

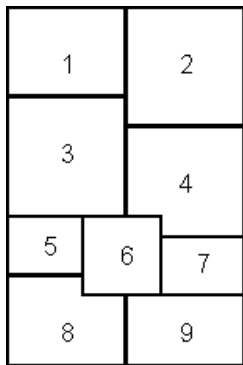


HEALTH

Santa Cruz County



PICTURE RECOGNITION (LINKS) FOR COVER:



1. <http://www.redmanhouse.com/news/index.html>
2. <http://www.blumaps.com/images/capitola/capitola.jpg>
3. http://www.nalucollective.com/index.php/site/archive_view/jumping-into-steamer-lane/
4. <http://homesofsantacruzcounty.com/cities/scotts-valley.htm>
5. <http://www.griptoad.com/mcpix.html>
6. <http://www.coastal.ca.gov/publiced/photos/2008/hm-lighthouse-Powell.jpg>
7. http://www.santacruzsentinel.com/localnews/ci_14252749
8. www.roaringcamp.com/presspix.html
9. <http://picasaweb.google.com/lh/photo/NcTbjaCBcp8agtJMuDETzw>

ACKNOWLEDGEMENTS

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Public Health
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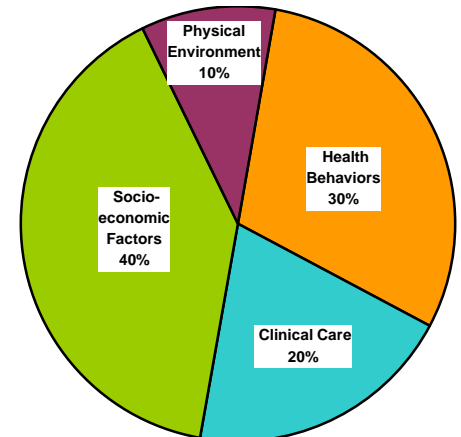
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INTRODUCTION

Every two years, the Santa Cruz County Health Services Agency, Public Health Division, publishes data and analysis to portray and inform residents, providers, and policymakers about the state of the county's health. This report helps to fulfill Essential Service #1 of the ten core public health essential services: To monitor the health of the community.

This year, our report is structured to reflect the *County Health Rankings* report, published for the first time this February. The *County Health Rankings* is a key component of the MATCH (Mobilizing Action Toward Community Health) project, a collaboration between the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation. The *County Health Rankings* will be an annual report on the nation's 3,016 counties, state-by-state. On an ongoing basis, the report will show us rankings of all the counties within a state on a set of 28 key factors that influence health and health outcomes such as morbidity and mortality. The categories of health factors and their relative weights used in determining the overall rankings are:

- Health behaviors 30%
- Clinical care 20%
- Socioeconomic factors 40%
- Physical environment 10%



The *County Health Rankings* allow us to compare ourselves with other counties in California in a standardized, weighted methodology that shows that where we live matters. Where we live, learn, work, and play influences how healthy we are and how long we will live.

Fortunately, we live in a wonderful county, graced with natural beauty, resources, and a diverse population of good will. The *County Health Rankings* report shows Santa Cruz County to be the 8th healthiest county in California overall.

This report, the *Health of Santa Cruz County 2010*, is a far richer document, delving deeply into the same outcomes and factors with greater analysis by race/ethnicity, gender, age, and geographic location. Health inequities and disparities become evident, as well as the effect of place within the county. The data we present is annotated and referenced and can be used to study critical issues and trends, and can uncover hopeful avenues for prevention and population health improvement. Good data is fundamental to good governance, not only because it informs decision-making and thoughtful use of scarce resources, but also because it helps people understand their own conditions and the contributions they can make towards improving their health and the health of the community.

I wish to acknowledge and thank the staff of HSA who wrote and contributed to this report, and our director, Dr. Rama Khalsa, for her interest and steadfast support. I am also grateful for the dedicated efforts made every day on behalf of the people of Santa Cruz County by the Members of the Board of Supervisors: John Leopold (First District), Ellen Pirie (Second District), Neal Coonerty (Third District), Tony Campos (Fourth District), and Mark Stone (Fifth District).

Poki Stewart Namkung, M.D., M.P.H.
Health Officer
County of Santa Cruz
September 2010

REPORT CARD

<i>County Health Rankings</i> http://www.countyhealthrankings.org/		Data Years	California	Santa Cruz County	Santa Cruz County Ranking out of 56 Counties in CA*	Ranked in the Upper or Lower Third?
HEALTH FACTORS						
SOCIAL & ECONOMIC FACTORS						
1.	High School Graduation ¹	2005-06	69%	81%	18 th	Upper
2.	College Degrees (age 25+) ²	2000, 2005-07	29%	38%	7 th	Upper
3.	Unemployment ³	2008	7%	7%	23 rd	-
4.	Children in Poverty ⁴	2007	17%	14%	19 th	-
5.	Income Inequality ² (GINI scale)	2000, 2005-07	47	46	49 th	Lower
6.	Inadequate Social Support ⁵	2005-08	26%	19%	8 th (of 35)	Upper
7.	Single-Parent Households ²	2000, 2005-07	10%	9%	22 nd	-
8.	Violent Crime Rate per 100,000 ⁶	2005-07	527	462	36 th	-
HEALTH BEHAVIORS						
9.	Adult Smoking ⁵	2002-08	15%	11%	6 th (of 40)	Upper
10.	Adult Obesity ⁵	2006-08	23%	18%	5 th	Upper
11.	Binge Drinking ⁵	2002-08	15%	14%	8 th (of 41)	Upper
12.	Motor Vehicle Crash Death Rate per 100,000 ⁷	2000-06	12	11	12 th	Upper
13.	Chlamydia Rate per 100,000 ⁸	2007	389	260	28 th	-
14.	Teen Birth Rate (age 15-19) per 1,000 ⁷	2000-06	41	32	22 nd	-
CLINICAL CARE						
15.	Uninsured Adults ⁹	2005	21%	22%	47 th	Lower
16.	Primary Care Provider Rate per 100,000 ¹⁰	2006	116	150	8 th	Upper
17.	Preventable Hospital Stays per 100,000 ¹¹	2005-06	62	52	16 th	Upper
18.	Diabetic Screening ¹¹	2003-06	76%	78%	24 th	-
19.	Hospice Use ¹¹	2001-05	28%	36%	5 th (of 50)	Upper
PHYSICAL ENVIRONMENT						
20.	Air Pollution: Particulate Matter Days ¹²	2005	13	15	43 rd	Lower
21.	Air Pollution: Ozone Days ¹²	2005	37	0	1 st	Upper
22.	Access to Healthy Foods ¹³	2006	46%	50%	18 th	Upper
23.	Liquor Store Density per 10,000 ¹³	2006	0.9	1.2	49 th	Lower
HEALTH OUTCOMES						
MORBIDITY						
24.	Poor or Fair Health ⁵	2002-08	18%	16%	27 th (of 45)	-
25.	Poor Physical Health Days in past 30 days ⁵	2002-08	3.6	3	8 th (of 50)	Upper
26.	Poor Mental Health Days in past 30 days ⁵	2002-08	3.6	3.6	23 rd (of 50)	-
27.	Low Birthweight ⁷	2000-06	6.6%	5.4%	7 th	Upper
MORTALITY						
28.	Premature Death (years lost before age 75) ⁷	2004-06	6,196	5,199	6 th	Upper

* Ranking: the "ideal" position (the "healthiest" value) is ranked #1. Two of California's 58 counties (Alpine and Sierra) are not ranked, due to small population size. For some topics, more counties are excluded due to small numbers; where fewer than 56 counties are ranked, the actual number is shown.

1) National Center for Education Statistics (NCES)

2) U.S. Census Bureau, American Community Survey (ACS)

3) Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS)

4) U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE)

5) Behavioral Risk Factor Surveillance System (BRFSS)

6) FBI's Uniform Crime Reports Web site

7) National Vital Statistics System (NVSS)

8) CDC's National Center for Hepatitis, HIV, STD, and TB Prevention

9) U.S. Census Bureau, Small Area Health Insurance Estimates

10) Health Resources and Services Administration's Area Resource File (ARF)

11) Dartmouth Atlas of Health Care, using Medicare claims data

12) Public Health Air Surveillance Evaluation (PHASE) project

13) US Census Bureau's Zip Code Business Patterns

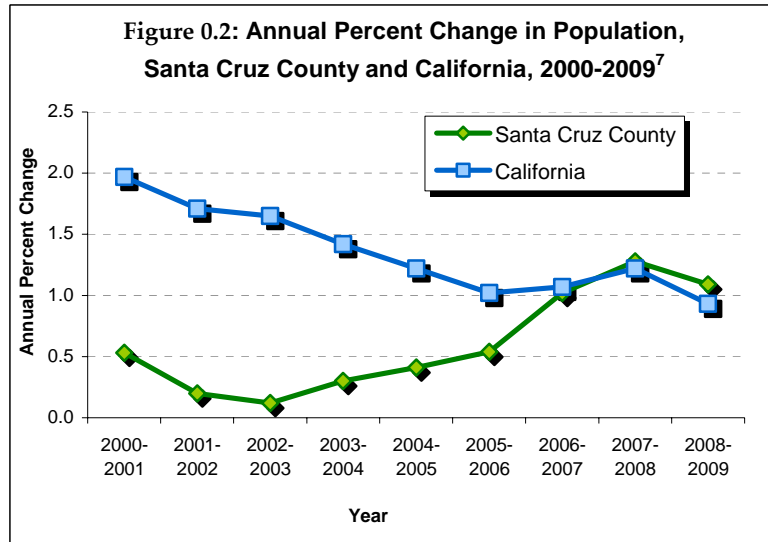
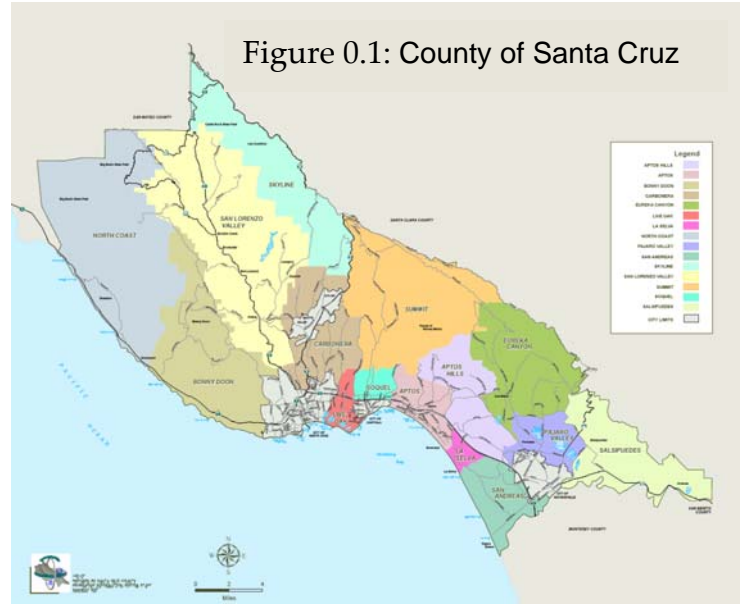
O. DEMOGRAPHICS

Figure 0.1 displays a map of the County of Santa Cruz. The County of Santa Cruz was one of the original counties of California, created in 1850 at the time of statehood. In the original act, the county was given the name “Branciforte” after the Spanish pueblo founded there in 1797. Less than two months later, the name was changed to “Santa Cruz,” meaning Holy Cross.¹ According to the US Census Bureau, the county has a total area of 607 square miles: 445 square miles of land and 162 square miles of water. The population density is 563 people per square land mile.²

The California Department of Finance estimated the total population in the County of Santa Cruz to be 270,882 residents in 2009.⁴ By California standards, Santa Cruz is a mid-sized population county, ranking 24th among California’s 58 counties in 2009.² Over the past decade, Santa Cruz County’s population has grown consistently. The county saw an increase of about 1.3% in residents in 2009-2010.⁵ The cities in Santa Cruz County have grown slightly, but most of the population growth has taken place in unincorporated areas of the county.⁶ All other surrounding counties have also experienced a slight population growth from July 1, 2009 to July 1, 2010. Monterey County saw a 1.1% increase in population, San Benito County saw a 0.8 % increase in population, Santa Clara County saw a 1.3% increase in population, and San Mateo County saw a 1.2% increase in population from 2007 to 2009.⁵

