

Epidemiology of HIV/AIDS in Sonoma County Biannual Report June 30, 1999

**Prepared by:
Cindan Gizzi, MPH
Epidemiologist, Public Health Division**



**George R. Flores, MD, MPH, Public Health Officer
Norma Ellis, BSN, MPA, Director, Community Health Services
Pat Kuta, MPH, AIDS Program Manager
Patricia Ensrud, PHN, AIDS Surveillance**

Table of Contents

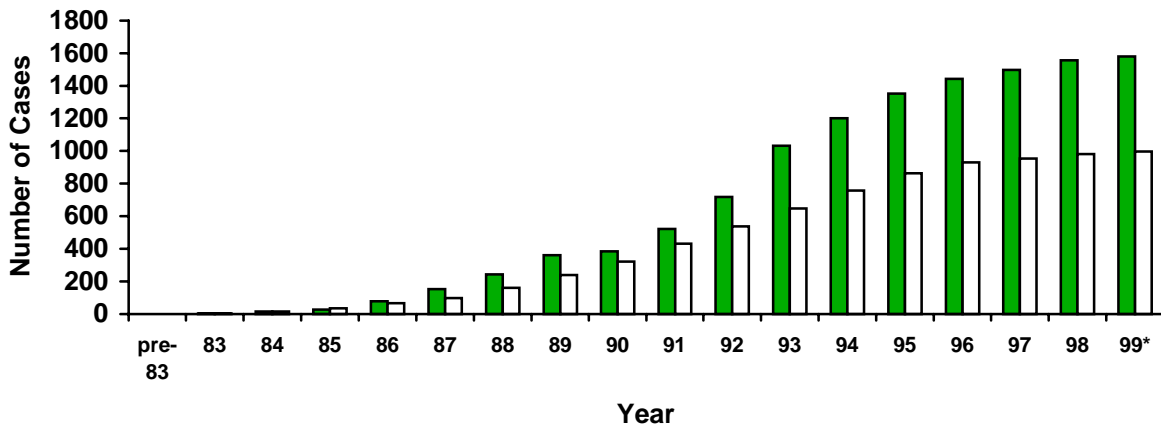
| | |
|--|----|
| Introduction | 1 |
| Cumulative AIDS Cases by Report Year and Year of Death | 1 |
| AIDS Cases by Report Year, Diagnosis Year and Year of Death | 2 |
| Risk Category for Adult/Adolescent (>12 years) AIDS Cases by Gender | 4 |
| Risk Category for Pediatric (<13 years) AIDS Cases | 4 |
| Risk Categories for Adult/Adolescent (>12 years) AIDS Cases by Year Reported | 5 |
| AIDS Cases Reported by Gender and Year Reported | 5 |
| Race/Ethnicity of AIDS Cases | 6 |
| Cumulative Incidence Rate of AIDS by Race/Ethnicity | 7 |
| AIDS Cases by Age Group at Diagnosis | 8 |
| Cumulative Incidence Rate of AIDS Cases by Age Group at Diagnosis | 8 |
| Adult/Adolescents (>12 years) Currently Living With AIDS | 9 |
| Cumulative Number of Persons Currently Living With AIDS by Year of Diagnosis | 9 |
| AIDS Cases by Location of Residence at Diagnosis | 10 |
| Locations with Highest Cumulative Incidence Rate of AIDS Diagnosis | 10 |
| AIDS Case Rate by Zip Code of Residence at Diagnosis | 11 |
| HIV Testing at County Anonymous & Confidential Testing Sites by Sex and Risk Category | 12 |
| 1998 Global, National and State HIV/AIDS Estimates | 13 |
| Sonoma County Contacts | 13 |

Introduction

The following report summarizes data from AIDS Confidential Case Report Forms submitted to the Sonoma County Department of Health Services by health care providers. This information allows examination of disease trends and helps determine where services should be targeted.

From January 1, 1983 through June 30, 1999, 1581 County residents were reported with AIDS; of these cases, 996 (63%) have died. This report includes only persons who were Sonoma County residents at the time of AIDS diagnosis. There is currently no system that tracks migration of individuals following AIDS diagnosis. Migration may result in a different number of persons with AIDS residing and requiring services in Sonoma County than are represented in this report.

