Center for
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DATA SUMMARY
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This Data Summary is one of a series of leading cause of death reports.

Highlights

- **HIV disease deaths among California residents between the ages of 35 to 54 made up 73.1 percent of all HIV disease deaths in 2004.**
- **California's highest age-adjusted HIV disease death rate was found among Blacks (13.0), followed by Hispanics (3.5), Whites (3.5), and Asians (0.7).**
- **San Francisco County (19.5) had the highest reliable age-adjusted HIV disease death rate and Orange County (1.7) had the lowest.**
- **California has yet to achieve the Healthy People 2010 National Objective for HIV disease of no more than 0.7 deaths per 100,000 population.**

Human Immunodeficiency Virus Disease Deaths California, 2004

By Sally Jew-Lochman

Introduction

Human immunodeficiency virus (HIV) disease covers the entire HIV spectrum from initial HIV infection to full-blown Acquired Immunodeficiency Syndrome (AIDS).[1] By killing or damaging cells of the body's immune system, HIV disease progressively destroys the body's ability to fight infections and certain cancers.[2] People initially infected with HIV may not look or feel sick as it may take more than ten years to develop AIDS.[3] There is no cure for HIV disease, however, a number of drugs have been developed to slow the spread of HIV in the body and delay the onset of AIDS. In the United States (U.S.) the number of deaths due to HIV disease decreased 4.9 percent from 13,658 in 2003 to 12,995 in 2004.[4] California residents HIV disease deaths increased 1.0 percent from 1,364 in 2003 to 1,377 in 2004.[5]

Currently HIV disease is not among the 15 leading causes of death for the general population in California or the U.S. Yet it is an infectious disease that poses a threat to approximately one million Americans living with HIV/AIDS. Of those living with HIV disease, roughly 25 percent are not aware that they are infected.[6] The epidemic is growing most rapidly in minority populations and is a leading killer of Black males ages 25 to 44.[2]

The U.S. Public Health Service established a number of health objectives as part of the Healthy People 2010 (HP 2010) Initiative that relate to HIV disease.[7]

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[1] San Francisco AIDS Foundation, The Stages of HIV Disease, URL: http://sfaf.org/aids101/hiv_disease.html Accessed July 27, 2006.
[2] National Institutes of Health, National Institute of Allergy and Infectious Disease. HIV Infection and AIDS: An Overview, March 2005. URL: http://www.niaid.nih.gov/factsheets/hivinf.htm
[3] EngenderHealth, HIV Infection and AIDS, URL: http://www.engenderhealth.org/wh/inf/dhiv.html Accessed July 28, 2006.
[4] Miniño AM, Heron MP, Smith BL. Deaths: Preliminary Data for 2004. National Vital Statistics Reports; Vol. 54, No. 19., National Center for Health Statistics Reports. June 2006.
[5] State of California, Department of Health Services, Death Records.
[6] Glynn M, Rhodes P. Estimated HIV prevelance in the United States at the end of 2003. National HIV Prevention Conference. June 2005. URL: http://www.aegis.com/conferences/NHIVPC/2005/T1-B1101.html
[7] United States Department of Health and Human Services. Healthy People 2010 Objectives (Second Edition, in Two Volumes). Washington, D.C. January 2001.

A brief overview of Data Limitations and Qualifications is provided at the end of this report.

The goal is to reduce deaths from HIV infection to no more than 0.7 deaths per 100,000 population (age-adjusted to the year 2000 population). Neither the U.S. nor California with age-adjusted death rates of 4.4 and 3.8, respectively, has yet achieved the HP 2010 objective.

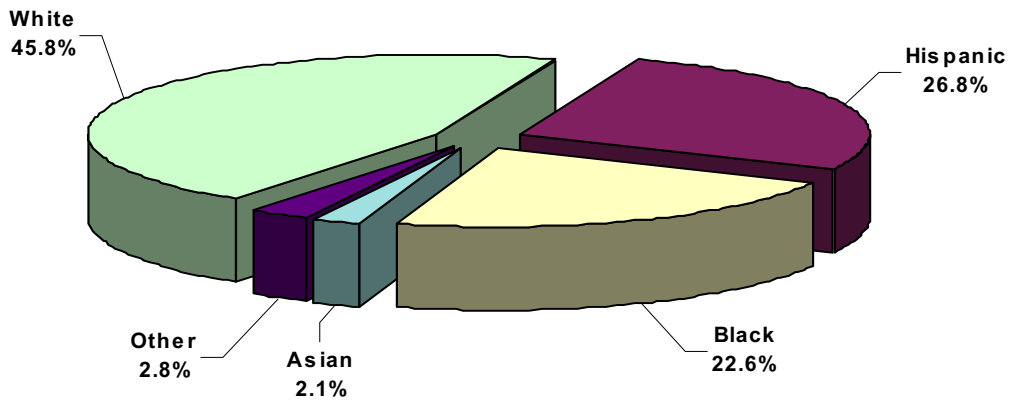
This report presents data on HIV disease deaths for 2004 with analyses of crude and age-adjusted death rates for California residents by sex, age group, race/ethnicity, and county. The definition of HIV disease used in this report is based on the International Classification of Diseases, Tenth Revision (ICD-10) codes B20-B24 as currently presented in National Center for Health Statistics (NCHS) reports.[8]

HIV Disease Deaths

Table 1 (page 11) displays California's HIV disease death data by race/ethnicity, age group, and sex for 2004. In 2004 the number of HIV disease deaths among males (1,183) comprised 85.9 percent of the total while deaths among females (194) were 14.1 percent. Deaths due to HIV disease occurred most often among California residents between the ages of 35 to 54, about 73.1 percent of all HIV disease deaths.

Figure 1 shows in 2004 Whites had the highest percentage of HIV disease deaths with 45.8 percent, followed by Hispanics with 26.8 percent, Blacks with 22.6 percent, and Asians with 2.1 percent. The remaining race/ethnic groups combined as Other

FIGURE 1
HIV DISEASE DEATHS
BY RACE/ETHNCITY*
CALIFORNIA, 2004



Note: Other includes American Indian (1.1%), Pacific Islander (0.3%) and Two or More Races (1.4%).
* Calculated using death data for California residents only.

