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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

- **Influenza and pneumonia ranked sixth in 2003 among the leading causes of death in California.**
- **Nearly 90 percent of all influenza and pneumonia deaths occur among people aged 65 and older.**
- **Crude death rate decreased by 6.9 percent from 24.5 in 2000 to 22.8 in 2003.**
- **Age-adjusted death rate decreased by 15.5 percent from 29.0 in 2000 to 24.5 in 2003.**
- **Of the reliable county age-adjusted rates in 2003, Yolo County had the highest rate of 44.6 per 100,000 population, which was 3.5 times the lowest rate of 12.7 in San Luis Obispo County.**

Influenza and Pneumonia Deaths California, 2000-2003

By Steven Shippen

Introduction

In 2003 influenza and pneumonia ranked sixth among the leading causes of death in California and seventh in the United States (U.S.).[1, 2] The two diseases are traditionally reported together, as pneumonia is frequently a complication of influenza. Though there are typically more pneumonia deaths each year than influenza deaths, the number of influenza deaths still varies during epidemics. Pneumonia and influenza death numbers have fluctuated considerably over the years reflecting the cyclic nature of communicable diseases. Influenza can be caused by more virulent virus strains in some years than others as the viruses mutate constantly. Influenza vaccination programs have been successful in reducing the number of severe illnesses and deaths caused by this disease. Influenza is a contagious disease caused by a virus while pneumonia is caused by a variety of agents such as bacteria, viruses, and mycoplasmas, among others.[3] A pneumococcal vaccine now widely available may also have a profound effect on reducing the future number of deaths from pneumonia.

Adults aged 65 and older are more likely to have serious complications from influenza. People considered at high risk for pneumonia include the elderly, the very young, and those with underlying health problems, such as chronic obstructive pulmonary disease, diabetes mellitus, congestive heart failure, and sickle cell disease.[3]

The U.S. Department of Health and Human Services developed a plan including 10-year health objectives for the U.S. known as Healthy People 2010 (HP2010).[4] The HP2010 objectives related to influenza and pneumonia focus on increasing the number of adults vaccinated in specific age, health status, racial/ethnic, and institutionalized groups as an effective strategy to reduce illness and deaths due to these diseases. These objectives require specific data collection not covered in this report.

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[1] State of California, Department of Health Services. Death Records. 2003

[2] Hoyert DL, Kung HC, Smith BL. Deaths: Preliminary Data for 2003. National Vital Statistics Reports; Vol. 53, No.15. National Center for Health Statistics. February 2005.

[3] American Lung Association. Pneumonia and Influenza Fact Sheets. URL: http://www.lungusa.org/ Accessed June 15, 2005.

[4] U.S. Department of Health and Human Services. Healthy People 2010 Objectives (Second Edition, in Two Volumes). Washington, D.C., January 2001.

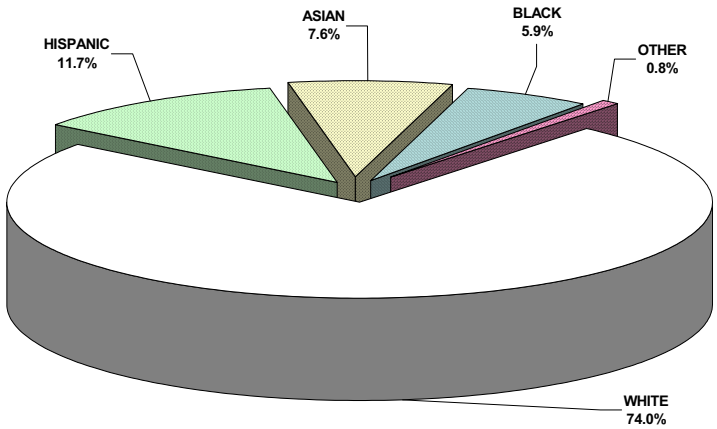
A description of methods and a brief overview of Data Limitations and Qualifications are provided at the end of this report.

This report presents data on California resident deaths due to influenza and pneumonia during 2000 through 2003, primarily focusing on 2003, with analysis of crude and age-adjusted rates by sex, age group, race/ethnicity, and county. The data are extracted from vital statistics records with the underlying cause of death attributable to influenza or pneumonia as defined by the International Classification of Diseases, Tenth Revision (ICD-10) codes J10-J18, in accordance with National Center for Health Statistics (NCHS) reports.[5]

Influenza and Pneumonia Deaths

Tables 1- 4 (pages 10-15) present influenza and pneumonia death statistics for years 2000 through 2003 by race/ethnicity, age group, and sex. In 2003 female influenza and pneumonia deaths (4,420) outnumbered male deaths (3,764) by a ratio of 1.2 to 1. In 2000 there were 1.3 female deaths due to influenza and pneumonia for every male death. The ratio declined in 2001 to 1.2 to 1 and has remained constant through 2003.

FIGURE 1
INFLUENZA AND PNEUMONIA DEATHS
BY RACE/ETHNICITY*
CALIFORNIA, 2003



Source: State of California, Department of Health Services, Death Records, 2003.
Note: Other includes American Indian, Pacific Islander, and Two or More Races.
* Calculated using death data for California residents only.

Nearly 90 percent of all influenza and pneumonia deaths in 2003 occurred among California residents aged 65 and older. A comparison of prior year resident deaths in the same age group shows 91.2 percent in 2002, 91.9 percent in 2001, and 91.3 percent in 2000.

Figure 1 shows, in 2003, Whites had the highest percentage of influenza and pneumonia deaths with 74.0 percent; followed by Hispanics with 11.7 percent, Asians with 7.6 percent, Blacks with 5.9 percent, and Other with 0.8 percent. Other included American Indian (0.4), Pacific Islander (0.1), and Two or More Races (0.3).

A comparison of influenza and pneumonia deaths during years 2000 through 2003 (**Tables 1- 4)** shows that influenza and pneumonia deaths in 2003 increased from 2002, but were still fewer than those in 2000. American Indians, Asians, Blacks, Hispanics, Whites, and Two or More Races had the highest number of influenza and pneumonia deaths in 2003. Influenza and pneumonia deaths for Pacific Islanders were highest in 2001. Female deaths tend to outnumber male deaths overall and within each race/ethnic group; however, Black female and White female deaths due to influenza and pneumonia were declining.[1]

[5] National Center for Health Statistics. Vital Statistics, Instructions for Classifying the Underlying Cause of Death. NCHS Instruction Manual, Part 9. Public Health Service. Hyattsville, Maryland. 1999.

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

Influenza and Pneumonia Crude Death Rates

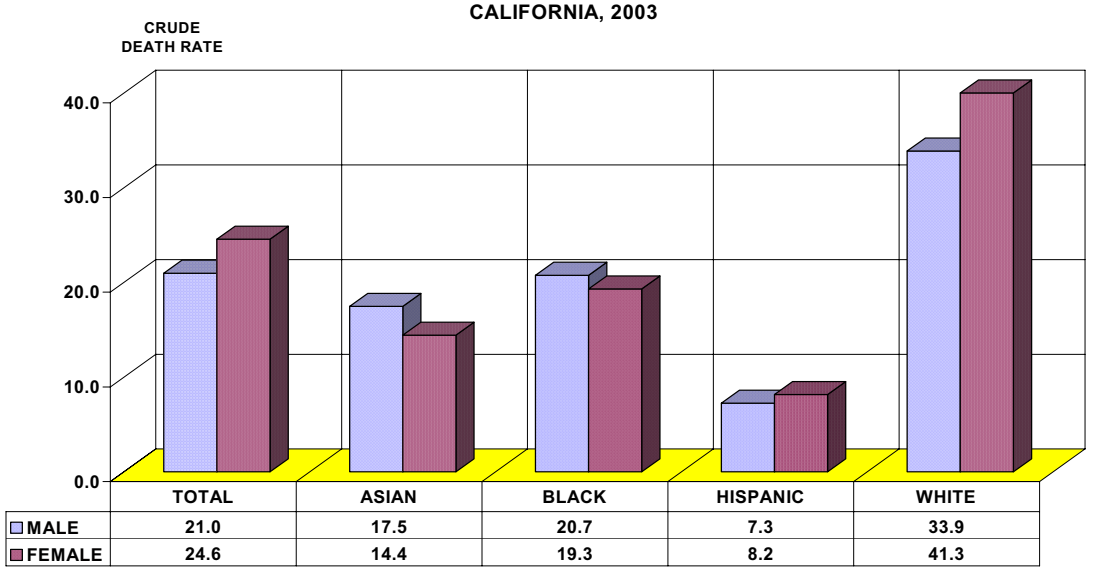
California's influenza and pneumonia crude death rate in 2003 was 22.8 per 100,000 population (**Table 1**, pages 10-11), declining 6.9 percent from the 24.5 rate in 2000 (**Table 4**, page 15). While the decline in California's crude rate from 2000 to 2003 was statistically significant, California's rate in 2003 was slightly higher than the 22.3 national rate.[2]

Overall, female influenza and pneumonia crude death rates were significantly higher than the male rates each year during 2000-2003 (**Tables 1- 4**). Among females, the crude rate in 2003 of 24.6 per 100,000 population was 10.2 percent lower than the crude rate of 27.4 in 2000. Even though the difference in female rates was significant, there was no significant difference in the corresponding 2003 and 2000 male rates of 21.0 and 21.7, respectively.

In 2003 Whites had the highest reliable crude death rate (37.6), followed by Blacks (20.0), Asians (15.9), American Indians (12.1), Hispanics (7.7), and Two or More Races (3.5). Of these rates, differences among the race/ethnic groups were statistically significant, except for Asians compared with American Indians.

Figure 2 shows that in 2003 females had higher crude death rates than males among Hispanics and Whites while males had higher crude death rates than females among Asians and Blacks. The White female rate (41.3) was significantly higher compared to all other reliable rates of both sexes in each race/ethnic group. The White male rate (33.9) was the second highest, followed by Black male (20.7), Black female (19.3), Asian male (17.5), Asian female (14.4), Hispanic female (8.2), and Hispanic male (7.3). The difference between male and female crude death rates among Asians was also significant.

FIGURE 2
INFLUENZA AND PNEUMONIA CRUDE DEATH RATES
BY SEX AND RACE/ETHNICITY*
CALIFORNIA, 2003



	TOTAL	ASIAN	BLACK	HISPANIC	WHITE
MALE	21.0	17.5	20.7	7.3	33.9
FEMALE	24.6	14.4	19.3	8.2	41.3

Note: Total includes American Indian, Pacific Islander, and Two or More Races.
Not shown are unreliable rates for American Indian, Pacific Islander, and Two or More Races.
* Calculated using death data for California residents only.
Source: State of California, Department of Health Services, Death Records, 2003.

