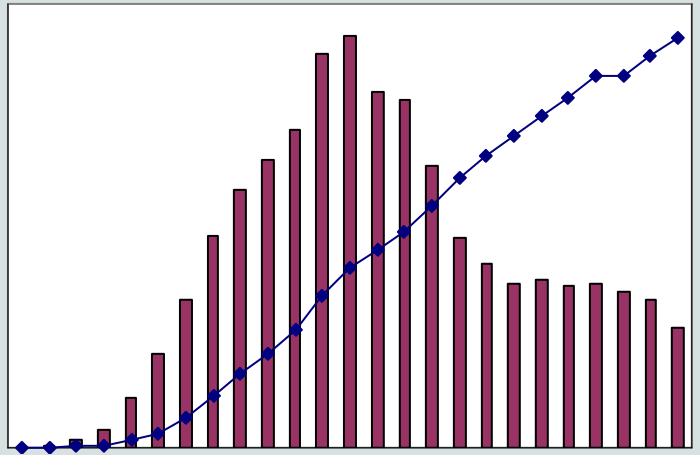


HIV/AIDS

Epidemiology Report

2006



County of San Diego
Health and Human
Services Agency



HIV/AIDS EPIDEMIOLOGY REPORT 2006

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



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I. EXECUTIVE SUMMARY

Overall, the state of California has the second largest number of Acquired Immunodeficiency Syndrome (AIDS) cases in the United States; San Diego County has the third highest number of AIDS cases in the state of California.

AIDS Cases

Since the beginning of the epidemic 12,603 AIDS cases have been reported in San Diego County as of December 31, 2005. The number of new cases has been decreasing each year since 1993, but has been relatively level from 1998-2003 at about 425 cases per year. There has been a slight decline in cases per year in 2004 and 2005. It is anticipated that cases diagnosed in 2004 and 2005 will continue to be reported in 2006.

Individuals diagnosed with AIDS in San Diego County are most commonly white, male, aged 30 to 39 years, and have male sex partners. Over the course of the epidemic there have been slow increases in the proportion of diagnoses in blacks, Hispanics, women, people aged 40 or older, and having used injected drugs.

The decrease in the annual number of AIDS diagnosis has not been uniform across racial/ethnic groups. The largest decrease has been in whites; the proportion of persons of color, including blacks, Hispanics, Asians, Pacific Islanders, and Native Americans has increased. Blacks have had the third highest number of cases per year, but the highest rate of AIDS since the mid-1980s. The annual rate

among blacks is two to three times that seen in whites. Hispanics have the second highest number of cases per year and a rate that is about 1½ times that seen in whites, but less than half that seen in blacks.

The average age at time of diagnosis has been slowly increasing over the years across all racial/ethnic groups. From 2001 to 2005, the average age at the time of diagnosis was 40 years of age with Hispanics being slightly younger (38 years of age) and whites slightly older (42 years of age). With the surveillance data available it is not possible to determine if the increased age is due to later age at HIV infection or successful medications which allow an HIV infected individual to be healthy longer with increased time before he or she meets the case definition for AIDS. It does appear, however, that more cases had greater time between reported HIV infection and AIDS in later years of the epidemic.

The most frequent place of residence at the time of AIDS diagnosis in the Central HHS Region. Sixty percent of male cases and 36% of female cases were living in the Central Region at the time of their diagnosis. The majority of cases diagnosed in this region were in whites (64%) followed by Hispanics (19%) and blacks (15%). In recent years the proportion has declined in whites (51%) and increased in Hispanics (27%) and blacks (19%). The South Region has been second most frequent place of residence at time of diagnosis since 1995. The cumulative cases diagnosed in the South region are predominantly Hispanic (59%) and white

(28%).

For men, the predominant mode of transmission is Men who have Sex with Men (MSM) (79%) followed by MSM and Injecting Drug Use (IDU) (MSM+IDU) (11%). Over the years, heterosexual contact and IDU have become more frequent modes of transmission in men.

In women, heterosexual contact is the primary mode of transmission (52%), followed by IDU (36%). Over the years, heterosexual contact has been increasing while IDU has been decreasing. Sexual partner to an IDU accounts for 21% of all female cases.

Advances in medication 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. Currently, approximately 5,849 individuals diagnosed with AIDS in San Diego County are alive.

HIV Reporting

To increase our understanding of HIV in California, in July 2002, the State of California initiated HIV reporting along with the current practice of AIDS reporting. Unlike in AIDS surveillance, the HIV data reported here was gathered using non-name codes for case identification. The non-name code is composed of the Soundex (a laboratory generated alphanumeric representation of the last name), numerically

coded gender, date of birth and last 4 digits of the social security number. As with other communicable diseases, this is a dual reporting process in which both health care providers and laboratories provide data.

Because the HIV reporting system is relatively new, 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.

All HIV reporting data presented here are inclusive of the period July 1, 2002 through December 31, 2005 for a total of 4,898 HIV case reports. In general, the distribution of demographic variables for those HIV cases reported is similar to that of cumulative AIDS cases in San Diego County. White men between the ages of 30-39 living in the Central Region of the county are most often diagnosed as HIV positive. Women represent about 10% of all HIV cases and the relationship between race and region is less clear in women, perhaps in part due to the smaller numbers. Although whites do have a larger share of female cases than other racial or ethnic groups, the difference by race is not as pronounced as among males.

The distribution of HIV cases by gender appears to be different for San Diego and California, when compared to the United States (Table 18). A smaller proportion of female cases of HIV have been reported in San Diego (10%) and California (14%) than in the United States (30%). However, the distribution by gender in

San Diego County is about the same for HIV (90% male; 10% female) and more recent AIDS cases (89% male; 11% female).

Through the end of 2005, 62% of reported HIV cases in San Diego County were white, 13% black, and 22% Hispanic in San Diego County (Table 19). Asian/Pacific Islander and Native American comprise the remaining 3% of cases. When compared to the United States, California and San Diego have fewer black cases, and more white and Hispanic cases of HIV. Although San Diego 'looks' more like California than the United States, San Diego has considerably higher proportion of white HIV cases (62% vs. 49%) than the state as a whole.

Those in the age group 30-39 are most frequently diagnosed with HIV in both the state and county, similar to AIDS case data. At the state and local level, a greater proportion of HIV cases are in the 20-29 year age group at the time of diagnosis compared to AIDS cases (26% vs. 15% California; 33% vs. 17% San Diego). This is expected given the natural history of the disease and current medical treatment. National data of reported HIV cases by age group is not available.

Age at diagnosis does not change; however, individuals continue to age. The current age of living cases (as of 2005) presents a shift in age groups toward older ages: only 45 cases of children and youth are under 20, while 739 cases are 50 years of age or older, compared to 144 and 251 respectively at diagnosis (Table 20).

Most of the county's HIV cases, 65%, were residing in the Central Region at the time of diagnosis, with the North Central and South Regions having the next highest proportion of cases (12% and 10% respectively). North Coastal, North Inland, and East Regions shared the remaining 13% of cases (Table 21).