Source: State of California, Department of Health Services. Death Records, 2004.

[8]National Center for Health Statistics. Vital Statistics, Instructions for Classifying the Underlying Cause of Death, 2006. NCHS Instruction Manual, Part 2a. Public Health Service, Hyattsville, Maryland.

See the Methodological Approach section later in this report for an explanation of crude, age-specific, and age-adjusted death rates.

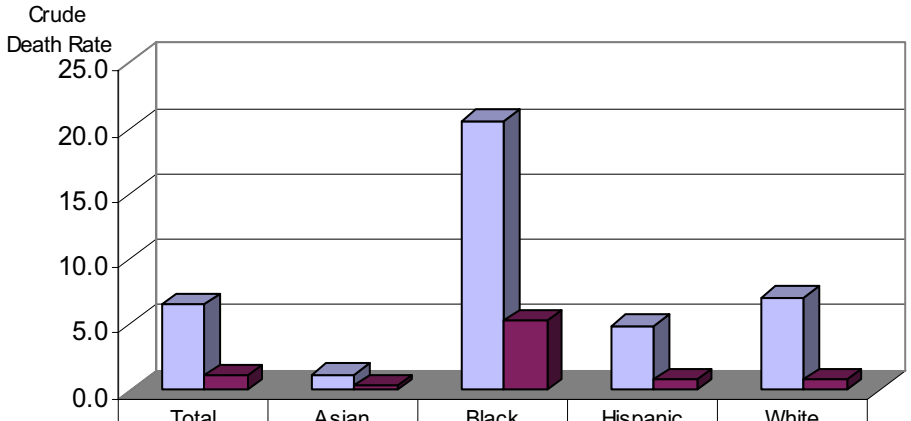
accounted for 2.8 percent of HIV deaths including American Indians with 1.1 percent, Pacific Islanders with 0.3 percent, and Two or More Races with 1.4 percent.

HIV Disease Crude Death Rates

California's 2004 HIV disease crude death rate was 3.8 deaths per 100,000 population (**Table 1**, page 11) compared with the U.S. rate of 4.4.[4] California Blacks had the highest HIV disease crude death rate (12.8) followed by Whites (3.9), Hispanics (2.9), and Asians (0.7). All the crude death rates among these race/ethnic groups were significantly different from one another.

Figure 2 shows that the rate of dying from HIV disease for the overall population in 2004 was significantly higher for males with a crude death rate of 6.5 compared with the rate of 1.1 for females. An examination of rates for males and females by each race/ethnic group finds this pattern to hold true among Blacks, Hispanics, and Whites. The crude death rate of Asian females is not reliable so a comparison with Asian males could not be made.

FIGURE 2
HIV DISEASE CRUDE DEATH RATES
BY SEX AND RACE/ETHNICITY*
CALIFORNIA, 2004



	Total	Asian	Black	Hispanic	White
Male	6.5	1.2	20.6	4.9	7.1
Female	1.1	0.3	5.3	0.8	0.8

Note: Total includes American Indian, Pacific Islander, and Two or More Races not shown due to unreliable rates. The rate for Asian females is not reliable.
*Calculated using death data for California residents only.

Source: State of California, Department of Health Services Death Records, 2004.

Additional statistics on HIV and AIDS in California are available on the California Department of Health Services, Office of AIDS website at http://www.dhs.ca.gov/ps/ooa/Statistics/default.htm

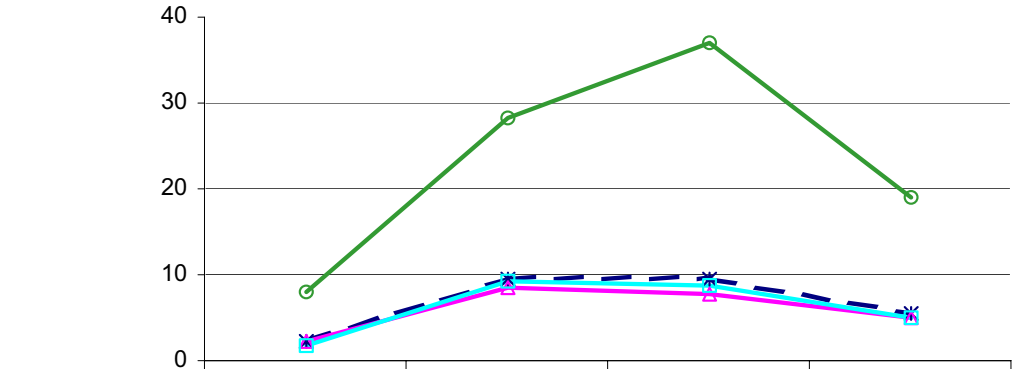
HIV Disease Age-Specific Death Rates

Table 1 (page 11) displays age-specific HIV disease death rates for all California residents by sex and race/ethnic group for 2004. Overall, reliable HIV disease death rates were highest in the 35 to 54 age groups. The death rate among males between 35 to 54 years of age was approximately six times higher than the rate in females.

HIV disease was the sixth leading cause of death in the U.S. in 2004 for all race/ethnic groups combined in the age group 25 to 44.[4] In 2004 HIV disease dropped from the U.S. top ten leading causes of death for the age group 45 to 64 years and rose from tenth place in 2003 to ninth place for the 15 to 24 age group.[4]

Figure 3 displays reliable age-specific HIV disease death rates in 2004 by race/ethnicity for age groups 24 to 64. Blacks had significantly higher death rates than Hispanics and Whites in all these age groups. There were no significant differences in death rates between Hispanics and Whites in any of these age groups.

FIGURE 3
HIV DISEASE AGE-SPECIFIC DEATH RATES
BY RACE/ETHNICITY AND AGE GROUP*
CALIFORNIA, 2004



	25-34	35-44	45-54	55-64
Total	2.2	9.4	9.6	5.4
Black	8.0	28.3	37.0	19.1
Hispanic	2.3	8.5	7.8	4.9
White	1.7	9.2	8.7	5.1

Notes: Total includes American Indian, Asian, Pacific Islander, and Two or More Races not shown due to unreliable rates.
*Calculated using death data for California residents only.

