

**County of Orange
Health Care Agency**

Orange County Mortality Data, 2001



October 2005

*Prepared by:
County of Orange Health Care Agency
Disease Control & Epidemiology Division
Epidemiology & Assessment*

Juliette A. Poulson, RN, MN
Agency Director

Mark B. Horton, MD, MSPH
Deputy Agency Director/Health Officer
Public Health Services

Prepared By:

Elisabeth J. Gonzalez, PhD
Senior Research Analyst

Data Analysis by:

Elisabeth J. Gonzalez, PhD
Senior Research Analyst

Acknowledgements:

Bradley W. McEvoy, BA
Assessment Unit Intern

Stephen W. Klish, MPH
Senior Epidemiologist

Reviewed By:

Holly R. Harris, MPH
Epidemiologist

Michael L. Carson, MS
Program Manager II

Hildy Meyers, MD, MPH
Medical Director

*Prepared by:
County of Orange Health Care Agency
Disease Control & Epidemiology Division
Epidemiology & Assessment*



**COUNTY OF ORANGE
HEALTH CARE AGENCY**

PUBLIC HEALTH SERVICES

JULIETTE A. POULSON, RN, MN
DIRECTOR

MARK B. HORTON, MD, MSPH
DEPUTY AGENCY DIRECTOR/HEALTH OFFICER

MAILING ADDRESS:
405 W 5th STREET, 7th Floor
SANTA ANA, CA 92701

TELEPHONE: (714) 834-3155
FAX: (714) 834-5506

E-MAIL: mhorton@hca.co.orange.ca.us

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To our colleagues in public health:

We are pleased to announce the availability of our statistical report, *Orange County Mortality Data, 2001*. This information is compiled by the State of California from death certificates filed with the Birth and Death Registration Office of the County of Orange Health Care Agency and other jurisdictions. This document is one in an annual series and is one of the crucial elements in monitoring the health status of Orange County. It also provides data for the development of policies to improve the health of Orange County's diverse population.

The information presented in this report can be considered to be the official data for 2001. Unless otherwise noted, reference is made to deaths to Orange County residents, regardless of where the event occurred. Similarly, deaths occurring within the county, but to residents of other jurisdictions, are not included in this report.

The report is available and can be downloaded from the Epidemiology & Assessment website, <http://www.ochealthinfo.com/epi/statistics.htm>.

Thank you for your interest in this special report. We encourage you to make other interested colleagues aware of its publication. If you would like more information, please feel free to contact Epidemiology & Assessment at (714) 834-8180.

Sincerely,

Mark B. Horton, MD, MSPH
Deputy Agency Director/Health Officer
Public Health Services

Juliette A. Poulson, RN, MN
Agency Director

**County of Orange
Health Care Agency**

Orange County Mortality Data, 2001

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Orange County Mortality Data, 2001: Executive Summary

Summary of 2001 mortality data

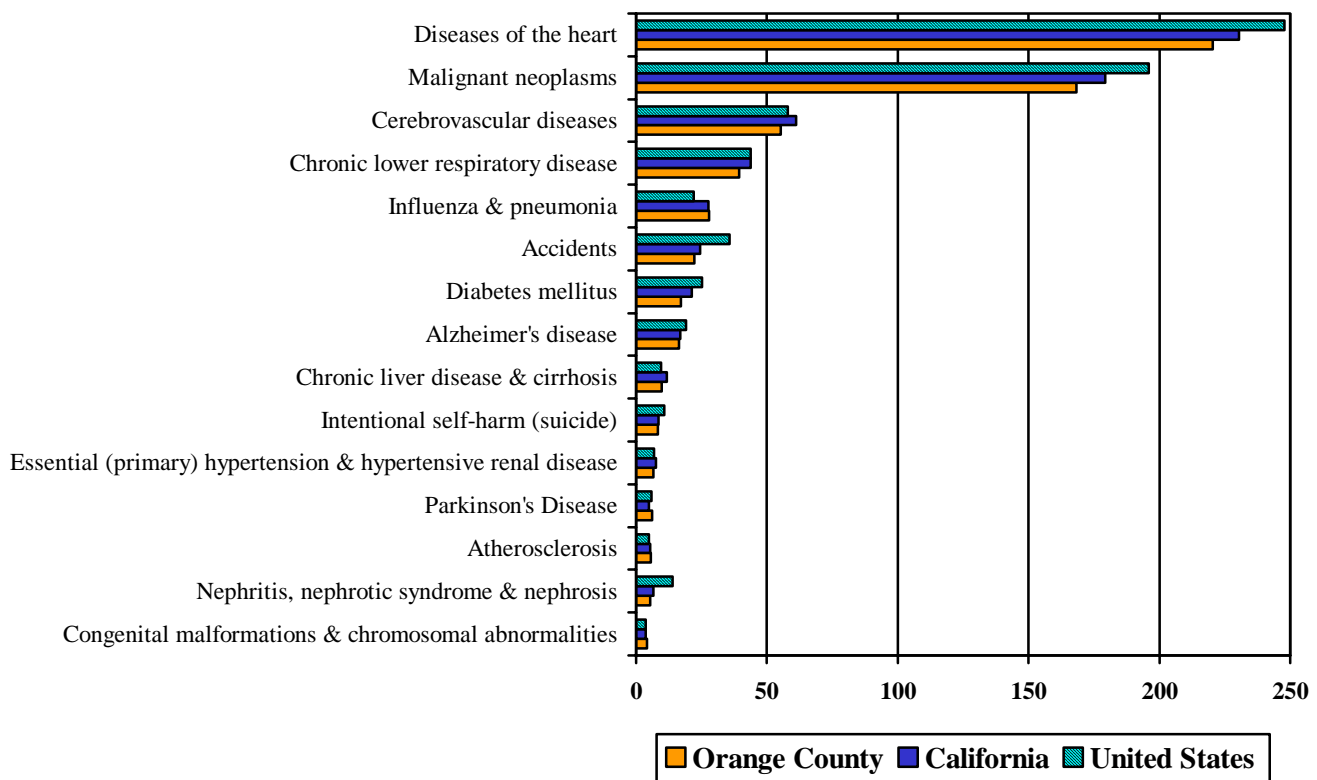
Total deaths and crude death rate

There were 16,734 deaths among Orange County residents in 2001, an increase of 1.5% from the 16,487 deaths that were registered in 2000. The crude death rate was 574.6 per 100,000 in 2001, a slight decrease (0.4%) from 2000 when the rate was 577.1.

Comparison to California and United States 2001 age-adjusted death rates

The overall age-adjusted death rate for Orange County in 2001 was 695.6 per 100,000. The corresponding California rate of 775.1 was slightly higher and the United States rate of 854.5 was significantly higher than Orange County. Of the fifteen leading causes of death in Orange County, 10 of the Orange County age-adjusted rates were lower than the United States and 11 were lower than California (Figure 1).

Figure 1. Age-Adjusted Death Rates per 100,000 Population, 2001



Fifteen leading causes of death

The fifteen leading causes of death accounted for 87.7% of all deaths in 2001. *Diseases of the heart* remained the leading cause of death among Orange County residents, accounting for 5,186 deaths (31.0%). *Malignant neoplasms* ranked second with 4,091 deaths (24.4%). Cancers of the trachea, bronchus, and lung accounted for the largest share of *Malignant neoplasms* with 1,044 deaths (6.2%), followed by lymphomas, leukemias and related cancers with 472 deaths (2.8%). The third leading cause of death was *Cerebrovascular diseases*, with 1,290 deaths, accounting for 7.7% of deaths.

Gender differences

There were 8,735 female and 7,999 male deaths among Orange County residents in 2001. The ranking of the leading causes of death in year 2001 for males and females is shown in Table 1.

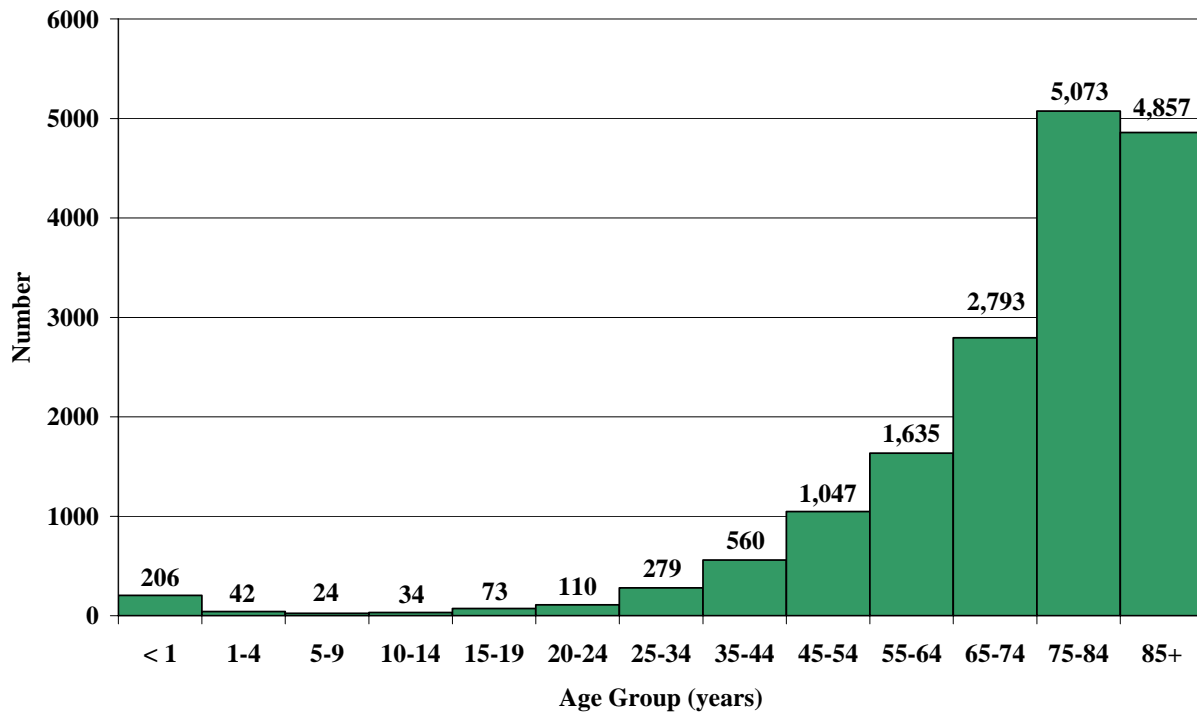
Table 1. Fifteen Leading Causes of Death by Gender, Orange County, 2001

Orange County		Males		Females	
Rank	Cause of death	Rank	Cause of death	Rank	Cause of death
1	Diseases of the heart	1	Diseases of the heart	1	Diseases of the heart
2	Malignant neoplasms	2	Malignant neoplasms	2	Malignant neoplasms
3	Cerebrovascular diseases	3	Cerebrovascular diseases	3	Cerebrovascular diseases
4	Chronic lower respiratory diseases	4	Accidents	4	Chronic lower respiratory diseases
5	Influenza and pneumonia	5	Chronic lower respiratory diseases	5	Influenza and pneumonia
6	Accidents	6	Influenza and Pneumonia	6	Alzheimer's disease
7	Diabetes mellitus	7	Diabetes mellitus	7	Diabetes mellitus
8	Alzheimer's disease	8	Intentional self-harm (suicide)	8	Accidents
9	Chronic liver disease and cirrhosis	9	Chronic liver disease and cirrhosis	9	Chronic liver disease and cirrhosis
10	Intentional self-harm (suicide)	10	Alzheimer's disease	10	Essential hypertension and hypertensive renal disease
11	Essential hypertension and hypertensive renal disease	11	Parkinson's disease	11	Atherosclerosis
12	Parkinson's disease	12	Congenital malformations and chromosomal abnormalities	12	Parkinson's disease
13	Atherosclerosis	13	Certain conditions originating in the perinatal period	12	Nephritis, nephrotic syndrome and nephrosis
14	Nephritis, nephrotic syndrome and nephrosis	14	Nephritis, nephrotic syndrome and nephrosis	14	Intentional self-harm (suicide)
15	Congenital malformations and chromosomal abnormalities	14	Essential hypertension and hypertensive renal disease	15	Congenital malformations and chromosomal abnormalities

Deaths by age group

The majority (59.3%) of all deaths among Orange County residents in 2001 were among those aged 75 years and older. Please see Figure 2.

Figure 2. Deaths by Age Group, Orange County, 2001



Among infants less than 1 year of age, the leading cause of death was *Congenital malformation, deformations, and chromosomal abnormalities* (62 deaths), followed by *Disorders relating to short gestation and low birth weight* (18 deaths), *Respiratory distress* (12 deaths), and *Atelectasis* (11 deaths).

The leading cause of deaths for age groups 1-4, 5-9, 35-44, 45-54, 55-64 and 65-74 years was *Malignant neoplasms*. For the age groups 10-14 years through 25-34 years, *Accidents* were the leading cause of death. *Diseases of the heart* was the leading cause of death for those aged 75-84 and 85 years and over.

Intentional self-harm (suicide) was among the 15 leading causes of death for all age groups from 10-14 through the 65-74 year age group. The number of *suicides* surpassed *Assault (homicide)* in each of these age groups except for the 15-19 year age group (for which *Assault* was the 2nd leading cause and *suicide* was the 3rd leading cause). See Table 2 for ranking of *suicide* by age group.

Table 2. Ranking of *Intentional self-harm (suicide)* by Age Group, Orange County, 2001

Age Group (years)	Suicide rank within age group	Number of suicides
10-14	5	1
15-19	3	8
20-24	2	18
25-34	3	34
35-44	4	44
45-54	5	55
55-64	8	33
65-74	14	17
75-84	--	19
85+	--	7

Assault (homicide) was a leading cause of death for age groups from persons under one year of age through 45-54 years, except for persons 5-9 years and 10-14 years of age. *Homicide* was the second leading cause of death for persons in the 15-19 year age group.

Human immunodeficiency virus (HIV) disease, the 21st leading cause of death for all ages, was ranked highest among 25-34 year olds and 35-44 year-olds (ranked 6th for both categories, 8 and 18 deaths, respectively). Additionally, *HIV disease* was a leading cause of death for 20-24 year olds (ranked 7th, 1 death), 15-19 and 45-54 year olds (ranked 9th, 1 and 12 deaths, respectively), and 55-64 year olds (ranked 11th, 10 deaths).

