

Lung Cancer

Lung cancer is the leading cause of cancer deaths.

Deaths

Lung cancer is the most common cause of cancer death in Contra Costa, accounting for 26% of all cancer deaths and 6.3% of all deaths in the county.

Between 2002-2004, 1,319 Contra Costa residents died of lung cancer. This means that approximately 440 Contra Costa residents die from lung cancer each year. The age-adjusted death rate from lung cancer is higher in Contra Costa (44.6 per 100,000) than in California (41.7 per 100,000).

Contra Costa's lung cancer death rate (44.6 per 100,000) meets the Healthy People 2010 objective (44.9 per

- African American men are most likely to die from lung cancer.
- Men are most likely to die from lung cancer.
- Most new lung cancer cases and deaths are among Whites.
- On average, 440 residents die from lung cancer each year.
- Contra Costa's lung cancer death rate (44.6 per 100,000) meets the Healthy People 2010 objective.

Lung Cancer Deaths by Race/Ethnicity

Table 1. Contra Costa County 2002-2004

	Deaths	Percent	Rate
White	1,039	78.8%	47.8
African American	127	9.6%	*62.0
Asian	78	5.9%	**25.7
Latino	60	4.5%	**24.6
Contra Costa	1,319	100.0%	44.6

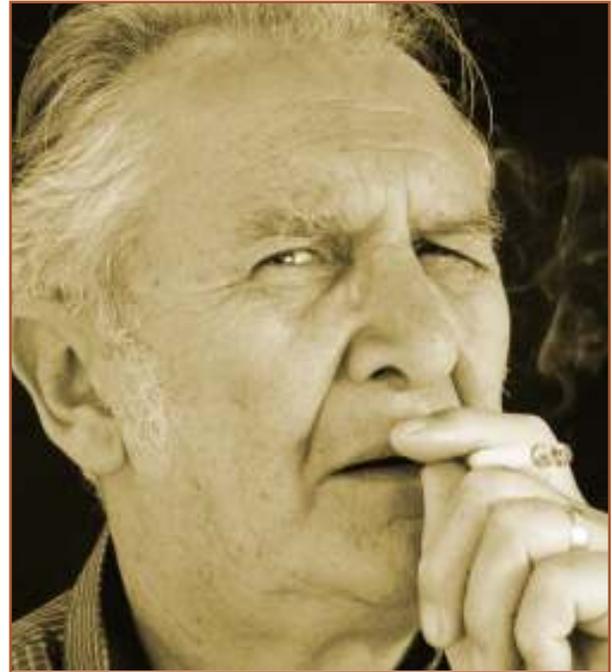
These are age-adjusted rates per 100,000 people.

* Significantly higher rate compared to the county overall

** Significantly lower rate

The majority of deaths from lung cancer in the county occur among Whites (1,039), followed by African Americans (127), Asians (78) and Latinos (60).

Although African Americans die in far fewer numbers than Whites, African Americans are most likely to die from lung cancer. African Americans have the highest lung cancer death rate (62.0 per 1000,000) in the county – higher than the county overall (44.6 per 100,000) and Whites (47.8 per 100,000), and twice as high as Asians (25.7 per 100,000) and Latinos (24.6 per 100,000). This difference is not due to the age of the population but may be due to physical or social environmental risks, inadequate cancer screening and treatment, or unhealthy behaviors.



In this report, a lung cancer case is defined as a primary malignant tumor, that is, one originating in the lung rather than having spread to the lung from another location.

Lung Cancer Deaths for Men

Table 2. Contra Costa County 2002–2004

	Deaths	Percent	Rate
White	484	76.8%	51.7
African American	64	10.2%	*79.1
Asian	49	7.8%	37.0
Latino	29	4.6%	**32.6
Contra Costa Men	630	100.0%	50.3

These are age-adjusted rates per 100,000 men.

* Significantly higher rate compared to men in the county overall.