Source: State of California, Department of Health Services. Death Records, 2004.

For more information about crude and age-adjusted death rates, refer to the National Center for Health Statistics website at http://www.cdc.gov/nchs/

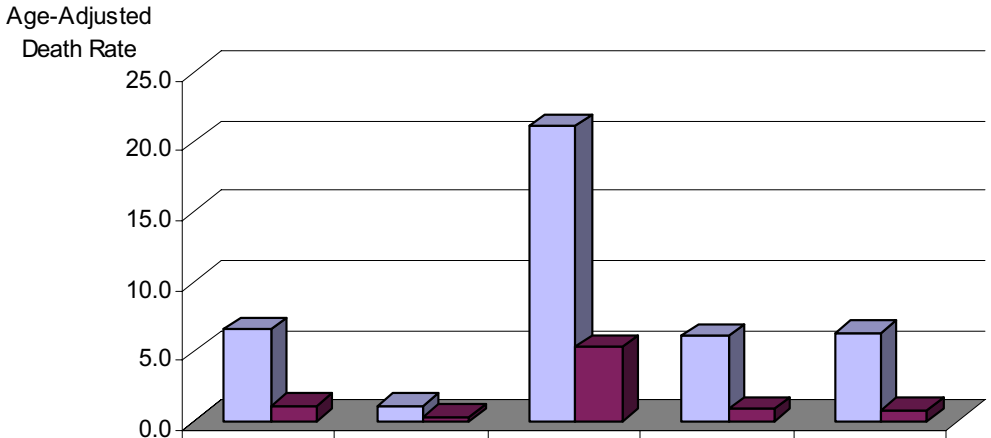
HIV Disease Age-Adjusted Death Rates

Table 1 (page 11) shows the 2004 age-adjusted HIV disease death rate for California was 3.8 deaths per 100,000 population. California's rate continues to be lower than the U.S. rate of 4.4 for 2004.[4]

Among the race/ethnic groups with reliable rates, Blacks had the highest age-adjusted 2004 HIV disease death rate (13.0) in California, followed by Hispanics (3.5), Whites (3.5), and Asians (0.7). Except for the difference between Hispanics and Whites, the age-adjusted death rates were all significantly different from one another.

Figure 4 displays the reliable age-adjusted death rates by sex and race/ethnicity. In 2004 the overall HIV disease age-adjusted death rate among males (6.1) was significantly higher than the rate among females (1.1). This pattern held true across all race/ethnic groups with reliable rates: Black males had rates nearly four times higher than Black females; Hispanic males had rates nearly seven times higher than Hispanic females; White males had rates almost eight times higher than White females. The rate among Asian females was not reliable so a comparison with Asian males was not made.

FIGURE 4
HIV DISEASE AGE-ADJUSTED DEATH RATES
BY SEX AND RACE/ETHNICITY*
CALIFORNIA, 2004



	Total	Asian	Black	Hispanic	White
Male	6.6	1.1	21.1	6.1	6.3
Female	1.1	0.3	5.3	0.9	0.8

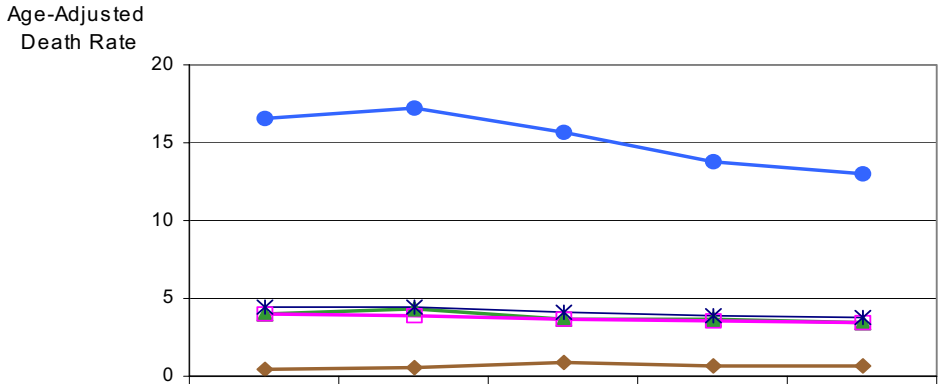
Notes: Total includes American Indian, Pacific Islander, and Two or More Races not shown due to unreliable rates. Rate for Asian females is not reliable.
*Calculated using death data for California residents only.

Source: State of California, Department of Health Services. Death Records, 2004.

For more vital statistics data or reports, see DHS Center for Health Statistics website at http://www.dhs.ca.gov/hisp/chs/OHIR

Figure 5 displays the reliable HIV disease age-adjusted death rates by race/ethnicity from 2000 to 2004.[9] Overall, the age-adjusted death rate decreased significantly from 4.4 deaths per 100,000 population in 2000 to 3.8 in 2004. The rates also decreased among Blacks, Hispanics, and Whites over this five-year period, however, the decreases were significant only for Blacks (16.6 to 13.0) and Whites (4.0 to 3.5). The difference in rates from 2000 to 2004 was not significant among Hispanics and the difference was not calculated for Asians since the rate in 2000 was not reliable.

FIGURE 5
HIV DISEASE AGE-ADJUSTED DEATH RATES
BY RACE/ETHNICITY*
CALIFORNIA, 2000-2004



	2000	2001	2002	2003	2004
Asian	0.5	0.6	0.9	0.7	0.7
Black	16.6	17.2	15.7	13.8	13.0
Hispanic	4.0	4.3	3.7	3.7	3.5
White	4.0	3.9	3.7	3.6	3.5
Total	4.4	4.4	4.1	3.9	3.8

Notes: Total includes American Indian, Pacific Islander, and Two or More Races not shown due to unreliable rates. Rate for Asians in 2000 is not reliable.
*Calculated using death data for California residents only.

Source: State of California, Department of Health Services. Death Records, 2000-2004.

HIV Disease Death Data for California Counties

Table 2 (page 12) displays the 2002 to 2004 average numbers of deaths, crude death rates, and age-adjusted death rates for California and its 58 counties. The highest average number of HIV disease deaths occurred in Los Angeles County (499.0) followed by San Francisco County (173.3) and San Diego County (121.3).