Leading causes by race/ethnicity

Non-Hispanic Whites accounted for 80.6% of all Orange County deaths in the year 2001, while Hispanics accounted for 10.3%, Southeast Asians 2.9%, Other Asians 4.5%, African Americans 1.1%, and others less than 1%.

Crude rates of death per 100,000 population were as follows: Non-Hispanic Whites 910.1; African Americans 422.9; Asians 306.6; and Hispanics 188.3.

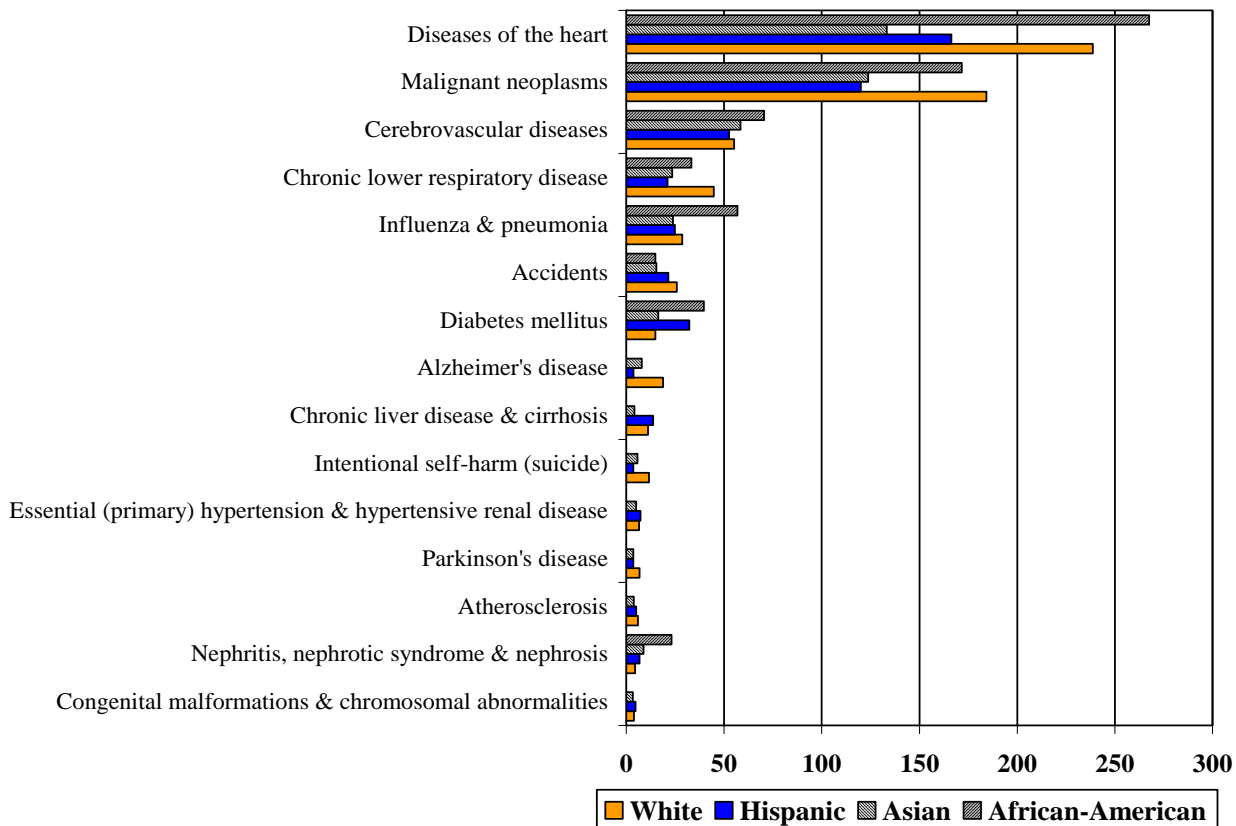
Diseases of the heart was the leading cause of death for Whites and African Americans, with 4,406 and 50 deaths, respectively. However, *Malignant neoplasms* were a very close second for African Americans with 48 deaths. *Malignant neoplasms* were the leading cause of death for Asians and Hispanics, with 358 and 395 deaths, respectively. However, *Diseases of the heart* were nearly equal for Hispanics with 394 deaths.

Age-adjusted rates by race/ethnicity

Age-adjusted rates of death per 100,000 population were as follows: African Americans 836.4; Non-Hispanic Whites 749.4; Hispanics 556.8; and Asians 493.5. Age-adjusted rates differed dramatically between race/ethnicity groups for many of the leading causes of death. Age adjusted rates were higher for Whites than Hispanics for 10 of the 15 leading causes of death, and higher for Whites than Asians for 12 of the 15 leading causes of death. Due to a relatively small percentage of African Americans in the Orange County population, rates are available for 8 of the 15 leading causes of death for this race/ethnicity category. Of those 8 leading causes, African Americans had higher rates than did Whites for 5 leading causes, and higher rates than did Asians or Hispanics for 7 leading causes. African

Americans had the highest age-adjusted death rate due to *Diseases of the heart* (267.5 per 100,000), followed by Whites (238.7 per 100,000), Hispanics (166.3 per 100,000), and Asians (133.3 per 100,000). Non-Hispanic Whites had the highest age-adjusted death rate due to *Malignant neoplasms* (184.3 per 100,000), followed by African Americans (171.7 per 100,000), Asians (123.7 per 100,000), and Hispanics (120.0 per 100,000). Age-adjusted rates for these and other leading causes of death are depicted in Figure 3.

Figure 3. Age-Adjusted Rates by Race/Ethnicity per 100,000 Population, Orange County, 2001



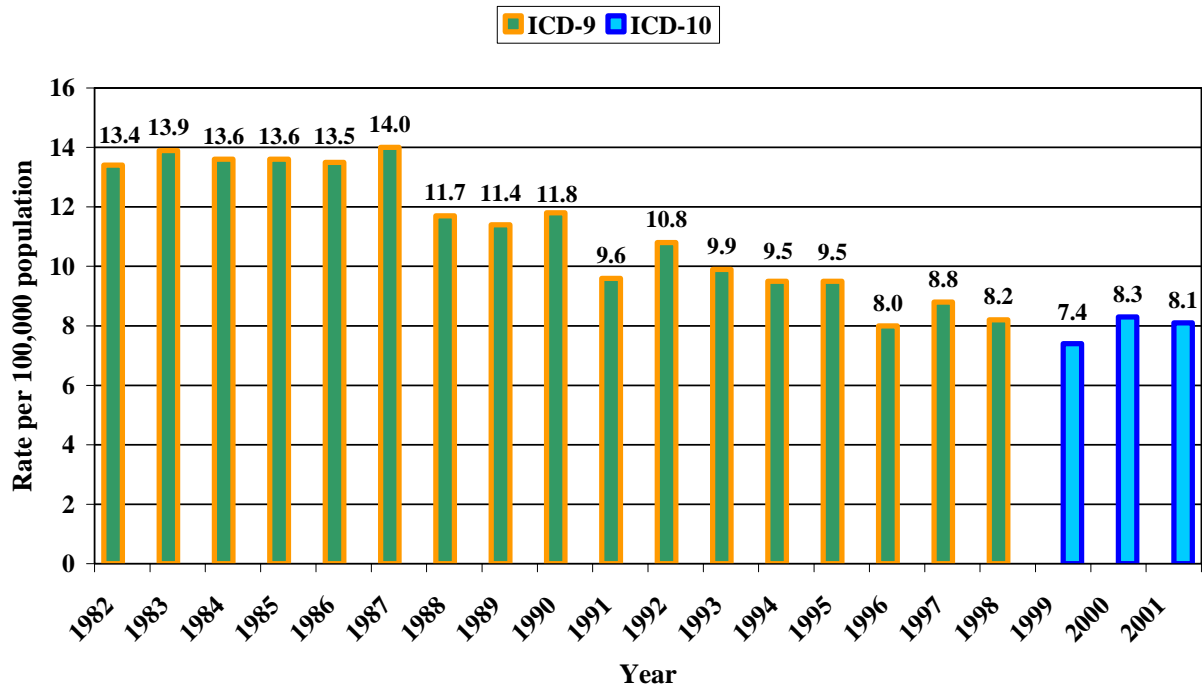
Injury mortality (external causes of death)

Motor vehicle accidents were the leading external cause of death in Orange County in 2001, with 237 deaths. The second leading external cause of death was *Intentional self-harm (suicide)* which was nearly equal with 236 deaths. These were followed by *Accidental poisoning* (148 deaths), *Falls* (128 deaths), and *Assault (homicide)* (77 deaths). Among victims of *Falls*, 66.4% of deaths were among those aged 75 years and older. There were a total of 258 transport accident deaths, including 117 deaths to occupants of a car, pick-up truck, or van, 62 pedestrian deaths, 31 motorcyclist deaths, 12 pedal cyclist deaths, and 36 other transport accident deaths. A total of 26 deaths by *Accidental drowning* occurred; of these, 6 (23.1%) were among children aged 1-4 years of age. In 2001, there was one drowning death of an infant.

Firearms were involved in 143 deaths: 92 suicides, 46 homicides, 4 deaths during legal intervention, and 1 accidental death. Firearms were used in 39% of suicides and 59.7% of homicides.

Figure 4 shows that in the last 20 years, the suicide rate has decreased 33.6% from 12.2 per 100,000 in 1981 to 8.1 in 2001 with a high of 14.0 in 1987 and a low of 7.4 in 1999. In 1999, the underlying cause of death classification schemes change from ICD-9 to ICD-10; however, the classification of suicide is thought to be comparable between the two schemes based on comparability ratios published by the National Center for Health Statistics.

Figure 4. Intentional Self-Harm (Suicide) Mortality Rate, Orange County, 1982-2001



Section 1 Deaths by Age Group

Age-Adjusted Death Rates for the 15 Leading Causes of Death Comparing Orange County with California and the United States, 2001 All ages

<u>Cause of Death</u>	<u>Orange County¹</u>	<u>California²</u>	<u>United States³</u>
All causes.....	695.6	775.1	854.5
Diseases of the heart (I00-I09, I11, I13, I20-I51)	220.5	230.4	247.8
Malignant neoplasms (C00-C97)	168.4	179.2	196.0
Cerebrovascular diseases (I60-I69)	55.4	61.2	57.9
Chronic lower respiratory diseases (J40-J47)	39.3	43.9	43.7
Influenza & pneumonia (J10-J18)	28.0	27.6	22.0
Accidents (V01-X59, Y85-Y86)	22.3	24.4	35.7
Diabetes mellitus (E10-E14)	17.1	21.4	25.3
Alzheimer's disease (G30)	16.4	16.9	19.1
Chronic liver disease & cirrhosis (K70, K73-K74)	9.8	11.7	9.5
Intentional self-harm (suicide) (X60-X84, Y87.0)	8.4	8.5	10.7
Essential (primary) hypertension & hypertensive renal disease (I10, I12)	6.6	7.7	6.8
Parkinson's disease (G20-G21)	6.1	5.0	5.9
Atherosclerosis (I70)	5.6	5.3	5.0
Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	5.3	6.7	14.0
Congenital malformations & chromosomal abnormalities (Q00-Q99).....	4.2	3.6	3.6

¹ Mortality rate is calculated per 100,000 Orange County population.

^{2,3} National Vital Statistics Reports, Vol. 52, No. 3, National Center for Health Statistics, September 18, 2003.

**Fifteen Leading Causes of Death
Orange County Residents, 2001**

All ages

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate ¹</u>
1	Diseases of the heart (I00-I09, I11, I13, I20-I51)	5,186	178.1
2	Malignant neoplasms (C00-C97)	4,091	140.5
3	Cerebrovascular diseases (I60-I69)	1,290	44.3
4	Chronic lower respiratory diseases (J40-J47)	914	31.4
5	Influenza & pneumonia (J10-J18)	648	22.3
6	Accidents (V01-X59, Y85-Y86)	608	20.9
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	237	8.1
-	<i>All other accidents</i>	371	12.7
7	Diabetes mellitus (E10-E14)	410	14.1
8	Alzheimer's disease (G30)	378	13
9	Chronic liver disease & cirrhosis (K70, K73-K74)	256	8.8
10	Intentional self-harm (suicide) (X60-X84, Y87.0)	236	8.1
11	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	154	5.3
12	Parkinson's disease (G20-G21)	140	4.8
13	Atherosclerosis (I70)	129	4.4
14	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	123	4.2
15	Congenital malformations & chromosomal abnormalities (Q00-Q99).....	121	4.2
-	All other causes	2,050	70.4
	Total	<u>16,734</u>	<u>574.6</u>

¹ Mortality rate is calculated per 100,000 Orange County population.

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

Fifteen Leading Causes of Death¹
Orange County Residents, 2001
Under one year of age

Rank	Cause of Death & ICD-10 Codes	Number	Rate²
1	Congenital malformations & chromosomal abnormalities (Q00-Q99).....	62	137.2
2	Disorders relating to short gestation & low birth weight (P07).....	18	39.8
3	Respiratory distress of newborn (P22)	12	26.6
4	Atelectasis (P28.0, P28.1)	11	24.3
5	Newborn affected by complications of placenta, cord & membranes (P02).....	8	17.7
5	Sudden infant death syndrome (R95).....	8	17.7
7	Accidents (V01-X59, Y85-Y86)	5	11.1
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	1	--
-	<i>All other accidents</i>	4	--
7	Intrauterine hypoxia & birth asphyxia (P20-P21)	5	11.1
7	Newborn affected by maternal complications of pregnancy (P01).....	5	11.1
10	Neonatal hemorrhage (P50-P52, P54).....	4	--
10	Gastritis, duodenitis, and non-infective enteritis & colitis (K29, K50-K55).....	4	--
12	Influenza & pneumonia (J10-J18).....	3	--
12	Slow fetal growth & malnutrition (P05).....	3	--
12	Assault (homicide) (X85-Y09, Y87.1)	3	--
15	Necrotizing enterocolitis of newborn (P77).....	2	--
15	Bacterial sepsis of newborn (P36)	2	--
15	Pulmonary hemorrhage originating in the perinatal period (P26).....	2	--
15	Neonatal aspiration syndrome (P24).....	2	--
15	Newborn affected by other complications of labor & delivery (P03).....	2	--
15	Bronchitis, chronic or unspecified (J40-J42).....	2	--
15	Malignant neoplasms (C00-C97).....	2	--
-	All other causes	41	90.7
	Total	206	455.9

-- Rates not calculated for fewer than five deaths.

