

Community Health Status Report



County of Sacramento 2008





Community Health Status Report 2008

A Description of the Health Status and Mortality Experience of Residents in the County of Sacramento

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Introduction

The County of Sacramento, Department of Health and Human Services, Division of Public Health is pleased to bring you the 2008 Community Health Status Report. This Community Health Status Report is presented to those who are interested in health-related statistics for the County of Sacramento. This report presents public health data that can be directly compared with clearly established benchmarks, such as national standards, and populations of similar composition. The Community Health Status report is meant to be a tool for learning as well as planning.

This is the second edition of the Community Health Status Report. This year's report includes data on chronic disease, communicable disease, natality and mortality. The broad purpose of the report is to help policy-makers and program planners identify priority issues and measure progress in the domain of population health. The general public, health professionals and organizations that deal with preventing disease and mortality may also find the information in this report useful.

Acknowledgements

The Department of Health and Human Services acknowledges all health care providers for their timely reporting of communicable diseases to the Disease Control Unit and Epidemiology Services of the Division of Public Health.

Technical Notes

Population Data

The population data used in this report is from the State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050, Sacramento, CA, May 2004.

Birth Data (including Prenatal Care)

The birth data presented in this report are from the County of Sacramento Vital Records Unit, and are current through 2006.

Communicable Disease Data

The data presented regarding communicable disease in the County of Sacramento was obtained from the State of California, Department of Health Services, the Automated Vital Statistics System (AVSS), the HIV and AIDS registry (HARS), Web vCMR and the Tuberculosis Information Monitoring System (TIMS). Please note that all communicable disease data for 2006 is provisional.

Introduction

Mortality Data

Starting in 1999 the 10th revision of the international classification of disease (ICD-10) replaced ICD-9 in coding and classifying mortality data from death certificates. This change produced new cause of death titles and corresponding codes, breaks in comparability of cause of death statistics and restructuring of the leading causes. Non-cause mortality statistics for infant mortality were produced beginning with the 1999 reporting year. All other mortality statistics begin with the 1999-reporting year.

Mortality data presented in this report was obtained from the California Department of Health Services Center for Health Statistics, and are current through 2006.

Chronic Disease Data

The data addressing chronic diseases in the County of Sacramento is based on the information obtained from the 2001, 2003 and 2005 California Health Interview Survey (CHIS).

Executive Summary

The mission of the Division of Public Health is to protect, assess, and promote the health and well being of all communities in the County of Sacramento.

Monitoring the occurrence of disease and mortality in the population is vital to understanding and limiting their impact on human health. This Community Health Status Report focuses on general health indicators, including, but not limited to, birth rates and prenatal care, sexually transmitted infections, asthma, diabetes, obesity, heart disease and infant mortality. The statistics provide a picture of the health status and mortality experience of residents in the County of Sacramento.

The content of this report was developed from data sources available, such as birth and death records, the California Health Interview Survey of 2001, 2003, 2005 and other surveillance systems.

This report accomplishes essential public health functions such as monitoring the health status of a community to identify community health problems, and informing, educating and empowering people to manage health issues in their community.

Highlights of Major Findings

Demographics

- The population in the County of Sacramento increased by 27.1 percent between 1997 and 2007.
- The Hispanic population increased the most of all races and ethnicities in the County of Sacramento, increasing by 108.1 percent in the period between 1997 and 2007.
- The County of Sacramento's population is aging. Over the 10-year span the number of residents ages 65 and older increased 22.7 percent. The number of residents ages 85 and older increased by 83.9 percent in that same period.

Births

- The number of births and the birth rate in the County of Sacramento increased between 1999 and 2006.
- During the seven-year period among all races and ethnicities, Hispanics had the highest birth rate.
- Although teenage birth rates declined for all racial and ethnic groups, Hispanic and African American teens continued to have birth rates that were more than twice that of Caucasian teens.
- Very low birth weight and low birth weight births were significantly higher for African Americans than for any other racial or ethnic group in the County of Sacramento.

Communicable and Vaccine Preventable Diseases

- Chlamydia was the most commonly reported communicable disease in the County of Sacramento with 7,678 cases of Chlamydia reported in 2006. During the same year 28.1 percent of these infections were in teenage girls between the ages of 15 and 19 years. The rate of chlamydia in the County of Sacramento was 51.3 percent higher than the State of California in 2006.
- From 1999 to 2006 the County's chlamydia rates were higher than the State's rates. During the eight-year period the incidence rate of chlamydia increased by 49.9 percent in the County of Sacramento.

Executive Summary

- In 2006 Gonorrhea was the second most commonly reported communicable disease in the County of Sacramento. About 18.5 percent of gonorrhea cases occurred in girls ages 15-19. In the eight-year period the incidence rate of gonorrhea increased by 46.6 percent. In 2006 the gonorrhea rate in the County of Sacramento was 66.0 percent higher than the statewide rate.
- Syphilis is returning as a disease of importance in the County of Sacramento. In 1999 there were two cases of primary and secondary syphilis reported. In 2006 there were 30 cases of primary and secondary syphilis reported.
- For the past ten years, statewide incidence rates for Tuberculosis have steadily declined, whereas rates in the County of Sacramento have fluctuated due to sporadic outbreaks among different race/ethnic groups and homeless persons and changes in immigration status.
- Pertussis, a vaccine-preventable disease, has increased since 2001; this may be due to vaccine-induced immunity waning with time. In 2006, there were 206 cases compared to 37 in 2001. It is recommended that infants receive 4 doses of vaccine before their first year of life, 1 dose of vaccine at 15 months; children should receive 1 dose of vaccine between the ages of 4 and 6 and a booster addition between the age of 11 and 12. In 2005 the Advisory Committee for Immunization Practices (ACIP) recommended that all adults under the age of sixty-five receive a booster from a new formulation of tetanus, diphtheria and pertussis (Tdap) every 10 years.
- Based on the 2001, 2003 and 2005 California Health Interview Survey (CHIS) results, the County of Sacramento has a higher prevalence of asthma than the state of California and its neighboring counties. African Americans have the highest prevalence of asthma, and children ages 12-17 have the highest prevalence of all age groups.
- In 2005 the County of Sacramento had lower diabetes prevalence than the State of California, with the prevalence of diabetes in females being significantly higher than in males.
- Obesity and overweight are significant health problems in the County of Sacramento. In 2005, 29.7 percent of children under the age of 18 were overweight, and 10.7 percent of children in that age group were at risk of being overweight. An estimated 21.8 percent of adults were considered obese, and another 36.7 percent were considered overweight.
- The prevalence of heart disease has decreased from 8.0 percent to 6.0 percent since the 2001 CHIS. According to the 2005 CHIS the prevalence of heart disease was lower in the County of Sacramento than the rest of California.

Infant Mortality

- African Americans have the highest infant mortality rate of all ethnic and racial groups in the County of Sacramento. From 1999 through 2006 African American babies had two to three times the mortality of all other babies born in the County of Sacramento.
- The three leading causes of infant mortality in 2006 for the County of Sacramento are:
 1. Congenital malformations
 2. Newborns affected by maternal factors and by complications of pregnancy, labor and delivery.
 3. Prematurity and low birth weight

Executive Summary

Mortality

- In 2006 unintentional and intentional injuries together accounted for more than 50 percent of all deaths in children between the ages of 1 and 18. Of the unintentional fatal injuries, the vast majority were due to motor vehicle accidents.
- During the same year, heart disease, cancer and stroke were the three leading causes of death in the County of Sacramento. Injury was the third leading cause of death instead of stroke for Hispanics; chronic lower respiratory disease was the third leading cause for African Americans.
- Homicide appeared in the top ten causes of death for African Americans (#7) and Hispanics (#5).
- Alcohol and other drug-related age-adjusted mortality rates increased by 31.6 percent from 1999 to 2006.

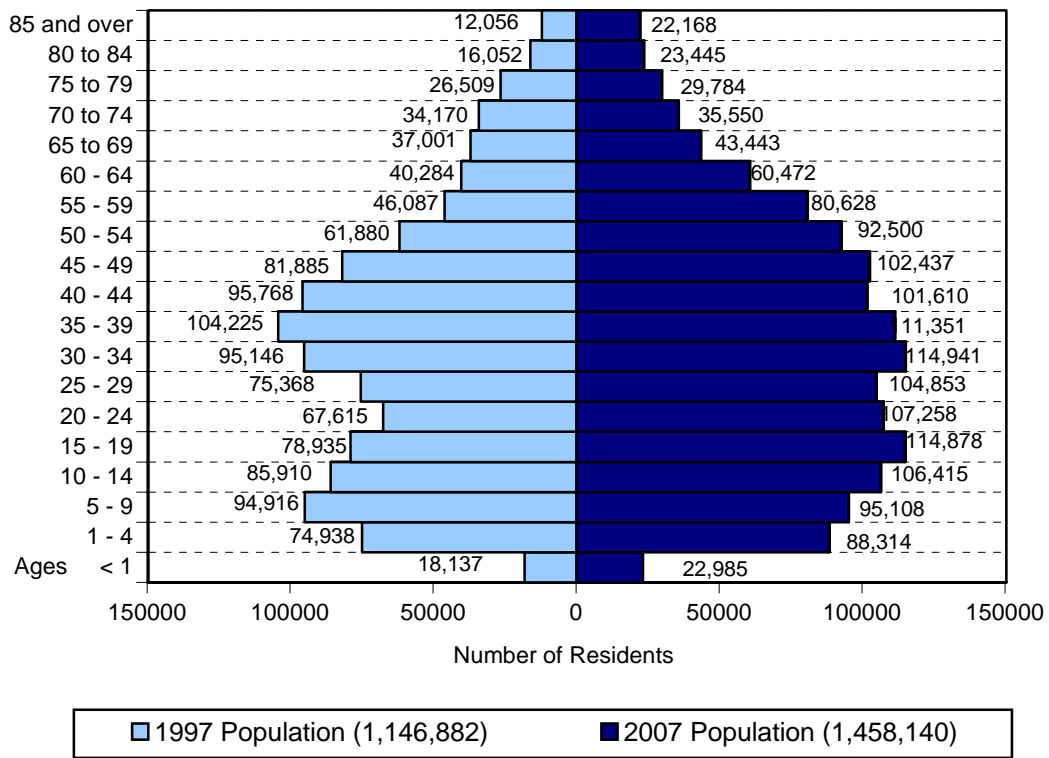
Demographics

County of Sacramento Population

Population data recently released by the California Department of Finance revealed that in 2007 there were 1,458,140 residents living in the County of Sacramento. This is an increase of 311,258 residents since 1997.

The figure below details the age distribution of the population and gives a picture of how the population in the County of Sacramento has changed between 1997 and 2007 (Figure 1).

Figure 1. County of Sacramento Residents by Age, 1997 and 2007



During the last decade, the population in the County of Sacramento has become older and much younger. From 1997 to 2007 there was a 22.7 percent increase in the population

over age 65, and an 83.9 percent increase over age 85. Likewise, the number of adolescents and young adults aged 10-29 increased significantly.

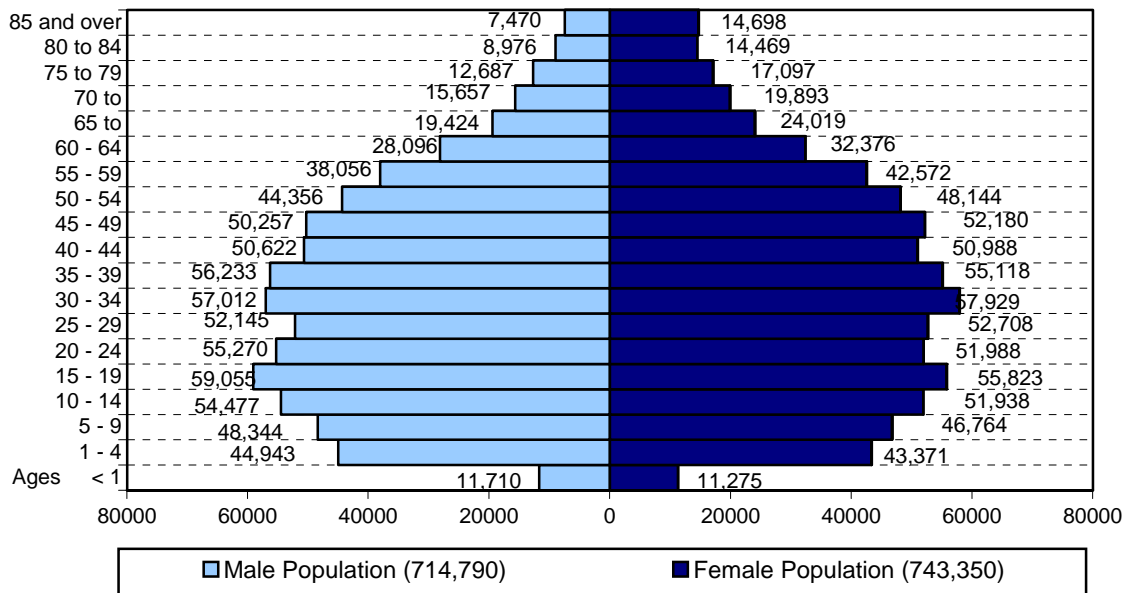
Demographics

County of Sacramento Population by Gender

Figure 2 compares the age and sex distribution for residents in the County of Sacramento in 2007. This graph shows that in 2007 there were more female residents than male residents. Males are more likely to die at younger ages than females due to reasons such as a higher incidence of heart

disease and injury. This distribution illustrates that as the population ages there are more females who are seniors compared to males, 12.1 percent of females were 65 years or older compared to 9.0 percent of males 65 years or older.

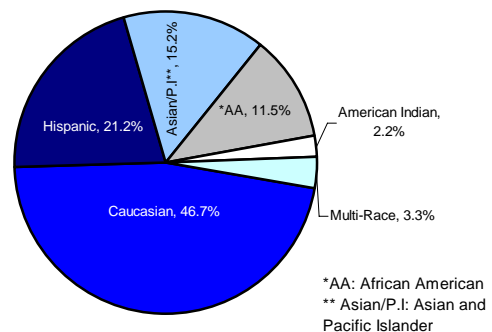
Figure 2. County of Sacramento Residents by Age and Gender, 2007



County of Sacramento Population by Race and Ethnicity

Figure 3 illustrates the diversity of the County of Sacramento by race and ethnicity. Beginning with Census 2000, census data has reported multi-race, which enables residents to identify themselves with two or more racial groups. In 2007, 3.3 percent of residents in the County of Sacramento identified themselves as multi-racial.

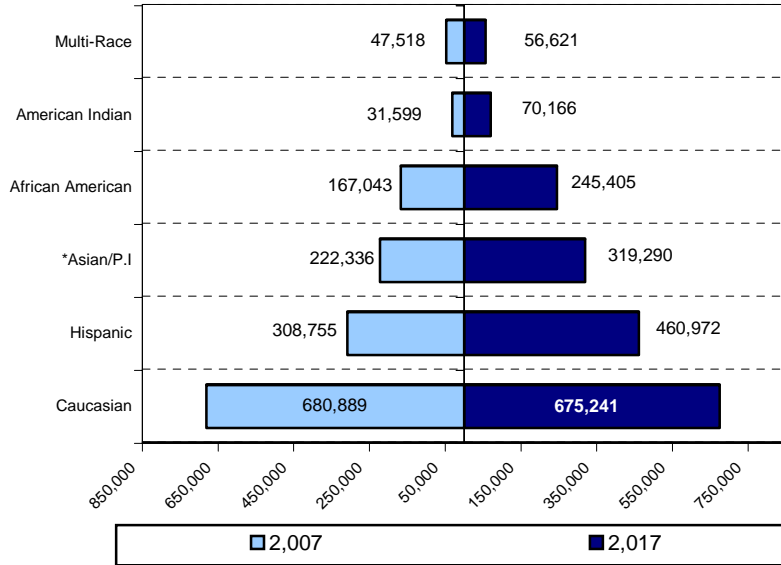
Figure 3. Population By Race/Ethnicity, County of Sacramento, 2007



Demographics

Figure 4 shows how the racial and ethnic composition of the County of Sacramento is expected to change over the next 10 years according to population projections from the California Department of Finance. There will be a marginal decline in Caucasian residents, whereas all other racial and ethnic groups will experience moderate to significant increases in population size.

