central	2%	912	4%	2756	6%	2224	9%	1129	5%	7031
East	11%	91	8%	342	10%	250	18%	166	11%	851
South	8%	79	13%	315	12%	387	10%	323	12%	1104
North Coastal	8%	76	10%	337	14%	320	14%	161	12%	899
North Inland	8%	48	14%	214	15%	182	15%	104	14%	551
North Central	4%	224	5%	664	11%	477	10%	223	8%	1598
Total in Time Period	3%	1430	6%	4628	9%	3840	11%	2106	7%	12034

Note: Percentages may not add up to 100% due to rounding.

9% of cases in this region in the 1999 – 2003 time period. In the last 5 years (1999 – 2003), the region with the largest proportion of women is the East region followed by the North Inland and North Coastal regions.

Place of residence can be further analyzed by city of residence within San Diego County. Cumulative cases by the city of residence in San Diego County at the time of diagnosis are displayed in Appendix 7.

2.6 Place of Origin

The majority of AIDS cases diagnosed in San Diego County were among individuals born in the United States. Of the 12,034 cases diagnosed in San Diego County, 15% were born outside the United States, and 1% in a United States Dependency (such as Puerto Rico or Guam).

Those born outside of the United States in either a US Dependency or a foreign country account for 53% of the 235 Asian/Pacific Islander, 55% of the 2,568 Hispanic, 3% of the 72 Native American, 2% of the 7,670 white and 4% of the 1,486 African American cases. While country of birth is recorded, the length of time a person has resided in the United States is not. Those who arrived in the United States shortly after birth cannot be differentiated from those who are newly arrived.

When the 1,843 individuals with AIDS who were born outside the United States (US Dependency or other country) are examined by race, the most frequent group is Hispanic, constituting 80% of all foreign and US Dependency born persons. While more than half of Asian/Pacific Islander cases were born outside of the United States, this group makes up only 7% of the 'foreign born' group. Whites make up 10% and African Americans constitute 3% of those born in either a US Dependency or foreign country.

An analysis of Hispanic cases by time period, place of birth, and gender shows that an increasing proportion of Hispanics are foreign-born and that a slightly larger proportion of females are foreign-born than males (*see Table 7*). Male and female Hispanic cases show a relatively similar pattern for place of origin over time. Asian/Pacific Islander cases show a larger percent of female AIDS cases (79%) than male

Hispanic Cases by Place of Birth

TABLE 7

Hispanic AIDS Cases by Gender and Place of Birth by Time Period, San Diego County

Gender	Place of Birth	Time Period of Diagnosis				Cumulative*
		1984 – 1988	1989 – 1993	1994 - 1998	1999 - 2003	
Male	US born	52%	53%	45%	30%	43%
	US Dependency born	6%	3%	2%	1%	2%
	Foreign Born	42%	44%	53%	69%	54%
	Unknown	<1%	<1%	<1%	1%	<1%
	Number in Time Period	145	686	845	637	2314
Female	US born	67%	42%	41%	25%	37%
	US Dependency born	11%	5%	2%	1%	3%
	Foreign Born	22%	54%	57%	73%	60%
	Number in Time Period	9	65	97	83	254

* Includes one male from the 1981 - 1983 time period

Note: Percentages may not add up to 100% due to rounding. No Hispanic AIDS cases were diagnosed prior to 1983.

cases (54%) being foreign- or US Dependency-born. Due to small numbers, the percentages shown for Asian/Pacific Islander cases should be interpreted with caution. Most of the foreign-born Hispanics (91%) were born in Mexico, and the majority of foreign-born Asian/Pacific Islanders (66%) were born in the Philippines.

3.0 Mode of Transmission

Mode of transmission has remained relatively stable over time with "Men who have Sex with Men" (MSM) consistently contributing the largest number of cases (74% of all cases). The next most frequent risk associated with AIDS are IDU (injection drug use) and the combined category, MSM and IDU at 9% each. The percentage of cases attributed to heterosexual transmission is proportionally highest in 2003. Since the mid-1990s, the proportion of cases attributed to MSM has slightly decreased while the proportion attributed to IDU and heterosexual contact have grown. Please note that cases presenting as heterosexual trasmission are often reclassified to another mode as more information becomes known, usually MSM or IDU. In the following figure (*see Figure 7*), the distribution of transmission attributable to risk is presented by year of diagnosis.

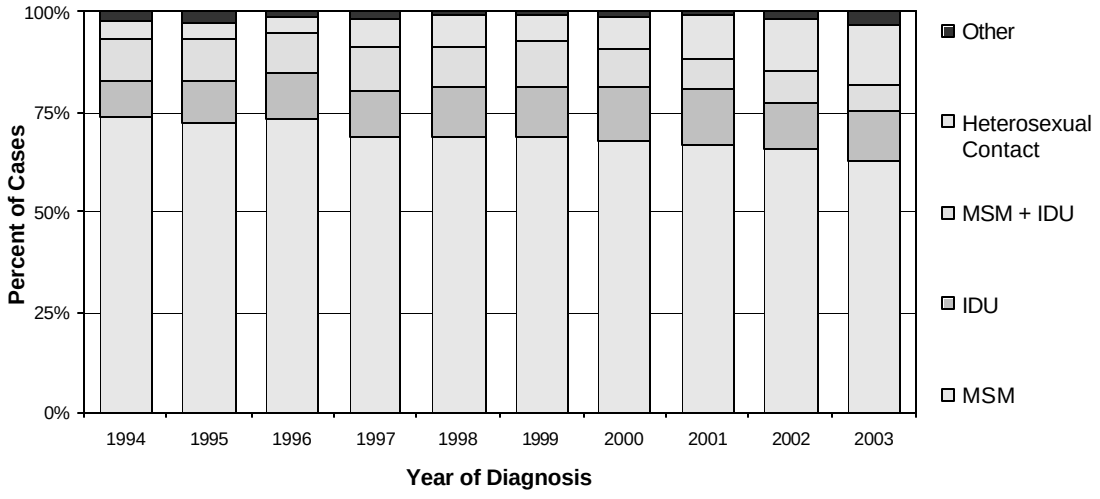
When the genders are separated, the percent distribution for mode of transmission changes (*see Figures 8 and 9*). Among men, the proportion attributed to heterosexual contact and IDU is 1% and 7%, respectively and the proportion of MSM is 80%. All risk categories other than MSM make up less than 20% of the cases – with most of that going to MSM+IDU (10%) and IDU (7%). In women, a different picture is seen. About 86% of all women attribute their infection to either heterosexual contact (51%) or IDU (37%).

When Mode of transmission is analyzed by 5-year time periods by gender (*see Table 8*), a decrease in percentage of male cases over time attributed to MSM can be seen (83% to 74%). The decrease from the time period 1994-1998 to 1999-2003 is statistically significant ($p<.05$, see Appendix 4). There has

AIDS by Mode of Transmission

FIGURE 7

AIDS Cases Distribution by Mode of Transmission, San Diego County



Transmission by Gender

FIGURE 8

Mode of Transmission for Men Diagnosed with AIDS, San Diego County (n=11,146)

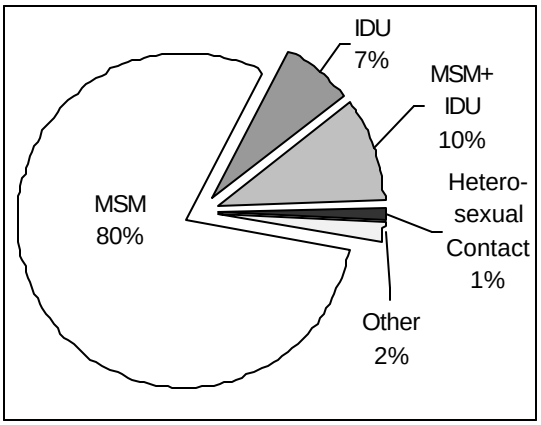
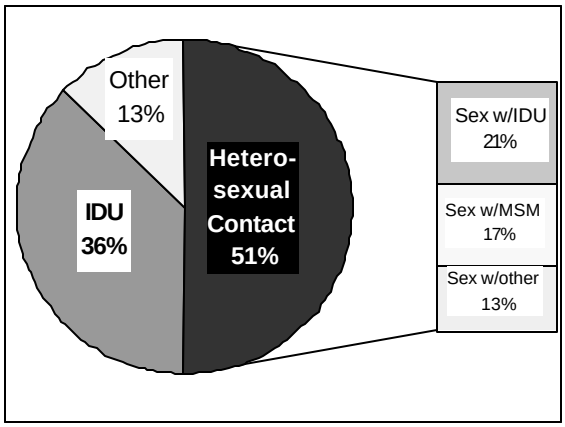


FIGURE 9

Mode of Transmission for Women Diagnosed with AIDS, San Diego County (n=888)



also been a gradual increase in IDU transmission for men. The increase between the period 1994-1998 and 1999-2003 is significant ($p<.05$). Heterosexual contact still makes up a very small percentage of HIV transmission among men each year.

For women, heterosexual contact continues to be the most frequent risk factor for HIV transmission. While the proportion of cases attributed to heterosexual transmission by time period seems to be increasing, these increases are not statistically significant ($p<.05$). When IDU as a risk factor for women is examined, the proportion of cases seems to be fluctuating from 29% to 41%.

Transmission by Gender and Time

TABLE 8

AIDS Cases by Gender, Transmission and Time, San Diego County

Gender	Mode of Transmission	Time period of Diagnosis				Cumulative*
		1984 - 1988	1989 – 1993	1994 - 1998	1999 – 2003	
Male	**Adolescent/Adult:**					
	Homosexual / Bisexual (MSM)	83%	83%	79%	74%	80%
	Injection Drug Use (IDU)	3%	6%	8%	10%	7%
	MSM + IDU	11%	9%	11%	10%	10%
	Heterosexual	1%	1%	1%	4%	1%
	Contact with contaminated blood/ blood product	3%	2%	1%	1%	1%
	Risk Not Specified/Other	<1%	<1%	<1%	<1%	<1%
	Pediatric (0 – 12 years): All modes of transmission	<1%	<1%	<1%	<1%	<1%
	Number in Group	1374	4356	3506	1880	11146
Female	**Adolescent/Adult:**					
	Injection Drug Use (IDU)	29%	37%	41%	33%	37%
	Heterosexual	38%	44%	49%	64%	51%
	Contact with contaminated blood/ blood product	25%	14%	5%	<1%	8%
	Risk Not Specified/Other	<1%	1%	2%	2%	2%
	Pediatric (0 – 12 years): All modes of transmission	9%	4%	3%	<1%	3%
	Number in Group	56	272	334	226	888

* Includes 30 males that were diagnosed between 1981 and 1983.
Note: Percentages may not add up to 100% due to rounding.

Modes of transmission for adult/adolescent male cases by racial/ethnic group and time period of diagnosis show a similar trend among groups (*see Table 9*). MSM is the largest consistent risk factor in all racial/ethnic groups and in all time periods. In Hispanic men, the proportion of cases attributed to MSM between the two time periods has remained the same while it decreased in white, African American, and "all racial/ethnic groups". Among African American cases, a smaller proportion is attributed to MSM and a larger proportion is attributed to IDU than is seen in any other male group.

IDU ranks as the second most frequent transmission mode among adult/adolescent males. In the earlier time period (1989-1993) IDU among gay/bisexual men (MSM+IDU) is more frequent than IDU in heterosexual men (IDU alone) but in the most recent time period they both constitute 10% of all cases. Unlike Hispanic and African American men, white men are more likely to be MSM+IDU than heterosexual IDU in both time periods, but when comparing the two time periods in the table, the proportion of cases attributed to heterosexual IDU is up significantly ($p<.05$) among combined racial/ethnic groups as well as among whites. In Hispanic men, the proportion has decreased. MSM+IDU has decreased among Hispanic and African American men.

Heterosexual transmission represents about 4% of all recent adult/adolescent male cases, rising from 1% in the earlier time period. This mode of transmission varies widely by racial/ethnic groups. White heterosexual men demonstrate the smallest increase over this time period, rising from 1% to 3%. The greater increase is in African American men, from 2% to 7%, followed by Hispanic men, 1% to 5%.

Unlike males, heterosexual contact is the primary mode of transmission for adult/adolescent women, followed by IDU. When mode of transmission is examined for each racial/ethnic group, heterosexual contact remains the primary mode of transmission in recent years in all groups (*see Table 10*). The proportion of cases attributed to heterosexual contact between early and recent years shown in Table 10 has increased in all racial/ethnic groups. The greatest increase is seen in African American females,

Transmission Among Men by Racial/Ethnic Group

TABLE 9

Adolescent/Adult Male AIDS Cases by Mode of Transmission, Racial/Ethnic Group and by Time Period, San Diego County

Mode of Transmission	Racial / Ethnic Group: White 1989-1993	White 1999-2003	African American 1989-1993	African American 1999-2003	Hispanic 1989-1993	Hispanic 1999-2003	All Racial / Ethnic Groups 1989-1993	All Racial / Ethnic Groups 1999-2003
MSM	86%	76%	65%	63%	77%	77%	83%	75%
IDU	3%	8%	19%	20%	11%	9%	6%	10%
MSM +IDU	9%	12%	12%	9%	10%	8%	9%	10%
Heterosexual	<1%	3%	2%	7%	1%	5%	1%	4%
Not Specified / Other	2%	1%	1%	1%	1%	1%	2%	1%
Number in Group and Time Period	3123	905	449	281	679	636	4342	1878

Note: Percentages may not add up to 100% due to rounding.

39% to 66%, followed by Hispanic women, 53% to 72%. The proportion of women's cases attributed to IDU has been decreasing among all racial/ethnic groups except whites. The decrease is as small as 1% among Hispanic women over time to as large as 67% among African American women. The most notable change between the two time periods is the large decrease in cases attributed to contaminated blood and/or blood products because of successful screening for HIV.

Pediatric cases (children less than 13 years of age) constitute less than 1% of all cases with the majority being diagnosed due to vertical transmission from an HIV-positive mother. There have been 22 boys and 25 girls diagnosed with AIDS due to maternally transmitted HIV over the course of the epidemic in San Diego County. A total of 29 male and 29 female pediatric AIDS cases have been reported in San Diego. This constitutes 3% of all female cases and less than 1% of all male cases

4.0 Health Outcomes

HIV infection alone does not meet the criteria of an AIDS diagnosis. An HIV-infected person must also have one of a number of conditions defined by the Centers for Disease Control and Prevention (CDC) to be considered an AIDS case. Refer to Appendix 3, Reporting HIV/AIDS Cases, for more information about the CDC's case definition of AIDS and how cases are reported.

Individuals with AIDS in San Diego have experienced a number of different opportunistic infections. The most common AIDS-defining infection for adolescent and adult cases is *Pneumocystis carinii pneumonia*, one of the original AIDS-defining conditions.

In recent years, individuals with AIDS are living healthier and longer lives. With the introduction of new medications, many opportunistic infections that were commonplace at the beginning of the epidemic occur less frequently. The case fatality rate, computed by dividing the number of people with AIDS who have died by the total number of people with

Transmission Among Women by Racial/Ethnic Group

TABLE 10

Adolescent/Adult Female AIDS Cases by Mode of Transmission, Racial/Ethnic Group and by Time Period, San Diego County

	Racial / Ethnic Group						All Racial / Ethnic Groups	
	White		African American		Hispanic			
Mode of Transmission	1989-1993	1999-2003	1989-1993	1999-2003	1989-1993	1999-2003	1989-1993	1999-2003
IDU	39%	44%	58%	34%	25%	24%	38%	33%
Heterosexual	44%	53%	39%	66%	53%	72%	46%	64%
Contaminated blood*	15%	<1%	3%	0%	23%	1%	15%	<1%
Not Specified/ Other	6%	10%	<1%	<1%	<1%	2%	1%	2%
Number in Group and Time Period	132	73	59	61	57	82	260	225

Note: Percentages may not add up to 100% due to rounding.