San Francisco County had the highest reliable average crude death rate (22.0) and age-adjusted death rate (19.5) while Orange County had the lowest crude and age-adjusted death rates (1.7).

[9]Shippen, S. Human Immunodeficiency Virus Disease Deaths, California, 2000-2003. Center for Health Statistics, California Department of Health Services, November 2005.

Ten counties (nine with the average age-adjusted death rate of zero and one with an unreliable rate) met the HP 2010 objective of no more than 0.7 deaths per 100,000 population. Four counties with reliable average age-adjusted death rates were significantly different from California's rate of 3.9 per 100,000 population. Los Angeles and San Francisco Counties rates were higher than the State rate while Orange and Santa Clara Counties rates were lower. Please refer to the Data Limitations and Qualifications section for information regarding significance testing between the county and State age-adjusted rates.

Figure 6 (page 13) shows a thematic map of the 2002 to 2004 average age-adjusted death rates for all California counties. The Jenks natural breaks classification was used to determine the interval breaks for the county rates.

HIV Disease Death Data for City Health Jurisdictions

The 2002 to 2004 three-year average numbers of HIV disease deaths and crude death rates for California's three city health jurisdictions are shown in **Table 3**. These numbers are included in their respective county totals. Age-adjusted death rates were not calculated for the city health jurisdictions because city population estimates by age were not available.

Long Beach had the highest average number of deaths (43.3) followed by Pasadena (7.7) and Berkeley (3.0). The HIV disease crude death rate was 9.0 deaths per 100,000 population for Long Beach. The crude death rates for Berkeley and Pasadena were not reliable.

TABLE 3
HIV DISEASE DEATHS
AMONG THE CITY HEALTH JURISDICTIONS*
CALIFORNIA, 2002-2004

CITY HEALTH JURISDICTION	NUMBER OF DEATHS (Average)	2003 POPULATION	CRUDE DEATH RATE
BERKELEY	3.0	104,195	2.9 +
LONG BEACH	43.3	481,015	9.0
PASADENA	7.7	142,214	5.4 +

Note: Rates are per 100,000 population.
*Calculated using death data for California residents only.
+Death rate unreliable (relative standard error is greater than or equal to 23 percent).

Sources: State of California, Department of Health Services, Death Records.
State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2006, with 2000 DRU Benchmark, May 2006.

Methodological Approach

The methods used to analyze vital statistics data are important. Analyzing only the number of deaths has its disadvantages and can be misleading because the population at risk is not taken into consideration. Crude death rates show the actual rate of dying in a given population, but because of the differing age compositions of various populations, crude rates do not provide a statistically valid method for comparing geographic areas and/or multiple reporting periods. Age-specific death rates are the number of deaths per 100,000 population in a specific age group and are used along with standard population

proportions to develop a weighted average rate. The weighted average rate is referred to as an age-adjusted death rate and removes the effect of different age structures of the populations whose rates are being compared. Age-adjusted rates therefore provide the preferred method for comparing different race/ethnic groups, sexes, and geographic areas and for measuring death rates over time.

Age-adjusted rates are presented when the single, summary measure is needed, but data analysts should inspect age-specific rates first.[10] Age-specific rates provide insights to important age-related mortality trends that can be masked by age-adjusted rates. For example, a shift in the number of deaths from one age group to another could produce very little change in the age-adjusted rate, but may warrant further investigation. In addition, analysis of age-specific rates can reveal that populations being compared do not show a consistent relationship (e.g., the trend is not in the same direction for all age-specific rates) in which case the analysis of age-specific rates is recommended over age-adjusted rates.

Data Limitations and Qualifications

The HIV disease death data presented in this report are based on the vital statistics records with ICD-10 codes B24-B40 as defined by the NCHS.[8] Deaths by place of residence means that the data include only those deaths occurring among residents of California, regardless of the place of death.

The term "significant" within the text indicates statistical significance based on the difference between two independent rates ($p < .05$). Significant difference between the county and State age-adjusted death rates was determined by comparing the 95 percent confidence intervals (CI) of the two rates, which are based on the rate, standard deviation, and standard error. Rates were considered to be significantly different from each other when their CIs (rounded to the nearest hundredth) did not overlap. If the upper limit of the county CI fell below the lower limit of the State CI, the county rate was deemed to be significantly lower. If the lower limit of the county CI exceeded the higher limit of the State CI, the county rate was deemed to be significantly higher. Significant differences of overlapping CIs were not addressed in this report. Overlapping CIs require a more precise statistical measure to determine significant and non-significant differences in rates because CIs may overlap as much as 29 percent and still be significantly different.[11]

The county or State age-adjusted mortality rates that equaled or surpassed the HP 2010 objective target rate were noted as achieved, regardless of rate reliability. Readers are cautioned that measuring progress toward target attainment for a HP 2010 objective using only one data point is not recommended. HP 2010 guidelines recommend using absolute differences between the target rate and the most recent data point as well as a progress quotient to measure relative changes over time in monitoring progress toward achieving the objective target rate.[12] See the guidelines for HP 2010 objectives on the NCHS website at http://www.cdc.gov/nchs/hphome.htm

[10] Choi BCK, de Guia NA, and Walsh P. Look before you leap: Stratify before you standardize. American Journal of Epidemiology, 149: 1087-1096. 1999.
[11] van Belle G. Statistical Rules of Thumb, Rule 2.5. Wiley Publishing. March 2002.
[12] Keppel KG, et al. Measuring Progress in Healthy People 2010. Healthy People 2010 Statistical Notes, No. 25. National Center for Health Statistics. Hyattsville, Maryland. September 2004.

As with any vital statistics data, caution needs to be exercised when analyzing small numbers, including the rates derived from them. Death rates calculated from a small number of deaths and/or population tend to be unreliable and subject to significant variation. To assist the reader, the 95 percent CIs are provided in the data tables as a tool for measuring the reliability of death rates. Rates with a relative standard error (coefficient of variation) greater than or equal to 23 percent are indicated with an asterisk (*). The CIs represent the range of values likely to contain the "true" value 95 percent of the time.