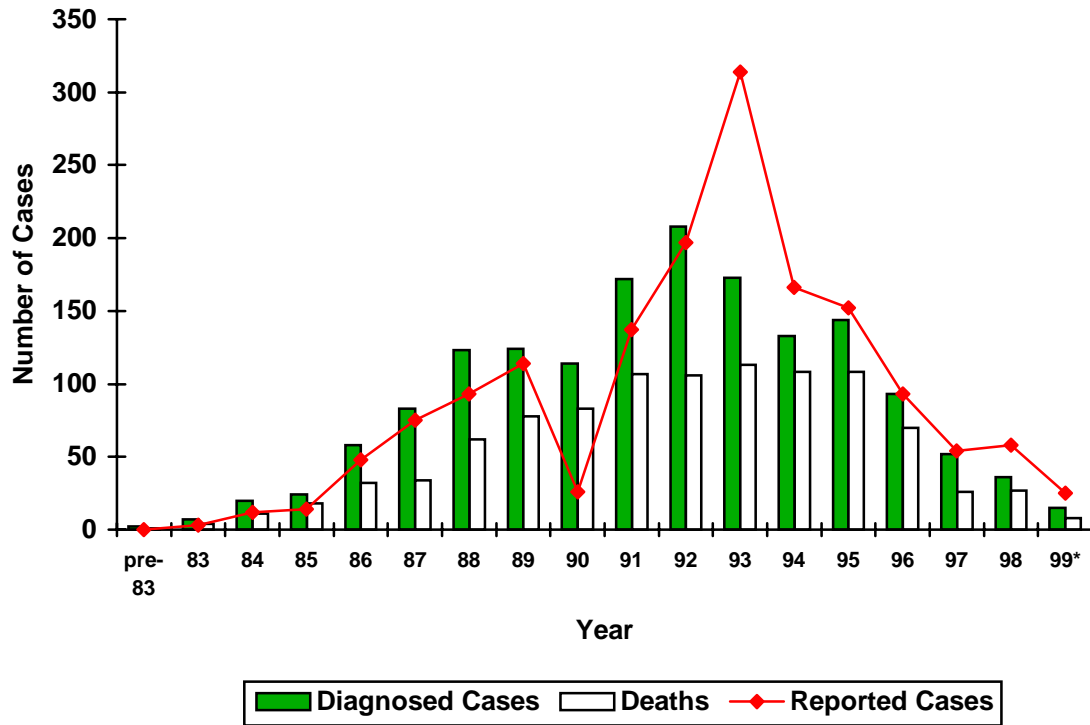
Cumulative AIDS Cases by Report Year and Year of Death, Sonoma County, 1981–1999*



| | | ■ Reported Cases | □ Deaths |
|-----------------------------|--------|------------------|----------|
| Year | pre-83 | 83 | 84 |
| Reported cases (cumulative) | 0 | 3 | 15 |
| Deaths (cumulative) | 1 | 5 | 16 |
| Year | 85 | 86 | 87 |
| Reported cases (cumulative) | 29 | 77 | 152 |
| Deaths (cumulative) | 34 | 66 | 100 |
| Year | 88 | 89 | 90 |
| Reported cases (cumulative) | 245 | 359 | 385 |
| Deaths (cumulative) | 162 | 240 | 323 |
| Year | 91 | 92 | 93 |
| Reported cases (cumulative) | 522 | 719 | 1033 |
| Deaths (cumulative) | 430 | 536 | 649 |
| Year | 94 | 95 | 96 |
| Reported cases (cumulative) | 1199 | 1351 | 1444 |
| Deaths (cumulative) | 757 | 865 | 935 |
| Year | 97 | 98 | 99* |
| Reported cases (cumulative) | 1498 | 1556 | 1581 |
| Deaths (cumulative) | 961 | 988 | 996 |

* Reported as of June 30, 1999.

AIDS Cases by Report Year, Diagnosis Year and Year of Death, Sonoma County, 1981–1999*



| | | | | | | | | | |
|-----------------|--------|-----|-----|-----|-----|----|-----|-----|-----|
| Year | pre-83 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| Diagnosed cases | 2 | 7 | 20 | 24 | 58 | 83 | 123 | 124 | 114 |
| Reported cases | 0 | 3 | 12 | 14 | 48 | 75 | 93 | 114 | 26 |
| Deaths | 1 | 4 | 11 | 18 | 32 | 34 | 62 | 78 | 83 |
| Year | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99* |
| Diagnosed cases | 172 | 208 | 173 | 133 | 144 | 93 | 52 | 36 | 15 |
| Reported cases | 137 | 197 | 314 | 166 | 152 | 93 | 54 | 58 | 25 |
| Deaths | 107 | 106 | 113 | 108 | 108 | 70 | 26 | 27 | 8 |

*Reported as of June 30, 1999.