*Includes individuals who received contaminated blood or blood products.

AIDS, has also been decreasing over time (see Appendix 8).

4.1 Opportunistic Infections

The following two tables show the different indicator diseases experienced by San Diego residents that met the AIDS case definition, as defined by the CDC. There are some differences in how a pediatric case (*see Table 11*) and an adolescent/adult case (*see Table 12*) can meet the definition.

Since one individual can have multiple health events, the total may exceed the number of cases.

4.2 Mortality Status

In 1993, a change in the definition of AIDS created a spike in the number of AIDS cases reported. Since then, the number of new cases per year has been steadily dropping. Additionally, the percent of individuals diagnosed in a given year and who are currently living has increased. About 37% of those diagnosed in 1993 are currently living while 69% of

Opportunistic Infections Among Pediatrics

TABLE 11

Frequency of Indicator Diseases* Among Reported Pediatric AIDS Cases, San Diego County**

Indicator Disease	Frequency	Percent
Wasting syndrome	26	45%
Lymphoid interstitial pneumonia and/or pulmonary lymphoid hyperplasia	19	33%
Pneumocystis carinii pneumonia	18	31%
HIV encephalopathy	18	31%
Esophageal candidiasis	14	24%
Cytomegalovirus	11	19%
Mycobacterium avium complex or *M. kansasii*	11	19%
Recurrent/multiple bacterial infections	7	12%
Pulmonary candidiasis	6	10%
Cytomegalovirus retinitis	4	7%
Cryptosporidiosis	4	7%
Immunoblastic lymphoma	4	7%
M. tuberculosis , disseminated or extrapulmonary	2	4%
Progressive multifocal leukoencephalopathy	2	3%
Cryptococcosis	1	2%
Herpes simplex, invasive or chronic	1	2%
Lymphoma, primary in brain	1	2%
Mycobacterium, of other species or unidentified species	1	2%

* This list may not be a complete accounting of all the indicator conditions experienced as there is limited time to track additional opportunistic infections as disease progresses.

** The sum of percentages is greater than 100 because some patients are reported with more than one AIDS indicator disease or condition.

A CD4+ T-lymphocyte of less than 200 mL/mm^3 or a percentage less than 14% in a pediatric patient does not meet the CDC AIDS case definition.

Opportunistic Infections Among Adults

TABLE 12

Frequency of Indicator Diseases* Among Reported Adolescent/Adult AIDS Cases, San Diego County**

Indicator Disease	Frequency	Percent
CD4 count <200 μL/mm^3 or <14%***	3624	30%
Pneumocystis carinii pneumonia	3408	28%
Wasting syndrome	1925	16%
Kaposi's Sarcoma	1552	13%
Mycobacterium avium complex or M. *kansasii*	1071	9%
Esophageal candidiasis	954	8%
HIV encephalopathy	797	7%
Cytomegalovirus	718	6%
Cytomegalovirus retinitis	616	5%
Cryptococcosis	601	5%
Cryptosporidiosis	473	4%
Immunoblastic lymphoma	407	3%
M. tuberculosis , pulmonary	372	3%
Herpes simplex, invasive or chronic	291	2%
Toxoplasmosis of the brain	291	2%
M. tuberculosis , disseminated or extrapulmonary	238	2%
Lymphoma, primary in brain	181	2%
Progressive multifocal leukoencephalopathy	171	1%
Pneumonia, recurrent in 12-month period	111	1%
Pulmonary candidiasis	73	1%
Mycobacterium, of other species or unidentified species	61	1%
Coccidioidomycosis	54	<1%
Histoplasmosis	49	<1%
Burkitt's lymphoma	41	<1%
Isosporiasis	26	<1%
Salmonella septicemia, recurrent	24	<1%
Carcinoma, invasive cervical	2	<1%

* This list may not be a complete accounting of all the indicator conditions experienced as there is limited time to track additional opportunistic infections as disease progresses.

** The sum of percentages is greater than 100 because some patients are reported with more than one AIDS indicator disease or condition.

*** Defined as a CD4+ T-lymphocyte of less than 200 mL/mm^3 or a percentage less than 14% in adult/adolescents who meet the AIDS surveillance case definition.

Mortality Status by Diagnosis Year

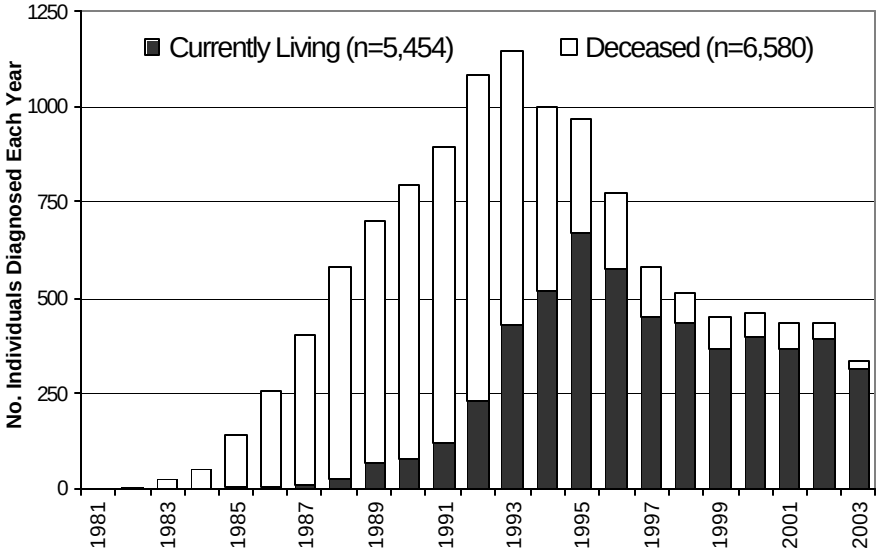


FIGURE 10

AIDS Cases by Year of Diagnosis and Status, San Diego County, (n=12,034)

those diagnosed just 2 years later are currently living. Of those diagnosed with AIDS after 1996, 74% to 95% are still living (*see Figure10*).

The number of individuals living with AIDS at the end of the year has been increasing since 1993 (*see Figure 11*). Through the 1990s there was an average of 16% more individuals living with AIDS each year. This is partly due to the increase in AIDS cases from the change in case definition in 1993. This increase can also be attributed to the new medications that allowed individuals to live longer, healthier lives post-AIDS diagnosis. Over the last few years the increase has been about 6% per year.

The number of AIDS deaths per year also has been dropping, thus the case fatality rate decreases or remains steady year to year (*see Table 13).* As of December 31, 2003, a total of 6,580 deaths have been reported with an overall case fatality rate of 55%.

Mortality Status by Diagnosis Year

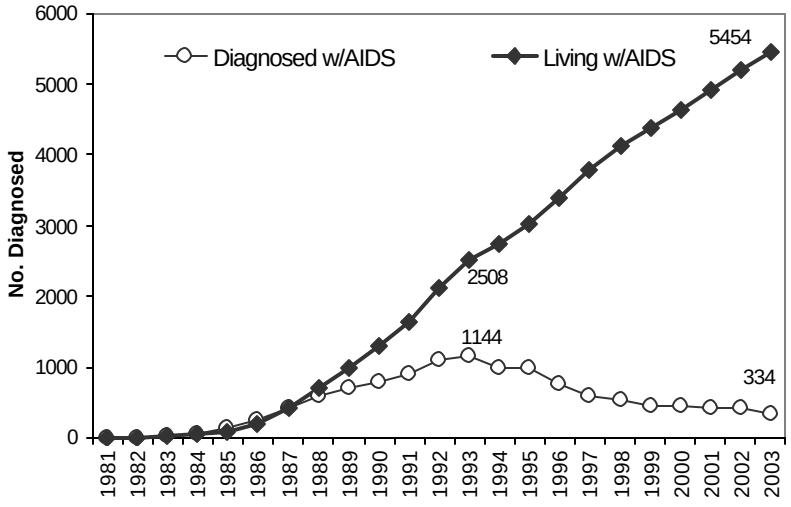


FIGURE 11

Number of Persons Diagnosed and Living with AIDS, San Diego County

Changes in Mortality

TABLE 13

AIDS Cases, Deaths and Fatality Rate Over Time, San Diego County

Number of Cases, Deaths and Fatality Rate	Time Period				
	Prior to 1999	1999	2000	2001	2002
New Cases	9928	447	458	433	434
Percent Change*	na	-15%	2%	-6%	<1%
Number of Deaths	5820	181	184	175	139
Percent Change*	na	0%	2%	-5%	-26%
Case Fatality Rate	59%	40%	40%	40%	32%

Note: Year 2003 data is still considered preliminary.

* Percent change compared to the previous year.

As people with AIDS live longer, healthier lives, the age group of persons with AIDS begins to get older. The mean age at AIDS diagnosis is 38 years. The average age at the end of 2003 of the 5,454 individuals currently living with a diagnosis of AIDS is 44 years. However, 24 individuals living with AIDS are less than 18 years old and 253 individuals living with AIDS are 60 years of age or older. There are 27 individuals diagnosed before the age of 13 who are still living. Thirteen of these individuals are still less than 13 years old and 14 individuals are growing out of childhood into the teen and young adult years (*see Table 14).*

Current Age

TABLE 14

Current Age of Individuals Living with AIDS, San Diego County

Age Group in Years	Frequency	Percent	Cumulative Percent
Less than 13	13	0.2%	0.2%
13-19	19	0.3%	1%
20-29	161	3%	4%
30-39	1549	28%	32%
40-49	2446	45%	77%
50-59	1013	19%	95%
More than 59	253	5%	100%
Total	**5454**	100%	

5.0 AIDS Summary

There have been 12,034 individuals diagnosed with AIDS in San Diego County. The number of new cases reported per year has been decreasing since 1993 and has been in the 400s between 1999 and 2002. It is expected that additional cases diagnosed in 2003 will be reported in 2004, bringing the number of 2003 cases also into the 400s. Medical advances have resulted in an increased time from HIV infection to AIDS diagnosis.

Individuals diagnosed with AIDS in San Diego County are most commonly white, male, between 30 to 39 years of age, and have male sexual partners. Over the years, this has been slowly changing with a larger proportion of people being diagnosed at age 40 or older, African American or Hispanic racial/ethnic groups, women, or having used injection drugs.

While the overall number of AIDS cases has decreased, this decrease has not been uniform across all subpopulations. The largest decrease has been in the whites, shifting the proportional burden from whites to persons of color. African Americans have had the highest rate of AIDS since the mid-1980s. The annual rate of AIDS among African Americans is two to three times the rate in whites. Hispanics have the second highest number and rate of AIDS, about 1½ times the rate of AIDS in whites but less than half the rate of African Americans.

The average age at time of diagnosis has been slowly increasing over the years regardless of racial/ethnic group. From 1999 through 2003, the average age at the time of diagnosis was 40 years of age, with Hispanics having a slightly younger age (37 years). Examination of AIDS data alone cannot explain if this age increase is due to later age at HIV infection or successful medications which allow an HIV-infected individual to live healthier and increase the time until they meet the case definition for AIDS.

The most frequent place of residence at the time of AIDS diagnosis is the Central HHSA region. Sixty percent of the men and 41% of the women with AIDS were living in the Central region at the time of their diagnosis. The second most frequently reported place of residence since 1995 is the South region. Cases diagnosed in the South are predominately Hispanic (56%) and white (30%).

For men, the predominate mode of transmission is MSM (80%) followed by MSM+IDU (10%). Over the years, IDU has increased as a mode of transmission in men. In women, heterosexual contact is the primary mode of transmission (51%) followed by IDU (37%). These modes do have some overlap because women whose transmission route was heterosexual contact often have had a sexual partner who was an IDU. Sexual partner to an IDU accounts for 21% of all female cases.

While AIDS was once considered a fatal illness, the advances in medicine and medical treatment have enabled individuals with AIDS to live longer, healthier lives. As the number of individuals newly diagnosed with AIDS has been decreasing, the number of individuals living with an AIDS diagnosis continues to increase. To date, approximately 5,454 are living with an AIDS diagnosis in San Diego County.

III. HIV Cases

1.0 HIV Reporting

Advances in medical treatment of HIV have improved the lives of those infected and increased the time from infection to the point at which an individual meets the criteria for an AIDS diagnosis. Until recently all of the information on trends, demographics and risk behavior of HIV-infected individuals in California was based on AIDS data, because HIV alone without an AIDS-defining condition was not reported.

To increase our understanding of HIV, the State of California in July 2002 initiated HIV reporting along with the current practice of AIDS reporting. Unlike AIDS, no patient name or address is reported. Instead, the regulations require health care providers and laboratories to report using a non-name code. The non-name code is composed of the Soundex (an alphanumeric representation of the last name generated by the laboratory), gender, date of birth and last 4 digits of the social security number. This code helps balance the need for good quality data (minimizing duplication) with the protection of individual identity. As with other communicable diseases, this is a dual reporting process in which both health care providers and laboratories report. See Appendix 3 for more information about HIV reporting procedures.

As a cautionary note, there are some known factors that affect HIV reporting data. Although HIV reporting began almost two years ago, the system is both new and different from AIDS reporting; facilities involved in reporting are still adjusting to the new requirements. In some cases HIV reporting may necessitate new or modified electronic systems; in other cases, facilities may need to re-organize internal systems to efficiently accommodate reporting. Thus, some facilities are at full reporting capacity while others are not; this could affect the ability to accurately describe the population with HIV (non-AIDS) in San Diego County.

The present HIV reporting system is designed to capture prevalent cases (cases in care before the initiation of reporting) through viral load reporting. As a system 'matures', the proportion of prevalent cases can be expected to decrease as incident (new) cases increase. Through 12/31/2003, most of the cases in San Diego County are prevalent cases. The HIV reporting system does not capture those HIV-positive individuals who have tested anonymously (only confidential tests are reported). Although it may seem obvious, those individuals who are HIV infected but have not tested are also not represented.

Due to the newness of the HIV reporting system, analysis of reported HIV cases will be limited to the distribution of demographic and geographic variables within the cumulative data. No rates will be computed nor will trends be examined at this time. National and state data, when comparable, will be discussed. Nationally, HIV reporting data published are limited to the 39 states that have confidential names-based reporting. Not included are data from the states that have code-based HIV reporting, like California.

2.0 Demographic Variables

All HIV reporting data presented here is inclusive of the period July 1, 2002 through December 31, 2003 for a total of 4,155 HIV case reports. In general, the distribution of demographic variables for those HIV cases reported is similar to AIDS cases in San Diego County. White men between the ages of 30-39 living in the Central region of the county are the group most likely to be diagnosed as HIV positive. Women represent about 11% of all HIV cases and the relationship with race and region is less defined, perhaps in part due to the smaller numbers. Although white women have a larger share of the female cases than other racial or ethnic groups, the difference by race is not as pronounced as among men.

2.1 Gender

The distribution of HIV cases by gender appears to be different for San Diego and California, as compared to the United States (*see Table 15*). Fewer female cases of HIV have been reported in San Diego (11%) and California (15%) than in the United States (30%). The distribution by gender in San Diego County is about the same for HIV (89% male; 11% female) and more recent AIDS cases (90% male; 10% female).

