



Annual AIDS and HIV Surveillance Report, 2008

An epidemiologic profile of Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV) in Santa Cruz County, California from 1983 to 2007.



**Santa Cruz County Health Services Agency
Public Health Division**

Poki Stewart Namkung, MD, MPH
Leslie Goodfriend, MPH
Socorro Gutierrez, MPH
Tracy Van Hoy
Jamie Riggs-Nagy, MSc
Jessica Oltmanns, MPH

Health Officer
Senior Health Services Manager
Health Services Manager
HIV/AIDS Surveillance Coordinator
Epidemiologist
Epidemiologist

Contents:

List of Tables and Figures	3
Frequently Used Abbreviations	5
Executive Summary	7
Introduction	10
Data Sources and Limitations	11
Demographic Characteristics of Santa Cruz County	12
HIV/ AIDS	
- Cases, 1983 - 2007	13
Gender	
Age Group	
Race/Ethnicity	
City of Residence	
Mode of Exposure	
Comorbidities of People Living with HIV/AIDS	
- Whites and Latinos Living with AIDS	22
Gender	
Age Group	
Race/Ethnicity	
City of Residence	
Mode of Exposure	
- AIDS Incidence Trends, 1993 – 2007	27
Gender	
Age Group	
Race/Ethnicity	
City of Residence	
Mode of Transmission	
- HIV Incidence Trends, 2003 - 2007	31
Gender	
Age Group	
Race/Ethnicity	
City of Residence	
Mode of Transmission	
- Local HIV Screening Results	38
- Utilization of HIV/AIDS Services	40
CARE Team (Community Advocacy Resources Team) and the HIV Early Intervention Services Program (EIS) SCAP (Santa Cruz AIDS Project)	
Conclusion	43

List of Tables and Figures:

TABLES

Table 1. Characteristics of the general population, AIDS and HIV cases, Santa Cruz County, 1983-2007....	15
Table 2. Mode of transmission for AIDS and HIV Cases by and gender, Santa Cruz County, 1983-2007.....	19
Table 3. Reportable Comorbid conditions among Persons presumed living with AIDS or HIV (PLWA-H)*, Santa Cruz County, 2007.....	21
Table 4. Characteristics of White and Latino persons living with AIDS and HIV, Santa Cruz County, 2007	22
Table 5. Mode of Transmission among White and Latino PLWA by gender, Santa Cruz County, 1983-2007	25
Table 6. Mode of Transmission among Whites and Latinos with HIV by gender, Santa Cruz County, 1985-2007	26
Table 7. Characteristics of AIDS cases by Year of Diagnosis, Santa Cruz County, 1993-2007	27
Table 8. Characteristics of AIDS cases by year of diagnosis, mode of transmission, and gender, Santa Cruz County, 1993-2007	30
Table 9. Characteristics of total HIV cases by year of diagnosis and mode of transmission, Santa Cruz County, 2003-2007	32
Table 10. Characteristics of HIV cases by mode of transmission and gender, Santa Cruz County, 2003-2007	35
Table 11. Number of HIV tests given and the proportion of positives per 1,000 tested over four-year intervals, Santa Cruz County, 1992-2007	37
Table 12. HIV/AIDS status of EIS clients	39

FIGURES

Figure 1. Population distribution by race/ethnicity, Santa Cruz County, California, and the United States, 2006	12
Figure 2. Incidence of new cases of AIDS and HIV, Santa Cruz County, 1983-2007	13
Figure 3. Diagnoses and deaths of AIDS cases by year of diagnosis, Santa Cruz County, 1983-2007	14
Figure 4. Diagnoses and deaths of HIV Cases by year of diagnosis that have not transitioned to AIDS, Santa Cruz County, 1983-2007	14
Figure 5. Gender distribution of general population, AIDS and HIV cases, Santa Cruz County, 1983-2007.	16
Figure 6. Age distribution of the general population, AIDS and HIV cases (excluding children under 13 years old), Santa Cruz County, 1983-2007.....	16
Figure 7. Race/Ethnicity of the general population, AIDS and HIV cases, Santa Cruz County, 1983-2007 ...	17
Figure 8. City of residence^ of the general population, AIDS and HIV cases at the time of diagnosis, Santa Cruz County, 1983-2007	18
Figure 9. Mode of transmission for male AIDS and HIV cases, Santa Cruz County, 1983-2007	20
Figure 10. Mode of transmission for female AIDS and HIV cases, Santa Cruz County, 1983-2007.....	20
Figure 11. White and Latino persons living with HIV or AIDS by gender, Santa Cruz County, 2007.....	23
Figure 12. White persons living with AIDS or HIV by age at diagnosis, Santa Cruz County, 2007.....	24
Figure 13. Latino persons living with AIDS or HIV by age at diagnosis, Santa Cruz County, 2007	24
Figure 14. White and Latino persons living with AIDS or HIV by city of residence, Santa Cruz County, 2007	25
Figure 15. Incidence rates of AIDS cases by year of diagnosis and gender, Santa Cruz County, 1993-2007..	28
Figure 16. Incidence rates of AIDS cases by year and age at diagnosis, Santa Cruz County, 1993-2007	28

Figure 17. Incidence rate of AIDS cases by year of diagnosis and race/ethnicity, Santa Cruz County, 1993-2007	29
Figure 18. Incidence rate of AIDS cases by year of diagnosis and city of residence^, Santa Cruz County, 1993-2007	29
Figure 19. Male AIDS cases by mode of transmission and year of diagnosis, Santa Cruz County, 1993-2007	31
Figure 20. Female AIDS cases by mode of transmission and year of diagnosis, Santa Cruz County, 1993-2007	31
Figure 21. Incidence rate of HIV diagnoses by gender, Santa Cruz County, 2003-2007	33
Figure 22. Incidence rate of HIV diagnoses by age at diagnosis, Santa Cruz County, 2003-2007.....	33
Figure 23. Incidence rate of HIV diagnoses by race/ethnicity, Santa Cruz County, 2003-2007.....	34
Figure 24. Incidence rate of HIV by city of residence, Santa Cruz County, 2003-2007.....	34
Figure 25. Male HIV diagnoses by mode of transmission, Santa Cruz County, 2003-2007	35
Figure 26. Female HIV diagnoses by mode of transmission among females, Santa Cruz County, 2003-2007	36
Figure 27. Number of HIV tests given and the proportion of positives per 1,000 tested over four-year intervals, Santa Cruz County, 1992-2007	37

Frequently Used Abbreviations:

Abbreviation	Meaning
HIV	Human immunodeficiency virus; for the purposes of this report, a case of HIV refers only to persons <u>not</u> diagnosed with AIDS.
AIDS	Acquired immunodeficiency syndrome: an HIV positive person is considered to have AIDS by the presence of one of several opportunistic infections commonly associated with advanced HIV disease, a CD4 T-lymphocyte count of 200 or less per μ L blood, or a total CD4 percentage of total lymphocytes of less than 14.
Cumulative cases	All persons ever diagnosed with a condition (living or deceased)
Incidence	The occurrence of new cases in the population
Incidence Rate	The occurrence of new cases in a specified population and time often denoted in this report as new cases per 100,000 population-years.
Prevalence	The number of existing cases in the population during a specified point or period of time
Late HIV Diagnosis	An HIV diagnosis made less than one year before an AIDS diagnosis is made on a single individual
PLWA (H)	Persons presumed living with AIDS (HIV); prevalent cases
HAART	Highly active antiretroviral therapy

Race and Ethnicity:

These categories have been chosen based on the design of the statewide HIV/AIDS database and 2000 Census population data. Persons are either Latino or non-Latino; Latino includes all races while non-Latino races are further categorized. The mutually exclusive race/ethnic origin categories are as follows:

Abbreviation	Meaning
White	White or Caucasian
Latino	Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture regardless of race
AI/AN	American Indian or Alaska native
Asian/PI	Asian, native Hawaiian or Pacific Islander
Black	Black, African American, or Negro
Other/Unknown	Multiple races or unknown or a race not listed

Mode of Transmission:

Cases are counted only once in the hierarchy of transmission categories (which are listed in order below; however "MOT" is not part of the hierarchy since it corresponds to pediatric cases only). Persons with more than one reported risk factor for HIV infection are classified in the transmission category listed first in the hierarchy. The exception is men who report sexual contact with other men and injection drug use; this group makes up a separate category.

Abbreviation	Meaning
MSM	Men who have sex with men
IDU	Injection drug use
MSM/IDU	Men who have sex with men and inject drugs

HEM	Hemophilia/coagulation disorder
HET	Heterosexual contact
XFUS	Receipt of blood, components, or tissue
MOT	Mother with/at risk for HIV infection
RNS	Risk not specified/reported or other

Executive Summary:

This is the first AIDS/HIV Epidemiological report published in Santa Cruz County that contains historic and current comparable data on both HIV and AIDS. In Santa Cruz County, there have been 613 persons diagnosed with AIDS and 187 persons diagnosed with HIV, which, for this report, refers to cases that have not transitioned to AIDS, between 1983 and 2007. Of the 613 AIDS cases, 267 (or 44%) are presumed to be alive as of December 2007. Of the 187 HIV cases, 185 are presumed to be alive as of December 2007. Two HIV cases died of non-HIV related causes. During 2007, nineteen people were newly diagnosed with AIDS and fourteen were newly diagnosed with HIV; four AIDS cases died during the year.

HIV/AIDS

- Cumulative Cases, 1983-2007

- An AIDS case is at least eight times more likely to be male than female, while an HIV case is more than five times more likely to be male.
- The largest percentage of cases (45%) were diagnosed with AIDS between the ages of 30-39; 27% were diagnosed between 40-49. Alternatively, the largest percentage of HIV cases (33%) were diagnosed between the ages of 40-49, while 30% were diagnosed between the ages of 30-39.
- There were three pediatric AIDS cases (< 13 years old) between 1992 and 1997, none of whom are still alive. There is currently one pediatric HIV case.
- The prevalence of HIV/AIDS cases among Whites is nearly twice that of Latinos (202 and 119 per 100,000 persons respectively).
- The prevalence of HIV/AIDS cases among Blacks is more than three times that of Whites, 666 and 119 per 100,000 population respectively) while the prevalence among Asian/Pacific Islanders (86 per 100,000 population) is 72% that of Whites. However, the prevalences of HIV/AIDS cases among Black and Asian/Pacific Islanders are considered unstable due to small numbers.
- Both HIV and AIDS cases are about three times more likely to have been residents in the city of Santa Cruz at the time of their diagnosis compared to residing in Watsonville.
- MSM accounts for the majority (73%) of male AIDS cases and increases to 79% among male HIV cases.
- Heterosexual contact accounts for the majority (63%) of female AIDS cases and (69%) of female HIV cases.
- 25% of the 389 name-identifiable Persons Living with AIDS or HIV (PLWA-H) were reported to Santa Cruz County Communicable Disease Unit with at least one reportable other condition such as, Hepatitis C or a sexually transmitted infection. The most common disease reported was chronic Hepatitis C infection. The next most common comorbidities included chlamydia and/or gonorrhea, chronic Hepatitis B infection, syphilis and enteric infections (which are transmitted fecal-to-oral).

- White and Latino Cases Living with AIDS or HIV

- The PLWA male to female ratio is slightly higher among Latinos (8 to 1) compared to Whites (6 to 1). However, the male to female ratio among HIV cases

is much closer among Latinos (4 to 1) compared to Whites (6 to 1). The female prevalences are statistically unstable due to the small number of cases.

- While the largest percentage of both Latinos and White PLWA are between ages 30-39 when diagnosed with AIDS, 48% and 42% respectively, Latinos tend to be younger than Whites at the time of an HIV diagnosis.
- The prevalence of Latino PLWA-H cases among the general Latino population is about three times higher in the city of Santa Cruz compared to Watsonville.
- Among Whites, 52% of PLWA-H cases resided in the city of Santa Cruz at time of diagnosis.
- MSM is the most common risk factor among both White and Latino male PLWA-H. Among Latino men living with AIDS, heterosexual contact is the second most commonly cited mode of transmission whereas IDU is second among White males. While among HIV cases, IDU is the second most common risk factor for both Latino and White males.
- Among female PLWA-H, heterosexual contact is cited as the most common risk factor for both Latinas and White women. Among females living with AIDS, the second most common risk factor is IDU. Among HIV cases, the second most common risk factor is IDU for White women, while Latinas currently do not report any other risk factors.

- Trends: 1993-97, 1998-02, & 2003-07

- The incidence of AIDS decreased more than 50% from 1993-97 to 2003-07.
- The ratio of male to female AIDS cases has dropped from 11 new male cases for every female case to 4 new male cases for every female case between 1993-97 and 2003-07. (The female rates are unstable since they are based on case counts of less than 20.)
- The ratio of male to female HIV cases was 7 males for every female between 2003-07. More females (46%) were considered “late HIV diagnoses” than males (33%) during this time period.
- The incidence of AIDS cases diagnosed decreased amongst all age levels from 1993-97 to 2003-07.
- The incidence rate of HIV cases diagnosed from 2003-07 was highest between ages 30-39. The highest percentages of late HIV diagnoses occurred between the ages 30-39 (37%) and ages 40-49 (39%).
- In AIDS cases, the incidence ratio of White cases to Latino cases went from almost 2 to 1 in 1993-97 to nearly equal (1 to 1) in 2003-07.
- Among HIV cases diagnosed between 2003-07, the incidence ratio of White cases to Latino cases was also nearly equal.
- Residents of the city of Santa Cruz have accounted for the bulk of AIDS cases diagnosed between 1993-97 and 2003-07. Rates in other cities have varied which is expected since their rates are unstable.
- Residents of the city of Santa Cruz also account for the largest proportion of HIV cases diagnosed in 2003-07.
- The cities of Santa Cruz (37%) and Scotts Valley (25%) had the largest percentages of late HIV diagnoses.
- Among male AIDS cases, the percentage of MSM AIDS cases declined 12% from 1993-97 to 2003-07, while IDU and heterosexual contact increased 5% and 10%

respectively during the same time period. These percentages are based on very small counts of cases and are thus unstable.