** Significantly lower rate.

In Contra Costa, men have a higher rate of death from lung cancer (50.3 per 100,000) than women (41.2 per 100,000). Although men overall are more likely to die from lung cancer, over half of the deaths from lung cancer (689, 52.2%) occur among women. African American men have a higher rate of lung cancer death than the county overall and all other race groups except African American women. Despite the apparent difference in rates, there is no significant difference in the lung cancer death rate between African American men and African American women.



In other health reports, cancer is sometimes called “malignant neoplasms”.

Lung Cancer Deaths for Women

Table 3. Contra Costa County 2002–2004

	Deaths	Percent	Rate
White	555	80.6%	41.7
African American	63	9.1%	51.4
Asian	35	5.1%	**17.6
Latina	31	4.5%	**20.5
Contra Costa Women	689	100.0%	41.2

These are age-adjusted rates per 100,000 women.

**Significantly lower rate compared to women in the county overall.

Lung Cancer Deaths by Selected Communities

Table 4. Contra Costa County 2002–2004

	Deaths	Percent	Rate
Concord	203	15.4%	*60.4
Walnut Creek	181	13.7%	45.8
Richmond	143	10.8%	56.0
Antioch	111	8.4%	57.3
Martinez	76	5.8%	*75.2
Pittsburg	65	4.9%	49.6
San Pablo	55	4.2%	*82.9
Brentwood	33	2.5%	41.1
Pinole	30	2.3%	46.9
Oakley	28	2.1%	64.0
Contra Costa	1,319	100.0%	44.6

These are age-adjusted rates per 100,000 people.

* Significantly higher rate compared to the county overall.

People living in San Pablo, Martinez and Concord are more likely to die from lung cancer compared to the county overall. Residents of San Pablo have the highest lung cancer death rate (82.9 per 100,000), followed by Martinez (75.2 per 100,000) and Concord (60.4 per 100,000). The County rate is 44.6 per 100,000. The highest numbers of deaths from lung cancer occur among people

living in Concord (203), Walnut Creek (181), Richmond (143), Antioch (111), and Martinez (76).

New Cases

New lung cancer cases provide a sense of how much, and among whom, the disease is surfacing in the community. This information can inform prevention, screening and treatment programs by highlighting who is most at risk for being diagnosed with lung cancer and tailoring programs appropriately.

Between 2000-2004, 2,713 new cases of lung cancer were diagnosed in Contra Costa. This means that on average, there are 543 new cases of lung cancer diagnosed in the county each year.

Most new cases of lung cancer in the county (76.6%) are among Whites: women (1,113 cases) and men (964 cases).

New Cases of Lung Cancer in Men

Table 5. Contra Costa County 2000–2004

	Cases	Percent	Rate
White	964	75.0%	65.2
African American	134	10.4%	*89.8
Asian/Pacific Islander	111	8.6%	53.9
Latino	61	4.7%	**38.6
Contra Costa Men	1,285	100.0%	64.0

These are age-adjusted rates per 100,000 men.

* Significantly higher rate compared to men in the county overall. ** Significantly lower rate.

Although more cases are diagnosed among Whites, African American men in Contra Costa have the highest rate of new lung cancer cases (89.8 per 100,000) – higher than men in the county overall (64.0 per 100,000), White men (65.2 per 100,000), Asian/Pacific Islander men (53.9 per 100,000) and Latino men (38.6 per 100,000). Among women, Latinas and Asian/Pacific Islanders are less likely to be diagnosed with lung cancer than women in the county overall, White and African American women.

In Contra Costa, men are more likely to be diagnosed with lung cancer than women. The county’s lung cancer incidence rate is 18% higher for males than females (64.0 vs. 54.1 per 100,000, respectively). Although men overall are more likely to be diagnosed with lung cancer, over half of new lung cancer cases (689, 52.2%) occur among women.

New Cases of Lung Cancer in Women

Table 6. Contra Costa County 2000–2004

	Cases	Percent	Rate
White	1,113	77.9%	58.4
African American	130	9.1%	63.0
Latina	93	6.5%	**39.6
Asian/Pacific Islander	82	5.7%	**27.4
Contra Costa Women	1,428	100.0%	54.1

These are age-adjusted rates per 100,000 women.