The distribution of cases by gender and transmission are quite different. For adult males, 80% of cases are attributed to MSM, while for females, the majority of cases, 62%, are due to heterosexual contact (Table 22). For males, the other modes of transmission are MSM+IDU, 7%, IDU, 4%, heterosexual contact, 4%, and 4% not specified/other, while for females, the other modes of transmission are IDU, 20%, and 14% not specified/other. 'Other' can include hemophilia, and transfusion/transplant, and maternal transmission.

Compared to the nation, San Diego has a larger proportion of MSM among adult male cases (80% versus 48%), and a lower proportion of IDU and not specified/other (4% versus 13% and 4% versus 24%). Among adult females, San Diego has a larger proportion of heterosexual transmission (62% versus 45%) and a lower proportion of not specified/other (14% versus 36%) 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.

Through 12/31/2005, there have been 37 pediatric cases of HIV reported in San Diego

County, representing less than 1% of all cases. Of the 37 cases reported, 23 were under 5 years of age at diagnosis and 14 were between the ages of 5 and 12 at diagnosis.

I. AIDS CASES

Table 1: AIDS Diagnoses in Adults/Adolescents by Gender in the United States, the State of California, and San Diego County

Gender	United States Through 12/31/2004*		California Through 12/31/2005		San Diego County Through 12/31/2005		San Diego County 2003-2005	
	#	%	#	%	#	%	#	%
Male	756,399	81%	127,400	92%	11,609	93%	1,016	89%
Female	178,463	19%	11,398	8%	934	7%	127	11%
Total	934,862		138,798		12,543		1,143	

*Most recent year available

Table 2: AIDS Cases, Deaths, and Cumulative¹ Fatality Rates in San Diego County, the State of California, and the United States

San Diego County	
New cases reported 2005	323
Deaths reported in 2005	15
Cumulative cases	12,603
Cumulative deaths	6,739
Living Cases	5,864
Cumulative ¹ case-fatality rate	53%
California²	
Cumulative cases	139,449
Cumulative deaths	81,214
Living cases	58,235
Cumulative case-fatality rate	58%
United States³	
Cumulative cases	944,306
Cumulative deaths	529,113
Living cases	415,193
Cumulative case-fatality rate	56%

¹Cumulative case-fatality rate is calculated by dividing the estimated cumulative deaths by the cumulative cases.

²California Office of AIDS. AIDS Surveillance Report for California, December 31, 2005.

³Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report 2004, Vol.16.

Figure 1: AIDS Cases by Year of Diagnosis, San Diego County

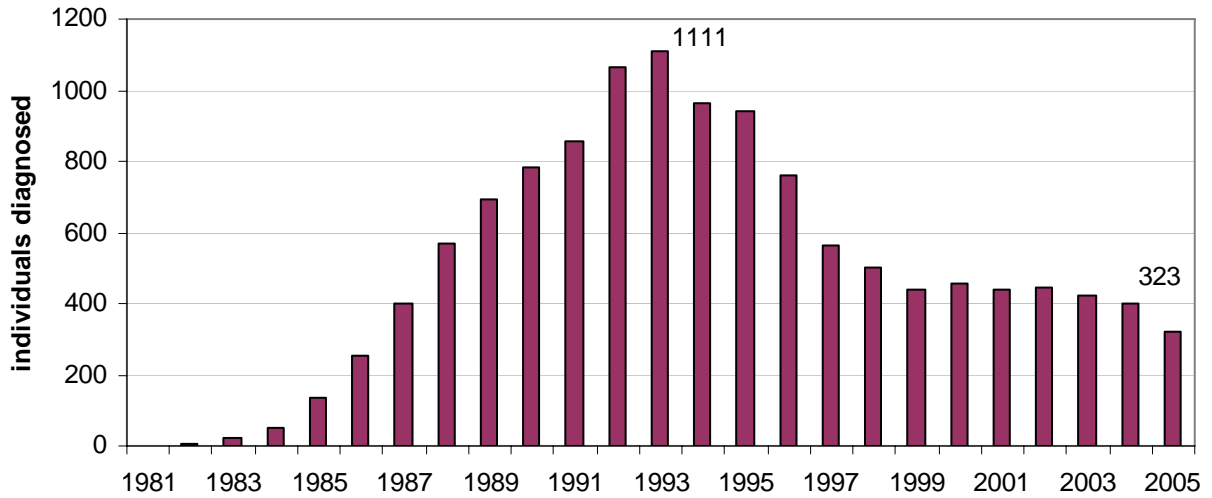


Figure 2: AIDS Cases by Year of Diagnosis and Report, San Diego County

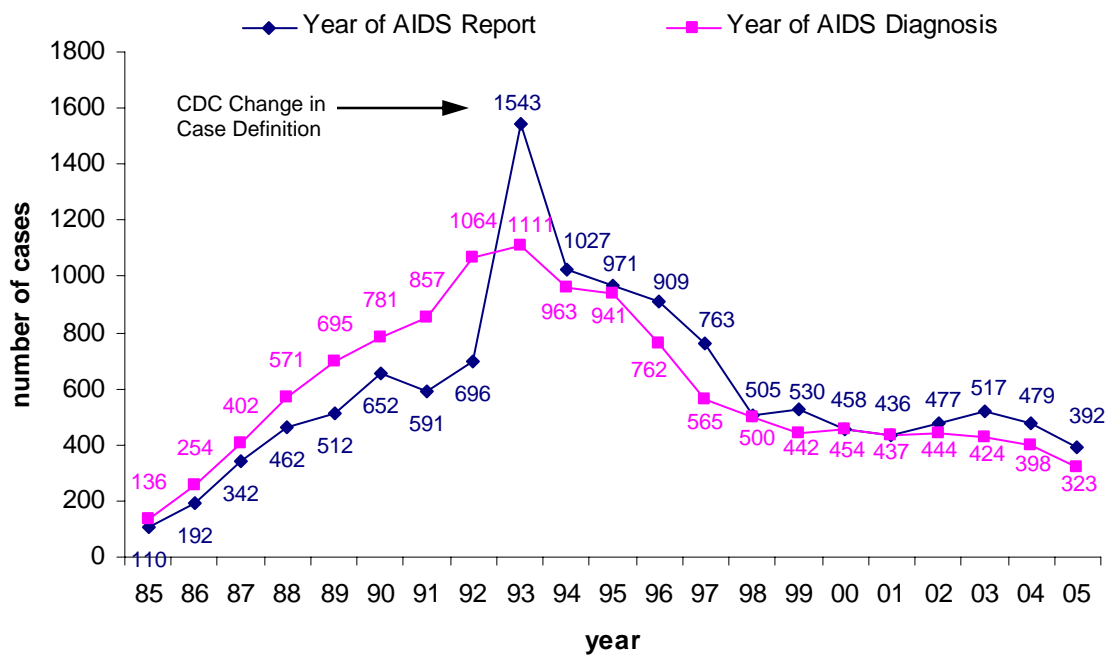
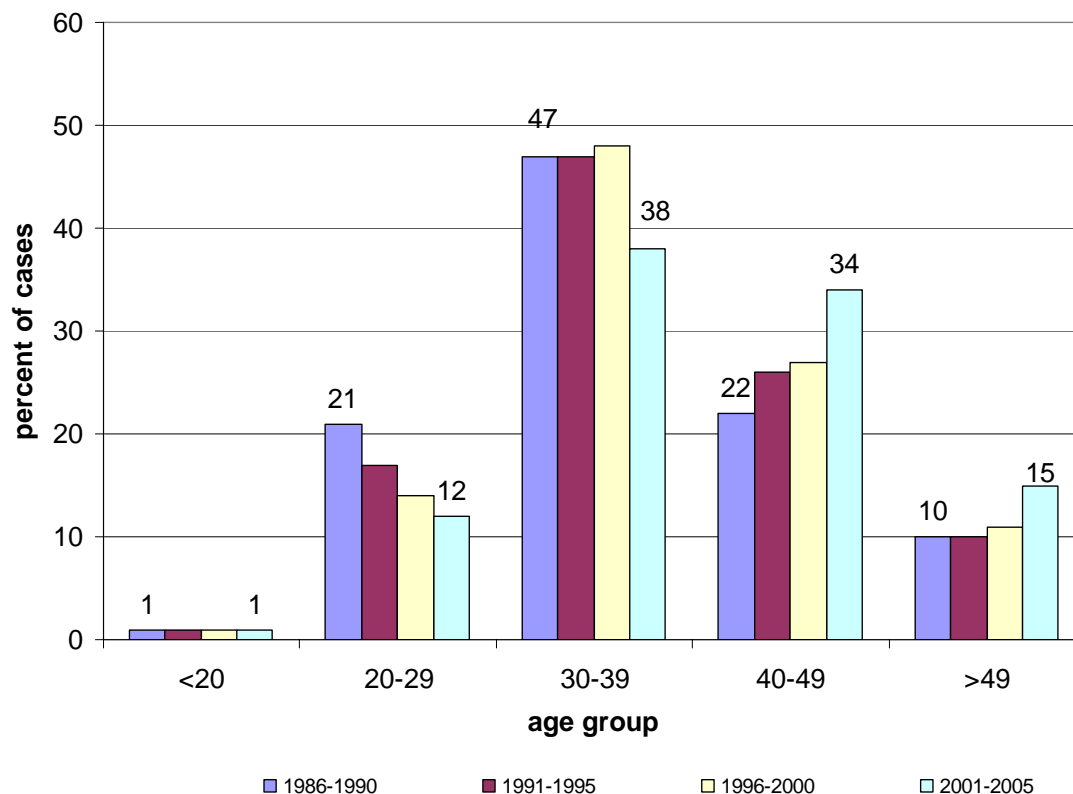


