

HIV/AIDS

African Americans had the highest rate of AIDS diagnoses.

- Whites had the highest number of HIV infections.
- Males had a higher rate of AIDS diagnoses than females.
- Among males with AIDS, sex with other males was the major mode of HIV transmission.
- More than half of AIDS diagnoses in the county were among residents of Richmond, Concord, Antioch and Pittsburg.

Human immunodeficiency virus, or HIV, is the virus that causes acquired immunodeficiency syndrome or AIDS. AIDS refers to the most advanced stage of HIV disease. This report presents information about both HIV infection and AIDS.

HIV Infection

The reporting of HIV infections by name began in California in April 2006. From 2006 to 2008 there were 599 HIV infections reported by name in Contra Costa County. Almost half (49.6%) of the infections were among whites, followed by African Americans (30.1%), Latinos (17.7%) and Asians/Pacific Islanders (2.0%). The time these people were infected is not known.

Table 1 ■ HIV cases by race/ethnicity

Contra Costa County, April 2006–December 2008

	Cases	Percent	Rate
White	297	49.6%	21.2
African American	180	30.1%	69.3*
Latino	106	17.7%	15.4**
Asian/Pacific Islander	12	2.0%	3.0
Total	599	100.0%	20.9

These are unadjusted crude rates per 100,000 residents.

Total includes racial/ethnic groups not shown.

* Significantly higher rate than the county overall.

** Significantly lower rate than the county overall.

African Americans had the highest rate of reported HIV infections (69.3 per 100,000); significantly higher than the county (20.9 per 100,000) and all other racial/ethnic groups listed. Latinos had a significantly lower reported infection rate (15.4 per 100,000) than the county overall.

The vast majority of HIV cases reported were among males (486), and males had a significantly higher reported infection rate (34.7 per 100,000) than females (7.7 per 100,000). Fewer than one in five cases (18.9%) were among females.

Table 2 ■ HIV cases by gender

Contra Costa County, April 2006–December 2008

	Cases	Percent	Rate
Males	486	81.1%	34.7*
Females	113	18.9%	7.7
Total	599	100.0%	20.9

These are unadjusted crude rates per 100,000 residents.

* Significantly higher rate than females.

More than half (59.6%) of all HIV cases were among those aged 25–44 years. This age group had the highest reported infection rate (44.5 per 100,000); significantly higher than the county (20.9 per 100,000) and all other age groups listed. The infection rate for those ages 0–24 (7.5 per 100,000) was significantly lower than the county rate. The 73 cases in this age group included nine people under age 5 and 12 people aged 13 to 19.

Table 3 ■ HIV cases by age at first positive test

Contra Costa County, April 2006–December 2008

	Cases	Percent	Rate
0–24 years	73	12.2%	7.5**
25–44 years	357	59.6%	44.5*
45–64 years	165	27.5%	21.7
Total	599	100.0%	20.9

These are unadjusted crude rates per 100,000 residents.

Total includes age groups not shown.

* Significantly higher rate than the county overall.

** Significantly lower rate than the county overall.

AIDS

AIDS is the most severe form of HIV infection and is diagnosed when one of a number of specific opportunistic infections or cancers develops or the CD4+T cell count drops below 200. Contra Costa's rate of reported AIDS cases among residents was lower (6.9 per 100,000) than the rate for California (10.9 per 100,000), but it did not meet the Healthy People 2010 objective (1.0 per 100,000.)

Between 2005 and 2007, there were 213 AIDS cases diagnosed in Contra Costa County. African Americans had the highest number of cases (86) followed by whites (71), Latinos (44) and Asians/Pacific Islanders (12).

Although African Americans accounted for only 9.1% of the population of Contra Costa County in 2005–2007, they accounted for 40.4% of all new AIDS diagnoses. They had a significantly higher rate (30.7 per 100,000) of AIDS diagnoses than whites (4.4 per 100,000), Latinos (6.7 per 100,000) and the county overall (6.9 per 100,000). The rate among whites was significantly lower than the overall county rate.

Table 4 ■ Residents diagnosed with AIDS by race/ethnicity
Contra Costa County, 2005–2007

	Cases	Percent	Rate
African American	86	40.4%	30.7*
White	71	33.3%	4.4**
Latino	44	20.7%	6.7
Asian/Pacific Islander	12	5.6%	NA
Total	213	100.0%	6.9

These are crude rates per 100,000 residents.

