

2010 Marin County Data Summary: Leading Causes of Death 2003-2007



In 2007, malignant neoplasms (cancer), diseases of the heart, and cerebrovascular disease (stroke) were the leading causes of death among Marin County residents. One of these three conditions was listed as the primary cause in 57% of all deaths to Marin residents.

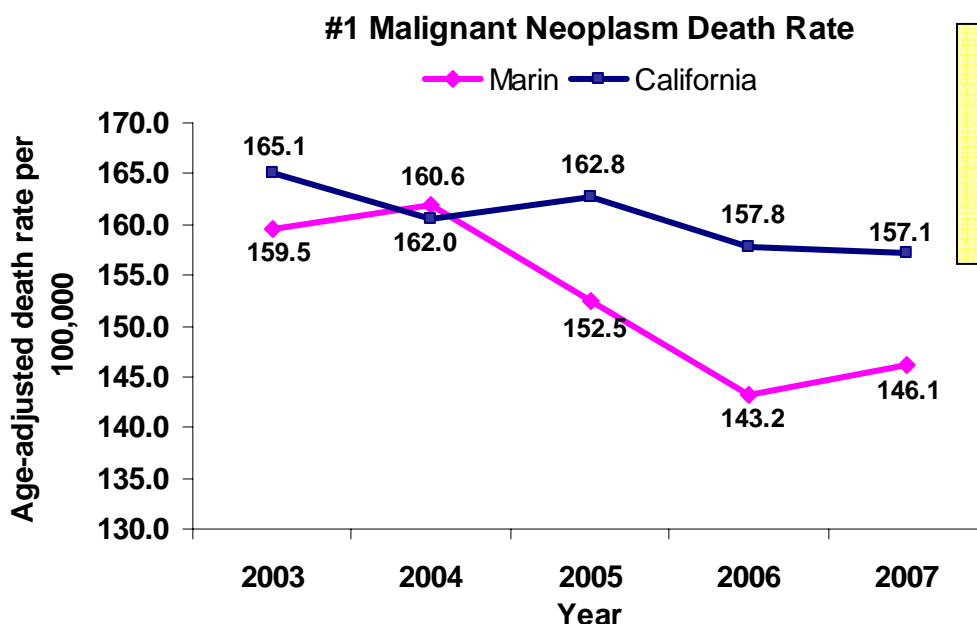
	Age-adjusted death rate		
	Total	Males	Females
1 Malignant Neoplasms	146.1	178.3	124.5
2 Diseases of the Heart	128.3	157.3	105.9
3 Cerebrovascular Disease	30.8	28.2	32.5
4 Alzheimer's Disease	27.9	26.4	29.0
5 Chronic Lower Respiratory Disease	26.4	36.1	19.1
6 Accidents (Unintentional Injuries)	18.4	22.2	15.0
7 Influenza and Pneumonia	11.8	16.0	9.6
8 Intentional Self-Harm (Suicide)	14.4	21.1	7.2
9 Parkinson's Disease	9.2	13.3	6.7
10 Diabetes Mellitus	8.2	11.1	5.9

Why do we use age-adjusted death rates to describe leading causes of death?

Age is an important factor in death, particularly with chronic diseases such as heart disease and diabetes. For example, counties with higher percentages of older residents will have higher crude death rates for major chronic conditions, while counties with younger populations will tend to have higher crude rates for deaths due to unintentional injuries. Age-adjusting eliminates the bias of age in the makeup of the populations being compared.