Influenza and Pneumonia Age-Specific Death Rates

See the Vital Statistics Query System (VSQ) at our Web site www.applications.dhs.ca.gov/vsq/default.asp to create your own vital statistics tables.

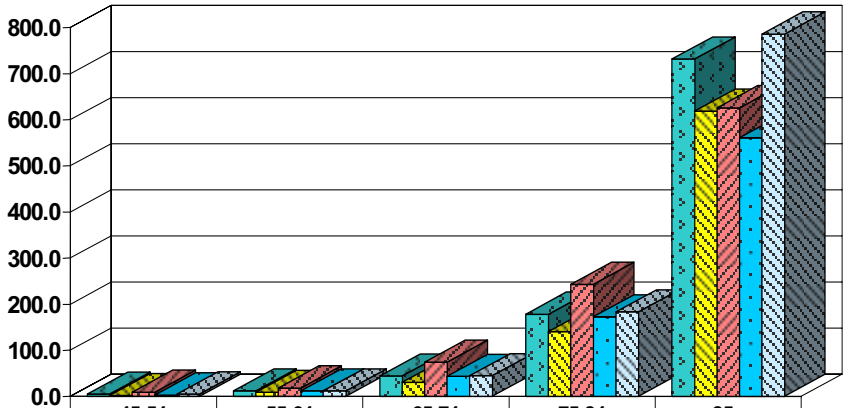
Tables 1- 4 (pages 10-15) display age-specific death rates by sex for the seven race/ethnic groups. Age-specific death rates, regardless of sex or race/ethnic group, were unreliable where there were fewer than 19 deaths (numerator data).

In general and regardless of sex or race/ethnic group, influenza and pneumonia age-specific death rates increased with age for the 35 and older age groups. The highest reliable death rates occurred in the 85 and older age group, with the second highest death rates occurring in age group 75 to 84.

Of reliable gender and age-specific death rates for California residents aged 65 and older, rates for males were higher than for females in each age and race/ethnic group during 2000 through 2003.

Figure 3 shows the age-specific death rates for 2003 by race/ethnicity and age group. In comparing the race/ethnic group differences, the highest and lowest reliable age-specific death rates varied as follows: Whites had the highest rate of any race/ethnic group in the 85 and older age group; Blacks were highest in the 45 to 84 age groups; Hispanics had the lowest rates in the 45 to 54 and 85 and older age groups and Asians were lowest in the 55 through 84 age groups. The rate for Asians in age group 45 to 54 was unreliable.

FIGURE 3
INFLUENZA AND PNEUMONIA AGE-SPECIFIC DEATH RATES
BY RACE/ETHNICITY AND AGE GROUPS*
CALIFORNIA, 2003



	45-54	55-64	65-74	75-84	85+
TOTAL	4.6	11.9	44.1	178.6	731.2
ASIAN	1.5	8.4	30.4	140.5	618.4
BLACK	9.4	17.9	73.9	242.7	625.8
HISPANIC	2.8	11.9	43.0	172.2	560.7
WHITE	5.5	11.9	44.6	183.0	785.9

Note: Total includes American Indian, Pacific Islander, and Two or More Races.
Not shown are unreliable rates for American Indian, Pacific Islander, and Two or More Races.
Asian rate in age group 45-54 is unreliable.
* Calculated using death data for California residents only.
Source: State of California, Department of Health Services, Death Records, 2003.

You can read more about crude and age-adjusted death rates on the National Center for Health Statistics Web site at www.cdc.gov/nchs

Influenza and Pneumonia Age-Adjusted Death Rates

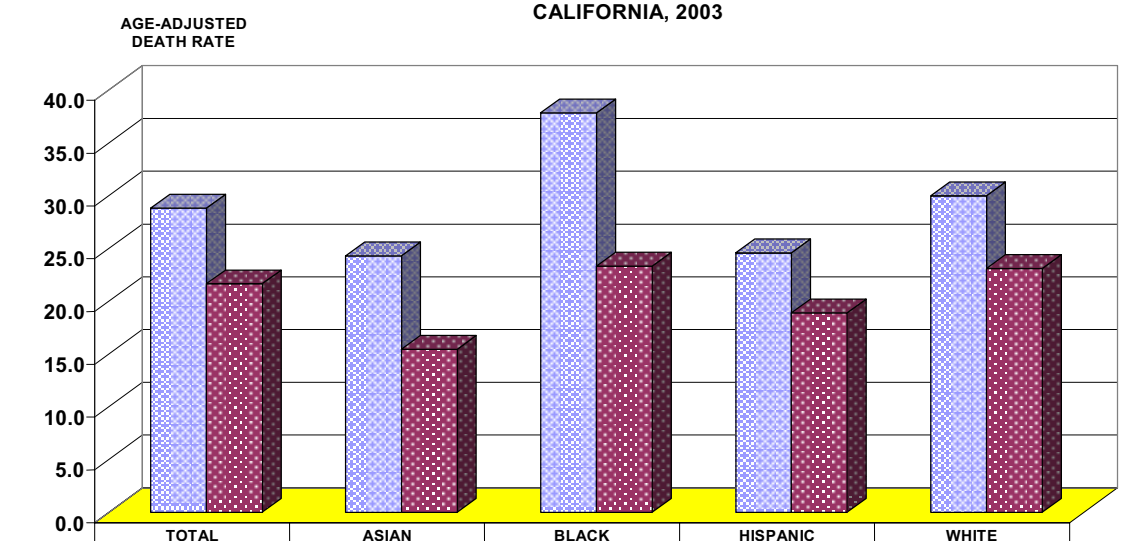
California's influenza and pneumonia age-adjusted death rate in 2003 was 24.5 per 100,000 population (**Table 1**, pages 10-11), declining 15.5 percent from the 29.0 rate in 2000 (**Table 4**, page 15). The decline in California's rate was statistically significant, although California's rate in 2003 was higher than the 21.9 national rate.[2]

Unlike crude death rates, influenza and pneumonia age-adjusted death rates were significantly higher for males than for females during 2000-2003 (**Tables 1- 4**). Among males, the age-adjusted rate in 2003 of 28.8 per 100,000 population was 14.8 percent lower than their age-adjusted rate of 33.8 in 2000. Among females, the age-adjusted death rate declined 16.6 percent from 25.9 in 2000 to 21.6 in 2003. The decline for both sexes was significant.

In 2003 Blacks had the highest reliable age-adjusted death rate (29.2), followed by Whites (25.8), Hispanics (21.2), Asians (19.1), American Indians (15.6), and Two or More Races (7.6). Of these, the differences in rates among the race/ethnic groups were statistically significant, except for Asians and Hispanics when compared with American Indians.

Figure 4 shows that in 2003 the age-adjusted rate for Black males (37.8) was significantly higher than all other sex-specific rates in each race/ethnic group. The second highest age-adjusted rate was for White males (30.0), followed by Hispanic males (24.6), Asian males (24.3), Black females (23.3), White females (23.1), Hispanic females (18.9), and Asian females (15.4). The differences in age-adjusted death rates between White and Hispanic males, White and Hispanic females, and Hispanic and Asian females were also significant.

FIGURE 4
INFLUENZA AND PNEUMONIA AGE-ADJUSTED DEATH RATES
BY RACE/ETHNICITY AND SEX*
CALIFORNIA, 2003



	TOTAL	ASIAN	BLACK	HISPANIC	WHITE
MALE	28.8	24.3	37.8	24.6	30.0
FEMALE	21.6	15.4	23.3	18.9	23.1

Note: Total includes American Indian, Pacific Islander, and Two or More Races.
Not shown are unreliable rates for American Indian, Pacific Islander, and Two or More Races.
* Calculated using death data for California residents
Source: State of California, Department of Health Services, Death Records, 2003.

Influenza and Pneumonia Death Data for California Counties

For more data and prior reports, see the DHS Center for Health Statistics, Home Page http://www.dhs.ca.gov/OHIR

Table 5 (page 16) displays the 2001-2003 average numbers of deaths, crude death rates, and age-adjusted death rates for California and its 58 counties. The data are averaged over a three-year period to reduce large fluctuations in death rates that are inherent among counties with a small number of deaths or population.

The three counties with the highest average number of deaths were Los Angeles County (2,444.7), followed by San Diego (621.7) and Orange County (611.7). Among the 38 counties with reliable crude rates, Lake County had the highest rate of 45.6 per 100,000 population, which was 3.1 times higher than the lowest rate of 14.6 in Monterey County.

Of the 37 counties with reliable age-adjusted death rates, Yolo County had the highest rate of 44.6 per 100,000 population, which was 3.5 times higher than the lowest rate of 12.7 in San Luis Obispo County.

A comparison of county age-adjusted rates to California's overall rate shows that six counties (Madera, Monterey, Riverside, San Luis Obispo, Shasta, and Sonoma) had a significantly lower age-adjusted rate and five counties (Los Angeles, Sacramento, San Francisco, Stanislaus, and Yolo) had a significantly higher age-adjusted rate.

Please refer to the Data Limitations and Qualifications section for language regarding significance testing between the county and state age-adjusted rates.

Influenza and Pneumonia Death Data for City Health Jurisdictions

Table 6 shows the 2001-2003 average number of pneumonia and influenza deaths and the crude death rates for three of California's city health jurisdictions. Long Beach had the highest average number of deaths (102.3), followed by Pasadena (54.3) and Berkeley (16.3). The crude death rates were 39.1 per 100,000 population for Pasadena, 21.6 for Long Beach, and 15.7 for Berkeley. However, the rate for Berkeley was unreliable.

Age-adjusted death rates were not calculated for the city health jurisdictions because city population estimates by age were not available.

TABLE 6
INFLUENZA AND PNEUMONIA DEATHS
AMONG THE CITY HEALTH JURISDICTIONS*
CALIFORNIA, 2001-2003

CITY HEALTH JURISDICTION	NUMBER OF DEATHS (Average)	2002 POPULATION	CRUDE DEATH RATE
BERKELEY	16.3	104,254	15.7 **
LONG BEACH	102.3	473,363	21.6
PASADENA	54.3	138,904	39.1

Note: Rates are per 100,000 population; ICD-10 codes J10-J18.
*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 Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2005, with 2000 DRU Benchmark, May 2005.
State of California, Department of Health Services, Death Records.