Figure 3: AIDS Cases by Age Group at Time of Diagnosis, San Diego County**Table 3: Age Group of AIDS Case at Diagnosis and in 2005, San Diego County**

Age Group, Years	At Diagnosis			In 2005*		
	Frequency	Percent	Cumulative Percent	Frequency	Percent	Cumulative Percent
Less than 13	60	0.5%	0.5%	12	0.2%	0.2%
13-19	55	0.4%	0.9%	18	0.3%	0.5%
20-29	2,065	16.4%	17.3%	189	3.2%	3.7%
30-39	5,709	45.3%	62.6%	1,306	22.3%	26.0%
40-49	3,351	26.6%	89.2%	2,704	46.1%	72.1%
More than 49	1,363	10.8%	100.0%	1,635	27.9%	100.0%
Total	12,603	100.0%		5,864	100.0%	

*Of those living in 2005

Figure 4: AIDS Cases Diagnosed in Time Period and Percent of Cases in Persons of Color, San Diego County

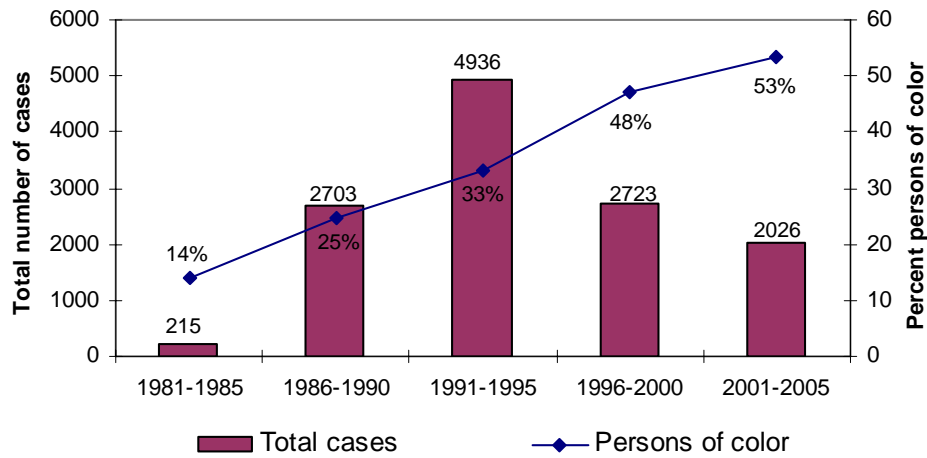
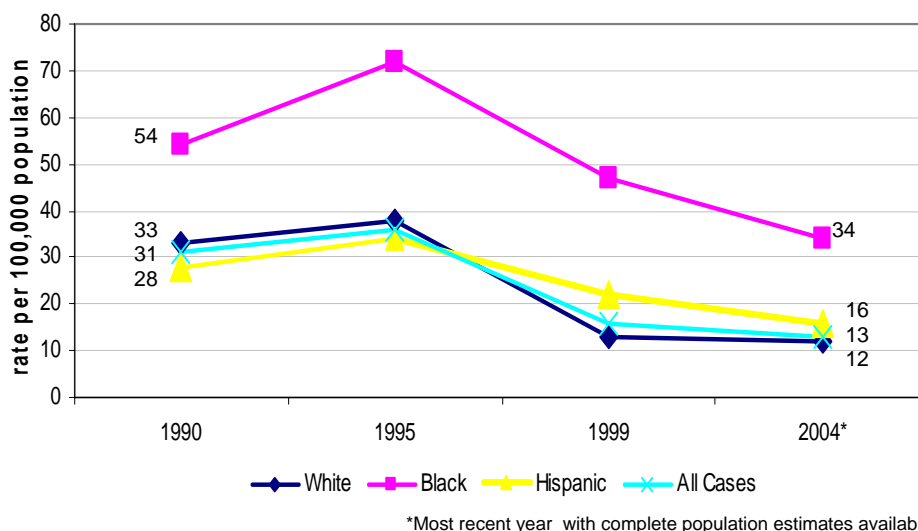


Table 4: AIDS Rate by Racial/Ethnic Group and Year of Diagnosis, San Diego County

Race/ Ethnicity		Year of Diagnosis				
		2000	2001	2002	2003	2004*
White	Cases in group	204	202	217	176	188
	% of Total cases	45%	46%	49%	42%	47%
	Rate per 100,000	13	13	13	11	10
Black	Cases in group	71	73	73	77	55
	% of Total cases	16%	17%	16%	18%	14%
	Rate per 100,000	47	47	47	48	30
Hispanic	Cases in group	163	145	140	156	140
	% of Total cases	36%	33%	32%	37%	35%
	Rate per 100,000	22	18	17	18	14
All Races/ Ethnicities	Cases in group	454	437	444	424	398
	Rate per 100,000	16	15	15	14	11

*Most recent year for which population estimates are available.