Trends in Age-adjusted death rates compared to California

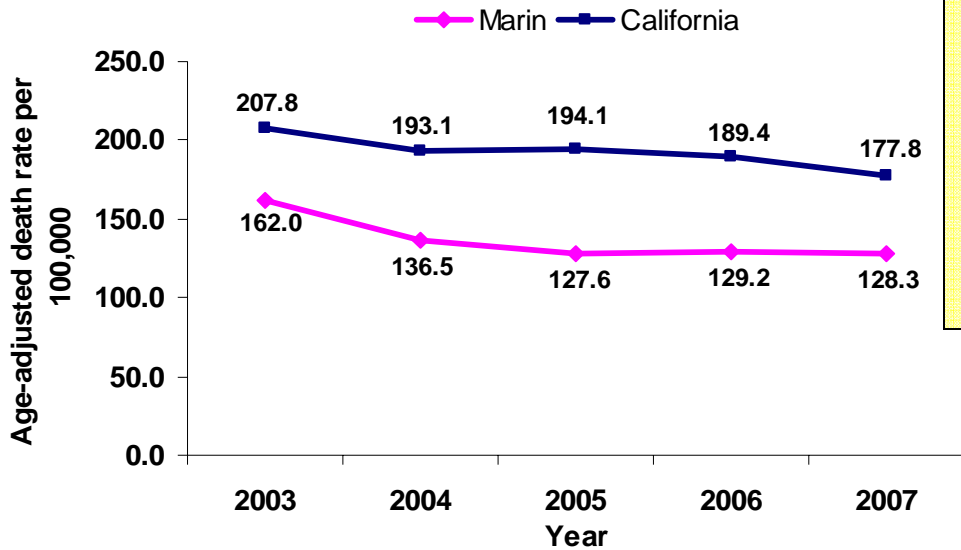
Marin County has consistently had lower rates of heart disease and chronic lower respiratory disease mortality than California as a whole and since 2005 has had lower mortality rates due to malignant neoplasms. Beginning in 2006, Marin has higher rates of Alzheimer's disease mortality than California.



The age-adjusted death rate due to malignant neoplasms has decreased by 8.4% (483 to 473 deaths) since 2003 in Marin County.

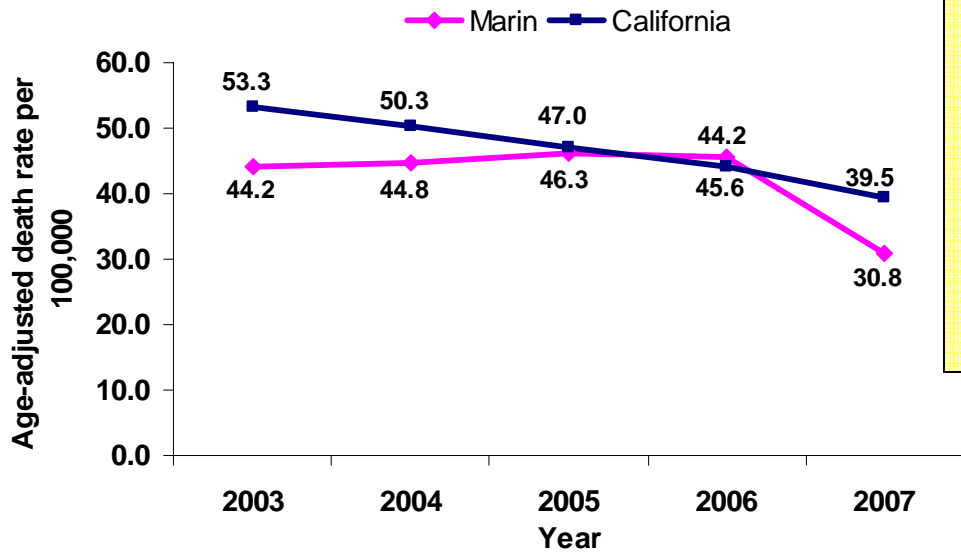


#2 Diseases of the Heart Death Rate



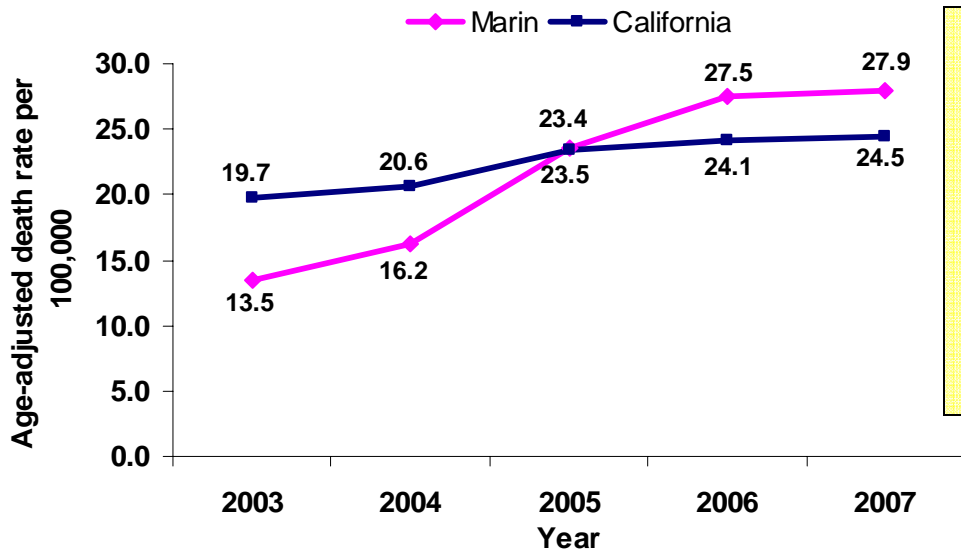
- Heart disease deaths have decreased by 20.8% (from 491 to 440 deaths) since 2003.
- Diseases of the heart are the #1 killer among women in Marin County.

