

Santa Clara County: Cancer Rates, Trends, and Screening

Key Findings:

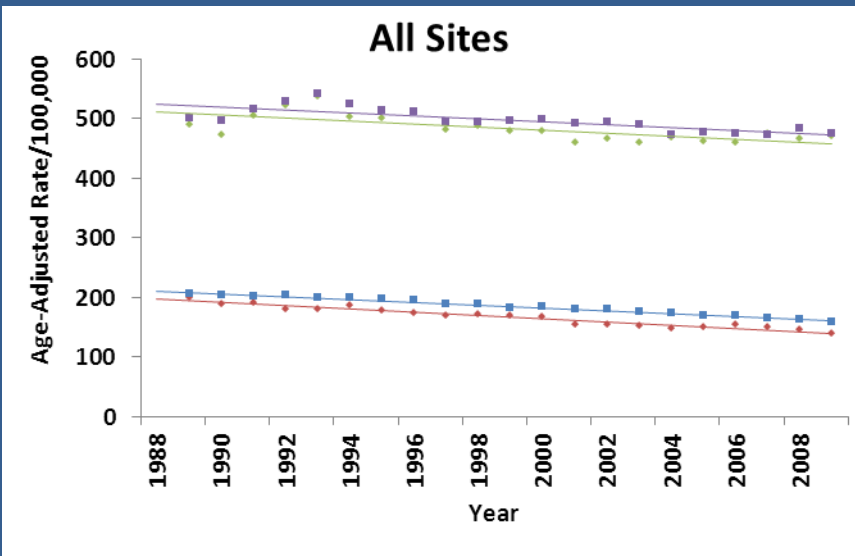
- From 1988 to 2009, the age-adjusted incidence and mortality for all cancer sites combined in Santa Clara County declined from 490 to 459 cases and 201 to 138 deaths per 100,000 people respectively.
- During this same time period, age-adjusted incidence and mortality declined for lung and bronchus, colorectal, and cervical cancers in Santa Clara County, but increased for liver cancer. The mortality rates for breast and prostate cancer declined slightly, while incidence for each has risen slightly.
- From 2007 to 2009, age-adjusted liver cancer incidence and mortality rates among Asian/Pacific Islanders were over three times higher than among whites.
- About 90% of lung cancer cases are caused by cigarette smoking.ⁱ From 1988 to 2006, as the prevalence of smoking declined among adults in Santa Clara County, the age-adjusted lung cancer mortality rate declined as well.
- In 2010 cancer was the leading cause of death in Santa Clara County with 2,334 deaths or over 6 deaths every day due to cancer.

Introduction:

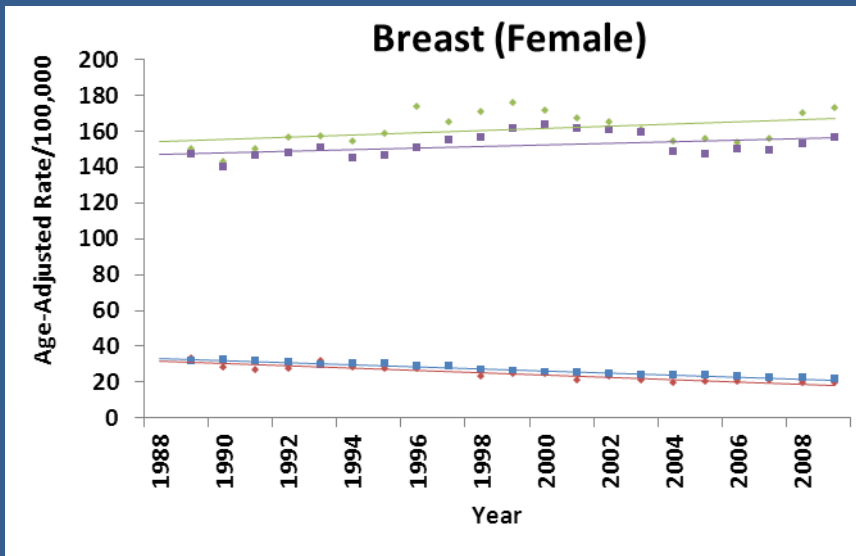
Cancer is the second most common cause of death in the U.S. and is associated with 1 in every 4 deaths.ⁱⁱ In 2010, cancer was the leading cause of death in Santa Clara County accounting for 2,334 of 8,969 deaths or over 6 deaths every day due to cancer. The American Cancer Society estimates one out of every two Californians born today will develop cancer within their lifetime.ⁱⁱⁱ Changes in cancer incidence and mortality rates can indicate changes in exposure to risk factors; because of this, monitoring cancer incidence and mortality rates is an important part of efforts to improve public health.