- Among male HIV cases between 2003-07, 78% cited MSM or MSM/IDU as the mode of transmission.
- Male HIV cases attributable to heterosexual contact were more likely to have “late” HIV diagnoses compared to other modes of HIV transmission.
- Heterosexual contact as the source of AIDS among females nearly doubled from 1993-97 to 2003-07.
- Among female HIV cases, heterosexual contact was the cited risk factor for 77% of cases between 2003-07. 46% of all female cases were considered late HIV diagnoses compared to 34% of male HIV cases.

- Local HIV Screening Results

- Since 1992, 129 (0.4%) of the 28,859 HIV tests conducted by the Public Health Department at various sites throughout the county were positive for HIV.
- Of the 6,023 tests given between 2004 and 2007, 29 (0.5%) were HIV+.
- Of the positive tests, 91% are male, 64% are White and 25% are Latino.

SERVICES FOR PERSONS WITH HIV/AIDS

Federal EIS Program: HIV Early Intervention Services Program

- A federal program that funds a variety of medical, mental health, nutrition and dental services.
- 208 persons with HIV/AIDS utilized EIS services during 2007. Of them, 51% have AIDS and 49% are HIV positive (non-AIDS or AIDS status unknown).
- Of Federal EIS clients that reported their characteristics, 6% stated they do not have any health insurance.

CARe Team: Community Advocacy Resources Team

- Facilitate clients’ ability through case management to utilize a variety of resources including those in the EIS Program. These programs are primarily State funded.
- Provides nurse and case management, which includes assistance with medication, medication adherence, and facilitate doctor visits. Social workers conduct psychosocial assessments, follow up assessments and referrals into appropriate mental health services.
- 144 clients with HIV/AIDS utilized services during 2007 (70% with AIDS)
- 99% of clients reported they have private (9%) or public (90%) source of health insurance.

SCAP: Santa Cruz AIDS Project

- Provides referrals and advocacy to legal services, assistance in obtaining permanent housing, financial assistance in order to maintain permanent housing, food bank, benefits advocacy, and financial assistance with insurance co-pays..
- 207 persons with HIV/AIDS utilized services during 2007; the AIDS status of these persons is unknown.
- Less than 1% of clients report that they have no insurance.

Introduction:

HIV is a virus that can be spread through contact with HIV-infected blood, semen, vaginal secretions, or mother's milk. CDC estimates approximately 56,000 new HIV infections occur each year in the U.S. This 40% increase from previous estimates is not due to an increase in transmission but to an improved test algorithm which better estimates the time of infection.¹ HIV is the etiologic or causative agent of AIDS; only persons who have been previously infected with HIV can progress to the more severe syndrome known as AIDS. In the beginning years of the HIV/AIDS epidemic, an HIV diagnosis was nearly equivalent to being diagnosed with AIDS. However in the mid-1990s, the outlook of being diagnosed with HIV changed dramatically with the advent of HAART (highly active antiretroviral therapy) which led to significantly fewer HIV patients progressing to AIDS. Unfortunately, surveillance epidemiology has not kept pace with improved therapies, such as HAART, and it took nearly ten years before an HIV diagnosis became a mandatory reportable condition in California. Due to the confidentiality issues that came along with having the disease, a non-name reporting structure was used for reporting HIV cases, even though AIDS cases were always reported with a name. A quality review of national databases with joint efforts from the California Department of Public Health and the Centers for Disease Control and Prevention (CDC) found 22,474 pairs of potential duplicated entries of HIV cases in other states and regions. In order to avoid duplication and to permit more accurate tracking of HIV infection and the progression to AIDS, California changed reporting laws on April 17, 2006 by passing Senate Bill 699 which mandates that all HIV cases be confidentially reported with a name.

The 2008 HIV/AIDS Surveillance Report covers the HIV/AIDS epidemic in Santa Cruz County from the first case reported in 1983 through the end of 2007. This report is intended to describe HIV and AIDS in terms of their occurrence, transmission, and impact throughout the county. **In this report, a case of HIV refers only to a person not diagnosed with AIDS.** The primary objective in providing this data is to help community-based organizations, planners, and policy-makers evaluate and implement programs and policies supporting HIV/AIDS care and prevention in Santa Cruz County.

The framework of this report is based on the following questions, as recommended by the CDC:

- What are the sociodemographic characteristics of the general population?
- What is the scope of the HIV/AIDS epidemic in Santa Cruz County?
- What are the indicators of risk for HIV infection and AIDS in Santa Cruz County?
- What are the patterns of service utilization of HIV-infected persons in Santa Cruz County?

For comments or questions about this report, please contact:

Jamie Riggs-Nagy, MSc

jamie.riggs-nagy@health.co.santa-cruz.ca.us; 831.454.7561

For more copies of the report, please refer to the website: <http://www.santacruzhealth.org>

Data Sources and Limitations:

HIV and AIDS data is collected from health care providers and laboratories who are required by California law to report all positive cases to their local Public Health Department. The Santa Cruz County HIV/AIDS Program is the primary entity for receiving and synthesizing AIDS and HIV data in the county. One limitation of HIV/AIDS reporting is a lack of timeliness in receiving complete data. The average delay of complete reporting can be anywhere from a few days to approximately two months. For example, once the HIV/AIDS Program receives a positive lab result, the case must be cleared with the California Department of Public Health to determine whether or not the case is already in a database elsewhere. If the case is indeed new, the provider is then contacted for the case's complete demographic and risk factor information. As a result, accurate data for this report takes an average of six months to be complete due to cases filtering in long after the close of the calendar year. All data presented are subject to change slightly as more accurate information is collected; such updates are incorporated in future publications.

In addition, the totals used in this report are not considered comprehensive, as there are likely many undiagnosed or unreported cases residing in the county. The CDC estimates that, "although completeness of AIDS reporting varies geographically, studies conducted by state and local health departments indicate that the overall reporting of AIDS cases is more than 85% complete".² Thus, the data presented are inherently biased toward the type of person who seeks care and gets tested. As a result, this report likely misrepresents the true HIV/AIDS population in the county.

Due to the relatively small number of cases in Santa Cruz County each year, annual incidence data (new cases) is not analyzed by characteristics. Instead, cases are viewed in the following ways: cumulative AIDS and HIV (non-AIDS) cases (total cases ever diagnosed in this county since the first case in 1983); prevalence data (all cases still alive today); and 5-year incidence rates. The second category, prevalence, will be henceforth referred to as people presumed living with AIDS or HIV. Of note, as the case counts become smaller, rates become less reliable—specifically rates based on counts of less than twenty. Please use caution when interpreting such results.

Another limitation of this report is the time when the data was collected. Since data on HIV/AIDS is collected only at the time of diagnosis, city of residence is not necessarily where the people are living now for example, a case diagnosed in Watsonville may no longer live in Watsonville or even Santa Cruz County or conversely a case may move into Watsonville or Santa Cruz County after diagnosis. Also, diagnostic criteria for defining a case of AIDS or HIV has changed several times during the course of the epidemic. As a result, the number of cases per year has seen some large fluctuations. The AIDS case definition was modified in 1985, 1987, and again in 1993, which likely explains the spikes in cases near those years since those revisions were more inclusive. Similarly reporting requirements for HIV have modified in 2002 and 2006. HIV became reportable in 2002, which creates the spike in HIV diagnoses reported that year. Prior to 2002, an HIV+ case was not reportable to the health department until they met were diagnosed with AIDS. In 2006, HIV cases were entered into the name-based reporting system from a unique identifier system.

Demographic Characteristics of Santa Cruz County:

This section is included as suggested by the CDC to help acquaint readers who are not familiar with Santa Cruz County. Our county is one of the original twenty-seven counties in California, created in 1850. The county spans approximately 445 square miles of land and 162 square miles of water (Census 2000). It is situated at the northern tip of Monterey Bay; located 65 miles south of San Francisco, 35 miles north of Monterey, and 35 miles southwest of Silicon Valley. Of California's current-day 58 counties, only San Francisco is physically smaller.

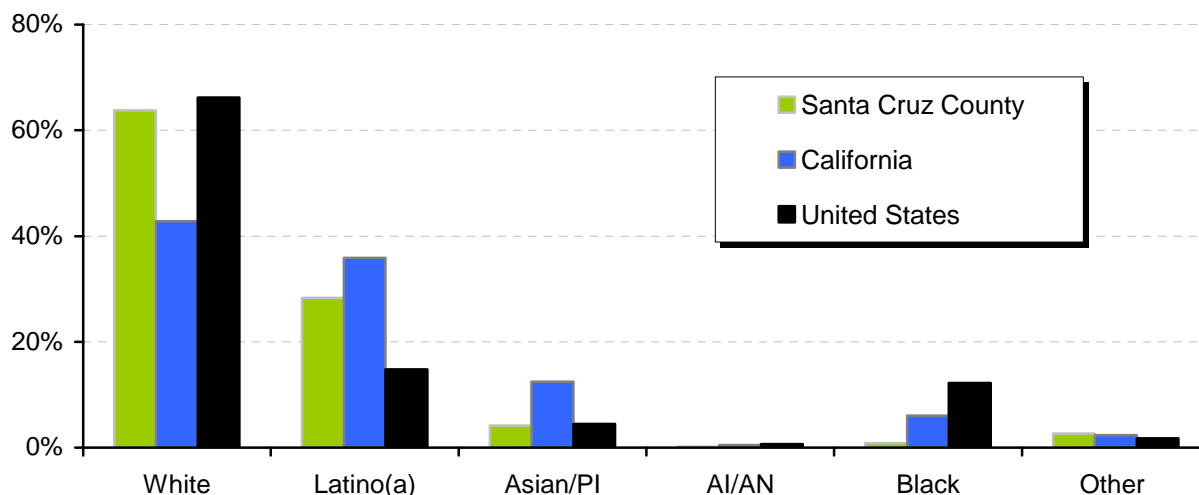


The California Department of Finance estimates that 264,417 people resided in Santa Cruz County in 2007, ranking it California's 24th most populated county and accounting for 0.7% of California's population overall. There are four incorporated cities within Santa Cruz County. ⁴ The largest of which is Santa Cruz, the county seat, with a population of 57,553. The second largest city is Watsonville, which has a population of 51,258. The other two cities are Scotts Valley and Capitola, with 11,615 and 9,960 residents respectively. Nearly 51% of the county's population (or 133,739 people) lives in unincorporated areas. ⁵

Source: www.wikimedia.org³

In 2006, the per capita personal income was \$45,194 and the median household income was \$62,193. ^{6,7} Santa Cruz County's local economy is driven primarily by agriculture, tourism, and higher education. Given Santa Cruz County's 300 days of sunshine per year and beautiful beaches, tourists flock to the area, especially during the summer. Nearly 30,000 students are enrolled at Cabrillo Community College or the University of California, Santa Cruz. In 2007, 5.9% ⁷ of the population was unemployed. Residents of the county are primarily of two racial/ethnic groups: White (64%) and Latino (28%); Asian/PI, Black, AI/AN and residents of other races account for less than 8% of the population (4%, 1%, <1%, and 3% respectively). ⁵

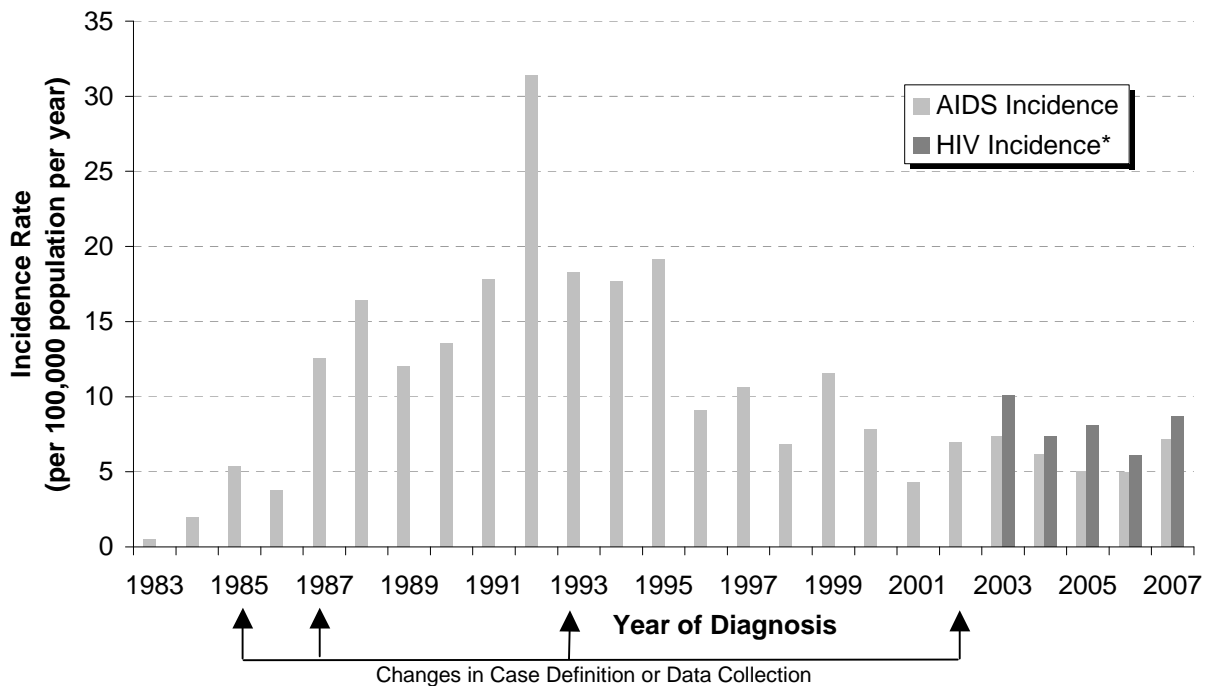
Figure 1. Population distribution by race/ethnicity, Santa Cruz County, California, and the United States, 2006



HIV/AIDS Cases (1983-2007):

There have been a total of 613 AIDS cases and 187 HIV (non-AIDS) cases reported in Santa Cruz County since the first reported case in 1983. Since then, the AIDS case definition evolved three times: in 1985, 1987 and again in 1993. HIV became a reportable disease in 2002. The expanding of the case definitions is the most likely explanation for the spikes in cases during and shortly after those years, since cases who likely became cases prior to those years, were not classified as such until the change in the definition. This also explains the sharp drops in cases shortly after the changes—supporting the theory that the spike was not due to an actual increase in infections. In 2006, HIV data legally changed to name-based data from a non-name (unique-identifier) database, which should allow more accurate future reporting and corrections of existing data. Overall, the number of AIDS cases has continued to decrease since the last peak in 1993. This trend is likely due to improved HIV treatments slowing the progress of the disease (e.g. HAART) and thus lowering the number of AIDS cases by delaying the time it takes HIV+ individuals to progress into AIDS.

