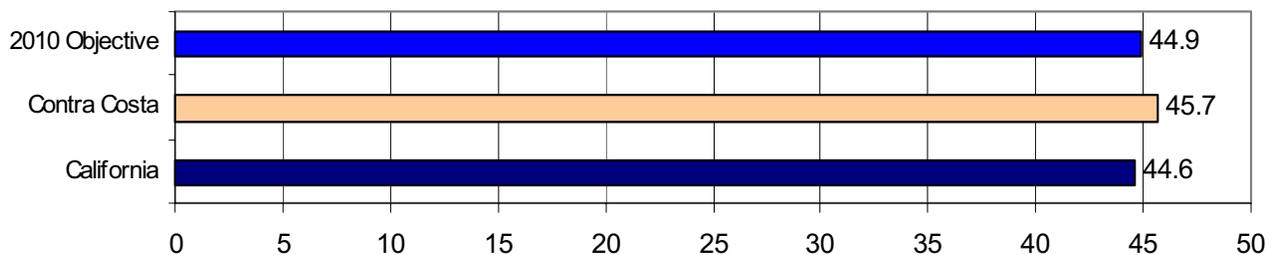


Cancer – Lung

Contra Costa has successfully met the Healthy People 2010 objective of reducing the age-adjusted death rate from lung cancer to no more than 44.9 deaths per 100,000 residents.



Figure 8. Age-adjusted death rates from lung cancer



The age-adjusted death rates per 100,000 for Contra Costa and California are virtually the same as the 2010 Objective. Contra Costa and California statistics were calculated for the three-year period 2000-2002.

Lung cancer is the leading cause of cancer death

In Contra Costa, lung cancer accounts for 25% of all cancer deaths. Over a three-year period 2000-2002, there were 1,279 Contra Costa residents who died of lung cancer. This means that approximately **425 Contra Costa residents die from lung cancer each year.**

The age-adjusted death rate from lung cancer is virtually the same in Contra Costa (45.7 per 100,000) and California (44.6 per 100,000).

People living in San Pablo and Bay Point and men are more likely to die from lung cancer compared to the county overall. These differences are not due to the age of

the population and are likely due to lack of health care, environmental risks or unhealthy behaviors, especially smoking.

Some communities have lung cancer rates much higher than others

Residents of San Pablo and Bay Point are more likely to die from lung cancer compared to Contra Costa as a whole.

Table 38. Lung cancer deaths in selected communities. Contra Costa, 2000-2002

| | Rate | Percent (Number) | |
|---------------------|-------------|------------------|----------------|
| San Pablo | *109.9 | 6% | (71) |
| Bay Point | *89.3 | 3% | (32) |
| Martinez | 62.9 | 5% | (62) |
| Oakley | 58.1 | 2% | (24) |
| Concord | 55.8 | 14% | (185) |
| Antioch | 54.7 | 8% | (103) |
| Richmond | 53.9 | 11% | (139) |
| Brentwood | 52.6 | 3% | (32) |
| Walnut Creek | 48.4 | 14% | (181) |
| Pittsburg | 47.6 | 5% | (59) |
| Pinole | 42.8 | 2% | (27) |
| Contra Costa | 45.7 | 100% | (1,279) |

* 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 lung cancer occur among people living in Concord (185, 14%), followed by people living in Walnut Creek (181, 14%), Richmond (139, 11%), Antioch (103, 8%), San Pablo (71, 6%), Martinez (62, 5%) and Pittsburg (59, 5%).

No single racial group is at higher risk for lung cancer death

No racial/ethnic group was found to be at significantly higher risk than the county as a whole. This analysis shows Asians and Latinos are less likely to die from lung cancer compared to the county as a whole.

Table 39. Lung cancer deaths by race/ethnicity. Contra Costa, 2000-2002

| | Rate | Percent (Number) | |
|---------------------|-------------|------------------|-----------------|
| African American | 56.1 | 9% | (115) |
| White | 50.6 | 81% | (1,041) |
| Asian | 30.0 | 6% | (80) |
| Latino | 17.7 | 3% | (36) |
| Contra Costa | 45.7 | 100% | 1(1,279) |

¹ The Contra Costa total also includes the 7 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), age-adjusted rates per 100,000 could not be calculated for these groups.