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 death 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.[6] 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 pneumonia and influenza death data presented in this report are based on the vital statistics records with ICD-10 codes J10-J18 as defined by the NCHS.[5] 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.[7]

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[6] Choi BCK, de Guia NA, and Walsh P. Look before you leap: Stratify before you standardize. American Journal of Epidemiology, 149: 1087-1096. 1999.

[7] van Belle G. Statistical Rules of Thumb, Rule 2.5. Wiley Publishing. March 2002

The county or State age-adjusted mortality rates that equaled or surpassed the HP2010 objective target rate were noted as achieved, regardless of rate reliability. Readers are cautioned that measuring progress toward target attainment for a HP2010 objective using only one data point is not recommended. HP2010 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.[8] See the guidelines for HP2010 objectives on the NCHS website at http://www.cdc.gov/nchs/hphome.htm

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.[9] 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.[10] 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.

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[8] 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.

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

[10] 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.

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.

The 2000 U.S. population standard was used for calculating age-adjustments in accordance with statistical policy implemented by NCHS.[11] 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 6** (page 6) differ from population data used to calculate county crude rates in **Table 5** (page 16). 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.[12] Detailed information on data quality and limitations is presented in the appendix of the annual report, "Vital Statistics of California."[13] Formulas used to calculate death rates are included in the technical notes of the "County Health Status Profiles" report.[14]

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[11] 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.
[12] 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.
[13] Ficenec S, Bindra K, Christensen J. Vital Statistics of California, 2002. Center for Health Statistics, California Department of Health Services, April 2004.
[14] Shippen S, Wilson C. County Health Status Profiles 2005. Center for Health Statistics, California Department of Health Services, April 2005.

TABLE 1
INFLUENZA AND PNEUMONIA DEATHS BY RACE/ETHNICITY, AGE, AND SEX
CALIFORNIA, 2003
(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	36	19	17	531,434	271,162	260,272	6.8	7.0	6.5 *	4.6	9.0	3.9	10.2	3.4	9.6
1 - 4	17	9	8	2,008,528	1,026,713	981,815	0.8 *	0.9 *	0.8 *	0.4	1.2	0.3	1.4	0.3	1.4
5 - 14	22	10	12	5,420,822	2,777,200	2,643,622	0.4	0.4 *	0.5 *	0.2	0.6	0.1	0.6	0.2	0.7
15 - 24	19	11	8	5,160,658	2,691,409	2,469,249	0.4	0.4 *	0.3 *	0.2	0.5	0.2	0.7	0.1	0.5
25 - 34	35	22	13	5,246,137	2,705,863	2,540,274	0.7	0.8	0.5 *	0.4	0.9	0.5	1.2	0.2	0.8
35 - 44	101	57	44	5,648,662	2,870,936	2,777,726	1.8	2.0	1.6	1.4	2.1	1.5	2.5	1.1	2.1
45 - 54	222	143	79	4,819,832	2,382,693	2,437,139	4.6	6.0	3.2	4.0	5.2	5.0	7.0	2.5	4.0
55 - 64	375	198	177	3,146,705	1,520,342	1,626,363	11.9	13.0	10.9	10.7	13.1	11.2	14.8	9.3	12.5
65 - 74	880	502	378	1,997,161	921,535	1,075,626	44.1	54.5	35.1	41.2	47.0	49.7	59.2	31.6	38.7
75 - 84	2,526	1,271	1,255	1,414,654	587,119	827,535	178.6	216.5	151.7	171.6	185.5	204.6	228.4	143.3	160.0
85 & OLDER	3,951	1,522	2,429	540,374	183,447	356,927	731.2	829.7	680.5	708.4	754.0	788.0	871.3	653.5	707.6
UNKNOWN	0	0	0												
TOTAL	8,184	3,764	4,420	35,934,967	17,938,419	17,996,548	22.8	21.0	24.6	22.3	23.3	20.3	21.7	23.8	25.3
AGE-ADJUSTED							24.5	28.8	21.6	24.0	25.1	27.9	29.7	21.0	22.3
AMERICAN INDIAN															
UNDER 1	0	0	0	3,180	1,629	1,551	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 - 4	0	0	0	9,091	4,692	4,399	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	0	0	0	41,585	21,049	20,536	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
15 - 24	0	0	0	41,597	21,270	20,327	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
25 - 34	1	0	1	34,537	17,157	17,380	2.9 *	0.0 +	5.8 *	0.0	8.6	-	-	0.0	17.0
35 - 44	0	0	0	41,759	20,278	21,481	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
45 - 54	3	3	0	39,151	18,614	20,537	7.7 *	16.1 *	0.0 +	0.0	16.3	0.0	34.4	-	-
55 - 64	6	2	4	24,166	11,540	12,626	24.8 *	17.3 *	31.7 *	5.0	44.7	0.0	41.4	0.6	62.7
65 - 74	4	2	2	11,703	5,454	6,249	34.2 *	36.7 *	32.0 *	0.7	67.7	0.0	87.5	0.0	76.4
75 - 84	8	2	6	6,213	2,604	3,609	128.8 *	76.8 *	166.3 *	39.5	218.0	0.0	183.3	33.2	299.3
85 & OLDER	9	4	5	3,472	1,263	2,209	259.2 *	316.7 *	226.3 *	89.9	428.6	6.3	627.1	27.9	424.7
UNKNOWN	0	0	0												
TOTAL	31	13	18	256,454	125,550	130,904	12.1	10.4 *	13.8 *	7.8	16.3	4.7	16.0	7.4	20.1
AGE-ADJUSTED							15.6	14.5 *	16.6 *	9.9	21.4	6.2	22.7	8.7	24.6
ASIAN															
UNDER 1	1	0	1	49,099	25,103	23,996	2.0 *	0.0 +	4.2 *	0.0	6.0	-	-	0.0	12.3
1 - 4	0	0	0	181,821	93,219	88,602	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	5	3	2	500,584	258,445	242,139	1.0 *	1.2 *	0.8 *	0.1	1.9	0.0	2.5	0.0	2.0
15 - 24	1	0	1	547,727	281,307	266,420	0.2 *	0.0 +	0.4 *	0.0	0.5	-	-	0.0	1.1
25 - 34	1	0	1	609,005	297,832	311,173	0.2 *	0.0 +	0.3 *	0.0	0.5	-	-	0.0	1.0
35 - 44	3	2	1	654,269	313,201	341,068	0.5 *	0.6 *	0.3 *	0.0	1.0	0.0	1.5	0.0	0.9
45 - 54	9	5	4	590,179	275,078	315,101	1.5 *	1.8 *	1.3 *	0.5	2.5	0.2	3.4	0.0	2.5
55 - 64	30	21	9	356,471	166,544	189,927	8.4	12.6	4.7 *	5.4	11.4	7.2	18.0	1.6	7.8
65 - 74	72	36	36	236,933	103,366	133,567	30.4	34.8	27.0	23.4	37.4	23.5	46.2	18.1	35.8
75 - 84	206	119	87	146,599	62,184	84,415	140.5	191.4	103.1	121.3	159.7	157.0	225.8	81.4	124.7
85 & OLDER	295	145	150	47,703	19,092	28,611	618.4	759.5	524.3	547.8	689.0	635.9	883.1	440.4	608.2
UNKNOWN	0	0	0												
TOTAL	623	331	292	3,920,390	1,895,371	2,025,019	15.9	17.5	14.4	14.6	17.1	15.6	19.3	12.8	16.1
AGE-ADJUSTED							19.1	24.3	15.4	17.6	20.6	21.6	26.9	13.7	17.2
BLACK															
UNDER 1	4	2	2	32,376	16,503	15,873	12.4 *	12.1 *	12.6 *	0.2	24.5	0.0	28.9	0.0	30.1
1 - 4	1	0	1	122,874	62,658	60,216	0.8 *	0.0 +	1.7 *	0.0	2.4	-	-	0.0	4.9
5 - 14	1	1	0	415,801	211,605	204,196	0.2 *	0.5 *	0.0 +	0.0	0.7	0.0	1.4	-	-
15 - 24	1	1	0	379,857	197,146	182,711	0.3 *	0.5 *	0.0 +	0.0	0.8	0.0	1.5	-	-
25 - 34	3	1	2	329,285	162,507	166,778	0.9 *	0.6 *	1.2 *	0.0	1.9	0.0	1.8	0.0	2.9
35 - 44	13	8	5	401,674	200,729	200,945	3.2 *	4.0 *	2.5 *	1.5	5.0	1.2	6.7	0.3	4.7
45 - 54	30	20	10	319,425	155,654	163,771	9.4	12.8	6.1 *	6.0	12.8	7.2	18.5	2.3	9.9
55 - 64	34	23	11	190,319	88,453	101,866	17.9	26.0	10.8 *	11.9	23.9	15.4	36.6	4.4	17.2
65 - 74	87	54	33	117,685	53,462	64,223	73.9	101.0	51.4	58.4	89.5	74.1	127.9	33.9	68.9
75 - 84	155	84	71	63,864	24,858	39,006	242.7	337.9	182.0	204.5	280.9	265.7	410.2	139.7	224.4
85 & OLDER	151	51	100	24,128	7,218	16,910	625.8	706.6	591.4	526.0	725.7	512.6	900.5	475.5	707.3
UNKNOWN	0	0	0												
TOTAL	480	245	235	2,397,288	1,180,793	1,216,495	20.0	20.7	19.3	18.2	21.8	18.2	23.3	16.8	21.8
AGE-ADJUSTED							29.2	37.8	23.3	26.6	31.9	32.9	42.8	20.3	26.3
HISPANIC															
UNDER 1	22	12	10	265,727	135,553	130,174	8.3	8.9 *	7.7 *	4.8	11.7	3.8	13.9	2.9	12.4
1 - 4	10	6	4	972,443	496,688	475,755	1.0 *	1.2 *	0.8 *	0.4	1.7	0.2	2.2	0.0	1.7
5 - 14	7	4	3	2,487,194	1,271,424	1,215,770	0.3 *	0.3 *	0.2 *	0.1	0.5	0.0	0.6	0.0	0.5
15 - 24	13	8	5	2,211,661	1,170,782	1,040,879	0.6 *	0.7 *	0.5 *	0.3	0.9	0.2	1.2	0.1	0.9
25 - 34	15	12	3	2,282,378	1,215,342	1,067,036	0.7 *	1.0 *	0.3 *	0.3	1.0	0.4	1.5	0.0	0.6
35 - 44	20	9	11	1,872,178	969,722	902,456	1.1	0.9 *	1.2 *	0.6	1.5	0.3	1.5	0.5	1.9
45 - 54	33	22	11	1,159,100	572,129	586,971	2.8	3.8	1.9 *	1.9	3.8	2.2	5.5	0.8	3.0
55 - 64	71	35	36	595,540	279,290	316,250	11.9	12.5	11.4	9.1	14.7	8.4	16.7	7.7	15.1
65 - 74	148	82	66	344,493	151,957	192,536	43.0	54.0	34.3	36.0	49.9	42.3	65.6	26.0	42.5
75 - 84	310	154	156	180,074	74,189	105,885	172.2	207.6	147.3	153.0	191.3	174.8	240.4	124.2	170.4
85 & OLDER	307	117	190	54,755	19,164	35,591	560.7	610.5	533.8	498.0	623.4	499.9	721.1	457.9	609.8
UNKNOWN	0	0	0												
TOTAL	956	461	495	12,425,543	6,356,240	6,069,303	7.7	7.3	8.2	7.2	8.2	6.6	7.9	7.4	8.9
AGE-ADJUSTED							21.2	24.6	18.9	19.8	22.6	22.1	27.0	17.2	20.6

Notes: Rates are per 100,000 population. ICD-10 codes J10-J18.
Year 2000 U.S. standard population is used for age-adjusted rates.
American Indian, Asian, Black, Pacific Islander, White, and Two or More Races excludes Hispanic ethnicity. Hispanic includes any race category.