Figure 2. Incidence of new cases of AIDS and HIV, Santa Cruz County, 1983-2007



*Incidence of HIV includes cases that have transitioned to AIDS. Accurate HIV incidence data prior to 2003 is not available.

Figure 3. Diagnoses and deaths of AIDS cases by year of diagnosis, Santa Cruz County, 1983-2007

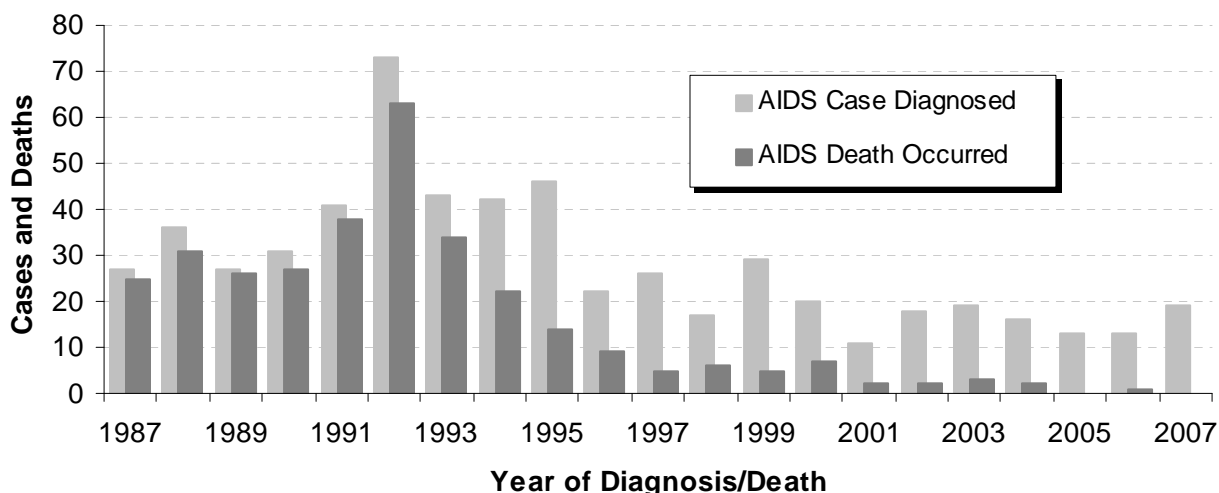
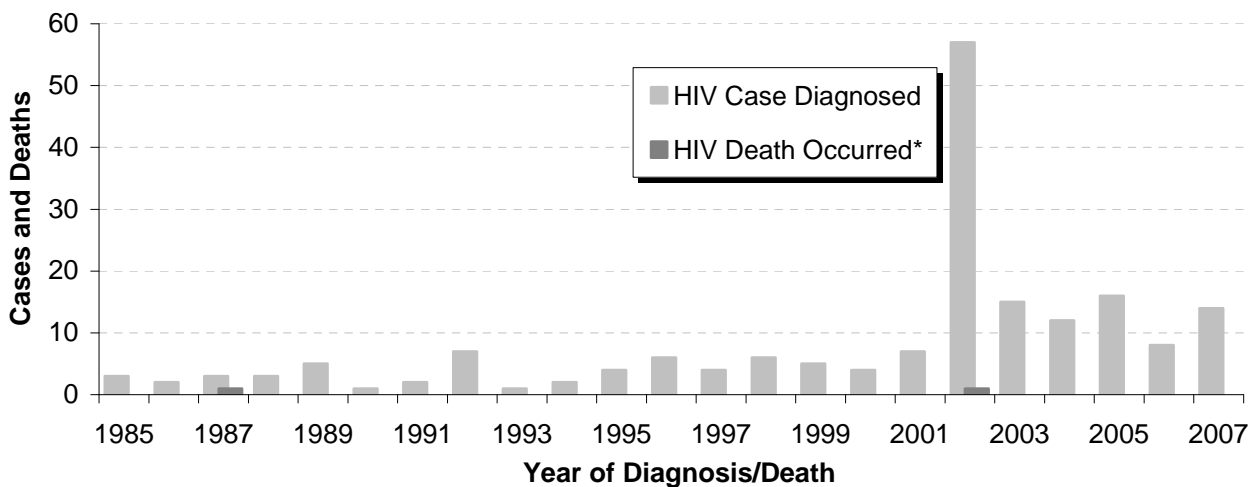


Figure 4. Diagnoses and deaths of HIV Cases by year of diagnosis that have not transitioned to AIDS, Santa Cruz County, 1983-2007



*Deaths of HIV+ individuals were not related to their HIV infection.

While Figure 2 presents the incidence of new HIV cases in Santa Cruz County, Figure 4 presents the prevalence of persons known to be living with HIV, who were diagnosed in Santa Cruz County, that have not yet transitioned to AIDS. There are two people who had an HIV diagnosis, that died of non-HIV related causes, one in 1987 and one in 2002. Once an individual transitions to a person living with AIDS (PLWA) they are removed from the HIV data and represented in the AIDS data. There have been only two known deaths of HIV+ individuals and both deaths were not HIV related. HIV became reportable in 2002, which creates the spike in HIV diagnoses reported that year. Prior to 2002, an HIV+ case was not reportable to the health department until they were diagnosed with AIDS.

Table 1. Characteristics of the general population, AIDS and HIV cases, Santa Cruz County, 1983-2007

	General Population ^a		Cumulative AIDS Cases ^b		Persons Living with AIDS ^c		Cumulative HIV Cases ^e		HIV/AIDS Prevalence ^{d,f}
	No.	%	No.	%	No.	%	No.	%	
Total	264,417	100	613	100	267	100	187	100	170.9
Gender									
Male	132,072	50	551	90	230	86	158	84	293.0
Female	132,345	50	62	10	36	14	29	16	48.4
Age at Diagnosis^g									
Under 5	16,797	6	2	<1	0	-	1	1	N/A
5-12	24,409	9	1	<1	0	-	0	-	N/A
13-19	25,361	10	1	<1	0	-	5	3	N/A
20-29	42,838	16	92	15	44	17	40	21	N/A
30-39	37,642	14	275	45	117	44	56	30	N/A
40-49	41,910	16	166	27	73	27	62	33	N/A
Over 49	75,460	29	76	12	33	12	23	12	N/A
Race/Ethnicity^h									
White	153,830	58	460	75	178	67	133	71	201.5
Latino	88,512	34	112	18	71	27	34	18	118.6
Black	2,553	1	23	4	8	3	10	5	665.9
Asian/PI	12,837	5	8	1	5	2	6	3	85.7
AI/AN	1,479	1	8	1	4	2	1	1	338.1
Other	5,206	2	2	<1	1	<1	3	2	76.8
City of Residence									
Capitola	9,960	4	30	5	11	4	14	8	251.0
Santa Cruz	57,553	22	290	47	133	50	90	48	384.0
Scotts Valley	11,615	4	15	2	8	3	7	4	129.1
Watsonville	51,258	19	88	14	45	17	33	18	152.2
Unincorporated	133,739	51	190	31	70	26	43	23	84.5

Note: HIV and AIDS cases are representative through 2007, updated 7/28/08. All data are provisional and subject to change.

^a Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050. Sacramento, CA, July 2007.

^b Every AIDS case diagnosed while residing in Santa Cruz County since 1983.

^c Persons with AIDS presumed to be living as of 12-31-07.

^d Prevalence is the number of living cases per 100,000 general population for 2007. Rates based on fewer than 20 cases are considered unstable.

^e HIV Only - excludes AIDS cases

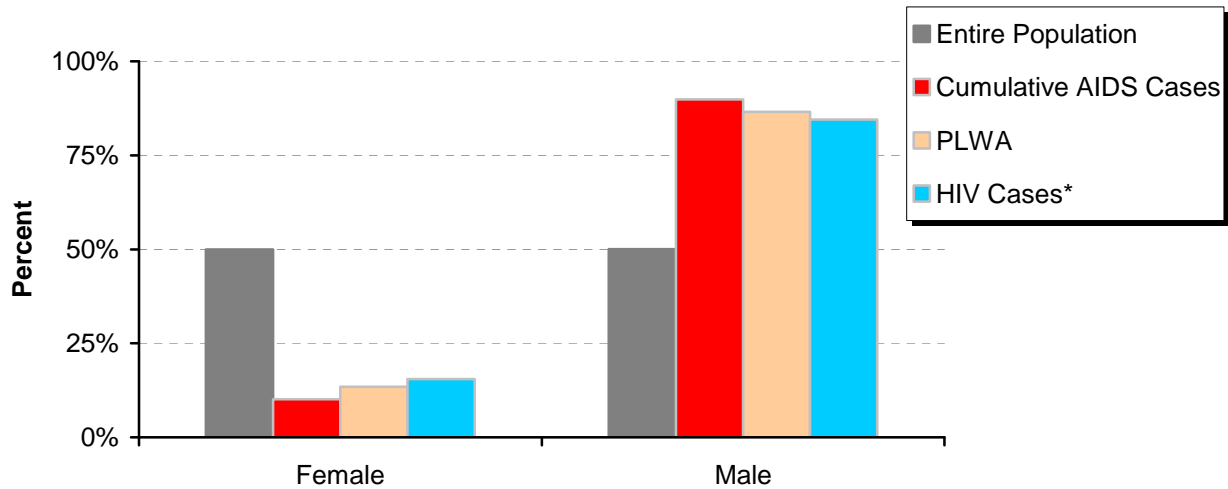
^f Prevalence calculations exclude 2 HIV cases that died of non-HIV related causes

^g "Age at Diagnosis" is not representative of the current population therefore prevalence is not appropriate.

^h See "Frequently Used Abbreviations" section for definitions

GENDER

Figure 5. Gender distribution of general population, AIDS and HIV cases, Santa Cruz County, 1983-2007

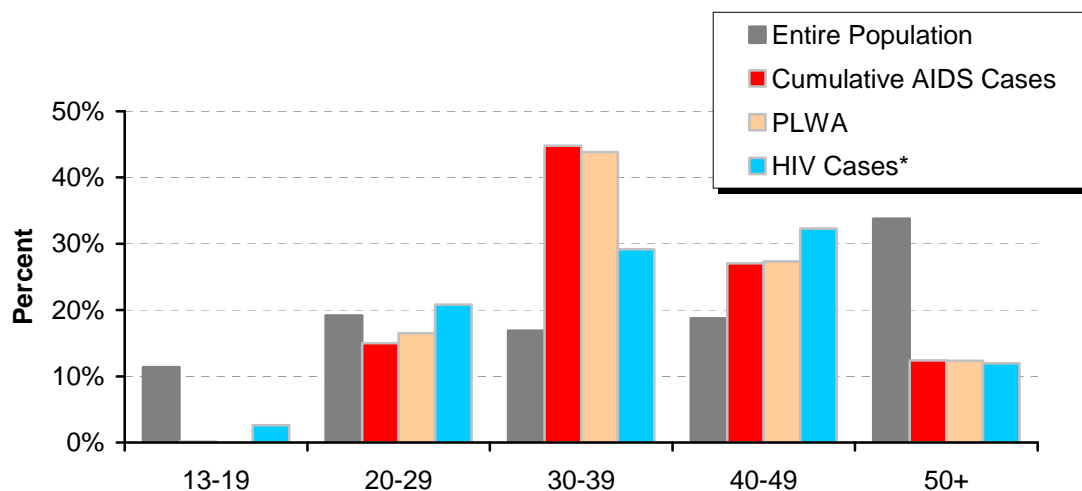


* HIV cases only (not AIDS). Includes two HIV cases who died from other causes.

The majority of AIDS/HIV cases have been among men since the beginning of the epidemic. In Santa Cruz County, 90% of all AIDS cases ever have been among males and 85% of HIV cases are male. Historically men have been over-represented as HIV/AIDS cases but the gap is becoming smaller. There have been a sizeable number of females with AIDS or HIV, 62 and 29 cases respectively, even though they only account for 11% of all HIV/AIDS cumulative cases. Currently, of the 267 PLWA, 86% are male and 14% are female and of the 185 PLWH (excluding two HIV cases that died from other causes), 85% are male and 15% are female, compared to the general population, which is 50% male and 50% female. This is a common theme among HIV/AIDS cases nation-wide.

AGE GROUP

Figure 6. Age distribution of the general population, AIDS and HIV cases (excluding children under 13 years old), Santa Cruz County, 1983-2007



* HIV cases only (not AIDS). Includes two HIV cases who died from other causes.

The distribution of age at diagnosis with AIDS while residing in Santa Cruz County is concentrated among persons 30-39. The second most common age of diagnosis is between 40-49 for both cumulative and PLWA cases. In contrast, HIV cases are more likely to be diagnosed in the later age group of 40-49.

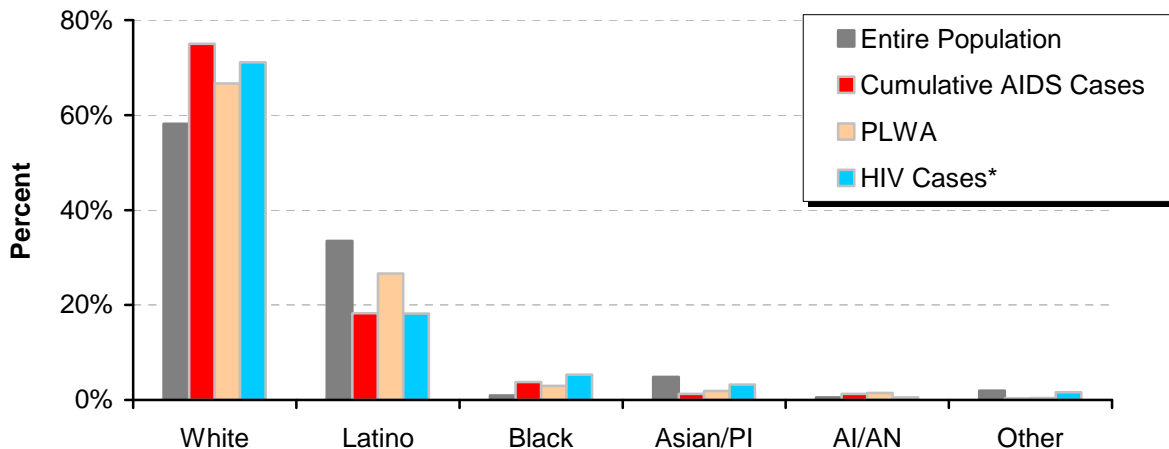
PEDIATRIC CASES

A pediatric HIV/AIDS case is defined as being diagnosed with HIV/AIDS before the age of 13. There have been 4 pediatric cases in Santa Cruz County that were diagnosed between the years 1992 and 2000. Two cases were female and two were male; three of the cases were under five and one was between five and twelve years of age at diagnosis. Three cases were White and one was Latino. The primary mode of transmission cited by all cases was a mother with, or at risk for, HIV infection. Only one of the cases lived longer than two years after diagnosis and is presumed to still be living, the other three have since died from complication due to AIDS. Pediatric cases are preventable and a strong measure of the quality of both public health surveillance and medical treatment of pregnant women.

Nationwide, pediatric AIDS cases have decreased 75% from 1999 to 2003. A major factor in this decline is increasing treatment before, during, and after pregnancy to reduce perinatal transmission of HIV. It is expected that the perinatal transmission rate will continue to decline with increased use of aggressive treatments and obstetric procedures (i.e. cesarean section).⁸

RACE AND ETHNICITY

Figure 7. Race/Ethnicity of the general population, AIDS and HIV cases, Santa Cruz County, 1983-2007

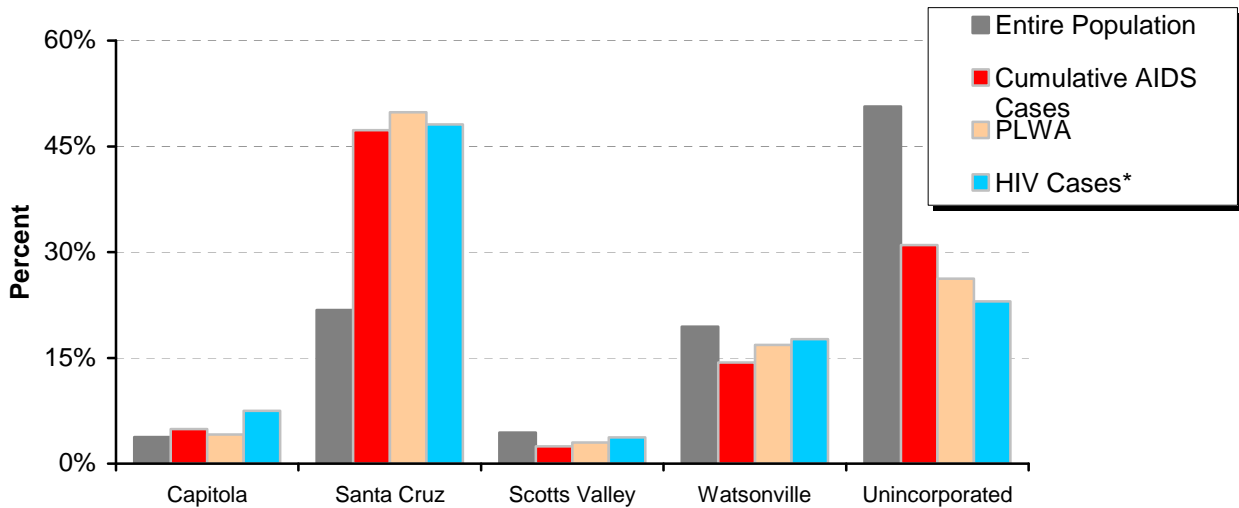


* HIV cases only (not AIDS). Includes two HIV cases who died from other causes.

Santa Cruz County residents are not highly diversified. In fact, two race/ethnic groups account for over 90% of residents: White and Latino. The prevalence of HIV/AIDS in Whites is almost twice that of Latinos (202 and 119 cases per 100,000 population). The prevalence among Black/African Americans is actually about six times that of Latinos; however, since the number of cases is less than 20, the Black rate is not considered reliable.

CITY OF RESIDENCE

Figure 8. City of residence[^] of the general population, AIDS and HIV cases at the time of diagnosis, Santa Cruz County, 1983-2007



[^] City of residence is based on the ZIP code at diagnosis. Data on where patients are currently living is not available.

* HIV cases only (not AIDS). Includes two HIV cases who died from other causes.

Approximately half of the cumulative AIDS cases, PLWA, and HIV cases were living in the city of Santa Cruz when they were diagnosed. Unincorporated areas and Watsonville account for the next highest prevalences of cases by location.

MODE OF TRANSMISSION

Table 2. Mode of transmission for AIDS and HIV Cases by and gender, Santa Cruz County, 1983-2007

Mode ^c	Cumulative AIDS Cases ^a		PLWA ^b		HIV Cases ^d	
	No.	%	No.	%	No.	%
Males						
MSM	400	73	162	70	124	79
IDU	56	10	27	12	11	7
MSM/IDU	58	11	24	10	10	6
HEM	3	1	1	<1	1	1
HET	20	4	14	6	6	4
XFUS	3	1	0	0	2	1
MOTHER	1	<1	0	0	1	1
RNS	10	2	3	1	3	2
TOTAL	551	100	231	100	158	100
Females						
IDU	18	29	9	25	6	21
HEM	1	2	1	3	0	0
HET	39	63	25	69	20	69
XFUS	2	3	1	3	1	3
MOTHER	2	3	0	0	0	0
RNS	0	0	0	0	2	7
TOTAL	62	100	36	100	29	100

Note: AIDS cases are representative through 2007, updated 7/25/08. All data are provisional and subject to change.

^a Every AIDS case diagnosed while residing in Santa Cruz County since 1983.

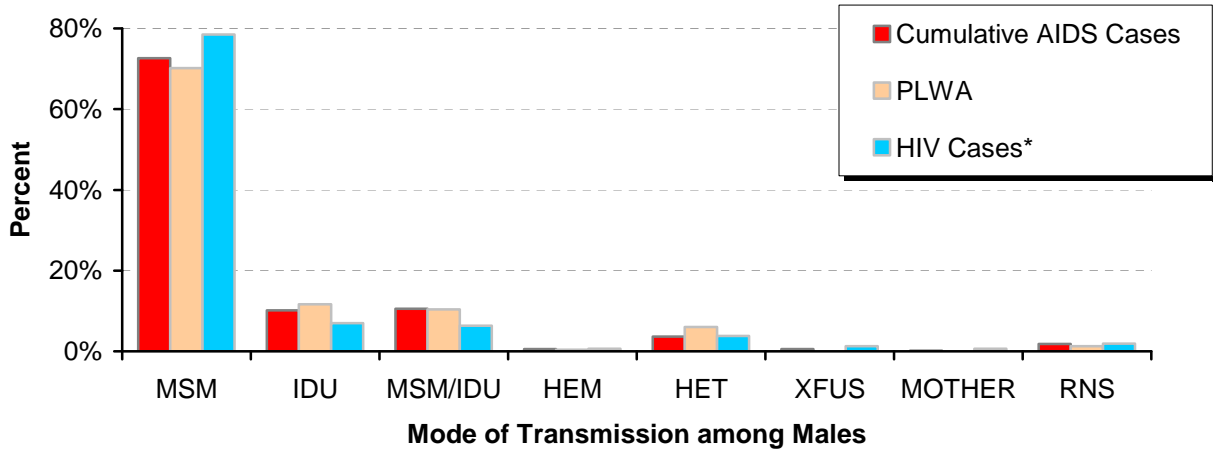
^b Persons with AIDS presumed to be living as of 12-31-07.

^c See "Frequently Used Abbreviations" section for definitions.

^d HIV cases diagnosed while residing in Santa Cruz County since 1985 that have not transitioned to AIDS; includes two HIV cases that died from other causes.

MALES

Figure 9. Mode of transmission for male AIDS and HIV cases, Santa Cruz County, 1983-2007

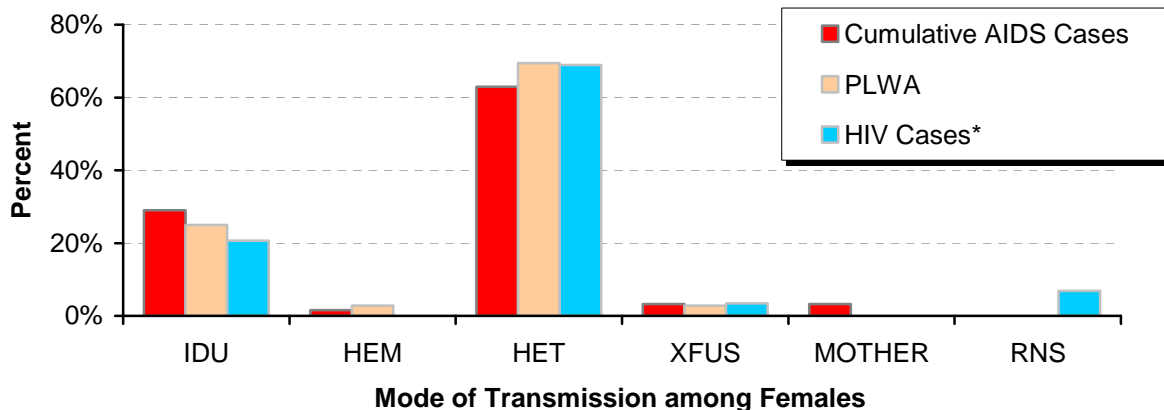


* HIV cases only (not AIDS). Includes two HIV cases who died from other causes.

Men having sex with men (MSM) is the most common mode of disease transmission among all three categories: cumulative AIDS cases, PLWA, and HIV cases at 73%, 70%, and 79% respectively. The next most common modes of transmission among men are injection drug use (IDU) alone and IDU in combination with MSM (IDU/MSM).

FEMALES

Figure 10. Mode of transmission for female AIDS and HIV cases, Santa Cruz County, 1983-2007



* HIV cases only (not AIDS). Includes two HIV cases who died from other causes.

Among females, heterosexual contact was the most common mode of transmission for all three categories: cumulative AIDS, PLWA and HIV cases at 63%, 70%, and 69% respectively. IDU is

the second highest risk factor cited among women, accounting for 30% of cumulative AIDS cases, 25% of PLWA, and 21% of HIV cases.

CO-MORBIDITIES

Of the 454 persons presumed living with HIV or AIDS (PLWA-H), names are available for 389 of them. Only cases with names can be evaluated for whether or not they have been reported to the County's Communicable Disease Unit with a reportable condition, which is how comorbidities were assessed for this section. Of the 389, 98 cases (25%) were diagnosed with at least one of the reportable conditions listed in Table 4. Ninety-eight individuals accounted for 126 different diseases. The largest portion of PLWA-H cases were reported as having chronic Hepatitis C. The next most common comorbidities included chlamydia and/or gonorrhea, chronic Hepatitis B, syphilis and enteric infections—which are transmitted fecal-to-oral.

Table 3. Reportable Comorbid conditions among Persons presumed living with AIDS or HIV (PLWA-H), Santa Cruz County, 2007.

Comorbid Conditions	Male		Female		TOTAL	
	n	% of PLWA-H	n	% of PLWA-H	n	% of PLWA-H
Tuberculosis	4	1	0	-	4	1
Hepatitis B, chronic	17	5	1	2	18	5
Hepatitis C, chronic	31	9	7	13	38	10
Chlamydia or Gonorrhea	27	8	3	6	30	8
Syphilis (any stage)	16	5	1	2	17	4
Enteric [^]	11	3	4	7	15	4
Meningitis (viral or fungal)	4	1	0	-	4	1
TOTAL Comorbidities*	110	N/A	16	N/A	126	N/A
TOTAL PLWA-H	334	86	55	14	389	100
Percent of PLWA-H with at least one Comorbidity	86	26	12	22	98	25

[^] 65 HIV cases could not be included in this analysis because their names are still unknown.

* This total includes persons who had more than one comorbidity and so the percentage is not calculated.

[^] Including: amebiasis (n=2), campylobacteriosis (n=2), cryptosporidiosis (n=2), giardiasis (n=5), Hepatitis A (n=1), Salmonellosis (n=1), Shigellosis (n=1) and Toxoplasmosis (n=1)

Whites and Latinos Living with AIDS and HIV:

This section sorts characteristics by Whites living with AIDS or HIV and Latinos living with AIDS or HIV. It is shown to compare differences between the racial and ethnic groups with regard to: gender, age at diagnosis, city of residence, and mode of transmission. The other races (Black, Asian/PI, Multi-race and unknown) have been left out of this comparison due to very small numbers that become even smaller when further categorized. Prevalence is shown in the following table; it is the number of persons living with HIV/AIDS per 100,000 populations at risk

Anecdotally, it has been observed through HIV prevention efforts that targeting Latino men and women can be extra challenging due to the lack of acceptance of homosexuality within the Latino culture. Some Latino men who prefer to have sex with men, identify as heterosexual, and may be married to a woman, yet engage in sex with other men. Many times the female partner does not know that her male partner is having sex with other men. This increases the risk of both Latino men and women and creates challenges when developing prevention strategies.

Table 4. Characteristics of White and Latino persons living with AIDS and HIV, Santa Cruz County, 2007

	White					Latino				
	PLWA		HIV Cases ^a		HIV/AIDS	PLWA		HIV Cases ^a		HIV/AIDS
	No.	%	No.	%	Prevalence ^b	No.	%	No.	%	Prevalence ^b
Total	178	100	133	100	201.5	71	100	34	100	118.6
Gender										
Male	153	86	115	86	355.7	63	89	27	79	196.2
Female	25	14	18	14	53.5	8	11	7	21	35.2
Age At Diagnosis^c										
< 20	0	0	2	2	N/A	0	0	1	1	N/A
20-29	26	15	21	16	N/A	15	21	15	44	N/A
30-39	74	42	41	31	N/A	34	48	9	26	N/A
40-49	51	29	49	37	N/A	17	24	7	21	N/A
Over 49	27	15	20	15	N/A	5	7	2	6	N/A
City of Residence										
Capitola	6	3	7	5	167.9	5	7	4	12	805.7
Santa Cruz	92	52	69	52	235.4	28	39	10	29	238.2
Scotts Valley	6	3	6	5	96.0	1	1	1	3	-
Watsonville	12	7	18	14	121.6	31	44	14	41	87.0
Unincorporated	62	35	33	25	143.1	6	8	5	15	114.4

Note: AIDS cases are representative through 2007, updated 7/25/08. All data are provisional and subject to change.

