

# Contra Costa and California

People living in Contra Costa are more likely than people living in California to die from cancer and stroke.



Heart disease, cancer, stroke, chronic lower respiratory disease and unintentional injury (accidents) are the five most common causes of death in both Contra Costa and California.

Over a three-year period 2000-2002, there were 20,531 deaths among Contra Costa residents. This means that there are approximately 6,844 deaths each year among people living in this county.

## Contra Costa

The death rates from cancer and stroke are higher in Contra Costa (178.2 and 63.9 per 100,000) than California (171.8 and 57.5 per 100,000).

## California

The death rates from heart disease and unintentional injuries are higher in California (220.1 and 26.9 per 100,000) than Contra Costa (198.1 and 22.8 per 100,000).

Table 7. The five most common causes of death. Contra Costa, 2000-2002

	Percent	(Number)	Rate <sup>1</sup>
1. Heart disease	27.4%	(5,624)	198.1
2. Cancer	24.5%	(5,037)	*178.2
3. Stroke	8.8%	(1,810)	*63.9
4. Chronic lower respiratory disease	5.4%	(1,116)	40.2
5. Unintentional injuries	3.2%	(666)	22.8

Table 8. The five most common causes of death. California, 2000-2002

	Percent	Rate <sup>1</sup>
1. Heart disease	29.7%	*220.1
2. Cancer	23.2%	171.8
3. Stroke	7.7%	57.5
4. Chronic lower respiratory disease	5.5%	41.6
5. Unintentional injuries	4.0%	*26.9

[\*] Indicates that the death rate for this cause is significantly higher in Contra Costa than in California.

<sup>1</sup> Death rates are presented as age-adjusted rates (per 100,000) for heart disease, cancer, stroke and chronic lower respiratory disease, and as a crude rate (per 100,000) for unintentional injury. Chronic lower respiratory disease includes bronchitis, emphysema and asthma.

[\*] Indicates that the death rate for this cause is significantly higher in California than in Contra Costa.

<sup>1</sup> Death rates are presented as age-adjusted rates (per 100,000) for heart disease, cancer, stroke and chronic lower respiratory disease, and as a crude rate (per 100,000) for unintentional injuries. Chronic lower respiratory disease includes bronchitis, emphysema and asthma.



## Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of diseases like heart disease, cancer, stroke and chronic lower respiratory disease that are heavily influenced by age.

It is important to use age-adjusted rates for diseases that are influenced by age as the population of California is younger than the population of Contra Costa and there are many more people living in California than in Contra Costa.

An age-adjusted death rate is useful identifying differences that are due to environmental or behavioral risk factors instead of age. Contra Costa has a higher age-adjusted death rate from cancer compared to California. This means that the increased risk in Contra Costa is probably due to environmental or behavioral factors instead of age.

## Why are crude rates important?

A crude rate controls for differences in population size and is a good summary statistic for comparing health outcomes like unintentional injury, which are less influenced by age, across groups of different size.

For unintentional injury, it is important to use crude rates as there are many more people living in California than in Contra Costa.

## How to calculate the percentage and number of deaths

Percentages describe the proportion of deaths that occur from a particular cause. The percentage is calculated by dividing the number of deaths from a specific cause by the total number of deaths, and then multiplying that number by 100.

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 by three.**

### Confidence intervals are available

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

You may download and view all detailed tables with 95% confidence intervals, at [http://cchealth.org/health\\_data/hospital\\_council/](http://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, see our section on statistical methods.

ICD10 leading causes of death coding 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](http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf).