

Figure 6. Age-adjusted death rates from breast cancer among women



[\*] 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.

# Breast cancer is the second leading cause of cancer death among women

In Contra Costa, breast cancer accounts for 9% of all cancer deaths, and 17% of the cancer deaths among women. Over a three-year period 2000-2002, there were 451 Contra Costa women who died of breast cancer. This means that **approximately 150 Contra Costa women die from breast cancer each year**.

The age-adjusted **death rate from breast** cancer is higher among women living in Contra Costa (27.5 per 100,000) than in California (23.9 per 100,000).

### Breast cancer impacts all Contra Costa communities

From the local data, it appears that the age-adjusted death rate from breast cancer is similar in many communities throughout Contra Costa. Local numbers are often too small to detect statistically significant differences by community.

## Table 33.Women dying from breast<br/>cancer in selected communities.<br/>Contra Costa, 2000-2002

	Rate	Percent (Number)	
Martinez	46.0	6%	(26)
Walnut Creek	31.3	16%	(70)
Richmond	30.8	10%	(46)
Pittsburg	26.5	4%	(20)
Concord	26.2	11%	(51)
Antioch	23.3	6%	(28)
Contra Costa	27.5	100%	(451)

Due to small numbers (<20 deaths), age-adjusted rates per 100,000 women could not be calculated for Bay Point, Brentwood, Oakley, Pinole or San Pablo.

A large number of the deaths from breast cancer occur among women living in Walnut Creek (70 deaths, 16% of all the deaths from breast cancer), followed by women living in Concord (51, 11%), Richmond (46, 10%), Antioch (28, 6%) and Martinez (26, 6%).

#### Women of all races are affected by breast cancer death

In Contra Costa, it appears the age-adjusted death rate from breast cancer may be similar among African American and White women and lower among Asian women compared to the county as a whole. Again, the local numbers are too small to be certain of differences between the race/ethnic groups.

#### Table 34. Women's deaths from breast cancer by race/ethnicity. Contra Costa, 2000-2002

	Rate	Percent (I	Number)
African American	36.8	10%	(47)
White	30.7	80%	(359)
Asian	13.8	5%	(24)
Latina		5%	(18)
Contra Costa	27.5	100%	¹ <b>(451)</b>

-- Due to small numbers (<20 deaths), age-adjusted rates per 100,000 women could not be calculated for Latinas. <sup>1</sup>The Contra Costa total also includes the 3 deaths that occurred among women 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 breast cancer occur among Whites (359, 80%), followed by African Americans (47, 10%), Asians (24, 5%) and Latinas (18, 5%).

Contra Costa has a higher rate of breast cancer deaths compared to California or the United States

The age-adjusted death rate for women with breast cancer is 23.9 per 100,000 in California and 24.9 nationally. In the United States, White women are most likely to get breast cancer, and African American women are the most likely to die of breast cancer, often because they are diagnosed at a later stage of the disease.

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

## 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. In this analysis, there was no race/ethnic group or community that had a higher age-adjusted death rate compared to the county as a whole, **even though national statistics tell us that African American women are the most likely to die from breast cancer**.

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 breast cancer, these are White and African American women, as well as women living in Walnut Creek, Concord and Richmond.

### Access to routine medical screenings and care is important to good health.

Many Contra Costa residents diagnosed with chronic diseases, like breast 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 heath 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 breast 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, increase community access to fruits and vegetables or educate people about the importance of regular screenings.

## Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An ageadjusted rate is the best summary statistic for comparing the impact of chronic diseases, such as breast cancer, 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 ageadjustment, 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. (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 breast cancer that occur within a particular community or race/ethnic group. The percentage is calculated by dividing the number of deaths that occur within a specific community or race/ ethnic group by the total number of deaths countywide and multiplying that number 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://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 breast (ICD C50) 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 differences in breast cancer cases and deaths is available at the National Cancer Institute site at http://www.cancer.gov/.