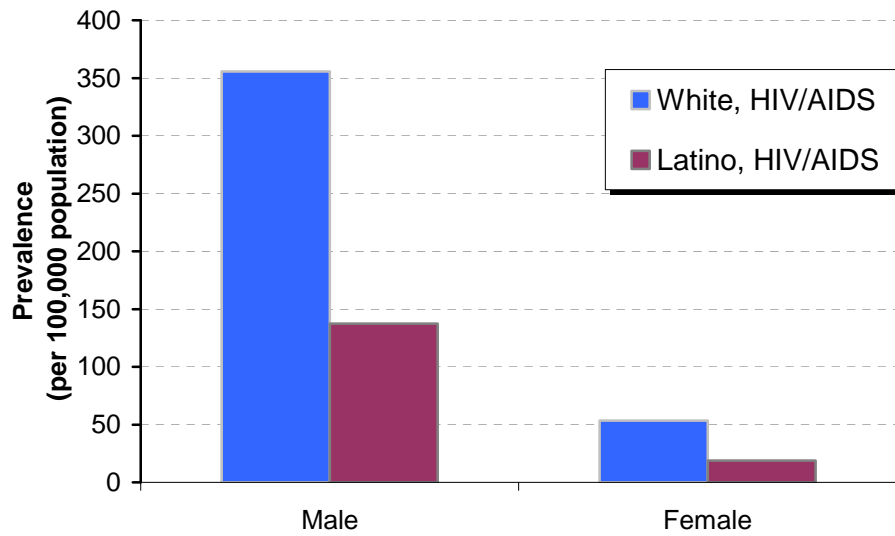
^a HIV Only excludes AIDS cases

^b Prevalence is the number of living cases per 100,000 population at risk. Population data is from CA Dept. of Finance estimates, 2007 (except for city data which is from the 2000 Census). Prevalence values based on counts less than three are not shown; values based on counts less than 20 are unstable. Prevalence calculations do not exclude HIV cases that died of other causes.

^c "Age at Diagnosis" is not representative of the current population therefore prevalence is not appropriate.

GENDER

Figure 11. White and Latino persons living with HIV or AIDS by gender, Santa Cruz County, 2007



There is a slightly higher prevalence ratio of male cases to female cases among Whites compared to Latinos. However, the Latina prevalence values are unstable due to the small number of cases.

AGE AT DIAGNOSIS

Figure 12. White persons living with AIDS or HIV by age at diagnosis, Santa Cruz County, 2007

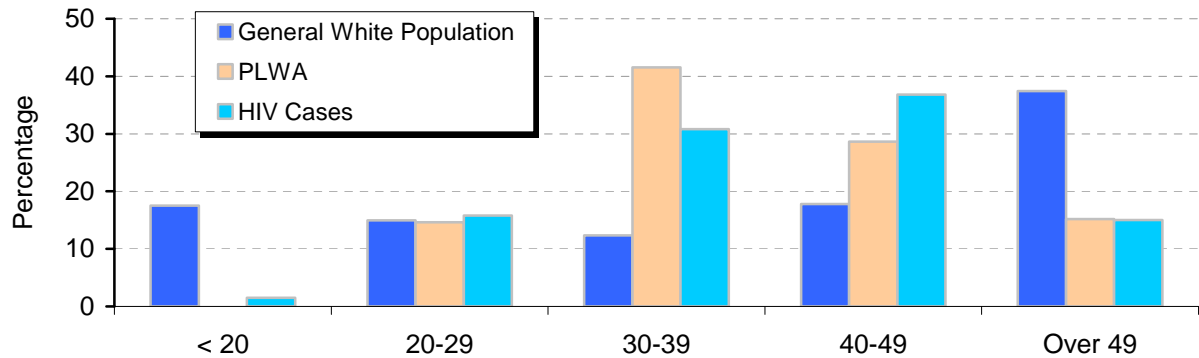
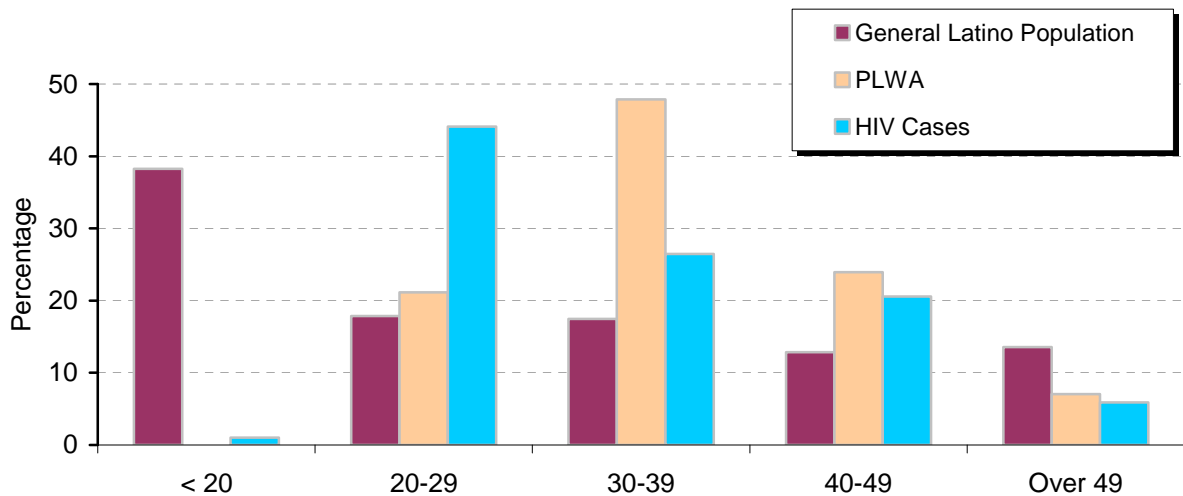


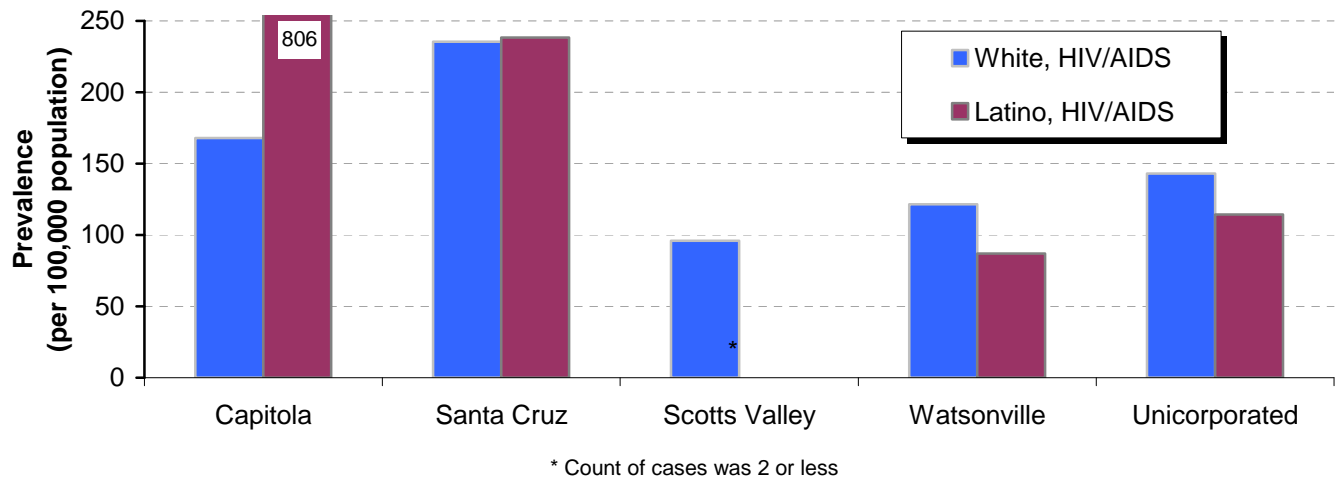
Figure 13. Latino persons living with AIDS or HIV by age at diagnosis, Santa Cruz County, 2007



Whites tend to have a later age of diagnosis for both HIV and AIDS than Latinos. In Latinos, 20-29 year olds represent the largest portion HIV diagnoses while those that are 30-39 years old represent the largest portion of AIDS diagnoses. For Whites, the age at diagnosis peaks in the 40-49 age group for HIV and the 30-39 age group for AIDS.

CITY OF RESIDENCE

Figure 14. White and Latino persons living with AIDS or HIV by city of residence, Santa Cruz County, 2007



Although the prevalence in Capitola is extremely high for Latinos, this rate is unstable since it is based on a count of less than 20. However, it is of some interest based on the relatively small population of Latinos living in Capitola. The prevalence of Latino cases living in Watsonville compared to those living in unincorporated parts of the county are 25% and 40% higher for Latinos than for Whites while the prevalences of HIV/AIDS in Santa Cruz are approximately equal.

MODE OF TRANSMISSION

Table 5. Mode of Transmission among White and Latino PLWA by gender, Santa Cruz County, 1983-2007

Mode of Transmission ^a	Males, PLWA				Females, PLWA			
	White		Latino		White		Latina	
	No.	%	No.	%	No.	%	No.	%
MSM	110	72	44	70	n/a	-	n/a	-
IDU	19	12	4	6	7	28	2	25
MSM/IDU	18	12	5	8	n/a	-	n/a	-
HEM	1	1	0	0	1	4	0	0
HET	3	2	10	16	16	64	6	75
XFUS	0	0	0	0	1	4	0	0
RNS	2	1	0	0	0	0	0	0
Total	153	100	63	100	25	100	8	100

Note: AIDS cases are representative through 2007, updated 7/25/08. All data are provisional and subject to change.

^a See "Frequently Used Abbreviations" section for definitions.

Table 6. Mode of Transmission among Whites and Latinos with HIV by gender, Santa Cruz County, 1985-2007

Mode of Transmission ^a	Males, HIV				Females, HIV			
	White		Latino		White		Latina	
	No.	%	No.	%	No.	%	No.	%
MSM	92	80	23	85	n/a	-	n/a	-
IDU	9	8	2	7	6	33	0	0
MSM/IDU	8	7	1	4	n/a	-	n/a	-
HEM	1	1	0	0	0	0.0	0	0
HET	4	4	0	0	11	61	7	100
XFUS	0	0.0	0	0	0	0.0	0	0.0
RNS	1	1	0	0	1	6	0	0.0
MOT	0	0.0	1	4	0	0.0	0	0.0
Total	115	100	27	100	18	100	7	100

Note: HIV cases are representative through 2007, updated 7/25/08. All data are provisional and subject to change.

^a See "Frequently Used Abbreviations" section for definitions.

For both PLWA and HIV cases, men having sex with men (MSM) is the most common risk factor among both White and Latino males. In PLWA males, MSM/IDU is the second most common risk factor for Whites, while heterosexual contact is the second most common risk factor for Latinos males representing data that supports the anecdotal reports of cultural difficulty with the acceptance of homosexuality. Among women, heterosexual contact accounts for the majority of PLWA/HIV cases for both Whites and Latinas. Interestingly, heterosexual contact accounts for 100% of risk factors attributed in HIV Latina cases. It is also hopeful to note that IDU use is less of a factor in recently reported HIV cases.

Trends among AIDS Cases:

As a byproduct of having fewer than 15 new cases of AIDS per year over the past few years, cases have been combined in order to present more reliable rates. Years have been grouped in 5-year intervals, and the incidence rates are the numbers of new cases, during the interval, per 100,000 population-year as of the middle year. Rates based on counts of less than 20 cases are considered unstable. Overall, the five-year rate of new cases has decreased 59% from 1993-97 to 2003-07.

Table 7. Characteristics of AIDS cases by Year of Diagnosis, Santa Cruz County, 1993-2007

	AIDS Diagnosed 1993-1997			AIDS Diagnosed 1998-2002			AIDS Diagnosed 2003-2007		
	No.	%	Rate ^a	No.	%	Rate ^a	No.	%	Rate ^a
TOTAL	179	100	14.8	95	100	7.4	80	100	6.1
Gender									
Male	164	92	27.3	80	84	12.5	65	81	10.0
Female	15	8	2.5	15	16	2.3	15	19	2.3
Age Group									
Under 5	1	1	-	0	-	-	0	-	-
5-12	1	1	-	0	-	-	0	-	-
13-19	1	1	-	0	-	-	0	-	-
20-29	31	17	17.2	14	15	7.2	4	5	1.9
30-39	77	43	37.7	40	42	20.2	32	40	17.1
40-49	49	27	23.8	24	25	11.0	28	35	13.3
Over 49	19	11	7.4	17	18	5.3	16	20	4.4
Race/Ethnicity^b									
White	140	78	16.6	58	61	6.8	50	69	6.4
Latino	27	15	9.4	27	28	7.8	27	25	6.5
Black	4	2	30.4	6	6	53.7	1	3	-
Other ^c	8	5	13.5	4	4	5.2	2	<1	-
City of Residence									
Capitola	4	2	7.9	2	2	-	3	4	6.0
Santa Cruz	89	50	34.6	53	56	19.4	36	45	12.8
Scotts Valley	5	3	10.1	1	1	-	3	4	5.2
Watsonville	22	12	12.1	17	18	7.7	17	21	6.9
Unincorporated	58	32	8.8	22	23	3.3	21	26	3.2

Note: AIDS cases are representative through 2007, updated 7/25/07. All data are provisional and subject to change.

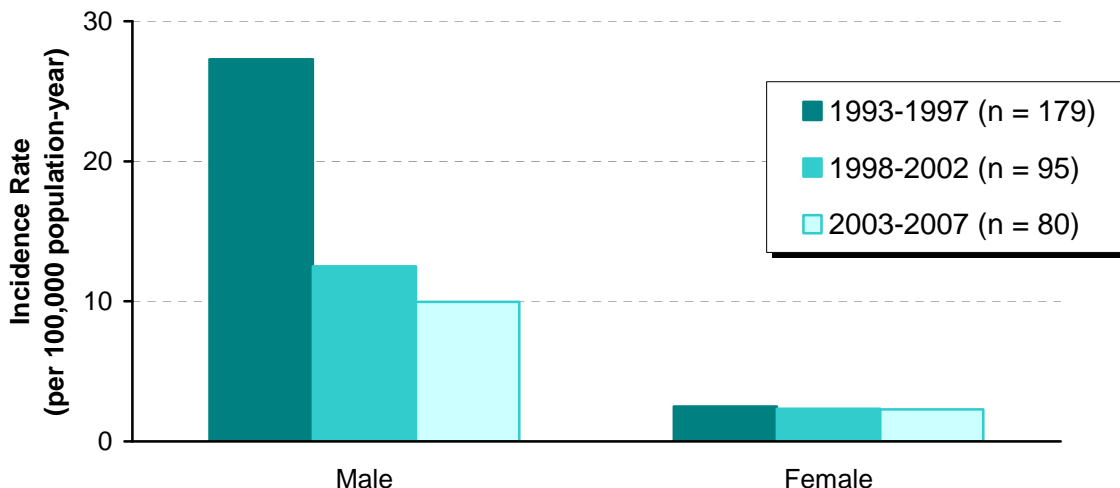
^aRate is incidence rate (the number of new cases during the 5 years specified per 100,000 population - year based on mid-year values). Rates based on fewer than 20 cases are considered unstable. And are not calculated for counts of 2 or less.

^bSee "Frequently Used Abbreviations" section

^cOther includes: Asian/PI, AI/AN, and Other

GENDER

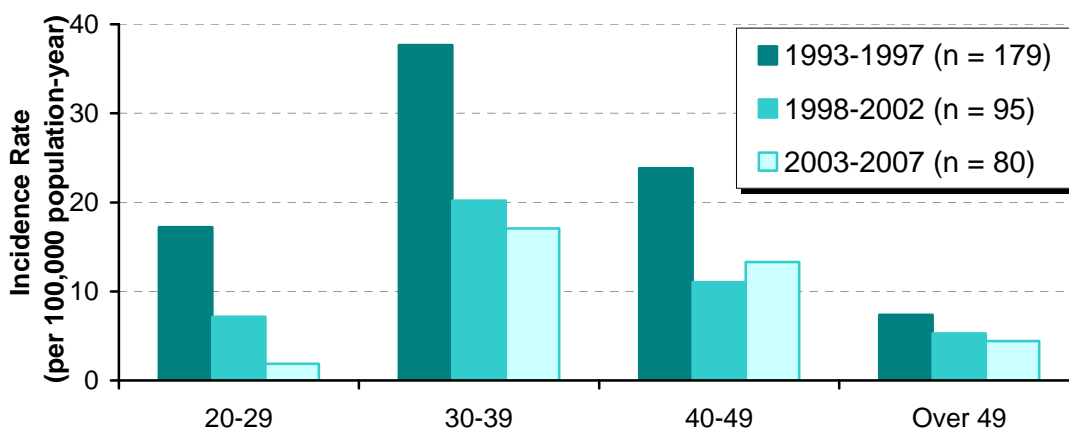
Figure 15. Incidence rates of AIDS cases by year of diagnosis and gender, Santa Cruz County, 1993-2007



Men have maintained a range of 74–100% of all AIDS cases diagnosed for any given year between 1993 and 2007, with an average share of 87% of cases. In 2003-2007, the percentage of female cases was the largest to date at 19%. Since 1993, the incidence of new female AIDS cases has not changed significantly, while the incidence of new male AIDS cases has decreased by 63%. Therefore, the percentage of cases who were female increased from 8% in 1993-1997 to 18% in 2003-2007, this is a very disturbing trend.

AGE GROUP

Figure 16. Incidence rates of AIDS cases by year and age at diagnosis, Santa Cruz County, 1993-2007

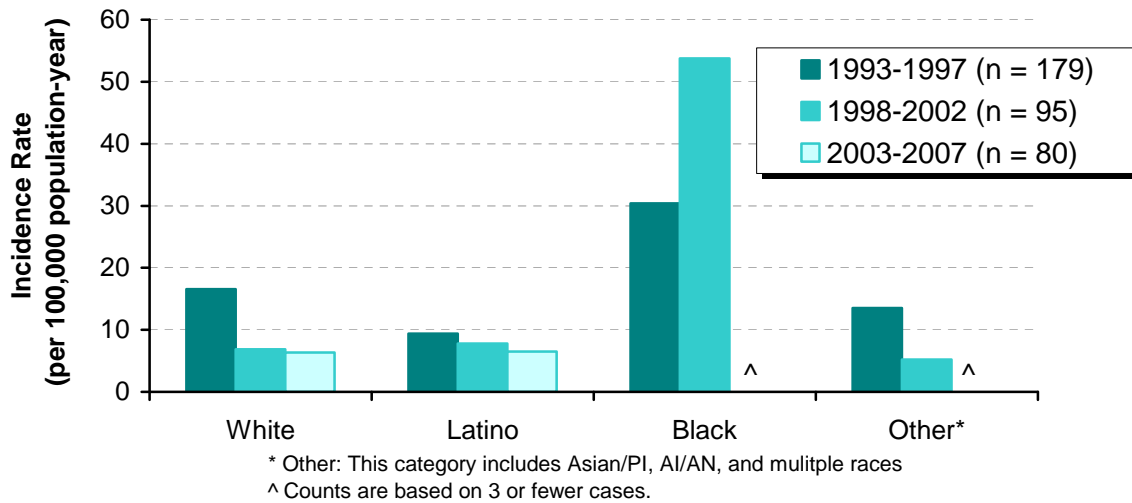


For every year from 1993 to 2007, between 22-60% of cases were diagnosed with AIDS when they were between 30 and 39 years old, with an average of 50%. There has also been an increase

in the percentage of cases diagnosed at and over age 50. This is likely a result of HAART, which allows people to age more before progressing from HIV to AIDS.

RACE/ETHNICITY

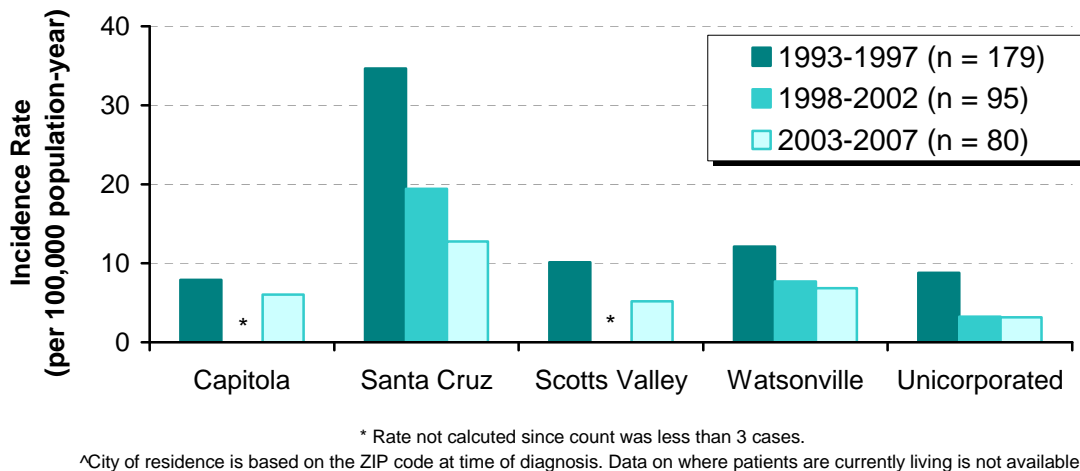
Figure 17. Incidence rate of AIDS cases by year of diagnosis and race/ethnicity, Santa Cruz County, 1993-2007



The incidence ratio of White cases to Latino cases went from twice as many White cases between 1993-97 to nearly equal rates in 2003-07. Black cases had an extremely high, but unstable range of rates.

CITY OF RESIDENCE

Figure 18. Incidence rate of AIDS cases by year of diagnosis and city of residence[^], Santa Cruz County, 1993-2007



Most AIDS cases were residing in the City of Santa Cruz (or Live Oak) when diagnosed. However, in the past few years, other areas of the county have been accounting for an increasing proportion of cases.

MODE OF TRANSMISSION

Table 8. Characteristics of AIDS cases by year of diagnosis, mode of transmission, and gender, Santa Cruz County, 1993-2007

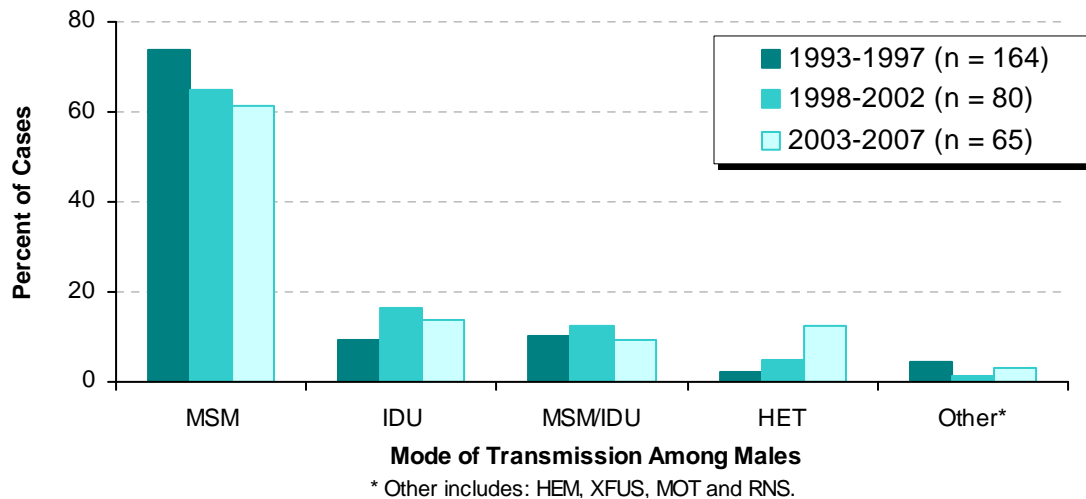
	Diagnosed 1993-1997		Diagnosed 1998-2002		Diagnosed 2003-2007	
	No.	%	No.	%	No.	%
TOTAL	179	100	95	100	80	100
Male	164	92	80	84	65	81
MSM	121	74	52	65	40	62
IDU	15	9	13	16	9	14
MSM/IDU	17	10	10	13	6	9
HET	4	2	4	5	8	12
Other*	7	4	1	1	2	3
Female	15	8	15	16	15	19
IDU	6	40	4	27	2	13
HET	7	47	11	73	12	80
Other*	2	13	0	0	1	7

Note: AIDS cases are representative through 2007, updated 7/28/08. All data are provisional and subject to change.

* Other: HEM, XFUS, MOT and RNS. See "Frequently Used Abbreviations" for definitions.

MALES

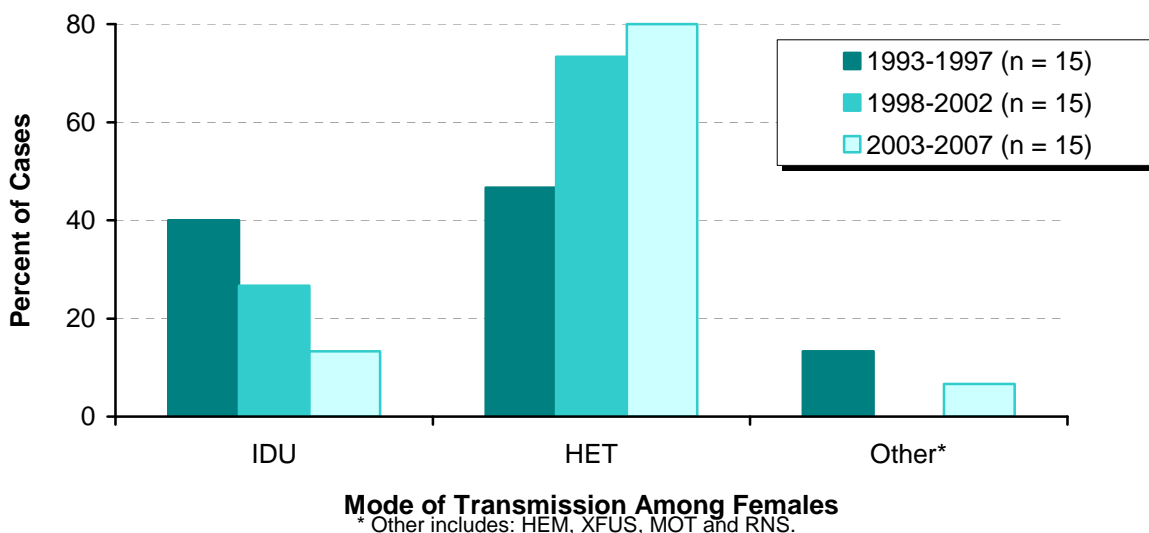
Figure 19. Male AIDS cases by mode of transmission and year of diagnosis, Santa Cruz County, 1993-2007



Modes of transmission characteristics are fairly stable for males over the 15-year period. MSM has remained the predominant mode of male HIV/AIDS transmission in Santa Cruz County, accounting for 31-72% of male AIDS cases diagnosed between 1993–2007. However, a growing proportion of cases have attributed their illness to IDU and heterosexual contact from 1993-1997 to 2003-2007.

FEMALES

Figure 20. Female AIDS cases by mode of transmission and year of diagnosis, Santa Cruz County, 1993-2007



In females, the mode of transmission has changed considerably over the 15-year period. The percentage of cases from heterosexual contact, the most commonly cited mode of transmission by female AIDS cases, increased about 70% between 1993-97 and 2003-07. In contrast, the percentage of cases with IDU decreased 66% between 1993-97 and 2003-07.

Trends among HIV Cases:

While the time between an HIV infection and an HIV diagnosis may vary from months to years, an HIV diagnosis certainly represents more recent transmission activity than an AIDS diagnosis.⁹ Before 2002, HIV diagnoses were not reportable in California. At that time many HIV cases were reported; some were new infections but most were old infections accounting for the sudden peak in HIV diagnoses in 2002. Based on a 16-site study in the U.S., about 45% of all HIV infections are diagnosed “late” (less than 12 months before the infection transitions to AIDS).¹⁰ Between 2003 and 2007, 34% of HIV positive individuals in Santa Cruz diagnosed with AIDS were considered late diagnoses meaning they were diagnosed with AIDS within one year of their HIV.