¹ Infant deaths are based on the Federal list of 130 selected causes.

² These are infant death (not mortality) rates; rates are per 100,000 Orange County population in this age group.

Fifteen Leading Causes of Death
Orange County Residents, 2001
1 - 4 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate¹</u>
1	Malignant neoplasms (C00-C97)	11	6.4
2	Congenital malformations & chromosomal abnormalities (Q00-Q99)	10	5.9
3	Accidents (V01-X59, Y85-Y86)	9	5.3
-	<i>Motor vehicle accid. (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2)</i>	2	--
-	<i>All other accidents</i>	7	4.1
4	Diseases of the heart (I00-I09, I11, I13, I20-I51)	2	--
5	Meningococcal infection (A39)	1	--
5	Chronic lower respiratory diseases (J40-J47)	1	--
5	Diseases of appendix (K35-K38)	1	--
5	Certain conditions originating in the perinatal period (P00-P96)	1	--
5	Assault (homicide) (X85-Y09, Y87.1)	1	--
-	All other causes	5	2.9
	Total	<u>42</u>	<u>24.6</u>

-- Rates not calculated for fewer than five deaths.

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

**Fifteen Leading Causes of Death
Orange County Residents, 2001**

5 - 9 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate¹</u>
1	Malignant neoplasms (C00-C97)	6	2.6
2	Accidents (V01-X59, Y85-Y86)	5	2.2
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	4	--
-	<i>All other accidents</i>	1	--
3	Congenital malformations & chromosomal abnormalities (Q00-Q99).....	4	--
4	Shigellosis & amebiasis (A03, A06).....	1	--
4	Diseases of the heart (I00-I09, I11, I13, I20-I51)	1	--
4	Influenza & pneumonia (J10-J18).....	1	--
4	Chronic lower respiratory disease (J40-J47).....	1	--
-	All other causes	5	2.2
	Total	<u>24</u>	<u>10.4</u>

-- Rates not calculated for fewer than five deaths.

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

Fifteen Leading Causes of Death
Orange County Residents, 2001
10 - 14 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate¹</u>
1	Accidents (V01-X59, Y85-Y86)	11	5.1
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	8	3.7
-	<i>All other accidents</i>	3	--
2	Malignant neoplasms (C00-C97)	8	3.7
3	Congenital malformations & chromosomal abnormalities (Q00-Q99).....	3	--
4	Diseases of the heart (I00-I09, I11, I13, I20-I51)	2	--
5	In situ neopl., benign neopl., & neoplasms of unknown behavior (D00-D48)	1	--
5	Anemias (D50-D64).....	1	--
5	Cerebrovascular diseases (I60-I69)	1	--
5	Chronic lower respiratory disease (J40-J47).....	1	--
5	Diseases of appendix (K35-K38).....	1	--
5	Intentional self-harm (suicide) (X60-X84, Y87.0)	1	--
-	All other causes	4	--
	Total	<u>34</u>	<u>15.7</u>

-- Rates not calculated for fewer than five deaths.

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

Fifteen Leading Causes of Death
Orange County Residents, 2001
15 - 19 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate¹</u>
1	Accidents (V01-X59, Y85-Y86)	26	13.1
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	15	7.6
-	<i>All other accidents</i>	11	5.5
2	Assault (homicide) (X85-Y09, Y87.1)	11	5.5
3	Intentional self-harm (suicide) (X60-X84, Y87.0)	8	4.0
4	Malignant neoplasms (C00-C97)	5	2.5
5	Diseases of the heart (I00-I09, I11, I13, I20-I51)	4	--
6	Congenital malformations & chromosomal abnormalities (Q00-Q99)	3	--
7	Septicemia (A40-A41).....	2	--
7	Cerebrovascular diseases (I60-I69)	2	--
9	Tuberculosis (A16-A19).....	1	--
9	Human immunodeficiency virus (HIV) disease (B20-B24).....	1	--
9	Meningitis (G00, G03).....	1	--
9	Legal Intervention (Y35, Y89.0).....	1	--
-	All other causes	8	4.0
	Total	<u>73</u>	<u>36.8</u>

-- Rates not calculated for fewer than five deaths.

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

Fifteen Leading Causes of Death
Orange County Residents, 2001
20 - 24 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate¹</u>
1	Accidents (V01-X59, Y85-Y86)	45	23.2
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	28	14.4
-	<i>All other accidents</i>	17	8.8
2	Intentional self-harm (suicide) (X60-X84, Y87.0)	18	9.3
2	Assault (homicide) (X85-Y09, Y87.1)	18	9.3
4	Malignant neoplasms (C00-C97)	7	3.6
5	Congenital malformations & chromosomal abnormalities (Q00-Q99)	3	--
6	Legal Intervention (Y35, Y89.0).....	2	--
7	Human immunodeficiency virus (HIV) disease (B20-B24).....	1	--
7	Diseases of the heart (I00-I09, I11, I13, I20-I51)	1	--
7	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	1	--
7	Cerebrovascular diseases (I60-I69)	1	--
7	Chronic lower respiratory disease (J40-J47).....	1	--
-	All other causes	12	6.2
	Total	<u>110</u>	<u>56.7</u>

-- Rates not calculated for fewer than five deaths.

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

Fifteen Leading Causes of Death
Orange County Residents, 2001
25 - 34 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate</u> ¹
1	Accidents (V01-X59, Y85-Y86)	82	17.7
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	46	9.9
-	<i>All other accidents</i>	36	7.8
2	Malignant neoplasms (C00-C97)	57	12.3
3	Intentional self-harm (suicide) (X60-X84, Y87.0)	34	7.3
4	Diseases of the heart (I00-I09, I11, I13, I20-I51)	24	5.2
5	Assault (homicide) (X85-Y09, Y87.1)	16	3.5
6	Human immunodeficiency virus (HIV) disease (B20-B24).....	8	1.7
6	Cerebrovascular diseases (I60-I69)	8	1.7
8	Congenital malformations & chromosomal abnormalities (Q00-Q99)	5	1.1
9	In situ neopl., benign neopl., & neoplasms of unknown behavior (D00-D48)	4	--
9	Chronic liver disease & cirrhosis (K70, K73-K74)	4	--
11	Pregnancy, childbirth & the puerperium (O00-O99)	2	--
12	Tuberculosis (A16-A19).....	1	--
12	Anemias (D50-D64).....	1	--
12	Meningitis (G00, G03).....	1	--
12	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	1	--
12	Legal Intervention (Y35, Y89.0).....	1	--
-	All other causes	30	6.5
	Total	<u>279</u>	<u>60.2</u>

-- Rates not calculated for fewer than five deaths.

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

**Fifteen Leading Causes of Death
Orange County Residents, 2001**

35 - 44 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate ¹</u>
1	Malignant neoplasms (C00-C97)	150	30.8
2	Accidents (V01-X59, Y85-Y86)	104	21.3
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	33	6.8
-	<i>All other accidents</i>	71	14.6
3	Diseases of the heart (I00-I09, I11, I13, I20-I51)	72	14.8
4	Intentional self-harm (suicide) (X60-X84, Y87.0)	44	9.0
5	Chronic liver disease & cirrhosis (K70, K73-K74)	26	5.3
6	Human immunodeficiency virus (HIV) disease (B20-B24).....	18	3.7
7	Cerebrovascular diseases (I60-I69)	17	3.5
8	Diabetes mellitus (E10-E14)	10	2.1
9	Chronic lower respiratory diseases (J40-J47)	8	1.6
9	Congenital malformations & chromosomal abnormalities (Q00-Q99)	8	1.6
9	Assault (homicide) (X85-Y09, Y87.1)	8	1.6
12	Viral hepatitis (B15-B19)	6	1.2
13	Aortic aneurysm & dissection (I71)	5	1.0
13	Influenza & pneumonia (J10-J18)	5	1.0
15	In situ neopl., benign neopl., & neoplasms of unknown behavior (D00-D48)	3	--
-	All other causes	76	15.6
	Total	<u>560</u>	<u>114.9</u>

-- Rates not calculated for fewer than five deaths.

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

Fifteen Leading Causes of Death
Orange County Residents, 2001
45 - 54 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate¹</u>
1	Malignant neoplasms (C00-C97)	361	95.2
2	Diseases of the heart (I00-I09, I11, I13, I20-I51)	210	55.4
3	Accidents (V01-X59, Y85-Y86)	86	22.7
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	35	9.2
-	<i>All other accidents</i>	51	13.4
4	Chronic liver disease & cirrhosis (K70, K73-K74)	72	19.0
5	Intentional self-harm (suicide) (X60-X84, Y87.0)	55	14.5
6	Cerebrovascular diseases (I60-I69)	35	9.2
7	Diabetes mellitus (E10-E14)	30	7.9
8	Viral hepatitis (B15-B19)	18	4.7
9	Human immunodeficiency virus (HIV) disease (B20-B24).....	12	3.2
10	Assault (homicide) (X85-Y09, Y87.1)	11	2.9
11	Chronic lower respiratory diseases (J40-J47)	10	2.6
12	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	7	1.8
12	Aortic aneurysm & dissection (I71)	7	1.8
12	Influenza & pneumonia (J10-J18)	7	1.8
12	Congenital malformations & chromosomal abnormalities (Q00-Q99)	7	1.8
-	All other causes	119	31.4
	Total	<u>1,047</u>	<u>276.1</u>

-- Rates not calculated for fewer than five deaths.

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

**Fifteen Leading Causes of Death
Orange County Residents, 2001**

55 - 64 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate ¹</u>
1	Malignant neoplasms (C00-C97)	663	277.4
2	Diseases of the heart (I00-I09, I11, I13, I20-I51)	418	174.9
3	Diabetes mellitus (E10-E14)	66	27.6
4	Chronic lower respiratory diseases (J40-J47)	65	27.2
5	Chronic liver disease & cirrhosis (K70, K73-K74)	59	24.7
6	Cerebrovascular diseases (I60-I69)	50	20.9
6	Accidents (V01-X59, Y85-Y86)	50	20.9
-	<i>Motor vehicle accid. (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79,</i>		
-	<i>V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....</i>	21	8.8
-	<i>All other accidents</i>	29	12.1
8	Intentional self-harm (suicide) (X60-X84, Y87.0)	33	13.8
9	Influenza & pneumonia (J10-J18)	16	6.7
10	Viral hepatitis (B15-B19)	12	5.0
11	Human immunodeficiency virus (HIV) disease (B20-B24)	10	4.2
11	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	10	4.2
13	In situ neopl., benign neopl., & neoplasms of unknown behavior (D00-D48)	8	3.3
14	Alzheimer's disease (G30)	7	2.9
14	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	7	2.9
14	Aortic aneurysm & dissection (I71)	7	2.9
-	All other causes	187	78.3
	Total	<u>1,635</u>	<u>684.2</u>

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

**Fifteen Leading Causes of Death
Orange County Residents, 2001**

65 - 74 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate¹</u>
1	Malignant neoplasms (C00-C97)	1,057	696.3
2	Diseases of the heart (I00-I09, I11, I13, I20-I51)	752	495.4
3	Chronic lower respiratory diseases (J40-J47)	181	119.2
4	Cerebrovascular diseases (I60-I69)	166	109.4
5	Diabetes mellitus (E10-E14)	107	70.5
6	Chronic liver disease & cirrhosis (K70, K73-K74)	53	34.9
7	Influenza & pneumonia (J10-J18)	51	33.6
8	Accidents (V01-X59, Y85-Y86)	49	32.3
-	<i>Motor vehicle accid. (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2)</i>	15	9.9
-	<i>All other accidents</i>	34	22.4
9	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	27	17.8
10	Aortic aneurysm & dissection (I71)	25	16.5
11	Parkinson's disease (G20-G21)	23	15.2
12	Alzheimer's disease (G30)	22	14.5
13	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	18	11.9
14	Intentional self-harm (suicide) (X60-X84, Y87.0)	17	11.2
15	In situ neopl., benign neopl., & neoplasms of unknown behavior (D00-D48)	10	6.6
-	All other causes	235	154.8
	Total	<u>2,793</u>	<u>1,839.9</u>

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

**Fifteen Leading Causes of Death
Orange County Residents, 2001**

75 - 84 years of age

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate¹</u>
1	Diseases of the heart (I00-I09, I11, I13, I20-I51)	1,652	1,629.6
2	Malignant neoplasms (C00-C97)	1,186	1,169.9
3	Cerebrovascular diseases (I60-I69)	488	481.4
4	Chronic lower respiratory diseases (J40-J47)	413	407.4
5	Influenza & pneumonia (J10-J18)	248	244.6
6	Diabetes mellitus (E10-E14)	132	130.2
7	Alzheimer's disease (G30)	111	109.5
8	Accidents (V01-X59, Y85-Y86)	74	73.0
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	23	22.7
-	<i>All other accidents</i>	51	50.3
9	Parkinson's disease (G20-G21)	66	65.1
10	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	50	49.3
11	Atherosclerosis (I70)	43	42.4
12	Aortic aneurysm & dissection (I71)	40	39.5
13	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	38	37.5
14	Chronic liver disease & cirrhosis (K70, K73-K74)	34	33.5
15	In situ neopl., benign neopl., & neoplasms of unknown behavior (D00-D48)	24	23.7
-	All other causes	474	467.6
	Total	<u>5,073</u>	<u>5,004.2</u>

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

**Fifteen Leading Causes of Death
Orange County Residents, 2001
85 years of age and over**

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Rate ¹</u>
1	Diseases of the heart (I00-I09, I11, I13, I20-I51)	2,048	5,706.2
2	Malignant neoplasms (C00-C97)	578	1,610.4
3	Cerebrovascular diseases (I60-I69)	522	1,454.4
4	Influenza & pneumonia (J10-J18)	317	883.2
5	Alzheimer's disease (G30)	238	663.1
6	Chronic lower respiratory diseases (J40-J47)	231	643.6
7	Atherosclerosis (I70)	75	209.0
8	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	69	192.2
9	Diabetes mellitus (E10-E14)	65	181.1
10	Accidents (V01-X59, Y85-Y86)	62	172.7
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	6	16.7
-	<i>All other accidents</i>	56	156.0
11	Parkinson's disease (G20-G21)	49	136.5
12	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	44	122.6
13	In situ neopl., benign neopl., & neoplasms of unknown behavior (D00-D48)	24	66.9
14	Peptic ulcer (K25-K28)	19	52.9
15	Aortic aneurysm & dissection (I71)	13	36.2
-	All other causes	503	1,401.5
	Total	<u>4,857</u>	<u>13,532.6</u>

¹ Mortality rate is calculated per 100,000 Orange County population in this age group.

