Diabetes - Deaths

African Americans and Latinos are more likely to die from diabetes than other Contra Costa residents.

Diabetes is the seventh leading cause of death

In Contra Costa, diabetes accounts for 2% of all deaths. Over a three-year period, 2000 to 2002, there were 490 Contra Costa residents who died of diabetes. This means that **approximately 160 Contra Costa residents die of diabetes each year**.

African Americans and Latinos, as well as people living in San Pablo, Richmond, and Pittsburg, are more likely to die from diabetes compared to the county overall. These differences are likely due to limited health care access, environmental risks or unhealthy behaviors.

The age-adjusted **death rate from diabetes is lower in Contra Costa** (17.4 per 100,000) **than California** (20.8 per 100,000).

Contra Costa and California statistics were calculated for the three-year period 2000-2002.

There are unfair racial differences in diabetes deaths

African Americans and Latinos are more likely to die from diabetes compared to Contra Costa as a whole. Asians are equally likely to die from diabetes, and Whites are less likely to die from diabetes, compared to the county as a whole.

The largest number of deaths from diabetes occur among Whites (285, 58%), followed by African Americans (103, 21%), Latinos (57, 12%), and Asians (39, 8%).

Table 43. Diabetes deaths by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent	Number
African American	*54.8	21%	(103)
Latino	*27.2	12%	(57)
Asian	17.3	8%	(39)
White	13.7	58%	(285)
Contra Costa	**17.4**	**100%**	**¹(490)**

[*] Indicates that the age-adjusted death rate (per 100,000) is significantly higher among African Americans and Latinos compared to Contra Costa as a whole.
¹ The Contra Costa total also includes the 6 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.

Some cities have diabetes rates much higher than others

Residents of San Pablo, Richmond, and Pittsburg are more likely to die from diabetes, and people living in Walnut Creek are less likely to die from diabetes, compared to Contra Costa as a whole.

Table 44. Diabetes deaths in selected cities. Contra Costa, 2000 - 2002

	Rate	Percent	Number
San Pablo	*38.9	5%	(26)
Richmond	*35.8	18%	(90)
Pittsburg	*29.7	8%	(37)
Martinez	29.5	5%	(26)
Concord	20.3	14%	(67)
Antioch	19.0	7%	(35)
Walnut Creek	11.3	10%	(49)
Contra Costa	**17.4**	**100%**	**(490)**

[*] 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 proportion of the deaths from diabetes occur among people living in Richmond (90, 18%), followed by people living in Concord (67, 14%), Walnut Creek (49, 10%), Pittsburg (37, 8%), Antioch (35, 7%), San Pablo (26, 5%), and Martinez (26, 5%).

Men and women die from diabetes in almost equal numbers

The age-adjusted death rate from diabetes is similar among men, women, and Contra Costa overall. Slightly over half of the deaths from diabetes occur among women.

Table 45. Diabetes deaths by gender. Contra Costa, 2000 - 2002

	Rate	Percent	Number
Men	20.2	48%	(234)
Women	15.5	52%	(256)
Contra Costa	**17.4**	**100%**	**(490)**

Currently, it is unclear if Contra Costa has met the Healthy People 2010 National Objective of reducing the age-adjusted death rate from diabetes to no more than 45.0 deaths per 100,000 residents. The Healthy People 2010 Objective for diabetes deaths is based on both underlying and contributing causes of death. Multiple causes of death data for 2002 for California and Contra Costa were not available for use in this report.

The statistics in this report include only those cases in which the primary cause of death was coded as diabetes. These statistics do not include people with diabetes that died of other causes such as heart disease or stroke. The CDC's National Center for Chronic Disease Prevention and Health Promotion estimates that **roughly 75% of people with diabetes die of heart disease or stroke**.

Diabetes death rates in Contra Costa will probably get worse

With the aging of the baby boomers and the growing number of overweight/obese Americans, the death rate from diabetes will probably continue to increase.

Diabetes is a chronic disease that is heavily influenced by age. This means that people become much more likely to develop - and die from - diabetes as they get older. The national data show that African Americans, American Indian and Alaska Natives, and Latinos are more likely to die from diabetes compared to the population as a whole.

Obesity is a major risk factor for developing diabetes. This risk can be significantly reduced by adopting a healthy diet and becoming physically active.

Diabetes is a major cause of disability. People with diabetes are more likely to have blindness, kidney failure, leg and foot amputations, heart disease and stroke. Many of these outcomes can be managed and even prevented through proper care.

Using this data to improve community health

In order to reduce unfair health differences, it is important to focus on the population groups with the highest age-adjusted death rates. For diabetes, this is African Americans, Latinos, and people living in San Pablo, Richmond and Pittsburg.

In order to lower Contra Costa's overall diabetes death rate and reduce the total number of diabetes deaths (without regard to health disparities), efforts must include those residents who account for the highest percent of deaths. For diabetes, these are Whites, African Americans and Latinos, as well as people living in Richmond, Concord and Walnut Creek.
Because a person's risk for developing or dying from a chronic disease like diabetes often begins early in life and builds over time, 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 junk food while at school, increase community access to safe and fun places to exercise, or educate people about the importance of regular health screenings.

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

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 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 environmental or 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

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

The numbers show the actual number of deaths from each cause 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 diabetes mellitus (ICD E10-E14) 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 about national trends and diabetes-related complications from the CDC's National Center for Chronic Disease Prevention and Health Promotion, available online at http://www.cdc.gov/diabetes/ and at *http://www.healthypeople.gov/*.