Table 9. Characteristics of total HIV cases by year of diagnosis and mode of transmission, Santa Cruz County, 2003-2007

	HIV Diagnosed in 2003-2007	“Late” HIV Diagnosis ^d		HIV Incidence rate ^b 2003-07
	No.	No.	%	
TOTAL	105	36	34	8.0
Gender				
Male	92	30	33	14.1
Female	13	6	46	2.0
Age Group				
0-19	2	0	0	-
20-29	19	2	11	8.9
30-39	38	14	37	20.3
40-49	36	14	39	17.1
50+	10	6	60	2.8
Race/Ethnicity^a				
White	62	18	29	7.9
Latino	31	16	52	7.5
Black	4	1	25	32.8
Other ^c	8	1	13	8.7
City of Residence				
Capitola	6	2	33	12.1
Santa Cruz	49	18	37	17.4
Scotts Valley	4	1	25	6.9
Watsonville	18	5	28	7.3
Unincorporated	28	10	36	4.2

Note: HIV cases are representative through 2007, updated 7/28/08. All data are provisional and subject to change.

^a See Technical Notes section for definitions of the following characteristics

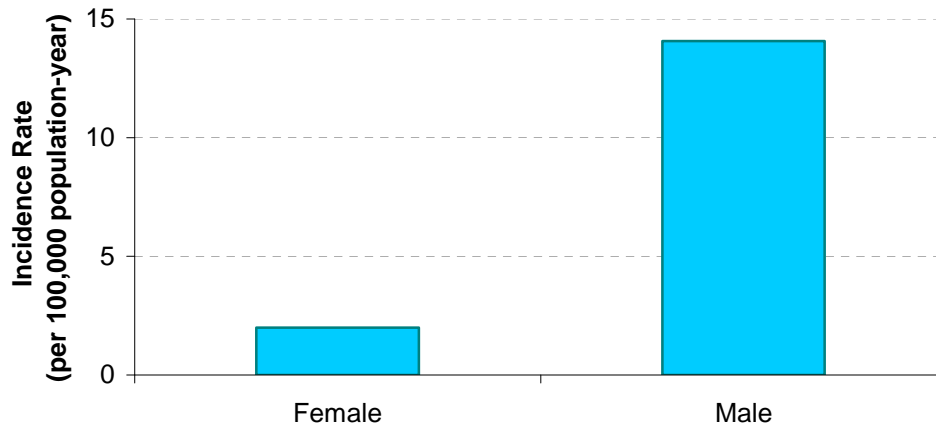
^b Incidence rate is the number of new cases over per 100,000 population per year. Incidences based on fewer than 20 cases are considered unstable. Incidence is not calculated for fewer than 3 cases.

^c Other includes: Asian/PI, AI/AN, and Other

^d A late diagnosis means the person progressed to AIDS within a year of their HIV diagnosis.

GENDER

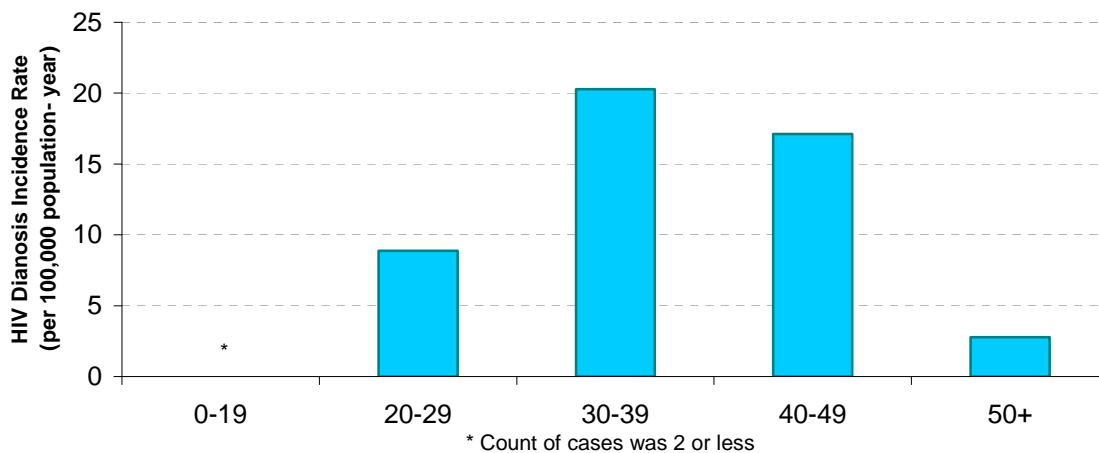
Figure 21. Incidence rate of HIV diagnoses by gender, Santa Cruz County, 2003-2007



Men have maintained a range of 78–96% of all HIV cases diagnosed for any given year between 2003 and 2007 with an average 88% of all HIV diagnoses. In 2007, the percentage of female cases was largest at 22%. Nearly half of all women diagnosed between 2003 and 2007 were considered late diagnoses.

AGE GROUP

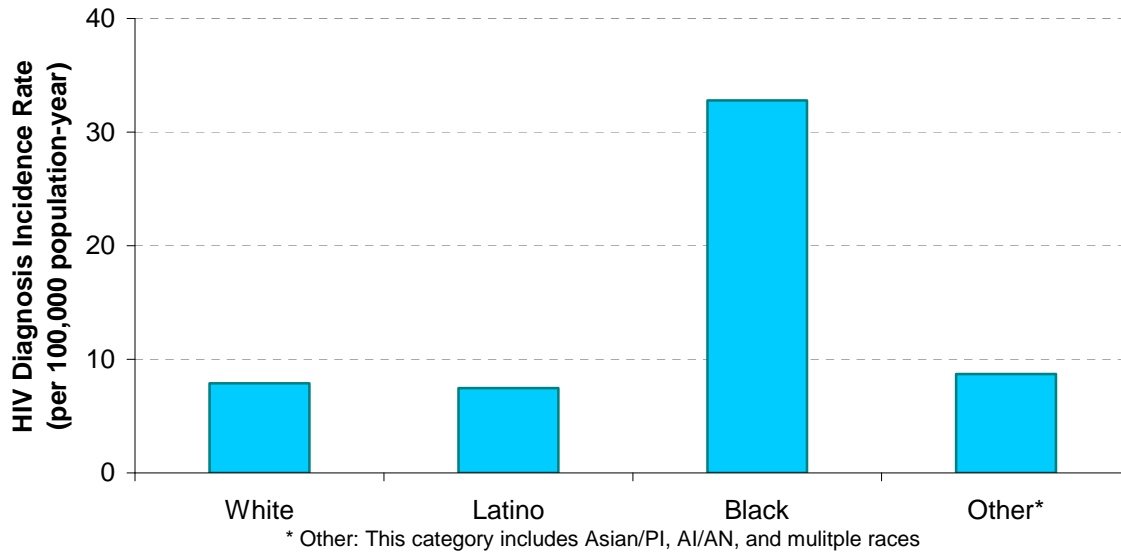
Figure 22. Incidence rate of HIV diagnoses by age at diagnosis, Santa Cruz County, 2003-2007



For every year from 2003 to 2007, 60-89% of HIV cases were diagnosed when they were between 30 and 49 years old, and more than a third were considered late diagnoses. Additionally, 60% of HIV diagnoses in individuals aged 50 or more were considered as late diagnoses.

RACE/ETHNICITY

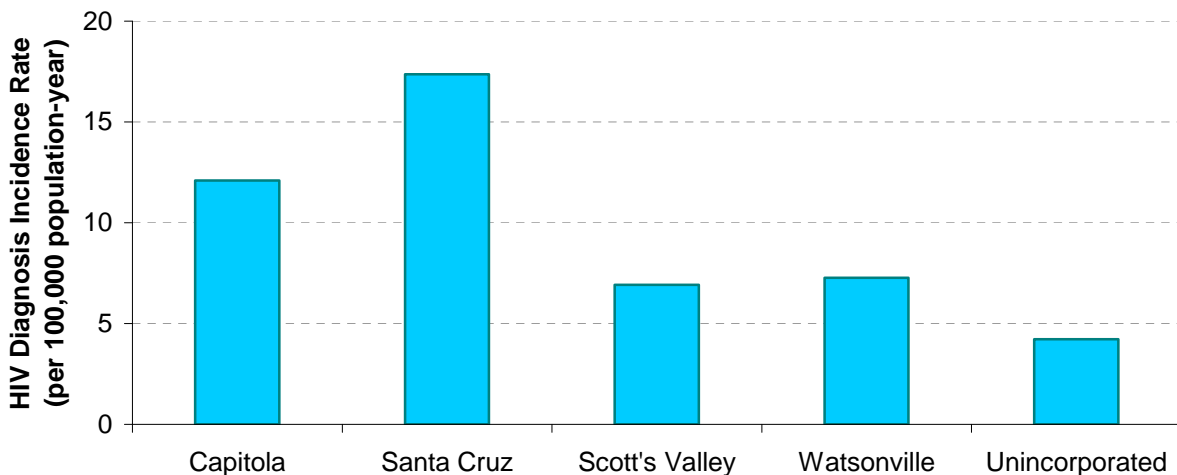
Figure 23. Incidence rate of HIV diagnoses by race/ethnicity, Santa Cruz County, 2003-2007



While the incidence of HIV diagnosis for Whites and Latinos was similar, 52% of the Latinos were considered late diagnoses, compared to 29% of Whites. Again, Blacks have an extremely high but statistically unstable incidence rate of HIV diagnoses.

CITY OF RESIDENCE

Figure 24. Incidence rate of HIV by city of residence, Santa Cruz County, 2003-2007



Nearly half of HIV cases occurred among Santa Cruz residents. Capitola has the second highest incidence rate of HIV diagnoses but it is statistically unstable. The percentage of late diagnoses varied from 25% of cases in Scotts Valley to 37% in Santa Cruz.

MODE OF TRANSMISSION

Table 10. Characteristics of HIV cases by mode of transmission and gender, Santa Cruz County, 2003-2007

	HIV Diagnosed in 2003-2007	"Late" HIV Diagnosis ^a	
	No.	No.	%
Total	105	36	34
Male	92	30	33
MSM	67	18	27
IDU	7	3	43
MSM/IDU	5	2	40
HET	7	5	71
Other*	6	2	33
Female	13	6	46
IDU	3	1	33
HET	10	5	50
Other*	0	0	0

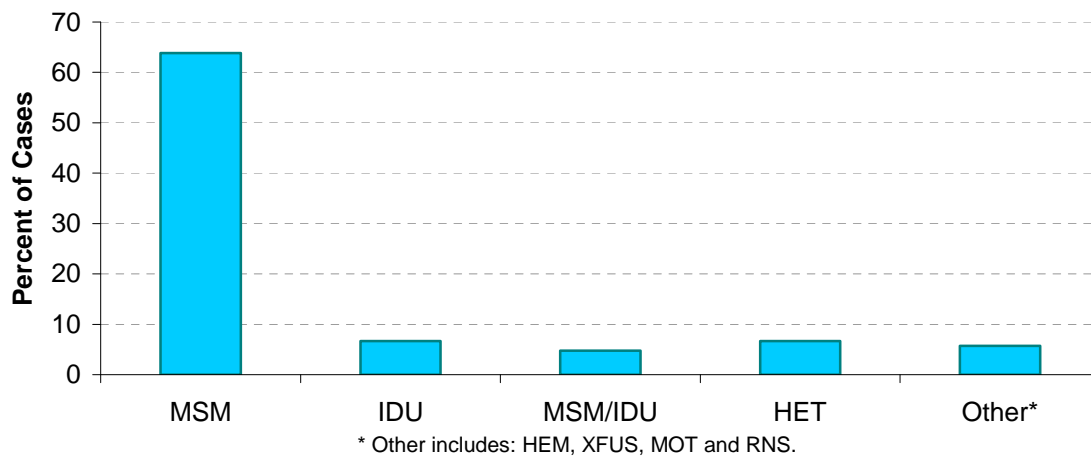
Note: HIV cases are representative through 2007, updated 7/28/08. All data are provisional and subject to change.

* Other: HEM, XFUS, MOT and RNS. See "Frequently Used Abbreviations" for definitions.

^aA late diagnosis means the person progressed to AIDS within a year of the HIV diagnosis.

MALES

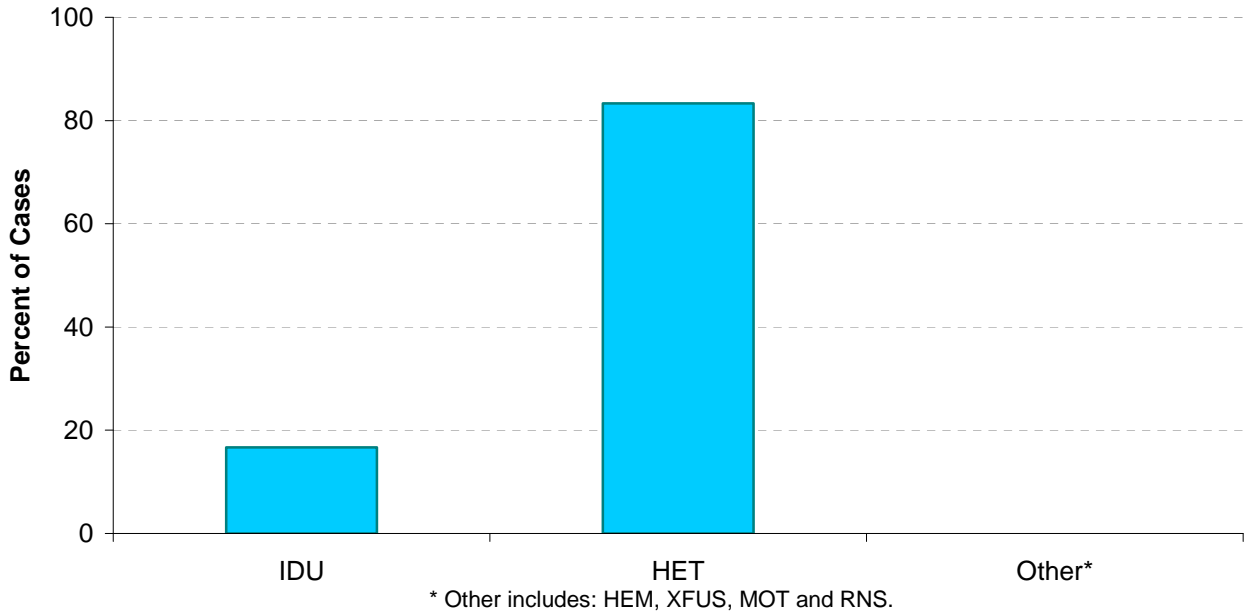
Figure 25. Male HIV diagnoses by mode of transmission, Santa Cruz County, 2003-2007



MSM has remained the predominant mode among HIV/AIDS cases in Santa Cruz County, accounting for 52-100% of male HIV cases diagnosed between 2003–2007. Interestingly, 27% of MSM were considered late diagnoses compared to 71% of males reporting heterosexual contact their risk.