Cancer Incidence and Mortality Trends in Santa Clara County and California, 1988 to 2009:

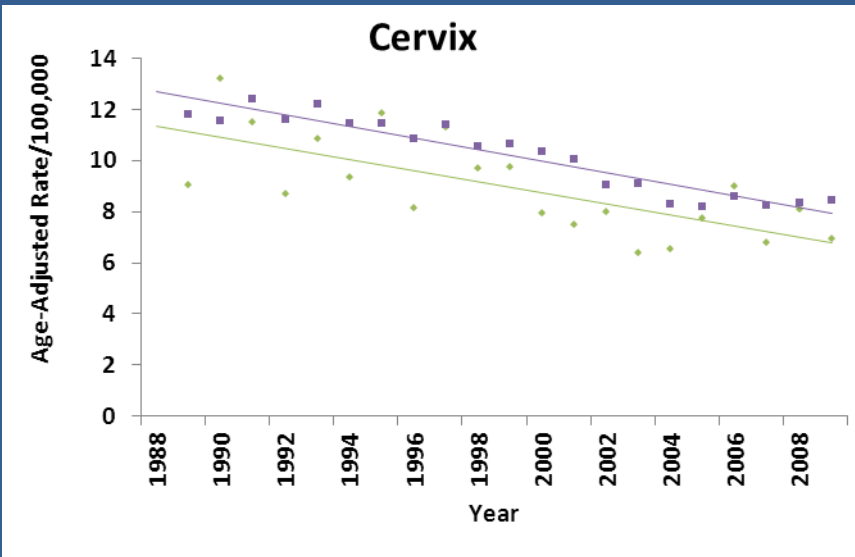
From 1988 to 2009, the age-adjusted incidence and mortality for all cancer sites combined in Santa Clara County declined from 490 to 459 cases and 201 to 138 deaths per 100,000 people respectively. From 1988 to 2009, the age-adjusted incidence and mortality rates of colorectal, lung and bronchus, and cervical cancers declined in Santa Clara County and California. During the same time period, the age-adjusted mortality rates of breast and prostate cancer declined slightly, while the age-adjusted incidence rates for these two types of cancer have risen slightly in both Santa Clara County and California; these contrasting trends may be due to improved screening methods, awareness and improved treatment methods. The age-adjusted incidence of breast cancer was higher in Santa Clara County than in the state overall over this period. From 1988 to 2009 the age-adjusted incidence and mortality rates of pancreatic cancer remained fairly stable. From 1988 to 2009, the age-adjusted incidence and mortality rates of liver cancer rose in Santa Clara County and California. The increase in liver cancer could be due to an increase in the population exposed to risk factors for liver cancer, such as through increased immigration from countries with a higher prevalence of chronic hepatitis B.



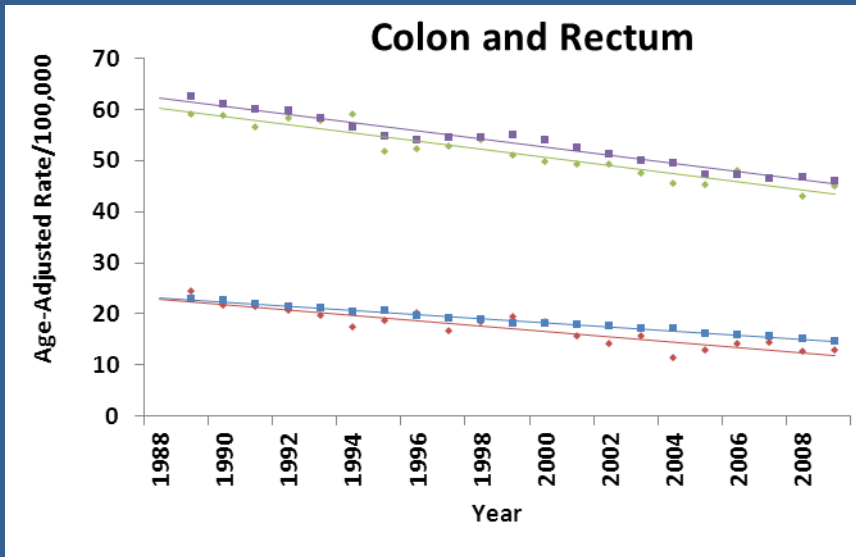
Source: California Cancer Registry Cancer Inquiry System