#3 Cerebrovascular Disease Death Rate



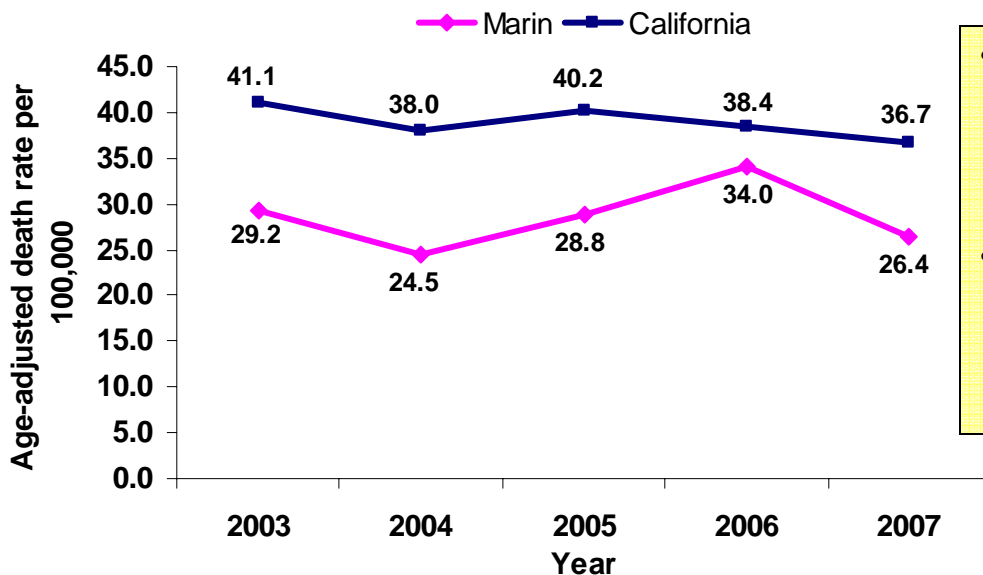
- Cerebrovascular disease deaths have decreased by 20.8% (from 134 to 105 deaths) since 2003.
- The age-adjusted death rate due to cerebrovascular disease is higher among women than among men in Marin County.

#4 Alzheimer's Disease Death Rate



- Alzheimer's disease deaths have increased by 106.7% (from 42 to 98 deaths) since 2003.
- The age-adjusted death rate due to Alzheimer's disease is 12.2% higher in Marin County than in California.

#5 Chronic Lower Respiratory Disease Death Rate

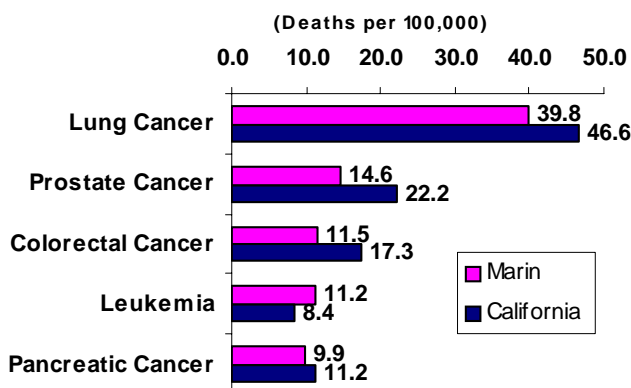


- Chronic lower respiratory disease deaths have decreased by 9.6% (from 86 to 87 deaths) since 2003.
- The age-adjusted death rate has been consistently lower in Marin County compared with California.