Section 2. Cause of Death by Gender

Cause of Death by Rank and Gender

Orange County Residents, 2001

Based on National Center for Health Statistics List of 113 selected Causes of Death

Rank			Cause of Death (ICD-10 code)	No. of Deaths			Rate ¹		
Total	Male	Female		Total	Male	Female	Total	Male	Female
1	1	1	Diseases of heart (I00-I09, I11, I13, I20-I51)	5,186	2,433	2,753	178.1	167.9	188.2
-	-	-	Acute rheumatic fever & chronic rheumatic heart diseases (I00-I09)	20	4	16	0.7	--	1.1
-	-	-	Hypertensive heart disease (I11)	154	50	104	5.3	3.5	7.1
-	-	-	Hypertensive heart & renal disease (I13)	26	12	14	0.9	0.8	1.0
-	-	-	Ischemic heart diseases (I20-I25)	4,270	2,036	2,234	146.6	140.5	152.7
-	-	-	Acute myocardial infarction (I21-I22)	1,216	630	586	41.8	43.5	40.1
-	-	-	Other acute ischemic heart disease (I24)	11	6	5	0.4	0.4	0.3
-	-	-	Other forms of chronic ischemic heart disease (I20, I25)	3,043	1,400	1,643	104.5	96.6	112.3
-	-	-	Atherosclerotic cardiovascular disease, so described (I25.0)	570	237	333	19.6	16.4	22.8
-	-	-	All other forms of chronic ischemic heart disease (I20, I25.1-I25.9)	2,473	1,163	1,310	84.9	80.3	89.5
-	-	-	Other heart diseases (I26-I51)	716	331	385	24.6	22.8	26.3
-	-	-	Acute & subacute endocarditis (I33)	8	4	4	0.3	--	--
-	-	-	Diseases of pericardium & acute myocarditis (I30-I31, I40)	7	4	3	0.2	--	--
-	-	-	Heart failure (I50)	207	82	125	7.1	5.7	8.5
-	-	-	All other forms of heart disease (I26-I28, I34-I38, I42-I49, I51)	494	241	253	17.0	16.6	17.3
2	2	2	Malignant neoplasms (C00-C97)	4,091	2,024	2,067	140.5	139.7	141.3
-	-	-	Malignant neoplasms of lip, oral cavity & pharynx (C00-C14)	67	38	29	2.3	2.6	2.0
-	-	-	Malignant neoplasm of esophagus (C15)	91	70	21	3.1	4.8	1.4
-	-	-	Malignant neoplasm of stomach (C16)	131	71	60	4.5	4.9	4.1
-	-	-	Malignant neoplasms of colon, rectum and anus (C18-C21)	358	165	193	12.3	11.4	13.2
-	-	-	Malignant neoplasms of liver & intrahepatic bile ducts (C22)	124	77	47	4.3	5.3	3.2
-	-	-	Malignant neoplasm of pancreas (C25)	207	107	100	7.1	7.4	6.8
-	-	-	Malignant neoplasm of larynx (C32)	22	15	7	0.8	1.0	0.5
-	-	-	Malignant neoplasms of trachea, bronchus & lung (C33-C34)	1,044	550	494	35.8	38.0	33.8
-	-	-	Malignant melanoma of skin (C43)	74	52	22	2.5	3.6	1.5
-	-	-	Malignant neoplasm of breast (C50)	326	3	323	11.2	--	22.1

- Not ranked (only the broader category, which includes this item, is ranked).

-- Rates not calculated for fewer than five deaths.

¹ Rates per 100,000 Orange County population.

Rank			Cause of Death (ICD-10 code)	No. of Deaths			Rate ¹		
Total	Male	Female		Total	Male	Female	Total	Male	Female
-	-	-	Malignant neoplasm of cervix uteri (C53)	28	--	28	--	--	1.9
-	-	-	Malignant neoplasms of corpus uteri & uterus, part unspecified (C54-C55)	48	--	48	--	--	3.3
-	-	-	Malignant neoplasm of ovary (C56)	122	--	122	--	--	8.3
-	-	-	Malignant neoplasm of prostate (C61)	206	206	--	7.1	14.2	--
-	-	-	Malignant neoplasms of kidney & renal pelvis (C64-C65)	90	59	31	3.1	4.1	2.1
-	-	-	Malignant neoplasm of bladder (C67)	92	59	33	3.2	4.1	2.3
-	-	-	Malignant neoplasms of meninges, brain & other parts of CNS (C70-C72)	142	72	70	4.9	5.0	4.8
-	-	-	Malig. neoplasms of lymphoid, hematopoietic & related tissues (C81-C96)	472	255	217	16.2	17.6	14.8
-	-	-	Hodgkin's disease (C81)	6	4	2	0.2	--	--
-	-	-	Non-Hodgkin's lymphoma (C82-C85)	178	94	84	6.1	6.5	5.7
-	-	-	Leukemia (C91-C95)	192	109	83	6.6	7.5	5.7
-	-	-	Multiple myeloma & immunoproliferative neoplasms (C88, C90)	95	48	47	3.3	3.3	3.2
-	-	-	Oth. & unspec. malig. neoplasms of lymphoid & related tissues (C96)	1	0	1	--	--	--
-	-	-	All other & unspecified malignant neoplasms (C17, C23-C24, C26-C31, C37-C41, C44- C49, C51-C52, C57-C60, C62-C63, C66, C68-C69, C73-C80, C97)	447	225	222	15.3	15.5	15.2
3	3	3	Cerebrovascular diseases (I60-I69)	1,290	513	777	44.3	35.4	53.1
4	5	4	Chronic lower respiratory diseases (J40-J47)	914	398	516	31.4	27.5	35.3
-	-	-	Bronchitis, chronic & unspecified (J40-J42)	7	3	4	0.2	--	--
-	-	-	Emphysema (J43)	119	52	67	4.1	3.6	4.6
-	-	-	Asthma (J45-J46)	29	13	16	1.0	0.9	1.1
-	-	-	Other chronic lower respiratory diseases (J44, J47)	759	330	429	26.1	22.8	29.3
5	6	5	Influenza & pneumonia (J10-J18)	648	292	356	22.3	20.2	24.3
-	-	-	Influenza (J10-J11)	2	1	1	--	--	--
-	-	-	Pneumonia (J12-J18)	646	291	355	22.2	20.1	24.3
6	4	8	Accidents (V01-X59, Y85-Y86)	608	403	205	20.9	27.8	14.0
-	-	-	Transport accidents (V01-V99, Y85)	258	191	67	8.9	13.2	4.6
-	-	-	Motor vehicle accid.(V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6,V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	237	175	62	8.1	12.1	4.2
-	-	-	Oth. land transp. accid.(V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3,V19.8- V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9	8	7	1	0.3	0.5	--

- Not ranked (only the broader category, which includes this item, is ranked).

-- Rates not calculated for fewer than five deaths.

¹ Rates per 100,000 Orange County population.

Rank			Cause of Death (ICD-10 code)	No. of Deaths			Rate ¹		
Total	Male	Female		Total	Male	Female	Total	Male	Female
-	-	-	Water, air, space, other & unspecified transport accidents (V90-V99, Y85)	13	9	4	0.4	0.6	--
-	-	-	Nontransport accidents (W00-X59, Y86)	312	181	131	10.7	12.5	9.0
-	-	-	Falls (W00-W19)	128	63	65	4.4	4.3	4.4
-	-	-	Accidental discharge of firearms (W32-W34)	1	0	1	--	--	--
-	-	-	Accidental drowning & submersion (W65-W74)	26	19	7	0.9	1.3	0.5
-	-	-	Accidental exposure to smoke, fire & flames (X00-X09)	9	2	7	0.3	--	0.5
-	-	-	Accidental poisoning & exposure to noxious substances (X40-X49)	148	97	51	5.1	6.7	3.5
-	-	-	Other & unspecified nontransport accidents (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86)	38	31	7	1.3	2.1	0.5
7	7	7	Diabetes mellitus (E10-E14)	410	191	219	14.1	13.2	15.0
8	10	6	Alzheimer's disease (G30)	378	129	249	13.0	8.9	17.0
9	9	9	Chronic liver disease & cirrhosis (K70, K73-K74)	256	155	101	8.8	10.7	6.9
-	-	-	Alcoholic liver disease (K70)	174	116	58	6.0	8.0	4.0
-	-	-	Other chronic liver disease & cirrhosis (K73-K74)	82	39	43	2.8	2.7	2.9
10	8	14	Intentional self-harm (suicide) (X60-X84, Y87.0)	236	179	57	8.1	12.4	3.9
-	-	-	Intentional self-harm (suicide) by firearms (X72-X74)	92	81	11	3.2	5.6	0.8
-	-	-	Intent'l self-harm (suicide) by oth. & unspec. means (X60-X71, X75-X84, Y87.0) ..	144	98	46	4.9	6.8	3.1
11	14	10	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	154	62	92	5.3	4.3	6.3
12	11	12	Parkinson's disease (G20-G21)	140	79	61	4.8	5.5	4.2
13	18	11	Atherosclerosis (I70)	129	53	76	4.4	3.7	5.2
14	14	12	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	123	62	61	4.2	4.3	4.2
-	-	-	Acute & rapidly progressive nephritic & nephrotic syndrome (N00-N01, N04) ...	1	0	1	--	--	--
-	-	-	Chronic glomerulonephritis, nephritis, nephritis not specified as acute or chronic, & renal sclerosis unspecified (N02-N03, N05-N07, N26)	7	4	3	0.2	--	--
-	-	-	Renal failure (N17-N19)	115	58	57	3.9	4.0	3.9
-	-	-	Other disorders of kidney (N25, N27)	0	0	0	--	--	--
15	12	15	Congenital malformations & chromosomal abnormalities (Q00-Q99)	121	69	52	4.2	4.8	3.6
16	13	17	Certain conditions originating in the perinatal period (P00-P96)	107	63	44	3.7	4.3	3.0
17	17	18	Aortic aneurysm & dissection (I71)	97	58	39	3.3	4.0	2.7
18	20	16	In situ neopl., benign neopl., & neoplasms of unknown behavior (D00-D48) ..	78	33	45	2.7	2.3	3.1

- Not ranked (only the broader category, which includes this item, is ranked).

-- Rates not calculated for fewer than five deaths.

¹ Rates per 100,000 Orange County population.

Rank			Cause of Death (ICD-10 code)	No. of Deaths			Rate ¹		
Total	Male	Female		Total	Male	Female	Total	Male	Female
19	16	23	Assault (homicide) (X85-Y09, Y87.1)	77	61	16	2.6	4.2	1.1
-	-	-	Assault (homicide) by firearms (X93-X95)	46	41	5	1.6	2.8	0.3
-	-	-	Assault (homicide) by other & unspecified means (X85-X92, X96-Y09, Y87.1)	31	20	11	1.1	1.4	0.8
20	22	19	Peptic ulcer (K25-K28)	57	26	31	2.0	1.8	2.1
21	19	24	Human immunodeficiency virus (HIV) disease (B20-B24)	54	44	10	1.9	3.0	0.7
22	21	20	Viral hepatitis (B15-B19)	47	28	19	1.6	1.9	1.3
23	23	21	Cholelithiasis & other disorders of gallbladder (K80-K82)	31	13	18	1.1	0.9	1.2
24	24	21	Septicemia (A40-A41)	27	9	18	0.9	0.6	1.2
25	27	26	Hernia (K40-K46)	13	4	9	0.4	--	0.6
26	34	24	Anemias (D50-D64)	11	1	10	0.4	--	0.7
27	26	29	Tuberculosis (A16-A19)	8	5	3	0.3	0.3	--
-	-	34	Respiratory tuberculosis (A16)	6	5	1	0.2	0.3	--
-	-	-	Other tuberculosis (A17-A19)	2	0	2	--	--	--
28	30	28	Nutritional deficiencies (E40-E64)	6	2	4	0.2	--	--
-	-	-	Malnutrition (E40-E46)	5	2	3	0.2	--	--
-	-	34	Other nutritional deficiencies (E50-E64)	1	0	1	--	--	--
28	34	27	Infections of kidney (N10-N12, N13.6, N15.1)	6	1	5	0.2	--	0.3
28	25	-	Hyperplasia of prostate (N40)	6	6	0	0.2	0.4	--
31	27	34	Meningitis (G00, G03)	5	4	1	0.2	--	--
31	30	29	Pneumonitis due to solids and liquids (J69)	5	2	3	0.2	--	--
31	30	31	Complications of medical & surgical care (Y40-Y84, Y88)	5	3	2	0.2	--	--
34	27	-	Legal intervention (Y35, Y89.0)	4	4	0	--	--	--
34	30	-	Pneumoconioses & chemical effects (J60-J66, J68)	4	4	0	--	--	--
34	33	31	Diseases of appendix (K35-K38)	4	2	2	--	--	--
37	34	34	Meningococcal infection (A39)	2	1	1	--	--	--
37	-	31	Pregnancy, childbirth & the puerperium (O00-O99)	2	--	2	--	--	--
-	-	-	Pregnancy with abortive outcome (O00-O07)	0	--	0	--	--	--
-	-	-	Other complications of pregnancy, childbirth & puerperium (O10-O99)	2	--	2	--	--	--
39	34	-	Salmonella infections (A01-A02)	1	1	0	--	--	--
39	34	-	Shigellosis and amebiasis (A03, A06).....	1	1	0	--	--	--
39	34	-	Sequelae of war operations (Y89.1).....	1	1	0	--	--	--

- Not ranked (only the broader category, which includes this item, is ranked).

-- Rates not calculated for fewer than five deaths.

¹ Rates per 100,000 Orange County population.