Source: California Cancer Registry Cancer Inquiry System

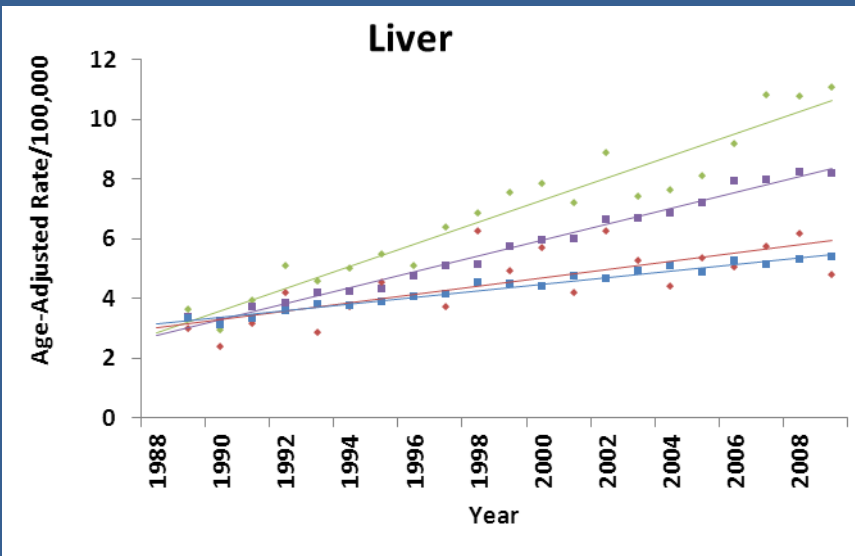


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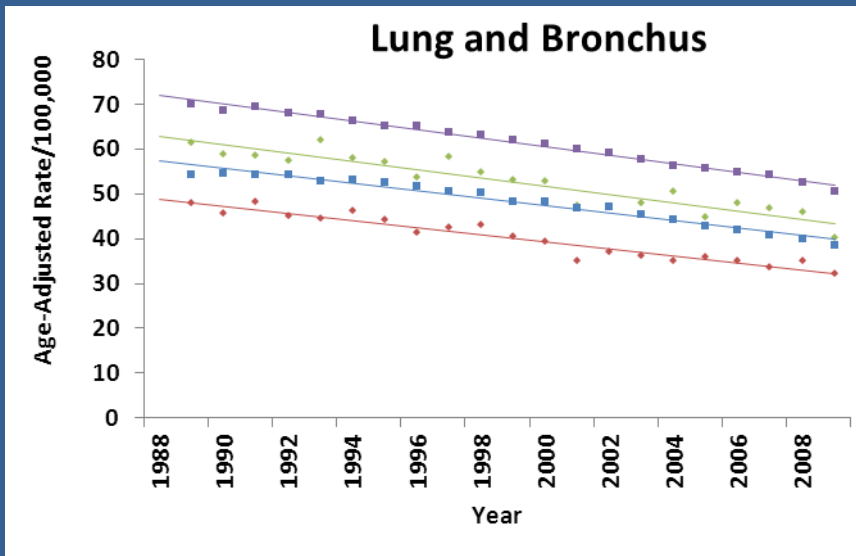