* Significantly higher than the county overall.

** Significantly lower than the county overall.

More than three-quarters (79.8%) of AIDS diagnoses were among males. Males also had a significantly higher rate of AIDS diagnoses (11.2 per 100,000) compared to females (2.7 per 100,000).

Table 5 ■ Residents diagnosed with AIDS by gender
Contra Costa County, 2005–2007

	Cases	Percent	Rate
Males	170	79.8%	11.2*
Females	43	20.2%	2.7
Total	213	100.0%	6.9

These are crude rates per 100,000 residents.

* Significantly higher than females.

More than half (57.7%) of new AIDS diagnoses were among adults 25-44 years of age. Almost one-third (31.0%) of the cases were among adults 45-64 years of age. Adults 25-44 years had the highest rate (14.4 per 100,000); significantly higher than the county (6.9 per 100,000) and the other age groups. Residents aged 0–24 had a rate of AIDS diagnoses significantly lower than the county overall.

Table 6 ■ Residents diagnosed with aids by age
Contra Costa County, 2005–2007

	Cases	Percent	Rate
0–24 years	20	9.4%	1.9**
25–44 years	123	57.7%	14.4*
45–64 years	66	31.0%	8.0
65 years and older	NA	1.9%	NA
Total	213	100.0%	6.9

These are age-specific rates per 100,000 residents.

Total includes all ages.

* Significantly higher than the county overall.

** Significantly lower than the county overall.

More than half (54.5%) of AIDS diagnoses in the county were among residents of four cities: Richmond (19.2%), Concord (13.6%), Antioch (11.3%) and Walnut Creek (10.3%).

Richmond had a higher rate (13.3 per 100,000) of AIDS diagnoses compared to the county as a whole (6.9 per 100,000).

Table 7 ■ Residents diagnosed with AIDS by selected cities
Contra Costa County, 2005–2007

	Cases	Percent	Rate
Richmond	41	19.2%	13.3*
Concord	29	13.6%	7.8
Antioch	24	11.3%	8.0
Walnut Creek	22	10.3%	11.2
Pittsburg	20	9.4%	10.7
San Pablo	14	6.6%	NA
Total	213	100.0%	6.9

These are crude rates per 100,000 residents.

Total includes cities not shown.

* Significantly higher than the county.

Men having sex with other men (MSM) was a major mode of HIV transmission among men diagnosed with AIDS from 2005-2007. Men having sex with men accounted for 73.5% of AIDS cases diagnosed among males during this period. For females, injection drug use and heterosexual contact accounted for a majority (81.4%) of cases. Almost half (48.8%) of the AIDS cases diagnosed among females from 2005-2007 were transmitted via heterosexual contact. Injection drug use was the mode of transmission for 32.6% of AIDS cases diagnosed among females during this same period.

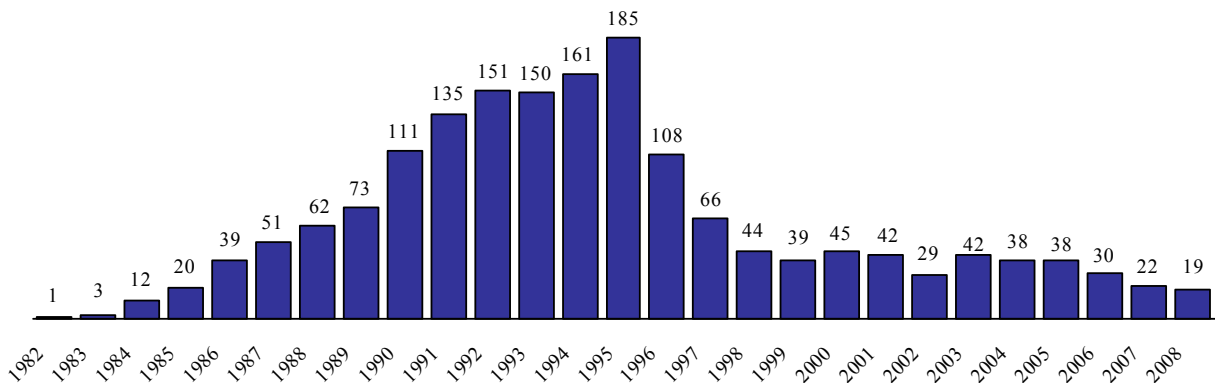
Table 8 ■ AIDS Cases by Probable Mode of Infection & Gender
Contra Costa County, 2005–2007