\+ Standard error indeterminate, death rate based on no (zero) deaths.
* Death rate unreliable (relative standard error is greater than or equal to 23 percent).
\- Confidence limit is not calculated for no (zero) events.
[1] Includes deaths for Pacific Islander (9) not individually shown due to unreliable rates.

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

TABLE 1 (Continued)
INFLUENZA AND PNEUMONIA DEATHS BY RACE/ETHNICITY, AGE, AND SEX
CALIFORNIA, 2003
(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	36	19	17	531,434	271,162	260,272	6.8	7.0	6.5 *	4.6	9.0	3.9	10.2	3.4	9.6
1 - 4	17	9	8	2,008,528	1,026,713	981,815	0.8 *	0.9 *	0.8 *	0.4	1.2	0.3	1.4	0.3	1.4
5 - 14	22	10	12	5,420,822	2,777,200	2,643,622	0.4	0.4 *	0.5 *	0.2	0.6	0.1	0.6	0.2	0.7
15 - 24	19	11	8	5,160,658	2,691,409	2,469,249	0.4	0.4 *	0.3 *	0.2	0.5	0.2	0.7	0.1	0.5
25 - 34	35	22	13	5,246,137	2,705,863	2,540,274	0.7	0.8	0.5 *	0.4	0.9	0.5	1.2	0.2	0.8
35 - 44	101	57	44	5,648,662	2,870,936	2,777,726	1.8	2.0	1.6	1.4	2.1	1.5	2.5	1.1	2.1
45 - 54	222	143	79	4,819,832	2,382,693	2,437,139	4.6	6.0	3.2	4.0	5.2	5.0	7.0	2.5	4.0
55 - 64	375	198	177	3,146,705	1,520,342	1,626,363	11.9	13.0	10.9	10.7	13.1	11.2	14.8	9.3	12.5
65 - 74	880	502	378	1,997,161	921,535	1,075,626	44.1	54.5	35.1	41.2	47.0	49.7	59.2	31.6	38.7
75 - 84	2,526	1,271	1,255	1,414,654	587,119	827,535	178.6	216.5	151.7	171.6	185.5	204.6	228.4	143.3	160.0
85 & OLDER	3,951	1,522	2,429	540,374	183,447	356,927	731.2	829.7	680.5	708.4	754.0	788.0	871.3	653.5	707.6
UNKNOWN	0	0	0												
TOTAL	8,184	3,764	4,420	35,934,967	17,938,419	17,996,548	22.8	21.0	24.6	22.3	23.3	20.3	21.7	23.8	25.3
AGE-ADJUSTED							24.5	28.8	21.6	24.0	25.1	27.9	29.7	21.0	22.3
WHITE															
UNDER 1	8	4	4	168,928	86,181	82,747	4.7 *	4.6 *	4.8 *	1.5	8.0	0.1	9.2	0.1	9.6
1 - 4	5	2	3	608,995	311,436	297,559	0.8 *	0.6 *	1.0 *	0.1	1.5	0.0	1.5	0.0	2.1
5 - 14	9	2	7	1,786,666	918,847	867,819	0.5 *	0.2 *	0.8 *	0.2	0.8	0.0	0.5	0.2	1.4
15 - 24	4	2	2	1,831,860	947,345	884,515	0.2 *	0.2 *	0.2 *	0.0	0.4	0.0	0.5	0.0	0.5
25 - 34	15	9	6	1,885,206	961,929	923,277	0.8 *	0.9 *	0.6 *	0.4	1.2	0.3	1.5	0.1	1.2
35 - 44	64	38	26	2,579,091	1,318,760	1,260,331	2.5	2.9	2.1	1.9	3.1	2.0	3.8	1.3	2.9
45 - 54	145	91	54	2,633,665	1,323,757	1,309,908	5.5	6.9	4.1	4.6	6.4	5.5	8.3	3.0	5.2
55 - 64	230	117	113	1,933,678	952,538	981,140	11.9	12.3	11.5	10.4	13.4	10.1	14.5	9.4	13.6
65 - 74	562	324	238	1,259,989	594,985	665,004	44.6	54.5	35.8	40.9	48.3	48.5	60.4	31.2	40.3
75 - 84	1,836	906	930	1,003,097	416,813	586,284	183.0	217.4	158.6	174.7	191.4	203.2	231.5	148.4	168.8
85 & OLDER	3,182	1,204	1,978	404,890	134,702	270,188	785.9	893.8	732.1	758.6	813.2	843.3	944.3	699.8	764.3
UNKNOWN	0	0	0												
TOTAL	6,060	2,699	3,361	16,096,065	7,967,293	8,128,772	37.6	33.9	41.3	36.7	38.6	32.6	35.2	39.9	42.7
AGE-ADJUSTED							25.8	30.0	23.1	25.2	26.5	28.8	31.1	22.3	23.9
TWO OR MORE RACES															
UNDER 1	1	1	0	10,512	5,369	5,143	9.5 *	18.6 *	0.0 +	0.0	28.2	0.0	55.1	-	-
1 - 4	0	0	0	107,336	54,939	52,397	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	0	0	0	168,750	85,488	83,262	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
15 - 24	0	0	0	126,962	62,819	64,143	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
25 - 34	0	0	0	85,304	41,007	44,297	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
35 - 44	1	0	1	78,644	37,811	40,833	1.3 *	0.0 +	2.4 *	0.0	3.8	-	-	0.0	7.2
45 - 54	1	1	0	63,278	30,017	33,261	1.6 *	3.3 *	0.0 +	0.0	4.7	0.0	9.9	-	-
55 - 64	3	0	3	37,843	17,751	20,092	7.9 *	0.0 +	14.9 *	0.0	16.9	-	-	0.0	31.8
65 - 74	4	1	3	21,434	9,955	11,479	18.7 *	10.0 *	26.1 *	0.4	37.0	0.0	29.7	0.0	55.7
75 - 84	8	4	4	12,660	5,536	7,124	63.2 *	72.3 *	56.1 *	19.4	107.0	1.4	143.1	1.1	111.2
85 & OLDER	7	1	6	4,641	1,681	2,960	150.8 *	59.5 *	202.7 *	39.1	262.6	0.0	176.1	40.5	364.9
UNKNOWN	0	0	0												
TOTAL	25	8	17	717,364	352,373	364,991	3.5	2.3 *	4.7 *	2.1	4.9	0.7	3.8	2.4	6.9
AGE-ADJUSTED							7.6	5.5 *	9.1 *	4.6	10.7	1.5	9.5	4.7	13.4

Notes: Rates are per 100,000 population. ICD-10 codes J10-J18.
Year 2000 U.S. standard population is used for age-adjusted rates.
American Indian, Asian, Black, Pacific Islander, White, and Two or More Races excludes Hispanic ethnicity. Hispanic includes any race category.

\+ Standard error indeterminate, death rate based on no (zero) deaths.
* Death rate unreliable (relative standard error is greater than or equal to 23 percent).
\- Confidence limit is not calculated for no (zero) events.
[1] Includes deaths for Pacific Islander (9) not individually shown due to unreliable rates.