Source: California Cancer Registry Cancer Inquiry System

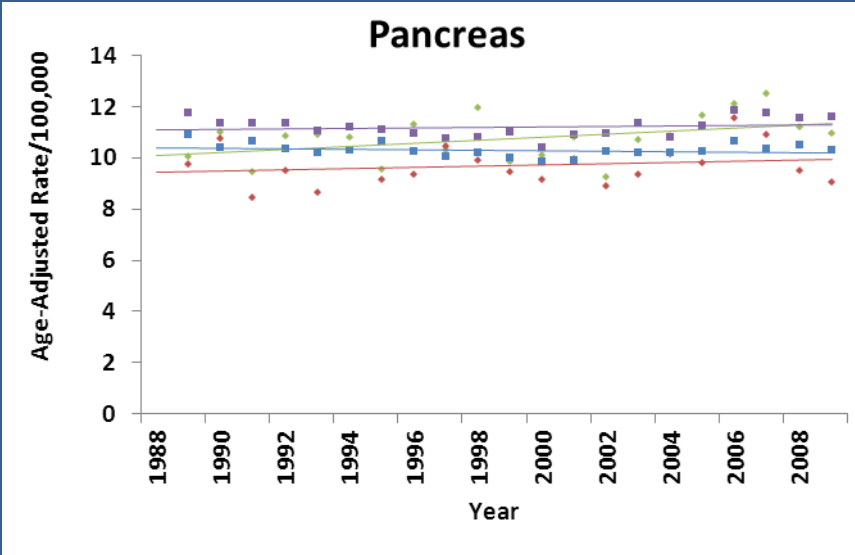
- ◆ Santa Clara County Incidence
 - ◆ Santa Clara County Mortality
- California Incidence
 - California Mortality



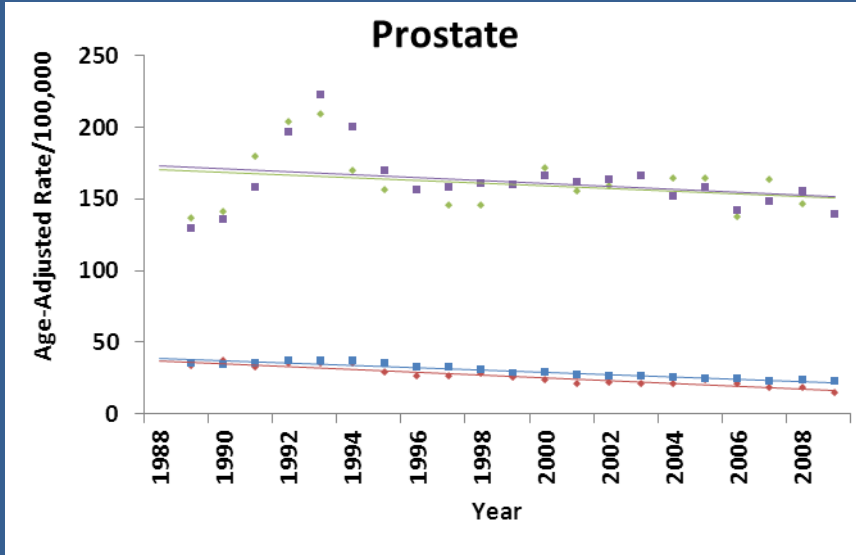
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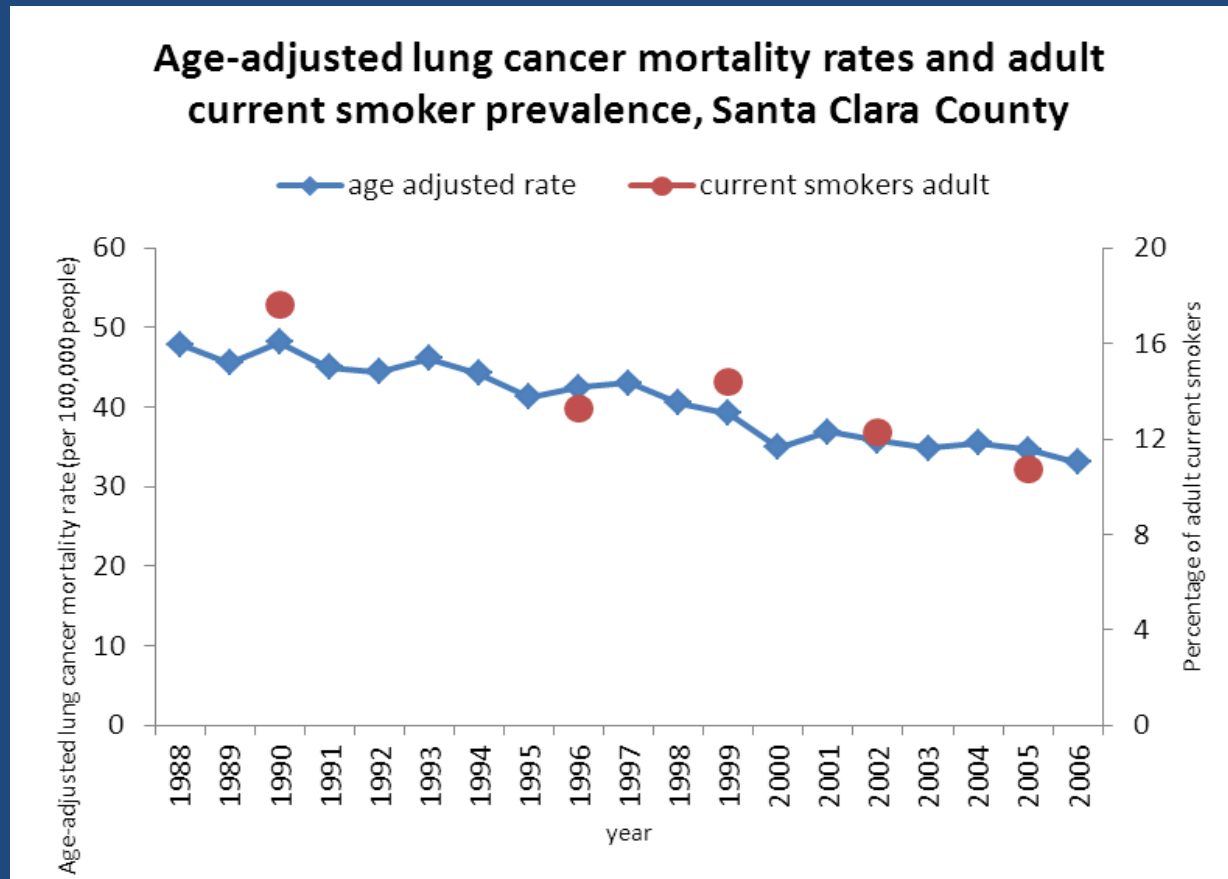