FEMALES

Figure 26. Female HIV diagnoses by mode of transmission among females, Santa Cruz County, 2003-2007



The majority of HIV cases among females can be attributed to heterosexual contact accounting for 50%-100% of female cases diagnosed with HIV each year between 2003 and 2007. In 2007, 100% of the women who reported with HIV cited heterosexual contact as their only risk factor. 33% of women with IDU as their risk factor were diagnosed late compared to 50% of women with heterosexual contact as their risk factor.

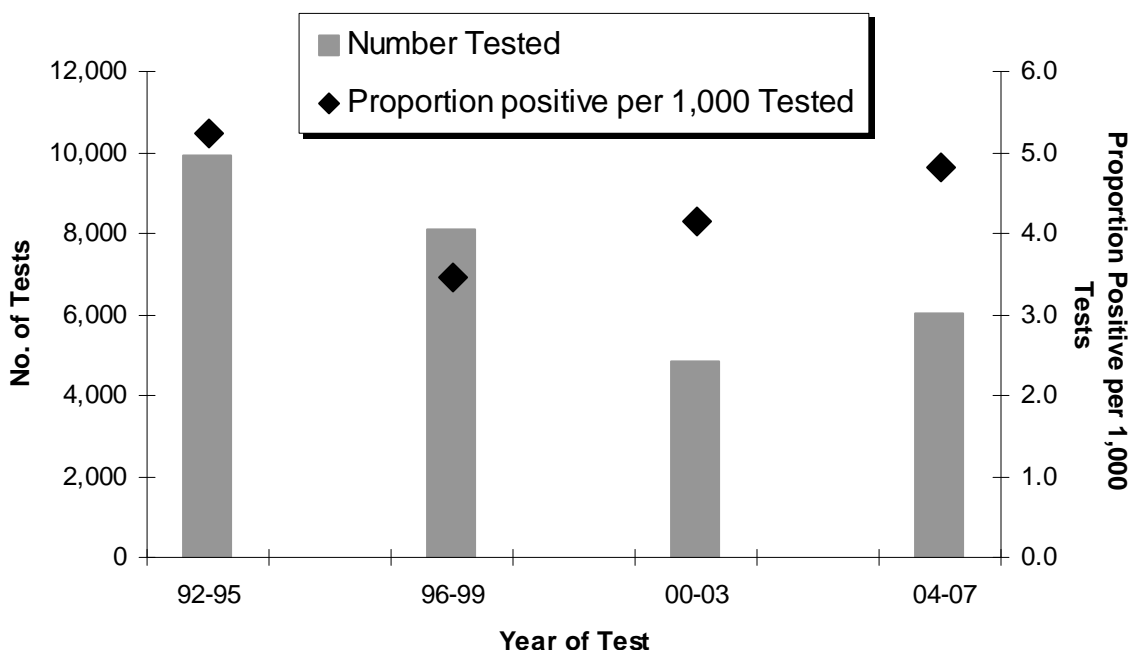
Local HIV Screening Results

The County of Santa Cruz Health Services Agency has offered free, anonymous and confidential HIV testing since 1992; persons can choose from a variety of community sites where rapid HIV testing is available. The local health department began rapid testing in April of 2004. The rapid test called OraQuick tests for HIV antibodies (not the HIV virus) with an oral swab and results are available in 20 minutes. In 2007, there were 1,176 tests given. It is important to note that one person can be tested more than once. Therefore the 1,176 tests likely do not correspond to 1,176 different individuals.

Table 11. Number of HIV tests given and the proportion of positives per 1,000 tested over four-year intervals, Santa Cruz County, 1992-2007

	92-95	96-99	00-03	04-07	Total
No. of Tests Given	9,935	8,085	4,816	6,023	28,859
No. of Positive Tests	52	28	20	29	129
Proportion positive per 1,000 Tested	5.2	3.5	4.2	4.8	4.5

Figure 27. Number of HIV tests given and the proportion of positives per 1,000 tested over four-year intervals, Santa Cruz County, 1992-2007



A total of 129 positive tests have been logged since 1992. The number of tests given has declined 40% between 1992-95 and 2004-07. However, the proportion of positive test results, while varied, has steadily increased since 1996-1999.

The characteristics of persons testing positive during anonymous HIV testing continues to parallel AIDS case data. For example, MSM is the most common risk factor among those infected with HIV, followed by IDU and MSM/IDU risk factors. Overall, of persons testing positive for HIV through anonymous testing: 91% are male, 64% are White and 25% are Latino.

Utilization of HIV/AIDS Services:

COMMUNITY ADVOCACY RESOURCE (CARE) TEAM and the HIV Early Intervention Services Program

The HIV Early Intervention Services (EIS) Program provides a variety of medical, dental, mental health, and social services to HIV+ clients. The Community Advocacy Resource (CARE) Team focuses on linking HIV+ clients to available services. While CARE Team activities are partially funded by EIS, the CARE Team does have other sources of funding to provide non-EIS services to clients. Therefore, some CARE Team clients may not receive EIS funded services.

The HIV EIS Program provides outpatient medical care free or on a sliding-scale. Outpatient HIV primary care is funded through the Federal Ryan White HIV/AIDS Treatment Modernization Act of 2006, the State of California, and the County of Santa Cruz.

EIS services provided on site at the Health Services Agency (HSA) include: 1) HIV antibody counseling and testing; 2) Outpatient primary care, including diagnosis and treatment of HIV disease, prophylaxis and treatment of opportunistic infections, laboratory, X-ray, and pharmacy services; 3) A nutritionist who provides counseling and body composition assays; 4) Medication education and adherence counseling; and 5) Comprehensive medical care management, social work case management, education, referrals, and advocacy provided by the CARE Team's public health nurses and social workers.

CARE Team clients are assigned nursing and social work case managers at no cost. The CARE Team helps link clients to medical care and treatment, mental health counseling, dental care, nutritional counseling, in-home nursing and attendant care, and social services support from other community agencies. CARE Team helps clients determine whether or not they meet the eligibility requirements in order to receive special funding to pay for many of these services. CARE Team also provides education about living with HIV, preventing transmission, having healthy intimate relationships, and dealing with substance abuse.

Clinical trials, specialty care providers, dental care, mental health and chemical dependency services are available through referrals to local providers. After-hours consultation and coordination with hospitalized patients helps assure continuity of care. Services are available in English and Spanish. Ongoing evaluation and Quality Management activities including multi-disciplinary team meetings as an integral part of HIV services--consumer input is solicited and encouraged. Outpatient HIV medical care is well integrated with other HSA departments including benefits eligibility, fiscal/accounting, and information services.

The following facts summarize the characteristics of patients seen by the EIS Program in the year 2007. There were 208 people utilizing services (12 of whom were new to the program in 2007 and 22 either became deceased, inactive, or their whereabouts are unknown).

- 82% of cases are male
- Nearly all (97% of) cases are between the ages of 25-64, with half between the ages of 25-44 and the other half ages 45-64.

- 61% of cases are White; 33% of cases are Latino
- 80% of cases report an income at or below the Federal Poverty Level.
- Of the 96% of patients who have reported their housing arrangements, approximately 1% do not have permanent housing.
- Of the cases who reported what source of insurance they have, 6% reported not having any insurance. Only 6% have private insurance and the rest have either: Medicare (28%), Medicaid (52%), other public source (6%), or unspecified source (3%).

Table 12. HIV/AIDS status of EIS clients

Status	No.	%
HIV+, not AIDS	99	48
HIV+, AIDS unk	2	1
CDC-defined AIDS	107	51
HIV-indeterminate (<2 yrs)	0	0
Total	208	100

In 2007 CARE Team services were provided to 144 clients. Three clients died during the year and 34 new clients were brought into at least one CARE Team program.

- 70% of clients are male
- Almost 99% were between 25-64; 63% between 25-44 and 35% between 45-64
- 59% of cases are White; 39% of cases are Latino
- 17% reported unstable housing or are homeless
- 9% have private insurance while 90% have public health insurance.
- 70% have transitioned to an AIDS diagnosis

For more information about the EIS Program or CARE Team, please visit: www.santacruzhealth.org.

SANTA CRUZ AIDS PROJECT (SCAP)

The Santa Cruz AIDS Project is a community-based, non-profit organization. Started by volunteers, SCAP offers the following services to HIV+ persons:

- Case Management and Advocacy
- Supportive Counseling and Referrals
- Assistance Obtaining Financial Resources

Case managers provide clients with emotional support, service plan development and community service provider referrals. SCAP assists clients in qualifying for financial assistance for care services under federal grants which assist people with housing, utilities, medication, nutritional supplements, counseling and the medical costs associated with HIV.

The following facts summarize the characteristics of patients seen by SCAP in the year 2007. There were 207 people utilizing services (7 of whom were new to the program last year).

- 84% of cases are male
- Most (95% of) cases are between the ages of 25-64 with half between the ages of 25-44 and the other half ages 45-64.
- 61% of cases are White; 27% of cases are Latino
- 80% of cases report an income at or below the Federal Poverty Level.
- Approximately 3% are not permanently housed.
- Of the cases that reported their source of insurance, 12% have private insurance and the rest have either: Medicare (31%), Medicaid (16%), other public source (40%), or other-unspecified source (<1%) and less than 1% reported not having any insurance

Descriptive data on HIV (non-AIDS) versus AIDS status is unknown for SCAP patients. For more information about SCAP, go to <http://scapsite.org/>.

SUMMARY

SCAP, CARE Team, and the EIS Program all work together to manage HIV/AIDS clients in Santa Cruz County. Some clients utilize all services, some use one or two, and some do not use any. From observations by staff, some HIV/AIDS cases may not use services because they have other sources of medical care and emotional support.

Conclusions:

AIDS data tends to provide a historical view of HIV transmission in affected populations. HIV data tends to present a more accurate and timely picture of recent HIV occurrence, transmission and impact throughout Santa Cruz County. HIV data accuracy will further improve with time as the newly implemented name-based system allows for more comprehensive and accurate data to be collected. However, based on national research 25% of persons with an HIV infection are not aware of their HIV status.¹¹ Since HIV infections may be asymptomatic for years after initial infection, an HIV diagnosis does not always represent a new infection. For example, 34% of Santa Cruz County residents who tested positive with HIV from 2003-07 were considered “late-diagnoses,” meaning they transitioned to AIDS within a year of their HIV diagnosis implying that they had been infected for some time before being diagnosed. Since most persons living with HIV are asymptomatic for many years, this creates a worrisome picture of unintentional transmission through unsafe habits. It is the intent that this report will provide a stronger foundation for community-based organizations, planners, policy-makers, and public health to more effectively and efficiently create and evaluate programs and policies supporting HIV/AIDS prevention, detection and care in Santa Cruz County.

Sources:

1. U.S. Department of Health and Human Services, Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. “Advances in Methods of Measuring Incidence – Questions and Answers.”
(<http://www.cdc.gov/hiv/topics/surveillance/resources/qa/incidence.htm>) (September 12, 2008)
2. U.S. Department of Health and Human Services, Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. “HIV/AIDS Surveillance Report.” Year End Edition 12 (2).
<http://www.cdc.gov/hiv/topics/surveillance/resources/reports/pdf/hasr1202.pdf>
3. Map of California with Santa Cruz county Highlighted. (image) www.wikimedia.org.
(http://en.wikipedia.org/wiki/Image:Map_of_California_highlighting_Santa_Cruz_County.svg).
4. State of California, Department of Finance. “California Ranking Report July 2007.”
(<http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/documents/Ranking%20Reports%20Jul07.xls>)
5. State of California, Department of Finance. “Race/Ethnic Population with Age and Sex Detail, 2000–2050.” Sacramento, CA, July 2007.
(http://www.dof.ca.gov/HTML/DEMOGRAP/Data/RaceEthnic/Population-00-50/RaceData_2000-2050.php)
6. US Census Bureau, 2006 American Community Survey.
(http://factfinder.census.gov/servlet/ACSSAFFPeople?_event=&geo_id=05000US06087&_geoContext=01000US%7C04000US06%7C05000US06087&_street=&_county=santa+cruz+county&_cityTown=santa+cruz+county&_state=04000US06&_zip=&_lang=en&_sse=on&ActiveGeoDiv=&_useEV=&pctxt=fph&pgsl=050&_submenuId=people_1&ds_name=null&_ci_nbr=null&qr_name=null®=null%3Anull&_keyword=&_industry=)
7. Bureau of Economic Analysis (BEA). “Per Capita Personal Income by County for 2006.” US Department of Congress. (<http://www.bea.gov/regional/reis/crius.cfm>)
8. U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. “Child Health USA 2006.” Rockville, Maryland: U.S. Department of Health and Human Services, 2006.
(http://www.mchb.hrsa.gov/chusa_06/healthstat/children/graphs/0310pa.htm)
9. U.S. Department of Health and Human Services, Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. “HIV and AIDS in the United States: A pictures of Today’s Epidemic - Fact Sheet.” (July 15, 2007)
(http://www.cdc.gov/hiv/topics/surveillance/united_states.htm)
10. AK Nakashima, MD, ML Campsmith, DDS, MI Wolfe, MD, G Nakamura, PhD, EB Begley, and EH Teshale, MD. “Late Versus Early Testing of HIV --- 16 Sites, United States, 2000—2003.” MMWR 52 no.25 (June 27, 2003): 581-586
(<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5225a2.htm>)
11. Glynn, M. and Rhodes, P. “Estimated HIV Prevalence in the United States at the End of 2003.” National HIV Prevention Conference, 2005 June 12-15 (abstract no. T1-B1101).
(<http://www.aegis.com/conferences/NHIVPC/2005/T1-B1101.html>)