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

TABLE 2
INFLUENZA AND PNEUMONIA DEATHS BY RACE/ETHNICITY, AGE, AND SEX
CALIFORNIA, 2002
(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	31	24	7	516,411	263,488	252,923	6.0	9.1	2.8 *	3.9	8.1	5.5	12.8	0.7	4.8
1 - 4	15	8	7	1,976,342	1,010,549	965,793	0.8 *	0.8 *	0.7 *	0.4	1.1	0.2	1.3	0.2	1.3
5 - 14	9	5	4	5,412,306	2,773,346	2,638,960	0.2 *	0.2 *	0.2 *	0.1	0.3	0.0	0.3	0.0	0.3
15 - 24	10	6	4	5,045,468	2,631,609	2,413,859	0.2 *	0.2 *	0.2 *	0.1	0.3	0.0	0.4	0.0	0.3
25 - 34	31	18	13	5,288,247	2,724,113	2,564,134	0.6	0.7 *	0.5 *	0.4	0.8	0.4	1.0	0.2	0.8
35 - 44	85	52	33	5,607,549	2,846,141	2,761,408	1.5	1.8	1.2	1.2	1.8	1.3	2.3	0.8	1.6
45 - 54	198	118	80	4,679,130	2,308,857	2,370,273	4.2	5.1	3.4	3.6	4.8	4.2	6.0	2.6	4.1
55 - 64	332	189	143	2,962,280	1,429,870	1,532,410	11.2	13.2	9.3	10.0	12.4	11.3	15.1	7.8	10.9
65 - 74	853	472	381	1,954,020	896,870	1,057,150	43.7	52.6	36.0	40.7	46.6	47.9	57.4	32.4	39.7
75 - 84	2,521	1,249	1,272	1,383,065	571,663	811,402	182.3	218.5	156.8	175.2	189.4	206.4	230.6	148.2	165.4
85 & OLDER	4,013	1,556	2,457	513,989	171,306	342,683	780.8	908.3	717.0	756.6	804.9	863.2	953.4	688.6	745.3
UNKNOWN	0	0	0												
TOTAL	8,098	3,697	4,401	35,338,807	17,627,812	17,710,995	22.9	21.0	24.8	22.4	23.4	20.3	21.6	24.1	25.6
AGE-ADJUSTED							25.2	29.8	22.2	24.7	25.8	28.8	30.8	21.5	22.8
ASIAN															
UNDER 1	4	3	1	45,926	23,458	22,468	8.7 *	12.8 *	4.5 *	0.2	17.2	0.0	27.3	0.0	13.2
1 - 4	2	2	0	178,330	91,534	86,796	1.1 *	2.2 *	0.0 +	0.0	2.7	0.0	5.2	-	-
5 - 14	1	0	1	507,351	262,076	245,275	0.2 *	0.0 +	0.4 *	0.0	0.6	-	-	0.0	1.2
15 - 24	1	1	0	557,144	284,561	272,583	0.2 *	0.4 *	0.0 +	0.0	0.5	0.0	1.0	-	-
25 - 34	3	1	2	644,621	313,918	330,703	0.5 *	0.3 *	0.6 *	0.0	1.0	0.0	0.9	0.0	1.4
35 - 44	2	2	0	659,156	314,894	344,262	0.3 *	0.6 *	0.0 +	0.0	0.7	0.0	1.5	-	-
45 - 54	11	9	2	578,796	268,890	309,906	1.9 *	3.3 *	0.6 *	0.8	3.0	1.2	5.5	0.0	1.5
55 - 64	18	11	7	337,662	157,274	180,388	5.3 *	7.0 *	3.9 *	2.9	7.8	2.9	11.1	1.0	6.8
65 - 74	69	34	35	233,048	101,009	132,039	29.6	33.7	26.5	22.6	36.6	22.3	45.0	17.7	35.3
75 - 84	206	114	92	137,756	58,678	79,078	149.5	194.3	116.3	129.1	170.0	158.6	229.9	92.6	140.1
85 & OLDER	299	158	141	41,956	16,705	25,251	712.7	945.8	558.4	631.9	793.4	798.3	1,093.3	466.2	650.6
UNKNOWN	0	0	0												
TOTAL	616	335	281	3,921,746	1,892,997	2,028,749	15.7	17.7	13.9	14.5	16.9	15.8	19.6	12.2	15.5
AGE-ADJUSTED							20.8	27.2	16.3	19.1	22.4	24.2	30.1	14.3	18.2
BLACK															
UNDER 1	7	6	1	27,144	13,839	13,305	25.8 *	43.4 *	7.5 *	6.7	44.9	8.7	78.0	0.0	22.2
1 - 4	3	0	3	126,271	64,316	61,955	2.4 *	0.0 +	4.8 *	0.0	5.1	-	-	0.0	10.3
5 - 14	1	1	0	411,254	209,155	202,099	0.2 *	0.5 *	0.0 +	0.0	0.7	0.0	1.4	-	-
15 - 24	1	0	1	358,775	185,649	173,126	0.3 *	0.0 +	0.6 *	0.0	0.8	-	-	0.0	1.7
25 - 34	7	3	4	327,826	161,945	165,881	2.1 *	1.9 *	2.4 *	0.6	3.7	0.0	3.9	0.0	4.8
35 - 44	13	6	7	395,874	197,451	198,423	3.3 *	3.0 *	3.5 *	1.5	5.1	0.6	5.5	0.9	6.1
45 - 54	28	16	12	304,136	147,575	156,561	9.2	10.8 *	7.7 *	5.8	12.6	5.5	16.2	3.3	12.0
55 - 64	39	21	18	179,445	83,390	96,055	21.7	25.2	18.7 *	14.9	28.6	14.4	36.0	10.1	27.4
65 - 74	75	46	29	113,055	51,054	62,001	66.3	90.1	46.8	51.3	81.4	64.1	116.1	29.7	63.8
75 - 84	149	69	80	62,587	24,248	38,339	238.1	284.6	208.7	199.8	276.3	217.4	351.7	162.9	254.4
85 & OLDER	147	54	93	23,307	6,933	16,374	630.7	778.9	568.0	528.8	732.7	571.1	986.6	452.5	683.4
UNKNOWN	0	0	0												
TOTAL	470	222	248	2,329,674	1,145,555	1,184,119	20.2	19.4	20.9	18.4	22.0	16.8	21.9	18.3	23.6
AGE-ADJUSTED							29.4	35.9	25.3	26.7	32.0	30.9	40.8	22.1	28.4
HISPANIC															
UNDER 1	16	13	3	256,278	130,761	125,517	6.2 *	9.9 *	2.4 *	3.2	9.3	4.5	15.3	0.0	5.1
1 - 4	3	3	0	950,953	485,542	465,411	0.3 *	0.6 *	0.0 +	0.0	0.7	0.0	1.3	-	-
5 - 14	5	4	1	2,449,592	1,252,436	1,197,156	0.2 *	0.3 *	0.1 *	0.0	0.4	0.0	0.6	0.0	0.2
15 - 24	2	2	0	2,147,131	1,140,661	1,006,470	0.1 *	0.2 *	0.0 +	0.0	0.2	0.0	0.4	-	-
25 - 34	6	5	1	2,222,788	1,182,208	1,040,580	0.3 *	0.4 *	0.1 *	0.1	0.5	0.1	0.8	0.0	0.3
35 - 44	14	12	2	1,788,037	924,255	863,782	0.8 *	1.3 *	0.2 *	0.4	1.2	0.6	2.0	0.0	0.6
45 - 54	33	20	13	1,086,080	535,046	551,034	3.0	3.7	2.4 *	2.0	4.1	2.1	5.4	1.1	3.6
55 - 64	50	27	23	554,789	259,751	295,038	9.0	10.4	7.8	6.5	11.5	6.5	14.3	4.6	11.0
65 - 74	127	65	62	330,157	145,276	184,881	38.5	44.7	33.5	31.8	45.2	33.9	55.6	25.2	41.9
75 - 84	291	157	134	167,231	68,658	98,573	174.0	228.7	135.9	154.0	194.0	192.9	264.4	112.9	159.0
85 & OLDER	320	131	189	49,930	17,160	32,770	640.9	763.4	576.7	570.7	711.1	632.7	894.1	494.5	659.0
UNKNOWN	0	0	0												
TOTAL	867	439	428	12,002,966	6,141,754	5,861,212	7.2	7.1	7.3	6.7	7.7	6.5	7.8	6.6	8.0
AGE-ADJUSTED							21.8	27.0	18.3	20.3	23.3	24.3	29.7	16.6	20.1
WHITE															
UNDER 1	4	2	2	150,846	76,936	73,910	2.7 *	2.6 *	2.7 *	0.1	5.3	0.0	6.2	0.0	6.5
1 - 4	7	3	4	613,463	314,208	299,255	1.1 *	1.0 *	1.3 *	0.3	2.0	0.0	2.0	0.0	2.6
5 - 14	2	0	2	1,819,031	935,673	883,358	0.1 *	0.0 +	0.2 *	0.0	0.3	-	-	0.0	0.5
15 - 24	6	3	3	1,802,388	930,873	871,515	0.3 *	0.3 *	0.3 *	0.1	0.6	0.0	0.7	0.0	0.7
25 - 34	15	9	6	1,956,447	999,574	956,873	0.8 *	0.9 *	0.6 *	0.4	1.2	0.3	1.5	0.1	1.1
35 - 44	54	31	23	2,625,877	1,342,353	1,283,524	2.1	2.3	1.8	1.5	2.6	1.5	3.1	1.1	2.5
45 - 54	125	72	53	2,599,031	1,304,396	1,294,635	4.8	5.5	4.1	4.0	5.7	4.2	6.8	3.0	5.2
55 - 64	219	127	92	1,825,358	898,529	926,829	12.0	14.1	9.9	10.4	13.6	11.7	16.6	7.9	12.0
65 - 74	576	323	253	1,242,058	582,927	659,131	46.4	55.4	38.4	42.6	50.2	49.4	61.5	33.7	43.1
75 - 84	1,862	905	957	996,270	411,887	584,383	186.9	219.7	163.8	178.4	195.4	205.4	234.0	153.4	174.1
85 & OLDER	3,236	1,210	2,026	391,271	127,805	263,466	827.0	946.8	769.0	798.6	855.5	893.4	1,000.1	735.5	802.5
UNKNOWN	0	0	0												
TOTAL	6,106	2,685	3,421	16,022,040	7,925,161	8,096,879	38.1	33.9	42.3	37.2	39.1	32.6	35.2	40.8	43.7
AGE-ADJUSTED							26.6	30.8	23.8	25.9	27.2	29.6	32.0	23.0	24.6

Notes: Rates are per 100,000 population. ICD-10 codes J10-J18.
Year 2000 U.S. standard population is used for age-adjusted rates.
American Indian, Asian, Black, Pacific Islander, White, and Two or More Races excludes Hispanic ethnicity. Hispanic includes any race category.

\+ Standard error indeterminate, death rate based on no (zero) deaths.
* Death rate unreliable (relative standard error is greater than or equal to 23 percent).
\- Confidence limit is not calculated for no (zero) events.
[1] Includes deaths for American Indian (19), Pacific Islander (11), and Two or More Races (9) not individually shown due to unreliable rates.