Trends in AIDS cases are presented by year of report and year of diagnosis. The report date can lag behind the diagnosis date by days to months due to delays in completing case report forms, mailing and processing time and other factors. Report date is the official date used for surveillance purposes by the State Office of AIDS.

Examination of AIDS trends by report date minimizes the effect of reporting delays on recent cases. For example, the number of cases attributed to diagnosis in 1998 will grow as they finally are reported during 1999. In contrast, during the earlier portion of the epidemic the diagnosis dates give a more accurate representation of the disease trend at that time. For instance, the sharp increase in the number of cases reported in 1993 is temporally related to the expansion of the Centers for Disease Control and Prevention's (CDC) surveillance case definition to include immunosuppressed persons (low CD4).¹ As a result, cases reported in 1993 reflect persons with AIDS who did not meet the pre-1993 case definition but were reported once the new case-definition was implemented.

The number of newly diagnosed AIDS cases per year has been on the decline since 1993. This is likely due to improvements in treatments that have slowed the progression to AIDS among persons with HIV infection and widespread behavior changes resulting in fewer new infections. The number of deaths due to AIDS has likewise declined for the same reasons.

¹ CDC. 1983 Revised classification system for HIV infection and expanded case definition for AIDS among adolescents and adults. MMWR 1992;41(No. RR-17).

**Risk Category for Adult/Adolescent (>12 years) AIDS Cases
by Gender, Sonoma County, 1981–1999***

| Risk Category | Male (%) | Female (%) | Total (%) |
|--|-------------------|-------------------|-------------------|
| Gay/bisexual | 1253 (83) | 0 (0) | 1253 (80) |
| Injection drug user (IDU) | 57 (4) | 32 (45) | 89 (6) |
| Gay/bisexual IDU | 148 (10) | 0 (0) | 148 (9) |
| Hemophilia/ Coagulation disorder | 5 (<1) | 0 (0) | 5 (<1) |
| Heterosexual contact | 7 (<1) | 25 (35) | 32 (2) |
| Receipt of blood, blood components, or tissue | 18 (1) | 7 (10) | 25 (2) |
| Risk not reported/Other | 14 (<1) | 7 (10) | 21 (1) |
| Total | 1502 (100) | 71 (100) | 1573 (100) |

*Reported as of June 30, 1999.

There were no cases reported for the risk category of 'health care worker.' A hierarchical index following CDC guidelines is used to describe how each AIDS patient acquired the virus. In the above table, each AIDS patient is represented by one response. If a patient has more than one possible infection route, the response closest to the top of the table is selected.

**Risk Categories for Pediatric (<13 years) AIDS Cases,
Sonoma County, 1981–1999***

| Risk Category | Male (%) | Female (%) | Total (%) |
|--|-----------------|-------------------|------------------|
| Mother with, or at risk for, HIV infection | 1 (100) | 5 (83) | 6 (86) |
| Receipt of blood, blood components, or tissue | 0 (0) | 1 (17) | 1 (14) |
| Total | 1 (100) | 6 (100) | 7 (100) |

*Reported as of June 30, 1999.

No new pediatric AIDS cases have been reported since 1992, possibly due to perinatal testing and prophylaxis.

**Risk Categories for Adult/Adolescent (>12 years) AIDS Cases
by Year Reported, Sonoma County, 1994–1999***

| | 1994 | | 1995 | | 1996 | | 1997 | | 1998 | | 1999* | | Total | |
|-------------------------|------------|--------------|------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) |
| Gay/bisexual | 125 | (76) | 113 | (74) | 65 | (70) | 40 | (74) | 34 | (59) | 20 | (80) | 397 | (73) |
| IDU | 13 | (8) | 22 | (14) | 14 | (15) | 4 | (7) | 6 | (10) | 1 | (4) | 60 | (11) |
| Gay/bisexual IDU | 20 | (12) | 12 | (8) | 11 | (12) | 4 | (7) | 4 | (7) | 2 | (8) | 53 | (10) |
| Hemophilia | 2 | (1) | 0 | (0) | 0 | (0) | 0 | (0) | 0 | (0) | 0 | (0) | 2 | (<1) |
| Heterosexual contact | 3 | (2) | 4 | (3) | 2 | (2) | 2 | (4) | 10 | (17) | 1 | (4) | 22 | (4) |
| Risk not reported | 2 | (1) | 1 | (1) | 1 | (1) | 4 | (7) | 4 | (7) | 1 | (4) | 13 | (3) |
| TOTAL | 165 | (100) | 152 | (100) | 93 | (100) | 54 | (100) | 58 | (100) | 25 | (100) | 547 | (100) |