Beginning in 1999 cause of death is reported using ICD-10.[13] Cause of death for 1979 through 1998 was coded using the International Classification of Diseases, Ninth Revision (ICD-9). Depending on the specific cause of death, the numbers of deaths and death rates are not comparable between ICD-9 and ICD-10. Therefore, our analyses do not combine both ICD-9 and ICD-10 data.

To meet the U.S. Office of Management and Budget minimum standards for race and ethnicity data collection and reporting, the report presents the following race/ethnic groups: American Indian, Asian, Black, Hispanic, Pacific Islander, White, and Two or More Races. Hispanic origin of decedents is determined first and includes any race group. Second, decedents of the Two or More Races group are determined and are not reported in single race groups. In order to remain consistent with the population data obtained from the Department of Finance, the single race groups are defined as follows: the "American Indian" race group includes Aleut, American Indian, and Eskimo; the "Asian" race group includes Asian Indian, Asian (specified/unspecified), Cambodian, Chinese, Filipino, Hmong, Japanese, Korean, Laotian, Thai, and Vietnamese; the "Pacific Islander" race group includes Guamanian, Hawaiian, Samoan, and Other Pacific Islander; the "White" race group includes White, Other (specified), Not Stated, and Unknown.

Caution should be exercised in the interpretation of mortality data by race/ethnicity. Misclassification of race/ethnicity on death certificates may contribute to death rates that may be understated among American Indians, Asians, Hispanics, and Pacific Islanders.[14] This problem could contribute to understatements of rates for the Two or More Races group as well. All race groups may not be individually displayed on the tables due to unreliable rates, but the State totals do include their data.

Beginning in 2000 federal race/ethnicity reporting guidelines changed to allow reporting of more than one race on death certificates. California initiated use of the new guidelines on January 1, 2000 and collects up to three races. California's population estimates recently added the multirace (Two or More Races) group. To be consistent with the population groups, current reports tabulate race of decedent using all races mentioned on the death certificate. Therefore, prior reports depicting race group statistics based on single race are not comparable with current reports.

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[13] World Health Organization. International Statistical Classification of Diseases and Related Health Problems. Tenth Revision. Geneva: World Health Organization. 1992.

[14] Rosenberg HM, et al. Quality of Death Rates by Race and Hispanic Origin: A Summary of Current Research, 1999. Vital and Health Statistics, Series 2, No. 128, National Center for Health Statistics, DHHS Pub. No. (PHS) 99-1328, September 1999.

The 2000 U.S. population standard was used for calculating age-adjustments in accordance with statistical policy implemented by NCHS.[15] Age-adjusted death rates are not comparable when rates are calculated with different population standards, e.g., the 1940 standard population. Additionally, population data used to calculate city crude rates in **Table 3** (page 7) differ from population data used to calculate county crude rates in **Table 2** (page 12). Caution should be exercised when comparing the crude rates of the three city health jurisdictions with the crude rates of the 58 California counties. Age-adjusted rates for city health jurisdictions were not calculated.

A more complete explanation of age-adjustment methodology is available in the "Healthy People 2010 Statistical Notes" publication.[16] Detailed information on data quality and limitations is presented in the appendix of the annual report, "Vital Statistics of California."[17] Formulas used to calculate death rates are included in the technical notes of the "County Health Status Profiles" report.[18]

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[15] Anderson RN, Rosenberg HM. Age Standardization of Death Rates: Implementation of the Year 2000 Standard. National Vital Statistics Reports; Vol. 47, No. 3. National Center for Health Statistics. Hyattsville, Maryland. 1998.
[16] Klein RJ, Schoenborn CA. Healthy People 2010 Statistical Notes: Age Adjustment using the 2000 Projected U.S. Population. National Center for Health Statistics, DHHS Publication, No 20. January 2001.
[17] Ficenec S, Bindra K. Vital Statistics of California, 2003. Center for Health Statistics, California Department of Health Services, August 2005.
[18] Shippen S. County Health Status Profiles 2006. Center for Health Statistics, California Department of Health Services, April 2006.

TABLE 1
HUMAN IMMUNODEFICIENCY VIRUS DISEASE DEATHS
BY RACE/ETHNICITY, AGE, AND SEX
CALIFORNIA, 2004
(By Place of Residence)

