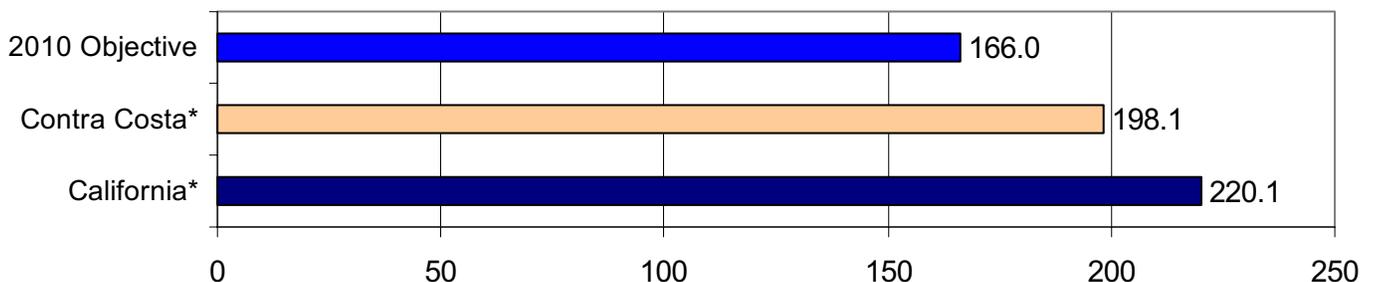# Heart Disease

Contra Costa has not met the Healthy People 2010 objective of reducing the age-adjusted death rate from heart disease to no more than 166.0 deaths per 100,000 residents.

Figure 11.   Age-adjusted death rates from heart disease

[*] Indicates that the age-adjusted death rates per (100,000) for Contra Costa and California are significantly higher than the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Heart disease is the leading cause of death

In Contra Costa, **heart disease accounts for 27% of all deaths**. Over a three-year period, 2000 to 2002,there were 5,623 Contra Costa residents who died of heart disease. This means that **approximately 1,875 Contra Costa residents die from heart disease each year**.

The age-adjusted death rate from heart disease is significantly lower in Contra Costa (198.1 per 100,000) than California (220.1 per 100,000).

People living in **San Pablo, Oakley, Rich-mond, Antioch, Brentwood and Pittsburg, as well as African Americans and men, are more likely to die** from

heart disease compared to the county overall. These differences are not due to the age of the population and are likely due to environmental risk, unhealthy behaviors or inadequate access to health services.

Some communities have rates much higher than others

Residents of **San Pablo, Oakley, Rich-mond, Antioch, Brentwood and Pittsburg are more likely to die** from heart disease, and people living in Walnut Creek are less likely to die from heart disease, compared to Contra Costa as a whole.

Table 47. Heart disease deaths in selected communities. Contra Costa, 2000-2002

	Rate	Percent	(Number)
San Pablo	*389.2	5%	(273)
Oakley	*289.0	2%	(100)
Richmond	*281.5	12%	(689)
Antioch	*257.6	8%	(447)
Brentwood	*249.4	2%	(134)
Pittsburg	*246.6	5%	(300)
Martinez	231.0	4%	(212)
Pinole	230.7	3%	(141)
Bay Point	217.8	1%	(76)
Concord	215.6	12%	(686)
Walnut Creek	171.5	15%	(836)
Contra Costa:	**198.1**	**100%**	**(5,623)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher for people living in these communities compared to Contra Costa as a whole.

A large number of the deaths from heart disease occur among people living in Walnut Creek (836, 15%), **followed by people living in Richmond** (689, 12%), **Concord** (686, 12%), Antioch (447, 8%), Pittsburg (300, 5%) and San Pablo (273, 5%).

Too many African American residents die of heart disease

There are unfair differences in heart disease deaths by race/ethnicity. **African Americans are more likely to die** from heart disease compared to Contra Costa as a whole. Whites are equally likely to die from heart disease, and Latinos and Asians are less likely to die from heart disease, compared to the county as a whole.

Table 48. Heart disease deaths by race/ ethnicity. Contra Costa, 2000-2002

	Rate	Percent	(Number)
African American	*319.8	11%	(591)
White	201.9	79%	(4,434)
Latino	152.4	5%	(284)
Asian	122.8	5%	(278)
Contra Costa:	**198.1**	**100%**	**[1](5,623)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher among African Americans compared to Contra Costa as a whole.
[1]The Contra Costa total also includes the 36 deaths that occurred among people from other race/ethnic groups such as Native American and Alaska Natives, Native Hawaiians and Pacific Islanders, and people from two or more race groups. Due to small numbers (<20 deaths), rates could not be calculated for these groups.