Figure 5: Rate of AIDS Cases by Race/Ethnicity Over Time, San Diego County**Table 5: AIDS Cases by Age-Related Measurements and Race/Ethnicity Over 5-Year Time Periods, San Diego County**

Time Period	Age-Related Measure	Race/Ethnic Group				All Cases
		White	Black	Hispanic	Other*	
1986-1990	mean age, years	37	33	34	35	37
	oldest case	88	58	75	34	88
	youngest case	birth	birth	birth	16	birth
	total cases	2035	261	365	42	2703
1991-1995	mean age, years	38	36	35	36	37
	oldest case	78	71	74	69	79
	youngest case	1	birth	birth	birth	birth
	total cases	3,295	573	931	137	4,936
1996-2000	mean age, years	39	38	36	35	38
	oldest case	92	71	78	53	92
	youngest case	10	birth	birth	20	birth
	total cases	1413	408	818	84	2,723
2001-2005	mean age, years	42	40	38	38	40
	oldest case	80	55	73	48	84
	youngest case	4	13	birth	17	birth
	total cases	945	314	698	69	2,026
Cumulative (1981-2005)	mean age, years	39	37	36	36	38
	oldest case	92	71	78	73	92
	youngest case	birth	birth	birth	birth	birth
	total cases	7,873	1,564	2,832	334	12,603

*Includes Asian, Pacific Islander, Native American and other races/ethnicities

Table 6: AIDS Case Distribution by HHSA Region Over Time, San Diego County

Time Period of Diagnosis	HHSA Region					
	Central	East	South	North Coastal	North Inland	North Central
1981-1985	54%	6%	3%	8%	5%	24%
1986-1990	61%	7%	6%	6%	4%	15%
1991-1995	60%	7%	7%	8%	5%	14%
1996-2000	57%	7%	13%	8%	5%	11%
2001-2005	53%	8%	17%	8%	4%	11%
Total in Region	7327	888	1225	946	571	1646

Note: Percentages may not total 100 due to rounding.

Table 7: AIDS Case Distribution by Race/Ethnic Group and HHSA Region, San Diego County

Race/Ethnicity	HHSA Region					
	Central	East	South	North Coastal	North Inland	North Central
White	64%	67%	28%	65%	67%	75%
Black	15%	12%	10%	10%	5%	8%
Hispanic	19%	19%	59%	22%	24%	14%
Asian/PI	2%	2%	3%	3%	4%	3%
Native American	1%	1%	1%	1%	1%	1%
Total in Region	7327	888	1225	946	571	1646

Note: Percentages may not total 100 due to rounding.

Table 8: Female AIDS Case Distribution by HHSA Region Over Time, San Diego County

HHSA Region	Time Period of Diagnosis									
	1986-1990		1991-1995		1996-2000		2001-2005		Cumulative*	
	% female	total cases	% female	total cases	% female	total cases	% female	total cases	% female	total cases
Central	3%	1,654	4%	1,654	8%	2,946	10%	1,545	5%	7,327
East	9%	197	10%	197	14%	332	16%	191	11%	888
South	12%	172	12%	172	11%	359	13%	351	12%	1,225
North Coastal	11%	165	12%	165	14%	388	15%	216	12%	946
North Inland	17%	106	14%	106	15%	841	14%	123	14%	571
North Central	5%	409	8%	409	11%	670	5%	297	7%	1,646
Total	5%	2,703	7%	2,703	10%	4,936	11%	2,723	8%	12,603

*includes cases from 1981-2005.

Table 9: AIDS Case Distribution by Race/Ethnic Group and HHSA Region Over Time, San Diego County

HHSA Region	Time Period	Race/Ethnicity				Total in Time Period
		White	Black	Hispanic	Other*	
Central	1986-1990	76%	11%	12%	1%	1,659
	2001-2005	51%	19%	27%	4%	1,062
East	1986-1990	81%	7%	10%	3%	197
	2001-2005	48%	16%	33%	2%	155
South	1986-1990	42%	12%	44%	2%	172
	2001-2005	19%	7%	72%	2%	336
North Coastal	1986-1990	75%	10%	13%	2%	165
	2001-2005	45%	15%	35%	6%	159
North Inland	1986-1990	81%	3%	13%	3%	106
	2001-2005	53%	9%	33%	4%	90
North Central	1986-1990	84%	5%	10%	2%	409
	2001-2005	68%	13%	15%	4%	219

*Includes Asian/Pacific Islander and Native American and other races/ethnicities.
 Note: Percentages may not total 100 due to rounding.

Figure 6: Mode of Transmission for Male AIDS Cases, San Diego County (n=11,641)

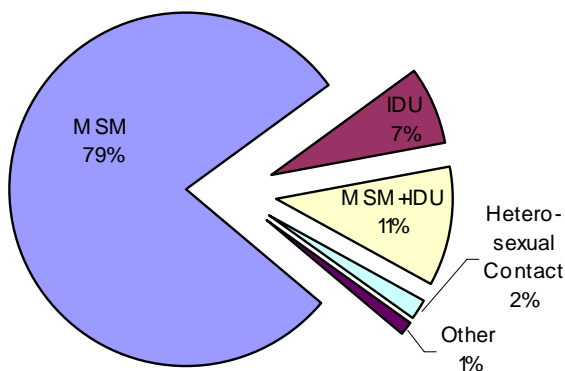


Figure 7: Mode of Transmission for Female AIDS Cases, San Diego County (n=962)

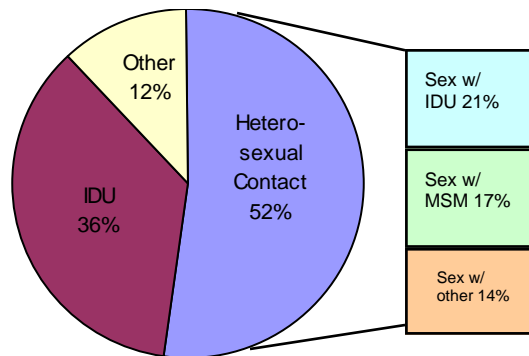


Table 10: Adult/Adolescent Male AIDS Cases by Mode of Transmission, Race/Ethnic Group, and Time Period, San Diego County

Mode of Transmission	Racial/Ethnic Group						All Racial/ Ethnic Groups	
	White		Black		Hispanic		1991- 1995	2001- 2005
	1991- 1995	2001- 2005	1991- 1995	2001- 2005	1991- 1995	2001- 2005		
MSM	84%	75%	65%	64%	76%	76%	80%	74%
IDU	4%	8%	17%	17%	11%	10%	7%	10%
MSM+IDU	11%	13%	16%	9%	11%	6%	11%	10%
Heterosexual	<1%	3%	2%	9%	1%	8%	1%	5%
Contaminated blood products	2%	1%	1%	0%	2%	<1%	1%	1%
Not specified/Other	<1%	<1%	0%	2%	1%	<1%	<1%	1%
Number in Group	3,128	882	495	263	596	51	4,581	1,803

Note: Percentages may not total 100 due to rounding.

Table 11: Adult/Adolescent Female AIDS Cases by Mode of Transmission, Race/Ethnic Group, and Time Period, San Diego County

Mode of Transmission	Racial/Ethnic Group						All Racial/ Ethnic Groups	
	White		Black		Hispanic		1991- 1995	2001- 2005
	1991- 1995	2001- 2005	1991- 1995	2001- 2005	1991- 1995	2001- 2005		
IDU	45%	42%	47%	28%	30%	16%	40%	26%
Heterosexual	44%	55%	48%	73%	57%	78%	49%	70%
Contaminated blood products	9%	0%	6%	0%	11%	1%	10%	<1%
Not specified/Other	2%	3%	0%	0%	1%	5%	2%	4%
Number in Group	164	62	71	51	70	100	329	220

Note: Percentages may not total 100 due to rounding.

Table 12: AIDS Cases by Gender, Mode of Transmission and Time Period, San Diego County

Gender	Mode of Transmission	Time Period of Diagnosis				Cumulative*
		1986-1990	1991-1995	1996-2000	2001-2005	
Male	Adolescent/Adult:					
	Homosexual/Bisexual (MSM)	84%	80%	76%	74%	79%
	Injecting Drug Use (IDU)	4%	7%	9%	10%	7%
	MSM+IDU	9%	11%	13%	10%	11%
	Heterosexual	1%	1%	2%	5%	2%
	Contaminated blood/blood product	2%	1%	1%	1%	1%
	Risk not specified/other	<1%	<1%	<1%	<1%	<1%
	Pediatric (0-12 years):					
	All modes	<1%	<1%	<1%	<1%	<1%
	Number in Group	2,568	4,596	2,461	1,805	11,641
Female	Adolescent/Adult:					
	Injecting Drug Use (IDU)	32%	39%	43%	26%	36%
	Heterosexual	38%	47%	52%	69%	52%
	Contaminated blood/blood product	22%	9%	2%	1%	7%
	Risk not specified/other	0%	1%	2%	2%	1%
	Pediatric (0-12 years):					
	All modes	<1%	<1%	<1%	<1%	<1%
Number in Group	135	340	262	221	962	

*1981-2005

Note: Percentages may not total 100 due to rounding.

Table 13: Hispanic AIDS Cases by Gender, Place of Birth, and Time Period, San Diego County

Gender	Place of Birth	Time Period of Diagnosis				Cumulative*
		1986-1990	1991-1995	1996-2000	2001-2005	
Male	US born	53%	51%	36%	26%	41%
	US dependency born	5%	2%	2%	1%	2%
	Foreign born	43%	47%	62%	73%	57%
	Unknown	0%	0%	0%	1%	<1%
	Number in time period	333	852	737	597	2538
Female	US born	53%	39%	37%	23%	35%
	US dependency born	6%	5%	1%	2%	3%
	Foreign born	41%	56%	62%	75%	62%
	Number in time period	32	79	81	101	294

*Includes cases from 1981-2005.

Note: Percentages may not total 100 due to rounding.

Table 14: Hispanic AIDS Cases by Ethnic Origin, San Diego County

Ethnic Origin	Number	Percent
Mexian	2,319	81.9
Hispanic, not specified	234	8.2
Puerto Rican	109	3.8
Central American	52	1.8
South American	50	1.8
Spain/Portugal	33	1.2
Cuban	30	1.1
Dominican	5	0.2
Total	2,832	100

Table 15: Asian/Pacific Islander AIDS Cases by Ethnic Origin, San Diego County

Ethnic Origin	Number	Percent
Filipino	137	53.3
Chinese	20	7.8
Japanese	17	6.6
Vietnamese	17	6.6
Asian, not specified	14	5.5
Guamanian	12	4.7
Hawai'in	10	3.9
Laotian	6	2.3
Samoan	6	2.3
Thai	4	1.6
Cambodian	3	1.2
Korean	2	0.8
Asian Indian	2	0.8
Other*	7	2.6
Total	257	100

*Includes Indonesian, Burmese, East Indian, Pacific Islander, Tongan, Fijian, and Micronesian

Table 16: Community of Residence at Time of AIDS Diagnosis, San Diego County

Community	Number	Percent
San Diego	9,287	73.7
Chula Vista	423	3.4
Oceanside	367	2.9
El Cajon	248	2.0
Escondido	240	1.9
Vista	196	1.6
La Mesa	186	1.5
National City	178	1.4
Spring Valley	170	1.3
San Ysidro	164	1.3
La Jolla	140	1.1
Carlsbad	130	1.0
Santee	93	0.7
Lemon Grove	92	0.7
Encinitas	87	0.7
Imperial Beach	85	0.7
San Marcos	76	0.6
Lakeside	47	0.4
Poway	43	0.3
Fallbrook	40	0.3
Coronado	38	0.3
Del Mar	38	0.3
Bonita	32	0.3
Ramona	28	0.2
Cardiff-by-the-Sea	20	0.2
Leucadia	20	0.2
Other*	135	1.0
Total	12,603	100.0

*The following communities had fewer than 20 cases each: Alpine, Bonsall, Borrego Springs, Boulevard, Camp Pendleton, Campo, Descanso, Dulzura, Guatay, Jamul, Julian, Mount Laguna, Pauma Valley, Pine Valley, Ranchita, Rancho Santa Fe, San Luis Rey, Santa Ysabel, Solana Beach, Valley Center.

Table 17: Frequency of Indicator Diseases Among All Reported AIDS Cases (Adult/Adolescent and Pediatric) and Among those Diagnosed in 2001-2005, San Diego County

Indicator Disease*	Cumulative		2001-2005	
	Frequency	Percent**	Frequency	Percent**
CD4 count<200/ μ L or <14%	3,984	32%	1,316	65%
<i>Pneumocystitis carinii</i> pneumonia	3,484	28%	203	10%
Wasting syndrome	2,034	16%	164	8%
Kaposi's sarcoma	1,557	12%	60	3%
<i>Mycobacterium avium</i> complex or <i>M. kansasii</i>	1,088	9%	19	1%
Candidiasis, esophageal	994	8%	87	4%
HIV encephalopathy	810	6%	24	1%
Cytomegalovirus	737	6%	44	2%
Cytomegalovirus retinitis	610	5%	12	1%
Cryptosporidiosis	476	4%	19	1%
<i>M. tuberculosis</i> , pulmonary	469	4%	94	5%
Immunoblastic lymphoma	428	3%	28	1%
Herpes simplex, invasive or chronic	299	2%	12	1%
Toxoplasmosis of the brain	294	2%	15	1%
<i>M. tuberculosis</i> , disseminated or extrapulmonary	272	2%	63	3%
Lymphoma, primary of the brain	181	1%	4	<1%
Progressive multifocal leukoencephalopathy	178	1%	10	1%
Pneumonia, recurrent in 12-month period	116	1%	15	1%
Candidiasis, pulmonary	81	1%	6	<1%
<i>Mycobacterium</i> , of other species	64	1%	3	<1%
Coccidiomycosis	58	1%	7	<1%
Burkitt's lymphoma	54	<1%	19	1%
Histoplasmosis	52	<1%	4	<1%
Isosporiasis	26	<1%	0	
Salmonella septicemia	26	<1%	1	<1%
Lymphoid interstitial pneumonia	21	<1%	2	<1%
Recurrent bacterial infections	8	<1%	0	
Carcinoma, invasive cervical	2	<1%	0	

*May not be a complete list of all indicator diseases experienced by every case.