	Male	Percent	Female	Percent	Total
Men who have sex with men (MSM)	125	73.5%	NA	NA	125
Injection drug use (IDU)	15	8.8%	14	32.6%	29
Heterosexual contact	7	4.1%	21	48.8%	28
MSM injection drug use	5	2.9%	NA	NA	5
Unknown or not reported	18	10.6%	8	18.6%	26
Total	170	100.0%	43	100.0%	213

The number of Contra Costa County residents dying from AIDS has dramatically declined since 1996 when antiretrovirals became widely accessible. Improved medications, earlier diagnosis of HIV, earlier access to treatment and care, and better-trained physicians have contributed to the decline in the number of AIDS-related deaths.

Figure 1 ■ Deaths among people diagnosed with AIDS in Contra Costa by year of death 1982-2008

(N=1,716)



What are HIV & AIDS?

HIV, or human immunodeficiency virus, is the virus that can lead to acquired immune deficiency syndrome, or AIDS. HIV damages a person's body by destroying specific blood cells, called CD4+ T cells, which are crucial to helping the body fight diseases.¹

AIDS is the late stage of HIV disease, when a person's immune system is severely damaged and has difficulty fighting opportunistic infections and certain cancers.

Why is it important?

HIV/AIDS is a worldwide health problem and a global pandemic. In 2007, it was estimated that 33.2 million people lived with the disease worldwide, and that AIDS killed an estimated 2.1 million people, including 330,000 children.²

More than 25 years after the initial onset of the AIDS epidemic, the crisis of HIV/AIDS infection continues to represent a serious health emergency for the Contra Costa County health and social service system, and has had tragic consequences for people living with and impacted by HIV and AIDS.³

Currently, HIV/AIDS disproportionately burdens the African American community. Significant stigma exists in regard to many HIV risk behaviors and populations, and in regard to the HIV disease itself—this stigma has in turn limited both the availability of funding and public support for more extensive HIV interventions.³

Who is most impacted?

Anyone of any age, race, sex or sexual orientation can be infected with HIV, but these behavioral and social risk factors place a person at greater risk of HIV/AIDS:

- Having sex with multiple partners without a condom. A person is at risk whether he/she is heterosexual, homosexual or bisexual.
- Having unprotected sex with someone who is HIV-positive.
- Having another sexually transmitted disease, such as syphilis, herpes, chlamydia, gonorrhea or bacterial vaginosis.
- Sharing needles during intravenous drug use.
- Received a blood transfusion or blood products before 1985.
- Having fewer copies of a gene called CCL3L1 that helps fight HIV infection.
- Newborns or nursing infants whose mothers tested positive for HIV but did not receive treatment also are at high risk.⁴

Of all racial and ethnic groups, HIV and AIDS have hit African Americans the hardest. Nationally, African Americans represent 13% of the U.S. population, but account for nearly half (49%) of the people with HIV and AIDS. The reasons for this disparity are related to some of the social conditions and barriers faced by many African Americans. These barriers can include poverty, sexually transmitted diseases and stigma (negative attitudes, beliefs, and actions directed at people living with HIV/AIDS or directed at people who do things that might put them at risk for HIV).⁵

In Contra Costa, three priority populations have been identified as being hardest-hit by HIV/AIDS and in greatest need of HIV prevention support and intervention. These priority populations are African Americans, men who have sex with men (MSM), and injection drug users and persons who share needles.³

What can we do about it?

Prevention of HIV infection remains the key to controlling AIDS in the community. Vital education about safe sex and the use of condoms in the heterosexual as well as the lesbian, gay, bisexual and transgender (LGBT) communities, and the importance of clean needles, needle exchange and harm reduction for intravenous drug users, all confront strong cultural and religious barriers that must be addressed with understanding and persistence. Notification of partners of HIV infected individuals, either directly or anonymously, helps slow transmission and facilitates early treatment. HIV testing should become part of routine medical care in private providers offices, in emergency departments of hospitals and in prenatal visits.