2.2 Racial/Ethnic Group

Through the end of 2003, 62% of reported HIV cases were white, 13% African American, and 21% Hispanic in San Diego County. The remaining 4% represented Asian/Pacific Islanders and Native Americans. When compared to the United States, California and San Diego have fewer African American cases, and more white and Hispanic cases of HIV (*see Figure 12*). Although San Diego 'looks' more like California than the United States, San Diego has considerably more white HIV cases (62% vs. 50%) than the State.

Cumulative AIDS case data by racial/ethnic group in San Diego county is similar to HIV reporting data; however, the most recent year of AIDS case data is notable compared to HIV cases. In 2003, AIDS cases were 43% white, 17% African American and 37% Hispanic. In general, states that have recently initiated HIV reporting have found that the HIV data resembled national trends in HIV data; that is, a higher proportion of cases were female, younger, more likely to be a person of color and more likely to report risk as heterosexual transmission. To date, this has not been true for HIV cases reported in San

HIV Cases by Gender

TABLE 15

HIV Cases by Gender and Area of Residence

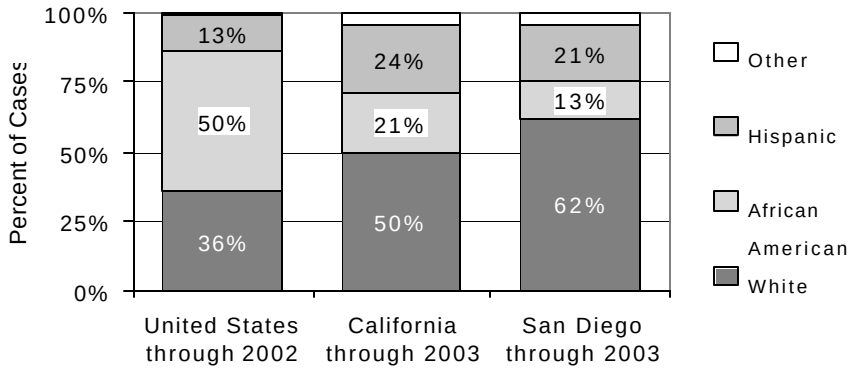
	United States Through 12/31/02		California Through 12/31/03		San Diego Through 12/31/03	
Gender	#	%	#	%	#	%
Male	140,193	70%	23,965	85%	3,718	89%
Female	59,558	30%	4,087	15%	437	11%
Unknown	8	<1%	3	<1%	0	
Total	**199,759**		**28,055**		**4,155**	

Note: 2002 is the most recent year available for national data.

HIV Cases by Racial/Ethnic Group

FIGURE 12

Comparison of Cases by Racial/Ethnic Group, Location and Time Period of Diagnosis



Notes: Adults and adolescents only.

2002 is the most recent year available for national data.

Diego County. The high proportion of long standing (prevalent) cases in HIV reporting data may be the reason for a distribution that is more like cumulative AIDS case data.

For more information on HIV cases among Hispanics or Asian/Pacific Islanders, see Appendix 5.

2.3 Age

At the State and local level, a greater proportion of HIV cases are in the 20-29 year age group compared to AIDS cases (25% vs. 15% California; 32% vs. 17% San Diego). The age group 30-39 is most frequently diagnosed with HIV in both the State and County, similar to AIDS case data. National data for reported HIV cases by age group is not available.

The age groups 20-29 and 30-39, when combined, represent 75% of HIV cases (*see Figure 13*). The second highest proportion, 17%, is among the 40-49 year old age group. Those under age 20 or 50 and over represent very few cases, 3% and 5% respectively.

Table 16 presents the cumulative number of cases of HIV by age group. Eighty-nine cases of HIV were teens age 13-19, while 37 cases were age 60 and older. The oldest age at HIV diagnosis was 85; the youngest were infants under one year of age.

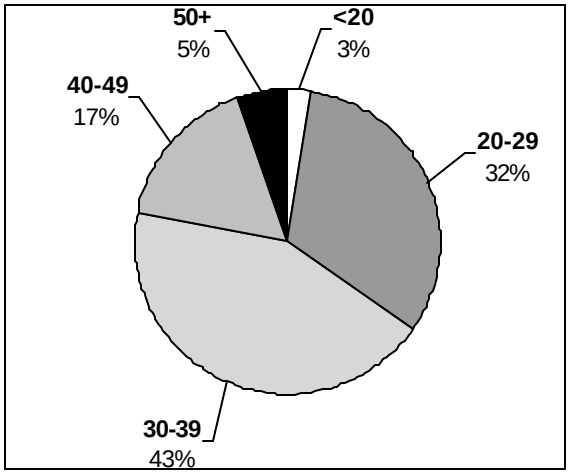
HIV Cases by Age Group

TABLE 16 AND FIGURE 13

HIV Cases by Age Group, San Diego County

Age Group in Years	Frequency	Percent
Less than 20	104	2.5%
20-29	1335	32.1%
30-39	1803	43.4%
40-49	691	16.6%
50-59	185	4.5%
More than 59	37	0.9%
Total	**4155**	**100%**

Note: Percentages may not add up to 100% due to rounding.



2.4 Pediatric Cases

As with AIDS cases, a pediatric HIV case is one in which the age at diagnosis is 12 years of age or younger. Through 12/31/2003, there have been a total of 15 pediatric HIV cases reported, representing less than 1% of all cases. At the State level, just over 1% of all cases are pediatric. Of the 15 cases reported in San Diego County, 8 are under 5 years of age; 7 are between the ages of 5 and 12.

2.5 Place of Residence

The zip code of residence at the time of HIV diagnosis is used to examine geographic differences. Please note that place of residence at diagnosis may be different than current residence. The County of San Diego Health and Human Services Agency (HHSA) divides the county into 6 regions for planning purposes: Central, North Central, South, North Coastal, East and North Inland. These regions are based on the county zip codes. See Appendix 6 for more information.

Most of the county's HIV cases were residing in the Central region at the time of diagnosis (64%), with the North Central and South regions having the next highest proportion of cases (11% and 10% respectively). North Coastal, North Inland, and East regions shared the remaining 15% of cases.

Whites constitute the majority of reported HIV cases in all regions except the South Region, where Hispanics are the majority of cases (see *Table 17*). All races have the largest number of cases within the Central region; however, proportions by racial/ethnic group within region may not correspond to the number of cases. For example, whites have the greatest number of cases in the Central region but the region in which they represent the highest proportion (76%) is North Central. African Americans have the greatest proportion in Central (15%); Hispanics in the South (57%); Asian/Pacific Islanders in the North Coastal (4%); Native Americans in both the East and Central (1%).

2.6 Place of Origin

Most of the HIV cases reported to date are among individuals born in the United States. Approximately 88% of the 4,155 cases are U.S. born. This differs slightly by gender: more women than men

Racial/Ethnic Group by HHSA Region

TABLE 17

HIV Case Distribution by Racial/Ethnic Group and HHSA Region, San Diego County

Racial/Ethnic Group	HHSA Region					
	Central	North Central	South	North Coastal	East	North Inland
White	64%	76%	29%	66%	70%	66%
African American	15%	9%	11%	14%	9%	7%
Hispanic	19%	12%	57%	16%	17%	25%
Asian/PI	2%	3%	3%	4%	3%	3%
Native American	1%	<1%	<1%	<1%	1%	<1%
Total in Region	2650	461	405	257	234	147

Note: Percentages may not add up to 100% due to rounding.

Transmission by Gender

TABLE 18

HIV Cases by Gender, San Diego County

Gender	Mode of Transmission	Cumulative	Percent
Male	**Adolescent/Adult:**		
	Homosexual / Bisexual (MSM)	2977	80%
	Injection Drug Use (IDU)	175	5%
	MSM + IDU	280	8%
	Heterosexual	159	4%
	Transfusion/Transplant/Hemophiliac	4	0%
	Risk Not Specified/Other	114	3%
	Pediatric (0 – 12 years): All modes of transmission	9	<1%
	Number in Group	3718	100%
Female	**Adolescent/Adult:**		
	Injection Drug Use (IDU)	82	19%
	Heterosexual	296	68%
	Transfusion/Transplant/Hemophiliac	1	<1%
	Risk Not Specified/Other	52	12%
	Pediatric (0 – 12 years): All modes of transmission	6	1%
	Number in Group	437	100%

Note: Percentages may not add up to 100% due to rounding.

are foreign born, 22% versus 11%. Of those who are foreign born, about 79% were born in Mexico, and 4% in the Philippines. The remaining 17% were born in one of another 50 countries.

2.7 Mode of Transmission

When viewing the 4,155 cumulative HIV cases by the likely mode of transmission, 72% are "Men who have Sex with Men" (MSM), 11% heterosexual transmission, 7% MSM +IDU (men who have sex with men and inject drugs), and 6% IDU (injection drug users). Table 18 presents the number of cases by gender, and mode of transmission among all HIV cases reported through 12/31/2003.

The distribution of cases by gender and transmission are quite different. For adult males, 80% of cases are attributed to MSM; while for adult females, the majority of cases, 68%, are due to heterosexual contact (*see Figures 14 and 15*). For men, the other modes of transmission are MSM+IDU (8%), IDU

Transmission by Gender for Adult/Adolescent

FIGURE 14

Mode of Transmission for Men with HIV, San Diego County (n=3,709)

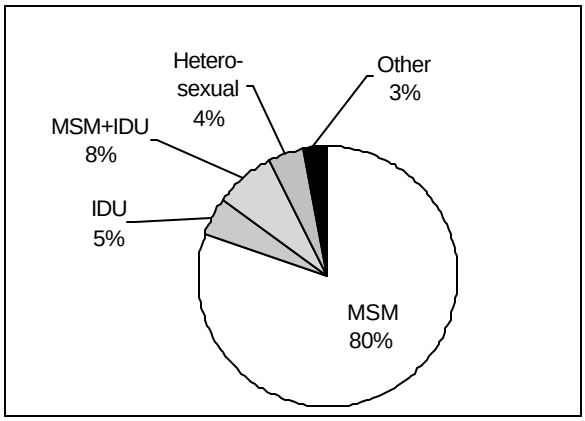
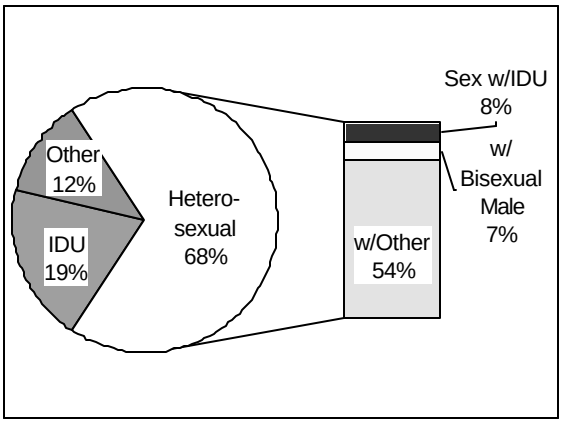


FIGURE 15

Mode of Transmission for Women with HIV, San Diego County (n=431)



Transmission Among Men by Racial/Ethnic Group

TABLE 19

Adolescent/Adult Male HIV Cases by Mode of Transmission and Racial/Ethnic Group, San Diego County

Mode of Transmission	Racial / Ethnic Group										All Racial / Ethnic Groups
	White		African American		Hispanic		Asian/PI		Native American		
	No.	%	No.	%	No.	%	No.	%	No.	%	
MSM	1959	82%	287	65%	650	86%	61	87%	20	59%	2977
IDU	97	4%	43	10%	30	4%	1	1%	4	12%	175
MSM +IDU	210	9%	31	7%	32	4%	1	1%	6	18%	280
Heterosexual	76	3%	53	12%	25	3%	3	4%	2	6%	159
Not Specified / Other	60	2%	30	7%	22	3%	4	6%	2	6%	118
Number in Group	2402	100%	444	100%	759	100%	70	100%	34	100%	3709

Note: Percentages may not add up to 100% due to rounding.

(5%), heterosexual contact (4%), and 3% unknown. The other modes of transmission for women, are IDU (19%), with 12% unknown. Notably, women have a higher proportion of transmission due to IDU (19% versus the 13% of IDU and MSM+IDU combined), as well as a higher percentage of cases in which mode of transmission is unknown (12% versus 3% in men). The CDC transmission categories require knowledge about the behaviors of a female's sexual partner; this information is not always known or available at the time of diagnosis.

Compared to the Nation, San Diego has a larger proportion of MSM among adult male cases (80% versus 47%), and a lower proportion of IDU and Other/Unknown (5% versus 13% and 3% versus 27%). Among adult females, San Diego has a larger proportion of heterosexual transmission (69% versus 42%) and a lower proportion of Other/Unknown (12% versus 39%) than the Nation. In general, the differences in mode of transmission between San Diego and California are similar to those with the nation, but are less pronounced. However, 24% of adult female cases in California are attributed to IDU, while the proportions for San Diego and the Nation are lower and similar, 19% and 18%, respectively.

Pediatric cases among boys include 3 with HIV

Transmission Among Women by Racial/Ethnic Group

TABLE 20

Adolescent/Adult Female HIV Cases by Mode of Transmission and Racial/Ethnic Group, San Diego County

Mode of Transmission	Racial / Ethnic Group										All Racial / Ethnic Groups
	White		African American		Hispanic		Asian/PI		Native American		
	No.	%	No.	%	No.	%	No.	%	No.	%	
IDU	54	30%	18	18%	9	7%	1	5%	0	0%	82
Heterosexual	114	63%	66	67%	95	75%	18	90%	3	75%	296
Not Specified/ Other	13	7%	15	15%	23	18%	1	5%	1	25%	53
Number in Group	181	100%	99	100%	127	100%	20	100%	4	100%	431

Note: Percentages may not add up to 100% due to rounding.

transmission due to hemophilia, 1 due to a transfusion, and 5 due to maternal transmission. All 6 of the female pediatric cases were due to maternal transmission.

When examining racial/ethnic groups and mode of transmission for males, a greater proportion of white, Hispanic and Asian/Pacific Islander HIV cases fall into the MSM category than African American or Native American (*see Table 19*). Although the most frequent mode of transmission among women in all racial/ethnic groups is heterosexual, white and African American women have a greater proportion of cases due to IDU transmission than Hispanic, Asian/Pacific Islander or Native American women (*see Table 20*).

2.8 Mortality Status

Of the 4,155 cases of HIV reported through 12/31/03, 53 individuals have died. The deceased had not progressed to an AIDS diagnosis and the cause of death may be unrelated to their HIV disease. Most of the deceased were between the ages of 30-49 (54%) at death (*see Table 21*).

2.9 HIV Reporting Summary

HIV reporting began statewide on July 1, 2002 and 4,155 cases have been reported in San Diego County through December 31, 2003. About 89% of the HIV cases are male and 11% female. By race/ethnicity, 62% of HIV cases are white, 21% Hispanic,13% African American, and 4% other (Asian/Pacific Islander or Native American). Most of the HIV cases (43%) are 30-39 years old, with about 1% being pediatric cases. By region within the County, most cases were living in the Central region at the time of diagnosis. The majority of HIV cases are MSM (72%), followed by heterosexual transmission (11%).

Trends can not be examined at this time because only 18 months of data have been collected. The demographic distribution of HIV cases are very similar to cumulative AIDS cases, but differs when compared to recent AIDS cases data by race/ethnicity. HIV reporting as a system is new, making it difficult to analyze. The reports collected so far may represent the population of HIV infected individuals seeking testing and care, or it may reflect the HIV positive clients of facilities that have more quickly adopted the new HIV reporting system.