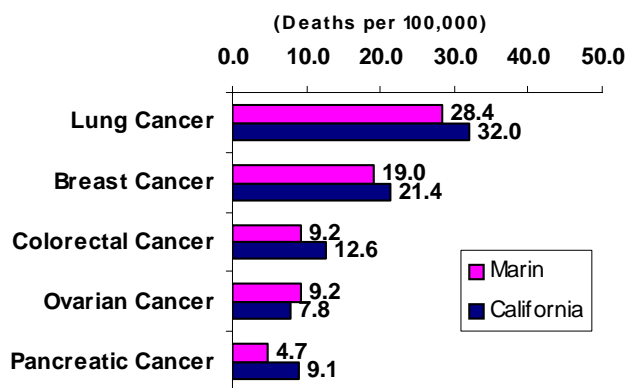
Leading causes of cancer death in Marin compared to California

Lung cancer was the leading cause of cancer death among males and females in both Marin and California. The age-adjusted death rate for all cancers was lower in Marin than in California except for leukemia in males and ovarian cancer in females.

Leading Causes of Cancer Death for Men
by Age-Adjusted Death Rate - 2007



Leading Causes of Cancer Death for Women
by Age-Adjusted Death Rate - 2007



- Lung cancer is the leading cause of cancer deaths in both males and females.
- The age-adjusted death rates for lung cancer, prostate cancer, and colorectal cancer are all decreasing.
- Breast cancer mortality remained steady from 2002 to 2006 and decreased by 27% from 2006 to 2007.
- The age-adjusted death rate due to pancreatic cancer has increased by 28% since 2002.
- The age-adjusted death rate due to ovarian cancer has increased by 35% since 2002.
- The age-adjusted death rate for all leading causes of cancer deaths is lower in Marin County than in California among both males and females, except for leukemia in males and ovarian cancer in females.
- During 2001-2006, the death rate due to ovarian cancer in Marin was lower than in California.
- Since 2001, there has not been a consistent trend in leukemia deaths among males, although rates in only 2 of the years were lower in Marin than in California.

Key Findings and Implications

- Of the top 5 leading causes of death, deaths due to malignant neoplasms, diseases of the heart, cerebrovascular disease, and chronic lower respiratory disease have all decreased since 2003.
 - There are several things we can do to help prevent deaths due to these causes such as:
 - Not smoking and reduced exposure to second-hand smoke through policy and laws that eliminate smoking in public places.
 - Controlling weight through participation in regular moderate or vigorous physical activity and eating a healthy diet rich in fruits, vegetables, whole grains, and low-fat dairy products.
 - Consuming alcohol in moderation or not at all.
- The Alzheimer's Disease death rate has more than doubled since 2003 in Marin and is currently higher than the rate in California.
 - Rates are age-adjusted so differences in rates are not due to an older population in Marin.
 - A relatively short time interval for such a dramatic increase in death rates is more consistent with exposure-related causes rather than genetic changes.
- Lung Cancer continues to be the leading cause of cancer mortality among both men and women.
 - Smoking is the major risk factor for lung cancer, causing over 90% of lung cancer deaths in men and over 80% of deaths in women in the U.S.

Risk Reduction and Outreach

- The Marin County Department of Health and Human Services Nutrition Wellness Program has several programs that help combat chronic disease by promoting healthy eating and physical activity such as:
 - Nutrition Wellness newsletter - offers nutrition tips and cost-effective seasonal recipes.
 - School-Based Nutrition Education – provides nutrition consultation to school districts, teaches students healthy cooking practices, and incorporates nutrition and physical activity information into tending school gardens.
 - Pathways to Progress Strategic Plan – increases awareness and access to affordable healthy fruits and vegetables as well as opportunities for safe physical activity.
- One risk factor that the top 5 leading causes of death all have in common is smoking.
 - A listing of Marin County tobacco cessation programs and resources can be found at: <http://www.co.marin.ca.us/depts/HH/main/adit/programs-and-services/tobacco.cfm> or by calling Tobacco Education Services of Marin at 415-444-5580x399.

Sources:

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