GENDER & AGE

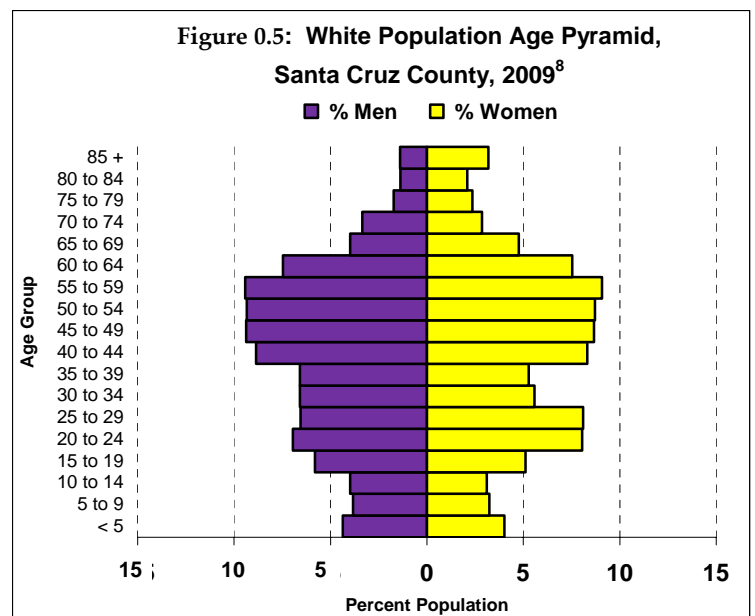
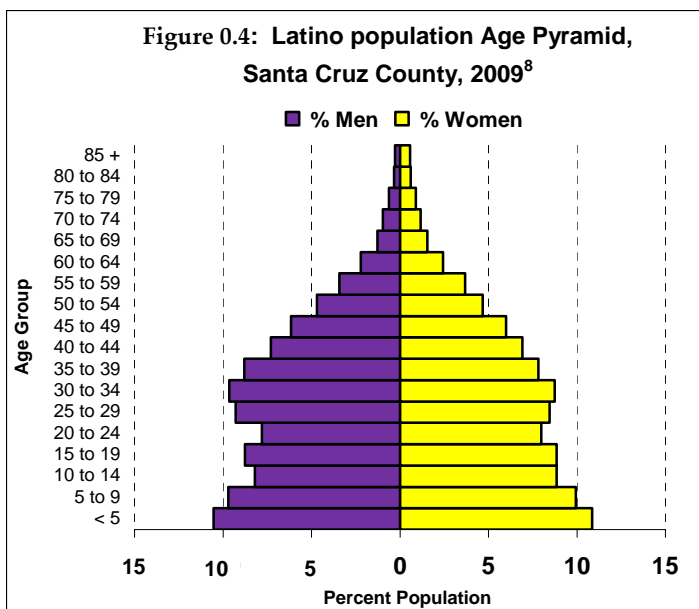
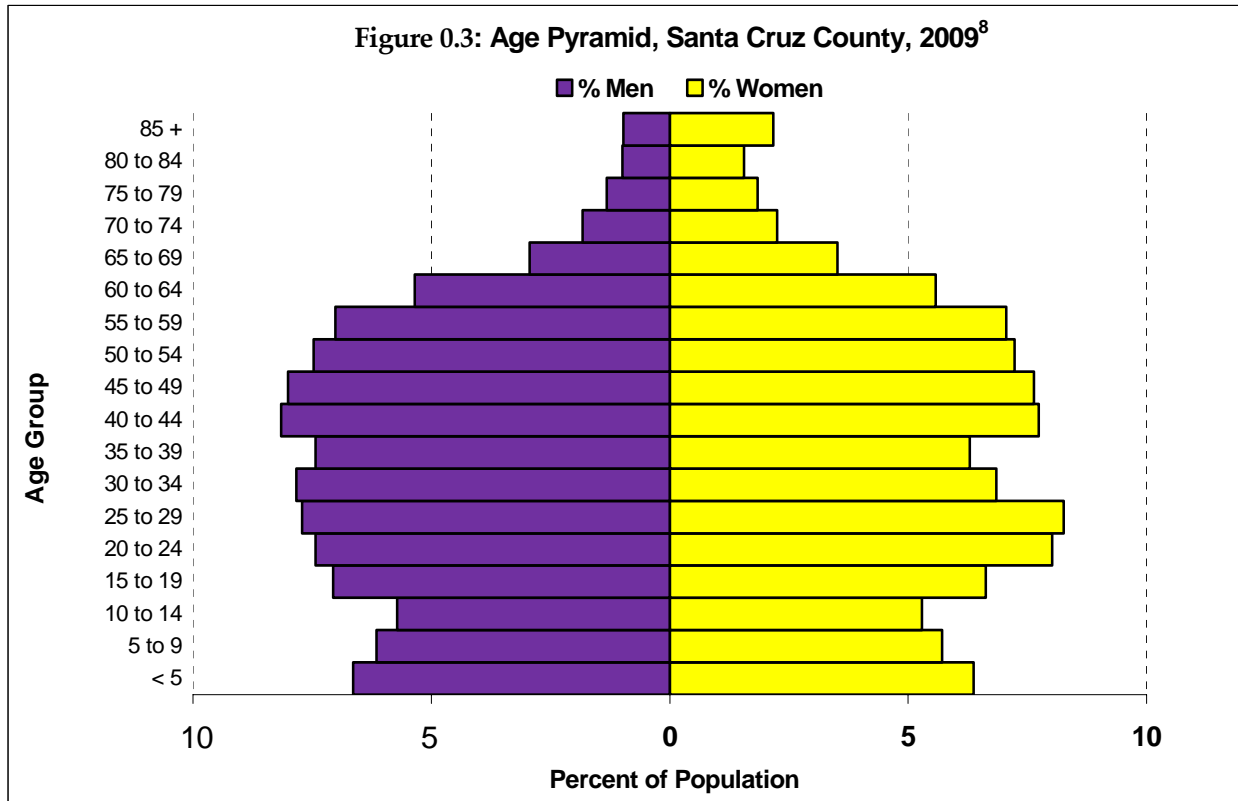
Nearly equal numbers of males and females reside in Santa Cruz County. Twenty-six percent of Santa Cruz County residents are 19 years of age and under.² The median age in Santa Cruz County is 36.9 years of age.¹ Based on 2009 estimates, Santa Cruz County’s “Age Dependency Ratio” is only 38.2%, compared to a statewide average of 47.6%.^{8,9} The Age Dependency Ratio is the number of people who are in age groups that tend to be economically dependent (children age 0-14, and adults age 65 and over), divided by the number of people in the most economically productive age group (15-64).⁹ A low Age Dependency Ratio means more working people to take care of fewer dependent people, providing an economic advantage to a community.⁹



		n(%)
Gender	Male	133,476 (50.0)
	Female	133,300 (50.0)
Age	0 - 2 years	10,633 (4.0)
	3 - 5 years	10,040 (3.8)
	6 - 14 years	27,181 (10.2)
	15 - 24 years	38,877 (14.6)
	25 - 44 years	80,367 (30.1)
	45 - 65 years	75,930 (28.5)
	66 and older	23,748 (8.9)
Race/Ethnicity	White	150,942 (57.0)
	Latino	92,945 (35.0)
	Black	2,661 (1.0)
	Asian & Pacific Islander	13,522 (5.0)
	Multirace	5,194 (2.0)

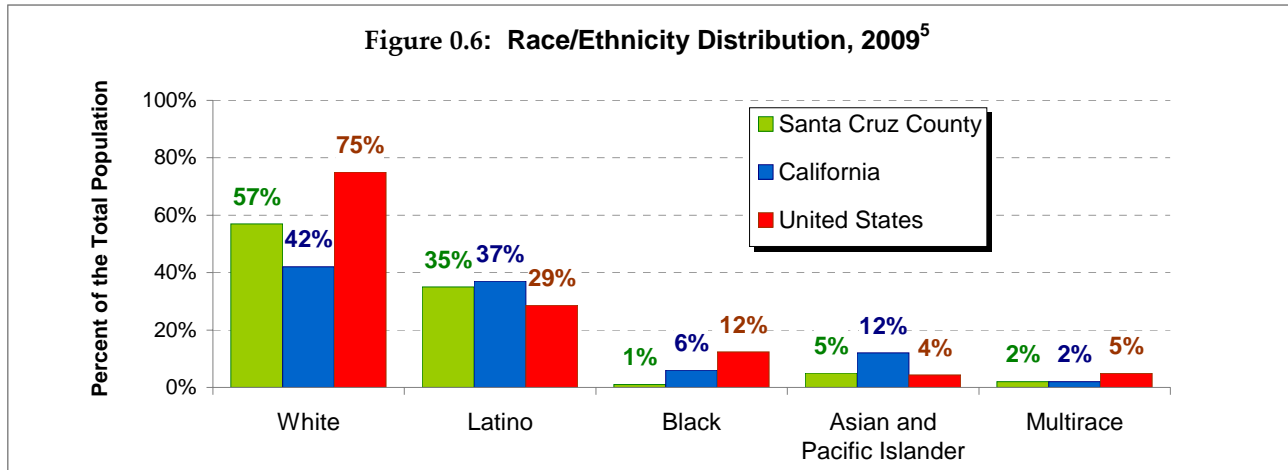
GENDER & AGE (CONT.)

Below are three figures that reflect the proportion of the population in each age group for that gender. Figure 0.3 shows the entire county population, while Figure 0.4 shows the Latino population and Figure 0.5 shows the White population. It is interesting to note that Latinos under age 5 account for the largest proportion of the Latino population. Among the White population, persons aged 55 to 59 are the largest age category.⁸



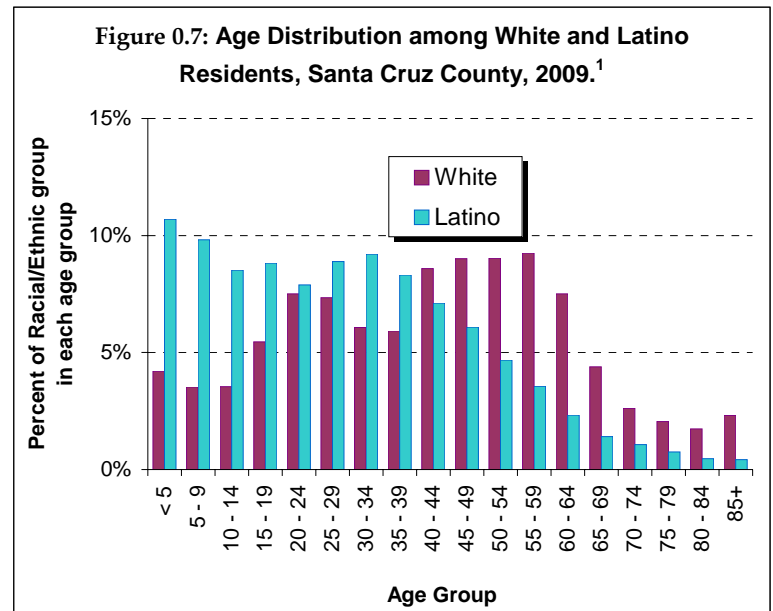
ETHNICITY & RACE

Figure 0.6 describes the race/ethnicity distribution in 2008 of the County of Santa Cruz compared to California and the United States. Santa Cruz County's population comprises 56.6% White, 34.8% Latino, 5.0% Asian or Pacific Islander, 1.0% Black, and 2.5% other.² California, by comparison, has a smaller proportion of Whites, slightly larger proportions of Blacks and Asians, and a slightly larger proportion of Latinos.⁵ The United States has higher proportions of Whites and Blacks, a slightly smaller proportion of Latinos, and approximately equal proportion of Asians as Santa Cruz County.⁵



The relative proportions of various racial/ethnic groups in the county have steadily changed in recent decades. In 1970, Santa Cruz County was more than 86% White and less than 10% Latino. The proportions of Asians, Blacks, and Native Americans have all increased since 1970, though not as rapidly as the Latino population, and they still remain relatively small proportions of the population.

Children make up a far larger proportion of the Latino population than of the White population; this difference continues through every age group under 40, whereas every older age group makes up a much larger proportion of the White population than of the Latino population (Figure 0.7).