Source: California Cancer Registry Cancer Inquiry System

- ◆ Santa Clara County Incidence
 - ◆ Santa Clara County Mortality
- California Incidence
 - California Mortality

Current Smoker and Lung Cancer Mortality Trends in Santa Clara County, 1988 to 2006:

About 90% of lung cancer cases are caused by cigarette smoking.ⁱ From 1988 to 2006, as the prevalence of smoking declined among adults in Santa Clara County, the age-adjusted lung cancer mortality rate declined as well.



Source: CDC BRFSS SMART, California Cancer Registry Cancer Inquiry System

Cancer Incidence and Mortality Rates in Santa Clara County by Race/Ethnicity, Age, and Sex:^{iv}

From 2007 to 2009, White adults had the highest age-adjusted incidence and mortality rates of cancer in Santa Clara County and White men in particular had the highest age-adjusted incidence and mortality rates compared to other major racial/ethnic groups.

When considering site specific cancers among Santa Clara County adults, breast cancer was the most common site of cancer for women, while prostate was the most common site of cancer for men. Lifestyle risk factors for breast cancer include obesity, sedentary lifestyle, tobacco and alcohol use. A high fat diet may increase the risk of developing prostate cancer. For all adults lung cancer had the highest mortality rate compared to other cancers. Smoking causes most lung cancers.^v

From 2007 to 2009, age-adjusted liver cancer incidence and mortality rates among Asian/Pacific Islanders were over three times higher than among Whites. The age-adjusted liver cancer incidence and mortality rates were also higher among Hispanics. Risk factors for liver cancer include chronic liver infection with the hepatitis B or hepatitis C virus, cirrhosis of the liver caused by chronic heavy drinking, hepatitis C, and exposure to the mold aflatoxin by eating grains and nuts. Hepatitis B infection can be prevented with a vaccine; a vaccine for Hepatitis C has not been developed.^v

From 2007 to 2009, the incidence and mortality rates of cancer increased with age for both men and women. For women ages 25 to 44 and ages 45 to 64, breast cancer had the highest incidence and mortality rates compared with other cancer sites. For men ages 25 to 44 colorectal cancers had the highest incidence compared with other cancer sites. For men ages 45-64, prostate cancer had the highest incidence when compared with other cancers, while lung cancer had the highest mortality rate for men in this age group.