Figure 4. Population Projection by Race and Ethnicity, County of Sacramento, 2007 and 2017



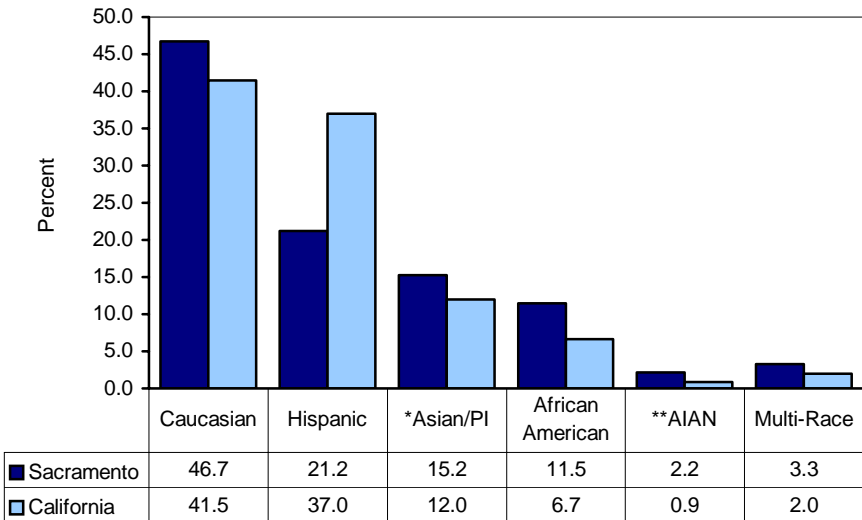
*Asian/P.I.: Asian and Pacific Islander

County of Sacramento Population Compared to California

Figure 5 compares the population of the County of Sacramento with that of California by race and ethnicity in 2007. Hispanics continue to be the fastest growing population in California. In the County of Sacramento, Hispanics comprise 21.2 percent of the population.

African Americans comprise 11.5 percent of County residents compared to only 6.7 percent of the state of California. Almost half the population in the County of Sacramento is Caucasian (46.7 percent) compared to 41.5 percent in California.

Figure 5. Population by Race and Ethnicity, County of Sacramento and California, 2007



*Asian/P.I.: Asian and Pacific Islander

**AIAN: American Indian and Alaskan Native

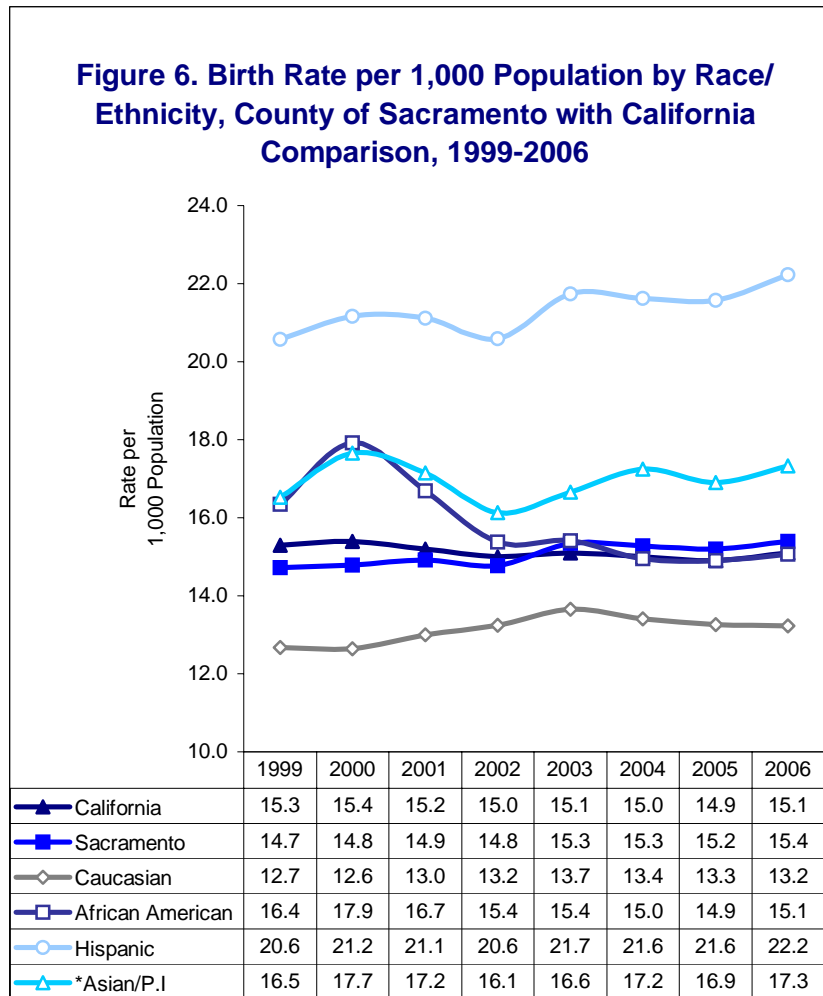
Births

Births and Birth Rates

Table 1. Total Number of Births by Race and Ethnicity County of Sacramento, 1999-2006								
Race	1999	2000	2001	2002	2003	2004	2005	2006
Caucasian	9,049	9,018	9,105	9,124	9,347	9,124	9,027	9,001
African American	2,065	2,164	2,151	2,087	2,180	2,211	2,297	2,419
Hispanic	3,896	4,221	4,627	4,880	5,503	5,848	6,107	6,573
Asian/PI	2,534	2,595	2,839	2,929	3,150	3,405	3,477	3,708
Unknown/Others	193	194	200	223	244	248	276	251
Total Births	17,737	18,192	18,922	19,243	20,424	20,836	21,184	21,952

The birth rate is calculated as the number of live births to a certain population (entire county, specific racial or ethnic group) divided by the total number of people in that population, and is reported per 1,000 population. Over the past eight years, the overall birth rate for the County of Sacramento increased, whereas the overall birth rate for California declined slightly. The overall birth rate for the County was highest in 2006 at 15.4 per 1,000 population. Over the eight-year span the birth rates for Caucasians, Hispanics, and Asian Pacific Islanders increased in the County, whereas the African American birth rate decreased over the same time span. Caucasians had the lowest birth rate in the County whereas Hispanics had the highest birth rate in the County. In 2006, the Hispanic birth rate of 22.2 per 1,000 population was 44.4 percent higher than the County's overall birth rate.

Figure 6. Birth Rate per 1,000 Population by Race/Ethnicity, County of Sacramento with California Comparison, 1999-2006



*Asian/P.I: Asian and Pacific Islander

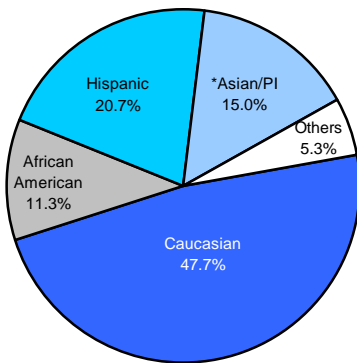
Births

Population Comparison: Births by Race and Ethnicity

The graph below shows the distribution of births for each race and ethnic category. In 2006, Hispanics and Asian/Pacific Islanders were over-represented. Hispanics were 20.7 percent of the population and had 29.9 percent of the births; Caucasians were 47.7 percent of the population and had 41.0 percent of the births.

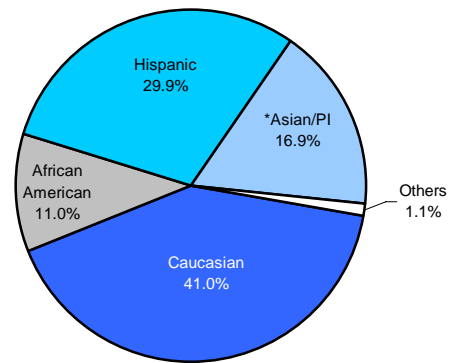
percent of the births. African Americans and Caucasians were under represented. African Americans were 11.3 percent of the population and had 11.0 percent of the births; Caucasians were 47.7 percent of the population and had 41.0 percent of the births.

Figure 7. Percent of Population by Race/Ethnicity, County of Sacramento, 2006



*Asian/PI: Asian and Pacific Islander

Figure 8. Percent of Births by Race/Ethnicity, County of Sacramento, 2006

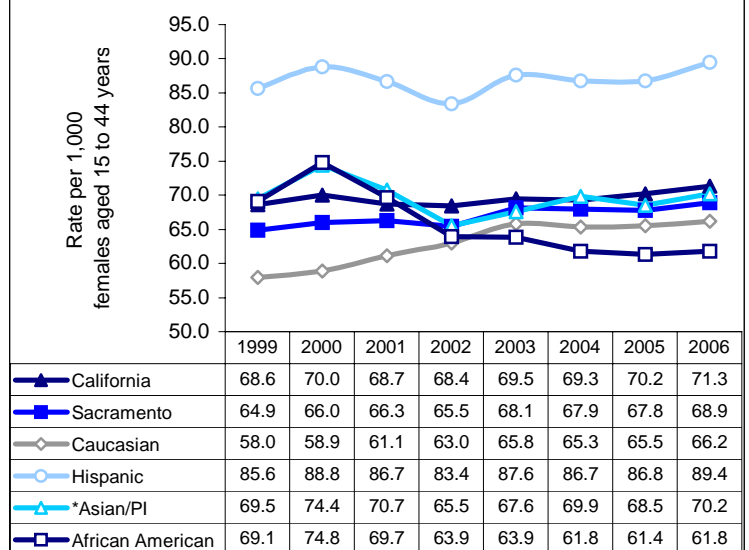


*Asian/PI: Asian and Pacific Islander

Fertility Rates

The fertility rate is defined as the number of births annually per 1,000 females ages 15 to 44 years. Over the past eight years, Sacramento County experienced an average fertility rate of 67.0 per 1,000 females ages 15 to 44, with the highest of 68.9 per 1,000 females in 2006. During the eight-year period, Caucasians experienced the lowest fertility rate among all racial and ethnic groups, while Hispanics had the highest fertility rates across all racial and ethnic groups. The fertility rate for Caucasian women increased 14.2 percent from 1999 to 2006, whereas the fertility rate for African American women decreased 10.6 percent since 1999.

Figure 9. Fertility Rates by Race/Ethnicity, County of Sacramento vs. California, 1999-2006



*Asian/PI: Asian and Pacific Islander

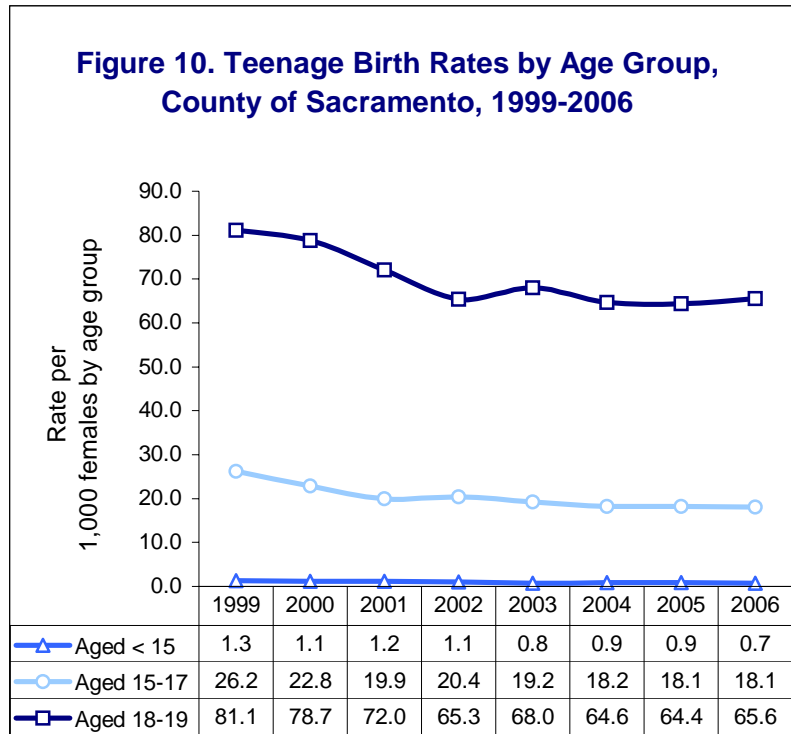
Births

Teenage Births

Adolescent pregnancy and childbearing have been associated with adverse health and social consequences for young women and their children. Births to mothers less than 20 years of age are presented here in three different age groups (under 15, 15-17 and 18-19).

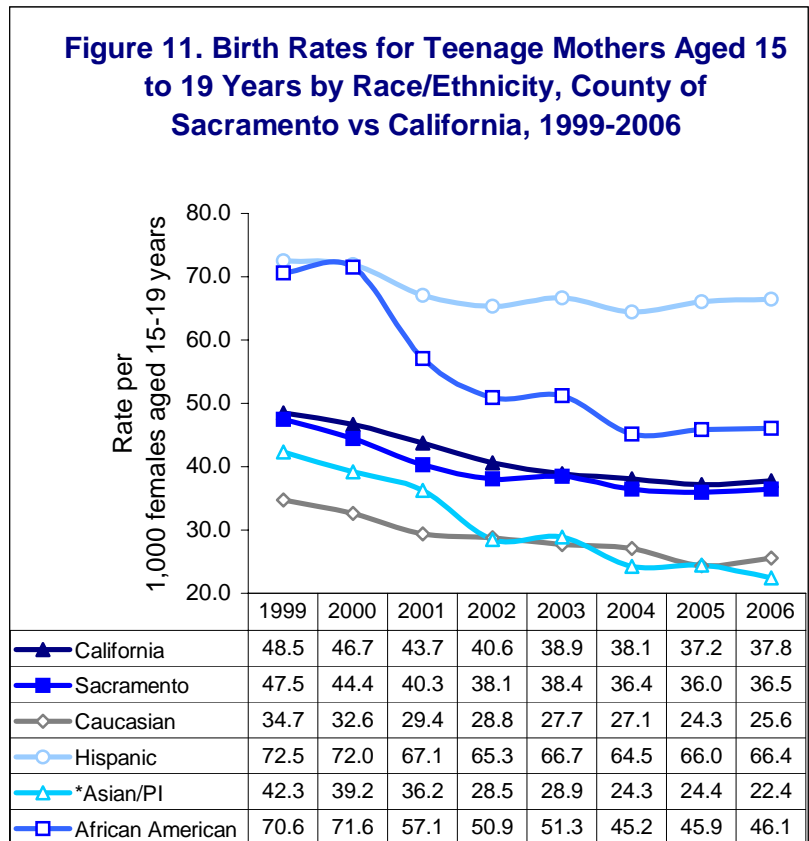
From 1999 to 2006 the age specific birth rates for adolescent girls for all age categories declined. The rate of births to young teenagers ages 15 to 17 years dropped 30.7 percent during the eight-year period, from 26.2 per 1,000 females in 1999 to 18.1 per 1,000 females in 2006. The birth rate for 18-19 year olds declined 19.1 percent from 81.1 per 1,000 females to 65.6 per 1,000 females.

Figure 10. Teenage Birth Rates by Age Group, County of Sacramento, 1999-2006



From 1999 to 2006, the birth rate for adolescents aged 15 to 19 years declined for all racial and ethnic groups. The overall, teen birth rate declined 23.2 percent. Likewise the teen birth rate for Asian/Pacific Islanders dropped 47.0 percent since 1999, African Americans dropped 34.8 percent, Caucasians dropped 26.4 percent and Hispanics dropped 8.4 percent during the seven-year period. Over the eight-year span, Hispanics kept the highest teen birth rate across all racial and ethnic groups. In 2006, the teen birth rate for Hispanics was more than two times higher than their Caucasian counterparts and the teen birth rate among African Americans was nearly two times higher than their Caucasian counterparts.