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

TABLE 3
INFLUENZA AND PNEUMONIA DEATHS BY RACE/ETHNICITY, AGE, AND SEX
CALIFORNIA, 2001
(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	25	15	10	518,927	264,741	254,186	4.8	5.7 *	3.9 *	2.9	6.7	2.8	8.5	1.5	6.4
1 - 4	15	11	4	1,960,105	1,002,866	957,239	0.8 *	1.1 *	0.4 *	0.4	1.2	0.4	1.7	0.0	0.8
5 - 14	10	5	5	5,377,327	2,755,213	2,622,114	0.2 *	0.2 *	0.2 *	0.1	0.3	0.0	0.3	0.0	0.4
15 - 24	13	7	6	4,956,819	2,584,393	2,372,426	0.3 *	0.3 *	0.3 *	0.1	0.4	0.1	0.5	0.1	0.5
25 - 34	20	13	7	5,284,524	2,720,908	2,563,616	0.4	0.5 *	0.3 *	0.2	0.5	0.2	0.7	0.1	0.5
35 - 44	100	63	37	5,566,274	2,820,571	2,745,703	1.8	2.2	1.3	1.4	2.1	1.7	2.8	0.9	1.8
45 - 54	171	108	63	4,552,753	2,244,282	2,308,471	3.8	4.8	2.7	3.2	4.3	3.9	5.7	2.1	3.4
55 - 64	306	164	142	2,774,474	1,337,024	1,437,450	11.0	12.3	9.9	9.8	12.3	10.4	14.1	8.3	11.5
65 - 74	853	466	387	1,920,122	876,170	1,043,952	44.4	53.2	37.1	41.4	47.4	48.4	58.0	33.4	40.8
75 - 84	2,681	1,361	1,320	1,341,150	551,924	789,226	199.9	246.6	167.3	192.3	207.5	233.5	259.7	158.2	176.3
85 & OLDER	3,972	1,478	2,494	477,265	155,766	321,499	832.2	948.9	775.7	806.4	858.1	900.5	997.2	745.3	806.2
UNKNOWN	1	0	1												
TOTAL	8,167	3,691	4,476	34,729,740	17,313,858	17,415,882	23.5	21.3	25.7	23.0	24.0	20.6	22.0	24.9	26.5
AGE-ADJUSTED							26.8	31.6	23.6	26.2	27.4	30.6	32.7	22.9	24.3
AMERICAN INDIAN															
UNDER 1	0	0	0	1,038	535	503	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 - 4	0	0	0	10,963	5,601	5,362	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	1	0	1	35,606	18,114	17,492	2.8 *	0.0 +	5.7 *	0.0	8.3	-	-	0.0	16.9
15 - 24	0	0	0	33,978	17,440	16,538	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
25 - 34	0	0	0	30,478	15,239	15,239	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
35 - 44	0	0	0	37,042	18,030	19,012	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
45 - 54	1	0	1	32,579	15,481	17,098	3.1 *	0.0 +	5.8 *	0.0	9.1	-	-	0.0	17.3
55 - 64	3	2	1	18,780	9,021	9,759	16.0 *	22.2 *	10.2 *	0.0	34.1	0.0	52.9	0.0	30.3
65 - 74	2	0	2	9,505	4,399	5,106	21.0 *	0.0 +	39.2 *	0.0	50.2	-	-	0.0	93.5
75 - 84	10	6	4	4,872	1,990	2,882	205.3 *	301.5 *	138.8 *	78.0	332.5	60.3	542.8	2.8	274.8
85 & OLDER	11	3	8	2,163	734	1,429	508.6 *	408.7 *	559.8 *	208.0	809.1	0.0	871.2	171.9	947.8
UNKNOWN	0	0	0												
TOTAL	28	11	17	217,004	106,584	110,420	12.9	10.3 *	15.4 *	8.1	17.7	4.2	16.4	8.1	22.7
AGE-ADJUSTED							20.7	21.8 *	20.0 *	12.8	28.6	8.5	35.0	10.3	29.7
ASIAN															
UNDER 1	2	1	1	47,353	24,180	23,173	4.2 *	4.1 *	4.3 *	0.0	10.1	0.0	12.2	0.0	12.8
1 - 4	1	0	1	175,354	90,196	85,158	0.6 *	0.0 +	1.2 *	0.0	1.7	-	-	0.0	3.5
5 - 14	2	2	0	506,076	261,333	244,743	0.4 *	0.8 *	0.0 +	0.0	0.9	0.0	1.8	-	-
15 - 24	4	2	2	558,118	283,682	274,436	0.7 *	0.7 *	0.7 *	0.0	1.4	0.0	1.7	0.0	1.7
25 - 34	3	2	1	652,150	316,603	335,547	0.5 *	0.6 *	0.3 *	0.0	1.0	0.0	1.5	0.0	0.9
35 - 44	5	3	2	654,655	311,736	342,919	0.8 *	1.0 *	0.6 *	0.1	1.4	0.0	2.1	0.0	1.4
45 - 54	8	7	1	559,132	259,407	299,725	1.4 *	2.7 *	0.3 *	0.4	2.4	0.7	4.7	0.0	1.0
55 - 64	24	12	12	317,844	147,600	170,244	7.6	8.1 *	7.0 *	4.5	10.6	3.5	12.7	3.1	11.0
65 - 74	77	43	34	226,106	97,488	128,618	34.1	44.1	26.4	26.4	41.7	30.9	57.3	17.5	35.3
75 - 84	204	109	95	127,700	54,562	73,138	159.7	199.8	129.9	137.8	181.7	162.3	237.3	103.8	156.0
85 & OLDER	289	152	137	36,199	14,378	21,821	798.4	1,057.2	627.8	706.3	890.4	889.1	1,225.2	522.7	733.0
UNKNOWN	1	0	1												
TOTAL	620	333	287	3,860,687	1,861,165	1,999,522	16.1	17.9	14.4	14.8	17.3	16.0	19.8	12.7	16.0
AGE-ADJUSTED							23.1	29.8	18.3	21.2	24.9	26.6	33.1	16.2	20.5
BLACK															
UNDER 1	2	0	2	28,498	14,527	13,971	7.0 *	0.0 +	14.3 *	0.0	16.7	-	-	0.0	34.2
1 - 4	1	1	0	129,558	65,928	63,630	0.8 *	1.5 *	0.0 +	0.0	2.3	0.0	4.5	-	-
5 - 14	1	0	1	405,206	205,997	199,209	0.2 *	0.0 +	0.5 *	0.0	0.7	-	-	0.0	1.5
15 - 24	0	0	0	341,761	176,140	165,621	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
25 - 34	3	3	0	328,784	162,827	165,957	0.9 *	1.8 *	0.0 +	0.0	1.9	0.0	3.9	-	-
35 - 44	12	7	5	390,384	194,372	196,012	3.1 *	3.6 *	2.6 *	1.3	4.8	0.9	6.3	0.3	4.8
45 - 54	24	12	12	289,801	140,000	149,801	8.3	8.6 *	8.0 *	5.0	11.6	3.7	13.4	3.5	12.5
55 - 64	37	15	22	170,354	79,371	90,983	21.7	18.9 *	24.2	14.7	28.7	9.3	28.5	14.1	34.3
65 - 74	73	46	27	108,917	48,723	60,194	67.0	94.4	44.9	51.6	82.4	67.1	121.7	27.9	61.8
75 - 84	172	89	83	60,927	23,448	37,479	282.3	379.6	221.5	240.1	324.5	300.7	458.4	173.8	269.1
85 & OLDER	155	58	97	21,657	6,331	15,326	715.7	916.1	632.9	603.0	828.4	680.4	1,151.9	507.0	758.9
UNKNOWN	0	0	0												
TOTAL	480	231	249	2,275,847	1,117,664	1,158,183	21.1	20.7	21.5	19.2	23.0	18.0	23.3	18.8	24.2
AGE-ADJUSTED							32.0	41.2	26.6	29.1	34.9	35.7	46.7	23.3	29.9
HISPANIC															
UNDER 1	15	10	5	253,961	129,573	124,388	5.9 *	7.7 *	4.0 *	2.9	8.9	2.9	12.5	0.5	7.5
1 - 4	6	5	1	938,287	479,043	459,244	0.6 *	1.0 *	0.2 *	0.1	1.2	0.1	2.0	0.0	0.6
5 - 14	3	2	1	2,385,392	1,219,250	1,166,142	0.1 *	0.2 *	0.1 *	0.0	0.3	0.0	0.4	0.0	0.3
15 - 24	5	4	1	2,090,373	1,113,138	977,235	0.2 *	0.4 *	0.1 *	0.0	0.4	0.0	0.7	0.0	0.3
25 - 34	3	2	1	2,148,856	1,142,461	1,006,395	0.1 *	0.2 *	0.1 *	0.0	0.3	0.0	0.4	0.0	0.3
35 - 44	28	17	11	1,698,401	876,555	821,846	1.6	1.9 *	1.3 *	1.0	2.3	1.0	2.9	0.5	2.1
45 - 54	27	18	9	1,013,711	498,885	514,826	2.7	3.6 *	1.7 *	1.7	3.7	1.9	5.3	0.6	2.9
55 - 64	54	29	25	515,325	240,811	274,514	10.5	12.0	9.1	7.7	13.3	7.7	16.4	5.5	12.7
65 - 74	127	62	65	315,002	138,023	176,979	40.3	44.9	36.7	33.3	47.3	33.7	56.1	27.8	45.7
75 - 84	273	130	143	153,901	62,845	91,056	177.4	206.9	157.0	156.3	198.4	171.3	242.4	131.3	182.8
85 & OLDER	350	143	207	44,732	15,161	29,571	782.4	943.2	700.0	700.5	864.4	788.6	1,097.8	604.6	795.4
UNKNOWN	0	0	0												
TOTAL	891	422	469	11,557,941	5,915,745	5,642,196	7.7	7.1	8.3	7.2	8.2	6.5	7.8	7.6	9.1
AGE-ADJUSTED							24.5	29.0	21.7	22.8	26.2	26.0	32.0	19.7	23.7

Notes: Rates are per 100,000 population. ICD-10 codes J10-J18.
Year 2000 U.S. standard population is used for age-adjusted rates.
American Indian, Asian, Black, Pacific Islander, White, and Two or More Races excludes Hispanic ethnicity. Hispanic includes any race category.

\+ Standard error indeterminate, death rate based on no (zero) deaths.
* Death rate unreliable (relative standard error is greater than or equal to 23 percent).
\- Confidence limit is not calculated for no (zero) events.
[1] Includes deaths for Pacific Islander (20) and Two or More Races (9) not individually shown due to unreliable rates.