AGE GROUPS	DEATHS			POPULATION			RATES			95% CONFIDENCE LIMITS					
										TOTAL		MALE		FEMALE	
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	LOWER	UPPER	LOWER	UPPER	LOWER	UPPER
TOTAL[1]															
Under 1	0	0	0	534,769	272,800	261,969	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 to 4	0	0	0	2,047,621	1,045,813	1,001,808	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 to 14	0	0	0	5,369,098	2,750,853	2,618,245	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
15 to 24	8	6	2	5,294,261	2,757,217	2,537,044	0.2 *	0.2 *	0.1 *	0.0	0.3	0.0	0.4	0.0	0.2
25 to 34	115	92	23	5,231,086	2,701,183	2,529,903	2.2	3.4	0.9	1.8	2.6	2.7	4.1	0.5	1.3
35 to 44	535	463	72	5,672,590	2,883,426	2,789,164	9.4	16.1	2.6	8.6	10.2	14.6	17.5	2.0	3.2
45 to 54	471	400	71	4,931,148	2,440,823	2,490,325	9.6	16.4	2.9	8.7	10.4	14.8	18.0	2.2	3.5
55 to 64	179	163	16	3,303,083	1,594,612	1,708,471	5.4	10.2	0.9 *	4.6	6.2	8.7	11.8	0.5	1.4
65 to 74	57	49	8	2,025,575	936,610	1,088,965	2.8	5.2	0.7 *	2.1	3.5	3.8	6.7	0.2	1.2
75 to 84	11	9	2	1,420,413	590,956	829,457	0.8 *	1.5 *	0.2 *	0.3	1.2	0.5	2.5	0.0	0.6
85 & Older	0	0	0	546,767	187,361	359,406	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
Unknown	1	1	0												
Total	1,377	1,183	194	36,376,411	18,161,654	18,214,757	3.8	6.5	1.1	3.6	4.0	6.1	6.9	0.9	1.2
Age-Adjusted							3.8	6.6	1.1	3.6	4.0	6.2	7.0	0.9	1.2
ASIAN															
Under 1	0	0	0	48,115	24,552	23,563	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 to 4	0	0	0	188,290	96,379	91,911	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 to 14	0	0	0	498,432	257,125	241,307	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
15 to 24	0	0	0	567,146	291,640	275,506	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
25 to 34	1	1	0	618,710	302,916	315,794	0.2 *	0.3 *	0.0 +	0.0	0.5	0.0	1.0	-	-
35 to 44	10	9	1	671,272	321,320	349,952	1.5 *	2.8 *	0.3 *	0.6	2.4	1.0	4.6	0.0	0.8
45 to 54	11	9	2	609,567	284,594	324,973	1.8 *	3.2 *	0.6 *	0.7	2.9	1.1	5.2	0.0	1.5
55 to 64	3	2	1	385,197	179,303	205,894	0.8 *	1.1 *	0.5 *	0.0	1.7	0.0	2.7	0.0	1.4
65 to 74	4	2	2	245,629	107,974	137,655	1.6 *	1.9 *	1.5 *	0.0	3.2	0.0	4.4	0.0	3.5
75 to 84	0	0	0	154,086	64,809	89,277	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
85 & Older	0	0	0	50,569	20,013	30,556	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
Unknown	0	0	0												
Total	29	23	6	4,037,013	1,950,625	2,086,388	0.7	1.2	0.3 *	0.5	1.0	0.7	1.7	0.1	0.5
Age-Adjusted							0.7	1.1	0.3 *	0.4	0.9	0.7	1.6	0.1	0.5
BLACK															
Under 1	0	0	0	32,707	16,671	16,036	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 to 4	0	0	0	122,652	62,561	60,091	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 to 14	0	0	0	408,879	208,120	200,759	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
15 to 24	2	2	0	395,238	205,416	189,822	0.5 *	1.0 *	0.0 +	0.0	1.2	0.0	2.3	-	-
25 to 34	26	17	9	326,490	160,606	165,884	8.0	10.6 *	5.4 *	4.9	11.0	5.6	15.6	1.9	9.0
35 to 44	113	91	22	399,615	199,186	200,429	28.3	45.7	11.0	23.1	33.5	36.3	55.1	6.4	15.6
45 to 54	122	93	29	329,298	160,793	168,505	37.0	57.8	17.2	30.5	43.6	46.1	69.6	10.9	23.5
55 to 64	38	34	4	199,142	92,418	106,724	19.1	36.8	3.7 *	13.0	25.1	24.4	49.2	0.1	7.4
65 to 74	8	8	0	121,222	55,208	66,014	6.6 *	14.5 *	0.0 +	2.0	11.2	4.4	24.5	-	-
75 to 84	2	1	1	64,749	25,309	39,440	3.1 *	4.0 *	2.5 *	0.0	7.4	0.0	11.7	0.0	7.5
85 & Older	0	0	0	25,074	7,615	17,459	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
Unknown	0	0	0												
Total	311	246	65	2,425,066	1,193,903	1,231,163	12.8	20.6	5.3	11.4	14.2	18.0	23.2	4.0	6.6
Age-Adjusted							13.0	21.1	5.3	11.5	14.4	18.5	23.8	4.0	6.6
HISPANIC															
Under 1	0	0	0	273,401	139,443	133,958	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 to 4	0	0	0	1,003,339	512,381	490,958	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 to 14	0	0	0	2,503,684	1,279,931	1,223,753	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
15 to 24	4	3	1	2,275,634	1,199,542	1,076,092	0.2 *	0.3 *	0.1 *	0.0	0.3	0.0	0.5	0.0	0.3
25 to 34	54	46	8	2,332,753	1,244,497	1,088,256	2.3	3.7	0.7 *	1.7	2.9	2.6	4.8	0.2	1.2
35 to 44	166	145	21	1,954,969	1,014,652	940,317	8.5	14.3	2.2	7.2	9.8	12.0	16.6	1.3	3.2
45 to 54	96	84	12	1,228,904	607,654	621,250	7.8	13.8	1.9 *	6.2	9.4	10.9	16.8	0.8	3.0
55 to 64	31	28	3	636,784	298,857	337,927	4.9	9.4	0.9 *	3.2	6.6	5.9	12.8	0.0	1.9
65 to 74	14	10	4	357,389	157,978	199,411	3.9 *	6.3 *	2.0 *	1.9	6.0	2.4	10.3	0.0	4.0
75 to 84	3	3	0	190,758	78,695	112,063	1.6 *	3.8 *	0.0 +	0.0	3.4	0.0	8.1	-	-
85 & Older	0	0	0	58,423	20,677	37,746	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
Unknown	1	1	0												
Total	369	320	49	12,816,038	6,554,307	6,261,731	2.9	4.9	0.8	2.6	3.2	4.3	5.4	0.6	1.0
Age-Adjusted							3.5	6.1	0.9	3.1	3.9	5.4	6.9	0.7	1.2
WHITE															
Under 1	0	0	0	164,750	84,066	80,684	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 to 4	0	0	0	617,372	315,162	302,210	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 to 14	0	0	0	1,722,936	886,271	836,665	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
15 to 24	2	1	1	1,856,335	960,424	895,911	0.1 *	0.1 *	0.1 *	0.0	0.3	0.0	0.3	0.0	0.3
25 to 34	31	25	6	1,808,165	922,586	885,579	1.7	2.7	0.7 *	1.1	2.3	1.6	3.8	0.1	1.2
35 to 44	230	204	26	2,502,123	1,278,269	1,223,854	9.2	16.0	2.1	8.0	10.4	13.8	18.1	1.3	2.9
45 to 54	229	203	26	2,639,194	1,328,451	1,310,743	8.7	15.3	2.0	7.6	9.8	13.2	17.4	1.2	2.7
55 to 64	102	97	5	2,005,398	987,820	1,017,578	5.1	9.8	0.5 *	4.1	6.1	7.9	11.8	0.1	0.9
65 to 74	30	29	1	1,260,712	596,472	664,240	2.4	4.9	0.2 *	1.5	3.2	3.1	6.6	0.0	0.4
75 to 84	6	5	1	988,209	412,295	575,914	0.6 *	1.2 *	0.2 *	0.1	1.1	0.1	2.3	0.0	0.5
85 & Older	0	0	0	402,581	135,267	267,314	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
Unknown	0	0	0												
Total	630	564	66	15,967,775	7,907,083	8,060,692	3.9	7.1	0.8	3.6	4.3	6.5	7.7	0.6	1.0
Age-Adjusted							3.5	6.3	0.8	3.3	3.8	5.7	6.8	0.6	1.0