Sources

1. California State Association of Counties. <http://www.csac.counties.org>.
2. U.S. Census Bureau: State and County Quick Facts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State.
3. Santa Cruz County California Color Maps http://www.californiacountymaps.com/santacruz_county.shtml.
4. State of California, Department of Finance, Population Estimates and Components of Change by County, July 1, 2000-2009. Sacramento, California, December 2009.
5. State of California, Department of Finance, E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2009 and 2010. Sacramento, California, May 2010.
6. Santa Cruz County Community Assessment Project year 15 2009. www.santacruzcountycap.org.
7. State of California, Department of Finance, California County Population Estimates and Components of Change by Year, July 1, 2000-2009. Sacramento, California, December 2009.
8. State of California, Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 2000-2050*. Sacramento, CA, July 2007.
9. Age dependency ratio: <http://www.economicshelp.org/dictionary/d/dependency-ratio.html>.
10. United States Department of Labor, Bureau of Labor Statistics, Office of employment and Unemployment.

A. EDUCATION

Importance	Educational level is strongly correlated with health. There is an inverse relationship between level of education and many risk behaviors. Similarly, there is a positive association with increasing level of education and an increase in protective health factors such as income level, economic security, and the accumulation of wealth. Educational attainment is a fundamental determinant of health. ^{1,4}
Highlights	<ul style="list-style-type: none"> ▪ More Santa Cruz County residents than California residents (age 25 and over) have obtained a high school diploma or higher (85.0% compared to 80.3%).³ ▪ More Santa Cruz County residents than California residents (age 25 and over) have obtained a bachelor's degree or higher (38.9% compared to 29.4%).³

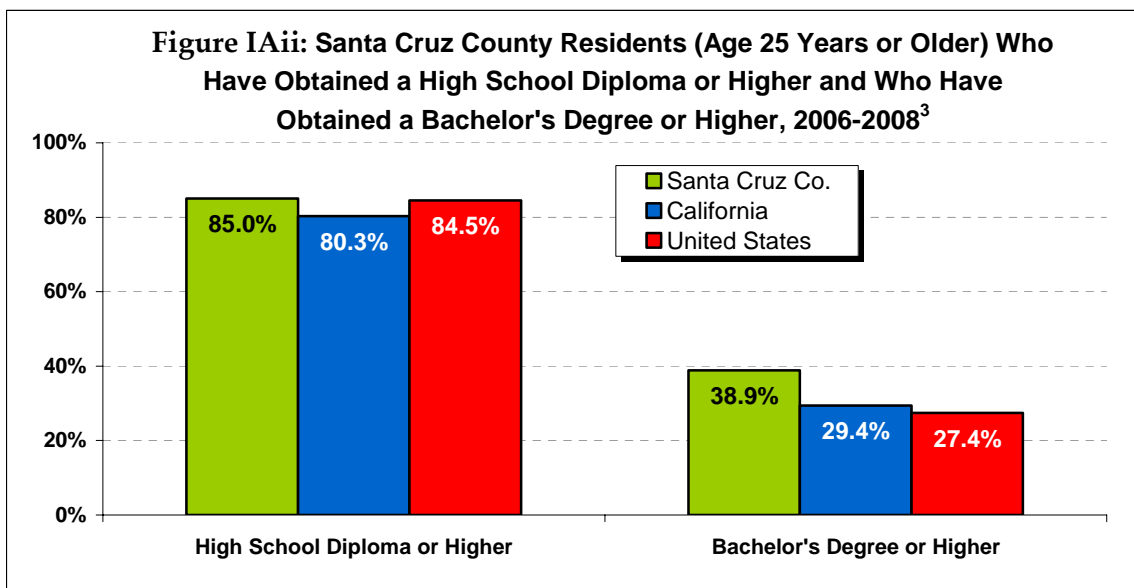
i. HIGH SCHOOL GRADUATION

There are 11 public school districts in Santa Cruz County. Pajaro Valley Unified, the only school district in South County, is the largest district, serving 51% (19,477) of the 38,279 public school students during the 2008-2009 school year.⁴

According to the American Community Survey (2006-2008), 85% of Santa Cruz County residents (25 years and over) have obtained a high school degree or equivalent.² By comparison, 80.8% of all Californians and 84.5% of residents of the United States have obtained a high school diploma by the age of 25.³

ii. COLLEGE DEGREES

According to the American Community Survey, 38.9% of county residents have earned a bachelor's degree or higher.³ By comparison, 29.4% of Californians and 27.4% of Americans have obtained a bachelor's degree or higher.³



Primary Prevention Activities	<ul style="list-style-type: none">▪ Educational success has been correlated with supportive and enriched childhood development. Therefore, resources and policy that support programs such as Head Start and universal pre-school are a good investment for society.²
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Sources	<ol style="list-style-type: none">1. University of Wisconsin Population Health Institute. County Health Rankings 2010. Accessed 2 Sep 2010. http://www.countyhealthrankings.org/health-factors/education.2. Kawachi, I. et al. "Money, schooling, and health: Mechanisms and causal evidence." <i>Annals of the New York Academy of Sciences</i> 1186 (<i>The Biology of Disadvantage: Socioeconomic Status and Health</i>):56-58, 16 Feb 2010. http://onlinelibrary.wiley.com/doi/10.1111/j.1749-6632.2009.05340.x/full.3. U.S. Census Bureau. American Community Survey 2006-2008. http://www.census.gov/acs/www/index.html.4. California State Department of Education. Accessed May 2010. www.ed-data.k12.ca.us.
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B. EMPLOYMENT

Importance	The relationship between unemployment and adverse health outcomes is complex, partly because of its bidirectional nature, such that having ill health can also cause unemployment. However, reviews of the literature provide evidence that unemployment has a direct effect on health, as well as the expected impacts on socioeconomic status, poverty, risk factors, or prior ill health. ¹
Definitions	<u>Unemployment Rate</u> : Number of unemployed individuals out of the total labor force. <u>Labor Force</u> : Individuals (age 16 and older) who are able, available, and actively looking for work – it does not include the jobless who are not seeking work (such as full-time students, homemakers, and retirees).

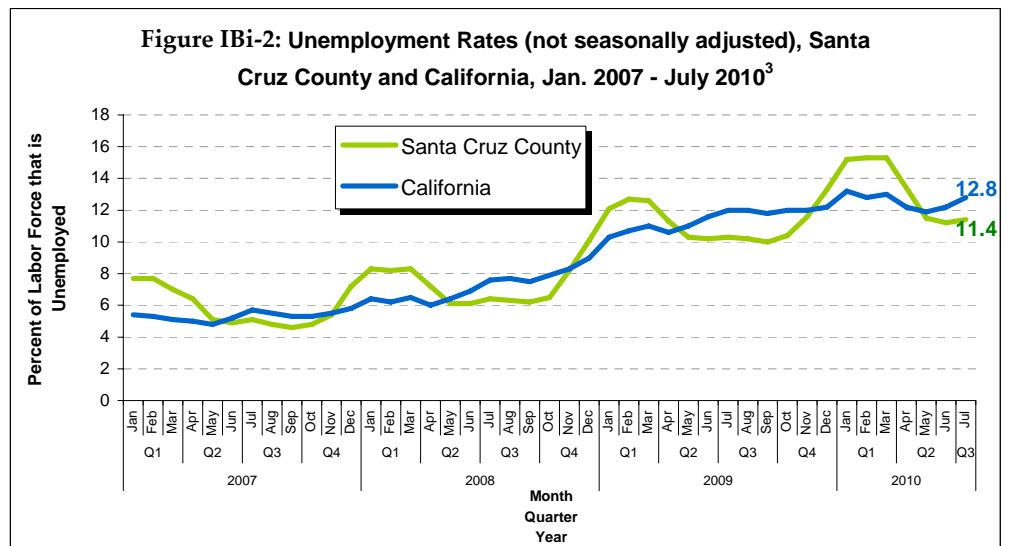
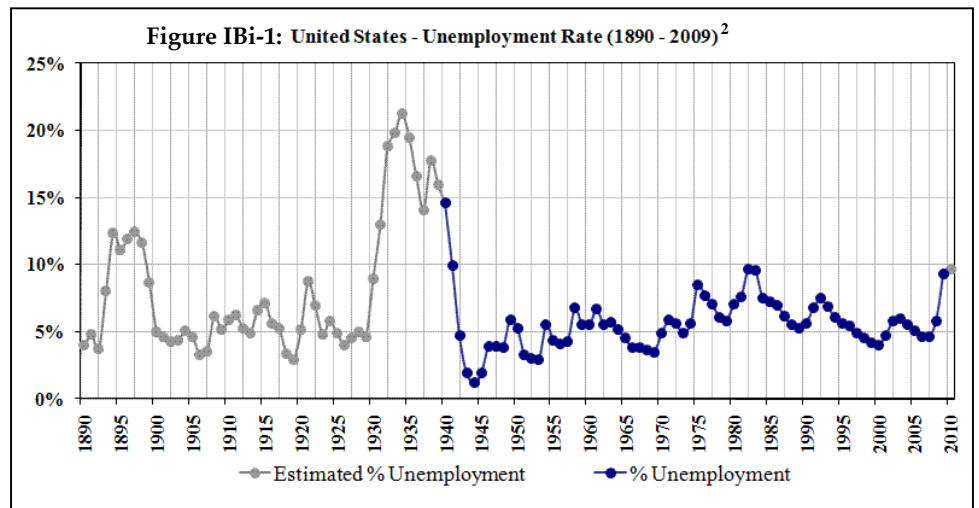
i. UNEMPLOYMENT

Although unemployment rates have not approached the high of 25% seen during the Great Depression in 1933,² current levels are much higher than in the past twenty years (Figure IBi-1). Of note, data collected prior to 1948 was based on a labor force of individuals aged 14 and older (compared to 16 and older thereafter).

In July 2010, Santa Cruz County had an unemployment rate of **11.4%** (or 17,300 people) compared to **12.8%** statewide and **9.7%** nationwide. Yet just a few months earlier, in Santa Cruz County in March 2010, the rate was 15.3% unemployed (or 22,800 persons).³

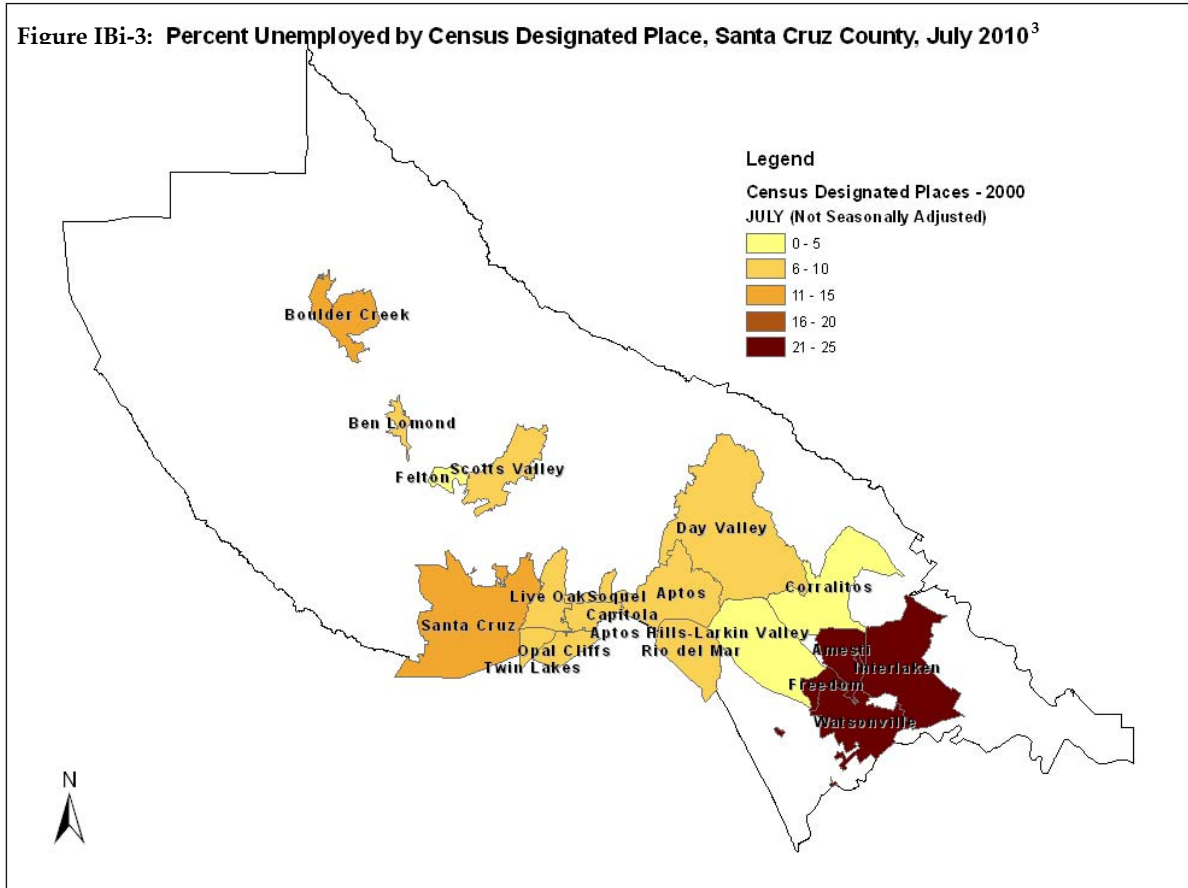
Although it is good to see a slight decrease in the unemployment rate since March (see Figure IBi-2), the data shown in the figure are not seasonally adjusted, and it is normal to see a decrease in the summer and fall months—likely a result of time-limited jobs associated with tourism and agriculture.