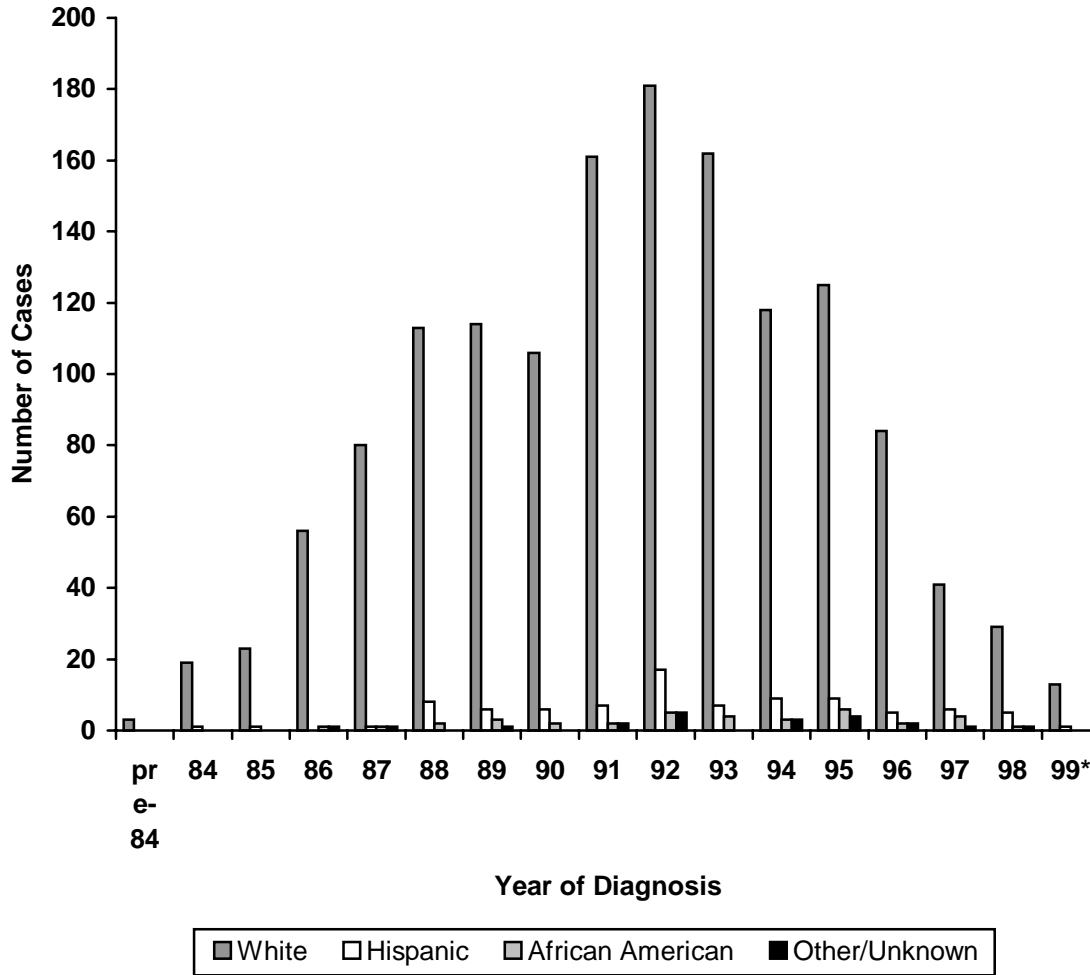
*Reported as of June 30, 1999.

**AIDS Cases Reported by Gender and Year Reported,
Sonoma County, 1994–1999***

| | 1994 | | 1995 | | 1996 | | 1997 | | 1998 | | 1999* | |
|--------------|------------|--------------|------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|
| | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) |
| Male | 158 | (95) | 140 | (92) | 87 | (94) | 52 | (96) | 50 | (86) | 24 | (96) |
| Female | 8 | (5) | 12 | (8) | 6 | (6) | 2 | (4) | 8 | (14) | 1 | (4) |
| TOTAL | 166 | (100) | 152 | (100) | 93 | (100) | 54 | (100) | 58 | (100) | 25 | (100) |

*Reported as of June 30, 1999.