Note : Rates are per 100,000 population. ICD-10 codes B20-B24.
Year 2000 U.S. Standard Population is used for age-adjusted rates.
American Indian, Asian, Black, Pacific Islander, White and Two or More Races exclude Hispanic ethnicity.
Hispanic includes any race category.
Deaths reported under Two or More Races are not duplicated in single race/ethnic groups.

Source : State of California, Department of Finance; Population Projections with Age, Sex, and Race/Ethnic Detail, 2000-2050, May 2004.
State of California, Department of Health Services, Death Records.

* Death rate unreliable, relative standard error is greater than or equal to 23 percent.
\+ Standard error indeterminate, death rate based on no (zero) deaths.
\- Confidence limit is not calculated for no (zero) deaths.
[1] Includes American Indians (15), Pacific Islanders (4), and Two or More Races (19) not individually shown due to unreliable rates.

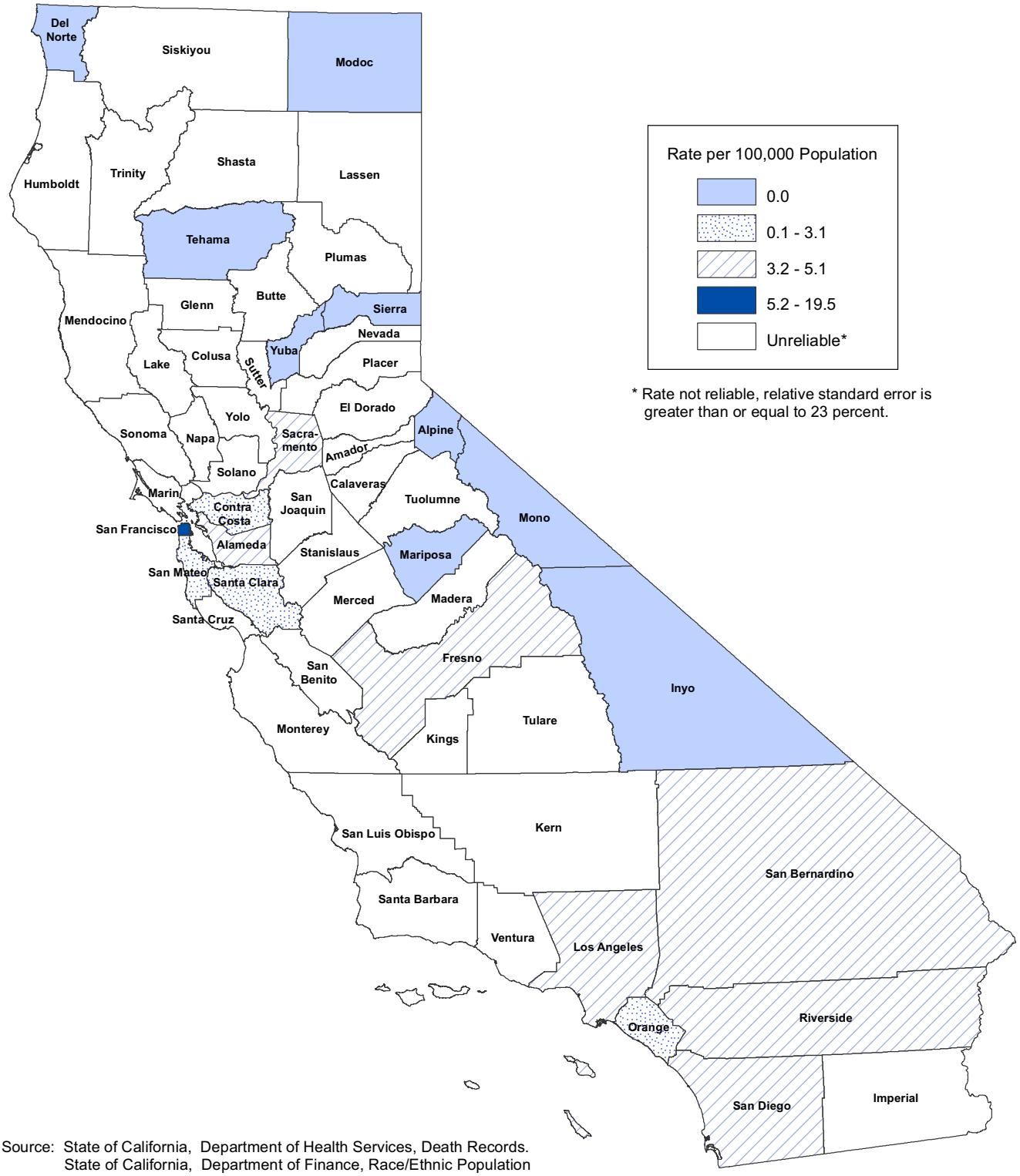
TABLE 2
HUMAN IMMUNODEFICIENCY VIRUS DISEASE DEATHS
CALIFORNIA, 2002-2004
(By Place of Residence)