Figure 11. Birth Rates for Teenage Mothers Aged 15 to 19 Years by Race/Ethnicity, County of Sacramento vs California, 1999-2006



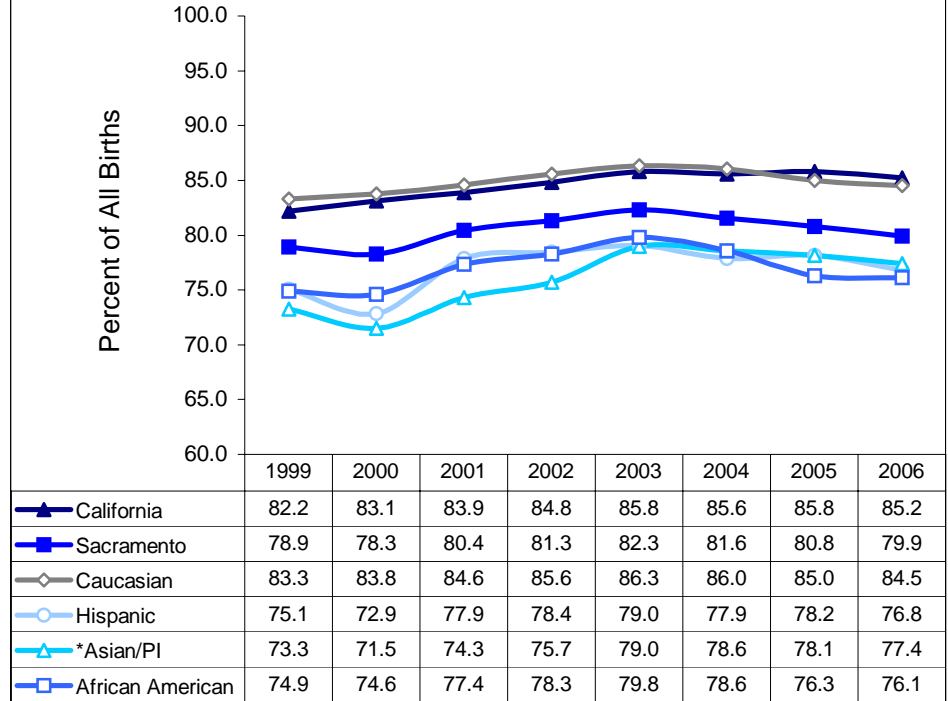
*Asian/PI: Asian and Pacific Islander

Births

Entry into Prenatal Care

Early entry into prenatal care is vital to the health of the mother and the infant. The Healthy People 2010 objective is that 90 percent of mothers enter prenatal care during the first trimester. During the past eight years, the County of Sacramento did not meet the Healthy People 2010 objective. However, from 1999 to 2006, the percent of mothers entering prenatal care during the first trimester increased for all racial groups. Caucasian women had the highest percentage of mothers entering prenatal care during the first trimester, with an average of 84.9 percent over the eight-year period.

Figure 12. Percent of Births with 1st Trimester Entry into Prenatal Care by Race/Ethnicity, County of Sacramento with California Comparison, 1999-2006



*Asian/PI: Asian and Pacific Islander

Adequacy of Prenatal Care

The Adequacy of Prenatal Care Utilization index (APNCU) is a measurement based on the month of pregnancy in which the mother entered prenatal care, the number of visits she had, and the continuity of her care for

preterm delivery and low birth weight during the pregnancy. Evidence suggests that adequate prenatal care results in better pregnancy outcomes, including reduced maternal and infant morbidity and mortality.

Births

Over the past eight years, the County of Sacramento did not meet the Healthy People 2010 objective of at least 90 percent of all mothers receiving early and adequate prenatal care. The percent of County resident mothers who received “Adequate” prenatal care reached a low of 44.6 percent in 2000 and a high of 55.1 in 2006.

Although more than 71.5 percent of mothers in the County of Sacramento received both “Adequate Plus” and “Adequate” prenatal care combined in 2006, no group met the Healthy People 2010 objective of at least 90 percent:

- 72.9 percent for Caucasian mothers;
- 70.8 percent for Asian/Pacific Islander mothers;
- 70.1 percent for African American mothers; and 70.8 percent for Hispanic mothers.

Figure 13. Percent of Adequate Prenatal Care Utilization Index (APNC), County of Sacramento, 1999-2006

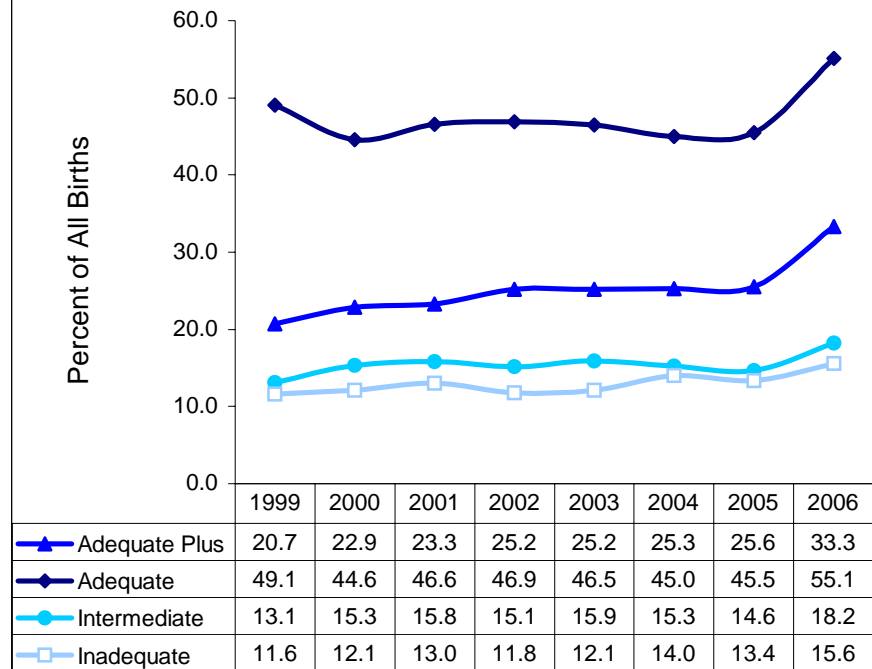
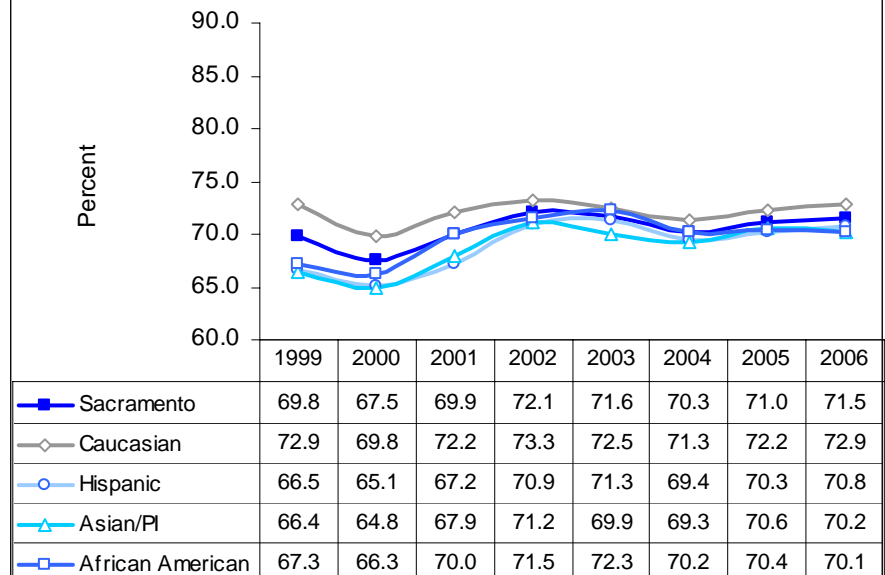


Figure 14. Percent of Mothers Receiving Adequate and Adequate Plus Prenatal Care Combined, County of Sacramento, 1999-2006



Births

Low Birth Weight

Low birth weight (less than 2500 grams or less than 5.5 pounds) is the risk factor most closely associated with neonatal death. Increases in infant birth weight can contribute substantially to reductions in the infant death rate. In 2006, Sacramento County did not meet the Healthy People 2010 objective of reducing low birth weight births to less than 5.0 percent of all live births. From 1999 to 2006, Caucasians and Hispanics were very close to meeting the 2010 objective, while Asians/Pacific Islanders and African Americans had higher low birth weights during the eight year period. Compared to all racial and ethnic groups, African Americans had the highest proportion of low birth weight births for all years, with an average of 11.8 percent over the eight-year period (Table 2.)

**Table 2. Percent of Low Birth Weight Births by Race/Ethnicity
County of Sacramento vs California, 1999-2006**

Year	1999	2000	2001	2002	2003	2004	2005	2006
California	6.1	6.2	6.3	6.4	6.6	6.7	6.9	6.8
Sacramento	6.6	6.5	6.8	6.3	6.6	6.9	7.1	7.1
Caucasian	5.4	5.7	5.5	5.5	5.7	5.7	6.0	5.9
Hispanic	6.2	5.9	6.3	4.9	5.9	5.8	5.9	6.3
*Asian/PI	7.0	6.6	8.0	7.3	7.0	8.0	7.7	8.3
African American	11.8	11.2	11.3	11.2	11.3	13.1	12.9	11.7
2010 Objective	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

*Asian/PI: Asian and Pacific Islander

**Table 3. Percent of Very Low Birth Weight Births by Race/Ethnicity
County of Sacramento vs California, 1999-2006**

Year	1999	2000	2001	2002	2003	2004	2005	2006
California	1.1	1.1	1.1	1.2	1.2	1.3	1.2	1.2
Sacramento	1.3	1.3	1.2	1.3	1.2	1.3	1.5	1.5
Caucasian	1.0	1.2	1.1	1.0	1.0	1.1	1.1	1.1
Hispanic	1.3	1.3	1.2	0.7	1.1	0.9	1.4	1.4
*Asian/PI	1.1	1.0	0.9	1.7	0.8	1.3	1.5	1.5
African American	3.1	2.5	2.6	3.3	2.8	3.1	3.2	3.2
2010 Objective	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

*Asian/PI: Asian and Pacific Islander

Very Low Birth Weight Births

Very low birth weight (less than 1500 grams or 3.3 pounds) infants are at highest risk of dying in their first year of life. Examining the incidence of low and very low birth weight births can help determine the health of infants in Sacramento County. From 1999 to 2006, Sacramento County did not meet the Healthy People 2010 objective of reducing very low birth weight births to less than 0.9 percent of

all live births. African Americans had the highest proportion of very low birth weight births for all years, with an average of 3.0 percent over the eight-year period. Caucasians had the lowest average proportion of very low birth weight births, with an average of 1.1 percent over the eight-year period (Table 3).

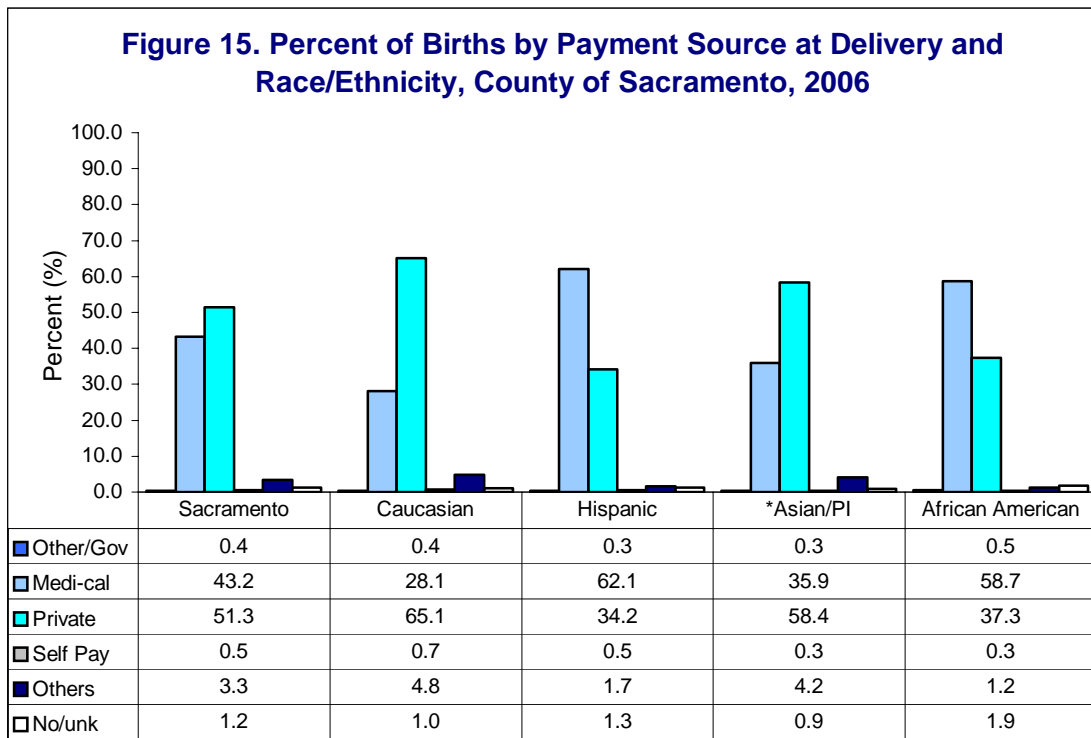
Births

Payment Source for Delivery

Payment source is an indirect measure of socioeconomic status. Lower income individuals are covered by public plans, instead of private insurance. In 2006, the major sources of payment for delivery by race and ethnicity were:

- African Americans – Medi-Cal (58.7 percent);
- Hispanics – Medi-Cal (62.1 percent);
- Caucasians – Private (65.1 percent);
- Asian/Pacific Islanders – Private (58.4 percent).

Insurance status was reported as none or unknown for 1.2 percent of deliveries in Sacramento County; this is equivalent to 264 births in 2006.



*Asian/PI: Asian and Pacific Islander

Communicable and Vaccine Preventable Diseases

Most Frequently Reported Communicable Diseases

Table 4 illustrates the most frequently reported communicable diseases in the County of Sacramento. Chlamydia, gonorrhea, pertussis, campylobacter, and salmonellosis were the top five communicable diseases reported in the County of Sacramento in 2006.

Table 4. Most Frequently Reported Communicable Diseases, Sacramento County, 2006

Disease	Cases
Chlamydia	7,678
Gonorrhea	2,091
Pertussis	206
Campylobacteriosis	164
Salmonellosis	158
Tuberculosis	97
Giardiasis	88
AIDS	81
Meningitis, Viral	90
Shigella	34

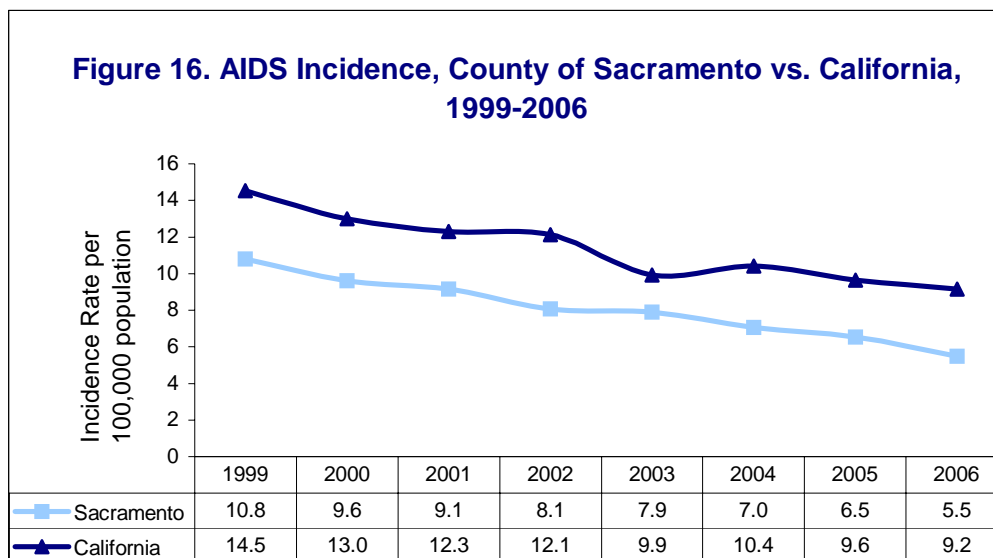
AIDS

The reported incidence of AIDS in the County of Sacramento declined 49.3 percent from 10.8 per 100,000 population in 1999 to 5.5 per 100,000 population in 2006 (Figure 16). The reported incidence of AIDS in California declined 35.6 percent. Both declines are due to anti-retroviral therapy, which can significantly reduce mortality and prolong the lives of residents living with HIV.

AIDS disproportionately impacts African Americans. African Americans make up 10.6 percent of the population, and 27.3 percent of

AIDS cases in the County of Sacramento (Figure 17).