In Santa Cruz County, the July 2010 unemployment rate (11.4%) was more than one percentage point higher than the year before (10.3% in July 2009), but five percentage points higher than the rate two years before (6.4% in July 2008).³ In this county, each percentage point represents roughly 1,500 people, so a seemingly small change greatly impacts a large number of residents.



i. UNEMPLOYMENT (CONT.)

At the sub-county level, unemployment rates in cities and Census Designated Places vary greatly, with the Watsonville, Amesti, Interlaken, and Freedom areas all having rates over 20% in July 2010 (for a total of 7,600 unemployed persons). Boulder Creek was the next highest, at 13.1% (or 400 persons), and then the city of Santa Cruz, with a rate of 9.5% (or 3,100 persons). The lowest rates were in Aptos, Aptos Hills/Larkin Valley, Corralitos, Ben Lomond, and Felton, all with rates below 5%. It is worth noting that many Watsonville employees work in agriculture, which is typically seasonal employment and more prone to unemployment.³



Helpful Websites	<ul style="list-style-type: none"> ▪ California Employment Development Department (EDD): http://www.edd.ca.gov/ ▪ United States Department of Labor, Bureau of Labor Statistics: http://www.bls.gov/
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Sources	<ol style="list-style-type: none"> 1. Mathers CD and Schofield, DJ (1998). "The health consequences of unemployment: the evidence." <i>The Medical Journal of Australia</i>, 168:178-182. http://www.mja.com.au/public/issues/feb16/mathers/mathers.html. 2. Robert VanGiezen and Albert E. Schwenk (2003). "Compensation from before World War I through the Great Depression." Bureau of Labor Statistics. http://www.bls.gov/opub/cwc/cm20030124ar03p1.htm. 3. State of California. Employment Development Department (EDD): [updated 2010 Aug 20; cited 2010 Sept 2]. Available from http://www.labormarketinfo.edd.ca.gov.
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C. INCOME

Importance	Poverty and ill health are intertwined. In general, poor countries tend to have worse health outcomes than wealthier countries. In addition, within a given country, poor people tend to have worse health outcomes than wealthier people. This association reflects causality running in both directions: poverty breeds ill health, and ill health keeps poor people poor. ¹
Definitions	<p><u>Poverty</u>: To determine a person's poverty status, the Census Bureau compares the person's total family income in the last 12 months with the poverty threshold (updated monthly) for that person's family size and composition.</p> <p><u>Homeless person</u>: (as defined by the U.S. Department of Housing and Urban Development) An individual who lacks a fixed, regular, and adequate nighttime residence, and who has a primary nighttime residence that is either:</p> <ul style="list-style-type: none"> ▪ A supervised publicly or privately operated shelter designed to provide temporary living accommodations (including welfare hotels, congregate shelters, and transitional housing for the mentally ill), or ▪ An institution that provides a temporary residence for individuals intended to be institutionalized, or ▪ A public or private place not designated for, or ordinarily used as, a regular sleeping accommodation for human beings.

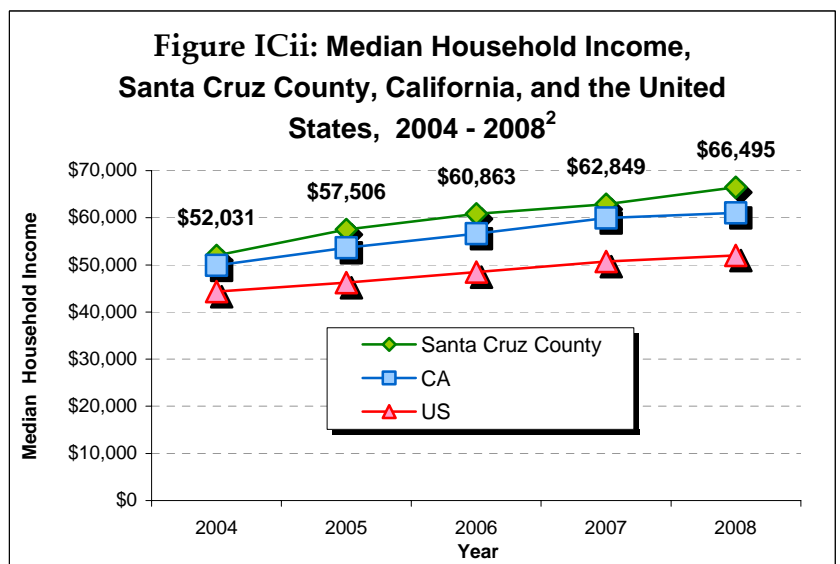
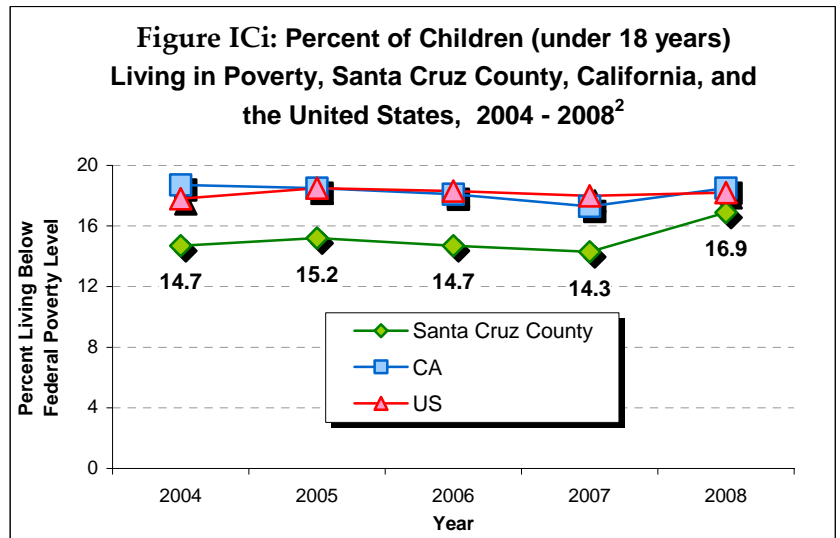
i. CHILDREN IN POVERTY

In 2008, an estimated **16.9%** of Santa Cruz County children (or **9,035** people under age 18) were living in families with incomes below federal poverty level—up from previous years and approaching the state and national rates of 18.5% and 18.2% respectively (Figure ICi).²

Estimates are also available for the cities of Santa Cruz and Watsonville, since there are more than 20,000 residents in each city. For the combined years of 2006 through 2008, the rate of children living in poverty in Santa Cruz was 11%, while *in Watsonville, the rate was 25%, or 1 in 4 children.*

ii. INCOME

In 2008, the median household income in Santa Cruz County was \$66,495, compared to \$61,017 statewide and \$52,029 nationally (Figure ICii). Santa Cruz County's per capita income in 2008 was \$51,140, ranking 107th highest (down from 95th in 2006) among the 3,112 national metropolitan statistical areas with data.²



iii. HOMELESSNESS

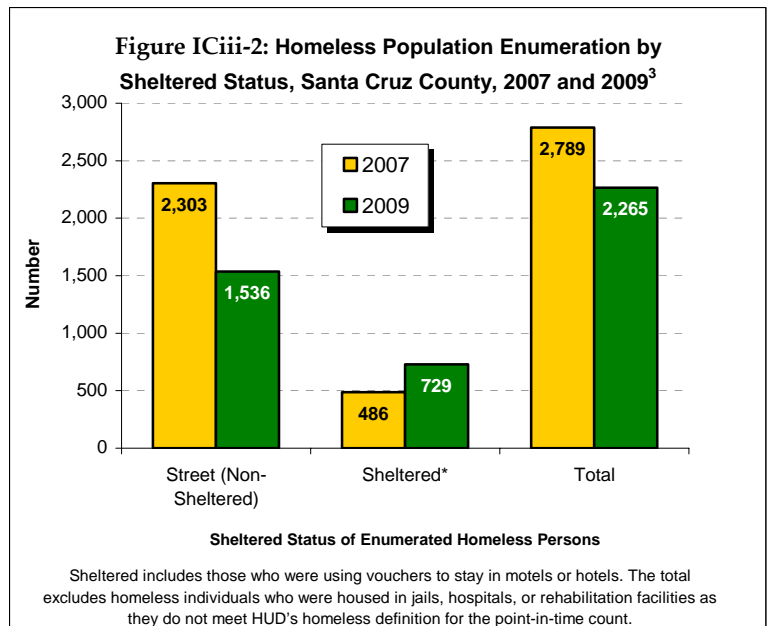
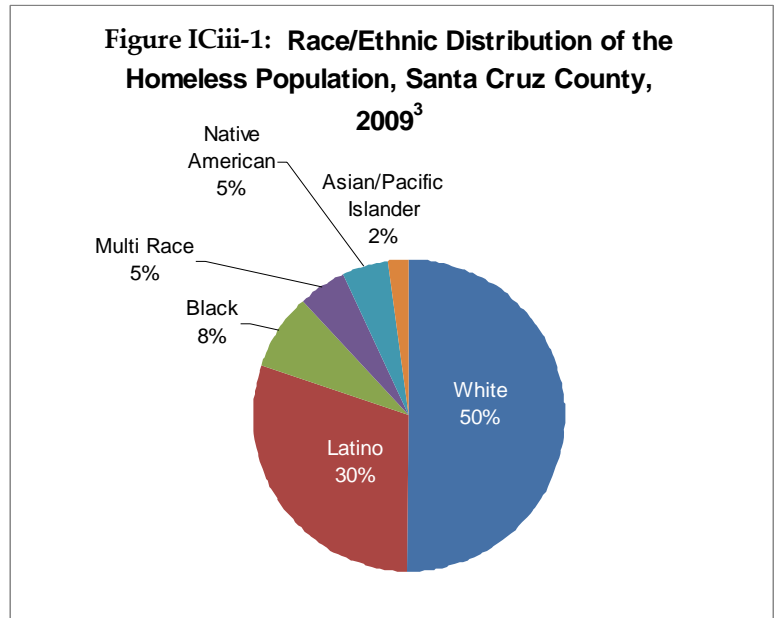
Based on the enumerated homeless population of 2,265 persons in Santa Cruz County in the 2009 point-in-time count, combined with a formula recommended by Applied Survey Research (ASR) and the United States Department of Housing and Urban Development (HUD), the estimated number of persons who were actually homeless in Santa Cruz County in 2009 was **4,624** persons.³ Fifty-four percent had been homeless for a year or more, and 16% had been continuously homeless for the last three years.

Figure ICiii-1 illustrates the racial/ethnic distribution of the 2,265 point-in-time count homeless survey participants.³ The largest proportion (48%) were between the ages of 31 and 51 years old, and the majority were male (73%). Thirty-nine percent had a high school diploma or GED as their highest level of education.