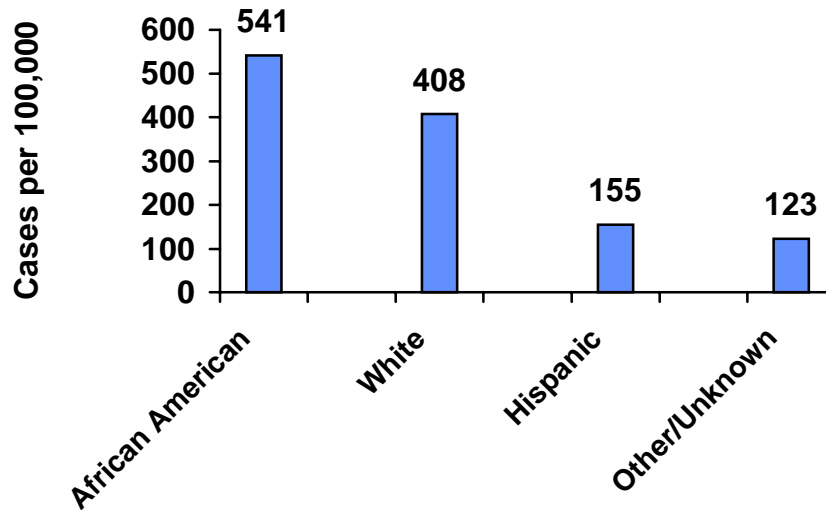
Race/Ethnicity of AIDS Cases Sonoma County, 1984–1999*



*Reported as of June 30, 1999.

No non-whites were reported with AIDS before 1984. White non-Hispanics make up the greatest proportion of persons with AIDS. Among non-whites the greatest number of persons with AIDS are Hispanic, and the highest cumulative incidence is observed among African Americans (see page 7). The rise and decline of new AIDS cases over time appears to be consistent across all racial/ethnic groups.

Cumulative Incidence Rate of AIDS by Race/Ethnicity, Sonoma County, 1981–1999*

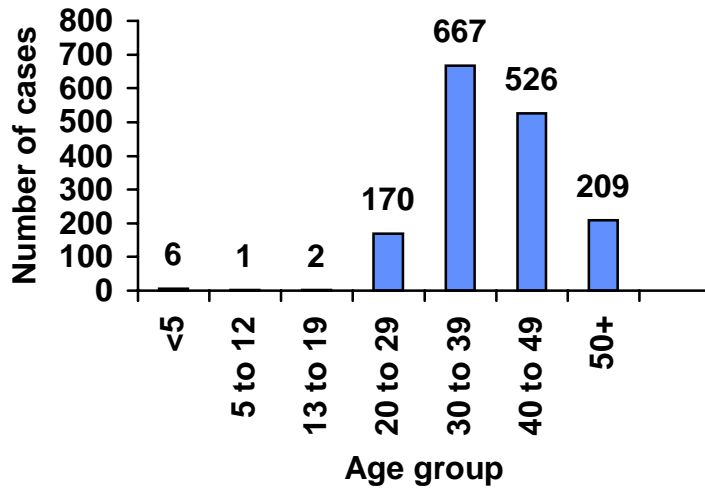


*Reported as of June 30, 1999.

The cumulative incidence rate (CIR) estimates the proportion of racial/ethnic groups diagnosed with AIDS from 1981 through June 1999. CIRs are calculated using the 1995 population projections from the California Department of Finance. Because the number of cases among Asian/Pacific Islanders (n=9) and American Indian/Alaska Natives (n=11) is too small to calculate accurate CIRs, these cases are included in the “other/unknown” racial/ethnic group (n=2).