** Significantly lower rate compared to women in the county overall.

Between 2000-2004, Contra Costa's incidence rate for lung cancer (57.7 per 100,000) was similar to California's rate (56.8 per 100,000).¹

Tobacco exposure is responsible for most lung cancer.

Lung cancer incidence has decreased in California by more than 20% since the late 1980s, due in large part to the success of California tobacco control initiatives. However, even today, more than 8 out of 10 lung cancer cases are caused by smoking cigarettes.²

Quitting smoking can reduce a person's risk of lung cancer.² Even those who smoke more than a pack a day can reduce their risk of lung cancer by quitting smoking. Quitting smoking reduces the risk of

lung cancer for other residents too by decreasing secondhand smoke. Every year in the U.S., 3,400 non-smoking adults die of lung cancer as a result of breathing smoke from other people's cigarettes.

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.

Lung cancer is difficult to detect early and treat because symptoms often do not appear until the disease has progressed. Unfortunately, most people who get lung cancer die from lung cancer. Although lung cancer survival rates have improved over the last 40 years, only 15% of people who are diagnosed with

lung cancer, all stages combined, live five years after being diagnosed. Prevention of lung cancer through smoking cessation, avoiding secondhand smoke, eating a healthy balanced diet, and being aware of environmental risks is the best way to avoid this disease.³

Data sources: Lung Cancer

Text

Lung cancer data for new cases and deaths is presented for invasive cancer only. Invasive cancer is cancer that has spread beyond the tissue where it developed to surrounding healthy tissues.

1. California Cancer Registry (CCR), Cancer Surveillance Section, California Department of Health Services (2006). Retrieved May 2, 2007 from the CCR's *California Cancer Incidence and Mortality Rates Plus Interactive Maps* public use data set at <http://www.ccrca.org/dataquery.html>
2. American Cancer Society, California Division and Public Health Institute, California Cancer Registry (2006). *California Cancer Facts and Figures 2007*. Oakland, CA: American Cancer Society, California Division.
3. American Cancer Society (n.d.) *Lung Cancer*. Retrieved March 28, 2007 from the American Cancer Society website: <http://www.cancer.org/downloads/PRO/LungCancer.pdf>

Tables

Tables 1-4: Mortality data from the California Department of Health Services (CDHS), <http://www.dhs.ca.gov/>, Center for Health Statistics' Death Statistical Master File, 2002-2004. Any analyses, interpretations or conclusions of the data have been reached by authors of this report and are not from the CDHS. Data for the following race/ethnicity groups was excluded from Table 1: Race/Ethnicity due to small numbers: American Indian/Alaska Native, Native Hawaiian/Pacific Islanders, Two or More Races, and Other. Due to unstable estimates, death rates could not be calculated for these groups. These groups were included in Table 2: Selected Cities.

These tables include total deaths and age-adjusted average annual death rates for 2002 through 2004. Data was not available for all communities.

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

Population data from:

California Department of Finance (April 2006). *Estimated Race/Ethnic Population with Age and Sex Detail 2000-2004*. Sacramento, CA.

California Department of Finance (May 2006). E-4 Population Estimates for Cities, Counties and the State 2001-2006, with DRU Benchmark. Sacramento, CA. Available online at: <http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm>

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.

Tables 5 and 6: Incidence data from Le GM, Gomez SL, Clarke CA, Chang ET, Keegan THM, O'Malley CD, Glaser SL, and West DW. (2007). *Cancer Incidence and Mortality in the Greater Bay Area, 1988-2004*. Fremont, CA: Northern California Cancer Center. Incidence data by race/ethnicity was only available for African Americans, Whites, Asian/Pacific Islanders, and Latinos. However overall Contra Costa case counts and incidence rates include data for all race/ethnicity groups. This table includes 5-year case counts and age-adjusted average annual incidence rates for 2000 through 2004.

International Classification of Diseases for Oncology, Third Edition (ICD-O-3) coding of lung cancer incidence data included C340-C349 (primary site), excluding histology types 9590-9989 came from Le GM et al. (2007). See above.

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/>