

## G-iv. CHRONIC DISEASE (CANCER)

<p><b>Importance</b></p>	<p>Cancer is the second leading cause of death among adults in the United States.<sup>1,2</sup> In the United States, men have slightly less than a 1 in 2 lifetime risk of developing cancer, while for women, the lifetime risk of developing cancer is a little more than 1 in 3.<sup>2</sup> The National Cancer Institute estimates that approximately 11.1 million Americans with a history of cancer were alive in January 2005.<sup>3</sup> About 1,479,350 new cancer cases were expected to be diagnosed in 2009 and approximately 562,340 Americans were expected to die of cancer.<sup>2,3,4</sup> In the United States, cancer accounts for nearly 1 in 4 deaths.<sup>2,3,4</sup> The 5-year relative survival rate for all cancers diagnosed between 1996-2004 was 66%, up from 50% in 1975-1977.<sup>2,3,4</sup> The improvement in survival reflects progress in diagnosing certain cancers at an earlier stage and improvements in treatment.<sup>1</sup></p>
<p><b>Highlights</b></p>	<ul style="list-style-type: none"> <li>▪ The rate of cancer incidence in the United States has declined since the early 2000s. Moreover, death rates for the four most common cancers other than skin cancer (lung, breast, prostate, and colorectal) continue to decline.<sup>5</sup></li> <li>▪ Length of cancer survival has increased for all cancers combined. For all sites, the percent of cases surviving five years from diagnosis in 2001 (most recent year with five-year follow-up) was 68.3%.<sup>5</sup></li> <li>▪ Incidence rates of some cancers are rising, including melanoma, non-Hodgkin's lymphoma, childhood cancers, leukemia, thyroid, pancreas, liver, testis, esophagus, and kidney/renal pelvis.<sup>5</sup></li> <li>▪ The overall incidence rate of new cancers in the Greater Bay Area declined by 16% for males and 10% for females from 1988-2005.<sup>6</sup></li> <li>▪ From 1988-2005, cancer mortality rates in the Greater Bay Area declined by 27% for males and 21% for females.<sup>6</sup></li> </ul>
<p><b>Definitions</b></p>	<p><b>Cancer:</b> A term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems.<sup>7</sup> Cancer is not just one disease but many diseases. There are more than 100 different types of cancer.<sup>7</sup> There are several main types of cancer. Carcinoma is a cancer that begins in the skin or in tissues that line or cover internal organs. Sarcoma is a cancer that begins in bone, cartilage, fat, muscle, blood vessels, or other connective or supportive tissue. Leukemia is a cancer that starts in the blood-forming tissue such the bone marrow, and causes large numbers of abnormal blood cells to be produced and enter the blood. Lymphoma and multiple myeloma are cancers that begin in the cells of the immune system. Central nervous system cancers are cancers that begin in the tissues of the brain and spinal cord.<sup>7</sup></p>
<p><b>Healthy People 2010 Objective<sup>8</sup></b></p>	<p>"Reduce the number of new cancer cases as well as the illness, disability, and death caused by cancer."</p> <ul style="list-style-type: none"> <li>▪ Reduce the overall cancer death rate. (Target <b>158.6</b> deaths per 100,000 population, a 21% improvement)</li> <li>▪ Increase the proportion of physicians and dentists who counsel their at-risk patients about tobacco use cessation, physical activity, and cancer screening. (Target 3-10a-h 85 percent)</li> <li>▪ Increase the proportion of cancer survivors who are living 5 years or longer after diagnosis. (Target <b>70%</b>, a 19% improvement)</li> </ul>

Over 1.2 million Californians have a history of cancer, presently living either with cancer or with no evidence of cancer.<sup>9</sup> In 2010, about 133,955 Californians will be diagnosed with cancer (more than 15 new cases every hour), and 54,655 people (one in every four deaths) will die of the disease.<sup>9</sup> About 85,731 (three out of five) Californians who get cancer this year will be alive five years after diagnosis.<sup>9</sup> The relative five-year survival rate for all cancers combined is 64%.<sup>9</sup>