Cause of Death by Gender, Unranked, by ICD-10 Code
Orange County Residents, 2001
National Center for Health Statistics List of 113 Selected Causes of Death

<u>Cause of Death (ICD-10 code)</u>	No. of Deaths			Rate ¹		
	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>
All causes	16,734	7,999	8,735	574.6	552.0	597.0
Certain infectious & parasitic diseases (A00-B99)	222	130	92	7.6	9.0	6.3
Salmonella infections (A01-A02)	1	1	0	--	--	--
Shigellosis and amebiasis (A03, A06)	1	1	0	--	--	--
Certain other intestinal diseases (A04, A07-A09)	20	6	14	0.7	0.4	1.0
Tuberculosis (A16-A19)	8	5	3	0.3	0.3	--
Respiratory tuberculosis (A16)	6	5	1	0.2	0.3	--
Other tuberculosis (A17-A19)	2	0	2	--	--	--
Whooping cough (A37)	0	0	0	--	--	--
Scarlet fever & erysipelas (A38, A46)	0	0	0	--	--	--
Meningococcal infection (A39)	2	1	1	--	--	--
Septicemia (A40-A41)	27	9	18	0.9	0.6	1.2
Syphilis (A50-A53)	0	0	0	--	--	--
Acute poliomyelitis (A80)	0	0	0	--	--	--
Arthropod-borne viral encephalitis (A83-A84, A85.2)	0	0	0	--	--	--
Measles (B05)	0	0	0	--	--	--
Viral hepatitis (B15-B19)	47	28	19	1.6	1.9	1.3
Human immunodeficiency virus (HIV) disease (B20-B24)	54	44	10	1.9	3.0	0.7
Malaria (B50-B54)	0	0	0	--	--	--
Other & unspecified infectious & parasitic diseases (A00, A05, A20-A36, A42- A44, A48-A49, A54-A79, A81-A82, A85.0-A85.1, A85.8, A86-B04, B06-B09, B25-B49, B55-B99)	62	35	27	2.1	2.4	1.8
Malignant neoplasms (C00-C97)	4,091	2,024	2,067	140.5	139.7	141.3
Malignant neoplasms of lip, oral cavity & pharynx (C00-C14)	67	38	29	2.3	2.6	2.0
Malignant neoplasm of esophagus (C15)	91	70	21	3.1	4.8	1.4
Malignant neoplasm of stomach (C16)	131	71	60	4.5	4.9	4.1
Malignant neoplasms of colon, rectum & anus (C18-C21)	358	165	193	12.3	11.4	13.2

-- Rates not calculated for fewer than 5 deaths.

¹ Rates per 100,000 Orange County population.

Cause of Death (ICD-10 code)	No. of Deaths			Rate ¹		
	Total	Male	Female	Total	Male	Female
Malignant neoplasms of liver & intrahepatic bile ducts (C22)	124	77	47	4.3	5.3	3.2
Malignant neoplasm of pancreas (C25)	207	107	100	7.1	7.4	6.8
Malignant neoplasm of larynx (C32)	22	15	7	0.8	1.0	0.5
Malignant neoplasms of trachea, bronchus & lung (C33-C34)	1,044	550	494	35.8	38.0	33.8
Malignant melanoma of skin (C43)	74	52	22	2.5	3.6	1.5
Malignant neoplasm of breast (C50)	326	3	323	11.2	--	22.1
Malignant neoplasm of cervix uteri (C53)	28	--	28	1.0	--	1.9
Malignant neoplasms of corpus uteri & uterus, part unspecified (C54-C55)	48	--	48	1.6	--	3.3
Malignant neoplasm of ovary (C56)	122	--	122	4.2	--	8.3
Malignant neoplasm of prostate (C61)	206	206	--	7.1	14.2	--
Malignant neoplasms of kidney & renal pelvis (C64-C65)	90	59	31	3.1	4.1	2.1
Malignant neoplasm of bladder (C67)	92	59	33	3.2	4.1	2.3
Malignant neoplasms of meninges, brain & other parts of CNS (C70-C72)	142	72	70	4.9	5.0	4.8
Malignant neoplasms of lymphoid, hematopoietic & related tissues (C81-C96)	472	255	217	16.2	17.6	14.8
Hodgkin's disease (C81)	6	4	2	0.2	--	--
Non-Hodgkin's lymphoma (C82-C85)	178	94	84	6.1	6.5	5.7
Leukemia (C91-C95)	192	109	83	6.6	7.5	5.7
Multiple myeloma & immunoproliferative neoplasms (C88, C90)	95	48	47	3.3	3.3	3.2
Other & unspecified malignant neoplasms of lymphoid & related tissues (C96)	1	0	1	--	--	--
All other & unspecified malignant neoplasms (C17, C23-C24, C26-C31, C37-C41, C44- C49, C51-C52, C57-C60, C62-C63, C66, C68-C69, C73-C80, C97)	447	225	222	15.3	15.5	15.2
In situ neoplasms, benign neoplasms, & neoplasms of unknown behavior (D00-D48)	78	33	45	2.7	2.3	3.1
Anemias (D50-D64)	11	1	10	0.4	--	0.7
Diabetes mellitus (E10-E14)	410	191	219	14.1	13.2	15.0
Nutritional deficiencies (E40-E64)	6	2	4	0.2	--	--
Malnutrition (E40-E46)	5	2	3	0.2	--	--
Other nutritional deficiencies (E50-E64)	1	0	1	--	--	--
Meningitis (G00, G03)	5	4	1	0.2	--	--
Parkinson's disease (G20-G21)	140	79	61	4.8	5.5	4.2
Alzheimer's disease (G30)	378	129	249	13.0	8.9	17.0

-- Rates not calculated for fewer than 5 deaths.

¹ Rates per 100,000 Orange County population.

Cause of Death (ICD-10 code)	No. of Deaths			Rate ¹		
	Total	Male	Female	Total	Male	Female
Major cardiovascular diseases (I00-I78)	6,906	3,137	3,769	237.1	216.5	257.6
Diseases of the heart (I00-I09, I11, I13, I20-I51)	5,186	2,433	2,753	178.1	167.9	188.2
Acute rheumatic fever & chronic rheumatic heart diseases (I00-I09)	20	4	16	0.7	--	1.1
Hypertensive heart disease (I11)	154	50	104	5.3	3.5	7.1
Hypertensive heart & renal disease (I13)	26	12	14	0.9	0.8	1.0
Ischemic heart diseases (I20-I25)	4,270	2,036	2,234	146.6	140.5	152.7
Acute myocardial infarction (I21-I22)	1,216	630	586	41.8	43.5	40.1
Other acute ischemic heart disease (I24)	11	6	5	0.4	0.4	0.3
Other forms of chronic ischemic heart disease (I20, I25)	3,043	1,400	1,643	104.5	96.6	112.3
Atherosclerotic cardiovascular disease, so described (I25.0)	570	237	333	19.6	16.4	22.8
All other forms of chronic ischemic heart disease (I20, I25.1-I25.9)	2,473	1,163	1,310	84.9	80.3	89.5
Other heart diseases (I26-I51)	716	331	385	24.6	22.8	26.3
Acute & subacute endocarditis (I33)	8	4	4	0.3	--	--
Diseases of pericardium & acute myocarditis (I30-I31, I40)	7	4	3	0.2	--	--
Heart failure (I50)	207	82	125	7.1	5.7	8.5
All other forms of heart disease (I26-I28, I34-I38, I42-I49, I51)	494	241	253	17.0	16.6	17.3
Essential (primary) hypertension & hypertensive renal disease (I10, I12)	154	62	92	5.3	4.3	6.3
Cerebrovascular diseases (I60-I69)	1,290	513	777	44.3	35.4	53.1
Atherosclerosis (I70)	129	53	76	4.4	3.7	5.2
Other diseases of circulatory system (I71-I78)	147	76	71	5.0	5.2	4.9
Aortic aneurysm & dissection (I71)	97	58	39	3.3	4.0	2.7
Other diseases of arteries, arterioles & capillaries (I72-I78)	50	18	32	1.7	1.2	2.2
Other disorders of circulatory system (I80-I99)	52	24	28	1.8	1.7	1.9
Influenza & pneumonia (J10-J18)	648	292	356	22.3	20.2	24.3
Influenza (J10-J11)	2	1	1	--	--	--
Pneumonia (J12-J18)	646	291	355	22.2	20.1	24.3
Other acute lower respiratory infections (J20-J22)	0	0	0	--	--	--
Acute bronchitis & bronchiolitis (J20-J21)	0	0	0	--	--	--
Unspecified acute lower respiratory infection (J22)	0	0	0	--	--	--

-- Rates not calculated for fewer than 5 deaths.

¹ Rates per 100,000 Orange County population.

Cause of Death (ICD-10 code)	No. of Deaths			Rate ¹		
	Total	Male	Female	Total	Male	Female
Chronic lower respiratory diseases (J40-J47)	914	398	516	31.4	27.5	35.3
Bronchitis, chronic & unspecified (J40-J42)	7	3	4	0.2	--	--
Emphysema (J43)	119	52	67	4.1	3.6	4.6
Asthma (J45-J46)	29	13	16	1.0	0.9	1.1
Other chronic lower respiratory diseases (J44, J47)	759	330	429	26.1	22.8	29.3
Pneumoconioses & chemical effects (J60-J66, J68)	4	4	0	--	--	--
Pneumonitis due to solids and liquids (J69)	5	2	3	0.2	--	--
Other diseases of respiratory system (J00-J06, J30-J39, J67, J70-J98)	128	68	60	4.4	4.7	4.1
Peptic ulcer (K25-K28)	57	26	31	2.0	1.8	2.1
Diseases of appendix (K35-K38)	4	2	2	--	--	--
Hernia (K40-K46)	13	4	9	0.4	--	0.6
Chronic liver disease & cirrhosis (K70, K73-K74)	256	155	101	8.8	10.7	6.9
Alcoholic liver disease (K70)	174	116	58	6.0	8.0	4.0
Other chronic liver disease & cirrhosis (K73-K74)	82	39	43	2.8	2.7	2.9
Cholelithiasis & other disorders of gallbladder (K80-K82)	31	13	18	1.1	0.9	1.2
Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	123	62	61	4.2	4.3	4.2
Acute & rapidly progressive nephritic & nephrotic syndrome (N00-N01, N04)	1	0	1	--	--	--
Chronic glomerulonephritis, nephritis, and nephritis not specified as acute or chronic, & renal sclerosis unspecified (N02-N03, N05-N07, N26)	7	4	3	0.2	--	--
Renal failure (N17-N19)	115	58	57	3.9	4.0	3.9
Other disorders of kidney (N25, N27)	0	0	0	--	--	--
Infections of kidney (N10-N12, N13.6, N15.1)	6	1	5	0.2	--	0.3
Hyperplasia of prostate (N40)	6	6	0	0.2	0.4	--
Inflammatory diseases of female pelvic organs (N70-N76)	0	0	0	--	--	--
Pregnancy, childbirth & the puerperium (O00-O99)	2	--	2	--	--	--
Pregnancy with abortive outcome (O00-O07)	0	--	0	--	--	--
Other complications of pregnancy, childbirth & puerperium (O10-O99)	2	--	2	--	--	--
Certain conditions originating in the perinatal period (P00-P96)	107	63	44	3.7	4.3	3.0
Congenital malformations & chromosomal abnormalities (Q00-Q99)	121	69	52	4.2	4.8	3.6
Symptoms, signs, abnormal clinical & lab findings NEC (R00-R99)	50	30	20	1.7	2.1	1.4

-- Rates not calculated for fewer than 5 deaths.

¹ Rates per 100,000 Orange County population.

Cause of Death (ICD-10 code)	No. of Deaths			Rate ¹		
	Total	Male	Female	Total	Male	Female
All other diseases (residual) (D65-E07, E15-E34, E65-F99, G04-G12, G23-G25, G31-H93, K00-K22, K29-K31, K50-K66, K71-K72, K75-K76, K83-M99, N13.0-N13.5, N13.7-N13.9, N14, N15.0, N15.8-N15.9, N20-N23, N28-N39, N41-N64, N80-N98)	1,018	394	624	35.0	27.2	42.6
Accidents (V01-X59, Y85-Y86)	608	403	205	20.9	27.8	14.0
Transport accidents (V01-V99, Y85)	258	191	67	8.9	13.2	4.6
Motor vehicle accid.(V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6,V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	237	175	62	8.1	12.1	4.2
Other land transport accidents.(V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9	8	7	1	0.3	0.5	--
Water, air, space, other & unspecified transport accidents (V90-V99, Y85)	13	9	4	0.4	0.6	--
Nontransport accidents (W00-X59, Y86)	312	181	131	10.7	12.5	9.0
Falls (W00-W19)	128	63	65	4.4	4.3	4.4
Accidental discharge of firearms (W32-W34)	1	0	1	--	--	--
Accidental drowning and submersion (W65-W74)	26	19	7	0.9	1.3	0.5
Accidental exposure to smoke, fire & flames (X00-X09)	9	2	7	0.3	--	0.5
Accidental poisoning & exposure to noxious substances (X40-X49)	148	97	51	5.1	6.7	3.5
Other & unspecified nontransport accidents (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86)	38	31	7	1.3	2.1	0.5
Intentional self-harm (suicide) (X60-X84, Y87.0)	236	179	57	8.1	12.4	3.9
Intentional self-harm (suicide) by firearms (X72-X74)	92	81	11	3.2	5.6	0.8
Intentional self-harm (suicide) by other & unspecified means (X60-X71, X75-X84, Y87.0)	144	98	46	4.9	6.8	3.1
Assault (homicide) (X85-Y09, Y87.1)	77	61	16	2.6	4.2	1.1
Assault (homicide) by firearms (X93-X95)	46	41	5	1.6	2.8	0.3
Assault (homicide) by other & unspecified means (X85-X92, X96-Y09, Y87.1)	31	20	11	1.1	1.4	0.8
Legal intervention (Y35, Y89.0)	4	4	0	--	--	--
Events of undetermined intent (Y10-Y34, Y87.2, Y89.9)	11	5	6	0.4	0.3	0.4
Discharge of firearms, undetermined intent (Y22-Y24)	0	0	0	--	--	--
Other & unspecified events of undetermined intent (Y10-Y21, Y25-Y34, Y87.2, Y89.9)	11	5	6	0.4	0.3	0.4
Sequelae of war operations (Y89.1).....	1	1	0	--	--	--
Complications of medical & surgical care (Y40-Y84, Y88)	5	3	2	0.2	--	--

-- Rates not calculated for fewer than 5 deaths.

¹ Rates per 100,000 Orange County population.

Section 3. Deaths by Race/Ethnicity

Number of Deaths by Race / Ethnicity with Crude and Age-Adjusted Rates¹ Orange County Residents, 2001

Race / Ethnicity ² of Decedent	Number	Percent of Total	Crude Rate	Age-Adjusted Rate
Hispanic	1,716	10.3%	188.3	556.8
Non-Hispanic				
White	13,491	80.6%	910.1	749.4
Asian	1,238	7.4%	306.6	493.5
Other Asian ³	760	4.5%	--	--
Southeast Asian ⁴	478	2.9%	--	--
African-American	191	1.1%	422.9	836.4
Native Hawaiian or Pacific Islander	39	0.2%	422	887.3
American Indian or Alaskan Native	37	0.2%	311.1	496.7
Unknown / Not Stated	22	0.1%	--	--
Total	16,734	100.00%	574.6	695.6

¹ Rates per 100,000 Orange County population.

² American Indian or Alaskan Native, Black, Native Hawaiian or Pacific Islander, Other Asian, Southeast Asian, and White exclude Hispanic ethnicity. Hispanic includes any race category.

³ Other Asian includes Asian either Specified or Unspecified, Asian Indian, Chinese, Filipino, Japanese, and Korean.

⁴ Southeast Asian includes Cambodian, Hmong, Laotian, Thai, and Vietnamese.

-- Rates not provided as population figures are not available from the State of California.

Fifteen Leading Causes of Death

Non-Hispanic White

Orange County Residents, 2001

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Percent</u>
1	Diseases of the heart (I00-I09, I11, I13, I20-I51)	4,406	32.7
2	Malignant neoplasms (C00-C97)	3,266	24.2
3	Cerebrovascular diseases (I60-I69)	1,022	7.6
4	Chronic lower respiratory diseases (J40-J47)	808	6.0
5	Influenza & pneumonia (J10-J18)	536	4.0
6	Accidents (V01-X59, Y85-Y86)	413	3.1
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	131	1.0
-	<i>All other accidents</i>	282	2.1
7	Alzheimer's disease (G30)	356	2.6
8	Diabetes mellitus (E10-E14)	268	2.0
9	Chronic liver disease & cirrhosis (K70, K73-K74)	193	1.4
10	Intentional self-harm (suicide) (X60-X84, Y87.0)	185	1.4
11	Parkinson's disease (G20-G21)	125	0.9
12	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	122	0.9
13	Atherosclerosis (I70)	113	0.8
14	Aortic aneurysm & dissection (I71)	84	0.6
15	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	83	0.6
-	All other causes	1,511	11.2
	Total	13,491	100.0

Fifteen Leading Causes of Death

Hispanic

Orange County Residents, 2001

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Percent</u>
1	Malignant neoplasms (C00-C97)	395	23.0
2	Diseases of the heart (I00-I09, I11, I13, I20-I51)	394	23.0
3	Accidents (V01-X59, Y85-Y86)	134	7.8
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	67	3.9
-	<i>All other accidents</i>	67	3.9
4	Cerebrovascular diseases (I60-I69)	116	6.8
5	Diabetes mellitus (E10-E14)	87	5.1
6	Congenital malformations & chromosomal abnormalities (Q00-Q99)	55	3.2
7	Influenza & pneumonia (J10-J18)	50	2.9
8	Chronic liver disease & cirrhosis (K70, K73-K74)	49	2.9
9	Chronic lower respiratory diseases (J40-J47)	47	2.7
10	Certain conditions originating in the perinatal period (P00-P96)	45	2.6
11	Assault (homicide) (X85-Y09, Y87.1)	38	2.2
12	Human immunodeficiency virus (HIV) disease (B20-B24)	24	1.4
12	Intentional self-harm (suicide) (X60-X84, Y87.0)	24	1.4
14	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	16	0.9
14	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	16	0.9
-	All other causes	226	13.2
	Total	1,716	100.0

Fifteen Leading Causes of Death

Southeast Asian¹

Orange County Residents, 2001

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Percent</u>
1	Malignant neoplasms (C00-C97)	127	26.6
2	Diseases of the heart (I00-I09, I11, I13, I20-I51)	106	22.2
3	Cerebrovascular diseases (I60-I69)	57	11.9
4	Influenza & pneumonia (J10-J18)	23	4.8
5	Chronic lower respiratory diseases (J40-J47)	19	4.0
6	Accidents (V01-X59, Y85-Y86)	17	3.6
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	12	2.5
-	<i>All other accidents</i>	5	1.0
7	Diabetes mellitus (E10-E14)	13	2.7
8	Intentional self-harm (suicide) (X60-X84, Y87.0)	9	1.9
9	Viral hepatitis (B15-B19)	8	1.7
9	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	8	1.7
11	Alzheimer's disease (G30)	7	1.5
11	Congenital malformations & chromosomal abnormalities (Q00-Q99)	7	1.5
13	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	6	1.3
14	Chronic liver disease & cirrhosis (K70, K73-K74)	5	1.0
15	Assault (homicide) (X85-Y09, Y87.1)	4	0.8
-	All other causes	62	13.0
	Total	478	100.0

¹ Southeast Asian includes Cambodian, Hmong, Laotian, Thai, and Vietnamese.

Fifteen Leading Causes of Death

Other Asian¹

Orange County Residents, 2001

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Percent</u>
1	Malignant neoplasms (C00-C97)	231	30.4
2	Diseases of the heart (I00-I09, I11, I13, I20-I51)	194	25.5
3	Cerebrovascular diseases (I60-I69)	78	10.3
4	Accidents (V01-X59, Y85-Y86)	36	4.7
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	23	3.0
-	<i>All other accidents</i>	13	1.7
5	Chronic lower respiratory diseases (J40-J47)	30	3.9
6	Diabetes mellitus (E10-E14)	26	3.4
7	Influenza & pneumonia (J10-J18)	25	3.3
8	Intentional self-harm (suicide) (X60-X84, Y87.0)	14	1.8
9	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	11	1.4
10	Chronic liver disease & cirrhosis (K70, K73-K74)	7	0.9
11	Alzheimer's disease (G30)	6	0.8
11	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	6	0.8
11	Atherosclerosis (I70)	6	0.8
14	Parkinson's disease (G20-G21)	5	0.7
14	Aortic aneurysm & dissection (I71)	5	0.7
-	All other causes	80	10.5
	Total	760	100.0

¹Other Asian includes Asian Specified and Unspecified, Asian Indian, Chinese, Filipino, Japanese, and Korean.

Fifteen Leading Causes of Death
African-American
Orange County Residents, 2001

<u>Rank</u>	<u>Cause of Death & ICD-10 Codes</u>	<u>Number</u>	<u>Percent</u>
1	Diseases of the heart (I00-I09, I11, I13, I20-I51)	50	26.2
2	Malignant neoplasms (C00-C97)	48	25.1
3	Cerebrovascular diseases (I60-I69)	12	6.3
4	Certain conditions originating in the perinatal period (P00-P96)	8	4.2
4	Accidents (V01-X59, Y85-Y86)	8	4.2
-	<i>Motor vehicle accid.</i> (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2).....	4	2.1
-	<i>All other accidents</i>	4	2.1
6	Diabetes mellitus (E10-E14)	7	3.7
6	Influenza & pneumonia (J10-J18)	7	3.7
8	Chronic lower respiratory diseases (J40-J47)	6	3.1
8	Assault (homicide) (X85-Y09, Y87.1)	6	3.1
10	Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	5	2.6
11	Human immunodeficiency virus (HIV) disease (B20-B24)	4	2.1
11	Essential (primary) hypertension & hypertensive renal disease (I10, I12)	4	2.1
11	Intentional self-harm (suicide) (X60-X84, Y87.0)	4	2.1
14	Alzheimer's disease (G30)	2	1.0
14	Congenital malformations & chromosomal abnormalities (Q00-Q99)	2	1.0
-	All other causes	18	9.4
	Total	<u>191</u>	<u>100.0</u>

Section 4. Additional Tables

Fifteen Leading Causes of Death by Selected Race/Ethnicity with Crude and Age-Adjusted Rates* Orange County Residents, 2001

Cause of Death	All Races			White			Hispanic			Asian			African Am.		
	No.	Rate	Age-adj. Rate	No.	Rate	Age-adj. Rate	No.	Rate	Age-adj. Rate	No.	Rate	Age-adj. Rate	No.	Rate	Age-adj. Rate
Diseases of the heart (I00-I09, I11, I13, I20-I51)	5,186	178.1	220.5	4,406	297.2	238.7	394	43.2	166.3	300	74.3	133.3	50	110.7	267.5
Malignant neoplasms (C00-C97)	4,091	140.5	168.4	3,266	220.3	184.3	395	43.3	120.0	358	88.7	123.7	48	106.3	171.7
Cerebrovascular diseases (I60-I69)	1,290	44.3	55.4	1,022	69.0	55.1	116	12.7	52.6	135	33.4	58.5	12	26.6	70.4
Chronic lower respiratory diseases (J40-J47)	914	31.4	39.3	808	54.5	44.7	47	5.2	21.1	49	12.1	23.5	6	13.3	33.3
Influenza & pneumonia (J10-J18)	648	22.3	28.0	536	36.2	28.6	50	5.5	24.8	48	11.9	23.9	7	15.5	56.9
Accidents (V01-X59, Y85-Y86)	608	20.9	22.3	413	27.9	25.9	134	14.7	21.5	53	13.1	15.3	8	17.7	14.9
Motor vehicle accidents	237	8.1	8.4	131	8.8	8.7	67	4.5	4.7	35	2.4	2.4	4	...	...
All other accidents	371	12.7	13.9	282	19.0	17.2	67	4.5	4.4	18	1.2	1.2	4	...	...
Diabetes mellitus (E10-E14)	410	14.1	17.1	268	18.1	14.9	87	9.5	32.2	39	9.7	16.4	7	15.5	39.7
Alzheimer's disease (G30)	378	13.0	16.4	356	24.0	18.7	7	0.8	3.7	13	3.2	7.9	2	...	...
Chronic liver disease & cirrhosis (K70, K73-K74)	256	8.8	9.8	193	13.0	11.1	49	5.4	13.7	12	3.0	4.1	1	...	...
Intentional self-harm (suicide) (X60-X84, Y87.0)	236	8.1	8.5	185	12.5	11.6	24	2.6	3.6	23	5.7	5.7	4	...	...
Essential (primary) hypertension & hypertensive renal disease (I10, I12)	154	5.3	6.6	122	8.2	6.5	16	1.8	7.2	12	3.0	5.0	4	...	...
Parkinson's disease (G20-G21)	140	4.8	6.1	125	8.4	6.8	7	0.8	3.6	8	2.0	3.5	0	...	...
Atherosclerosis (I70)	129	4.4	5.6	113	7.6	6.0	9	1.0	5.0	6	1.5	3.8	0	...	...
Nephritis, nephrotic syndrome & nephrosis (N00-N07, N17-N19, N25-N27)	123	4.2	5.3	83	5.6	4.5	16	1.8	6.7	19	4.7	8.8	5	11.1	23.1
Congenital malformations & chromosomal abnormalities (O00-O99)	121	4.2	4.0	52	3.5	3.9	55	6.0	4.7	11	2.7	3.3	2	...	...
Certain conditions originating in perinatal period (P00-P96)	107	3.7	3.3	48	3.2	4.5	45	4.9	2.8	5	1.2	1.3	8	17.7	28.6
Aortic aneurysm & dissection (I71)	97	3.3	4.1	84	5.7	4.7	6	0.7	1.5	7	1.7	2.6	0	...	...
In situ neoplasms, benign neoplasms, & neoplasms of unknown behavior (D00-D48)	78	2.7	3.2	66	4.5	3.6	6	0.7	1.6	6	1.5	1.7	0	...	...
Assault (homicide) (X85-Y09, Y87.1)	77	2.6	2.6	26	1.8	1.8	38	4.2	3.6	6	1.5	1.4	6	13.3	13.8
Peptic ulcer (K25-K28)	57	2.0	2.4	47	3.2	2.6	4	...	...	6	1.5	3.2	0	...	...
Human immunodeficiency virus (HIV) disease (B20-B24)	54	1.9	1.9	25	1.7	1.5	24	2.6	3.4	1	...	...	4	...	...
Viral hepatitis (B15-B19)	47	1.6	1.8	28	1.9	1.6	8	0.9	1.9	10	2.5	2.7	1	...	...

* Rate per 100,000 Orange County population within specified racial/ethnic group.

Not among 15 leading causes of death

-- Rate not calculated for fewer than five deaths.