Figure ICiii-2 compares the sheltered and non-sheltered homeless population in Santa Cruz County in both 2007 and 2009. During that time, the unsheltered count decreased by 33%, while the sheltered homeless population increased by 50%.³ In 2009, among the unsheltered adult homeless population, 29% were male, 6% were female, and gender information was not available for the other 65%. Among the sheltered adult homeless population, 49% were men, 17% were women, and information was unavailable for 34%. The increase in the sheltered population can be largely attributed to the increase in countywide shelter capacity since 2007. The Salvation Army in Watsonville increased the number of emergency shelter beds, and both Pajaro Valley Shelter Services and Families in Transition expanded their numbers of transitional housing units.

Findings of interest from the 2009 Homeless Census include³:

- **30%** of respondents cited job loss as the primary reason for their current episode of homelessness.
- **54%** had been homeless for more than one year.
- From 2007 to 2009, the percentage of respondents who indicated that this was the first time they had been homeless increased from 34% to **46%**.
- **30%** of survey respondents said they were currently experiencing a substance abuse problem (alcohol and/or other drugs) – of those, 38% cited the use of alcohol or drugs as the primary cause of their homelessness in 2009, compared to 9% in 2007.



- **73%** reported having a disabling condition (defined as a physical disability, mental illness, depression, alcohol or drug abuse, chronic health problems, HIV / AIDS, Post-Traumatic Stress Disorder (PTSD), or developmental disability).
- **55%** were experiencing at least one mental health issue.
- **31%** reported they were currently experiencing chronic health problems.

<p>Helpful Websites</p>	<ul style="list-style-type: none"> ▪ (Children in Poverty) National Center for Children in Poverty, Mailman School of Public Health, Columbia University. http://nccp.org. ▪ (Homelessness) Applied Survey Research / Homeless Census. http://www.appliedsurveyresearch.org/projects/homeless2009.html.
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<p>Sources</p>	<ol style="list-style-type: none"> 1. Wagstaff, Adam. "Poverty and health sector inequalities." <i>Bull. World Health Org.</i> [online]. 2002, vol.80, n.2, pp. 97-105. ISSN 0042-9686. 2. U.S. Census Bureau. Small Area Income and Poverty Estimates (SAIPE): [updated 2010 Jan 10; cited 2010 May 5]. Available from http://www.census.gov/did/www/saipe/. 3. Applied Survey Research, 2009, Santa Cruz County Homeless Census and Survey. www.appliedsurveyresearch.org.
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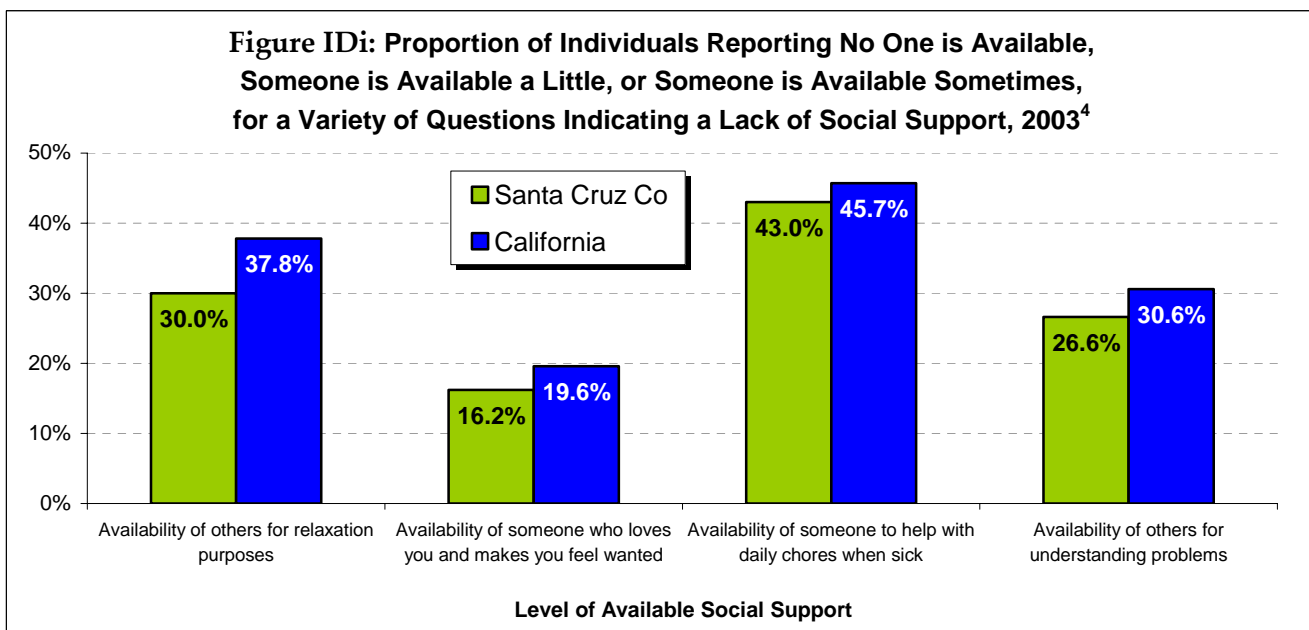
D. FAMILY AND SOCIAL SUPPORT

Importance	Family and social support are important factors in a healthy, long life. Poor family support, social isolation, and limited interaction with others in the community are associated with an increase of morbidity and early mortality. ¹ The effects of family and social support are present at any age, but are more apparent for the very young and the very old who need assistance. This becomes more of a factor as our population ages and more older adults find themselves living alone without a care-giver or other source of adequate social support located nearby. ² Additionally, family support is usually the major source of support in a child's life, and that support system can be stressed when only one parent is available. ¹ The lack of family and social support is adversely related to both mental and physical well-being.
Highlights	<ul style="list-style-type: none"> ▪ 19% of Santa Cruz County adults report never, rarely, or sometimes receiving the social support they need, compared to 26% of all California adults. ▪ Santa Cruz County has fewer single-parent households with children under 18 than California does.
Definitions	<u>Single householder</u> : A person living with a child under 18 and not living with a legal spouse of the opposite sex. ³ For the purpose of this report, a single householder is equivalent to a single parent .

i. INADEQUATE SOCIAL SUPPORT

In Santa Cruz County, 19% of the adult population feel that they never, rarely, or sometimes receive the social support they need, compared to 26% of all Californian adults; the figure varies from county to county, between 14%-33%.¹

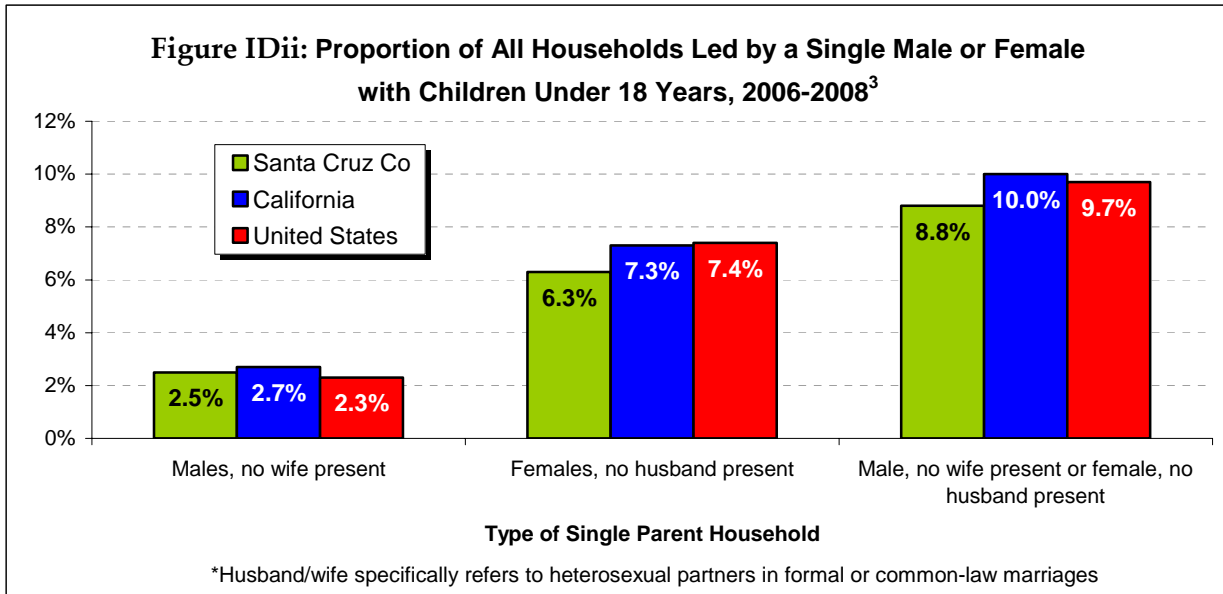
In 2003, the California Health Interview Survey (CHIS) asked four questions related to social support. The questions asked about the availability of others for relaxation purposes, of someone who loved the respondent and made them feel needed, of someone to help with daily chores when they were sick, and of others for understanding problems. Santa Cruz County residents less often than California residents answered that no one was available, or that someone was available a little or sometimes (Figure IDi).⁴



ii. SINGLE-PARENT HOUSEHOLDS

Data collected between 2005 and 2007 showed that 9% of Santa Cruz County households are single-parent households, compared to 10% of all California households; the figure varies by county throughout the state, from 4% to 16%.¹

The American Community Survey (ACS) identified a single householder as a person living with a child under 18 and not living with a legal spouse of the opposite sex.³ For the purpose of this report, a **single householder** is equivalent to a **single parent**. 2006-2008 Census Data estimates that 4,016 (4.3%) of the 93,555 Santa Cruz County households are headed by a male single householder, and 5,858 (6.3%) of households are headed by a female single householder.³



Sources

1. University of Wisconsin Population Health Institute. *County Health Rankings 2010*. <http://www.countyhealthrankings.org/>.
2. White AM et al. "Social Support and Self-Reported Health Status of Older Adults in the United States." *American Journal of Public Health* 99(10):1872-1878, 2009.
3. U.S. Census Bureau, 2006-2008 American Community Survey. <http://www.census.gov/acs/www/index.html>.
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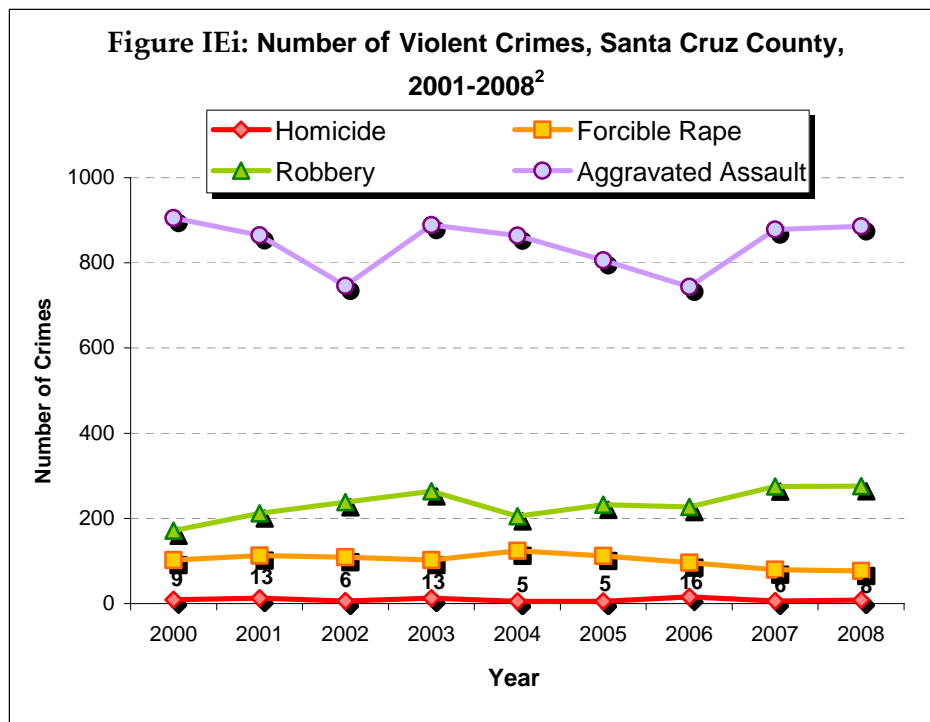
E. COMMUNITY SAFETY

Importance	Both violent crimes and incarceration have negative effects on the community and the individual.
Highlights	<ul style="list-style-type: none"> The County of Santa Cruz had a rate of 462 violent crimes per 100,000 population between 2005 and 2008, compared to California, which had a rate of 527 per 100,000 population.¹ Black adults are 4.5 times more represented in the inmate population than in the general population.^{2,3}
Definitions	<u>Violent Crime</u> : Crimes including aggravated assault, forcible rape, robbery, and homicide.

i. VIOLENT CRIME RATE

“High levels of violent crime compromise physical safety and psychological well-being. Crime rates can also deter residents from pursuing healthy behaviors such as exercising out-of-doors. Additionally, some evidence indicates that increased stress levels may contribute to obesity prevalence, even after controlling for diet and physical activity levels.”¹ In 2009, 63.8% of all Santa Cruz County residents felt safe in their neighborhood, varying from 51.0% in South County to 83.4% in North County.² Additionally, in 2009, 40.1% of all Santa Cruz County residents were concerned about crime, varying from 23.1% in the San Lorenzo Valley to 52.0% in South County.²

Violent crimes include forcible rape, homicide, robbery, and aggravated assault. Between 2005 and 2007 the rate of violent crimes in Santa Cruz County averaged 462 per 100,000 population, while the rate in California averaged 527 per 100,000 population.¹ In Santa Cruz County, the most common reported violent crime is aggravated assault, with between 744 and 905 reports between 2000 and 2008.² Aggravated assault is followed distantly by robbery, forcible rape, and homicide in that order (see Figure IEi).



ii. INCARCERATION

While incarceration may have direct effects on health, “it is more likely to indirectly affect health by shaping employment, income, and marital trajectories.”⁴ Studies have shown that people who have been incarcerated develop a range of behaviors that set them apart from the normal society. These behaviors interfere with community adjustment and personal recovery after release.⁴ Because certain segments of the population are at a higher risk for incarceration, those segments are disproportionately affected in Santa Cruz County, as within the United States, by the negative health effects associated with incarceration.