Figure 16. AIDS Incidence, County of Sacramento vs. California, 1999-2006

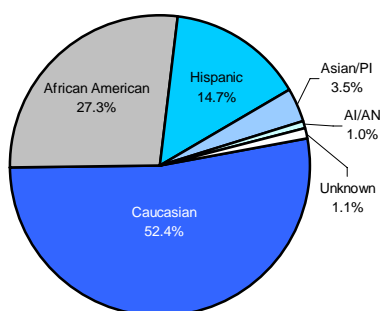


Communicable and Vaccine Preventable Diseases

Males accounted for 81.5 percent of AIDS cases diagnosed from 1999-2006. Men who have sex with men accounted for 47.0 percent of reported AIDS cases from 1999-2006 and intravenous drug users accounted for 14.5 percent of cases (Figure 18). Due to new drug treatments and better medical management of AIDS cases, the number of people living with AIDS (PLWA) continues to steadily increase. In 1990, there were 326 PLWA in the County of Sacramento compared to 1,571 PLWA in 2006. It was also

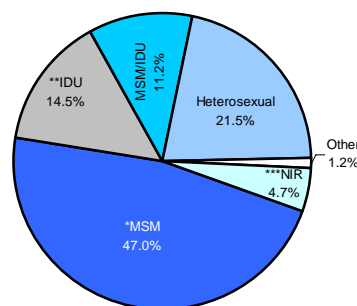
estimated that in 2006 there were 1,087 people living with HIV that did not progress to AIDS in the County of Sacramento. In 2002, HIV became a reportable condition in California. That law required laboratories and healthcare providers to report HIV cases using a non-name code. In April 2006, State bill 699 (Soto) was signed into law and reporting by patient name became effective immediately. Reported cases of HIV infection will be included in future reports.

Figure 17. AIDS Cases by Race/Ethnicity, County of Sacramento, 1999-2006



*Asian and Pacific Islander
 **AI/AN: American Indian and Alaskan Native

Figure 18. AIDS Cases by Risk Factors, County of Sacramento, 1999-2006

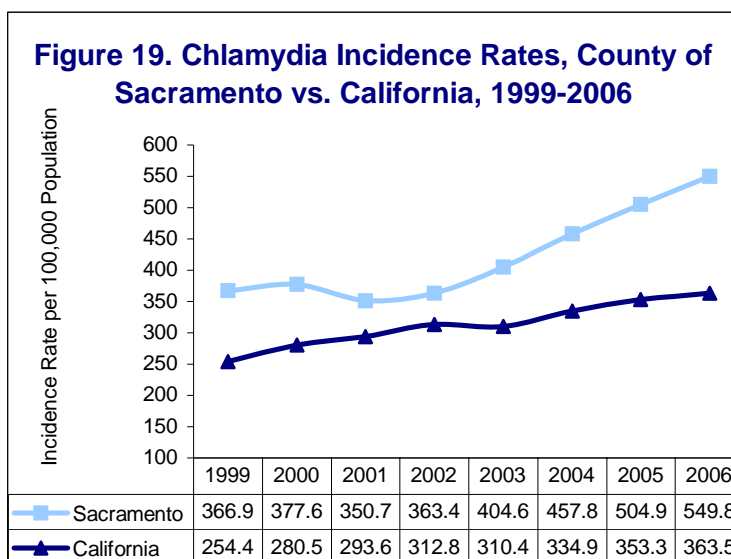


*MSM: Men who have sex with men
 **IDU: Injection drug user
 ***NIR: No identifiable risk

Chlamydia

Chlamydia infections were the most commonly reported notifiable disease. In the County of Sacramento, Chlamydia rates increased 49.9 percent, from 366.9 per 100,000 population in 1999 to 549.8 per 100,000 population in 2006. The County of Sacramento's Chlamydia incidence rate in 2006 was 51.3 percent higher than the statewide rate (Figure 19). Compared to other health jurisdictions in California, the County of Sacramento had the second highest incidence rate in 2006.

Figure 19. Chlamydia Incidence Rates, County of Sacramento vs. California, 1999-2006



Communicable and Vaccine Preventable Diseases

In 2006, 72.4 percent of the chlamydia cases were female. Among all female cases, 39.0 percent were 15 -19 years old, while 34.8 percent of female cases were 20-24 years old. The highest incidence rate is among teenage girls aged 15-19 years, whereas the highest incidence rate for males occurred in the 20-24 year old group.

Since 2001, chlamydia rates for the incorporated cities within the County of Sacramento has steadily increased, with Elk Grove having the highest percent change of 165 percent (Table 6). In 2006 the city of Sacramento had the highest chlamydia rate (1021.4 per 100,000), followed by Elk Grove (902 per 100,000) and

Table 5. Chlamydia Incidence Rates (per 100,000 Population) by Age and Gender, County of Sacramento, 2006

Age	Male	Female
10-14	25.6	200.0
15-19	941.1	3978.4
20-24	1355.5	3801.7
25-29	698.7	1442.2
30-34	308.9	561.1
35-44	166.8	188.4

Rancho Cordova (384.3 per 100,000), whereas the city of Folsom had the lowest (123.7 per 100,000).

Table 6. Chlamydia Incidence Rates for County of Sacramento Cities by Year, 2001-2006

City	2001	2002	2003	2004	2005	2006	% Change***
Citrus Heights	191.1	195.0	214.4	255.5	250.4	341.3	78.6
Elk Grove	152.1	179.8	225.9	256.6	318.6	402.0	164.4
Folsom	51.1	62.4	99.8	119.7	103.0	123.7	141.9
Galt	129.4	138.0	200.1	203.1	210.7	230.3	78.0
Isleton	*	*	*	*	*	*	*
Rancho Cordova	**	**	**	270.7	357.5	384.3	41.9
Sacramento	678.4	702.1	733.0	828.1	898.4	1021.4	50.6

* Rates not calculated for cities with < 5 cases a year. The rates are per 100,000 population.

** Rates calculated using population estimates obtained from the California Department of Finance. Estimates were available for Rancho Cordova beginning in 2004.

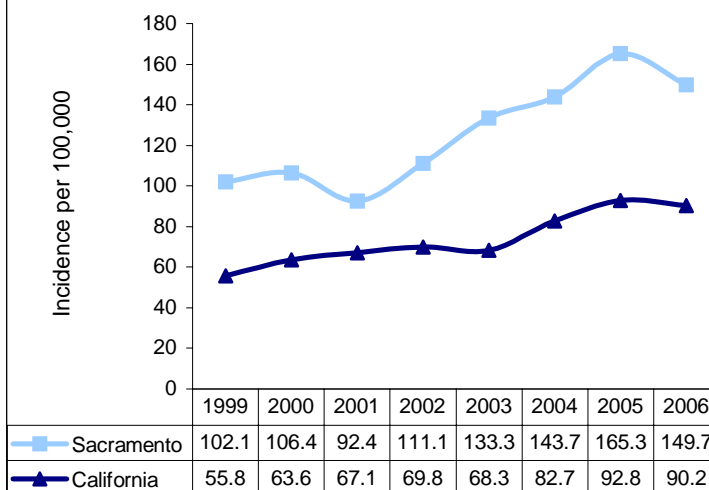
***% Change: from year 2001 to 2006, except Rancho Cordova from 2004 to 2006.

Communicable and Vaccine Preventable Diseases

Gonorrhea

The Healthy People 2010 objective for gonorrhea is 19.0 cases per 100,000 population. During the seven-year period from 1999 to 2006 the County of Sacramento did not meet this objective. The incidence rate of gonorrhea in the County increased 46.6 percent from 102.1 per 100,000 population in 1999 to 149.7 per 100,000 population in 2006. In 2006, the gonorrhea rate in the County was 66.0 percent higher than the statewide rate (Figure 20). When compared with other health jurisdictions in California, the County of Sacramento had the fifth highest gonorrhea rate in 2006.

Figure 20. Gonorrhea Incidence Rates, County of Sacramento vs. California, 1999-2006



As with chlamydia, a greater proportion of gonorrhea cases occurred in females. In 2006, 52.4 percent of cases were females. Among females, 35.6 percent of the cases occurred in adolescents aged 15 to 19 years, while 31.8 percent were in the 20-24 age group (Table 7).

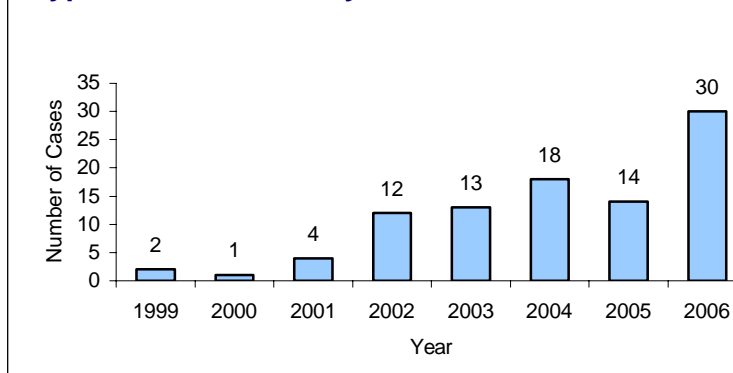
Table 7. Gonorrhea Incidence Rates (per 100,000 Population) by Age and Gender, County of Sacramento, 2006

Age	Male	Female
10-14	9.1	55.8
15-19	294.6	713.8
20-24	482.5	683.0
25-29	377.4	314.6
30-34	188.9	105.5
35-44	148.7	74.0

Syphilis

California, as well as Sacramento, continues to experience an increase in primary and secondary (P&S) syphilis cases. This increase was primarily due to outbreaks among men who have sex with men. The number of P&S syphilis cases in the County increased from 2 in 1999 to 30 in 2006 (Figure 22).

Figure 22. Number of Primary and Secondary Syphilis Cases, County of Sacramento, 1999-2006



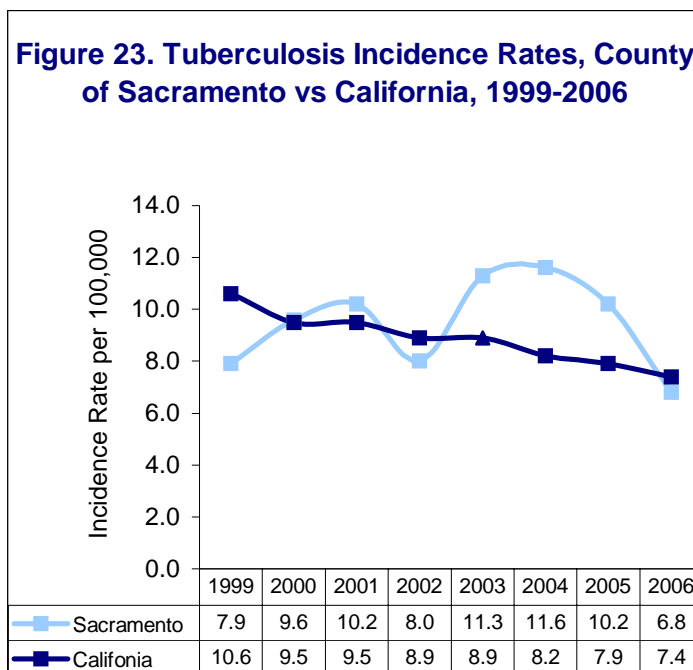
Communicable and Vaccine Preventable Diseases

Tuberculosis

The Healthy People 2010 objective for tuberculosis (TB) is 1.0 new case per 100,000 population. During the eight-year period the County of Sacramento did not meet this objective.

Figure 23 compares tuberculosis incidence rates for the County of Sacramento with statewide incidence rates for the past eight years. While statewide incidence rates have steadily declined, rates in Sacramento County have fluctuated due to changes in immigration patterns and identification of outbreaks. National, statewide, and local incidence rates declined in 2006. Table 8 shows the number of cases for the County of Sacramento by year.

Figure 23. Tuberculosis Incidence Rates, County of Sacramento vs California, 1999-2006



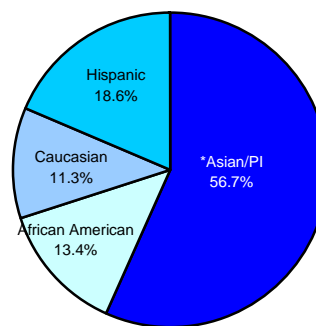
In 2006, Asian/Pacific Islanders made up the highest proportion of TB cases in the County of Sacramento (Figure 24). While incidence rates among all ethnic groups have declined,

the rates among Asian and Pacific Islanders, African Americans, and Hispanics remain higher than Caucasians (Figure 25).

Table 8. Number of Tuberculosis Cases by Year, County of Sacramento, 1997-2006

Year	Number of Cases
1999	95
2000	118
2001	130
2002	104
2003	151
2004	158
2005	142
2006	97

Figure 24. Proportion of Tuberculosis Cases by Race/Ethnicity, County of Sacramento, 2006



*Asian/PI: Asian and Pacific Islander

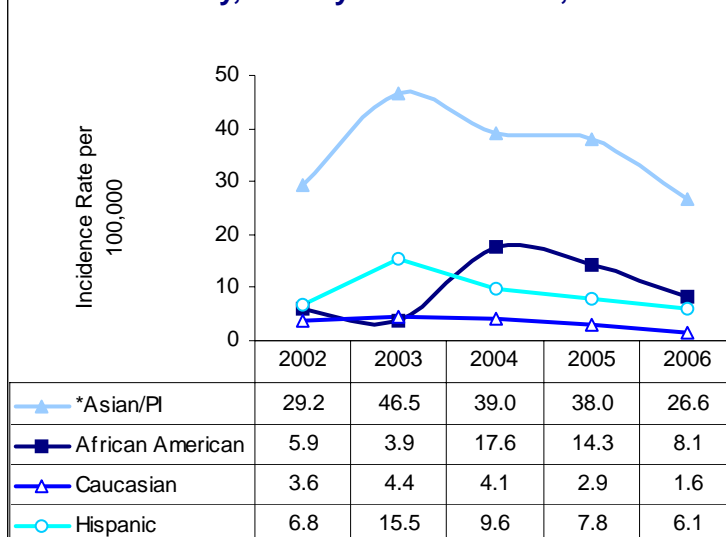
Communicable and Vaccine Preventable Diseases

Table 9 shows the number and proportion of TB cases by race/ethnicity, sex, and age group. The greatest proportion of TB cases in 2005 and 2006 occurred in individuals 45-65 years of age. In 2006, 52.6 percent of cases were male.

Foreign Born

The proportion of TB cases among foreign-born persons increased statewide and locally. In 1993, statewide, 62.8 percent of cases were foreign-born compared to 76.8 percent in 2006. In the County of Sacramento, 61.6 percent of cases were foreign-born in 1993 compared to 72.2 percent in 2006.

Figure 25. Proportion of Tuberculosis Cases by Race/Ethnicity, County of Sacramento, 2002-2006



*Asian/PI: Asian and Pacific Islander

Table 9. Tuberculosis Cases by Race/Ethnicity, Sex, and Age Group, County of Sacramento, 2004-2006

Total	Total	0-4	5-14	15-24	25-44	45-64	65+
	391	10	15	46	117	125	78
*Asian/PI	203	5	9	24	56	62	47
Male	106	2	4	12	27	33	28
Female	97	3	5	12	29	29	19
African American	63	1	1	7	17	28	9
Male	40	1	1	5	9	17	7
Female	23	0	0	2	8	11	2
Caucasian	64	1	1	4	17	26	15
Male	39	1	1	2	12	17	6
Female	25	0	0	2	5	9	9
Hispanic	61	3	4	11	27	9	7
Male	38	0	1	5	19	8	5
Female	23	3	3	6	8	1	2

*Asian/PI: Asian and Pacific Islander

Communicable and Vaccine Preventable Diseases

Among foreign-born TB cases from 2004-2006, Asians accounted for 71.1 percent of cases (Figure 26). From 2004-2006, the top five countries of origin of foreign-born persons with TB were Laos/Thailand, Philippines, Vietnam, Mexico, and India

(Figure 27). The average number of foreign-born TB cases who have been in the U.S. for less than one year increased 38.0 percent from 2004-2006 compared to the average number of foreign-born cases from 2001-2003.