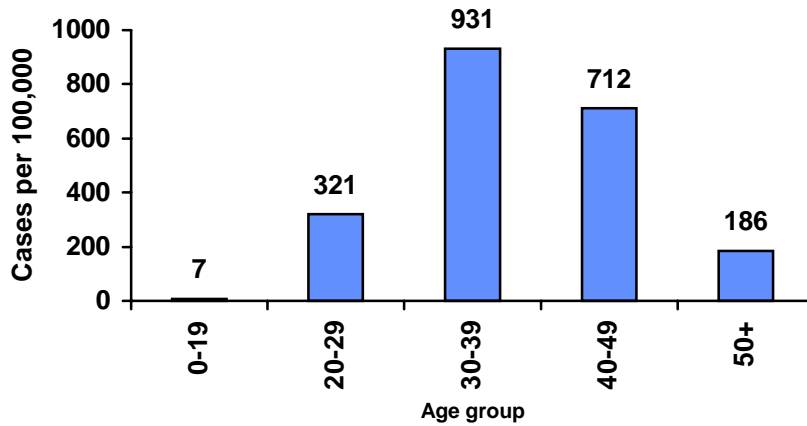
The highest CIR is seen in African Americans. However, the small county population of African Americans and the relatively small number of cases among African Americans (n=36) compared to white non-Hispanics (n=1434) and Hispanics (n=89), may result in a less accurate representation of the CIR for African Americans.

AIDS Cases by Age Group at Diagnosis, Sonoma County, 1981–1999*



*Reported as of June 30, 1999.

Cumulative Incidence Rate of AIDS Cases by Age Group at Diagnosis, Sonoma County, 1981–1999*



*Reported as of June 30, 1999.

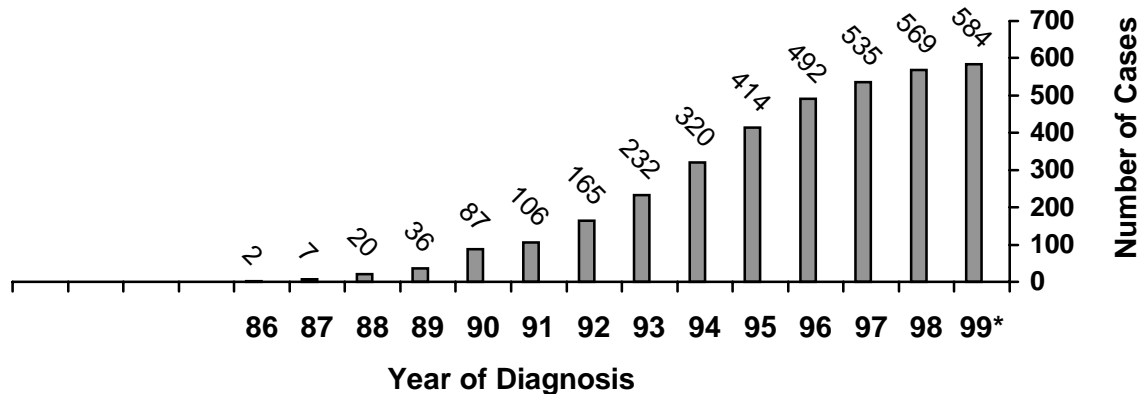
Cumulative incidence rates (CIRs) are calculated using California Department of Finance 1995 population projections. The highest CIR is seen among adults 30–39 years of age. Because of the small numbers of pediatric and adolescent cases (0–19 years), these age groups were combined in order to more accurately estimate the CIR.

Adult/Adolescents (>12 years) Currently Living with AIDS Sonoma County, June 1999

| Risk Category | Male | % | Female | % | Total | % |
|-------------------------------------|------------|--------------|-----------|--------------|------------|--------------|
| Gay/bisexual | 439 | (81) | 0 | (0) | 439 | (76) |
| IDU | 25 | (5) | 17 | (44) | 42 | (7) |
| Gay/bisexual IDU | 60 | (11) | 0 | (0) | 60 | (10) |
| Hemophilia/ Coagulation Disorder | 2 | (<1) | 0 | (0) | 2 | (<1) |
| Heterosexual Contact | 7 | (1) | 18 | (46) | 25 | (4) |
| Transfusion Recipient | 1 | (<1) | 0 | (0) | 1 | (<1) |
| Risk Not Reported/Other | 8 | (1) | 4 | (10) | 12 | (2) |
| Total | 542 | (100) | 39 | (100) | 581 | (100) |

The number of Sonoma County residents diagnosed with AIDS who had no reported date of death as of June 30, 1999, was used to calculate the number of persons currently living with AIDS. It is possible that some deaths may not be reported, especially if a person living with AIDS (PLWA) dies outside the county. Information from local service providers indicates that the actual number of PLWAs in Sonoma County may be greater, due to migration here following diagnosis in other jurisdictions.