Age at Death

TABLE 21

Age at Death of HIV Cases, San Diego County

Age Group in Years	Frequency	Percent	Cumulative Percent
Less than 20	0	0%	0%
20-29	7	13%	13%
30-39	15	28%	42%
40-49	14	26%	68%
50-59	11	21%	89%
More than 59	6	11%	100%
Total	**53**	**100%**	

Note: Percentages may not add up to 100% due to rounding

IV. HIV and Local Data

Given the newness of the HIV reporting system, several other sources of data can provide information about the basic demographics of the HIV-positive community. Each source has limitations. For example, most of the data sources described here do not contain an identifier, such as a name or social security number. This system is designed to protect confidentiality and thus may contain duplicate records.

Counseling and Testing Data

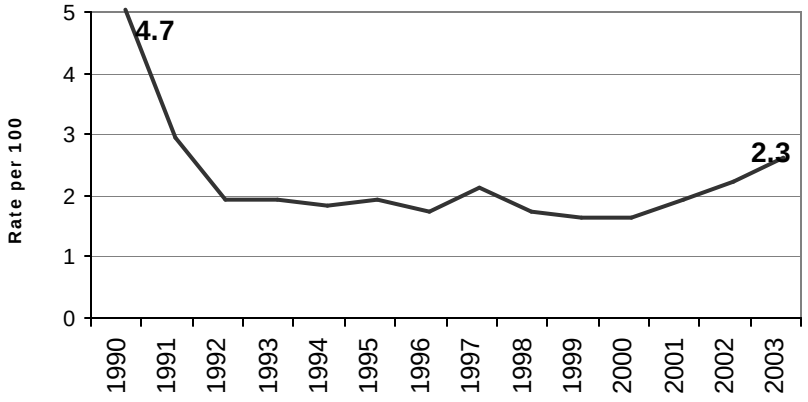
Local HIV counseling and testing (HCT) data, conducted by the California Department of Health Services through contracts with the County of San Diego, provides information about those aged 12 and older who voluntarily seek HIV testing. In recent years, the County provided between 15,000 and 18,000 counseling and testing sessions each year. These tests have been provided at no cost, either anonymously (no name is given) or confidentially (a name is given). At the inception of the program in 1985, when the data did not distinguish between anonymous and confidential tests, the rate of HIV infection among the testers started at 18.6%, decreasing sharply to 1.1% by 1992.

One limitation of this data source is that each case may not be unique since an unknown number of individuals test repeatedly within a year. Therefore, when discussing this data we refer to 'testers' not individuals – since we assume that some of the 'testers' are the same person. Also, those who voluntarily seek testing probably differ in important ways from those who don't. HIV tests performed at private clinics or hospitals are not included in this database. Analysis of HCT data in this report has been limited to anonymous tests only since it is likely to be more representative of those who seek HIV testing. Most confidential tests are offered at STD (sexually transmitted disease) clinics in which the client comes in for an STD other than HIV. Thus, testers at confidential sites may not come in specifically for an HIV test and many choose not to test. Like the trend among all tests, HIV infection rates among anonymous tests declined between 1990 and 1992, with a recent increase from 1.3% in 2000 to 2.3% in 2003 (*Figure 16*).

HCT Trends Overall

FIGURE 16

Rate per 100 Testing HIV+, Anonymous HCT, San Diego County, 1990-2003



Seroprevalence Data

Seroprevalence data generally refers to studies or programs that regularly collect blood for various tests. Seroprevalence data has a number of limitations. Some seroprevalence studies examine data in populations at higher risk for HIV, such as an STD (Sexually Transmitted Disease) clinic, while other seroprevalence populations are likely at lower risk. For example, blood and plasma centers employ a protocol designed to screen out individuals thought to be at high risk for HIV. All of the participants in these programs are self-selected and are likely to be different from the population as a whole. Much of this data is not currently available by gender, race, ethnicity, or age at the county level.

1.0 HIV Data and Demographics

While mandatory reporting has expanded what we know about HIV-infected individuals locally, the picture is not entirely clear and thus other data are explored. Unfortunately, these sources do not always contain information about certain subgroups such as women, youth, children and some racial/ethnic groups. Sometimes demographic data are not collected and when they are, small numbers are often a problem. Small numbers make it difficult to distinguish between random variation and real differences between groups or over time. Also, small numbers can mean some groups may not be represented in the data at all. This is especially true for some racial/ethnic groups, age groups, and transgender populations.

Although many of the demographics captured on the counselor information form are asked of the client (self-report), some are not. Gender is usually determined by the counselor.

2.0 Gender

Counseling and Testing Data

The majority of individuals seeking anonymous HIV counseling and testing services in San Diego County are men: about 67% male and 32% female in the year 2003 (the remaining 1% are missing or transgender). Similarly, men test positive at a higher rate than women (2.8% versus 1.1% in 2003). Up until 2001, the rate for men appeared to be decreasing (*see Figure 17*). In general, men coming in for services are less racially diverse and older than women in any particular year; however, this trend is

HCT Trends by Gender

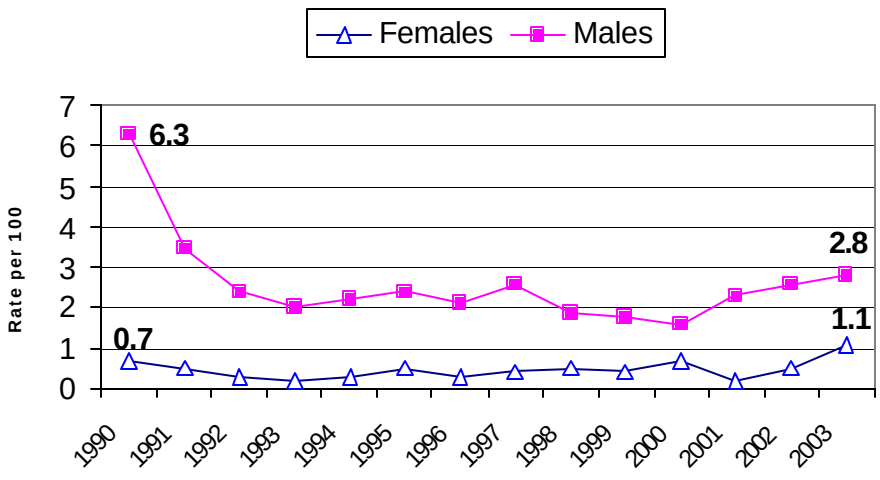


FIGURE 17

Rate per 100 Testing HIV+ by Gender, Anonymous HCT, San Diego County, 1990-2002

changing in recent years. More Hispanic and African American men are testing and fewer white men, with a general trend towards younger (15-19) and older testers (50+). Like men, the trend for women who seek testing has been an increase in number of younger and older age groups and a greater proportion of Hispanic and African American clients.

Of all the men coming in for anonymous services, 78% had tested at least once before according to year 2003 data. In year 2003, 211 anonymous tests were confirmed HIV-positive; 172 (82%) of these were men. Most of these positive tests were among men who had previously tested negative. Of the repeat male testers, 3.1% were HIV infected. In contrast, 1.6% of the first-time male testers were positive.

Like men, the majority of female testers were repeat testers: 69% of women in 2003 had tested at least once before. Of the 211 HIV positive tests in 2003, 33 were women (16%). The remaining six positive HIV tests were transgender: 4 male to female, and 2 female to male.

In recent years fewer than 100 tests were to pregnant women (self-reported) annually. Most of these women were 25-34 years old. Because the numbers are small, the percent of pregnant testers in each racial/ethnic group fluctuates from year to year. Hispanic women are the majority racial/ethnic group, representing between 30% and 57% of all pregnant testers in most years. Between 1995 and 2003, only 2 pregnant women tested positive for HIV. In that same time period, fewer pregnant testers were first-time testers. In 1995, 55% of the women were first-time testers, but in 2003 only 18% were first-time testers.

Seroprevalence Data

The California Department of Health Service's Survey of Childbearing Women (SCBW) began in 1988, was discontinued in 1996, and replicated in 1998. During those years, unlinked testing was conducted on blood samples taken from hospital live births for the third quarter of each year or between 9,000 and 12,000 births per year in San Diego County. The rate of HIV seropositivity in the County ranged from .3 to .9 per 1,000 births (or .03% to .09%), having about the same levels as the State. For the County, this rate translates to between 4 and 11 HIV infected mothers, numbers too small to further analyze by race, ethnicity or age.

A survey of adults attending STD clinics has been conducted at 12 California health departments, including San Diego County, since 1989. To be included, a client must be visiting the clinic for an STD (other than HIV) that requires a blood sample. Eligible clients are consecutively sampled during one month, up to 500 samples. The samples are then stripped of identifiers and tested for HIV.

The seroprevalence for women attending STD clinics in San Diego County during 2004 was 0.9% (1 HIV infected woman out of 112 tested); over time it has ranged from 0% to 0.9%. Seroprevalence for men in 2004 was 5.3% (21 men out of 399 tested), with a range of 3.0% to 10.6% over time. From 1993 to 2003, the trend has been an increase in the seroprevalence rate for men, with a decrease in 2004 (*see Figure 18*). The difference between the 3.0% in 1996 for men and the 10.6% in 2003 is statistically significant ($p<.05$; see Appendix 4 for more information).

STD Seroprevalence Trends by Gender

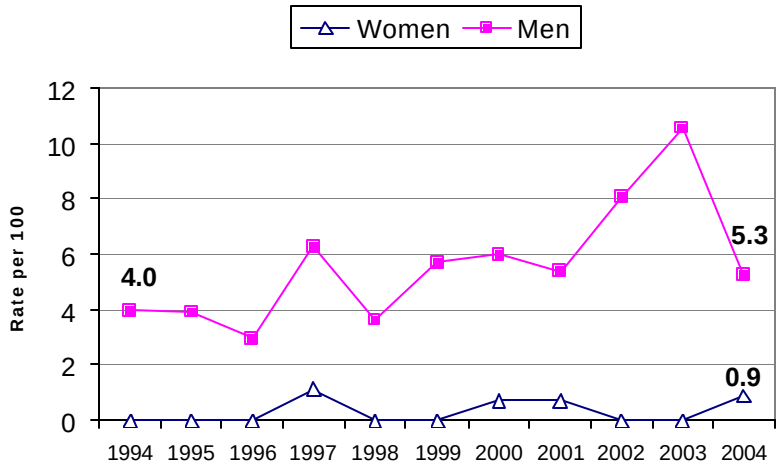


FIGURE 18

HIV-1 Seroprevalence by Gender in a Sample of STD Clinic Attendees Percent HIV-1 Positive by Gender, San Diego County, 1990-2004

Blood and plasma donation data does not include gender at the county level. The number that are HIV infected is very small: 1 out of 58,765 units of blood tested (.002%) tested in the first half of 2003 and 1 out of 75,681 units of plasma tested (.001%) in the last half of 2002. Military applicant screening does include data on gender but the numbers are too small for analysis. In year 2001, 3,891 civilians applied for military service in San Diego and were screened for HIV. Of that number 2 persons tested positive for HIV, resulting in a prevalence rate of .05% overall. Job Corps also tests applicants for HIV, however, there are concerns about the quality of the data for recent years so it is not included here.

2.1 Racial/Ethnic Group

Counseling and Testing Data

Through the last half of 1997, the counselor information form had 6 mutually exclusive racial/ethnic categories to choose from: African American, American Indian/Alaskan Native, Asian/Pacific Islander, Hispanic, white, and other. Beginning in fiscal year 97/98, clients had the same categories but could choose two different races if they desired. Since then, between 2% and 3% of testers choose more than one race. For purposes of analysis, only the first race or ethnicity chosen is used to assign race or ethnicity. The largest group of testers self-report as white, about 46% in 2003; however, there are proportionately more tests to persons of color each year.

In 2003, the proportion of HIV-positive tests was split between white (42%) and Hispanic (41%), with 11% African American and the remaining 4% being Asian/PI, Native American or Other. Prior to 2001, the largest share had always been among whites and this was again the case in 2002, in which whites accounted for 50% of positive tests and Hispanics 31%.

Proportions do not take into account the size of a specific group coming in for tests; rates do (see Appendix 4 for more information on rates). Tests to African Americans and Hispanics historically have the highest HIV infection rates, 2.2% and 2.9% in 2003. In 2002, rates for whites increased from 1.2% to 2.0%, which is statistically significant ($p<.05$).

Although the rate for Hispanics is highest in 2003, the rates for Hispanics, whites and African Americans are not statistically different from each other (*see Figure 19*).

2.2 Age

Counseling and Testing Data

Since 1990, the distribution of testers by age group has changed slightly. In general, more testers aged 15-19, 35-49 and 50+ are coming in for testing, and fewer of those aged 25-34.

Historically, the age group with the highest HIV infection rates are in the 25-34 age group, with the next highest rate in 35-49 year olds. From 1999, rates have increased among all age groups, with statistically significant ($p<.05$) increases among the 25-34 and 35-49 year olds (*see Figure 20*).

2.3 Youth

Counseling and Testing Data

Each year about 2,000-3,000 youth aged 13-24 come in for anonymous HIV testing. Between 1997-2001 the number of youth testing increased each year. In 2002 and 2003, less 13-24 year olds came in for testing. Of those aged 13-24 who tested in 2003, about 61% were male and 39% were female. This appears to be a change from 1997 when the majority of youth testers were female. When compared by racial/ethnic makeup, more Hispanics and fewer whites seek HIV testing than those age 25 years and older.

The rate of HIV infection in testers 13-24 years of age is much lower than the overall rate, about 1.3% or 25 tests out of 1,928 in 2003. Since 1990, the percent of young testers who are HIV infected has fluctuated from a low of 0.4% to a high of 3.2% (*see Figure 21*). This is statistically different, but fluctuations in the rate since 1992 are likely a result of small numbers and random variation rather than actual differences between years. Similarly, the small number of youth testing positive each year precludes further analysis by race or ethnicity.

Like adults who test, youth are asked about risk behaviors for assignment to a risk group. For more information on this process see section 2.5 Risk Groups or Appendix 10. The vast majority of youth seeking HIV testing fall into the Multiple Partners risk group, although few in this risk group test positive

HCT Trends by Racial/Ethnic Group

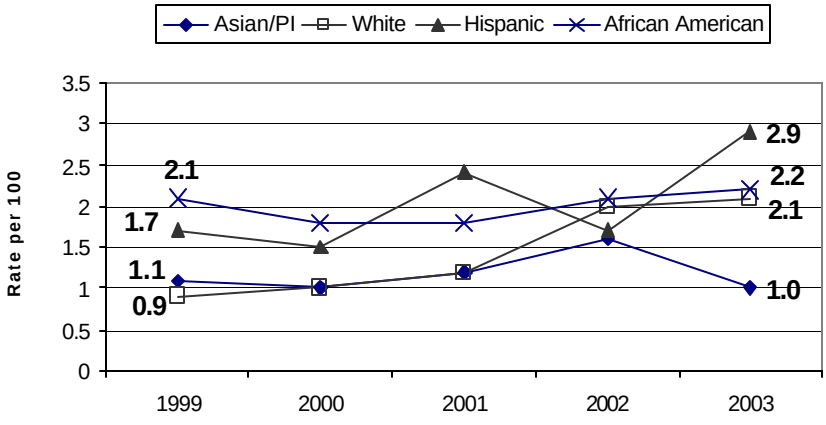


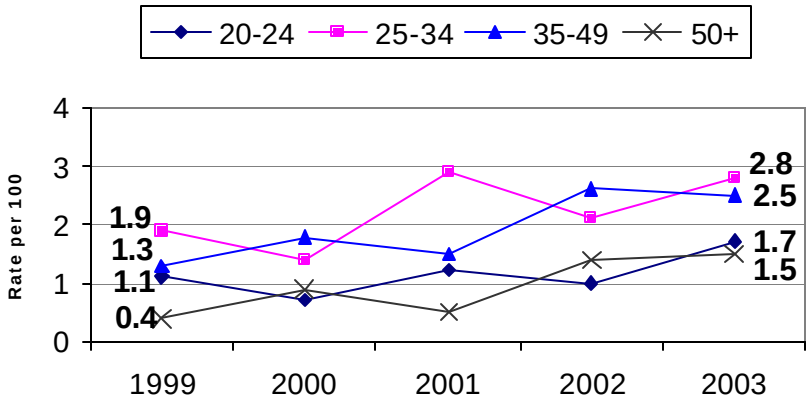
FIGURE 19

Rate per 100 Testing HIV+ by Racial/Ethnic Group, Anonymous HCT, San Diego County, 1999-2003

HCT Trends by Age Group

FIGURE 20

Rate per 100 Testing HIV+ by Age Group, Anonymous HCT, San Diego County, 1999-2003



for HIV (6 in 2003). In recent years, and again in 2003, the second most frequent risk category was No Reported Risk (no HIV positives in 2003). Partners with Multiple Partners was either the second or third most frequent risk group before 2001 (not a risk group as of 2001). MSM has been either the third or fourth most common risk group seeking testing since 1997, and has the largest share of HIV-positives (12 of the 25 positives) in 2003. With that in mind, the rate of HIV infection for MSM youth in 2003 would be 3.0%, a decrease from 4.5% in 2002. In recent years Bisexual was the fouth most common risk group (3 positives in 2003) and IDU Partner was the fifth most frequent risk group for youth (no HIV positives in 2003). Since 1999, bisexuality has emerged as a more predominant risk factor than any IDU-related one, with 3 out of the 25 HIV positives in 2003. Unlike adults, about 51% of youth had never tested before.

2.4 Place of Residence

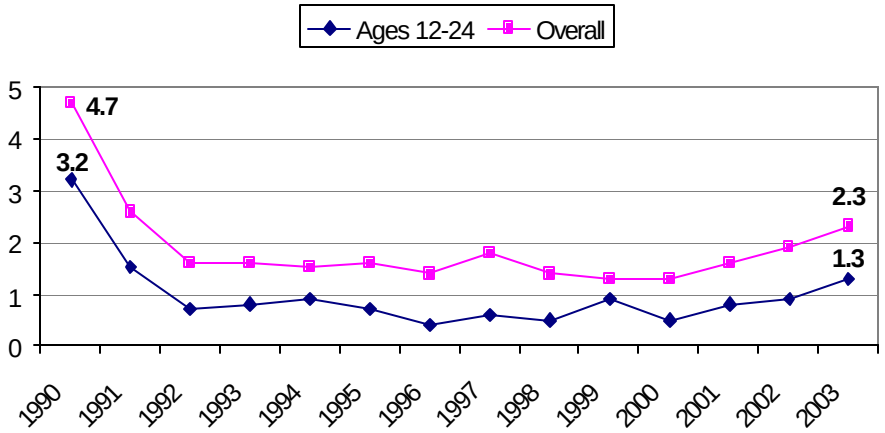
Counseling and Testing Data

Using the zip code of residence at testing, rates of HIV infection can be examined for the six HHSA geographic regions: North Coastal, North Inland, North Central, Central, East and South (see Appendix 6 for more information about the regions). HCT data clearly show that the largest share of clients live in the Central region, 46% in 2003. Historically,

HCT Trends for Youth

FIGURE 21

Rate per 100 Testing HIV+ Ages 12-24 and Overall Anonymous HCT, San Diego County, 1990-2003



the Central region also shows the highest HIV infection rate as well as the largest share of HIV positive tests (*see Figure 22*). Notably, in 2003 the South region had the highest rate (3.5%), although the Central region maintained the largest share of HIVpositive tests (52%). The increase for the South region from 1.3% in 2001 to 3.5% in 2003 is statistically significant ($p<.05$). Geographic data may reflect a higher risk by region, or it may be the result of testing locations, outreach programs or access to healthcare. Some regions had fewer than 5 HIV positive tests in a given year; therefore, no rates were calculated.

2.5 Risk Groups

Counseling and Testing Data

When a client comes in for HIV testing, a counselor explores specific risk behaviors. The State Office of AIDS calculates a hierarchy of risk based on those behaviors and on the risk of HIV transmission. The 14 mutually exclusive risk groups are: Men who have Sex with Men (MSM), Bisexual, Intravenous Drug Users (IDU), Gay/Bi IDU (men only), HIV+ Partner, Partner Bisexual, IDU Partner, Sex for Drugs/Money, Blood Transfusion before 1985, Multiple Partners, Occupational Exposure, Child at Risk (perinatal transmission), No Reported Risk, and Unknown. Heterosexual risk categories include IDU, HIV+ Partner, IDU Partner, Sex for Drugs/Money, Multiple Partners, and Partners with Multiple Partners. For a more in-depth description of this hierarchy, please see Appendix 10.

The largest share of those who come in for testing fall into the Multiple Partners risk group (30% in 2003). The distribution of testers by risk group has stayed relatively stable over the last 4 years. A few of the notable changes include an increase in the number of testers who fall into the following risk groups: MSM, Multiple Partners, and No Reported Risk and a large decrease in IDU and Gay/Bi IDU.

Of the HIV-positive tests in 2003, 87% fell into one of 5 groups: MSM (54%), Multiple Partners (9%), No Reported Risk (9%), Bisexual (8%) and Gay/Bi IDU (7%). Over time the distribution of HIV positive tests by risk has changed, although MSM continues to have the largest share of HIV positive tests. The number of HIV positive tests to Gay/Bi IDU testers has decreased while the number in the Multiple Partners groups has increased. However, in 2003, the number of HIV positive tests for Gay/Bi IDU increased. Each year since 2001, the No Reported Risk group has had 16-25 positive tests.

HCT Trends by HHSA Region

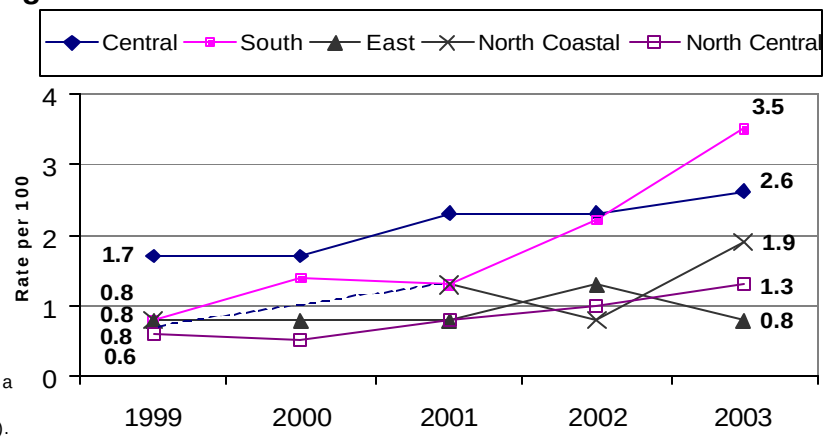


FIGURE 22

Rate per 100 Testing HIV+ by HHSA Region, Anonymous HCT, San Diego County, 1999-2003

North Inland had too few events to calculate a rate 1998-2002; North Coastal had too few events in 2000 to calculate a rate (dotted line).

When rates can be calculated (5 or more positives), the highest rate of HIV infection has been among Gay/Bi IDU in 1999 and 2003, 5.6% and 15.4% respectively (*see Figure 23*). In 2003, the rate for HIV+ Partner increased to 6.4%. Rates for Gay/Bi IDU and HIV+ Partner fluctuate greatly between years due to small numbers and are less reliable. MSM and Bisexual have had the next highest rates, 4.8% and 3.1% in 2003. The increase in rates for Gay/Bi IDU from 5.6% in 1999 to 15.4% in 2003 is not statistically significant. Rates increased for MSM in both 2001 and 2002 (4.5%, 5.0%) while holding steady at 4.8% in 2003. IDU has had a decrease in the number testing HIV positive as well as a corresponding drop in the number coming in for HIV testing and counseling services. A possible reason is that in 2001 the counselor information form changed and clients were asked if they had injected nonprescription drugs since their last test or in the last two years rather than if they had ever injected nonprescription drugs (this would also affect Gay/Bi IDU). The other groups have remained fairly stable or have such small numbers that trends are not clear.

Among men seeking anonymous HIV testing services in 2003, 82% fell into one of three risk groups: MSM (38%), Multiple Partners (27%), and No Reported Risk (17%). For men, the highest rate of HIV infection was among Gay/Bi IDU, MSM and bisexual men (15.4%, 5.0% and 2.7% respectively). Other risk groups for men had rates of infection at or below the average for 2003 or had too few positives to calculate a rate.

During 2003, 39% of women seeking testing had No Reported Risk, and 36% were categorized in Multiple Partners. Between 1997 and 2000, Partners with Multiple Partners constituted the second largest proportion of female testers. In that time period, the fourth and fifth risk factors pertained to the use of injection drugs either directly by the woman, or indirectly through her sexual partner. Of women seeking testing in 2003, 6% were IDU and about 5% reported an IDU Partner. Bisexual women represented 5% of those seeking testing, and about 2% reported having a bisexual partner in 2003. The risk groups for women with the highest HIV infection rates were HIV+ Partner (7.4%), IDU (3.5%) and Multiple Partners (0.7%). However, each of these groups had fewer than 10 positive tests, and rates are likely to be less reliable.

The percent of all tests attributed to No Reportable Risk increased dramatically in 2001 and

HCT Trends by Risk Group

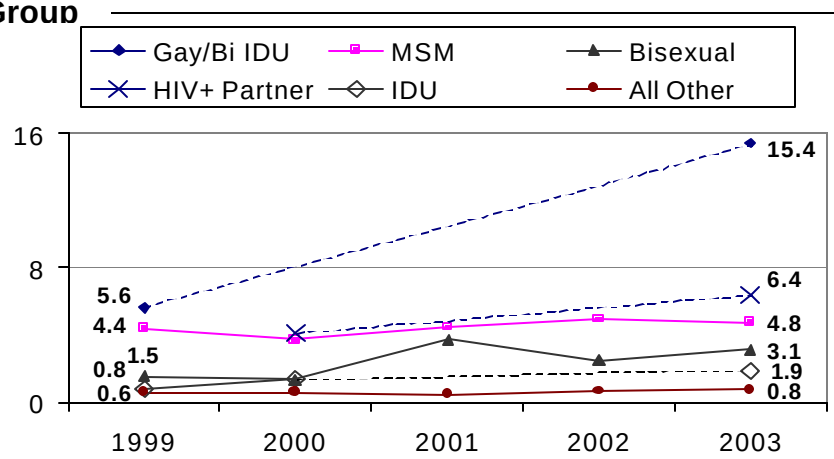


FIGURE 23

Rate per 100 Testing HIV+ by Risk Group, Anonymous HCT, San Diego County, 1999-2003

Dotted lines are used when too few events exist to calculate a rate for a year(s).

HCT Trends for MSM Group

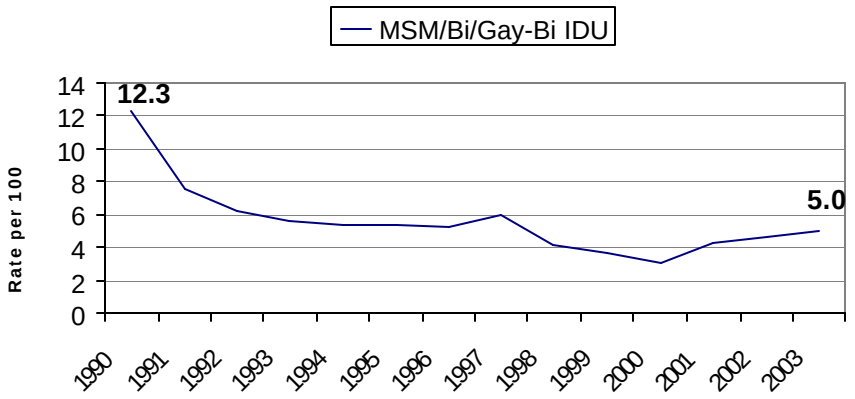


FIGURE 24

Rate per 100 Testing HIV+, MSM Group, Anonymous HCT, San Diego County, 1990-2003

has remained high since that time. Responses to counselor's questions are voluntary and those who opt not to discuss risk behavior information are combined with those who do not appear to have a traditional high risk behavior. Recent changes in the form will likely have an unquantified impact on the increase in No Reported Risk. Partner with Multiple Partners, no longer one of the calculated risk factors, is now reclassified into the No Reported Risk category, as would IDU with no recent injection drug use.

2.6 MSM Group

High Risk Groups

Certain risk groups have historically had much higher rates of HIV infection than others in San Diego County. Three HCT risk groups, having in common both the highest rates and the behavior of men who have had sex with men, were combined to form the MSM group: Gay/Bi IDU, MSM, and Bisexual men. MSM made up the largest proportion of testers in the MSM group, 84%, with Bisexual next, 13%, and Gay/Bi IDU at 3%. In 2002, the MSM group had 2,683 tests, 127 of which were HIV positive.

Overall, rates of HIV infection have fallen for the MSM group between 1990 and 2003, from 12.3%

HCT Trends for MSM Group by Age

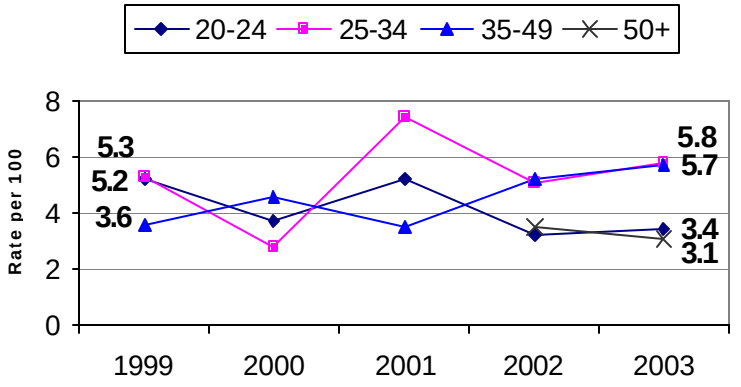


FIGURE 25

Rate per 100 Testing HIV+, MSM Group by Age Group, Anonymous HCT, San Diego County, 1999-2003

HCT Trends for MSM Group by Racial/Ethnic Group

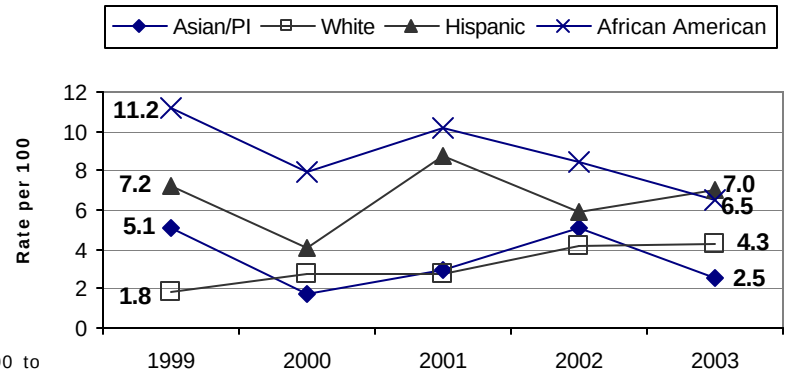


FIGURE 26

Rate per 100 Testing HIV+, MSM Group by Racial/Ethnic Group, Anonymous HCT, San Diego County, 1999-2003

Asian/PI had too few events in 1998 and 2000 to calculate a rate (dotted line).

to 5.0% (*see Figure 24*). Of concern is the statistically significant increase in the HIV infection rate from 3.3% in 2000 to 5.0% in 2003 ($p<.05$).