Figure 26. Proportion of Foreign Born TB Cases by Race/Ethnicity, County of Sacramento, 2004-2006

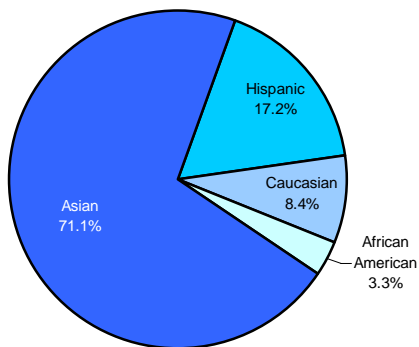
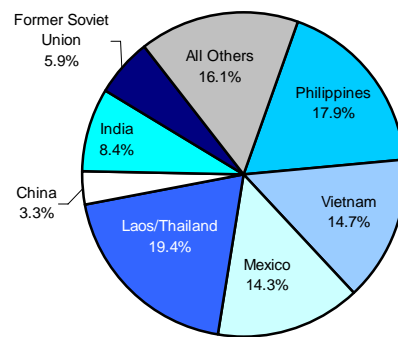
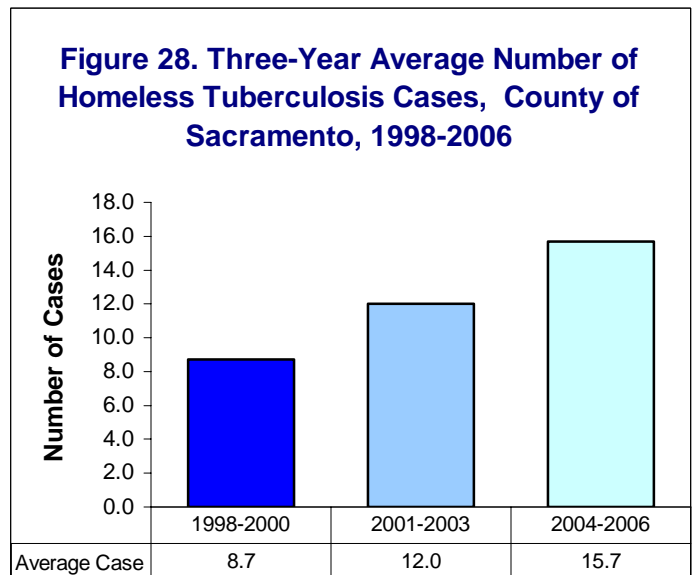


Figure 27. Proportion of Foreign Born TB Cases by Country of Origin, County of Sacramento, 2004-2006



The number of TB cases occurring among persons who are homeless in the County has fluctuated over the past 10 years. Three-year averages from 1998-2006 show an increase in the number of homeless TB cases (Figure 28). Without knowledge of the true number of homeless persons, we are unable to determine if the rate of TB among the homeless has increased. The majority of homeless TB cases in the County occurred among Caucasian and African American males aged 45-64 years.

Figure 28. Three-Year Average Number of Homeless Tuberculosis Cases, County of Sacramento, 1998-2006



Communicable and Vaccine Preventable Diseases

Vaccine Preventable Diseases

Due to successful immunization programs and school entrance requirements, from 1999-2006, no indigenous cases of measles, rubella, tetanus, or diphtheria were reported in Sacramento County. During this same period, only 11 cases of mumps were reported; four cases of haemophilus influenzae invasive disease and one case of haemophilus influenzae meningitis occurred

among children between two months and five years of age. The 2006 Kindergarten Retrospective Survey for the County of Sacramento estimates that 81.2 percent of toddlers were fully immunized by 24 months with the 4:3:1 series (4+ DTP, 3+ Polio, and 1+ MMR), compared to a statewide estimate of 77.7 percent.

Pertussis

Pertussis continues to be a concern since vaccine induced immunity wanes, with little or no protection 5-10 years following the last dose. Adolescents and adults are susceptible and capable of transmission to under immunized children.

The County of Sacramento experienced a dramatic increase of pertussis cases in 2006. There were 206 reported cases with an incidence rate of 14.4 per 100,000 population.

From 2002-2006, a total of 680 cases of pertussis were reported in the County of Sacramento. Of those cases 11.9 percent (81) occurred in infants less than one year of age. Pertussis is a cyclical disease with outbreaks occurring every 3-4 years.

Sacramento County's pertussis incidence rates have been far above the statewide rates (Figure 29). Table 10 shows the number of pertussis cases reported by year in the County of Sacramento.

Figure 29. Pertussis Incidence, County of Sacramento vs California, 1999-2006

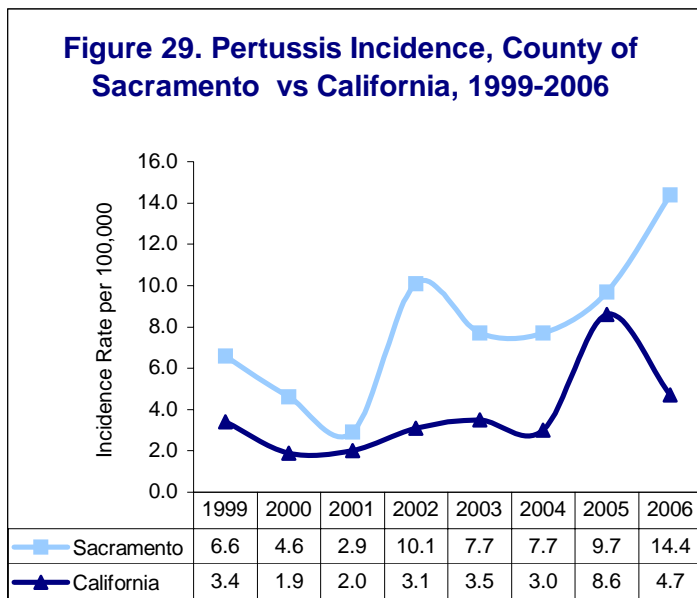


Table 10. Pertussis Cases by Year of report, County of Sacramento, 1999-2006

Year	Cases
1999	79
2000	56
2001	37
2002	132
2003	102
2004	105
2005	135
2006	206

Chronic Diseases

Asthma, diabetes, overweight and heart disease estimates presented in this report are based on the 2001-2005 California Health Interview Survey (CHIS) public use files for the County of Sacramento and the State of California. CHIS is an ongoing, California-based, random-digit-dialed telephone survey of the California civilian, non-institutionalized population. CHIS is considered to be the largest telephone survey in California and the

largest health survey of its kind in the country. The sample frame may consist of over 55,000 households. The CHIS sample is designed to provide population-based estimates for most California Counties, all major ethnic groups, and several ethnic subgroups. Major content areas for the survey include health-related behaviors, health status and conditions, health insurance coverage, and access to health care services.

Asthma

Lifetime Asthma Prevalence

In 2005, 17.7 percent, (an estimated 235,000 of the County's residents of all ages) were diagnosed with asthma at some point in their lives (lifetime asthma prevalence). Compared to California, the lifetime asthma prevalence for residents in the County of Sacramento is higher than California across all years.

In 2005, the lifetime asthma prevalence was 30.1 percent higher in the County of Sacramento than the state of California. From 2001 to 2005 the lifetime asthma prevalence for the County of Sacramento increased 18.0 percent (Figure 30).

The prevalence of asthma was higher in the County of Sacramento than in neighboring counties across all years except 2005 (Table 10). In 2005 the prevalence of asthma (17.7) was lower than Contra Costa County (18.6).

Figure 30. Lifetime Asthma Prevalence, Sacramento vs. California, 2001-2005

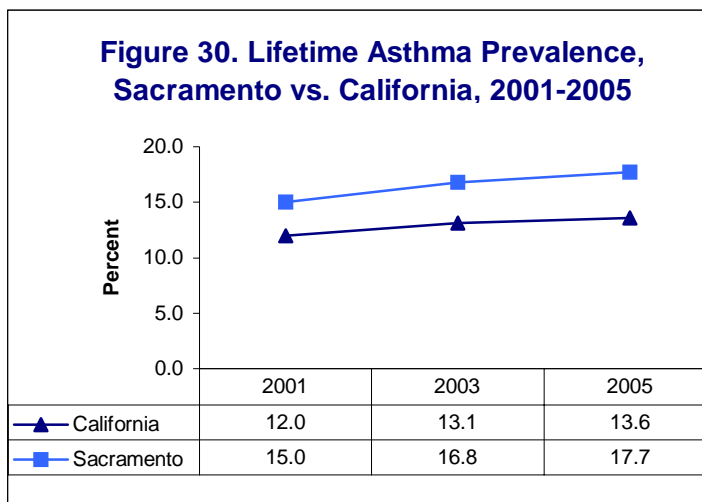


Table 11. Asthma Prevalence Among Neighboring Counties, 2001-2005

County	2001	2003	2005
Sacramento	15.0	16.8	17.7
Placer	14.7	15.0	17.6
El Dorado	14.2	15.8	15.9
Yolo	13.4	13.4	16.4
Contra Costa	14.0	16.2	18.6

Chronic Diseases

Lifetime Asthma Prevalence by Age

Figure 31 shows the distribution of lifetime asthma prevalence by age group. Adolescents 12-17 years of age had the highest lifetime asthma prevalence (23.6 percent), followed by residents 18-24 years (18.4 percent).

Lifetime Asthma Prevalence by Race/Ethnic Group

Lifetime asthma prevalence varied across different race and ethnic groups in the County of Sacramento. American Indians and Alaskan Natives (AIAN) had the highest lifetime asthma prevalence (27.7 percent which may be unreliable due to small sample size), followed by African American (23.2 percent).

Figure 31. Lifetime Asthma Prevalence by Age Group, County of Sacramento vs. California, 2005

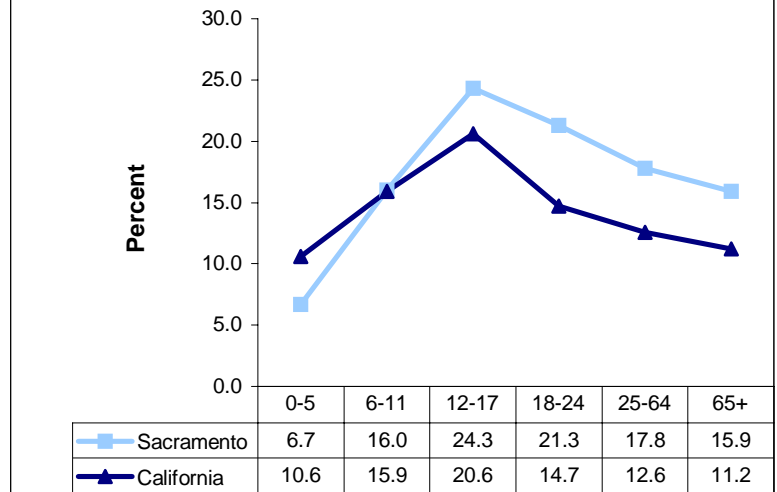
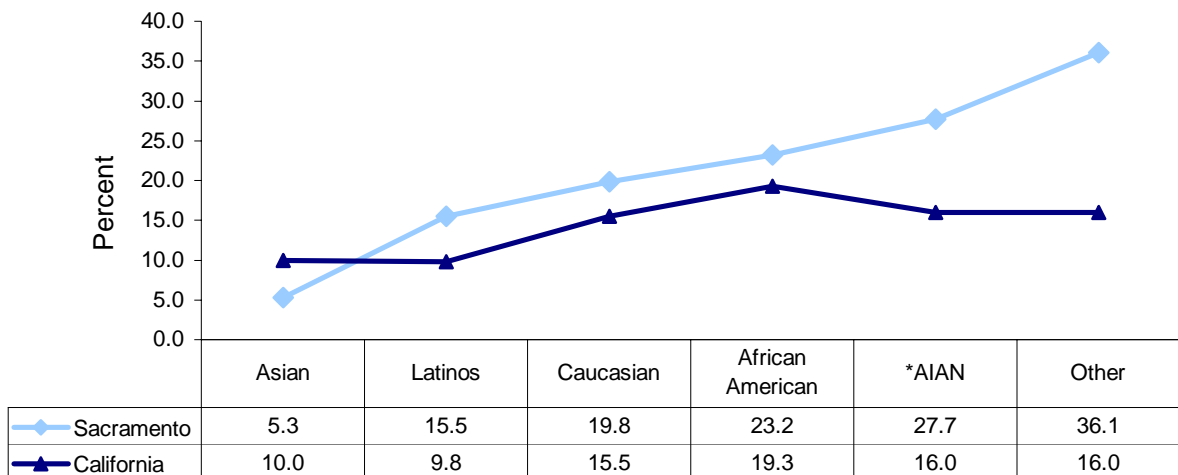


Figure 32 Lifetime Asthma Prevalence by Race/Ethnicity, County of Sacramento vs. California, 2005



*AIAN: American Indian and Alaskan Native (rate or percent may be unreliable due to small sample size).

Chronic Diseases

Diabetes

In 2005, it was estimated that 57,000 adults in the County of Sacramento had been diagnosed with diabetes at some point in their lives. The prevalence of diabetes for the County of Sacramento was 5.8 percent. Compared to the state of California, the County of Sacramento's diabetes rate was lower in 2005, but higher in 2001 and 2003.

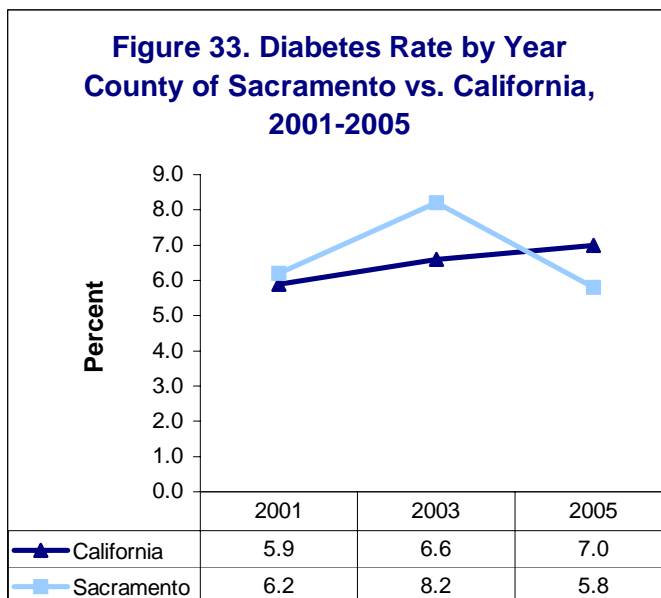
In 2005, it is estimated that there were 25,000 (5.3 percent) adult males and 31,000 (6.2 percent) females diagnosed with diabetes in the County of Sacramento.

Among those diagnosed with diabetes in 2005, 13.9 percent were type I diabetes and 86.1 percent were type II diabetes.

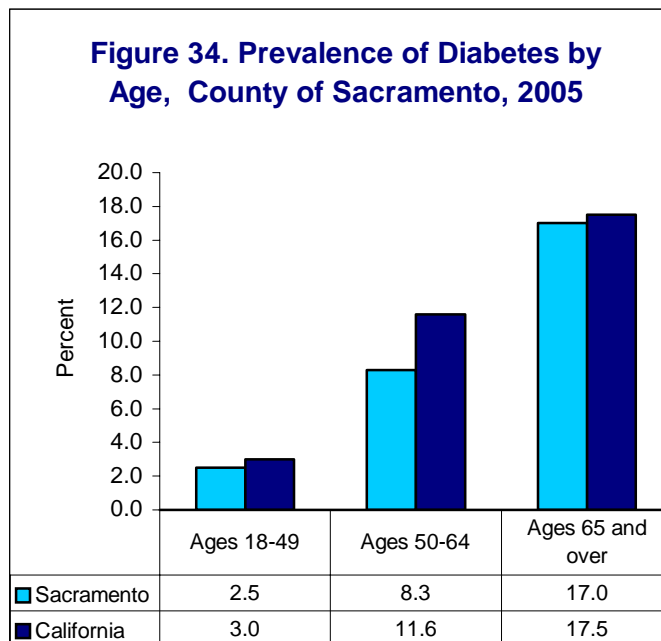
Prevalence of Diabetes by Age

Seniors (residents ages 65 years and older) had the highest prevalence of diabetes (17.0 percent), followed by residents ages 50-64 years (8.3 percent). In 2005, the County of Sacramento's diabetes rate was lower than the state of California across all age groups (Figure 34).

**Figure 33. Diabetes Rate by Year
County of Sacramento vs. California,
2001-2005**



**Figure 34. Prevalence of Diabetes by
Age, County of Sacramento, 2005**



Chronic Diseases

Overweight

Definition of Overweight and At Risk for Overweight

Body Mass Index (BMI) is an index of weight and height that is defined as body weight in kilograms divided by height in meters squared (kg/m²). For children, BMI is gender and age specific; therefore BMI-for-age is the measure used for children ages 2 to 20 years. The California Health Interview Survey was used to generate BMI-for-age measures for children ages 2-17 years based on the

year 2000 Centers for Disease Control and Prevention's BMI-for-age-growth charts for the United States. In this report children with BMI-for-age values at or above the 95th percentile of the gender-specific BMI growth charts are categorized as overweight and those with BMI values between the 85th and 95th percentiles are categorized as at risk of being overweight.

Overweight Children

In 2005, an estimated 49,000 (29.7 percent) children under 18 years of age in the County of Sacramento were considered overweight and 18,000 (10.7 percent) children under 18 years were at risk of being overweight. In 2005, the childhood overweight rate was 44.9 percent higher than 2003, and 21.7 percent higher than 2001 (Table 12).