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

TABLE 3 (Continued)
INFLUENZA AND PNEUMONIA DEATHS BY RACE/ETHNICITY, AGE, AND SEX
CALIFORNIA, 2001
(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	25	15	10	518,927	264,741	254,186	4.8	5.7 *	3.9 *	2.9	6.7	2.8	8.5	1.5	6.4
1 - 4	15	11	4	1,960,105	1,002,866	957,239	0.8 *	1.1 *	0.4 *	0.4	1.2	0.4	1.7	0.0	0.8
5 - 14	10	5	5	5,377,327	2,755,213	2,622,114	0.2 *	0.2 *	0.2 *	0.1	0.3	0.0	0.3	0.0	0.4
15 - 24	13	7	6	4,956,819	2,584,393	2,372,426	0.3 *	0.3 *	0.3 *	0.1	0.4	0.1	0.5	0.1	0.5
25 - 34	20	13	7	5,284,524	2,720,908	2,563,616	0.4	0.5 *	0.3 *	0.2	0.5	0.2	0.7	0.1	0.5
35 - 44	100	63	37	5,566,274	2,820,571	2,745,703	1.8	2.2	1.3	1.4	2.1	1.7	2.8	0.9	1.8
45 - 54	171	108	63	4,552,753	2,244,282	2,308,471	3.8	4.8	2.7	3.2	4.3	3.9	5.7	2.1	3.4
55 - 64	306	164	142	2,774,474	1,337,024	1,437,450	11.0	12.3	9.9	9.8	12.3	10.4	14.1	8.3	11.5
65 - 74	853	466	387	1,920,122	876,170	1,043,952	44.4	53.2	37.1	41.4	47.4	48.4	58.0	33.4	40.8
75 - 84	2,681	1,361	1,320	1,341,150	551,924	789,226	199.9	246.6	167.3	192.3	207.5	233.5	259.7	158.2	176.3
85 & OLDER	3,972	1,478	2,494	477,265	155,766	321,499	832.2	948.9	775.7	806.4	858.1	900.5	997.2	745.3	806.2
UNKNOWN	1	0	1												
TOTAL	8,167	3,691	4,476	34,729,740	17,313,858	17,415,882	23.5	21.3	25.7	23.0	24.0	20.6	22.0	24.9	26.5
AGE-ADJUSTED							26.8	31.6	23.6	26.2	27.4	30.6	32.7	22.9	24.3
WHITE															
UNDER 1	4	3	1	153,306	78,168	75,138	2.6 *	3.8 *	1.3 *	0.1	5.2	0.0	8.2	0.0	3.9
1 - 4	6	4	2	624,482	320,442	304,040	1.0 *	1.2 *	0.7 *	0.2	1.7	0.0	2.5	0.0	1.6
5 - 14	3	1	2	1,862,124	957,903	904,221	0.2 *	0.1 *	0.2 *	0.0	0.3	0.0	0.3	0.0	0.5
15 - 24	4	1	3	1,796,019	926,636	869,383	0.2 *	0.1 *	0.3 *	0.0	0.4	0.0	0.3	0.0	0.7
25 - 34	11	6	5	2,022,119	1,034,396	987,723	0.5 *	0.6 *	0.5 *	0.2	0.9	0.1	1.0	0.1	0.9
35 - 44	55	36	19	2,687,568	1,372,319	1,315,249	2.0	2.6	1.4	1.5	2.6	1.8	3.5	0.8	2.1
45 - 54	111	71	40	2,585,433	1,296,139	1,289,294	4.3	5.5	3.1	3.5	5.1	4.2	6.8	2.1	4.1
55 - 64	183	104	79	1,711,671	840,997	870,674	10.7	12.4	9.1	9.1	12.2	10.0	14.7	7.1	11.1
65 - 74	570	313	257	1,236,729	576,477	660,252	46.1	54.3	38.9	42.3	49.9	48.3	60.3	34.2	43.7
75 - 84	2,011	1,023	988	981,305	403,775	577,530	204.9	253.4	171.1	196.0	213.9	237.8	268.9	160.4	181.7
85 & OLDER	3,161	1,120	2,041	368,575	117,768	250,807	857.6	951.0	813.8	827.7	887.5	895.3	1,006.7	778.5	849.1
UNKNOWN	0	0	0												
TOTAL	6,119	2,682	3,437	16,029,331	7,925,020	8,104,311	38.2	33.8	42.4	37.2	39.1	32.6	35.1	41.0	43.8
AGE-ADJUSTED							27.6	32.2	24.5	26.9	28.3	30.9	33.4	23.7	25.3

Notes: Rates are per 100,000 population. ICD-10 codes J10-J18.
Year 2000 U.S. standard population is used for age-adjusted rates.
American Indian, Asian, Black, Pacific Islander, White, and Two or More Races excludes Hispanic ethnicity. Hispanic includes any race category.

\+ Standard error indeterminate, death rate based on no (zero) deaths.
* Death rate unreliable (relative standard error is greater than or equal to 23 percent).
\- Confidence limit is not calculated for no (zero) events.
[1] Includes deaths for Pacific Islander (20) and Two or More Races (9) not individually shown due to unreliable rates.

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

TABLE 4
INFLUENZA AND PNEUMONIA DEATHS BY RACE/ETHNICITY, AGE, AND SEX
CALIFORNIA, 2000
(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	35	21	14	491,073	251,541	239,532	7.1	8.3	5.8 *	4.8	9.5	4.8	11.9	2.8	8.9
1 - 4	9	4	5	1,990,873	1,018,496	972,377	0.5 *	0.4 *	0.5 *	0.2	0.7	0.0	0.8	0.1	1.0
5 - 14	9	6	3	5,310,526	2,720,715	2,589,811	0.2 *	0.2 *	0.1 *	0.1	0.3	0.0	0.4	0.0	0.2
15 - 24	15	6	9	4,860,696	2,532,547	2,328,149	0.3 *	0.2 *	0.4 *	0.2	0.5	0.0	0.4	0.1	0.6
25 - 34	40	25	15	5,245,273	2,702,010	2,543,263	0.8	0.9	0.6 *	0.5	1.0	0.6	1.3	0.3	0.9
35 - 44	102	56	46	5,499,218	2,780,657	2,718,561	1.9	2.0	1.7	1.5	2.2	1.5	2.5	1.2	2.2
45 - 54	196	111	85	4,376,695	2,156,077	2,220,618	4.5	5.1	3.8	3.9	5.1	4.2	6.1	3.0	4.6
55 - 64	319	195	124	2,641,560	1,270,830	1,370,730	12.1	15.3	9.0	10.8	13.4	13.2	17.5	7.5	10.6
65 - 74	899	508	391	1,894,010	858,793	1,035,217	47.5	59.2	37.8	44.4	50.6	54.0	64.3	34.0	41.5
75 - 84	2,638	1,270	1,368	1,294,989	530,932	764,057	203.7	239.2	179.0	195.9	211.5	226.0	252.4	169.6	188.5
85 & OLDER	4,093	1,481	2,612	438,285	139,496	298,789	933.9	1,061.7	874.2	905.3	962.5	1,007.6	1,115.8	840.7	907.7
UNKNOWN	0	0	0												
TOTAL	8,355	3,683	4,672	34,043,198	16,962,094	17,081,104	24.5	21.7	27.4	24.0	25.1	21.0	22.4	26.6	28.1
AGE-ADJUSTED							29.0	33.8	25.9	28.4	29.6	32.7	34.9	25.2	26.7
ASIAN															
UNDER 1	2	1	1	42,844	21,965	20,879	4.7 *	4.6 *	4.8 *	0.0	11.1	0.0	13.5	0.0	14.2
1 - 4	2	1	1	177,521	91,373	86,148	1.1 *	1.1 *	1.2 *	0.0	2.7	0.0	3.2	0.0	3.4
5 - 14	1	1	0	498,621	257,574	241,047	0.2 *	0.4 *	0.0 +	0.0	0.6	0.0	1.1	-	-
15 - 24	1	0	1	552,160	279,314	272,846	0.2 *	0.0 +	0.4 *	0.0	0.5	-	-	0.0	1.1
25 - 34	1	1	0	642,906	311,655	331,251	0.2 *	0.3 *	0.0 +	0.0	0.5	0.0	0.9	-	-
35 - 44	9	3	6	639,658	302,953	336,705	1.4 *	1.0 *	1.8 *	0.5	2.3	0.0	2.1	0.4	3.2
45 - 54	11	6	5	528,556	245,171	283,385	2.1 *	2.4 *	1.8 *	0.9	3.3	0.5	4.4	0.2	3.3
55 - 64	21	12	9	300,494	138,840	161,654	7.0	8.6 *	5.6 *	4.0	10.0	3.8	13.5	1.9	9.2
65 - 74	90	47	43	217,029	93,082	123,947	41.5	50.5	34.7	32.9	50.0	36.1	64.9	24.3	45.1
75 - 84	191	108	83	116,423	49,861	66,562	164.1	216.6	124.7	140.8	187.3	175.8	257.5	97.9	151.5
85 & OLDER	250	118	132	30,080	12,023	18,057	831.1	981.5	731.0	728.1	934.1	804.4	1,158.5	606.3	855.7
UNKNOWN	0	0	0												
TOTAL	579	298	281	3,746,292	1,803,811	1,942,481	15.5	16.5	14.5	14.2	16.7	14.6	18.4	12.8	16.2
AGE-ADJUSTED							24.3	29.7	20.4	22.3	26.3	26.3	33.2	18.0	22.8
BLACK															
UNDER 1	3	1	2	29,741	15,112	14,629	10.1 *	6.6 *	13.7 *	0.0	21.5	0.0	19.6	0.0	32.6
1 - 4	2	1	1	132,430	67,365	65,065	1.5 *	1.5 *	1.5 *	0.0	3.6	0.0	4.4	0.0	4.5
5 - 14	1	0	1	397,484	201,951	195,533	0.3 *	0.0 +	0.5 *	0.0	0.7	-	-	0.0	1.5
15 - 24	2	1	1	326,641	167,718	158,923	0.6 *	0.6 *	0.6 *	0.0	1.5	0.0	1.8	0.0	1.9
25 - 34	2	2	0	331,100	165,044	166,056	0.6 *	1.2 *	0.0 +	0.0	1.4	0.0	2.9	-	-
35 - 44	13	7	6	383,161	190,459	192,702	3.4 *	3.7 *	3.1 *	1.5	5.2	1.0	6.4	0.6	5.6
45 - 54	28	15	13	274,820	132,042	142,778	10.2	11.4 *	9.1 *	6.4	14.0	5.6	17.1	4.2	14.1
55 - 64	40	27	13	164,079	76,569	87,510	24.4	35.3	14.9 *	16.8	31.9	22.0	48.6	6.8	22.9
65 - 74	88	54	34	105,017	46,402	58,615	83.8	116.4	58.0	66.3	101.3	85.3	147.4	38.5	77.5
75 - 84	140	61	79	58,654	22,382	36,272	238.7	272.5	217.8	199.1	278.2	204.1	340.9	169.8	265.8
85 & OLDER	152	45	107	19,689	5,604	14,085	772.0	803.0	759.7	649.3	894.7	568.4	1,037.6	615.7	903.6
UNKNOWN	0	0	0												
TOTAL	471	214	257	2,222,816	1,090,648	1,132,168	21.2	19.6	22.7	19.3	23.1	17.0	22.3	19.9	25.5
AGE-ADJUSTED							32.7	38.0	28.8	29.7	35.7	32.6	43.4	25.3	32.4
HISPANIC															
UNDER 1	21	13	8	237,496	121,585	115,911	8.8	10.7 *	6.9 *	5.1	12.6	4.9	16.5	2.1	11.7
1 - 4	3	0	3	948,679	484,068	464,611	0.3 *	0.0 +	0.6 *	0.0	0.7	-	-	0.0	1.4
5 - 14	4	3	1	2,299,957	1,175,384	1,124,573	0.2 *	0.3 *	0.1 *	0.0	0.3	0.0	0.5	0.0	0.3
15 - 24	4	1	3	2,027,816	1,080,868	946,948	0.2 *	0.1 *	0.3 *	0.0	0.4	0.0	0.3	0.0	0.7
25 - 34	14	9	5	2,060,173	1,095,849	964,324	0.7 *	0.8 *	0.5 *	0.3	1.0	0.3	1.4	0.1	1.0
35 - 44	17	12	5	1,604,089	826,047	778,042	1.1 *	1.5 *	0.6 *	0.6	1.6	0.6	2.3	0.1	1.2
45 - 54	32	18	14	941,053	462,923	478,130	3.4	3.9 *	2.9 *	2.2	4.6	2.1	5.7	1.4	4.5
55 - 64	51	33	18	481,558	224,626	256,932	10.6	14.7	7.0 *	7.7	13.5	9.7	19.7	3.8	10.2
65 - 74	152	82	70	300,409	131,275	169,134	50.6	62.5	41.4	42.6	58.6	48.9	76.0	31.7	51.1
75 - 84	231	112	119	141,486	57,595	83,891	163.3	194.5	141.9	142.2	184.3	158.4	230.5	116.4	167.3
85 & OLDER	302	112	190	40,269	13,429	26,840	750.0	834.0	707.9	665.4	834.5	679.6	988.5	607.2	808.6
UNKNOWN	0	0	0												
TOTAL	831	395	436	11,082,985	5,673,649	5,409,336	7.5	7.0	8.1	7.0	8.0	6.3	7.6	7.3	8.8
AGE-ADJUSTED							24.1	28.1	21.4	22.4	25.9	25.1	31.2	19.4	23.5
WHITE															
UNDER 1	7	4	3	155,299	79,680	75,619	4.5 *	5.0 *	4.0 *	1.2	7.8	0.1	9.9	0.0	8.5
1 - 4	1	1	0	644,970	331,193	313,777	0.2 *	0.3 *	0.0 +	0.0	0.5	0.0	0.9	-	-
5 - 14	3	2	1	1,904,163	979,233	924,930	0.2 *	0.2 *	0.1 *	0.0	0.3	0.0	0.5	0.0	0.3
15 - 24	8	4	4	1,794,122	925,355	868,767	0.4 *	0.4 *	0.5 *	0.1	0.8	0.0	0.9	0.0	0.9
25 - 34	22	12	10	2,083,017	1,066,877	1,016,140	1.1	1.1 *	1.0 *	0.6	1.5	0.5	1.8	0.4	1.6
35 - 44	62	34	28	2,742,427	1,398,317	1,344,110	2.3	2.4	2.1	1.7	2.8	1.6	3.2	1.3	2.9
45 - 54	123	71	52	2,535,616	1,269,871	1,265,745	4.9	5.6	4.1	4.0	5.7	4.3	6.9	3.0	5.2
55 - 64	202	119	83	1,641,307	804,962	836,345	12.3	14.8	9.9	10.6	14.0	12.1	17.4	7.8	12.1
65 - 74	561	320	241	1,240,624	573,721	666,903	45.2	55.8	36.1	41.5	49.0	49.7	61.9	31.6	40.7
75 - 84	2,065	985	1,080	962,896	394,629	568,267	214.5	249.6	190.1	205.2	223.7	234.0	265.2	178.7	201.4
85 & OLDER	3,381	1,202	2,179	343,548	106,876	236,672	984.1	1,124.7	920.7	951.0	1,017.3	1,061.1	1,188.2	882.0	959.3
UNKNOWN	0	0	0												
TOTAL	6,435	2,754	3,681	16,047,989	7,930,714	8,117,275	40.1	34.7	45.3	39.1	41.1	33.4	36.0	43.9	46.8
AGE-ADJUSTED							30.3	35.1	27.2	29.5	31.0	33.8	36.4	26.3	28.1