## **CANCER (CONT.)**

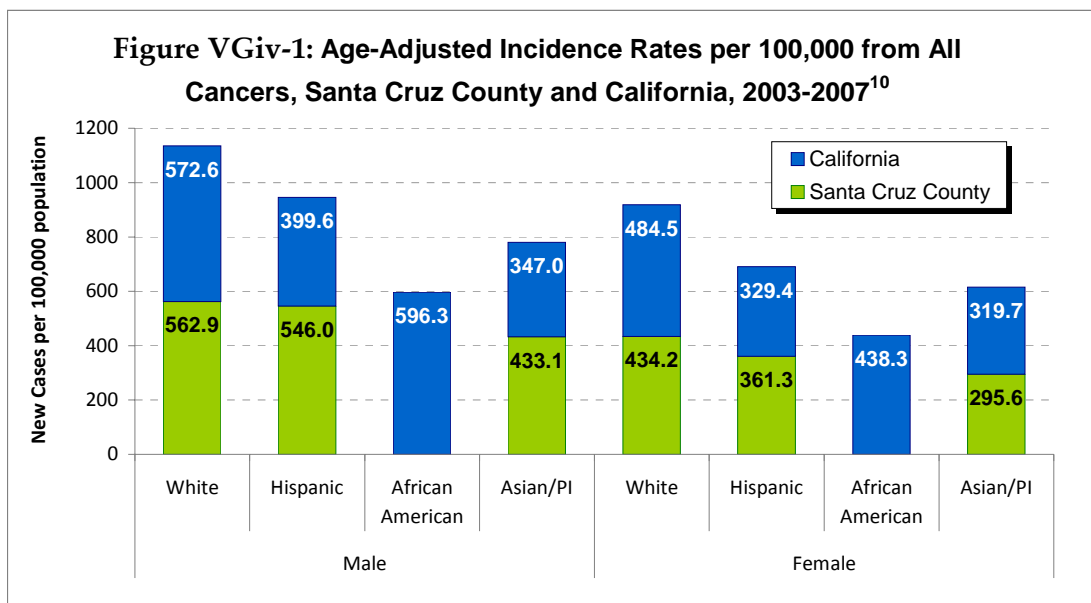
Table VGiv-1 describes the annual incidence of new cancer cases and cancer deaths in California and Santa Cruz County between 2006 and 2008.<sup>10</sup> Santa Cruz County has fairly low rates statewide for lung and colon cancer – ranking below 30<sup>th</sup> when the 47 counties/county-areas are ordered with the highest rates at the top. However, it is of great concern that Santa Cruz County ranks 2<sup>nd</sup> in the state for deaths from breast cancer and 4<sup>th</sup> in the state for new cases of prostate cancer.<sup>10</sup>

<b>Table VGiv-1: Age-Adjusted Incidence and Mortality Rates by Cancer Type</b>								
<b>Santa Cruz County and California, 2006-2008<sup>10</sup></b>								
	<b>Incidence Rate per 100,000</b>				<b>Mortality Rate per 100,000</b>			
	Prostate	Breast*	Lung	Colon	Prostate	Breast*	Lung	Colon
<b>Santa Cruz County</b>	183.7	141.0	44.6	29.9	18.7	28.1	34.4	10.8
<b>California</b>	140.5	151.0	50.6	32.3	22.1	21.9	39.3	12.2
<b>State Rank (among 47 counties/grouped counties)</b>	4 <sup>th</sup>	29 <sup>th</sup>	44 <sup>th</sup>	33 <sup>rd</sup>	42 <sup>nd</sup>	2 <sup>nd</sup>	43 <sup>rd</sup>	34 <sup>th</sup>