Table 12. Prevalence of Overweight and at Risk for Overweight, Children Under 18, County of Sacramento, 2001-2005

Year	Overweight	At Risk
2001	24.4	10.8
2003	20.5	12.5
2005	29.7	10.7

Adult Obesity

In 2005, an estimated 214,000 (21.8 percent) adults ages 18 years and older were obese (Body Mass Index greater than or equal to 30) and 326,000 (36.7 percent) adults were considered overweight (Body Mass Index between 25.0 to 29.9). From 2001 to 2005, the County's obesity and overweight rate for adults was stable (Table 13).

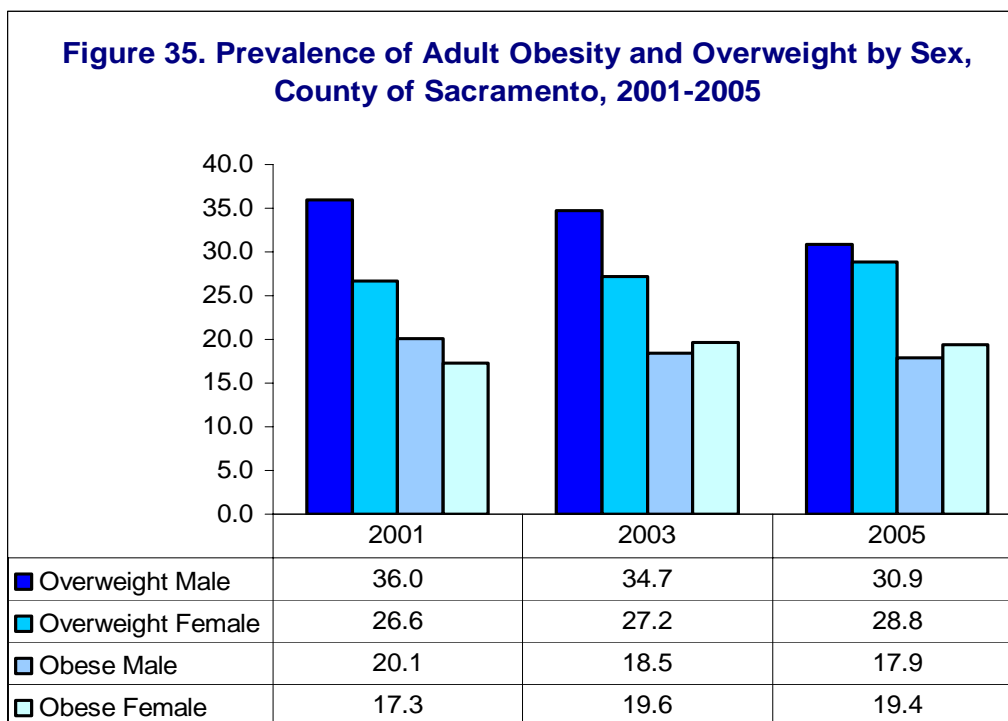
Table 13. Prevalence of Adult Obesity and Overweight, County of Sacramento, 2001-2005

Year	Overweight	Obese
2001	36.6	21.9
2003	34.3	21.1
2005	36.7	21.8

Chronic Diseases

Male residents had higher overweight rates than female residents across all three survey years. During 2003 and 2005, adult females

had slightly higher obesity rates than adult males in the County of Sacramento (Figure 35).



Heart Disease

In 2005 an estimated 59,000 adult residents in the County of Sacramento reported living with the diagnosis of heart disease. The prevalence rate for heart disease was 6.0 percent in the County, which is 3.3 percent lower than the State of California (6.2 percent).

Table 14. Prevalence of Heart Disease, County of Sacramento by Year, 2001-2005

Year	Sacramento	California
2001	8.0	7.0
2003	6.4	6.9
2005	6.0	6.2

Chronic Diseases

Heart Disease and Age

The prevalence rate for heart disease was higher for older adults. Residents age 65 years and older had the highest prevalence rate of heart disease in the County of Sacramento (Figure 36). From 2001 to 2005 the prevalence rates for seniors age 65 and

older declined. In 2005, heart disease prevalence decreased 29.4 percent compared to 2001. In 2005, the heart disease prevalence rate in the County of Sacramento was 21.1 percent lower than the statewide rate (Figure 37).

Figure 36. Prevalence of Heart Disease by Age Group, County of Sacramento vs. California, 2001-2005

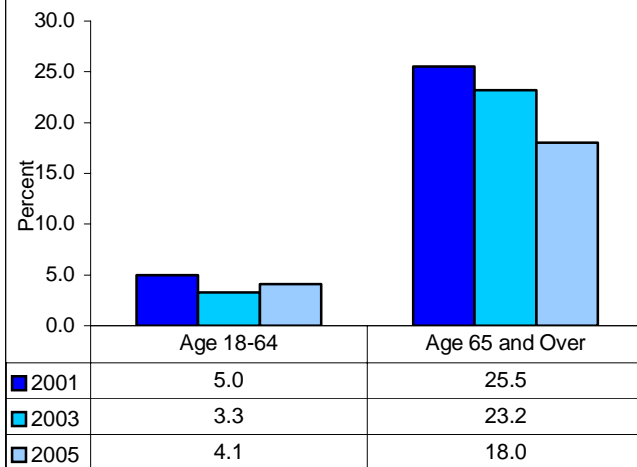
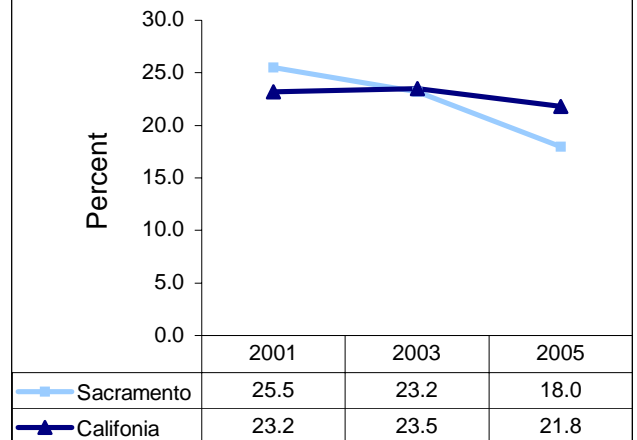


Figure 37. Prevalence of Heart Disease for Seniors Aged 65 and Older, County of Sacramento vs. California, 2001-2005



Infant Mortality

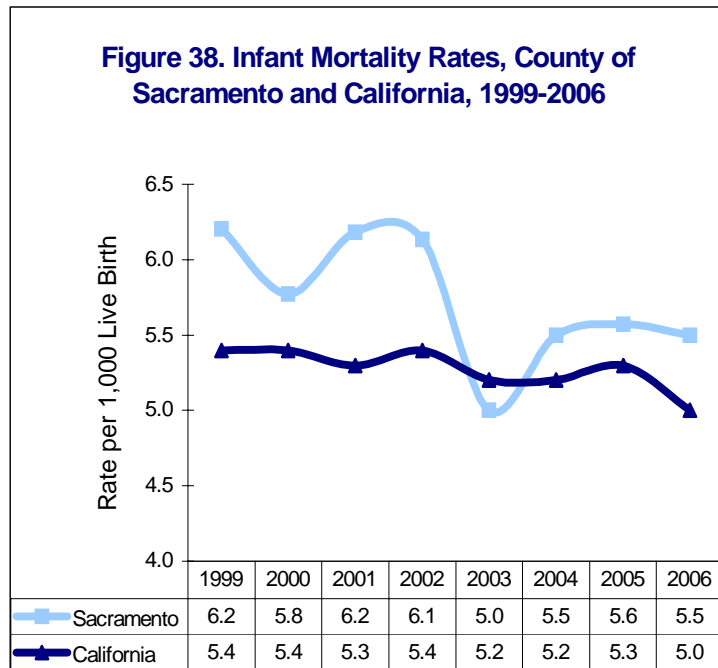
Infant Mortality Rate

The infant mortality rate is calculated by dividing the number of deaths for infants less than one year of age by the number of births in the same year. The rate is per 1,000 live births. In 2006, there were 120 infant deaths in the County of Sacramento of which 68 were male infants and 52 were female infants.

The Healthy People 2010 objective is to reduce infant mortality to no more than 4.5 infant deaths per 1,000 live births. In 2006, the infant mortality rate was 5.5 per 1,000 live births in the County of Sacramento, 22.2 percent higher than the Healthy People 2010

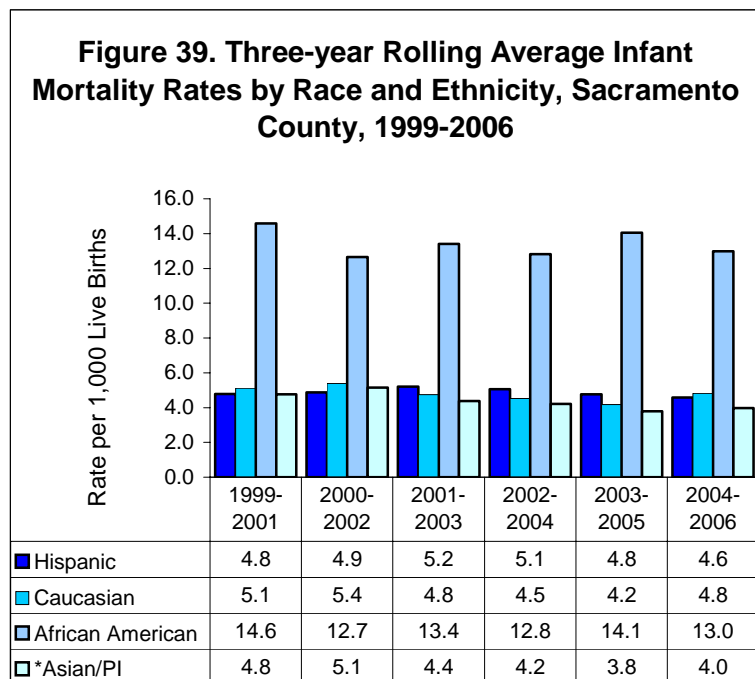
Figure 39 shows the infant mortality rates for all racial and ethnic groups. To control for random variation of estimates due to small numbers among racial and ethnic groups, three-year rolling average infant mortality rates were calculated. Over the eight-year span, African American infants had the highest infant mortality rate across all racial and ethnic groups. During any three-year period the infant mortality rate for African American infants, was more than twice that of any other racial or ethnic group in Sacramento County.

Figure 38. Infant Mortality Rates, County of Sacramento and California, 1999-2006



objective (Figure 38), and 10.0 percent higher than the California rate (5.0 per 1,000 live births).

Figure 39. Three-year Rolling Average Infant Mortality Rates by Race and Ethnicity, Sacramento County, 1999-2006



*Asian/PI: Asian and Pacific Islander

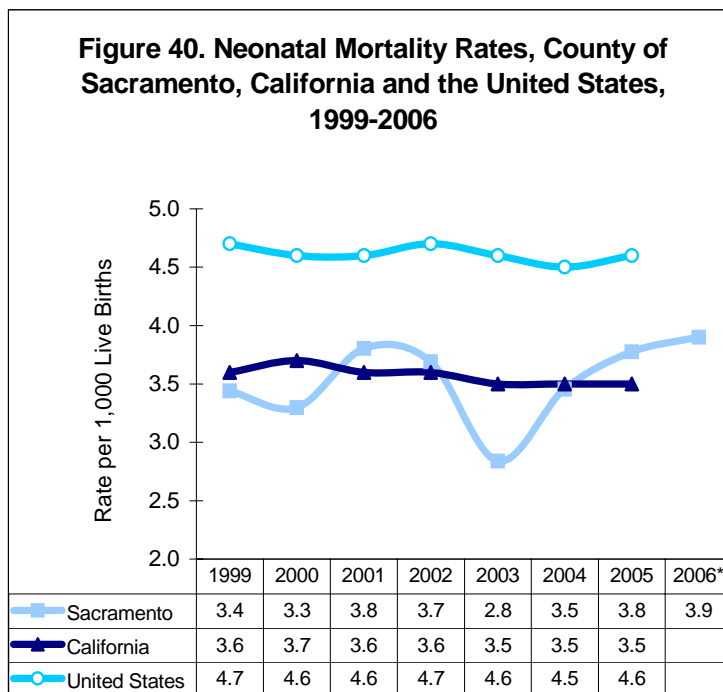
Infant Mortality

Neonatal Mortality Rate

A neonatal death is the death of a live born infant from birth to age 28 days. The neonatal mortality rate is calculated by dividing the number of neonatal deaths by the number of live births that have occurred in the same time period. The rate is expressed per 1,000 live births. The Healthy People 2010 Objective is to reduce the neonatal mortality rate to no more than 2.9 neonatal deaths per 1,000 live births.

The 2005 neonatal mortality rate for the County of Sacramento was 7.9 percent higher than the California rate and 17.4 percent lower than the national rate (Figure 40). From 2005 to 2006 the neonatal mortality rate slightly increased by 3.7 percent from 3.8 neonatal deaths per 1,000 live births in 2005 to 3.9 neonatal deaths per 1,000 live births in 2006.

Figure 40. Neonatal Mortality Rates, County of Sacramento, California and the United States, 1999-2006



*2006: Data are not available for California and United States

Leading Causes of Infant Death

In 2006 the five leading causes of death for infants accounted for 60.8 percent of all infant deaths in the County of Sacramento (Table 15). Of the 120 infant deaths, 21 were due to congenital malformations, of which 13 were neonatal deaths and 8 were post-neonatal deaths (up to 28 days but less than one year). There were 21 newborn deaths due to maternal factors and complications of

pregnancy, labor and delivery, of which 20 were neonatal deaths and only one was a post-neonatal death. There were 16 deaths due to prematurity and low birth-weight, all neonatal deaths. There were 11 infant deaths due to sudden infant death syndrome (SIDS) all were post-neonatal deaths. There were 4 deaths due to respiratory conditions and 2 deaths due to accidents (Table 15).

Table 15. Leading Causes of Infant Death, County of Sacramento, 2006

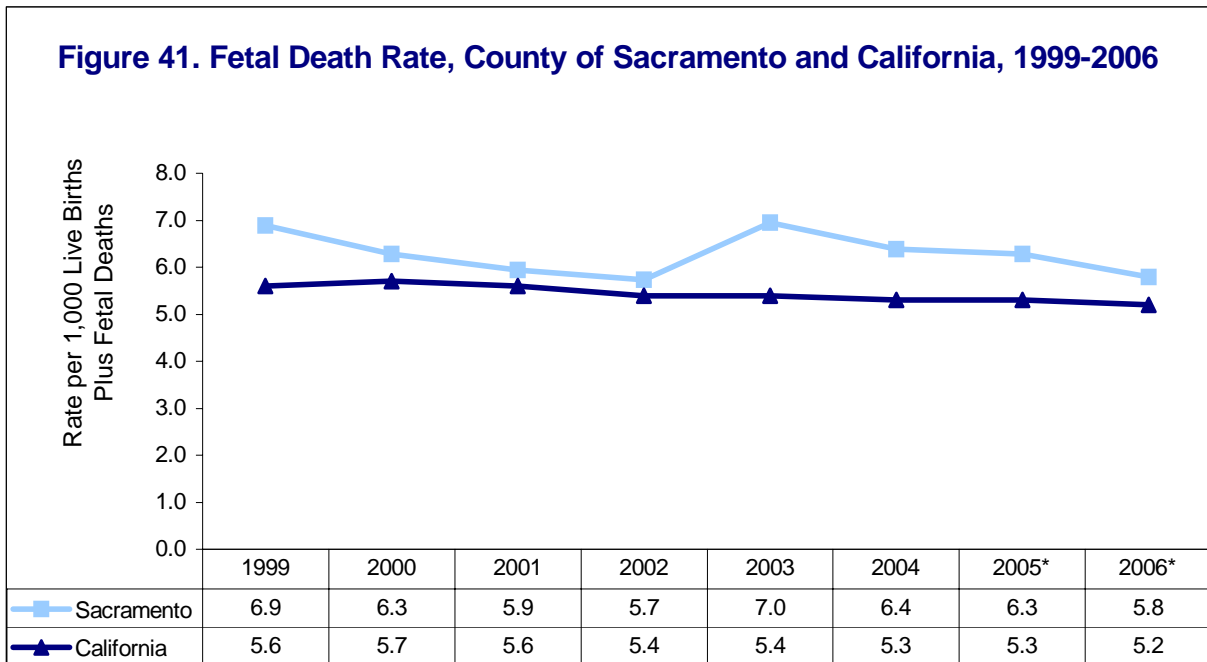
Causes of Infant Death	Total Deaths	Neonatal Deaths	Post-Neonatal Deaths	Percent of Total
Congenital malformations	21	13	8	17.5
Newborn affected by maternal factors and by complications of pregnancy, labor and delivery	21	20	1	17.5
Prematurity and low birthweight	16	16	0	13.3
Sudden infant death syndrome (SIDS)	11	0	11	9.2
Respiratory	4	3	1	3.3
Accident	2	0	2	1.7
Other Causes	45	34	11	37.5
All Causes	120	86	34	100.0

Infant Mortality

Fetal Mortality

A fetal death is the death of a fetus beyond the twentieth week of gestation but before birth. The fetal death rate is calculated by dividing the number of fetal deaths by the number of live births plus fetal deaths during the same time period. The rate is expressed per 1,000 live births plus fetal deaths. The Healthy People 2010 objective is to reduce the fetal mortality rate to 4.1 per 1,000 live births plus fetal deaths. Overall the fetal

death rate for the County of Sacramento declined from 6.9 per 1,000 live births plus fetal deaths in 1999 to 5.8 per 1,000 live births plus fetal deaths in 2006. In 2006, the County's fetal death rate was still 42.5 percent higher than the Healthy People 2010 objective of 4.1 per 1,000 live births plus fetal deaths. Compared to the State of California, Sacramento County had a higher fetal mortality rate across all years (Figure 41)



* 2005 and 2006 data for California are estimates.