Table 1: Age Adjusted Cancer Incidence and Mortality Rates per 100,000 Adults by Cancer Site, Race/Ethnicity and Sex, Santa Clara County 2007-2009

		Asian/Pacific Islander	White	Hispanic	Santa Clara County
All Sites					
Men	Incidence	643	727	524	616
	Mortality	128	242	172	212
Women	Incidence	403	623	428	519
	Mortality	212	211	125	175
Men and Women	Incidence	418	664	467	558
	Mortality	145	224	145	191
Breast					
Women	Incidence	140	214	134	175
	Mortality	18	32	24	27
Colon and Rectum					
Men	Incidence	77	60	59	58
	Mortality	25	19	20	20
Women	Incidence	48	54	41	50
	Mortality	14	21	10	16
Men and Women	Incidence	49	57	50	54
	Mortality	15	19	14	18
Liver					
Men	Incidence	50	12	36	21
	Mortality	28	6	17	12
Women	Incidence	14	4	10	7
	Mortality	8	3	3	4
Men and Women	Incidence	25	8	22	14
	Mortality	15	4	10	8
Lung					
Men	Incidence	69	70	44	63
	Mortality	43	56	35	49
Women	Incidence	33	63	30	50
	Mortality	24	51	13	38
Men and Women	Incidence	44	66	36	56
	Mortality	32	53	23	43
Prostate					
	Incidence	125	228	154	191
	Mortality	10	26	14	21
Cervix					
	Incidence	10	9	14	10
	Mortality	-	-	-	-

Sources: Greater Bay Area Cancer Registry, 2007-2009; U.S. Census Bureau, 2007-2009 American Communities Survey 3-Year Estimates; Santa Clara County Public Health Department, 2007-2009 Death Database.

Table 2: Cancer Incidence and Mortality Rates per 100,000 Adults by Cancer Site, Age Group and Sex, , Santa Clara County 2007-2009

		18-24	25-44	45-64	65+
All Sites					
Men	Incidence	38	70	627	2319
	Mortality	4	13	140	963
Women	Incidence	41	154	624	1557
	Mortality	4	18	142	733
Men and Women	Incidence	40	109	626	1890
	Mortality	4	15	141	834
Breast					
Women	Incidence	0	62	259	422
	Mortality	0	4	31	93
Colon and Rectum					
Men	Incidence	0	8	66	207
	Mortality	0	2	14	88
Women	Incidence	0	7	51	191
	Mortality	0	1	11	72
Men and Women	Incidence	0	7	59	198
	Mortality	0	2	13	79
Liver					
Men	Incidence	0	2	31	64
	Mortality	0	1	15	42
Women	Incidence	0	0	7	29
	Mortality	0	0	2	21
Men and Women	Incidence	0	1	19	44
	Mortality	0	0	9	30
Lung					
Men	Incidence	0	2	41	290
	Mortality	0	1	28	236
Women	Incidence	0	4	39	218
	Mortality	0	1	25	176
Men and Women	Incidence	0	3	40	250
	Mortality	0	1	27	202
Prostate					
	Incidence	0	2	215	740
	Mortality	0	0	5	113
Cervix					
	Incidence	2	9	13	13
	Mortality	-	-	-	-

Sources: Greater Bay Area Cancer Registry, 2007-2009; U.S. Census Bureau, 2007-2009 American Communities Survey 3-Year Estimates; Santa Clara County Public Health Department, 2007-2009 Death Database.