Cumulative Number of Persons Currently Living With AIDS by Year of Diagnosis, Sonoma County, 1981–1999*



The above graph represents AIDS cases of all ages and indicates that the trend for increasing numbers of PLWAs continues, following a continuing decrease in AIDS deaths. Again, this graph does not take into account migration of PLWAs to Sonoma County following diagnosis elsewhere.

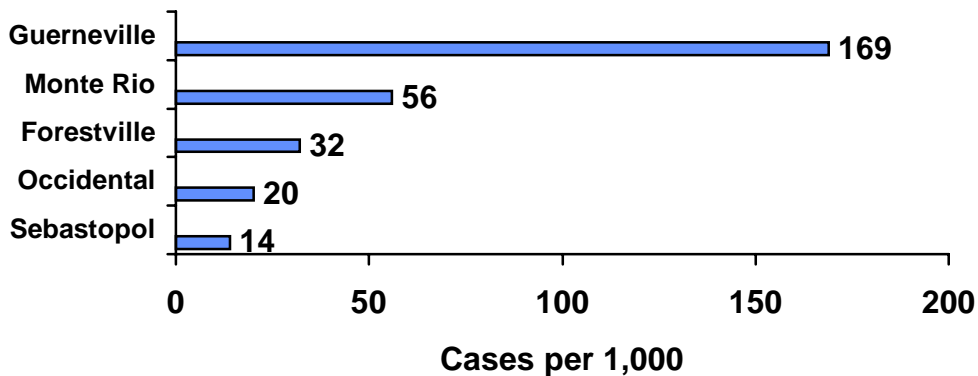
AIDS Cases by Location of Residence at Diagnosis, 1981–1999*

| Area of Residence | Number of Cases |
|-------------------|-----------------|
| Santa Rosa | 477 |
| Guerneville | 332 |
| Sebastopol | 109 |
| Petaluma | 104 |
| Forestville | 79 |
| Rohnert Park | 77 |
| Sonoma | 69 |
| Monte Rio | 59 |
| Windsor | 44 |
| Healdsburg | 40 |
| Rio Nido | 31 |
| Cazadero | 27 |
| Occidental | 26 |
| Cotati | 23 |
| Clowardale | 16 |

*Reported as of June 30, 1999.

Locations with less than 10 cases are not included in either data set on this page (17 locations; n=68).

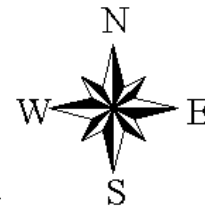
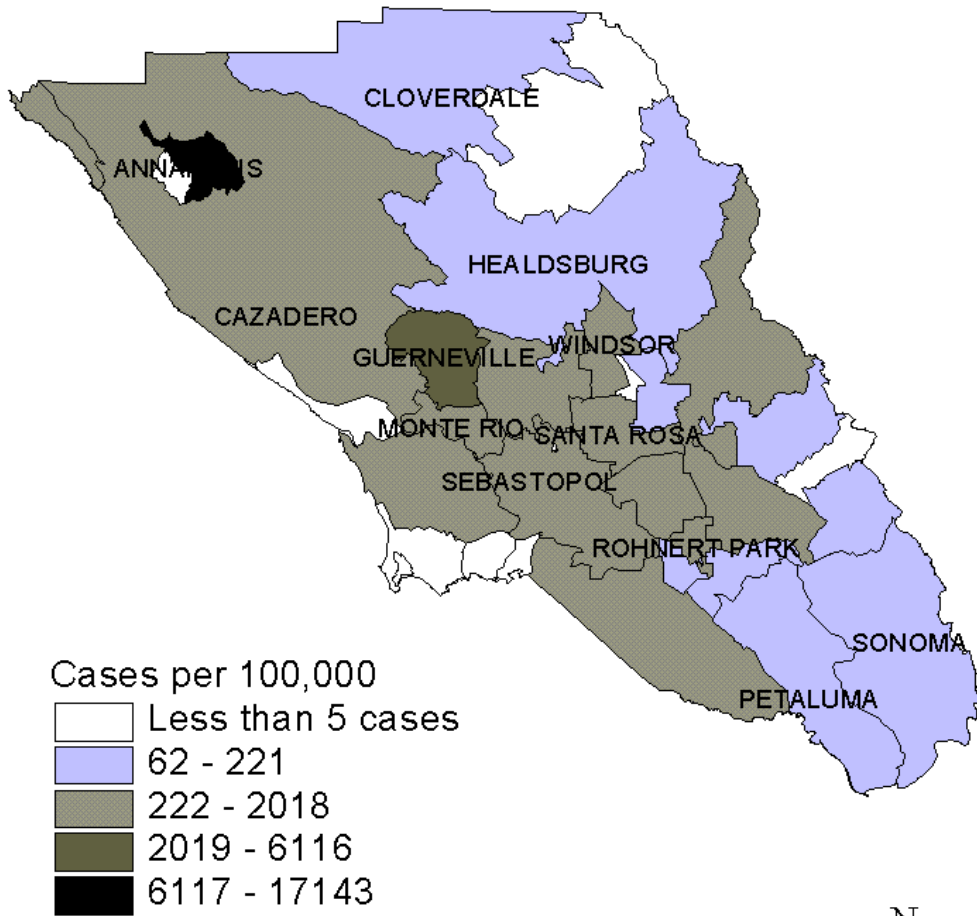
Locations with Highest Cumulative Incidence Rate of AIDS Diagnoses, Sonoma County, 1981—1999*