Mortality

Total Number of Deaths

The total number of deaths of County residents increased from 9,004 deaths in 1999 to 10,016 deaths (11.2 percent) in 2006. During this 8-year period the number of male deaths increased by 666 deaths (15.3 percent) and the number of female deaths increased by 346 (7.5 percent) deaths. The population in the County of Sacramento grew by 221,509 during the same period (18.4 percent).

Year	Population	Total Deaths	Female	Male
1999	1,204,686	9,004	4,637	4,367
2000	1,230,465	8,991	4,498	4,493
2001	1,268,313	9,373	4,720	4,653
2002	1,302,647	9,578	4,814	4,764
2003	1,331,563	9,744	4,861	4,883
2004	1,363,248	9,634	4,831	4,803
2005	1,394,554	9,949	4,962	4,987
2006	1,426,195	10,016	4,983	5,033

Crude Death Rate

Between 1999 and 2006 the crude death rate for County residents decreased 6.0 percent from 747.4 per 100,000 population to 702.3 per 100,000 population. The female crude death rate decreased 9.1 percent from 753.5 per 100,000 population in 1999 to 685.1 per

100,000 population in 2006, while the male crude death rate dropped only 2.8 percent from 741.0 per 100,000 population in 1999 to 720.2 per 100,000 population in 2006.

Age-Adjusted Death Rates

From 1999 to 2006 the age-adjusted death rate for County residents fell by 12.3 percent from 869.7 deaths per 100,000 population to 762.4 deaths per 100,000 population. The female age-adjusted death rate dropped 14.6 percent and male age-adjusted death rate dropped 11.1 percent (Table 17). In 2006 the age-adjusted death rate for County residents was 762.4 deaths per 100,000 population.

Year	Crude Death Rates	Age-Adjusted Death Rates	Crude Death Rates		Age-Adjusted Death Rates	
	Overall	Overall	Female	Male	Female	Male
1999	747.4	869.7	753.5	741.0	752.0	1026.1
2000	730.7	818.4	715.9	746.1	692.9	991.5
2001	739.0	814.1	728.6	749.9	694.7	975.4
2002	735.3	800.0	723.3	747.8	679.6	954.6
2003	731.8	793.6	714.8	749.5	669.3	958.8
2004	706.7	765.4	694.2	719.7	650.9	915.2
2005	713.4	772.7	697.3	730.2	652.0	927.8
2006	702.3	762.4	685.1	720.2	642.1	912.3

*Rates are per 100,000 population, age-adjusted to 2000 U.S. Population Standard
 Population Data: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050, May 2004

Mortality

Top 10 Leading Causes of Death

The 10 leading causes of death in 2006 accounted for 79.6 percent of all deaths. Over an 8-year span, the 10 leading causes of death were unchanged. Heart disease, malignant neoplasm (cancer), cerebrovascular disease (stroke) and chronic lower respiratory disease (CLRD) remained the top four causes of death across all years.

From 2002 to 2006 the number of deaths from influenza and pneumonia dropped from fifth place in 1999-2001 to sixth place. Accidents became the fifth leading cause of death from 2002 to 2006. Alzheimer's disease deaths increased from 1999 to 2006. In 2006 Alzheimer's became the 7th leading cause of death (Table 18).

Table 18. Leading Causes of Death, County of Sacramento, 1999-2006

Leading Causes	1999	2000	2001	2002	2003	2004	2005	2006
	Deaths (%)	Deaths (%)	Deaths (%)	Deaths (%)	Deaths (%)	Deaths (%)	Deaths (%)	Deaths (%)
All Cause	9,004 (100.0)	8,991 (100.0)	9,373 (100.0)	9,578 (100.0)	9,744 (100.0)	9,634 (100.0)	9,949 (100.0)	10,016 (100.0)
Heart Disease	(1) 2,582 (28.7)	(1) 2,572 (28.6)	(1) 2,611 (27.6)	(1) 2,677 (27.9)	(1) 2,738 (28.1)	(1) 2,556 (26.5)	(1) 2,508 (25.2)	(1) 2,610 (26.1)
Cancer	(2) 2,106 (23.4)	(2) 2,177 (24.2)	(2) 2,204 (23.5)	(2) 2,230 (23.3)	(2) 2,237 (23)	(2) 2,211 (22.9)	(2) 2,237 (22.5)	(2) 2,196 (21.9)
Stroke	(3) 723 (8.0)	(3) 740 (8.2)	(3) 782 (8.3)	(3) 837 (8.7)	(3) 775 (8.0)	(3) 774 (8.0)	(3) 799 (8.0)	(3) 676 (6.8)
CLRD*	(4) 555 (6.2)	(4) 554 (6.2)	(4) 572 (6.1)	(4) 544 (5.7)	(4) 604 (6.2)	(4) 566 (5.9)	(4) 563 (5.7)	(4) 599 (6.0)
Influenza & Pneumonia	(5) 390 (4.3)	(5) 335 (3.7)	(5) 362 (3.9)	(6) 341 (3.6)	(6) 345 (3.5)	(6) 301 (3.1)	(6) 344 (3.5)	(6) 335 (3.3)
Accidents**	(6) 325 (3.6)	(6) 301 (3.3)	(6) 353 (3.8)	(5) 406 (4.2)	(5) 421 (4.3)	(5) 485 (5.0)	(5) 506 (5.1)	(5) 536 (5.4)
Diabetes	(7) 212 (2.4)	(7) 212 (2.4)	(7) 246 (2.6)	(7) 239 (2.5)	(7) 254 (2.6)	(8) 251 (2.6)	(8) 270 (2.7)	(8) 260 (2.6)
Liver Diseases	(8) 152 (1.7)	(8) 136 (1.5)	(9) 148 (1.6)	(9) 163 (1.7)	(10) 136 (1.4)	(10) 144 (1.5)	(10) 160 (1.6)	(10) 134 (1.3)
Alzheimer's Disease	(9) 146 (1.6)	(9) 139 (1.5)	(8) 172 (1.8)	(8) 215 (2.2)	(8) 234 (2.4)	(7) 297 (3.1)	(7) 318 (3.2)	(7) 321 (3.2)
Suicide	(10) 138 (1.5)	(10) 125 (1.4)	(10) 134 (1.4)	(10) 153 (1.6)	(9) 155 (1.6)	(9) 166 (1.7)	(9) 171 (1.7)	(9) 185 (1.9)
All Other causes	1,675 (18.6)	1,700 (18.9)	1,789 (19.1)	1,773 (18.5)	1,845 (18.9)	1,883 (19.5)	2,073 (20.8)	2,167 (21.6)

* Chronic Lower Respiratory Disease

** Accidents (Unintentional Injuries)

(): Cause of Death Numerical Rank for that Year.

Mortality

Leading Causes of Death by Gender

In 2006, heart disease and cancer were the first and second leading causes of death for both females and males, which accounted for 47.6 percent of female deaths and 48.4 percent of male deaths. Accidents were the third leading cause of death for males and the seventh leading cause for females. Stroke

was third leading cause of death for females and the fifth leading cause of death for males. Lung disease (CLRD) was the fourth leading cause for both of females and males. Influenza/pneumonia was the sixth leading cause of death for both of males and females as well (Table 19).

Table 19. Leading Causes of Death by Gender, County of Sacramento, 2006					
Females	Deaths	Rank	Males	Deaths	Rank
Heart Disease	1,285	1	Heart Disease	1,325	1
Cancer	1,087	2	Cancer	1,109	2
Stroke	396	3	Accidents*	364	3
CLRD*	305	4	CLRD*	294	4
Alzheimer's Disease	224	5	Stroke	280	5
Influenza & Pneumonia	181	6	Influenza & Pneumonia	154	6
Accidents**	172	7	Suicide	147	7
Diabetes	144	8	Diabetes	116	8
Hypertension	75	9	Liver Diseases	93	9
Liver Diseases	41	10	Homicide	92	10

* Chronic Lower Respiratory Disease

** Accident (Unintentional Injuries)

Mortality

Leading Causes of Death by Race/Ethnicity

In 2006, heart disease and cancer were the top two leading causes of death across all racial and ethnic groups. Stroke was the third leading cause of death for African American and Asian/Pacific Islanders. Chronic lower respiratory disease (CLRD) was the third leading cause of death for Caucasians and American Indians. The third leading cause of

death for Hispanics was accidents. Stroke became the fourth leading cause of death for Hispanics and Caucasians. Accidents were the fourth leading cause of death for Asian/Pacific Islanders and African Americans. Liver disease was the fourth leading cause of death for American Indians and Alaskan Natives. (Table 20).

Table 20. Leading Causes of Death by Race/Ethnicity, County of Sacramento, 2006					
Rank	Caucasian	African American	Hispanic	Asian/Pacific Islanders	American Indian and Alaskan Native
1	Heart Disease	Heart Disease	Heart Disease	Heart Disease	Cancer
2	Cancer	Cancer	Cancer	Cancer	Heart Disease
3	CLRD	Stroke	Accidents	Stroke	CLRD
4	Stroke	Accidents	Stroke	Accidents	Liver Diseases
5	Accidents	Diabetes	Homicide	CLRD	Accidents
6	Alzheimer's Disease	CLRD	Diabetes	Diabetes	Stroke
7	Influenza & Pneumonia	Homicide	CLRD	Influenza & Pneumonia	Suicide
8	Diabetes	Influenza & Pneumonia	Alzheimer's Disease	Suicide	Diabetes
9	Suicide	Hypertension	Influenza & Pneumonia	Hypertension	Influenza & Pneumonia
10	Liver Diseases	Liver Diseases	Liver Diseases	Alzheimer's Disease	Hypertension

Mortality

Leading Causes of Death for Seniors (Ages 65 Years and Older)

In 2006, deaths among seniors (65 years and older) comprised 70.2 (7,033 out 10,016) percent of all deaths in the County of

Sacramento. Table 21 shows the leading causes of death for seniors from 1999 to 2006.

Table 21. Leading Causes of Death for Seniors, County of Sacramento, 1999-2006

Causes	1999	2000	2001	2002	2003	2004	2005	2006
	No. of Deaths/Rate*	No. of Deaths/Rate*	No. of Deaths/Rate*	No. of Deaths/Rate*	No. of Deaths/Rate*	No. of Deaths/Rate*	No. of Deaths/Rate*	No. of Deaths/Rate*
Heart Disease	2,154 (16.5)	2,112 (15.4)	2,142 (15.2)	2,194 (15.2)	2,228 (15.2)	2,086 (14.0)	1,993 (13.3)	2,106 (13.8)
Cancer	1,459 (11.2)	1,479 (10.8)	1,526 (10.8)	1,507 (10.4)	1,527 (10.4)	1,495 (10.1)	1,486 (9.9)	1,459 (9.6)
Stroke	639 (4.9)	642 (4.7)	691 (4.9)	743 (5.1)	671 (4.6)	651 (4.4)	701 (4.7)	568 (3.7)
CLRD*	475 (3.6)	486 (3.5)	493 (3.5)	479 (3.3)	519 (3.5)	486 (3.3)	504 (3.4)	514 (3.4)
Influenza & Pneumonia	356 (2.7)	309 (2.3)	321 (2.3)	297 (2.1)	297 (2.0)	257 (1.7)	297 (2.0)	294 (1.9)
Diabetes	155 (1.2)	151 (1.1)	169 (1.2)	167 (1.2)	172 (1.2)	175 (1.2)	181 (1.2)	177 (1.2)
Alzheimer 's Disease	146 (1.1)	139 (1.0)	168 (1.2)	213 (1.5)	233 (1.6)	295 (2.0)	316 (2.1)	320 (2.1)
Accidents	86 (0.7)	103 (0.8)	93 (0.7)	99 (0.7)	99 (0.7)	117 (0.8)	118 (0.8)	146 (1.0)
Hypertension	65 (0.5)	67 (0.5)	70 (0.5)	55 (0.4)	99 (0.7)	70 (0.5)	96 (0.6)	96 (0.6)
Parkinson's Disease	38 (0.3)	42 (0.3)	41 (0.3)	52 (0.4)	56 (0.4)	66 (0.4)	68 (0.5)	62 (0.4)
Others Causes	986 (7.6)	1,017 (7.4)	1,007 (7.1)	1,056 (7.3)	1,028 (7)	1,039 (7)	1,162 (7.7)	1,291 (8.5)
All Deaths	6,559 (50.3)	6,547 (47.8)	6,721 (47.7)	6,862 (47.4)	6,929 (47.3)	6,737 (45.3)	6,922 (46.1)	7,033 (46.2)

*Rate per 1,000 population ages 65 years and older

Mortality

Leading Causes of Death for Children (ages 1 to 18)

Accidents were the number one leading cause of death for children ages 1 to 18 years. The majority of deaths in this category

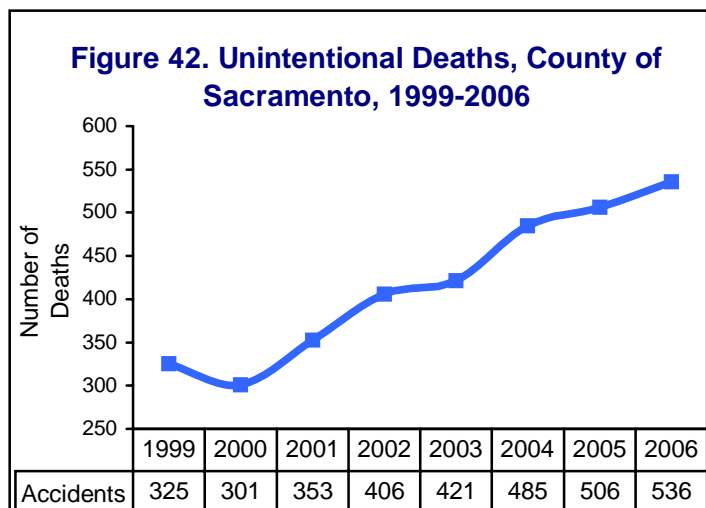
were due to motor vehicle accidents, followed by drowning (Table 22). The second leading cause of death was homicide.

Table 22. Leading Causes of Death for Children Aged 1 to 18 Years, County of Sacramento, 1999-2006

Causes	1999	2000	2001	2002	2003	2004	2005	2006
Accident	33	27	49	40	46	39	30	47
Motor Vehicle	14	12	34	24	37	23	17	23
Drowning	8	6	6	9	4	8	5	13
Other	11	9	9	7	5	11	8	11
Homicide	18	10	11	12	13	14	14	16
Cancer	10	18	10	9	10	9	11	9
Of Brain	4	5	2	4	2	0	0	2
Leukemia	2	6	5	0	6	2	4	1
Other	4	7	3	5	2	7	7	6
Suicide	3	6	7	8	5	5	8	9
Other Causes	33	41	46	42	34	41	32	36
All Causes	94	96	116	103	103	103	87	107

Accidents (Unintentional Injuries)

From 1999 to 2006 the number of unintentional injury deaths increased (Figure 42). There were 536 unintentional injury deaths in the County of Sacramento in 2006, 30 more unintentional injury deaths than in 2005. The leading cause of death for unintentional injuries is transportation accidents.