The majority of deaths from heart disease occur among Whites (4,434, 79%), followed by African Americans (591, 11%), Latinos (284, 5%), and Asians (278, 5%).

Men are more likely to die from heart disease

There are differences in heart disease death by gender. Men (239.8 per 100,000) are more likely to die from heart disease, and women (165.0 per 100,000) are less likely to die from heart disease, compared to Contra Costa as a whole.

Table 49. Heart disease deaths by gender. Contra Costa, 2000-2002

	Rate	Percent	(Number)
Men	*239.8	48%	(2,693)
Women	165.0	52%	(2,930)
Contra Costa:	**198.1**	**100%**	**(5,623)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher among men compared to Contra Costa as a whole.

Though men are more likely to die from heart disease, **over half of the deaths from heart disease occur among women** (2,930, 52%).

Heart disease death rates are improving

Deaths from heart disease have declined steadily over the past 50 years, in large part because of advances in prevention, early detection and treatment.

Heart disease is a chronic disease that is heavily influenced by age. This means that people become much more likely to develop and die from heart disease as they get older.

A person can reduce their risk for heart disease by not smoking, adopting a healthy diet, becoming physically active, and reducing or controlling high blood pressure, high blood cholesterol and diabetes.

Using this data to improve community health

In order to reduce health disparities, it is important to target the groups with the highest age-adjusted death rates from a given cause. For heart disease, these are people living in San Pablo, Oakley, Richmond, Antioch, Brentwood and Pittsburg, as well as African Americans and men.

In order to reduce the overall number of deaths in the county, without regard to health disparities, it may be better to target interventions to the group that accounts for the highest percentage of deaths from a given cause. For heart disease, these are Whites, African Americans, and people living in Walnut Creek, Richmond and Concord.

Because a person's risk for developing or dying from a chronic disease like heart disease is cumulative, it is important to target ongoing environmental and behavioral interventions to the young and middle-aged, in addition to older populations. Examples could include strategies to limit youth access to cigarettes, increase community access to fruits and vegetables, teach people how to better manage stress in their lives, or how to recognize the signs and symptoms of a heart attack or stroke.

Access to routine medical screenings and care is important to good health. Many Contra Costa residents diagnosed with chronic diseases like heart disease can keep getting sicker when they lack health insurance, transportation or sufficient English skills to navigate health care systems. Providing culturally competent and accessible heath care to all residents will be key to lowering the county's death rates.

Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age distribution, as well as population size. An age-adjusted rate is the best summary measure for comparing the impact of chronic diseases like heart disease that are heavily influenced by age.

For example, the White population is older and the Latino population is younger than the county as a whole. Without age-adjustment, we would expect to see higher death rates among Whites than among Latinos, and we would expect that these differences would be largely due to age. An age-adjusted rate calculates what the death rates would look like if the White and Latino populations had the same age distribution. The age-adjusted death rate is useful in **identifying differences that are**

due to poor access to health care or environmental and behavioral risk factors instead of age. (Please see the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

How to calculate the percentage and number of deaths

Percentages describe the proportion of countywide deaths from heart disease that occur within a particular community, race/ethnic group or gender. The percentage is calculated by dividing the number of deaths that occur within a specific community, race/ethnic group or gender by the total number of deaths countywide, and then multiplying that number by 100.

Numbers show the actual number of deaths from heart disease over a three-year period. The number of deaths per year can be calculated by dividing the total number of deaths from 2000-2002, as shown in the tables, by three.

Confidence intervals are available
You may download and view all detailed tables with 95% confidence intervals, at *http://www.cchealth.org/ health_data/hospital_council/*

Data sources

Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2000-2002. Any analyses, interpretations, or conclusions of the data have been reached by CHAPE and are not from the CDHS.

Population data from the California Department of Finance, Race/ Ethnic Population with Age and Sex Detail, 2000- 2050, and E-4 Population Estimates for Cities, Counties, and the State, 2001-2004, with DRU Benchmark, available online at: http://www.dof.ca.gov/HTML/DEMOGRAP/ Druhpar.htm. Sacramento, California, May 2004.

Note: City-level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, please see our section on statistical methods.

ICD10 coding for diseases of the heart (ICD I00-I09, I11, I13, I20-I51) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http:// www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Information on national trends from the Centers for Disease Control and Prevention, available online at http://www.cdc.gov/. Decline in deaths from heart disease and stroke-United States, 1900-1999. MMWR 1999; Vol. 48 No. 30: 649-656. Mortality from coronary heart disease and acute myocardial infarction-United States, 1998. MMWR 2001; Vol. 50 No. 6: 90-93.