The majority of deaths from lung cancer occur among Whites (1,041, 81%), followed by African Americans (115, 9%), Asians (80, 6%) and Latinos (36, 3%).

Both men and women die from lung cancer

Men are more likely to die from lung cancer and women are less likely to die from lung cancer compared to the county as a whole. Just over half of the deaths from lung cancer occur among men.

Table 40. Lung cancer deaths by gender. Contra Costa, 2000-2002

| | Rate | Percent (Number) | |
|----------------------|-------------|------------------|----------------|
| Men | *55.5 | 51% | (658) |
| Women | 38.9 | 49% | (621) |
| Contra Costa: | 45.7 | 100% | (1,279) |

* Indicates that the age-adjusted death rate is significantly higher among men compared to Contra Costa as a whole.

Exposure to tobacco is responsible for most lung cancer

Lung cancer incidence and **mortality rates increased dramatically through much of the last century**, first in men and then in women.

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

Cigarette smoking is the primary risk factor for getting lung cancer. **Men who smoke increase their risk of dying from lung cancer by more than 22 times**, and women who smoke increase their risk of dying from lung cancer by nearly 12 times. Cigars, pipes, secondhand smoke, radon, asbestos, pollution and lung diseases can also increase a person's risk for lung cancer.

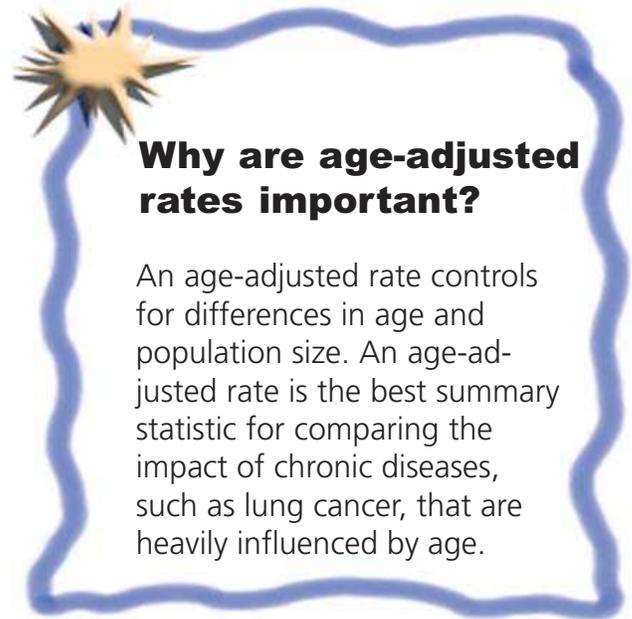
Using this data to improve community health

In order to reduce unfair health differences, it is important to target the groups with the highest age-adjusted death rates from a given cause. For lung cancer, these are people living in San Pablo and Bay Point 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 lung cancer, these are Whites, and people living in Concord, Walnut Creek and Richmond.

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

Because a person's risk for developing or dying from a chronic disease like lung cancer increases as they age, 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 or secondhand smoke**.



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 **identifying differences that are due to poor access to health care or environmental and behavioral risk factors** instead of age. (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 lung cancer 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 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://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 malignant neoplasm of trachea, bronchus, and lung (ICD C33-C34) 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 the national increase in lung cancer during the last century from Wingo PA, Ries LA, Giovino GA, et al.: Annual report to the nation on the status of cancer, 1973-1996, with a special section on lung cancer and tobacco smoking. *J Natl Cancer Inst* 91 (8): 675-90, 1999.

Information about risk for lung cancer from the United States National Institute for Health's National Cancer Institute's lung cancer homepage, available online at: <http://www.nci.nih.gov/cancertopics/types/lung>, and the Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion's Tobacco Information and Prevention Source (TIPS) website on cigarette smoking-related mortality, available online at: http://www.cdc.gov/tobacco/research_data/health_consequences/mortali.htm.