Age Group

When a rate could be calculated for the MSM group in 2003, the age groups with the highest HIV infection rates are 25-34 and 35-49, 5.8% and 5.7% respectively (*see Figure 25*). Youth under the age of 15 had no positive tests during this time period, and the age group of 15-19 had too few positive tests to calculate a rate in most years. The age group 50+ had a rate of 3.5% in 2002 and 3.1% in 2003. Small numbers result in considerable annual variation in rates.

Racial/Ethnic Group

Since 1999, African Americans in the MSM group have had the highest rates until 2003, when Hispanics had a rate of 7.0% and African Americans 6.5% (*see Figure 26*). Whites in the MSM group were next with an HIV infection rate of 4.3%, and Asian/Pacific Islander with 2.5%. In 2002 and 2003 American Indian/Alaskan Natives in the MSM group had no HIV positive tests. Over the last 5 years, rates appear to be increasing for Hispanics and whites in the MSM group, although small numbers make it more difficult to analyze trends.

Place of Residence

Figure 27 shows that during 2002 and 2003, the South region of San Diego County, at 11.3% and

HCT Trends for MSM Group by Region

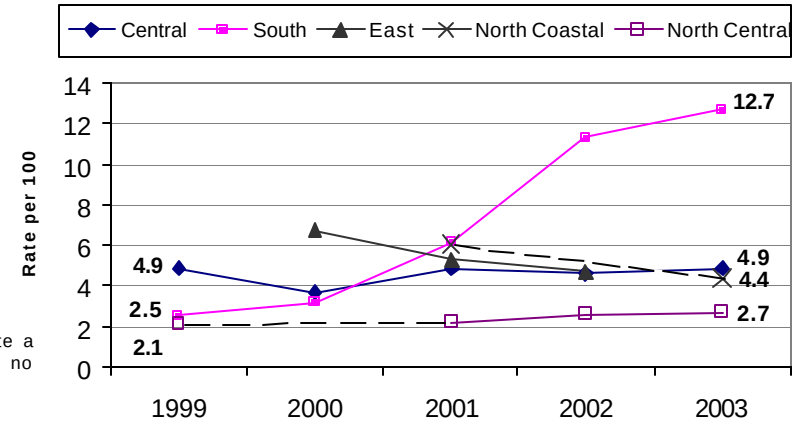


FIGURE 27

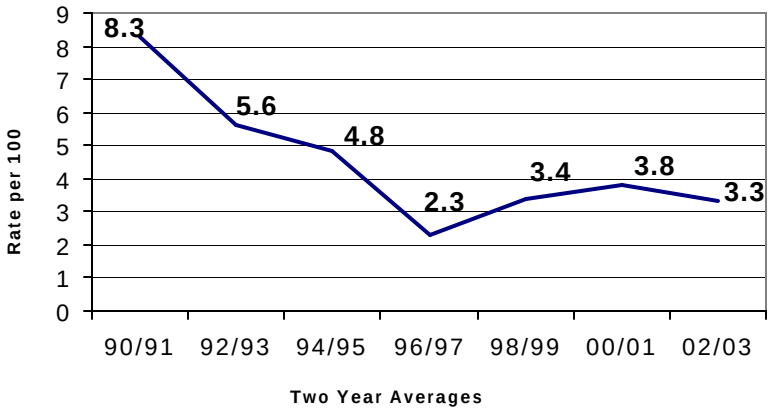
Rate per 100 Testing HIV+, MSM Group by HHSA Region, Anonymous HCT, San Diego County, 1999-2003

East region had too few events to calculate a rate 1999 and North Coastal in 1999-2000; no rates could be calculated for North Inland 1999-2003.

HCT Trends for Young MSM

FIGURE 28

Rate per 100 Testing HIV+, MSM Ages 13-24, Anonymous HCT, Two Yr. Averages, San Diego County, 90/91-02/03



12.7% respectively, had the highest rate of HIV infection in the MSM group. In 2003, Central and North Coastal follow the South region (4.9% and 4.4%). The South region has had the highest rates for the last three years; however, the difference between 6.1% in 2001 and 12.7% in 2003 is not statistically significant. Since 60% of the HIV positive tests come from the Central region, numbers are small in the remaining regions, resulting in years in which rates cannot be calculated and unstable rates.

2.7 Young MSM

Increases in HIV infection rates for young MSM have been noted recently in some large metropolitan areas of the U.S. Each year, approximately 400 young MSM (including Gay/Bi IDU and bisexual) ages 13-24 test each year, of which about 10-20 are HIV positive. Because of the small numbers, rates are calculated in two-year averages.

The trend for young MSM in San Diego County who tested shows a decline from 1990/91 to 1996/97, with a slight increase since that year (*see Figure 28*). Even with two-year averages, numbers are small resulting in considerable annual variation in the rate. The change in rate from 2.3% in 96/97 to 3.8% in 2000/01 is not statistically significant.

2.8 HIV and Local Data Summary

HCT data in San Diego County suggest a decline in HIV infection rates among an increasingly diverse group of voluntary testers from 1985 to 1992, fairly level rates to 2000 and an increase 2001-2003. While the slight overall increase in HIV infection rate from 1.3% in 2000 to 1.6% in 2001 was not statistically significant, the increase from 1.3% to 1.9% in 2002 was statistically significant ($p<.05$) and the rate held at 2.3% in 2003.

Significant increases in HIV infection rates were seen for some subgroups in the last several years ($p<.05$). For example in 2001, the change in rates for men, from 1.6% in 2000 to 2.3% in 2001 was statistically significant. Women showed a statistically significant decline in their HIV infection rate, from 0.7% in 2000 to 0.2% in 2001 and then a statistically significant increase from 0.5% in 2002 to 1.1% in 2003. Rates did not change significantly for men between 2002 and 2003 (2.6% to 2.8%).

With the exception of 2002, African American and Hispanic testers have higher HIV infection rates than other racial groups although the gap has decreased over time. Generally, these are statistically significant differences. From 2001 to 2002, rates for whites

increased (statistically significant; $p<.05$) from 1.2% to 2.0%, surpassing the rate for Hispanics. In 2003, the rate for Hispanics increased from 1.7% to 2.9% and this was statistically significant. In addition, rates for African Americans and whites are almost the same in 2003 (2.2% and 2.1%).

Testers ages 25-34 have historically had the highest HIV infection rates, except in the years 1997 and 2002. Since the year 2000, there has been an increase in rates for all age groups, but only the 25-34 and 35-49 year old age groups reached statistical significance ($p<.05$).

HIV infection rates for other subgroups had numbers too small to detect significant differences. Youth ages 13-24 showed an increase from 0.5% in 2000 to 1.3% in their HIV infection rate and the rate of HIV infection for young MSM increased from 2.3% in 1996/1997 to 3.8% in 2000/2001 but differences were not statistically significant. Similarly, although the rate increased for ages 50+ from 1999 to 2003, the difference was not statistically significant.

Until 2003, testers who reside in the Central region of San Diego County have always had higher HIV infection rates than those from other regions. The increase in rate for the South region from 2001 to 2003 (1.3% to 3.5%) was statistically significant ($p<.05$). The rate of HIV infection for the Central region increased from 1.7% in 2000 to 2.3% in 2001 (statistically significant; $p<.05$), and increased slightly to 2.6% in 2003.

Although in 2003 Gay/Bi IDU had the highest rate for men, the numbers are small and often a rate cannot be calculated, thus, the risk groups MSM, and Bisexual generally have the highest rates. HIV+ Partner, another risk group with unstable rates, had the next highest rate in 2003 (6.4%). When combined, the MSM group has shown a decline in rates over time, until 2001. The increase in the HIV infection rate for the MSM group from 3.3% in 2000 to 5.0% in 2003 was statistically significant. Young MSM have shown an increase in their HIV infection rate since 1997, yet small numbers indicate no statistical difference in the rates over time.

HIV Data Sources:

San Diego County HIV Counseling and Testing Data.
State of California, Department of Health Services, Office of AIDS

Epidemiology Profile and Projections of HIV / AIDS in San Diego County, 1998, County of San Diego, HHSA, Community Epidemiology

California HIV Counseling and Testing Annual Reports, State of California, Department of Health Services, Office of AIDS, HIV Prevention Research and Evaluation

California HIV Seroprevalence Annual Reports, State of California, Department of Health Services, Office of AIDS, HIV / AIDS Epidemiology Branch

Division of HIV / AIDS Prevention, Centers for Disease Control and Prevention (Military and Job Corps data)

Results of HIV-1 and HIV-2 Testing in California Blood Banks and Plasma Centers, Semi-annual reports, State of California, Department of Health Services, Office of AIDS, HIV / AIDS Epidemiology Branch

V. Appendices

Appendix 1. Glossary

The following are summary definitions and explanations of a number of terms which you may encounter in this report. Terms may be added for clarification in subsequent reports.

Acquired Immunodeficiency Syndrome (AIDS) - End stage HIV disease where the immunological system is severely disabled by HIV, resulting in an increased susceptibility to opportunistic infections and rare cancers. To be considered an AIDS case, one must be HIV+ and have one of a number of specific conditions (for example, Kaposi's Sarcoma).

Adult/Adolescent Cases - AIDS cases who were at least 13 years of age at time of diagnosis.

AIDS - See Acquired Immunodeficiency Syndrome.

Bisexual - Men and women who report having both a male and female partner.

Case Definition - A set of standard criteria for deciding whether a person has a particular disease or health-related condition. In the case of AIDS, the Centers for Disease Control lists specific conditions (opportunistic infection or a level of immunosuppression) a person must have in order to be classified as an AIDS case.

Case Fatality Rate - The proportion of individuals with a specific disease who die within a specified period of time.

Centers for Disease Control and Prevention (CDC) - The lead federal agency for protecting the health and safety of people - at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships.

CDC - See Centers for Disease Control and Prevention.

Epidemic - The spread of an infectious disease through a population or geographic area.

Epidemiology - The study of factors associated with health and disease and their distribution in the population.

Heterosexual transmission - Transmission of HIV via sexual contact with a member of the opposite sex. This category can be further analyzed to investigate the behavior of the sexual partner, such as sex with an intravenous/injection drug user, bisexual male (for females only), person with hemophilia/coagulation disorder, transfusion/transplant recipient with documented HIV infection, or a person with AIDS or documented HIV infection.

HIV - See Human Immunodeficiency Virus.

HIV Counseling and Testing (HCT) - refers to state-funded HIV counseling and testing programs.

Human Immunodeficiency Virus (HIV) - A retrovirus that destroys the immune system eventually causing AIDS.

Injection Drug User (IDU) - Someone who at some time has injected non-prescription drugs.

Incidence - The total number of new cases of a disease occurring within a specified period of time.

Incidence Rate - The number of new cases of a disease occurring within a specified time period divided by the population at risk, often expressed per 100,000 population. Incidence rates are useful for comparison of selected factors to demonstrate the severity of the epidemic among individuals of different ages, gender and race / ethnicity group.

Maternal Transmission - the transmission of a disease from mother to child. HIV can be transmitted from mother to child in the womb, during delivery or through breast feeding.

Mode of Transmission - The way in which a disease was passed from one person to another. In describing HIV / AIDS cases, identifies how an individual may have been exposed to HIV, such as injection drug use, or sexual contact. (Also known as exposure categories)

Men who have Sex with Men (MSM) - In AIDS and HIV case data, MSM is a mode of HIV transmission, men who have same sex contact (bisexual or homosexual). For HIV Counseling and Testing purposes, MSM are those men who only have sex with men and are not bisexual. See Appendix 10 for details.

Pediatric Cases - AIDS cases who were newborns to children 12 years of age at time of diagnosis.

Prevalence - the number of all cases (new and old) of a disease occurring within a specified period of time.

Prevalence Rate - the number of all cases (new and old) of a disease occuring within a specified time period divided by the population at risk, often expressed per 100,000 population. Prevalence rates are useful for comparison of selected factors to demonstrate the severity of the epidemic among individuals of different ages, gender and race / ethnicity group.

Public Health Surveillance - An ongoing, systematic collection, analysis, and use of data regarding specific health conditions and diseases, in order to monitor these health problems, such as the Centers for Disease Control and Prevention surveillance system for AIDS cases.

Risk Group - Used in HIV Counseling and Testing to assign clients risk of HIV transmission based on their behavior. See Appendix 10 for detail.

Risk not Specified (RNS) - An AIDS case that lacks mode of transmission information to determine the person's risk for acquiring HIV infection.

Vertical Transmission - see Maternal Transmission.

Year of Diagnosis - The year in which a case met the CDC criteria for AIDS and was diagnosed with AIDS.

Year of Report - The year in which an AIDS case is reported to the Department of Health Services.

Appendix 2. HIV / AIDS Reporting- Reliability and Limitations

Individuals with HIV or AIDS are required to be reported to the local health department pursuant to California Code of Regulations, Title 17, Sections 2500 and 2643.5. Reports come from physicians, health care providers, hospitals and clinics via HIV / AIDS Case Report forms on which individuals with AIDS are reported by name, and those with HIV only are reported with a non-name code. A San Diego County case is an individual diagnosed with HIV or AIDS, while residing in San Diego County.

Active verification of cases and internal tests of the data increase the reliability of the data; however, the HIV / AIDS data used to generate reports have several limitations as listed below:

1. ***Under-reporting of cases*** -The number of diagnosed HIV / AIDS cases for which notification to the Office of Public Health does not occur is called "under-reporting". Delays in reporting are graphically obvious in the most recent year (2003). It is likely that cases diagnosed in 2003 will continue to be reported in 2004.

2. ***Diagnosis date versus report date*** - Reporting delays impact the available data. Those cases diagnosed in 1995, for example, may not have been reported to the Health and Human Services Agency until 1997 or later. See glossary for the definition of Date of Diagnosis and Date of Report.

3. ***Collection tools*** -While information on a variety of variables is collected, it is still limited. Data on an individual income or specific drug of choice is not collected, for example. The data collected is limited and reflects the quality of data submitted by the reporting facility.

4. ***Non-resident HIV / AIDS cases*** - Persons with AIDS diagnosed elsewhere and relocating to San Diego County after diagnosis, are NOT represented in AIDS case data for the county. Persons receiving medical care or other services in San Diego County while residing outside the county, are also not reflected in this data in any way.

5. ***Confidentiality*** - Charts and graphics with small cell sizes (under 5) may not be described in detail where identification of persons could occur.

6. ***Changes in CDC Criteria for AIDS Case Definition*** - Since 1981, the Centers for Disease Control and Prevention (CDC) have changed the AIDS Case definition to include more diagnostic criteria. The peak in AIDS cases is likely the result of the 1993 change in the case definition.

Additional limitations in the HIV case data include ***limited time collecting data***. HIV infection, without an AIDS defining condition, has only been reportable in California since July 2002. Because of the newness of the system and the different way it is reported (non-name code), some facilities have not been able to institutionalize HIV reporting. HIV data may be skewed to primarily represent the patients of those facilites who have been more easily able to adopt HIV reporting.

Appendix 3. Reporting HIV/AIDS Cases

Who is responsible for reporting HIV and AIDS cases?