In total the number of inmates in Santa Cruz County jails has decreased from 8,350 in 2000 to 7,922 in 2008. There are four facilities that house incarcerated adults in Santa Cruz County: Water Street, Rountree Lane (medium and minimum security), and Blaine Street.⁵ At the Water Street Jail, the percentage of adult inmates who were repeat offenders decreased from 87% in 1997 and stayed between 66.8% and 70.2% between 2000 and 2008.² Black and Hispanic inmates are over-represented in the jails compared to the general population in Santa Cruz County. For example, the percentage of Black inmates was 4.7 times the percentage of Blacks in the general population, and the percentage of Hispanic inmates was 1.1 times the percentage of Hispanics in the general population, whereas the percentage of Whites was the same as the percentage of Whites in the general population.^{2,3}

The Santa Cruz County Juvenile Hall population is small compared to national facilities. Juvenile Hall admissions decreased from 56.6 per 1,000 population in 2000 to 31.9 per 1,000 population in 2008.² This is likely attributable to changes initiated in 1990 when alternatives to incarceration, such as house arrest and job placements, were made available.⁶

Sources

1. University of Wisconsin Population Health Institute. *County Health Rankings 2010*. <http://www.countyhealthrankings.org/>.
2. Applied Survey Research, Community Assessment Project, Santa Cruz County. Year 13 and 15. Capitola, CA: United Way of Santa Cruz, 2007. <http://www.santacruzcountycap.org>.
3. State of California, Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 2000–2050*. Sacramento, CA, July 2007.
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6. Santa Cruz Juvenile Detention Alternatives Initiative. <http://sccounty01.co.santa-cruz.ca.us/prb/jdai.asp>.

A. TOBACCO USE

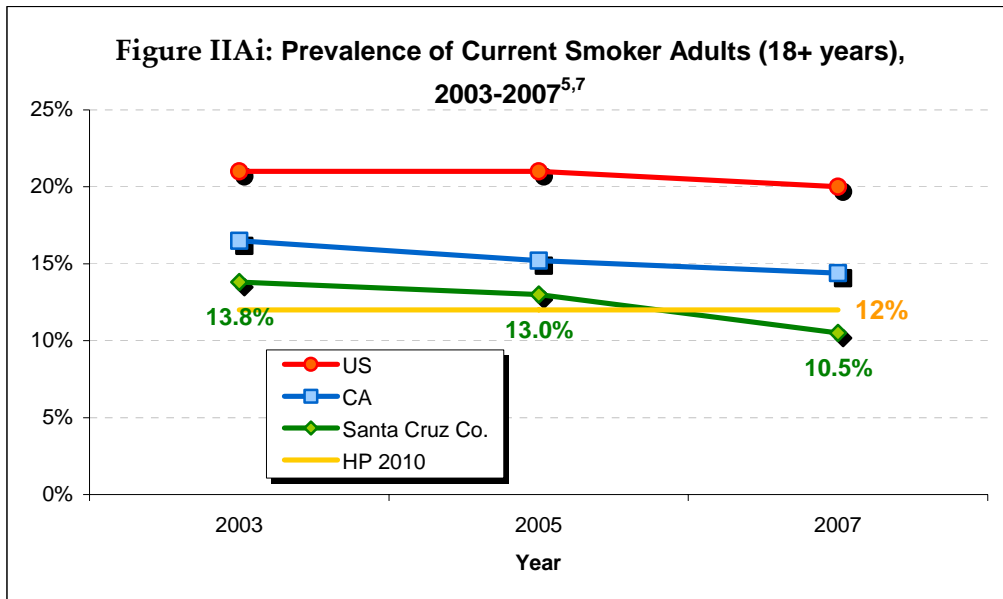
<p>Importance</p>	<p>According to the Surgeon General, “Smoking harms nearly every organ of the body, causing many diseases and reducing the health of smokers in general.”¹ Cigarette smoke contains over 4,000 chemicals, at least 250 of which are known to be toxins or carcinogens that harm not only the smoker but also those exposed to environmental smoke.² In fact, non-smokers inhale many of the same chemicals as smokers, including side-stream smoke, which is unfiltered, unlike secondhand smoke exhaled by the smoker, and can contain benzene, arsenic, and numerous nitrogen compounds.² Non-smokers are also exposed to “third hand smoke,” chemicals that attach to a smoker’s clothing, hair, and skin and are passed to a non-smoker through direct contact. This type of exposure is most harmful to infants and young children who may touch and/or place items in their mouths.³ Overall, cigarette smoking and exposure to tobacco smoke resulted in at least 443,000 premature deaths per year in the United States from 2000 to 2004.⁴ Fortunately, “[q]uitting smoking has immediate as well as long-term benefits, reducing risks for diseases caused by smoking and improving health in general.”¹</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ In 2007, the prevalence of adult smokers in Santa Cruz County reached and surpassed the HP 2010 goal of less than 12%.⁵
<p>Definitions</p>	<p><u>“Third Hand” Smoke:</u> Chemicals that attach to the smoker’s clothing, hair, and skin and are passed to the non-smoker through direct contact.</p>
<p>Healthy People 2010 Objective</p>	<ul style="list-style-type: none"> ▪ Reduce current smokeless tobacco use among high school students to 1% ▪ Reduce current cigarette use among adults to 12% ▪ Reduce current cigarette use among high school students to 16%

i. ADULT SMOKING

Since 1964, when the first surgeon general’s report on tobacco was presented, the prevalence of adult smoking in the U.S. has dropped from 42.4% to 20.6% in 2008.⁶ Residents of both Santa Cruz County and the state of California continue to exhibit healthier tobacco habits than the general U.S. population. In 2007, Santa Cruz County adults not only reached but surpassed the HP2010 goal of less than 12% smoking. The prevalence of adults who smoked in California and the US also continued to move toward the HP2010 goal (Figure IIAi).^{5,7}

Much of these improvements are attributable to anti-smoking legislation focused on preventing second-hand smoke-related health problems, and making smoking a less attractive habit. The State of California and the County of Santa Cruz have developed and enforced a series of anti-smoking laws that prevent smoking in public and semi-private areas, including restaurants, bars, and workplaces. In January 2008, the State of California began enforcing a law that bans smoking in cars when children under the age of 18 are present.⁸

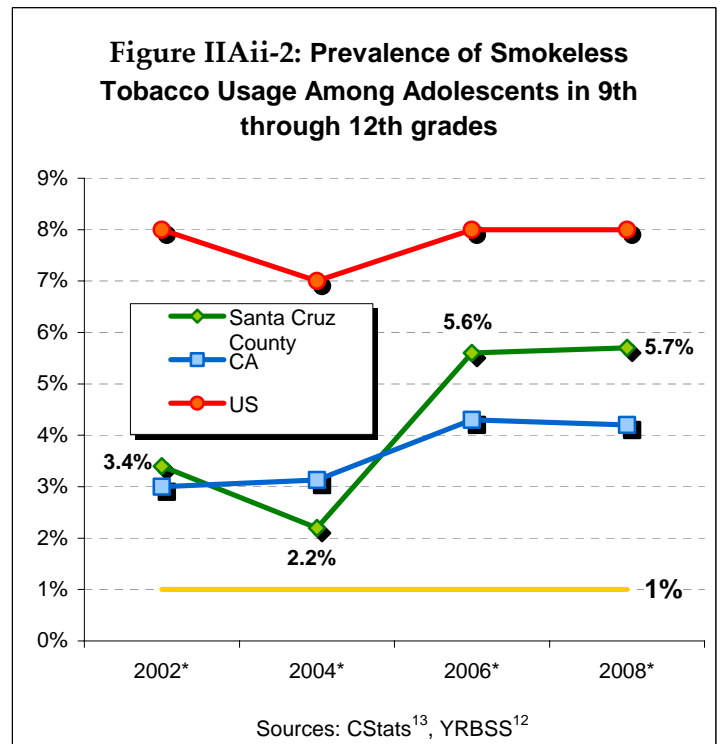
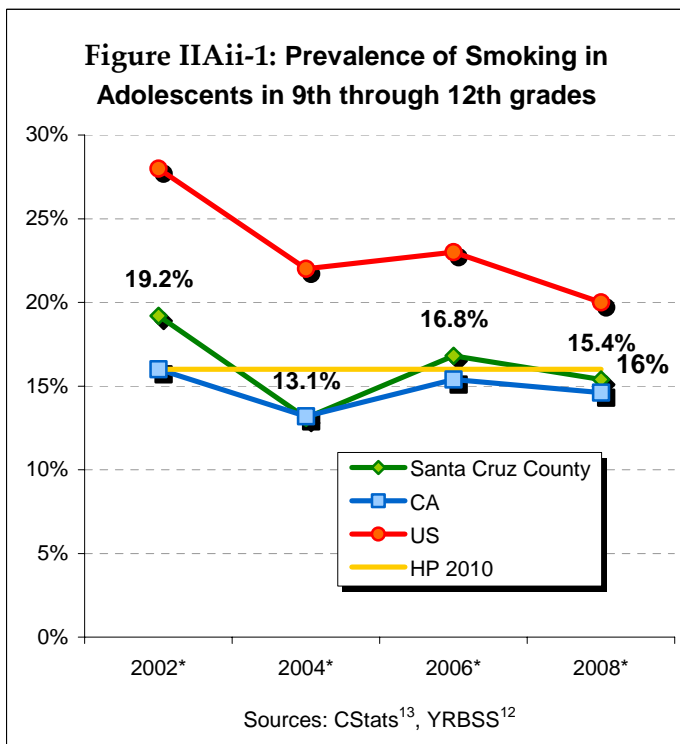
In October 2009, the City of Santa Cruz passed stricter non-smoking laws targeting public gathering areas such as the municipal wharf, parks, beaches, and Pacific Avenue, to decrease second-hand smoke exposure of residents and visitors.⁹ Unfortunately, current anti-smoking laws have not addressed smoking in the home; 6.5% of Santa Cruz residents are still exposed to second-hand smoke in their homes.⁵ Most recently, the Watsonville City Council unanimously approved a new tobacco retailer licensing ordinance on August 24th, 2010, which was recommended and supported by Watsonville’s Chief of Police, Manny Solano.¹⁰



ii. ADOLESCENT SMOKING

Many adult smokers are introduced to tobacco as adolescents, leading to a lifetime of exposure to cancer-causing chemicals not only for the smoker but for those around them as well. Fortunately, the prevalence of smoking among adolescents has decreased in the U.S. in recent years, and California and Santa Cruz County both have lower prevalences of adolescent smoking than the U.S. does.