Notes: Rates are per 100,000 population. ICD-10 codes J10-J18.
Year 2000 U.S. standard population is used for age-adjusted rates.
American Indian, Asian, Black, Pacific Islander, White, and Two or More Races excludes Hispanic ethnicity. Hispanic includes any race category.

\+ Standard error indeterminate, death rate based on no (zero) deaths.
* Death rate unreliable (relative standard error is greater than or equal to 23 percent).
\- Confidence limit is not calculated for no (zero) events.
[1] Includes deaths for American Indian (18), Pacific Islander (12), and Two or More Races (9) not individually shown due to unreliable rates.

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

TABLE 5
DEATHS DUE TO INFLUENZA AND PNEUMONIA
CALIFORNIA COUNTIES, 2001-2003
(By Place of Residence)

COUNTY	2001-2003 DEATHS (AVERAGE)	PERCENT	2002 POPULATION	CRUDE RATE	AGE-ADJUSTED RATE	95% CONFIDENCE LIMITS	
						LOWER	UPPER
CALIFORNIA	8,149.7	100.0	35,338,807	23.1	25.4	24.8	25.9
ALAMEDA	305.7	3.8	1,488,074	20.5	24.1	21.4	26.8
ALPINE	0.0	0.0	1,292	0.0 +	0.0 +	-	-
AMADOR	12.3	0.2	36,637	33.7 *	25.3 *	11.1	39.6
BUTTE	67.0	0.8	209,770	31.9	24.3	18.4	30.1
CALAVERAS	12.7	0.2	42,524	29.8 *	25.0 *	11.0	38.9
COLUSA	4.7	0.1	19,635	23.8 *	25.8 *	2.4	49.2
CONTRA COSTA	225.0	2.8	989,807	22.7	23.5	20.4	26.6
DEL NORTE	11.3	0.1	27,982	40.5 *	40.1 *	16.7	63.4
EL DORADO	32.3	0.4	165,463	19.5	20.8	13.5	28.0
FRESNO	190.7	2.3	836,207	22.8	28.3	24.3	32.3
GLENN	5.3	0.1	26,969	19.8 *	18.6 *	2.7	34.4
HUMBOLDT	34.3	0.4	128,492	26.7	26.6	17.7	35.5
IMPERIAL	14.0	0.2	149,360	9.4 *	12.8 *	6.0	19.6
INYO	5.0	0.1	18,456	27.1 *	18.3 *	1.8	34.9
KERN	180.3	2.2	697,856	25.8	29.6	25.3	34.0
KINGS	12.3	0.2	135,123	9.1 *	15.3 *	6.7	23.9
LAKE	28.0	0.3	61,352	45.6	33.1	20.7	45.5
LASSEN	4.3	0.1	34,129	12.7 *	17.4 *	0.9	34.0
LOS ANGELES[1]	2,444.7	30.0	9,889,170	24.7	27.2	26.1	28.3
MADERA[1]	19.3	0.2	129,585	14.9	15.5	8.6	22.4
MARIN	73.7	0.9	250,179	29.4	23.3	17.9	28.6
MARIPOSA	4.0	a	17,589	22.7 *	17.7 *	0.3	35.0
MENDOCINO	22.7	0.3	88,353	25.7	24.0	14.1	34.0
MERCED	34.7	0.4	223,904	15.5	22.7	15.1	30.3
MODOC	1.7	a	9,400	17.7 *	12.2 *	0.0	30.8
MONO	1.3	a	13,441	9.9 *	17.7 *	0.0	50.8
MONTEREY[1]	60.3	0.7	413,819	14.6	17.8	13.3	22.4
NAPA	50.7	0.6	128,966	39.3	27.3	19.6	35.0
NEVADA	27.7	0.3	96,045	28.8	21.7	13.6	29.9
ORANGE	611.7	7.5	2,959,646	20.7	25.7	23.6	27.7
PLACER	63.7	0.8	273,338	23.3	21.1	15.9	26.3
PLUMAS	9.3	0.1	21,117	44.2 *	29.2 *	10.5	48.0
RIVERSIDE[1]	353.3	4.3	1,682,408	21.0	21.2	19.0	23.5
SACRAMENTO[1]	349.3	4.3	1,302,647	26.8	29.3	26.2	32.4
SAN BENITO	8.7	0.1	55,955	15.5 *	24.2 *	8.0	40.4
SAN BERNARDINO	338.7	4.2	1,816,398	18.6	28.9	25.8	32.0
SAN DIEGO	621.7	7.6	2,944,585	21.1	23.6	21.8	25.5
SAN FRANCISCO[1]	282.0	3.5	788,292	35.8	30.5	27.0	34.1
SAN JOAQUIN	119.0	1.5	607,896	19.6	25.2	20.6	29.7
SAN LUIS OBISPO[1]	38.7	0.5	255,449	15.1	12.7	8.7	16.7
SAN MATEO	212.0	2.6	711,793	29.8	27.4	23.7	31.1
SANTA BARBARA	94.7	1.2	408,471	23.2	21.2	16.9	25.4
SANTA CLARA	325.7	4.0	1,717,059	19.0	24.0	21.4	26.6
SANTA CRUZ	48.3	0.6	259,164	18.6	19.5	14.0	25.1
SHASTA[1]	49.7	0.6	172,130	28.9	19.2	13.7	24.6
SIERRA	1.0	a	3,524	28.4 *	16.1 *	0.0	48.0
SISKIYOU	18.3	0.2	44,628	41.1 *	28.5 *	15.4	41.7
SOLANO	90.7	1.1	411,498	22.0	22.9	18.1	27.7
SONOMA[1]	120.0	1.5	470,723	25.5	20.9	17.1	24.6
STANISLAUS[1]	136.7	1.7	477,919	28.6	32.5	27.0	38.0
SUTTER	25.7	0.3	82,696	31.0	32.7	20.0	45.4
TEHAMA	19.3	0.2	57,649	33.5	22.5 *	12.4	32.7
TRINITY	3.7	a	13,271	27.6 *	21.2 *	0.0	43.1
TULARE	81.0	1.0	383,164	21.1	28.4	22.2	34.6
TUOLUMNE	14.0	0.2	56,545	24.8 *	18.0 *	8.5	27.4
VENTURA	152.3	1.9	788,282	19.3	21.6	18.1	25.0
YOLO[1]	60.0	0.7	180,193	33.3	44.6	33.3	55.9
YUBA	14.7	0.2	62,788	23.4 *	29.1 *	14.1	44.1

Note: Rates are per 100,000 population. ICD-10 codes J10-J18.
Year 2000 U.S. standard population is used for age-adjusted rates.

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

a Represents a percentage of more than zero but less than 0.05.
+ Standard error indeterminate, death rate based on no (zero) deaths.
* Death rate unreliable (relative standard error is greater than or equal to 23 percent).
- Confidence limit is not calculated for no (zero) events.
[1] County age-adjusted rate is significantly different from the state age-adjusted rate.