HIV and AIDS are listed in California's disease reporting regulations. (California Code of Regulations, Title 17, Section 2500 and 2643.5). Every health care provider knowing of or in attendance on a case or suspected case of HIV or AIDS is required to make a report. Laboratories are required to report a positive HIV test. Both laboratories and providers are required to report within 7 days of a positive test or diagnosis.

When is HIV Reported?

Report a case when a patient has a test result indicative of HIV infection. This includes:

- Confirmed positive HIV antibody test
- Any viral load test
- Positive P24 antigen test
- Positive viral isolation test

Providers report a patient once when a test result is indicative of HIV infection and once again if the individual meets the AIDS case definition. To unduplicate reporting and provide a way to get missing information, health care providers are required to keep a log of patients that have been reported. Always report a case even if you think the patient may have been reported by another provider. This helps ensure complete case capture, which is critical for local prevention and treatment funding.

When is AIDS Reported?

When an individual is diagnosed with one or more of the AIDS defining conditions listed below, their care provider is required to report the case to the local health department within 7 days of the diagnosis (For HIV infected individuals, definitive or presumptive):

* CD4+ T-lymphocyte count <200 mL/mm3or<14% of total T-lymphocytes
* Candidiasis of the bronchi, trachea, or lungs
* Candidiasis, esophageal
* Cervical cancer, invasive
* Coccidioidomycosis, disseminated or extra-pulmonary
* Cryptococcosis, extra-pulmonary
* Cryptosporidiosis, chronic intestinal
* Cytomegalovirus disease
* Cytomegalovirus retinitis
* Encephalopathy, HIV-related
* Herpes simplex: chronic ulcers or bronchitis, pneumonitis or esophagitis
* Histoplasmosis, disseminated or extrapulmonary
* Isosporiasis, chronic intestinal
* Kaposi's Sarcoma
* Lymphoma, Burkitt's
* Lymphoma, immunoblastic
* Lymphoma, primary in the brain
* *Mycobacterium avium* complex or *M. kansasii*, disseminated or extrapulmonary
* *Mycobacterium tuberculosis*, any site
* *Pneumocystis carinii* pneumonia
* Pneumonia, recurrent
* Progressive multifocal Leukoencephalopathy
* Salmonella septicemia, recurrent
* Toxoplasmosis of the brain
* Wasting syndrome due to HIV

The pediatric AIDS case definition (for HIV infected children <13 years of age) includes all of the above mentioned indicator diseases with the exception of pulmonary Mycobacterium tuberculosis, cervical cancer and CD4+ T-lymphocyte counts <200 mL/mm3 or <14% of total T-lymphocytes.

In addition, recurrent bacterial infections (at least two episodes within a two year period) and lymphoid interstitial pneumonia / pulmonary lymphoid hyperplasia (LIP / PHL) are AIDS defining conditions for HIV infected children.

The original case definition of AIDS was established by the Centers for Disease Control (CDC) in 1981. Additional conditions and diseases were added in 1985, 1987 and 1993. All case definitions and revisions are published in the CDC's publication entitled 'Morbidity and Mortality Weekly Report' (MMWR).

What information is required to be reported?

Reports of HIV and AIDS cases to the local health department shall include, but are not limited to, ethnic group, gender, date of birth, mode of transmission information, diagnosis and date of diagnosis and the name, address and phone of the person or facility making the report.

HIV infected individuals, without a diagnosis of AIDS, are required to be reported using a non-name code. The non-name code is composed of the Soundex (an alphanumeric representation of the last name generated by the laboratory), date of birth, gender, and last 4 digits of the social security number.

AIDS cases are reported with the same information as HIV, but also include the name, address, telephone number and full social security number.

Community Epidemiology is required by law to protect the privacy of any individual reported with HIV / AIDS.

How should a report be made?

Providers can submit a confidential case report form available from County of San Diego, Health and Human Services Agency. Forms can be sent to:

Lyn Cardoza
Health and Human Services Agency
Community Epidemiology
P.O. Box 85222
San Diego, CA 92186-5222

Providers also have the option of reporting cases by phone. For a reporting kit, forms or additional information, see our website www.sdhivaids.org or call Community Epidemiology at (619) 515-6675.

Why is reporting necessary?

Timely and accurate AIDS case reports provide this county with a better understanding of our local epidemic. Epidemiologists can monitor trends in populations being affected by HIV infection, project future numbers of AIDS cases, and provide information for those responsible for planning for future health care needs and prevention and educational activities.

Failure to report in a timely manner may have an impact on current and projected funding needs. Funding formulas using data which represents under-reporting of AIDS cases may translate into under funded programs and services for those with HIV infection.

A summary of legislation related to the case reporting, confidentiality, penalties and surveillance activities supported in the California Code of Regulations is available by calling Community Epidemiology at (619)515-6675. For a copy of the regulations and more information go to : www.dhs.ca.gov / AIDS.

Appendix 4. Computing Rates, Rates by Racial / Ethnic Groups and Statistics.

Calculating a rate is a better indication of the burden of disease on a given population than just looking at the raw numbers. Not all population sizes are the same so the same number of cases in different populations may not reflect the proportion of that population which experiences a given disease. A rate allows populations with dissimilar sizes to be compared. Rates may be based on the population at large (AIDS) or a subpopulation utilizing services (HIV Counseling and Testing) or participants in a study (STD seroprevalence study).

AIDS Rates

A rate is calculated by dividing the number of individuals with a disease / condition in a given time period by the population size. As is common for population-based rates, the AIDS rate is then multiplied by 100,000 to give the rate per 100,000 individuals. For example, in year 2001, the number of cases (433) is divided by the population size (2,856,000) and multiplied by 100,000, the result is: (433 / 2,856,000) x100,000 = 15 AIDS cases per 100,000 residents of San Diego County.

Rates by racial / ethnic groups were computed by dividing the number of individuals with AIDS from a particular racial / ethnic group by the number of that same racial / ethnic group in the population at large (*see Table 22*). The following are considerations for comparisons by race. Rates calculated in this report are based on current estimates of population size published by SANDAG, which is based on Census data. Race information was collected differently during the 2000 Census and does not match the way race is collected by the HIV / AIDS report forms. This change over time and mismatch could affect rates, particularly when analyzing groups with small numbers.

TABLE 22: Rates of AIDS Among Different Racial/Ethnic Groups by Year of Diagnosis

Racial /Ethnic Group**	Description of Rows	Year of Diagnosis				
		1999	2000	2001	2002	2003*
White	No. of AIDS cases	227	203	203	202	143
	Population Size	1,577,836	1,548,833	1,548,788	1,555,334	1,559,007
	Rate per 100,000	**14**	**13**	**13**	**13**	**9**
African American	No. of AIDS cases	63	76	71	75	58
	Population Size	154,626	154,487	156,232	159,850	162,686
	Rate per 100,000	**41**	**49**	**45**	**47**	**36**
Hispanic	No. of AIDS cases	147	165	141	143	124
	Population Size	693,421	750,965	778,633	808,597	841,134
	Rate per 100,000	**21**	**22**	**18**	**18**	**15**
All Racial/Ethnic Groups	No. of AIDS cases	447	458	433	434	334
	Population Size	2,751,000	2,813,833	2,856,000	2,908,505	2,961,579
	Rate per 100,000	**16**	**16**	**15**	**15**	**11**

* Year 2003 AIDS case numbers are still preliminary numbers. As more individuals diagnosed with AIDS in 2003 are reported in 2004, the rate will increase.

Other Rates

HIV counseling and Testing (HCT) rates and the STD seroprevalence rates were calculated by dividing the number HIV positive by the number tested for HIV.

Statistics

Fluctuation in rates occur over time and between groups. The smaller the number of events (AIDS cases or HIV infections), the greater the fluctuation. Statistical tests are often used to determine when one rate is different from another. One such test is used in this report, the 95% confidence interval. When rates are described here as 'statistically significant' or 'significant', the rates can be said to be different from each other with 95% confidence ($p<.05$).

Appendix 5. Expanded Ethnic Origin of Hispanic and Asian / Pacific Islander Cases

TABLE 23: Expanded Origin of Hispanic AIDS Cases

Ethnic Origin	Frequency	Percent
Mexican	2106	82%
Hispanic, non-specific	201	8%
Puerto Rican	102	4%
Central American	47	2%
South American	47	2%
Cuban	30	1%
Spain / Portugal	30	1%
Dominican	5	<1%
Total Hispanic Cases	2568	100%

TABLE 24: Expanded Origin of Asian/Pacific Islander AIDS Cases

Ethnic Origin	Frequency	Percent
Filipino	129	55%
Chinese	18	8%
Japanese	18	8%
Vietnamese	16	7%
Asian, non-specific	13	6%
Guamanian Islander	10	4%
Hawaiian	9	4%
Laotian	6	3%
Samoan	5	2%
Thai	3	1%
Cambodian	2	1%
Korean	2	1%
East Indian	2	1%
Fijian	1	<1%
Pacific Islander	1	<1%
Tongan	1	<1%
Total Asian/PI Cases	236	100%

TABLE 25: Expanded Origin of Hispanic HIV Cases

Ethnic Origin	Frequency	Percent
Mexican	800	89%
Hispanic, non-specific	50	6%
South American	14	2%
Puerto Rican	12	1%
Central American	11	1%
Cuban	3	<1
Spain / Portugal	2	<1
Dominican	2	<1
Total Hispanic Cases	894	100.0%

TABLE 26: Expanded Origin of Asian/Pacific Islander HIV Cases

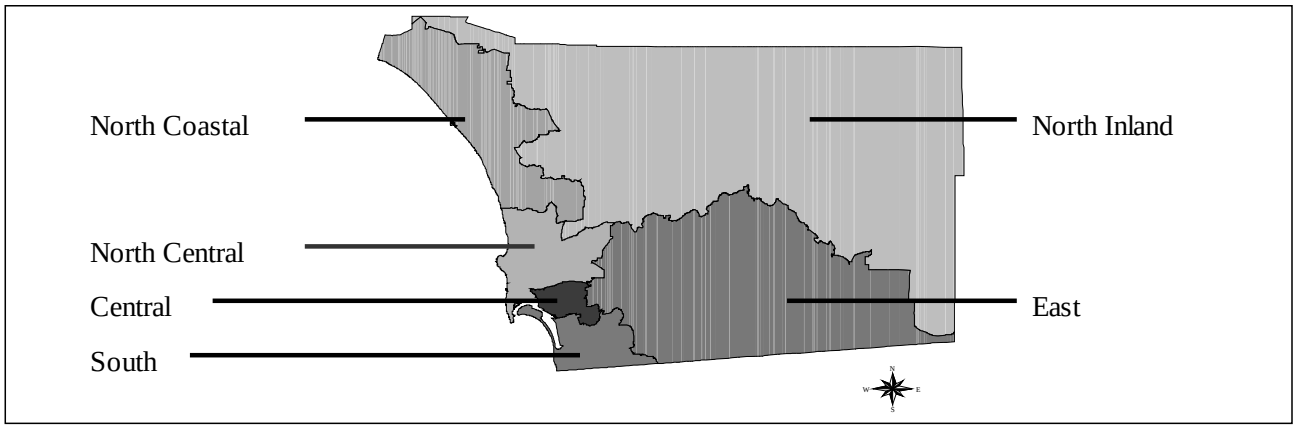
Ethnic Origin	Frequency	Percent
Filipino	43	48%
Asian, non-specific	20	22%
Japanese	5	6%
Vietnamese	5	6%
Chinese	4	4%
Pacific Islander	2	2%
Asian Indian	2	2%
Guamanian Islander	2	2%
Thai	2	2%
Cambodian	2	2%
Pakistani	1	1%
Indonesian	1	1%
Hawaiian	1	1%
Total Asian/PI Cases	90	100.0%

Note: Percentages may not add up to 100% due to rounding.

Appendix 6. Health and Human Services Agency (HHSA) Regions of San Diego

San Diego County is divided into 6 Health and Human Services Agency regions by zip code. The following list shows the breakdown of each area by the zip codes contained therein.

FIGURE 29: HHSA Regions of San Diego County



Central Area

Zip codes 92101, 92102, 92103, 92104, 92105, 92113, 92114, 92115, 92116, 92134, 92136, 92139, 92112, 92162, 92163, 92164, 92165, 92170, 92175, and 92176.

East Area

Zip codes 91901, 91905, 91906, 91916, 91917, 91931, 91934, 91935, 91941, 91942, 91945, 91948, 91962, 91963, 91977, 91978, 91980, 92019, 92020, 92021, 92040, 92071, 91944, and 91946.

South

Zip codes 91902, 91910, 91911, 91913, 91914, 91915, 91932, 91950, 92118, 92135, 92154, 92155, 92173, 92179, 91909, 91912, 92143, 91951, 91933, and 92158.

North Coastal

Zip codes 92007, 92008, 92009, 92014, 92024, 92052, 92054, 92055, 92056, 92057, 92067, 92068, 92075, 92083, 92084, 92672, 92093, 92169, 92161, 92038, and 92137.

North Inland

Zip codes 92003, 92004, 92025, 92026, 92027, 92028, 92029, 92036, 92059, 92060, 92061, 92064, 92065, 92066, 92069, 92070, 92082, 92086, 92127, 92128, 92129, 92259, 92390, 92536, 92592, 92046, and 92198.

North Central

Zip codes 92037, 92106, 92107, 92108, 92109, 92110, 92111, 92117, 92119, 92120, 92121, 92122, 92123, 92124, 92126, 92130, 92131, 92133, 92140, 92145, 92138, 92147, 92166, 92168, 92171, 91990, 92193, and 92196.

Appendix 7. Community of Residence at Time of Diagnosis

TABLE 27: Community of Residence at Time of AIDS Diagnosis

Community of Residence	Cases	Percent
San Diego	8924	74.2%
Chula Vista	388	3.2%
Oceanside	351	2.9%
El Cajon	237	2.0%
Escondido	229	1.9%
La Mesa	182	1.5%
Vista	174	1.5%
National City	168	1.4%
Spring Valley	158	1.3%
La Jolla	132	1.1%
San Ysidro	129	1.1%
Carlsbad	126	1.1%
Santee	90	0.8%
Lemon Grove	88	0.7%
Encinitas	86	0.7%
Imperial Beach	78	0.7%
San Marcos	72	0.6%
Lakeside	47	0.4%
Poway	45	0.3%
Coronado	37	0.3%
Fallbrook	37	0.3%
Del Mar	36	0.3%
Bonita	29	0.2%
Ramona	27	0.2%
Cardiff by the Sea	19	0.2%
Leudcadia	19	0.2%
Alpine	17	0.1%
Valley Center	17	0.1%
Solana Beach	16	0.1%
Rancho Santa Fe	13	0.1%
Jamul	10	0.1%
Other*	53	0.4%
Total	12034	100%

* The following communities had 9 or less cases: Bonsall, Boulevard, Borrego Springs, Camp Pendleton, Campo, Descanso, Dulzura, Julian, Mount Laguna, Pauma Valley, Pine Valley, Ranchita, San Luis Rey, and Santa Ysabel

Note: Percentages may not add up to 100% due to rounding.