\*Breast=female breast cancer only

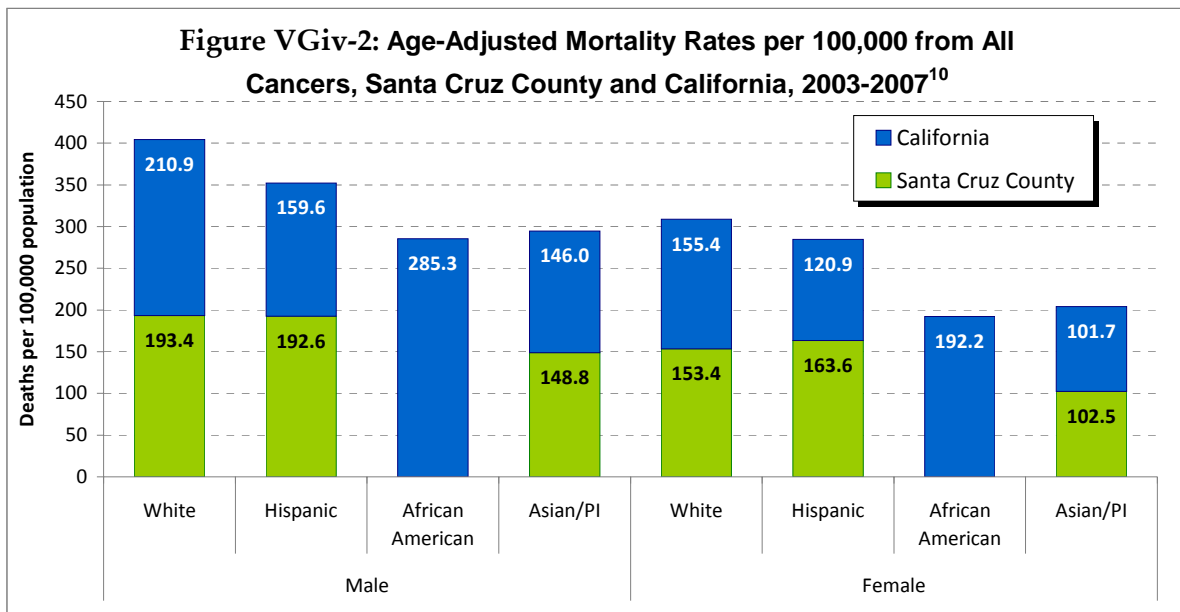
Female breast cancer incidence rate in California has decreased by 7 percent.<sup>9</sup> The prostate cancer incidence rate increased by 70 percent from 1988 to 1992, but has since declined.<sup>9</sup> Colon and rectum cancer incidence rates are declining in most racial/ethnic groups.<sup>9</sup> The most commonly diagnosed types of cancer among men were cancers of the prostate, lung and bronchus, and colon and rectum, which accounted for an estimated 50% of cancer cases in men.<sup>11</sup> Prostate cancer alone accounts for 25% of all newly diagnosed cancer cases among men. An estimated 91% of new cases of prostate cancer are expected to be diagnosed at local or regional stages, for which the 5- year relative survival approaches 100%.<sup>11</sup> The most commonly diagnosed types of cancer among women in 2009 were cancers of the breast, lung and bronchus, and colon and rectum, accounting for 51% of estimated cancer cases in women.<sup>11</sup> Breast cancer alone accounts for 27% of all newly diagnosed cancer cases among women.<sup>11</sup>

Overall, the incidence rate of cancer in California has declined by 11 percent from 1988-2007.<sup>9</sup> The incidence of cancer in California is about the same as or lower than elsewhere in the United States for most types of cancers, and the overall rates in Santa Cruz County are the same as or lower than the state (Figure VGiv-1).<sup>9</sup> California cancer incidence rates for Asian/Pacific Islanders, Blacks, and Whites were between three and five percent lower than the corresponding national rates. Latinos in California had a nearly 9% lower incidence rate than Latinos nationwide.<sup>9</sup>



## **CANCER (CONT.)**

Figure VGiv-2 presents the mortality rates for all cancers from 2003-2007 in California and Santa Cruz County. From 1988 to 2007, cancer mortality rates declined by 21 percent.<sup>9</sup> Mortality rates declined for all four major racial/ethnic groups in the state.<sup>9</sup> Cancer incidence and mortality rates vary considerably among racial and ethnic groups.<sup>11</sup> For all cancer sites combined, African American men have an 18% higher incidence rate and a 36% higher mortality rate than White men, whereas African American women have a 6% lower incidence rate but a 17% higher mortality rate than White women.<sup>11</sup> For specific cancer sites, incidence and mortality are consistently higher in African Americans than in Whites, except for cancers of the breast and lung among women, and kidney among both men and women.<sup>11</sup>



## **CANCER DISPARITIES**

Factors known to contribute to racial disparities in mortality vary by cancer site and include differences such as exposure to underlying risk factors, access to regular screening, and timely diagnosis and treatment.<sup>11</sup> For all cancer sites combined, residents of poorer counties (those with greater than or equal to 20% below the poverty line) have 13% higher death rates from cancer in men and 3% higher death rates in women compared with more affluent counties.<sup>12</sup> Differences in cancer survival account for part of this disparity. Socioeconomic factors such as poverty, inadequate education, and lack of health insurance appeared to be far more important than biological differences. In 1991, the director of the US National Cancer Institute (NCI) declared “poverty is a carcinogen.”<sup>12</sup> Socioeconomic factors influence cancer risk factors such as tobacco use, poor nutrition, physical inactivity, and obesity. Income, education, and health insurance coverage influence access to appropriate early detection, treatment, and palliative care.<sup>12</sup>

**Primary Prevention  
Activities**

- **WomenCARE;** Their mission is to provide free cancer advocacy, resources, education, and support to women, their families, and healthcare practitioners for all types of cancer. <http://www.womencaresantacruz.org/>

**Sources**

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