**Total percent will not total 100 because each case may experience more than one indicator disease.

Figure 8: Number of Persons Diagnosed (n=12,603) and Living (n=5,534) With AIDS, San Diego County

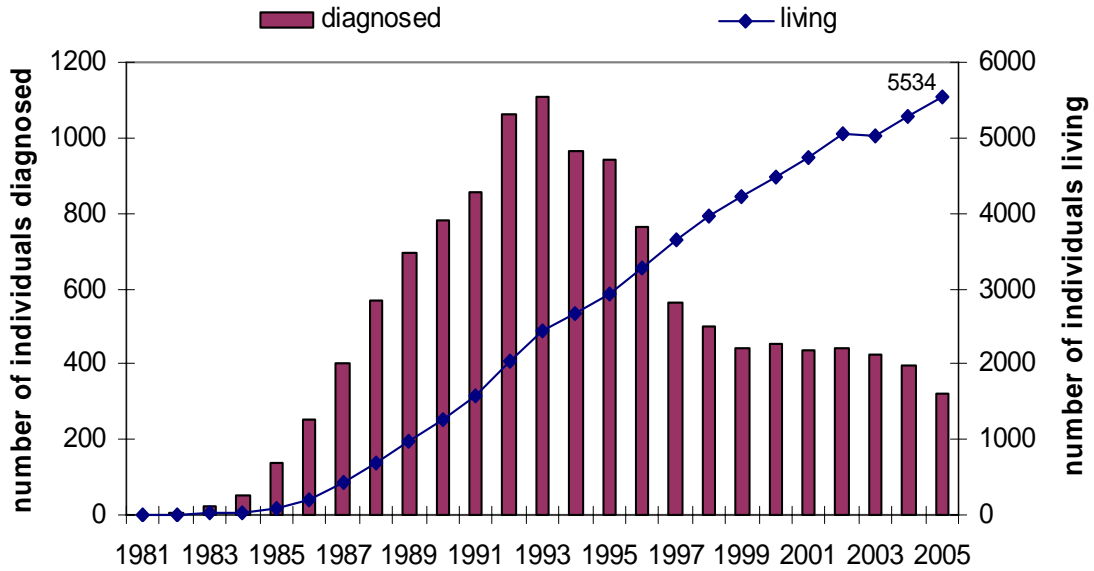
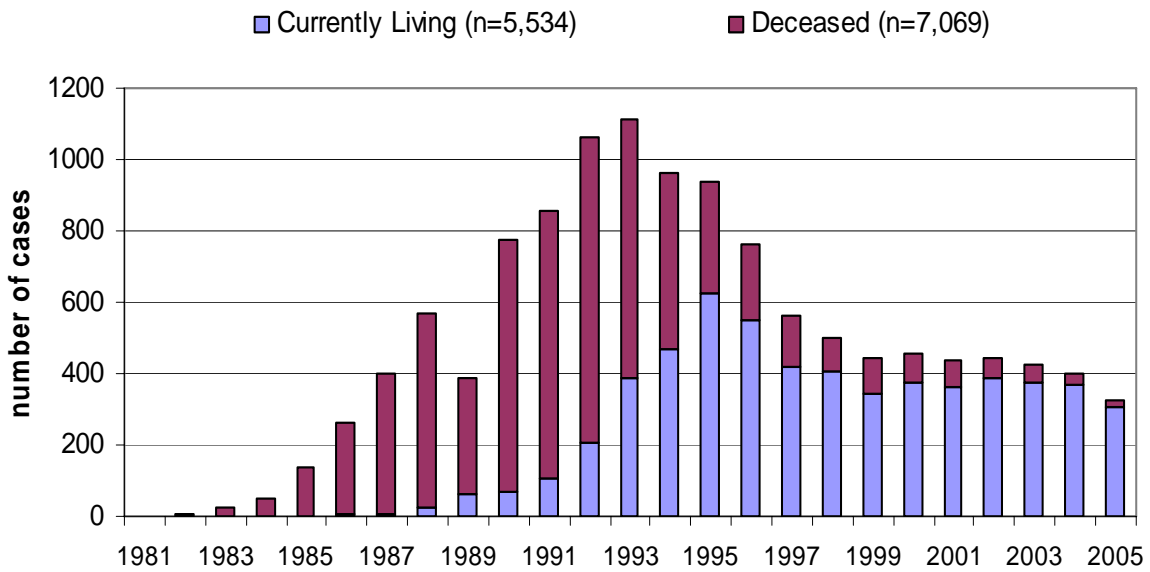


Figure 9: AIDS Cases by Year of Diagnosis and Status, San Diego County



III. HIV CASES

Table 18: Adult/Adolescent HIV Cases by Gender and Area of Residence, San Diego County

Gender	United States		California		San Diego County	
	Through 12/31/04*		Through 12/31/05		Through 12/31/05	
	no.	%	no.	%	no.	%
male	157,047	70%	34,016	85%	4,329	89%
female	67,543	30%	5,487	14%	508	10%
transgendered	**	**	375	1%	24	<1%
unknown	7	<1%	2	<1%	0	0%
Total	224,597		39,880		4,861	

*Last year with data available.

** Not collected or not reported

Note: Percent may not total 100 due to rounding.

Table 19: Adult/Adolescent HIV Cases by Race/Ethnicity and Area of Residence, San Diego

Racial/Ethnic Group	United States		California		San Diego County	
	Through 12/31/04*		Through 12/31/05		Through 12/31/05	
	no.	%	no.	%	no.	%
Black	109,991	49%	7,737	19%	632	13%
Hispanic	33,640	15%	10,297	26%	1068	22%
White	76,703	34%	19,369	49%	3003	62%
Other	2,374	1%	1,475	4%	158	3%
Unknown	1889	1%	1002	3%	0	0%
Total	224,597		39,880		4,861	

*Most recent year with data available.

Table 20: HIV Cases Age at Diagnosis and in 2005, San Diego County

age group	age at diagnosis		current age*	
	number	percent	number	percent
under 20	144	2.9	45	0.9
20-29	1613	32.9	545	11.4
30-39	2030	41.4	1607	33.5
40-49	860	17.6	1865	38.8
50+	251	5.1	739	15.4
total	4898	100	4801	100

*Of those living in 2005.