In 2008, the prevalence of Santa Cruz County adolescents who smoke reached the HP 2010 goal of 16%, dropping to 15.4%, from 19.2% in 2002 (Figure IIAii-1).^{11,12} In contrast, the prevalence of adolescents in the region (Santa Cruz, Monterey, San Benito, San Luis Obispo, Santa Barbara, and Ventura Counties) who use smokeless tobacco has moved further away from the HP 2010 goal of 1%, increasing from 3.4% in 2002 to 5.7% in 2008 (Figure IIAii-2).^{12,13}



Primary Prevention Activities

- The Santa Cruz County Health Services Agency (HSA) staffs the Tobacco Education Coalition, an advocacy group that promotes a tobacco-free lifestyle and environment through education and legislation. HSA also provides self-help materials and a list of classes offered in Santa Cruz County.

Sources

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B. ALCOHOL USE

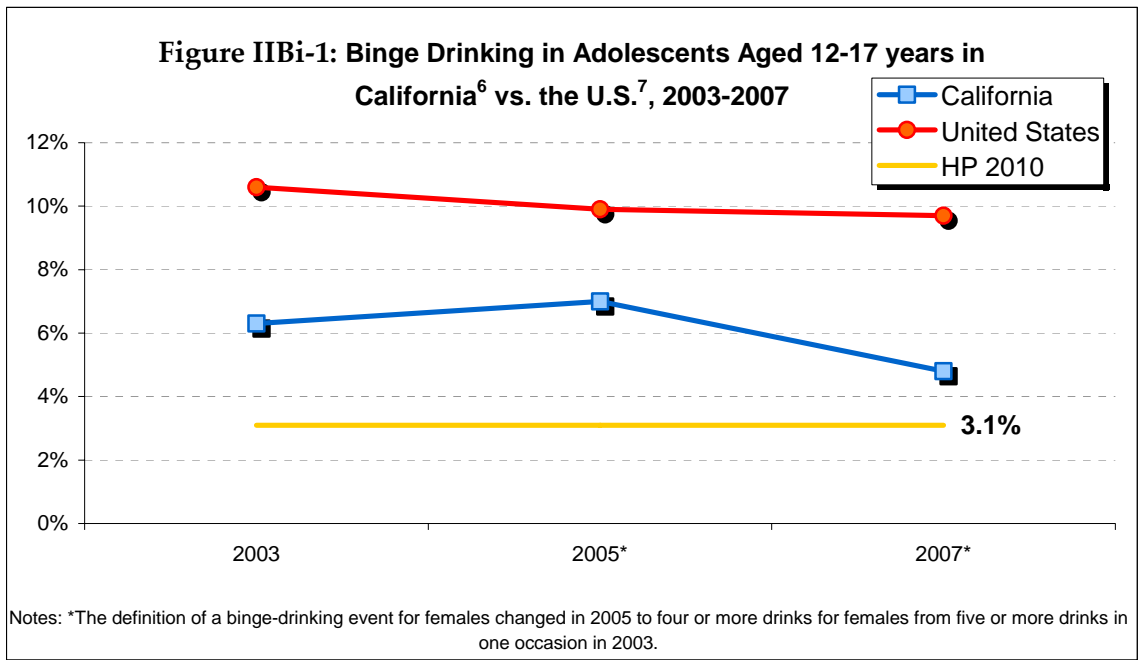
Importance	“[E]xcessive alcohol use is the third leading lifestyle-related cause of death for people in the United States each year.” ^{1,2} Alcohol-related death or injury can occur during or immediately after use, in incidents such as vehicle collisions, drowning, and alcohol poisoning, or present later in life, often in the form of a chronic illness such as liver disease. “From 2001-2005, there were approximately 79,000 deaths annually in the United States attributable to excessive alcohol use.” ^{1,3}
Highlights	<ul style="list-style-type: none"> ▪ Between 2005 and 2007, there was <i>no decrease</i> in the percentage of Santa Cruz County adolescents in grades 7, 9, and 11 reporting a binge-drinking event in the past 30 days.⁴ ▪ Santa Cruz County’s motor vehicle accident death rate has been slightly better than the state average, and ranked 12th among the 58 California counties.¹¹
Definitions	<p><u>Binge Drinking</u>: Drinking five or more drinks on a single occasion for men, or four or more drinks on a single occasion for women.</p> <p><u>Heavy Drinking</u>: Drinking more than two drinks per day for men, or more than one drink per day for women.</p>
Healthy People 2010 Objective	<ul style="list-style-type: none"> ▪ Reduce adolescent binge drinking in the past month to 3.1% ▪ Reduce adult binge drinking in the past month to 13.4%

i. BINGE DRINKING

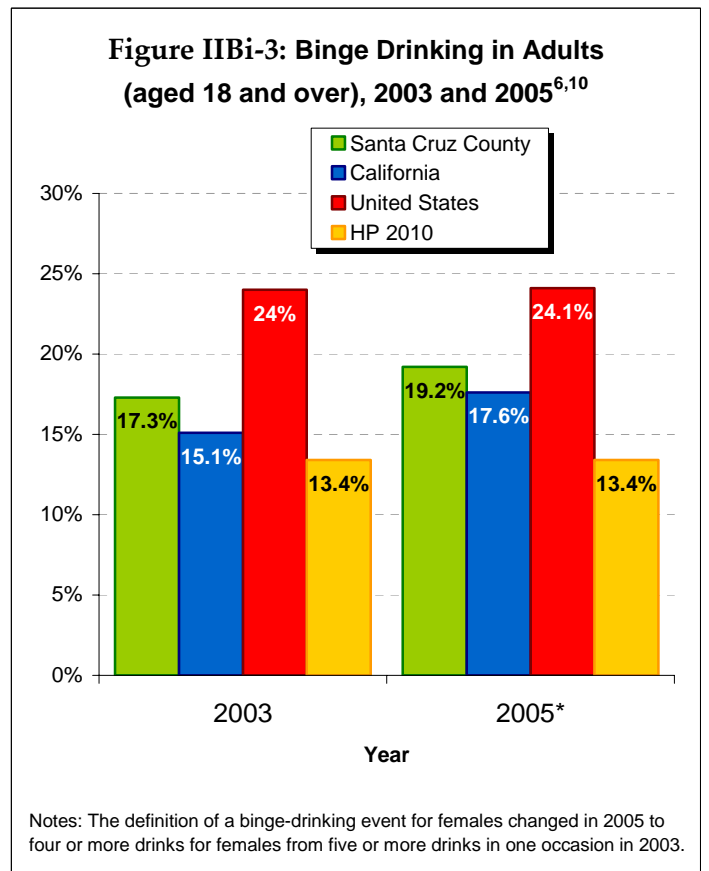
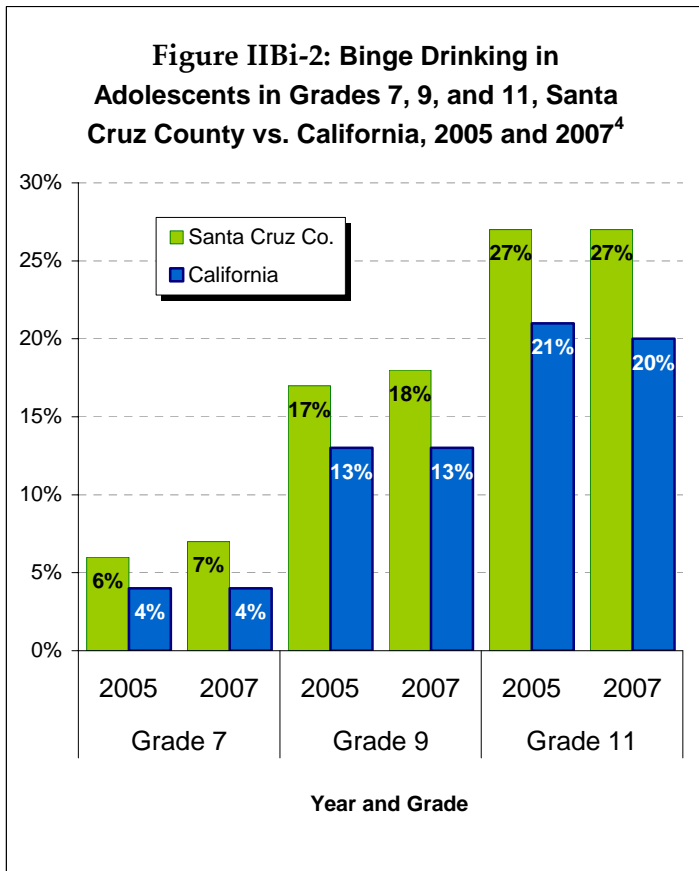
There are two forms of excessive alcohol use: heavy drinking, which is defined as drinking more than two drinks per day for men or more than one drink per day for women, and binge drinking, which is defined as drinking five or more drinks on a single occasion for men or four or more drinks on a single occasion for women.¹ While binge drinking may be most often associated with the immediate negative implications of ingesting alcohol, heavy drinking is also harmful and “can lead to increased risk of liver disease, certain cancers, overweight/obesity, and intentional or unintentional injuries.”¹

Although the minimum drinking age in California is 21 years, alcohol is still accessible to many adolescents and underage adults. When drinking, many underage drinkers binge drink, which often leads to health and social problems, including alcohol-impaired driving, physical fighting, poor school performance, unprotected sexual activity, and smoking.⁵ Binge drinking among adolescents is in a steady downward trend nationwide (Figure IIBi-1).^{6,7}

Both in Santa Cruz County and in California, alcohol consumption for adolescents in grades 7, 9, and 11 decreased between 1996 and 2006; however, the prevalence in Santa Cruz County continues to be higher than the state’s.⁸ This is highlighted in Figure IIBi-2, which shows that the proportion of 7th, 9th, and 11th-grade adolescents self-reporting binge drinking was higher in Santa Cruz County than California.⁴ For both the state of California and the County of Santa Cruz, the proportion of adolescents reporting binge drinking showed little or no indication of decreasing between 2005 and 2007 (Figure IIBi-2).⁴



Most binge drinking occurs among adults aged 26 years and older.⁹ Between 2003 and 2005, both California and Santa Cruz County saw increases in binge drinking in adults, including underage drinkers (Figure IIBi-3), though only California's was a significant increase and both increases may be at least partially caused by the change in definition from five drinks to four drinks in a single occasion for women.^{6,10}



ii. MOTOR VEHICLE CRASH DEATH RATE

Alcohol is a major contributor to motor vehicle accidents. About 17,000 Americans are killed each year in motor vehicle crashes involving alcohol – about 40% of all motor vehicle fatalities. The motor vehicle crash death rate is strongly associated with excessive drinking. In Santa Cruz County, from 2004 to 2008, there were an average of 9.2 fatalities and 217 injuries per year due to motor vehicle collisions involving alcohol.¹²

CDC's National Center for Health Statistics calculated the annual crash death rate for each county in the United States for the years 2000-2006.¹¹ California's statewide rate was 12 deaths per 100,000 persons. Santa Cruz County's rate was 11 per 100,000, ranking 12th lowest among the 58 California counties. In California, motor vehicle crash death rates are lower in counties with large, dense populations, and much higher in counties with small, dispersed populations.¹¹