**Deaths Due to Malignant Neoplasms with Race/Ethnicity and Gender Detail
Orange County Residents, 2001**

	Rate ¹	All races		White		Hispanic		SE Asian		Oth. Asian		African Am.		Other ²		
		Total	M	F	M	F	M	F	M	F	M	F	M	F		
Malignant Neoplasms (C00-C97)	140.5	4,091	2,024	2,067	1,611	1,655	187	208	75	52	120	111	21	27	10	14
Trachea, bronchus & lung (C33-C34)	35.8	1,044	550	494	453	410	34	35	22	17	35	21	3	7	3	4
Lymphoid, hematopoietic & related tissues (C81-C96)	16.2	472	255	217	194	173	41	23	7	6	8	9	4	3	1	3
Hodgkin's disease (C81)	0.2	6	4	2	3	2	1	0	0	0	0	0	0	0	0	0
Non-Hodgkin's lymphoma (C82-C85)	6.1	178	94	84	73	68	13	6	2	2	5	5	1	1	0	2
Leukemia (C91-C95)	6.6	192	109	83	83	65	19	12	4	3	2	3	1	0	0	0
Multiple myeloma & immunoproliferative (C88, C90)	3.3	95	48	47	35	37	8	5	1	1	1	1	2	2	1	1
Other & unspecified malignant neoplasms of lymphoid, haematopoietic and related tissue (C96)	...	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Colon, rectum & anus(C18-C21)	12.3	358	165	193	131	159	15	18	5	3	8	10	5	3	1	0
Breast ³ (C50)	11.2	326	3	323	3	257	0	36	0	6	0	16	0	6	0	2
Pancreas (C25)	7.1	207	107	100	87	82	10	8	2	2	7	7	1	0	0	1
Prostate (C61)	14.2	206	206	...	181	...	15	...	0	...	7	...	1	...	2	...
Meninges, brain & other parts of CNS (C70-C72)	4.9	142	72	70	60	55	8	10	0	1	4	3	0	1	0	0
Stomach (C16)	4.5	131	71	60	35	36	11	11	9	4	15	8	0	0	1	1
Liver and intrahepatic bile ducts (C22)	4.3	124	77	47	41	25	9	7	14	4	12	9	1	2	0	0
Ovary (C56)	8.3	122	...	122	...	106	...	10	...	1	...	4	...	0	...	1
Bladder (C67)	3.2	92	59	33	52	27	4	3	1	0	2	1	0	1	0	1
Esophagus (C15)	3.1	91	70	21	58	19	7	1	4	0	1	1	0	0	0	0
Kidney & renal pelvis (C64-C65)	3.1	90	59	31	46	19	5	7	0	0	6	5	1	0	1	0
Melanoma of skin (C43)	2.5	74	52	22	50	22	2	0	0	0	0	0	0	0	0	0
Lip, oral cavity & pharynx (C00-C14)	2.3	67	38	29	32	28	2	1	2	0	2	0	0	0	0	0
Corpus uteri and uterus, part unspecified (C54-C55)	3.3	48	...	48	...	41	...	4	...	0	...	3	...	0	...	0
Cervix uteri (C53)	1.9	28	...	28	...	11	...	12	...	3	...	1	...	1	...	0
Larynx (C32)	0.8	22	15	7	11	7	2	0	2	0	0	0	0	0	0	0
All other & unspecified malignant neoplasms	15.3	447	225	222	177	178	22	22	7	5	13	13	5	3	1	1

¹ Rate is calculated per 100,000 Orange County population. The rate is sex-specific when neoplasm is applicable to one gender.

² In this table, Other includes Native Hawaiian and Pacific Islander, American Indian and Alaskan Native, and those who are not assigned to a previous category.

³ Due to the three male deaths from breast cancer, the presented rate is for the whole population; women's breast cancer rate is 20.4 per 100,000.

**Deaths Due to External Causes with Age and Gender Detail
Orange County Residents, 2001**

Cause of Death	Sex	Age Group (Years)													
		All Ages	Under 1 yr.	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total, external causes (V01-Y89)	M	656	4	6	1	10	39	65	112	117	109	68	40	54	31
	F	286	4	4	4	2	7	18	21	43	48	22	31	44	38
	All	942	8	10	5	12	46	83	135	160	157	90	71	98	69
Motor vehicle accidents (see ICD-10 codes at the end of table)	M	175	1	2	1	6	14	21	36	26	24	16	10	14	4
	F	62	0	0	3	2	1	7	10	7	11	5	5	9	2
	All	237	1	2	4	8	15	28	46	33	35	21	15	23	6
Intentional self-harm (suicide) (X60-X84, Y87.0)	M	179	0	0	0	1	6	14	28	34	38	26	11	15	6
	F	57	0	0	0	0	2	4	6	10	17	7	6	4	1
	All	236	0	0	0	1	8	18	34	44	55	33	17	19	7
Accidental poisoning & exposure to noxious substances (X40-X49)	M	97	0	0	0	0	4	6	20	37	19	7	4	0	0
	F	51	2	0	0	0	1	3	0	16	16	5	4	3	1
	All	148	2	0	0	0	5	9	20	53	35	12	8	3	1
Falls (W00-W19)	M	63	0	0	0	0	1	5	2	4	6	6	6	17	16
	F	65	0	0	0	0	1	0	0	0	2	0	10	23	29
	All	128	0	0	0	0	2	5	2	4	8	6	16	40	45
Assault (homicide) (X85-Y09, Y87.1)	M	61	1	0	0	0	10	15	14	4	10	5	2	0	0
	F	16	2	1	0	0	1	3	2	4	1	1	1	0	0
	All	77	3	1	0	0	11	18	16	8	11	6	3	0	0
Other & unspecified non-transport accidents (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86)	M	31	1	0	0	2	2	1	6	5	4	1	2	4	3
	F	7	0	1	0	0	0	0	0	0	0	1	2	1	2
	All	38	1	1	0	2	2	1	6	5	4	2	4	5	5
Accidental drowning & submersion (W65-W74)	M	19	1	4	0	1	1	1	3	0	4	2	0	1	1
	F	7	0	2	1	0	1	0	1	0	0	0	1	1	0
	All	26	1	6	1	1	2	1	4	0	4	2	1	2	1
Water, air, space, other & unspecified transport accidents (V90-V99, Y85)	M	9	0	0	0	0	0	0	0	2	0	4	2	0	1
	F	4	0	0	0	0	0	1	1	2	0	0	0	0	0
	All	13	0	0	0	0	0	1	1	4	0	4	2	0	1

(Table continued on next page)

Deaths Due to External Causes with Age and Gender Detail, continued
Orange County Residents, 2001

Cause of Death	Sex	Age Group (Years)													
		All Ages	Under 1 yr.	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Undetermined intent - other & unspecified (Y10-Y21, Y25-Y34, Y89.9)	M	5	0	0	0	0	0	0	0	2	2	0	1	0	0
	F	6	0	0	0	0	0	0	0	2	1	1	1	1	0
	All	11	0	0	0	0	0	0	0	4	3	1	2	1	0
Accidental exposure to smoke, fire & flames (X00-X09)	M	2	0	0	0	0	0	0	0	0	0	0	1	1	0
	F	7	0	0	0	0	0	0	0	1	0	2	1	0	3
	All	9	0	0	0	0	0	0	0	1	0	2	2	1	3
Land transport accidents (other than motor vehicle) (see ICD-10 codes at the end of table)	M	7	0	0	0	0	0	0	2	3	0	1	1	0	0
	F	1	0	0	0	0	0	0	1	0	0	0	0	0	0
	All	8	0	0	0	0	0	0	3	3	0	1	1	0	0
Complications of medical & surgical care (Y40-Y84, Y88)	M	3	0	0	0	0	0	0	0	0	2	0	0	1	0
	F	2	0	0	0	0	0	0	0	0	0	0	0	2	0
	All	5	0	0	0	0	0	0	0	0	2	0	0	3	0
Legal intervention (Y35, Y89.0)	M	4	0	0	0	0	1	2	1	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	All	4	0	0	0	0	1	2	1	0	0	0	0	0	0
Accidental discharge of firearms (W32-W34)	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	F	1	0	0	0	0	0	0	0	1	0	0	0	0	0
	All	1	0	0	0	0	0	0	0	1	0	0	0	0	0
Sequelae of war operations (Y89.1)	M	1	0	0	0	0	0	0	0	0	0	0	0	1	0
	F	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	All	1	0	0	0	0	0	0	0	0	0	0	0	1	0

ICD-10 codes for motor vehicle accidents: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2

ICD-10 codes for land transport accidents (other than motor vehicle accidents): V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9

Deaths Due to Transport Accidents with Age Detail Orange County Residents, 2001

	Age Group (Years)													
	All	< 1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total, transport accident deaths (V01-V99, Y85).....	258	1	2	4	8	15	29	50	40	35	26	18	23	7
Occupant of car, pick-up truck, or van (V40-V59) in:.....	117	1	1	0	4	9	15	25	17	12	10	8	13	2
Collision with car, van or pick-up (V43, V53).....	63	1	0	0	2	2	8	9	9	7	7	5	11	2
Collision with stationary objects (V47, V57).....	30	0	1	0	0	5	5	7	5	3	2	1	1	0
Non-collision accidents (V48, V58).....	13	0	0	0	2	2	0	6	2	0	0	0	1	0
Collision with heavy transp. vehicle or bus (V44, V54).....	6	0	0	0	0	0	1	2	0	1	1	1	0	0
Collision with railway vehicle (V45, V55).....	1	0	0	0	0	0	1	0	0	0	0	0	0	0
Collision with other nonmotor vehicle (V46, V56).....	1	0	0	0	0	0	0	0	1	0	0	0	0	0
Other & unspecified accidents (V49, V59).....	3	0	0	1	0	0	0	1	0	1	0	1	0	0
Pedestrian (V01-V09)	62	0	1	2	3	2	7	10	10	8	6	4	6	3
Motor vehicle related (V02-V04, V09.0, V09.2).....	56	0	1	2	3	2	7	7	8	8	5	4	6	3
Railway (V05).....	4	0	0	0	0	0	0	3	1	0	0	0	0	0
Other and unspecified (V09.1, V09.3-V09.9).....	2	0	0	0	0	0	0	0	1	0	1	0	0	0
Motor cyclist (V20-V29).....	31	0	0	1	1	1	4	9	6	5	3	0	1	0
Pedal cyclist (V10-V19)	12	0	0	0	0	1	0	2	1	3	2	2	0	1
Person in unspecified motor vehicle accidents (V89.2).....	12	0	0	1	0	1	1	2	0	3	1	2	1	0
Person in specified but unknown mode of transp. (V87).....	10	0	0	0	0	1	1	1	2	3	0	0	2	0
Occupant of aircraft (V95-V97).....	7	0	0	0	0	0	0	0	2	0	3	2	0	0
Sequelae of transport accident (Y85).....	6	0	0	0	0	0	1	1	2	0	1	0	0	1
Occupant of heavy transport vehicle (V60-V69).....	1	0	0	0	0	0	0	0	0	1	0	0	0	0
Person in unspecified other land transp. accid. (V89.9).....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water transport accidents (V90-V94).....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occupant of off-road vehicle (V86).....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Animal rider or occupant of animal-drawn vehicle, (fall from or being thrown from in noncollision accid.) (V80.0).....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Driver of special construction vehicle (V85.0).....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occupant of 3-wheel motor vehicle (V30-V39).....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occupant of railway vehicle (V81).....	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Deaths Due to Intentional Self-Harm (Suicide) by Method, Age, and Sex
Orange County Residents, 2001

Method	Sex	Age Group (Years)*										
		All	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
All methods (X60-X84, Y87)	M	179	1	6	14	28	34	38	26	11	15	6
	F	57	0	2	4	6	10	17	7	6	4	1
	Tot.	236	1	8	18	34	44	55	33	17	19	7
	Rate ¹	8.1	--	4.0	9.3	7.3	9.0	14.5	13.8	11.2	18.7	19.5
Firearms and explosives (X72-X75)	M	81	0	3	7	10	11	19	12	6	10	3
	F	11	0	0	1	2	2	2	1	3	0	0
	Tot.	92	0	3	8	12	13	21	13	9	10	3
	Rate ¹	3.2	--	--	4.1	2.6	2.7	5.5	5.4	5.9	9.9	--
Hanging, strangulation, suffocation (X70)	M	46	0	1	5	11	11	5	6	1	4	2
	F	16	0	1	1	1	3	4	2	1	2	1
	Tot.	62	0	2	6	12	14	9	8	2	6	3
	Rate ¹	2.1	--	--	3.1	2.6	2.9	2.4	3.3	--	5.9	--
Drugs and alcohol (X60-X65)	M	26	1	1	1	2	5	8	4	2	1	1
	F	22	0	1	2	1	3	9	4	1	1	0
	Tot.	48	1	2	3	3	8	17	8	3	2	1
	Rate ¹	1.6	--	--	--	--	1.6	4.5	3.3	--	--	--
Poisoning by gases, vapors, pesticides & unspecified chemicals (X66-X69)	M	10	0	0	0	0	3	3	2	2	0	0
	F	3	0	0	0	1	0	1	0	1	0	0
	Tot.	13	0	0	0	1	3	4	2	3	0	0
	Rate ¹	0.4	--	--	--	--	--	--	--	--	--	--
Sharp objects (X78)	M	6	0	0	0	3	1	1	1	0	0	0
	F	0	0	0	0	0	0	0	0	0	0	0
	Tot.	6	0	0	0	3	1	1	1	0	0	0
	Rate ¹	0.2	--	--	--	--	--	--	--	--	--	--

(Table continued on next page)

*Age groups under 10 not shown as there were no deaths due to intentional self-harm in year 2001 for these age groups.

-- Rate not calculated for individual age group.

¹ Rate is calculated per 100,000 Orange County population and within each specific age group.

Deaths Due to Intentional Self-Harm (Suicide)

By Method, Age, and Sex, continued

Orange County Residents, 2001

Method	Sex	Age Group (Years)*										
		All	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Intentional self-harm by crashing of motor vehicle (X82)	M	4	0	1	0	1	0	2	0	0	0	0
	F	2	0	0	0	1	1	0	0	0	0	0
	Tot.	6	0	1	0	2	1	2	0	0	0	0
	Rate ¹	0.2	--	--	--	--	--	--	--	--	--	--
Jumping from a high place (X80)	M	2	0	0	0	0	2	0	0	0	0	0
	F	2	0	0	0	0	1	1	0	0	0	0
	Tot.	4	0	0	0	0	3	1	0	0	0	0
	Rate ¹	--	--	--	--	--	--	--	--	--	--	--
Jumping or lying before moving objects (X81)	M	3	0	0	0	1	1	0	1	0	0	0
	F	0	0	0	0	0	0	0	0	0	0	0
	Tot.	3	0	0	0	1	1	0	1	0	0	0
	Rate ¹	--	--	--	--	--	--	--	--	--	--	--
Drowning and submersion (X71)	M	1	0	0	0	0	0	0	1	0	0	0
	F	1	0	0	0	0	0	0	0	0	1	0
	Tot.	2	0	0	0	0	0	0	1	0	1	0
	Rate ¹	--	--	--	--	--	--	--	--	--	--	--
Intentional self harm by other means, specified and unspecified (X83-X84, Y87)	M	1	0	0	1	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0	0
	Tot.	1	0	0	1	0	0	0	0	0	0	0
	Rate ¹	--	--	--	--	--	--	--	--	--	--	--

*Age groups under 10 not shown as there were no deaths due to intentional self-harm in year 2001 for these age groups.

-- Rate not calculated for individual age group.

¹ Rate is calculated per 100,000 Orange County population and within each specific age group.