COUNTY	2002-2004 DEATHS (Average)	PERCENT	2003 POPULATION	CRUDE RATE	AGE-ADJUSTED RATE	95% CONFIDENCE LIMITS	
						LOWER	UPPER
HEALTHY PEOPLE 2010 NATIONAL OBJECTIVE:					0.7		
CALIFORNIA	1,388.0	100.0	35,934,967	3.9	3.9	3.7	4.1
ALAMEDA	67.7	4.9	1,495,367	4.5	4.3	3.3	5.4
ALPINE[2]	0.0	0.0	1,268	0.0 +	0.0 +	-	-
AMADOR	0.7	a	37,074	1.8 *	1.6 *	0.0	5.5
BUTTE	4.3	0.3	212,473	2.0 *	2.3 *	0.1	4.5
CALAVERAS	2.0	0.1	43,566	4.6 *	4.0 *	0.0	9.6
COLUSA	0.3	a	20,026	1.7 *	1.8 *	0.0	7.9
CONTRA COSTA	32.3	2.3	1,003,704	3.2	3.1	2.0	4.1
DEL NORTE[2]	0.0	0.0	28,192	0.0 +	0.0 +	-	-
EL DORADO	2.3	0.2	168,227	1.4 *	1.5 *	0.0	3.5
FRESNO	27.0	1.9	855,469	3.2	3.6	2.2	5.0
GLENN	0.3	a	27,626	1.2 *	1.4 *	0.0	6.3
HUMBOLDT	4.3	0.3	129,515	3.3 *	3.5 *	0.2	6.8
IMPERIAL	3.3	0.2	153,673	2.2 *	2.4 *	0.0	4.9
INYO[2]	0.0	0.0	18,617	0.0 +	0.0 +	-	-
KERN	17.3	1.2	717,332	2.4 *	2.6 *	1.4	3.8
KINGS	3.3	0.2	138,763	2.4 *	2.5 *	0.0	5.2
LAKE	4.0	0.3	62,359	6.4 *	6.8 *	0.0	13.6
LASSEN	0.7	a	34,633	1.9 *	1.9 *	0.0	6.4
LOS ANGELES[1]	499.0	36.0	10,047,236	5.0	5.1	4.6	5.5
MADERA	2.3	0.2	133,965	1.7 *	1.9 *	0.0	4.3
MARIN	7.7	0.6	250,252	3.1 *	2.6 *	0.7	4.4
MARIPOSA[2]	0.0	0.0	17,886	0.0 +	0.0 +	-	-
MENDOCINO	2.0	0.1	89,156	2.2 *	2.0 *	0.0	4.8
MERCED	5.3	0.4	230,696	2.3 *	2.7 *	0.4	4.9
MODOC[2]	0.0	0.0	9,541	0.0 +	0.0 +	-	-
MONO[2]	0.0	0.0	13,443	0.0 +	0.0 +	-	-
MONTEREY	9.7	0.7	418,842	2.3 *	2.5 *	0.9	4.0
NAPA	2.7	0.2	130,920	2.0 *	2.0 *	0.0	4.5
NEVADA	2.3	0.2	96,923	2.4 *	2.3 *	0.0	5.3
ORANGE[1]	52.0	3.7	3,001,146	1.7	1.7	1.2	2.2
PLACER	2.3	0.2	285,336	0.8 *	0.8 *	0.0	1.9
PLUMAS	0.3	a	21,181	1.6 *	2.9 *	0.0	12.7
RIVERSIDE	72.3	5.2	1,758,719	4.1	4.5	3.4	5.5
SACRAMENTO	50.3	3.6	1,331,563	3.8	3.9	2.8	5.0
SAN BENITO	1.3	0.1	56,605	2.4 *	2.4 *	0.0	6.4
SAN BERNARDINO	59.7	4.3	1,869,219	3.2	3.4	2.5	4.3
SAN DIEGO	121.3	8.7	2,989,178	4.1	4.2	3.4	4.9
SAN FRANCISCO[1]	173.3	12.5	786,980	22.0	19.5	16.6	22.4
SAN JOAQUIN	12.7	0.9	625,702	2.0 *	2.2 *	1.0	3.4
SAN LUIS OBISPO	4.7	0.3	257,452	1.8 *	1.9 *	0.2	3.7
SAN MATEO	21.0	1.5	712,772	2.9	2.7	1.6	3.9
SANTA BARBARA	4.7	0.3	412,069	1.1 *	1.2 *	0.1	2.3
SANTA CLARA[1]	33.0	2.4	1,723,819	1.9	1.8	1.2	2.4
SANTA CRUZ	7.3	0.5	259,220	2.8 *	2.6 *	0.7	4.5
SHASTA	2.0	0.1	175,421	1.1 *	1.3 *	0.0	3.1
SIERRA[2]	0.0	0.0	3,563	0.0 +	0.0 +	-	-
SISKIYOU	1.3	0.1	45,081	3.0 *	3.2 *	0.0	8.7
SOLANO	19.0	1.4	416,406	4.6	4.5 *	2.5	6.6
SONOMA	13.7	1.0	473,274	2.9 *	2.7 *	1.2	4.1
STANISLAUS	9.7	0.7	489,491	2.0 *	2.2 *	0.8	3.6
SUTTER	0.7	a	84,978	0.8 *	0.8 *	0.0	2.8
TEHAMA[2]	0.0	0.0	58,665	0.0 +	0.0 +	-	-
TRINITY	0.3	a	13,579	2.5 *	1.9 *	0.0	8.2
TULARE	6.3	0.5	392,989	1.6 *	1.9 *	0.4	3.4
TUOLUMNE[2]	0.3	a	57,120	0.6 *	0.4 *	0.0	1.8
VENTURA	13.0	0.9	799,114	1.6 *	1.6 *	0.7	2.4
YOLO	4.3	0.3	183,602	2.4 *	2.7 *	0.1	5.2
YUBA[2]	0.0	0.0	63,979	0.0 +	0.0 +	-	-

Note : Rates are per 100,000 population. ICD-10 codes B20-B24.
* Death rate unreliable, relative standard error is greater than or equal to 23 percent.
\+ Standard error indeterminate, death rate based on no (zero) deaths.
a Represents a percentage of more than zero but less than 0.05.
\- Confidence limit is not calculated for no (zero) deaths.
[1] County age-adjusted rate is signigicantly different from the state age-adjusted rate.
[2] Met or surpassed HP2010 target rate.

Source : State of California, Department of Finance; 2002 Population: Population Projections by Age, Race/Ethnicity and Sex, May 2004.
State of California, Department of Health Services, Death Records.

FIGURE 6
HIV DISEASE AGE-ADJUSTED DEATH RATES
CALIFORNIA, 2002-2004



Source: State of California, Department of Health Services, Death Records.
State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA 2004