Early identification and evidence-based medical treatment slows the progression of HIV to AIDS, and helps reduce transmission risk. A variety of care services are available for people with HIV or AIDS. In addition to nurse case management services for eligible individuals, the Contra Costa Health Services AIDS Program coordinates and offers referrals to a network of support services including: access to clinic-based social workers and HIV early intervention services; certification for enrollment in the AIDS Drug Assistance Program; referrals to community-based (medical) case management services; access to mental health or substance abuse services; help with accessing housing services; non-criminal legal

services; and other practical support such as food and transportation assistance, and other emergency assistance. Anonymous partner notification services as well as enhanced risk reduction services for HIV positive individuals are also available.⁶

The AIDS Program also coordinates a network of HIV prevention services geared to help HIV-negative individuals remain negative. These services include targeted prevention outreach services, one-to-one prevention case management services, support groups and workshops, and access to HIV testing. Services are designed to support individuals in making healthy choices to reduce the risk for transmission of HIV.⁶

Data Sources: HIV & AIDS

TEXT

1. Divisions of HIV/AIDS Prevention. (March 22, 2010) *Basic Information about HIV and AIDS. National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention* Retrieved July 9, 2010 from the CDC website: <http://www.cdc.gov/hiv/topics/basic/>
2. UNAIDS, WHO (December 2007) *2007 AIDS epidemic update*. Retrieved July 9, 2010. http://data.unaids.org/pub/EPISlides/2007/2007_epiupdate_en.pdf
3. Contra Costa Health Services, AIDS Program. (2008) Contra Costa County, California Comprehensive HIV Prevention Plan 2008–2013. Retrieved July 9, 2010 from the CCHS website: http://cchealth.org/groups/aids/pdf/hiv_plan_2008.pdf
4. Mayo Foundation for Medical Education and Research. (2010) HIV & AIDS: Risk factors. Retrieved July 9, 2010 from <http://www.mayoclinic.com/health/hiv-aids/DS00005/DSECTION=risk-factors>
5. The Centers for Disease Control and Prevention (2007). *HIV/AIDS and African Americans*. Retrieved July 9, 2010 from <http://www.cdc.gov/hiv/topics/aa/index.htm>
6. Contra Costa Health Services (ND) *HIV & AIDS*. Retrieved July 9, 2010 from the CCHS website: http://cchealth.org/services/hiv_aids/

Tables 1–8

The Contra Costa data about AIDS diagnoses and deaths and HIV are from the Contra Costa Health Services Epidemiology, Surveillance and Health Data unit. Any analyses, interpretations or conclusions of the data have been reached by Community Health Assessment, Planning and Evaluation (CHAPE). Counts fewer than five are not shown in order to protect anonymity. Rates were not calculated for any group with fewer than 20 cases due to unstable estimates.

Population estimates for Contra Costa and its subpopulations (by age, gender, race/ethnicity, city/census place) for 2005–2007 were provided by the Urban Strategies Council, Oakland, CA. January, 2010. Data sources used to create these estimates included: Census 2000, Claritas 2009, Association of Bay Area Governments (ABAG) 2009 Projections, and California Department of Finance Population Estimates for Cities and Counties 2001–2009, with 2000 Benchmark. California Population estimate for state level rate from the State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001–2009, with 2000 Benchmark. Sacramento, California, May 2009.

HIV cases reported by name only. An additional 241 non-name code HIV cases are reported in HARS, but are not included as they have not had HIV testing since April 2006 (when names reporting became law) that would allow them to be re-ascertained as a named HIV case report.

Figure 1: Data about cumulative AIDS deaths through 2008 are from the Contra Costa Health Services HIV/AIDS Epidemiology Report, August 2009.

ADDITIONAL RESOURCES

Many thanks to Contra Costa's Epidemiology and Surveillance Unit for providing data and select graphics included in this section.

For more information about HIV and AIDS in Contra Costa, please contact Juan Reardon, MD, MPH, juan.reardon@hsd.cccounty.us, Director, Epidemiology, Surveillance and Health Data Unit, or Martin Lynch by phone at 925-313-6323. "Contra Costa County HIV/AIDS Epidemiology Report" - August 2009 is available from their website at http://www.cchealth.org/groups/epidemiology/aids/pdf/2009_hiv_aids_epi_report.pdf

The *Centers for Disease Control and Prevention HIV/AIDS* information website: <http://www.cdc.gov/hiv/>

The *California Department of Health Services Office of AIDS* homepage: <http://www.dhs.ca.gov/aids/>