**Deaths Due to Assault (Homicide) by Method, Age, and Sex
Orange County Residents, 2001**

Method	Sex	Age Group (Years)													
		All	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
All methods (X85-Y09, Y87.1)	M	61	1	0	0	0	10	15	14	4	10	5	2	0	0
	F	16	2	1	0	0	1	3	2	4	1	1	1	0	0
	Total	77	3	1	0	0	11	18	16	8	11	6	3	0	0
Firearms & explosives (X93-X96)	M	41	0	0	0	0	6	12	10	2	7	3	1	0	0
	F	5	0	0	0	0	0	2	2	1	0	0	0	0	0
	Total	46	0	0	0	0	6	14	12	3	7	3	1	0	0
Sharp objects (X99)	M	7	0	0	0	0	2	3	1	0	1	0	0	0	0
	F	2	0	0	0	0	0	0	0	2	0	0	0	0	0
	Total	9	0	0	0	0	2	3	1	2	1	0	0	0	0
Other & unspecified means (Y08-Y09)	M	4	0	0	0	0	0	0	0	2	0	2	1	0	0
	F	3	0	0	0	0	1	0	0	0	0	0	1	0	0
	Total	7	0	0	0	0	1	0	0	2	0	2	2	0	0
Hanging, strangulation & suffocation (X91)	M	2	0	0	0	0	2	0	0	0	0	0	0	0	0
	F	3	1	0	0	0	0	1	0	0	1	0	0	0	0
	Total	5	1	0	0	0	2	1	0	0	1	0	0	0	0
Sequelae of assault (Y87.1)	M	3	0	0	0	0	0	0	3	0	0	0	0	0	0
	F	1	0	0	0	0	0	0	0	0	0	1	0	0	0
	Total	4	0	0	0	0	0	0	3	0	0	1	0	0	0
Other maltreatment syndromes (including mental cruelty, physical abuse, sexual abuse, torture), (excluding sexual assault by bodily force) (Y07)	M	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	F	2	1	1	0	0	0	0	0	0	0	0	0	0	0
	Total	3	2	1	0	0	0	0	0	0	0	0	0	0	0
Assault by pushing or placing victim before moving object (Y02)	M	1	0	0	0	0	0	0	0	0	1	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1	0	0	0	0	0	0	0	0	1	0	0	0	0
Blunt objects (Y00)	M	1	0	0	0	0	0	0	0	0	1	0	0	0	0
	F	1	0	0	0	0	0	0	0	1	0	0	0	0	0
	Total	2	0	0	0	0	0	0	0	1	1	0	0	0	0

Deaths Due to Firearm Discharge by Method, Age, and Sex
Orange County Residents, 2001

	Sex	Age Group (Years)*									
		All	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Firearm discharge, total (W32-W34, X72-X74, X93-X95, Y22-Y24, Y35.0)	M	126	10	21	21	13	26	15	7	10	3
	F	17	0	3	4	4	2	1	3	0	0
	All	143	10	24	25	17	28	16	10	10	3
Firearm used in suicide (X72 - X74)	M	81	3	7	10	11	19	12	6	10	3
	F	11	0	1	2	2	2	1	3	0	0
	All	92	3	8	12	13	21	13	9	10	30
Firearm used in homicide (X93-X95)	M	41	6	12	10	2	7	3	1	0	0
	F	5	0	2	2	1	0	0	0	0	0
	All	46	6	14	12	3	7	3	1	0	0
Legal intervention involving firearm discharge (Y35.0)	M	4	1	2	1	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	All	4	1	2	1	0	0	0	0	0	0
Firearm discharge, accidental (W32-W34)	M	0	0	0	0	0	0	0	0	0	0
	F	1	0	0	0	1	0	0	0	0	0
	All	1	0	0	0	1	0	0	0	0	0

* Age groups 10-14 and younger not shown because there were no deaths associated with firearms in year 2001 for these age groups.

Appendix 1 **Technical Notes**

Important note to readers of this report

Significant changes in coding causes of death and in age adjustment were implemented with 1999 mortality data and have continued with the 2001 mortality data. It is important to keep in mind that these changes make direct comparisons with mortality data from years 1998 and prior of uncertain validity, with the exception of comparisons of deaths due to all causes. A brief explanation of the changes follows.

International Classification of Diseases (ICD) 10th Revision

The International Classification of Diseases (ICD) 10th Revision has significant differences from the 9th revision: 1) changes in the actual codes, with a near doubling of the number of codes available; 2) changes in some of the methods for assigning the underlying cause of death; and 3) changes in the grouping of codes to determine leading causes of death. Therefore, there is not a one to one correspondence between codes used in the 9th and 10th revisions; similarly, there may not be a one to one correspondence between groups of causes (as in the leading causes of death).

The federal government calculated “comparability ratios” for the change from ICD-9 to ICD-10 and uses them for trend analysis. However, the State of California has chosen not to use comparability ratios, and it is not clear how accurate these are at the county level. Among the most significant changes are a large decrease in deaths attributed to *Influenza and pneumonia*, estimated at 30%, and an increase in those due to *Alzheimer’s disease*, approximately 55%.

Age adjustment

Age adjustment is a statistical procedure used to remove the affect of different age distributions when comparing populations with different age structures (see the “Computation of Rates” section). A “standard population” is chosen for this procedure. Prior to 1999, most reports of mortality data have used the 1940 United States standard population (1940 standard) for age adjustment. Beginning with the 1999 mortality report, the federal government began using the year 2000 United States standard population (2000 standard), which is also used in this report. Care must be exercised in comparing age-adjusted data from different reports to be sure that the same population standard was used. Since the age distribution of the 2000 standard is shifted to older age groups, reflecting the growth in this population segment since 1940, and because death rates increase with age, the age-adjusted death rates using the new standard are, in most instances, larger than those using the 1940 standard. Please see “Age Standardization of death Rates: Implementation of the Year 2000 Standard” published by the National Center for Health Statistics (available at: http://www.cdc.gov/nchs/data/nvsr/nvsr47/nvs47_03.pdf) for more information about how the change in population standard affects trends and comparisons of racial/ethnic death rates.

Use of State of California mortality data file

Until 1999, Orange County used a locally generated file for analysis of mortality data. Beginning with 1999 data and continuing with the 2001 data, the file provided by the State of California is used. The use of the State data file as opposed to the Orange County data file ensures greater consistency between Orange County and California published reports.

Cause-of-death classification and ranking

Beginning in 1999, the federal government and the State of California implemented significant changes in the method of coding underlying cause of death by adopting the International Classification of Diseases – Tenth Revision (ICD-10). ICD-10 provides significant benefits over ICD-9, the previous classification system, by using more expanded and detailed classifications of diseases. A consequence of the change in coding schemes is the moving of certain underlying causes of death from one major grouping to another. For example, transient cerebral ischemic attacks have been moved from *Diseases of the circulatory system* to *Diseases of the nervous system*.

The cause-of-death ranking used in this document is based on the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS) list of 113 selected causes of death and the list's subsection of the 50 rankable causes of death. These rankings are the same as those used in the Federal and State of California mortality reports. For infant deaths, a separate list of 130 selected causes of infant death has been used with a subset of 71 rankable causes of infant death. When a rankable cause of death includes further sub-categories or individual diseases, only the broader category is ranked; its comprising detailed causes are not ranked. Category titles that begin with the words "other" or "all other" are also not ranked. Additionally, the group titles *Major cardiovascular diseases* and *Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified* are not ranked.

Computation of rates

The rates used in various tables are per 100,000 Orange County population. In tables where causes of death are reported by either age group or by race/ethnicity group, the rates are based on 100,000 population within the specific age or race/ethnicity group. For example, cause-of-death rates for persons of Hispanic origin are based on the resident Hispanic population in Orange County.

Rates are not calculated where the number of deaths is fewer than five. Random variation in a given cause of death could produce misleading variations in mortality rates when the number of deaths is very small.

Infant deaths

The rate used for infant deaths is as follows:

(The number of deaths among children less than one year of age during the year) ÷ (The number of children aged less than one year in the population during the same year) x 100,000.

The more familiar measure, the infant mortality rate, is actually a ratio of the number of infant deaths divided by the number of live births during the year in question. Infant mortality rates are presented in the annual summary of natality data.

Age-adjusted rates vs. crude rates

Age is a leading risk factor for many causes of death. When comparing populations, such as the Orange County population with the United States population, differences in age structure can account for some of the sometimes very large differences in the unadjusted (crude) rates. Age adjustment, also known as age standardization, is performed in order to remove the effect of age from the comparison. An age-adjusted rate is a summary number representing a weighted average of age-specific rates. The weights for each age group are provided by use of a "standard" population.

Beginning with the year 1999, the federal and state mortality reports use the year 2000 standard population, replacing the earlier 1940 standard population figures, when calculating age-adjusted rates. As a result, and because of the change from ICD-9 to ICD-10, age-adjusted rates in this report cannot be used for comparing present data with data published prior to 1999.

The adjustment weights used in this report were obtained from the NCHS and are listed in the following table¹.

Age distribution and age-adjustment weights based on the 2000 U.S. population

Age Group	Number	Adjustment Weight
All Ages	1,000,000	1.000000
Under 1 year	13,818	0.013818
1 – 4 years	55,317	0.055317
5 – 14 years	145,565	0.145565
15 – 24 years	138,646	0.138646
25 – 34 years	135,573	0.135573
35 – 44 years	162,613	0.162613
45 – 54 years	134,834	0.134834
55 – 64 years	87,247	0.087247
65 – 74 years	66,037	0.066037
75 – 84 years	44,842	0.044842
85 years and over	15,508	0.015508

¹ Klein RJ, Schoenborn CA. Age Adjustment Using the 2000 Projected U.S. Population. No 20. Hyattsville, Maryland. National Center for Health Statistics, 2001.

Race/Ethnicity Categories

In this document race/ethnicity is separated into two different coding schemes. To be consistent with changes in the minimum required race categories as promulgated from the Federal government, the racial/ethnic categories used when calculating rates are as follows:

- Hispanic
- Non-Hispanic
 - White
 - African American
 - Asian
 - Native Hawaiian or Pacific Islander
 - Native American, Eskimo, and Aleut
 - Other / Unknown

The category for Asian includes the more specific categories of Asian, specified or unspecified, Asian Indian, Cambodian, Chinese, Hmong, Filipino, Japanese, Laotian, Korean, Thai and Vietnamese.

However, in other tables where population based rates are not calculated, a second coding scheme was used which is felt to better reflect the diverse population of Orange County. The following categories are used in the second scheme:

- Hispanic
- Non-Hispanic
 - White
 - African American
 - Southeast Asian
 - Other Asian
 - Native Hawaiian or Pacific Islander
 - Native American, Eskimo, and Aleut
 - Other/Unknown

In this scheme, Asian is separated into two groups, Southeast Asian, which contains Cambodian, Hmong, Laotian, Thai and Vietnamese; and Other Asian, which contains Asian Indian, Chinese, Filipino, Japanese, and Korean.

Quality of Cause of Death Data

The number of causes of death reported as *Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified* (ICD-10 Codes R00-R99) may be a rough indication of the quality of the death certificate data. If the size of this category is very small, it might mean that sufficient effort has been made to determine the underlying cause of death, thereby obviating the need to use a “catch-all” category when the cause of death has not been definitively established or reported. Among Orange County deaths, there were only 50 cases where this category was used in 2001, representing 0.30% of Orange County deaths. By comparison, this category comprised 1.34% of the coded deaths in the United States in 2001.²

² Arias E, Anderson, RN, Kung, HC, Murphy SL, Kochaneck KD. Deaths: Final Data for 2001. National Vital Statistics Reports; Vol. 52, No. 3, National Center for Health Statistics, September 18, 2003.

Appendix 2

Population Estimates

July 1, 2001 Population Estimates¹

Male (Years)	Total	Hispanic	White	African American	AIAN ²	Asian	NHOPI ³	Two or More Races
<15	338,857	148,508	132,878	5,304	1,281	39,425	1,101	10,360
15-17	60,746	22,743	26,253	1,160	279	8,664	283	1,364
18-19	41,984	16,787	16,823	735	191	6,455	167	826
20-24	100,787	45,594	35,973	1,531	417	15,226	395	1,651
25-29	110,295	48,702	40,986	1,655	414	16,661	429	1,448
30-34	126,932	50,371	54,337	2,272	481	17,491	441	1,539
35-39	127,347	41,677	63,667	2,543	542	16,993	449	1,476
40-44	120,297	30,567	68,570	2,503	487	16,415	382	1,373
45-49	99,918	20,645	61,054	1,938	467	14,512	273	1,029
50-54	86,035	14,160	56,306	1,439	396	12,692	255	787
55 & Over	235,856	28,753	169,498	2,516	906	31,575	524	2,084
Sub Total	1,449,054	468,507	726,345	23,596	5,861	196,109	4,699	23,937

Female (Years)	Total	Hispanic	White	African American	AIAN ²	Asian	NHOPI ³	Two or More Races
<15	322,948	142,372	126,293	4,829	1,192	37,154	1,070	10,038
15-17	57,049	21,392	24,721	1,026	279	8,063	237	1,331
18-19	38,420	14,560	16,022	591	184	6,066	151	846
20-24	93,218	38,395	35,443	1,396	405	15,435	385	1,759
25-29	105,215	43,418	40,413	1,327	396	17,794	382	1,485
30-34	121,001	43,840	53,567	1,987	480	19,117	444	1,566
35-39	122,226	37,426	61,754	2,359	516	18,266	422	1,483
40-44	117,567	28,796	65,924	2,217	585	18,247	384	1,414
45-49	102,260	20,656	61,009	1,709	507	17,028	295	1,056
50-54	91,026	15,121	58,470	1,421	440	14,447	215	912
55 & over	292,184	37,051	212,331	2,709	1,050	36,106	558	2,379
Sub-Total	1,463,114	443,027	755,947	21,571	6,034	207,723	4,543	24,269
Grand Total	2,912,168	911,534	1,482,292	45,167	11,895	403,832	9,242	48,206
Percent	100.00%	31.30%	50.90%	1.55%	0.41%	13.87%	0.32%	1.66%

¹ State of California, Department of Finance, *Race/Ethnic Population with Age and Sex Detail*, 2000-2050, Sacramento, CA, May, 2004.

² AIAN is American Indian and Natives of Alaska.

³ NHOPI is Native of Hawaii and Other Pacific Islanders.