Table 21: HIV Cases by HHS Region and Race/Ethnicity, San Diego County

Race/Ethnicity	HHS Region						Total
	Central	East	South	North Coastal	North Inland	North Central	
White	63.3%	36.6%	27.3%	65.1%	66.7%	75.6%	61.5%
Black	14.6%	11.4%	10.7%	12.9%	6.0%	9.9%	13.0%
Hispanic	18.9%	21.5%	58.5%	17.6%	24.0%	11.3%	22.2%
Asian/PI	1.9%	2.4%	2.9%	3.8%	3.3%	2.9%	2.3%
Native American	1.2%	1.0%	0.5%	0.6%	0.0%	0.3%	0.9%
Total	3,031	297	484	318	183	585	4,898

Table 22: HIV Cases by Mode of Transmission and Gender, San Diego County

Gender	Mode of Transmission	Cumulative*	%
	Male	Adolescent/Adult:	
Homosexual / Bisexual (MSM)		3,480	79.6%
Injection Drug Use (IDU)		192	4.4%
MSM + IDU		321	7.3%
Heterosexual		174	4.0%
Transfusion/Transplant/Hemophiliac		11	0.3%
Risk Not Specified/Other		175	4.0%
Pediatric (0 – 12 years):			
All modes of transmission	18	<1%	
Number in Group		4,371	
Female	Adolescent/Adult:		
	Injection Drug Use (IDU)	105	19.9%
	Heterosexual	328	62.2%
	Transfusion/Transplant/Hemophiliac	1	<1%
	Risk Not Specified/Other	74	14.0%
	Pediatric (0 – 12 years):		
	All modes of transmission	19	3.6%
Number in Group		527	

*HIV reporting began in July 2002 and retrospective case finding continues.

Figure 10: Adult/Adolescent Male HIV Cases by Modes of Transmission, San Diego County

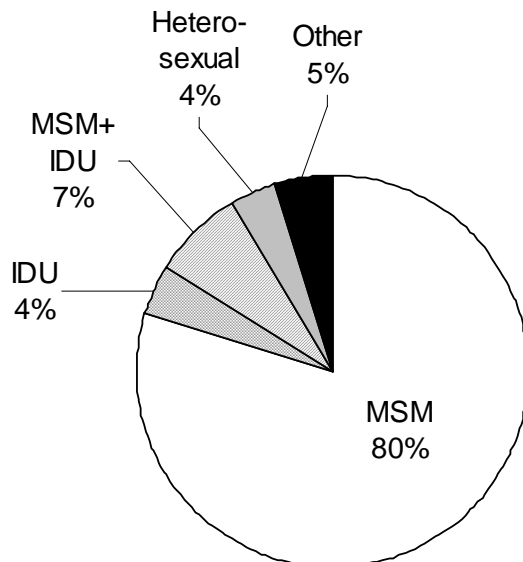


Figure 11: Adult/Adolescent Female HIV Cases by Modes of Transmission, San Diego County

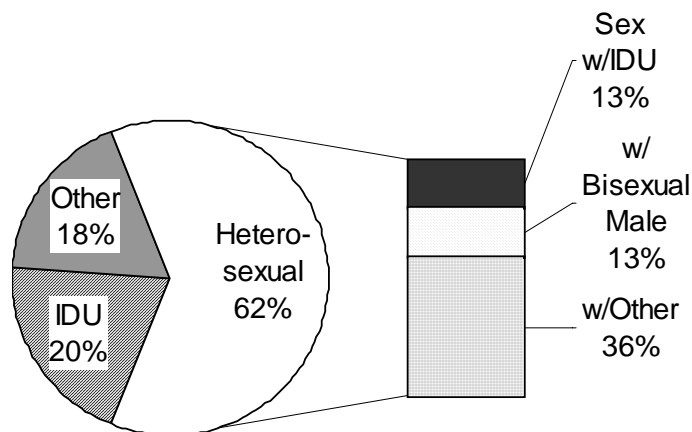


Table 23: Adult/Adolescent Male HIV Cases by Mode of Transmission and Race/Ethnicity, San Diego County

Mode of Transmission	White		Black		Hispanic		Asian/PI		Native American		Total	
	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%
MSM	2297	82.1	318	63.2	760	82.6	78	83.9	27	29.0	3480	79.9
IDU	108	3.9	46	9.1	32	3.5	1	1.1	5	5.4	192	4.4
MSM+IDU	231	8.3	40	8.0	42	4.6	4	4.3	4	4.3	321	7.4
Heterosexual	79	2.8	56	11.1	34	3.7	3	3.2	2	2.2	174	4.0
Blood products	7	0.3	1	0.2	3	0.3	0	0.0	0	0.0	11	0.3
Risk not specified	75	2.7	42	8.3	49	5.3	7	7.5	2	2.2	175	4.0
Total	2797	100	503	100	920	100	93	100	40	100	4353	100

Table 24: Adult/Adolescent Female HIV Cases by Mode of Transmission and Race/Ethnicity, San Diego County

Mode of Transmission	White		Black		Hispanic		Asian/PI		Native American		Total	
	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%
IDU	66	32.0	26	20.2	12	8.1	1	5.0	0	0.0	105	20.7
Heterosexual	117	56.8	82	63.6	109	73.6	16	80.0	4	20.0	328	64.6
Blood products	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	1	0.2
Risk not specified	23	11.2	20	15.5	27	18.2	3	15.0	1	5.0	74	14.6
Total	206	100	129	100	148	100	20	100	5	100	508	100

Table 25: Hispanic HIV Cases by Ethnic Origin, San Diego County

Ethnic origin	Number	Percent
Mexican	873	80.3
Hispanic, non-specific	157	14.4
South American	19	1.7
Puerto Rican	14	1.3
Central American	15	1.4
Cuban	4	0.4
Spain / Portugal	3	0.3
Dominican	2	0.2
Total	1087	100.0

Table 26: Asian HIV Cases by Ethnic Origin, San Diego County

Ethnic origin	Number	Percent
Filipino	53	46.1
Asian, non-specific	27	23.5
Vietnamese	7	6.1
Japanese	6	5.2
Chinese	4	3.5
Asian Indian	3	2.6
Cambodian	3	2.6
Guamanian Islander	3	2.6
Korean	2	1.7
Thai	2	1.7
Hawaiian	1	0.9
Pakistani	1	0.9
Indonesian	1	0.9
Pacific Islander	1	0.9
Singaporean	1	0.9
Total	115	100.0

Table 27: HIV Cases by Community of Residence at Time of Diagnosis, San Diego County

Community of Residence	Number	Percent
San Diego	3742	76.4
Chula Vista	171	3.5
Oceanside	131	2.7
El Cajon	105	2.1
Vista	86	1.8
Escondido	81	1.7
San Ysidro	72	1.5
National City	66	1.3
La Mesa	59	1.2
Imperial Beach	38	0.8
La Jolla	39	0.8
Spring Valley	38	0.8
Carlsbad	41	0.8
Lemon Grove	32	0.7
Santee	29	0.6
Encinitas	28	0.6
Lakeside	19	0.4
San Marcos	18	0.4
Poway	15	0.3
Bonita	10	0.2
Del Mar	10	0.2
Ramona	12	0.2
Other*	56	1.1
Total	4898	100.0

* The following communities had 9 or fewer cases: Alpine, Bonsall, Borrego Springs, Camp Pendleton, Campo, Cardiff By The Sea, Coronado, Fallbrook, Jamul, Julian, Pine Valley, Rancho Santa Fe, Santa Ysabel, Solana Beach, Valley Center, Warner Springs.