TABLE 28: Community of Residence at Time of HIV Diagnosis

Community of Residence	Cases	Percent
San Diego	3223	77.6%
Chula Vista	141	3.4%
Oceanside	105	2.5%
El Cajon	82	2.0%
Vista	75	1.8%
Escondido	67	1.6%
National City	56	1.3%
San Ysidro	56	1.3%
La Mesa	48	1.2%
Imperial Beach	31	0.7%
Spring Valley	28	0.7%
Lemon Grove	27	0.6%
La Jolla	25	0.6%
Carlsbad	25	0.6%
Santee	25	0.6%
Encinitas	23	0.6%
San Marcos	16	0.4%
Lakeside	14	0.3%
Bonita	13	0.3%
Poway	13	0.3%
Other*	62	1.5%
Total	4155	100%

* The following communities had 9 or less cases: Alpine, Bonsall, Borrego Springs, Campo, Cardiff By The Sea, Coronado, Del Mar, Fallbrook, Jamul, Julian, Pine Valley, Ramona, Rancho Santa Fe, Santa Ysabel, Solana Beach,
Note: Percentages may not add up to 100% due to rounding.

Appendix 8. Cumulative AIDS Cases Reported through 12/31/2003

1. Disease Category	Adult/Adolescent * Cases (%)	Adult/Adolescent * Deaths (%)	Pediatric * Cases (%)	Pediatric * Deaths (%)	Total Cases (%)	Total Deaths (%)
PCP	3408 (28)	2733 (80)	18 (31)	12 (67)	3426 (28)	2745 (80)
Other Disease w/o PCP	4365 (36)	3104 (71)	40 (69)	19 (48)	4405 (37)	3123 (71)
KS Alone	579 (5)	398 (69)	0 (0)	0 (.)	579 (5)	398 (69)
No Diseases Listed	3624 (30)	314 (9)	0 (0)	0 (.)	3624 (30)	314 (9)
Total	11976 (100)	6549 (55)	58 (100)	31 (53)	12034 (100)	6580 (55)

2. Age *	Cases (%)
Under 5	37 (0)
5-12	21 (0)
13-19	47 (0)
20-29	1994 (17)
30-39	5544 (46)
40-49	3145 (26)
Over 49	1246 (10)
Unknown	0 (0)
Total	12034 (100)

3. Race/Ethnicity	Adult/Adolescent * Cases (%)	Pediatric * Cases (%)	Total Cases (%)
Hispanic - All Races	2536 (21)	32 (55)	2568 (21)
Not Hispanic - Am. Indian/Alaska Native	72 (1)	0 (0)	72 (1)
Asian	6 (0)	0 (0)	6 (0)
Black or African American	1475 (12)	12 (21)	1487 (12)
Native Hawaiian/Pacific Is.	2 (0)	0 (0)	2 (0)
White	7658 (64)	13 (22)	7671 (64)
Legacy Asian/Pacific Is.	227 (2)	1 (2)	228 (2)
Multi-race	0 (0)	0 (0)	0 (0)
Unknown	0 (0)	0 (0)	0 (0)
Total	11976 (100)	58 (100)	12034 (100)

4. Exposure Category	Adult/Adolescent Transmission Modes Males (%)	Females (%)	Total (%)
Men who have sex with men	8921 (80)	0 (0)	8921 (74)
Injecting drug use	747 (7)	327 (38)	1074 (9)
Men who have sex with men and inject drugs	1134 (10)	0 (0)	1134 (9)
Hemophilia/coagulation disorder	62 (1)	3 (0)	65 (1)
Heterosexual contact	142 (1)	449 (52)	591 (5)
Receipt of blood, components, or tissue	88 (1)	66 (8)	154 (1)
Risk not reported/Other	23 (0)	14 (2)	37 (0)
Total	11117 (100)	859 (100)	11976 (100)

	Pediatric Transmission Modes Males (%)	Females (%)	Total (%)
Hemophilia/coagulation disorder	3 (10)	0 (0)	3 (5)
Mother with/at risk for HIV infection	22 (76)	25 (86)	47 (81)
Receipt of blood, components, or tissue	4 (14)	4 (14)	8 (14)
Risk not reported/Other	0 (0)	0 (0)	0 (0)
Total	29 (100)	29 (100)	58 (100)

* Classification at time of AIDS dx if patient met the AIDS case definition (otherwise age at first HIV report).

Cumulative AIDS Cases Continued

5. Reported Cases of AIDS and Case-Fatality Rates by Half-Year of Diagnosis.

Half-Year of Diagnosis	Number of Cases	Number of Deaths	Case-Fatality Rate
Before 1990	2164	2049	95%
1990 Jan -June	418	370	89%
July-Dec	377	346	92%
1991 Jan -June	411	350	85%
July-Dec	486	428	88%
1992 Jan -June	538	428	80%
July-Dec	550	429	78%
1993 Jan -June	643	420	65%
July-Dec	501	298	59%
1994 Jan -June	506	242	48%
July-Dec	494	240	49%
1995 Jan -June	512	162	32%
July-Dec	452	136	30%
1996 Jan -June	439	122	28%
July-Dec	339	78	23%
1997 Jan -June	327	73	22%
July-Dec	256	60	23%
1998 Jan -June	243	41	17%
July-Dec	272	40	15%
1999 Jan -June	231	50	22%
July-Dec	216	35	16%
2000 Jan -June	242	32	13%
July-Dec	216	28	13%
2001 Jan -June	210	32	15%
July-Dec	223	33	15%
2002 Jan -June	217	23	11%
July-Dec	217	17	8%
2003 Jan -June	181	9	5%
July-Dec	153	9	6%
2004 Jan -Jan 6	0	0	----
Totals	12034	6580	55%

Appendix 9. Cumulative HIV Cases Reported through 12/31/2003

1. Disease Category	Adult/Adolescent * Cases (%)	Adult/Adolescent * Deaths (%)	Pediatric * Cases (%)	Pediatric * Deaths (%)	Total Cases (%)	Total Deaths (%)
PCP	0 (0)	0 (.)	0 (0)	0 (.)	0 (0)	0 (.)
Other Disease w/o PCP	0 (0)	0 (.)	0 (0)	0 (.)	0 (0)	0 (.)
KS Alone	0 (0)	0 (.)	0 (0)	0 (.)	0 (0)	0 (.)
No Diseases Listed	4140 (100)	53 (1)	15 (100)	0 (0)	4155 (100)	53 (1)
Total	4140 (100)	53 (1)	15 (100)	0 (0)	4155 (100)	53 (1)

2. Age *	Cases (%)
Under 5	8 (0)
5-12	7 (0)
13-19	89 (2)
20-29	1335 (32)
30-39	1803 (43)
40-49	691 (17)
Over 49	222 (5)
Unknown	0 (0)
Total	4155 (100)

3. Race/Ethnicity	Adult/Adolescent * Cases (%)	Pediatric * Cases (%)	Total Cases (%)
Hispanic - All Races	886 (21)	8 (53)	894 (22)
Not Hispanic - Am. Indian/Alaska Native	38 (1)	0 (0)	38 (1)
Asian	14 (0)	0 (0)	14 (0)
Black or African American	543 (13)	4 (27)	547 (13)
Native Hawaiian/Pacific Is.	9 (0)	0 (0)	9 (0)
White	2583 (62)	3 (20)	2586 (62)
Legacy Asian/Pacific Is.	67 (2)	0 (0)	67 (2)
Multi-race	0 (0)	0 (0)	0 (0)
Unknown	0 (0)	0 (0)	0 (0)
Total	4140 (100)	15 (100)	4155 (100)

4. Exposure Category	Adult/Adolescent Transmission Modes Males (%)	Females (%)	Total (%)
Men who have sex with men	2977 (80)	0 (0)	2977 (72)
Injecting drug use	175 (5)	82 (19)	257 (6)
Men who have sex with men and inject drugs	280 (8)	0 (0)	280 (7)
Hemophilia/coagulation disorder	2 (0)	0 (0)	2 (0)
Heterosexual contact	159 (4)	296 (69)	455 (11)
Receipt of blood, components, or tissue	2 (0)	1 (0)	3 (0)
Risk not reported/Other	114 (3)	52 (12)	166 (4)
Total	3709 (100)	431 (100)	4140 (100)

	Pediatric Transmission Modes Males (%)	Females (%)	Total (%)
Hemophilia/coagulation disorder	3 (33)	0 (0)	3 (20)
Mother with/at risk for HIV infection	5 (56)	6 (100)	11 (73)
Receipt of blood, components, or tissue	1 (11)	0 (0)	1 (7)
Risk not reported/Other	0 (0)	0 (0)	0 (0)
Total	9 (100)	6 (100)	15 (100)

* Classification at time of AIDS dx if patient met the AIDS case definition (otherwise age at first HIV report).

** Non-names HIV reporting began on July 1, 2002. Prevalent cases, those under care and treatment prior to that time, will continue to be reported; reporting of incident cases, newly testing positive, will be on-going. Caution should be taken in interpreting these data at this time.

County of San Diego, HHSA, Community Epidemiology

Appendix 10. Office of AIDS HIV Counseling and Testing Risk Group Hierarchy

After risk behavior is entered into the database for a client, the computer program ranks the risks and assigns the client to the risk group with the highest risk. The following risk groups are mutually exclusive and are presented generally in order of estimated risk from highest risk to lower risk. As of 2001, behaviors must have occurred within the last 2 years or since the last test result (whichever is less) to be recorded. Also, some categories may seem to include all of a particular risk group when they do not. For example, Gay/Bi IDU includes some men who have sex with men (MSM) who are also injection drug users (IDU). Below are the current definitions (there have been changes over the years):

Men who have Sex with Men (MSM): men who report having a male sex partner, no female sex partners, and no injection drug use.

Bisexual: men and women who report having both a male and female partner.

Injection Drug Users (IDU): clients who report having injected drugs, except men who have had sex with men or men and women (they are placed in Gay/Bi IDU).

Gay Men/Bisexual Men who are Injection Drug Users (Gay/Bi IDU): Men who report having sex with a male, or male and female partner and using injection drugs.

HIV+ Partner: heterosexual client reports having a partner who is HIV positive.

Partner Bisexual: heterosexual women only who report having a male partner who has sex with men.

IDU Partner: heterosexual client reports having a partner who uses injection drugs.

Sex for Drugs/Money: heterosexual client reports trading sex for drugs or money.

Blood Transfusion before 1985: client reports having a blood transfusion prior to 1985 or in a country where the blood is not tested for HIV.

Multiple Partners: heterosexual men who report more than1 female partner and no male partners in that time; heterosexual women who report more than1 male partner and no female partners in that time.

Partners with Multiple Partners: heterosexual client reports having a partner who has had multiple partners. Dropped as a risk group in 2001 (by default absorbed into No Reported Risk).

Occupational Exposure: client reports on the job blood exposure (either blood to blood exposure or any exposure to known HIV positive blood).

Child at Risk: clients less than 12 years of age and report having an HIV positive mother.

No Reported Risk: client does not fall into one of the above risk categories and reports one or no sexual partners.

Unknown: client reports more than one sexual partner in the last year (or unknown number of sexual partners) and did not report any risk factors (client may have refused to discuss risk factors).

Appendix 11. World Wide Web Addresses for HIV/AIDS Related Information

International

International AIDS Economic Network **www.iaen.org**
Comprehensive information on economic and cost-effectiveness aspects of HIV/AIDS therapy.

WHO Global HIV/STD Surveillance Fact Sheet **www.who.int/emc/hiv/**
Contains the most recent country-specific data on HIV/AIDS prevalence and incidence.

National

AIDS Treatment News **www.immunet.org**

ADAP Monitoring Project **www.atdn.org/access/adap**
Up-to-date information on ADAPs providing medications to low income, uninsured or underinsured people with HIV in 52 States and Territories.

AEGIS **www.aegis.com**
Extensive databases of newspaper and wire reports, community group publications, legal documents, statistics, and patient forums.

AIDS Information **www.aidsinfo.nih.gov**
Provides information on Federally and privately approved treatment guidelines for persons with HIV/AIDS.

AIDSmeds.com **www.aidsmeds.com**
AIDSmeds.com contains complete and easy-to-read information on treating HIV and AIDS, including guided treatment lessons, information on drugs, recent news, community forums, great links, and more.

American Foundation for AIDS Research **www.amfar.org**
Basic bio-medical & clinical research.

Antiviral Weekly **www.newsrx.net**
Weekly Antiviral Update information.

CDC National Prevention Information Network **www.cdcnpin.org.**
Resources and information about education, prevention, published materials, research funding and trends.

CDC, Division of AIDS Prevention **www.cdc.gov/nchstp/od/nchstp.html**
National Centers for HIV, STD and TB prevention.

Gay Men's Health Crisis **www.gmhc.org**
New York based, non-profit organization offering support services.

Journal of the American Medical Association **www.ama-assn.org/ama/pub/category/1944.html**
HIV/AIDS topics of interest.

National Institute of Health, Office of AIDS Research **www.nih.gov/od/oar/index.htm**

Project Inform **www.projinf.org**
Non-profit community based organization.

University of California, San Francisco **whatudo.org**
Youth orientated website about HIV and AIDS.

California

AIDS Project Los Angeles **www.apla.org**

California AIDS Clearinghouse **www.hivinfo.org**
HIV prevention, community planning, educational materials, directory & calendar.

State Office of AIDS **www.dhs.ca.gov/AIDS**
The Office of AIDS has lead responsibility for coordinating state programs, services, and activities relating to HIV/AIDS. Up to date state statistics can be accessed.

The Body: California AIDS Services Organization **www.thebody.com**
An AIDS and HIV information resource.

San Diego County

Being Alive **www.beingalive.org**
Non-profit organization delivering quality, compassionate services to people affected by HIV/AIDS. Extensive online guidebook (*HIV Consumer Guidebook*).

The Center **www.thecentersd.org/programs.asp**
A non-profit organization serving the gay, lesbian, bisexual & transgender (GLBT) community. Offer HIV testing, HIV prevention/education, HIV+ support groups, and counseling.

Community Epidemiology, HIV/AIDS Unit **www.sdhivaids.org**
Reports and statistics about HIV and AIDS in San Diego County. Reporting forms and information.

County of San Diego Office of AIDS Coordination **www2.sdcounty.ca.gov/hhsa/**
Offers many HIV services. **ServiceCategoryDetails.asp?ServiceAreaID=27**

AIDS Research Institute **www.ari.ucsd.edu**
University of California, San Diego, dedicated to improving health care for those with HIV.

HIV Consumer Council **www.hivconsumercouncil.org**
Provides information regarding events that involve HIV+ people and to encourage participation of the HIV community of San Diego County in the decision making processes that affect them.

SANDAG - San Diego's Regional Planning Agency **www.sandag.org/index.asp?classid=26&**
Population estimates for San Diego County. **fuseaction=home.classhome**

Appendix 12. County of San Diego HIV/AIDS Telephone Numbers

AIDS Drug Assistance Program (ADAP) **(619) 296-3400 x174**

Provides assistance to eligible individuals in obtaining prescription drugs for the treatment of HIV/AIDS.

HIV Testing Clinics **(619) 296-2120**

Free anonymous and confidential testing to anyone ages 12 or older. Available at several sites.

Office of AIDS Coordination **(619) 296-3400**

Provides the planning and administration of HIV prevention funding and Ryan White Care Act funds for San Diego County, as well as AIDS case management and HIV testing.

Partner Counseling and Referral Services (PCRS) **(619) 296-2120**

Provides assistance to those who want to notify partners of possible exposure to HIV. A free, voluntary and confidential service.

STD (Sexually Transmitted Disease) Clinics **(619) 692-8550**

Low cost/free confidential testing and treatment of STDs to anyone ages 12 or older. Available at several sites.

T-Cell Testing Program **(619) 296-2120**

A one-time, free confidential T-cell test.

Community Epidemiology,
HIV/AIDS Epidemiology
P.O. Box 85222
San Diego, CA 92186-5222