Mortality

Table 23. Leading Causes of Accident-Related Deaths, County of Sacramento, 1999-2006

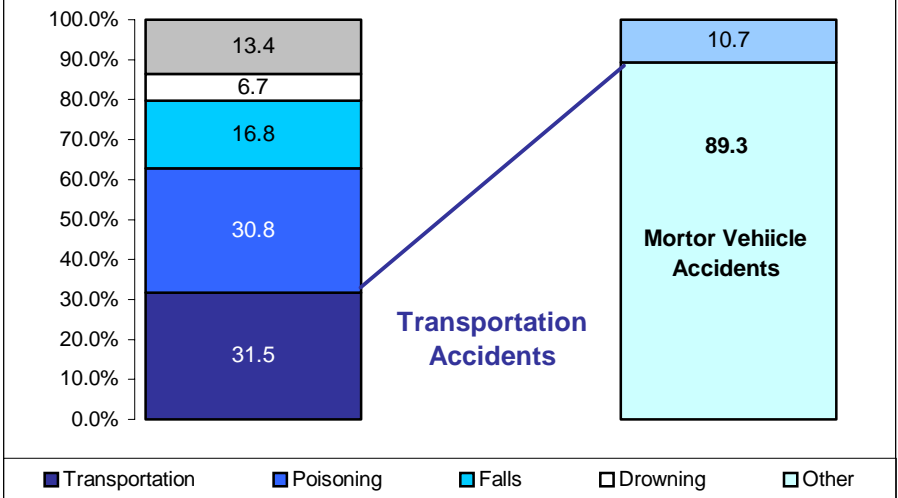
Causes	1999	2000	2001	2002	2003	2004	2005	2006
	Deaths/%	Deaths/%	Deaths/%	Deaths/%	Deaths/%	Deaths/%	Deaths/%	Deaths/%
Transportation*	143 (44.0)	148 (49.2)	203 (57.5)	191 (47)	189 (44.9)	199 (41)	185 (36.6)	169 (31.5)
Poisonings	75 (23.1)	51 (16.9)	36 (10.2)	96 (23.6)	113 (26.8)	139 (28.7)	161 (31.8)	165 (30.8)
Falls	43 (13.2)	55 (18.3)	50 (14.2)	56 (13.8)	47 (11.2)	70 (14.4)	85 (16.8)	94 (17.5)
Drownings	13 (4.4)	14 (4.7)	15 (4.2)	20 (4.9)	21 (5.0)	20 (4.1)	21 (4.2)	36 (6.7)
Other	51 (15.7)	33 (11.0)	49 (13.9)	43 (10.6)	51 (12.1)	57 (11.8)	54 (10.7)	72 (13.4)
Total	325 (100)	301 (100)	353 (100)	406 (100)	421 (100)	485 (100)	506 (100)	536 (100)

* Transportation Accident: Motor vehicle accidents, pedestrian, etc.

Of the 536 unintentional injury deaths in 2006, 169 (31.5 percent) were due to transportation accidents. Of these deaths, 89.3 percent were due to motor vehicle accidents.

Poisoning and exposure to noxious substances was the second leading cause of unintentional injury death, followed by fall related injuries and drowning (Figure 43).

Figure 43. Leading Causes of Unintentional Deaths, County of Sacramento, 2006



Intentional Injury

There were a total of 293 intentional deaths in 2006. Of these deaths 185 (63.1 percent) were suicides and 108 (36.9 percent) were homicides. The leading manner of suicide was use of firearms, which accounted for 42.1 percent of all suicides, followed by hanging, strangulation and suffocation, poisoning and exposure to noxious

substances. The first leading manner of homicide was also the use of a firearm, which accounted for 68.2 percent of all homicides. The second leading manner of homicide was assault with a sharp object, followed by hanging, strangulation and suffocation (Table 24).

Mortality

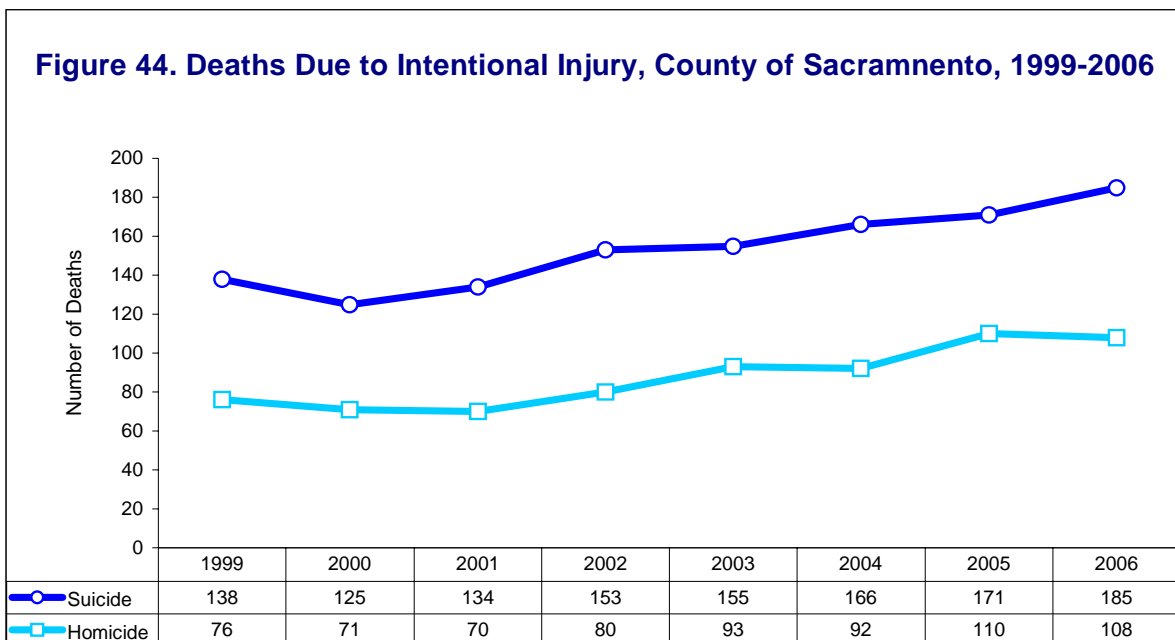
Table 24 Leading Manner of Intentional Injury, County of Sacramento, 2006

Manner	Counts	Percent
Suicide	185	63.1
Discharge of Firearm	75	40.5
Poisoning and Exposure to Noxious Substances	49	26.5
Hanging, Strangulation and Suffocation	38	20.5
Jumping from a High Place	4	2.2
Others	19	10.3
Homicide	108	36.9
Assault with Firearm	75	69.4
Assault with Sharp Object	14	13.0
Assault by Hanging, Strangulation and Suffocation	3	2.8
Neglect, abandonment and other maltreatment syndromes	2	1.9
Other	14	13.0
Total Intentional Deaths	293	100.0

From 1999 to 2006, the number of intentional injury deaths caused by suicide and homicide increased. In 2006, there were 47 more

suicides and 32 more homicide deaths than in 1999 (Figure 44).

Figure 44. Deaths Due to Intentional Injury, County of Sacramento, 1999-2006



Mortality

Drug and Alcohol Related Deaths

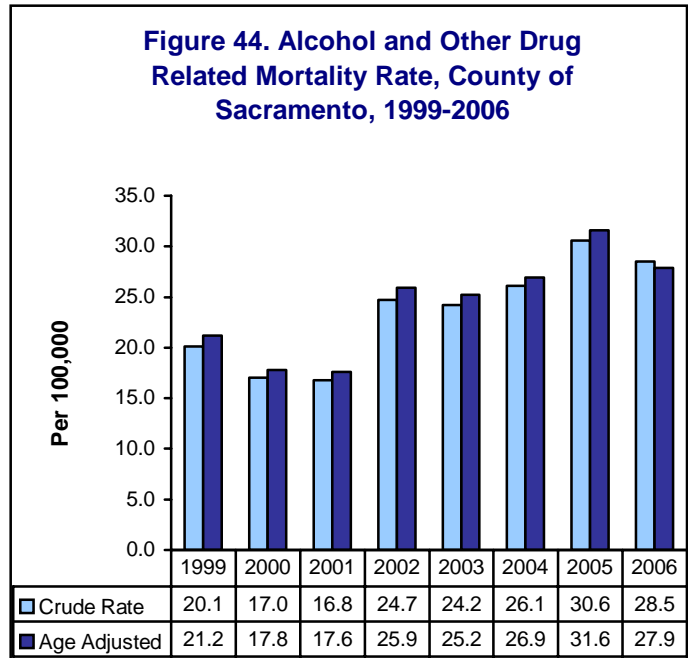
From 1999-2006, 2,489 deaths were associated with alcohol and other drugs in the County of Sacramento. Drug and alcohol

related deaths represent 3.3 percent of the 76,289 deaths recorded during the 8-year period (Table 25).

Table 25. Alcohol and Other Drug-Related Deaths, County of Sacramento, 1999-2006

Year	All Death	Alcohol and Other Drug-Related	Percent
1999	9,004	242	2.7
2000	8,991	209	2.3
2001	9,373	213	2.3
2002	9,578	322	3.4
2003	9,744	322	3.3
2004	9,634	356	3.7
2005	9,949	427	4.3
2006	10,016	398	4.0
Total	76,289	2489	3.3

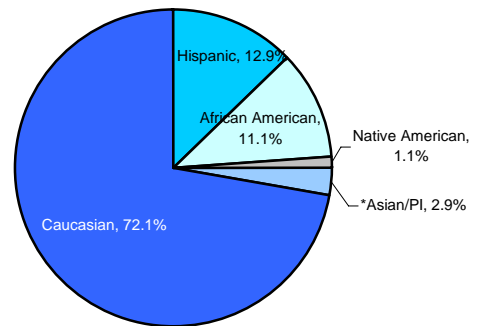
Figure 44. Alcohol and Other Drug Related Mortality Rate, County of Sacramento, 1999-2006



The number of alcohol and other drug-related deaths increased from 242 in 1999 to 398 in 2006. The age-adjusted mortality rate increased from 21.2 per 100,000 population in 1999 to 27.9 per 100,000 population in 2006 (Figure 44).

Figure 45 shows the racial and ethnic distribution of alcohol and other drug related deaths over the eight-year period.

Figure 45. Percent of Alcohol and Other Drug-Related Deaths by Race/Ethnicity, County of Sacramento, 1999-2006



*Asian/PI: Asian and Pacific Islander

Mortality

The age group with the largest number of alcohol and other drug related deaths were ages 45-54 years and accounted for 35.1 percent of all alcohol and other drug related deaths during the eight-year period. The next highest number of deaths was to residents ages 35-45 years (22.8 percent).

There were 815 alcohol related deaths attributed to alcoholic liver disease (32.7 percent), of which 493 (58.4 percent) were due to alcoholic cirrhosis. Nearly 34 percent of all alcohol and other drug related deaths were associated with alcohol or drug poisoning; 17.8 percent were caused by mental or behavioral disorders and 9.3 percent were related to suicide (Table 26).

Figure 46. Percent of Alcohol and Other Drug-Related Deaths by Age Group, County of Sacramento, 1999-2006

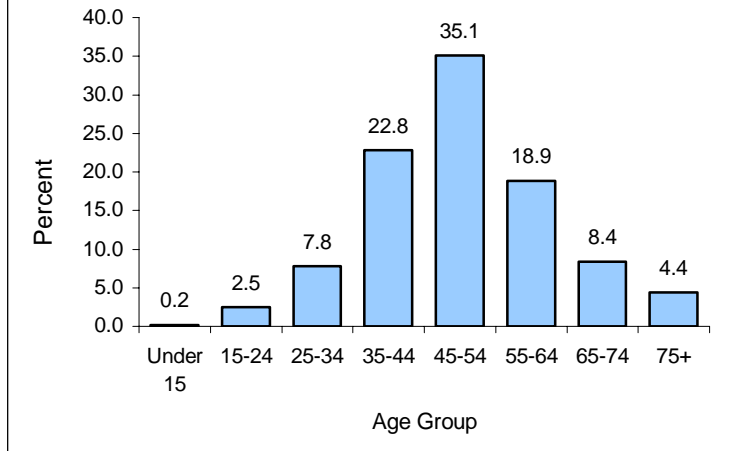


Table 26. Alcohol and Other Drug-Related Deaths by Underlying Cause, County of Sacramento, 1999-2006

Causes	Deaths	Percent
Total	2489	100.0
Alcohol Liver disease	815	32.7
Accidental drug or alcohol poisoning	844	33.9
Mental or behavioral disorder due to drug or alcohol use	444	17.8
Suicide	232	9.3
Undetermined intent	108	4.3
Alcoholic cardiomyopathy	22	0.9
Adverse effects of therapeutic drugs	13	0.5
Alcoholic gastritis	4	0.2
Homicide	4	0.2
Degeneration of nervous system due to alcohol	3	0.1

Definitions

Age-Adjusted Death Rate: Age-adjusted death rates are used to compare relative mortality risk across groups and over time. These rates show expected mortality if the age distribution of population were the same. Age-adjusted rates are index numbers and cannot be compared to crude or other types of rates. The rate is calculated by dividing the total number of expected deaths in a standard population if the people in this population had experienced the same age-specific death rates as the population being adjusted to the total standard population. The rate is expressed per 100,000 population. In this report the 2000 US standard population is used.

APNCU: The Adequacy of Prenatal Care Utilization index (APNCU), also known as the Kotelchuck index, is a measurement based on the month of pregnancy at which the mother enters prenatal care, the number of prenatal care visits she has, and the continuity of her care during the pregnancy. To classify the adequacy of received services, the number of prenatal visits is compared to the expected number of visits for the period between when care began and the delivery date. The expected number of visits is based on the American College of Obstetricians and Gynecologists prenatal care standards for uncomplicated pregnancies and is adjusted for the gestational age when care began and for the gestational age at delivery. A ratio of observed to expected visits is calculated and grouped into four categories: Inadequate (received less than 50 percent of expected visits), Intermediate (50 percent-79 percent), Adequate (80 percent-109 percent), and Adequate Plus (110 percent or more). The final Kotelchuck index measure combines these two dimensions into a single summary score. The profiles define adequate prenatal care as a score of 80 percent or greater on the Kotelchuck Index, or the sum of the Adequate and Adequate Plus categories.

Birth Rate: The birth rate is calculated as the number of births to a certain population (entire county, specific racial or ethnic group) divided by the total number of people in that population, and is reported per 1,000 population.

Causes of Death: The standard diagnostic categories of the International Statistical Classification of Diseases Code the tenth revision (ICD 10) were used to identify the leading causes of death.

Crude Death Rate: Total number of deaths divided by the estimated total population in the same time period. The rate is expressed per 100,000 or 1,000 population.

Fertility Rate: The fertility rate is defined as the number of births annually per 1,000 women ages 15 to 44 years.

Fetal Death: The death of a fetus beyond the twentieth week of gestation at anytime before birth.

Fetal Mortality Rate: Number of fetal deaths divided by the number of live births plus fetal deaths during the same time period. The rate is expressed per 1,000 live births plus fetal deaths.

Incidence: The number of new cases of disease or other condition that occur in a specified population during a given period.

Infant Mortality Rate: Number of deaths to infants under one year of age divided by the number of births in the same year. The rate is per 1,000 live births.

Low Birth Weight: Weight of a baby at birth less than 2500 grams (Less than 5.5 pounds).

Neonatal Death: Death of a live-born infant during the first 28 completed days of life.

Definitions

Neonatal Mortality Rate: Number of deaths less than 28 days of age divided by the number of live births that have occurred in the same time period. The rate is expressed per 1,000 live births.

Prevalence: The proportion of cases of a disease or other condition present in a population without any distinction between new and old cases. When used without qualification the term usually refers to the number of cases as a proportion of the population at risk at a specified point in time (point prevalence).

Rate: An expression of the change in one quantity per unit time. It is a ratio whose essential characteristic is that time is an element of the denominator and in which there is a distinct relationship between numerator and denominator.

SIDS: Sudden Infant Death Syndrome (SIDS) is the diagnosis given for the sudden death of an infant under one year of age that remains unexplained after a thorough case investigation (i.e., autopsy, death scene exam, review of health status prior to dying and other family medical history). SIDS is the leading cause of death in infants between one month and one year of age.

Teen Births: Number of live births among 15 to 19 year olds.

Teen Birth Rate: The number of live births to female's age 15 to 19 years divided by the number of females in the population age 15 to 19 years. The rate is expressed per 1,000 female's ages 15 to 19 years.

Very Low Birth Weight: Weight of a baby at birth less than 1500 grams (3.3 pounds).



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