IV. APPENDICES

Appendix 1. Glossary

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

Case Fatality Rate—The number of deaths due to a disease within a specified time period divided by the number with that disease in the same time period, multiplied by 100.

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

Incidence Rate—The number of cases of a disease per specified time period divided by the population at risk, often expressed per 100,000. Incidence rates are useful for comparison of selected factors to demonstrate severity of the epidemic among different ages, gender, and racial/ethnic groups.

Mode of Transmission—The way in which a disease is passed from one person to another. In describing HIV/AIDS cases it identifies how an individual may have been exposed to HIV, such as having injected drugs, or homosexual or heterosexual contact.

Prevalence—The number of all live cases (old and new) of a given disease within a specified time period.

Prevalence Rate—The number of all live cases (new and old) of a given disease within a specified time period divided by the population at risk, often expressed per 100,000. Prevalence rates are useful for comparison of selected factors to demonstrate the severity of the epidemic among individuals of different ages, gender, and racial/ethnic groups.

Risk Group—Used in HIV Counseling and Testing to assign client's risk of HIV transmission based on his or her behavior. See Appendix 10.

Year of Diagnosis—The year in which an individual met the CDC case definition for HIV or AIDS.

Year of Report—The year in which an HIV/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 HHS pursuant to California Code of Regulations, Health & Safety Statutes, Title 17, Section 2643.5 and 2500. Reports come from physicians, other health care providers, hospitals, and clinics via HIV/AIDS Case Report forms; individuals with AIDS are reported by name and those with HIV (not AIDS) are reported by 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.

The HIV and AIDS case data used to generate reports may have several limitations as listed below:

1. **Under-reporting of cases** - HIV and AIDS cases for which notification to Community Epidemiology is delayed results in “under-reporting”. Delays in reporting are graphically obvious in recent (2003 and 2004) years. It is likely that cases diagnosed in 2005 will continue to be reported in 2006.
2. **Diagnosis date versus report date** - Reporting delays impact the available data. Those cases **diagnosed** in 2004, for example, may not have been reported to the Health and Human Services Agency until 2005 or later. It is likely that cases diagnosed in 2005 will continue to be reported in 2006. See *Appendix 1, Glossary* for Year of Diagnosis and Year of Report.
3. **Collection tools** - While information on a variety of variables is collected, it is still limited. Data on 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 cases** - Persons with HIV or AIDS diagnosed elsewhere and relocating to San Diego County after diagnosis, are not represented in 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.
5. **Asian/Other Category** - Asian/Pacific Islander and Native American racial/ethnic groups are sometimes grouped into one category, Asian/Other, to allow for adequate case numbers for analysis.
6. **Confidentiality** - Charts and graphics with small cell sizes (under 5) may not be described in detail where identification of persons may occur.
7. **Changes in CDC Criteria for AIDS Case Definition** - Since 1981, the CDC has changed the AIDS Case definition multiple times to include more diagnostic criteria. These changes in definition distort observed trends. The peak in AIDS cases is likely the result of the 1993 change in the case definition.
8. **Limited Time Collecting Data.** HIV infection, without an AIDS defining condition, has only been reportable in California since July 2002. Because of the relatively short time it has been reportable and the differences in report method (non-name code), HIV data may be skewed to primarily represent the patients of those facilities that have been able to more easily adopt HIV reporting.

Appendix 3. Reporting HIV and AIDS Cases for Health Care Providers

Who is responsible for reporting HIV and AIDS cases?

Every health care provider knowing of or in attendance on a case or suspected case of a HIV or AIDS is required to make a report. (California Code of Regulations, Health & Safety Statutes, Title 17, Section 2643.5 and Section 2500).

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
- P24 antigen test
- Viral isolation test

Providers should report an individual newly positive for HIV as well as those the health care provider (ordering the test) has never reported and has no verification that the individual has already been reported with HIV. If an individual meets the case definition for AIDS, they are reported again.

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. The provider should report a case even if the patient may have been reported by another provider. This helps ensure complete case capture, which is critical for local prevention and treatment funding. Health care providers are required to complete a report within 7 days of learning of the HIV test.

When is AIDS Reported?

When an individual is diagnosed with one or more of the AIDS defining conditions listed below, his or her 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 $<200 \text{ mL/mm}^3$ or $<14\%$ of total T-lymphocytes
- * Candidiasis of the bronchi, trachea, or lungs
- * Candidiasis, esophageal
- * Cervical cancer, invasive
- * Coccidioidomycosis, disseminated or extrapulmonary
- * 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 (HIV infected children 12 years of age and younger) includes all of the above indicator diseases except pulmonary *Mycobacterium tuberculosis*, cervical cancer and CD4+ T-lymphocyte counts $<200 \text{ mL/mm}^3$ 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 have been 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 minimally include: racial/ethnic group, gender, date of birth, mode of transmission information, diagnosis and date of diagnosis and the name, address and phone number of the person or facility making the report.

In California, 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. As with other communicable diseases, HIV uses a dual reporting process in which both health care providers and laboratories report.

AIDS cases are reported with the same information as HIV but also include the name, address, telephone number, and full Social Security Number of the individual with AIDS.

Community Epidemiology is required by law to protect the privacy of any individual reported with 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 or any additional information, call the Community Epidemiology Branch at (619) 515-6675, or visit www.sdhivaid.org.

Why is reporting necessary?

The law requires reporting of diagnosed HIV and AIDS cases. California's disease reporting regulations not only specify what, when, where and how to report cases, but also include descriptions of monetary penalties to be imposed for failure to comply with these laws.

Timely and accurate HIV/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 to those responsible for planning for future health care needs and prevention 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 the Community Epidemiology Branch at (619)515-6675. For a copy of the regulations and more information on HIV/AIDS reporting go to: www.dhs.ca.gov/AIDS.

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

Calculating a rate of AIDS is a better indication of the burden of disease for 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 normalizes the number and allows populations with dissimilar sizes to be compared. Rates may be based on the population at large (for AIDS rates) or a subpopulation utilizing services (clients presenting for HIV Counseling and Testing for HCT rates) or individuals in a research 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 in the by the population size. As is common for population-based rates, the proportion of AIDS cases in a given population is then multiplied by 100,000 to give the rate per 100,000. For example, in year 2001, there were 434 individuals diagnosed with AIDS. When the number of cases (434) is divided by the population size (2,868,873) and multiplied by 100,000, the result is:

$(434/2,868,873)*100,000 = 15$ 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 comparison by racial/ethnic group. Rates calculated in this report are based on current estimates of population size published by San Diego Association of Governments (SANDAG), which is calculated from Census data. Race information was collected differently during the 2000 Census and does not match the way race is collected on the HIV/AIDS report forms. This change over time and mismatch could affect rates, particularly when analyzing groups with small numbers.

Other Rates

HIV Counseling and Testing rates and the STD seroprevalence rates were calculated by dividing the number HIV positive by the number tested for HIV.

Statistics

Fluctuation in rates occurs over time and between groups. The smaller the number of events (AIDS/HIV 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 ($p<.05$).