*Reported as of June 30, 1999.

The cumulative incidence rate (CIR) for Sebastopol is calculated using California Department of Finance city/county population estimates, with annual percentage change, January 1, 1996 and 1997. CIRs for other locations use 1990 census data (a CIR is not calculated for Rio Nido due to lack of population estimates for this unincorporated area).

AIDS Case Rate by Zip Code, Sonoma County, 1981-1999*



*Data reported as of June 30, 1999. Case rates by zip code are calculated using 1996 population estimates from the California Department of Finance.

**HIV Testing at County Anonymous & Confidential Testing Sites
by Sex and Risk Category,
Sonoma County, 1/1/99–6/30/99**

| Risk Category | # Positive Males | # Positive Females | Total Tested | % Positive of Total Tested |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|
| Gay/Bisexual | 3 | 0 | 204 | 1.5% |
| IDU | 1 | 2 | 310 | 1.0% |
| Gay and IDU | 3 | n/a | 25 | 12.0% |
| At-Risk Partner ¹ | 1 | 0 | 667 | <1.0% |
| Heterosexual (Multiple Partners) | 0 | 0 | 672 | 0.0% |
| Transfusion | 0 | 0 | 15 | 0.0% |
| Occupational ² | 0 | 0 | 19 | 0.0% |
| Sex Worker | 0 | 0 | 9 | 0.0% |
| No Risk | 0 | 0 | 219 | 0.0% |
| Risk Not Reported | 0 | 0 | 5 | 0.0% |
| Total | 8 | 2 | 2145 | <1.0% |
| # Total Tested (% Positive of Total Tested) | 1226 (<1.0%) | 907 (<1.0%) | 2145 (<1.0%) | -- |

¹An at-risk partner is defined as a partner who is HIV+, bisexual, an IDU or has multiple partners.

²An occupational risk is defined as blood to blood exposure on the job; this includes, but is not limited to, health care workers.

There were 12 persons tested where gender was unknown (0 positive results). An additional 22 persons were tested during this time period; however, test results were not available at the time of this report.

| 1998 Global, National and State HIV/AIDS Estimates (Pediatric and Adult) | |
|---|--------------|
| Total number of people living with HIV/AIDS | |
| • Worldwide ¹ | 33.4 million |
| • United States ² | 363,829 |
| • California* ² | 39,894 |
| Total deaths due to HIV/AIDS | |
| • Worldwide ¹ | 13.9 million |
| • United States ² | 410,800 |
| • California ³ | 66,263 |

*Data for California include only people living with AIDS; California does not require surveillance of HIV cases.

- Sources:
- ¹ WHO/UNAIDS. AIDS Epidemic Update. December 1998.
 - ² CDC. HIV/AIDS Surveillance Report, Year-End Edition. 1999;10 (2).
 - ³ California Office of AIDS. California and the HIV/AIDS Epidemic 1997: State of the State Report. 1998.

Sonoma County Contacts

Anonymous and Confidential HIV Testing AIDS Helpline: (707) 524-7373

HIV/AIDS Programs or Policy: Patricia Kuta, MPH (707) 524-7379

Case Reporting: Patricia Ensrud, PHN (707) 565-4750

HIV/AIDS Prevention Programs: Lynn Campanario, MPH (707) 525-6583

Center for Treatment and Care of HIV: (707) 524-7410