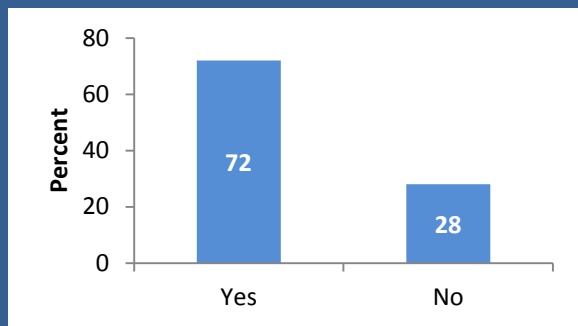
Cancer Screening In Santa Clara County

Cancer screening helps to detect cancer early, improving survival rates and treatment options. Estimates of premature deaths that could be avoided by screening vary from 3% to 35% depending on the type of cancer. In addition, screening may reduce cancer-related morbidity because treatment for earlier-stage cancers is often less aggressive than for more advanced-stage cancers.^{vi}

In 2009, a greater proportion of colorectal cancers in white males were diagnosed at an early stage (52%) than in Asian/Pacific Islander males (42%) in Santa Clara County. In 2009, among San Francisco Bay Area Counties, white males ages 50 and older had a higher rate of colon cancer screening compliance (78%) than Asian/Pacific Islander males (53%). In Santa Clara County, similar patterns are evident for all adults ages 50 and older (data on males specifically is unavailable).

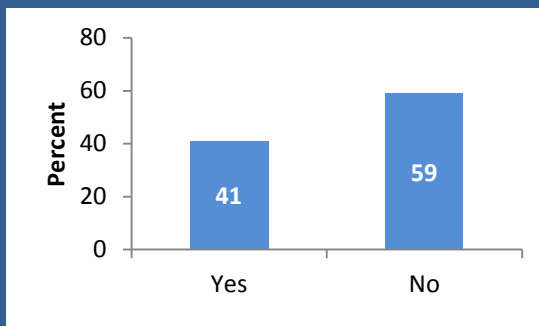
In 2009, over two thirds of adults 50 and older (72%) were in compliance with current colon cancer screening guidelines. Less than half (41%) of men over 49 had a PSA test to screen for prostate cancer in the past year. Eighty-three percent (83%) of women between the ages of 50 and 74 had a mammogram in the past 2 years.

Percentage of Adults Ages 50 and Older Who Are in Compliance with Current Colon Cancer Screening Guidelines



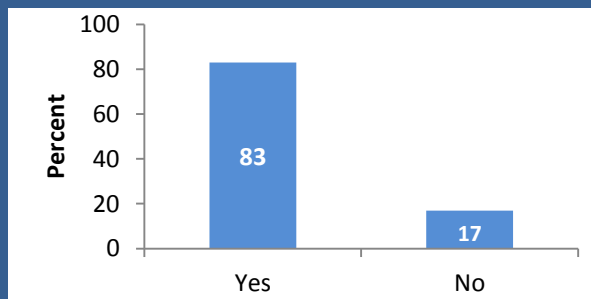
Source: California Health Interview Survey, 2009

Percentage of Men Ages 50 and Older Who Had a PSA Test to Screen for Prostate Cancer in the Past Year



Source: California Health Interview Survey, 2009

Percentage of Women Ages 50-74 Who Had a Mammogram in the Past Two Years



Source: California Health Interview Survey, 2009

ⁱ U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General (2004).

ⁱⁱ Santa Clara County Public Health Department. Santa Clara County Health Profile Report 2010. San Jose, CA: Santa Clara County Public Health Department; 2010

ⁱⁱⁱ American Cancer Society, California Department of Public Health, California Cancer Registry. California Cancer Facts and Figures 2012. Oakland, CA: American Cancer Society, California Division, September 2011.

^{iv} Rates for African Americans not presented due to small numbers of cases. Cervical cancer mortality rates not presented due to small numbers of cases.

^v Morris CR, Epstein J, Nassere K, Hofer BM, Rico J, Bates JH, Snipes KP. Trends in Cancer Incidence, Mortality, Risk Factors, and Health Behaviors in California. Sacramento, CA: California Department of Public Health, Cancer Surveillance Section, January 2010.

^{vi} National Cancer Institute. Cancer Screening Overview. Accessed January 31, 2013 from <http://www.cancer.gov/cancertopics/pdq/screening/overview/HealthProfessional>