<p>Primary Prevention Activities</p>	<ul style="list-style-type: none"> ▪ Santa Cruz County Friday Night Live Partnership comprises the Friday Night Live (FNL) and Club Live (CL) programs. These programs are multi-cultural and youth-driven and led, designed to prevent alcohol, tobacco, and other drug use among middle school and high school students. ▪ Locally, Project CURB (Communities United to Reduce Bingeing) has been working to reduce binge drinking among the youth of Santa Cruz County.¹³ Project CURB is led by Together for Youth/Unidos Para Nuestros Jovenes (TYF/UPNJ), a United Way of Santa Cruz County-led initiative. The goal of Project CURB was to reduce underage binge drinking rates by 50% by the year 2009. ▪ The University of California, Santa Cruz runs a campaign called "Just Say Gnome: Party Small," which offers information from how to drink responsibly to how to be a responsible party host.
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<p>Sources</p>	<ol style="list-style-type: none"> 1. "Alcohol & Public Health." 19 Apr 2010. Centers for Disease Control and Prevention; Health Resources and Services Administration. Accessed 21 April 2010. http://www.cdc.gov/alcohol/. 2. Mokdad AH, Marks JS, Stroup DF, Gerberding JL. "Actual causes of death in the United States, 2000." <i>JAMA</i> 2004; 291(10):1238–1245 3. Centers for Disease Control and Prevention (CDC). Alcohol-Related Disease Impact (ARDI). Atlanta, GA: CDC. Accessed March 28, 2008. http://www.cdc.gov/alcohol/ardi.htm. 4. "Santa Cruz County Technical Report 2006-2008." <i>West Ed / Healthy Kids</i>. 31 Mar 2010. California Safe and Healthy Kids Program Office. Accessed 12 April 2010. http://www.wested.org/cs/chks/print/docs/chks_home.html. 5. Miller JW, Naimi TS, Brewer RD, Jones SE. "Binge drinking and associated health risk behaviors among high school students." <i>Pediatrics</i> 2006;119:76-85. Via CDC Alcohol webpage. Accessed 5 May 2010. 6. California Health Interview Survey. AskCHIS. 2001, 2003, 2005, 2007. UCLA Center for Health Policy Research. Accessed April-May 2010 at http://www.chis.ucla.edu. 7. "Trends in the Prevalence of Alcohol Use," National YRBSS: 1991-2007, YRBSS, CDC, NCCDPHP, Accessed 12 April 2010. 8. Applied Survey Research. Life in Santa Cruz County, Year 13, 2007: Community Assessment Project: Comprehensive Report 13. San Jose, CA: United Way of Santa Cruz, 2007. 9. Naimi T, Brewer RD, Mokdad A, Serdula M, Denny C, Marks J. "Binge drinking among U.S. adults." <i>JAMA</i> 2003;289:70–5. via CDC Alcohol webpage. Accessed 5 May 2010. 10. National Survey on Drug Use and Health (NSDUH), SAMHSA. http://oas.samhsa.gov/. 11. University of Wisconsin Population Health Institute. <i>County Health Rankings 2010</i>. http://www.countyhealthrankings.org/. 12. "2008 Annual Report of Fatal and Injury Motor Vehicle Traffic Collisions," Table 5D. Statewide Integrated Traffic Records System (SWITRS). California Highway Patrol. Accessed 3 September 2010. http://www.chp.ca.gov/switrs/index.html. 13. Applied Survey Research. "The Status of Youth Drinking in Santa Cruz County, 2007." Accessed 29 May 2008. Project CURB http://www.projectcurb.com. http://www.appliedsurveyresearch.org/www/products/Final_CURB_Evaluation_Report_2007.pdf.
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C. OTHER SUBSTANCE ABUSE

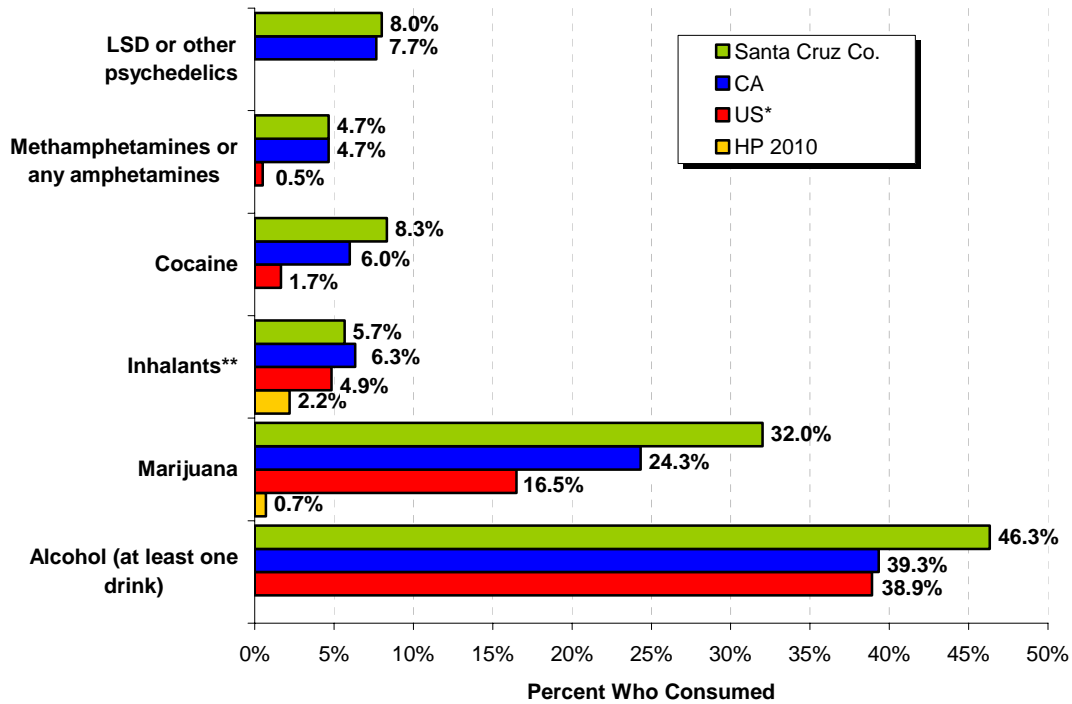
<p>Importance</p>	<p>The impact of illicit drug use and addiction is far-reaching. Cardiovascular disease, stroke, cancer, HIV/AIDS, hepatitis, and lung disease can all be associated with and/or affected by drug abuse,¹ as can fatal and nonfatal overdose and other diseases associated with high-risk behavior and sexual transmission. There is a body of literature and research that details the complex and sometimes reciprocal linkages between illegal drug use and negative health and social experiences.</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ In the 2008-2009 school year, a higher proportion of 9th graders than 11th graders responding to a survey reported using or ingesting cocaine, methamphetamines, inhalants, and psychedelics.^{2,3}
<p>Healthy People 2010 Objectives</p>	<ul style="list-style-type: none"> ▪ Inhalant use in the past year by adolescents 2.2% ▪ Adolescent past month use of marijuana 0.7% ▪ Adult past month use of an illicit drug 3.2%

Drugs with abuse potential have been shown to alter gene expression and brain circuitry, and consequently may permanently affect human behavior. When drug abuse occurs, a person's ability to exert self-control becomes seriously impaired. Brain imaging studies from drug-addicted individuals show physical changes in areas of the brain that are critical to judgment, decision-making, learning and memory, and behavior control. Scientists believe that these changes alter the way the brain works, and may help explain the compulsive and destructive behaviors of addiction. Some of these effects occur only when drugs are used at high doses or after prolonged use; however, some may occur after just one use.¹

Adolescents are especially at risk for the negative and often life-long impacts of drug abuse, because their brains are still maturing – specifically, “the prefrontal cortex – the part of the brain that enables us to assess situations, make sound decisions, and keep our emotions and desires under control. The fact that this critical part of an adolescent’s brain is still a work-in-progress puts them at increased risk for poor decisions (such as trying drugs or continued abuse). Thus, introducing drugs while the brain is still developing may have profound and long-lasting consequences.”¹

The proportions of high school students in Santa Cruz County who have recently used illicit substances are similar to the statewide rates, except for *cocaine, marijuana, and alcohol usage, for which Santa Cruz County is, notably, 17%-25% higher than California* (Figure IIC-1).^{4,5} While the U.S. data represented in Figure 5.7 comes from a different source (10th and 12th grade, 2008 data from NIDA) and may not be dependably comparable with the source used for Santa Cruz County and the state of California (9th and 11th grade data collected between 2006 and 2008 from CHIS), it is worth noting that methamphetamine and cocaine usage are 9.4 and 4.8 times higher in Santa Cruz County than in the U.S.^{4,5} Both inhalant and marijuana use in Santa Cruz County are far higher than the 2010 national objectives (Figure IIC-1).^{4,5}

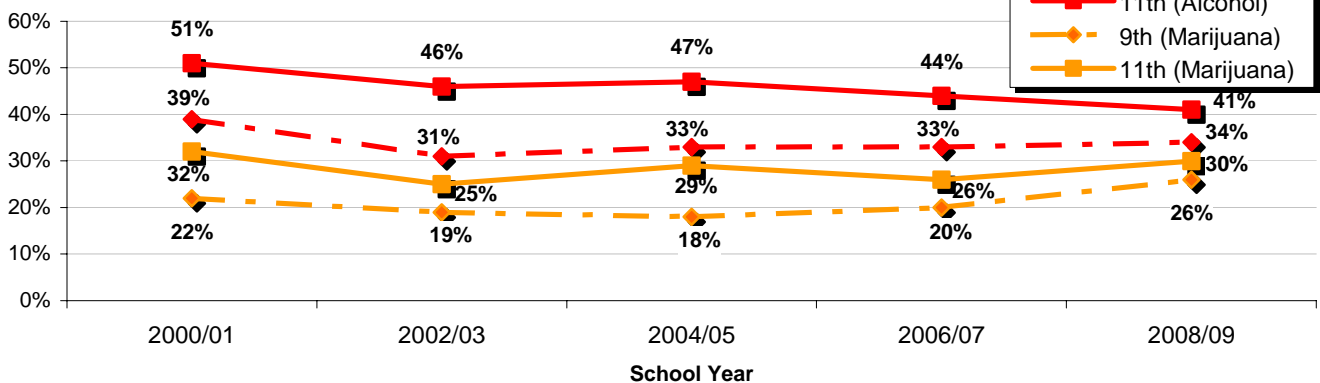
Figure IIC-1: Percent of 9th, 11th and Non-traditional High School Students Who Consumed the Following Substances in the 30 days* prior to the survey, 2006-2008^{4,5}



Note: US Data for Grades 10 and 12 is 2008; *Inhalant Use is for the last 12 months.

Between the 2000-2001 and 2008-2009 school years, there has been little or no reduction in the proportions of 11th graders who have used in the last 30 days, with the exception of a 10% decrease in alcohol consumption. *The proportion of 9th graders who have used has increased for every substance asked about except alcohol.* For all but alcohol and marijuana, a higher proportion of 9th graders than 11th graders reported using in the 2008-2009 school year (Figures IIC-2 to IIC-6).^{2,3}

Figure IIC-2: Percent of 9th and 11th Grade Students Who Used Marijuana At Least Once or Drank at Least One Alcoholic Beverage in the Last 30 Days, Santa Cruz County, 2000-2009^{2,3}



Note: Data are weighted.

Figure IIC-3: Percent of 9th and 11th Grade Students Who Used Cocaine At Least Once in the Last 30 Days, Santa Cruz County, 2000-2009^{2,3}

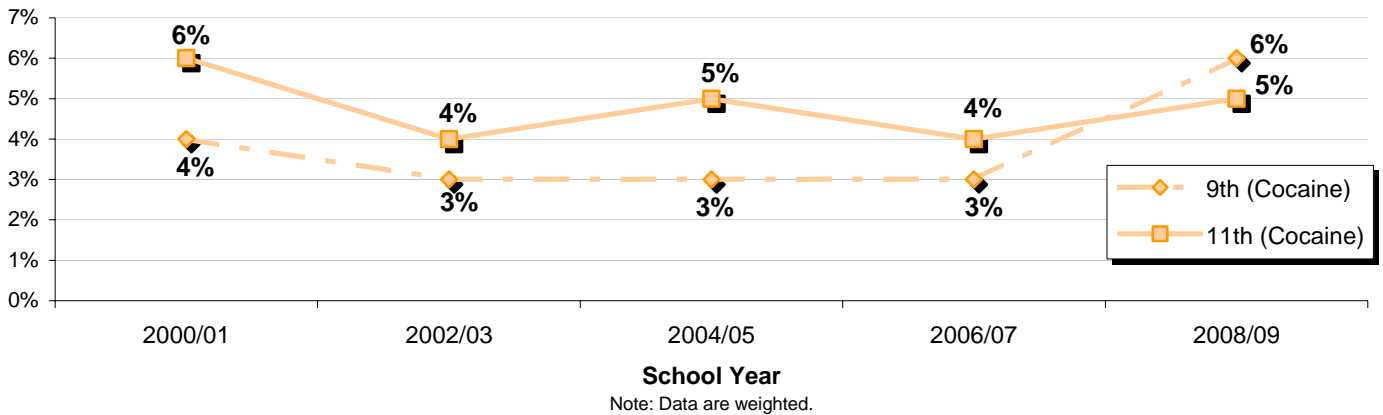


Figure IIC-4: Percent of 9th and 11th Grade Students Who Used Methamphetamines* At Least Once in the Last 30 Days, Santa Cruz County, 2000-2009^{2,3}

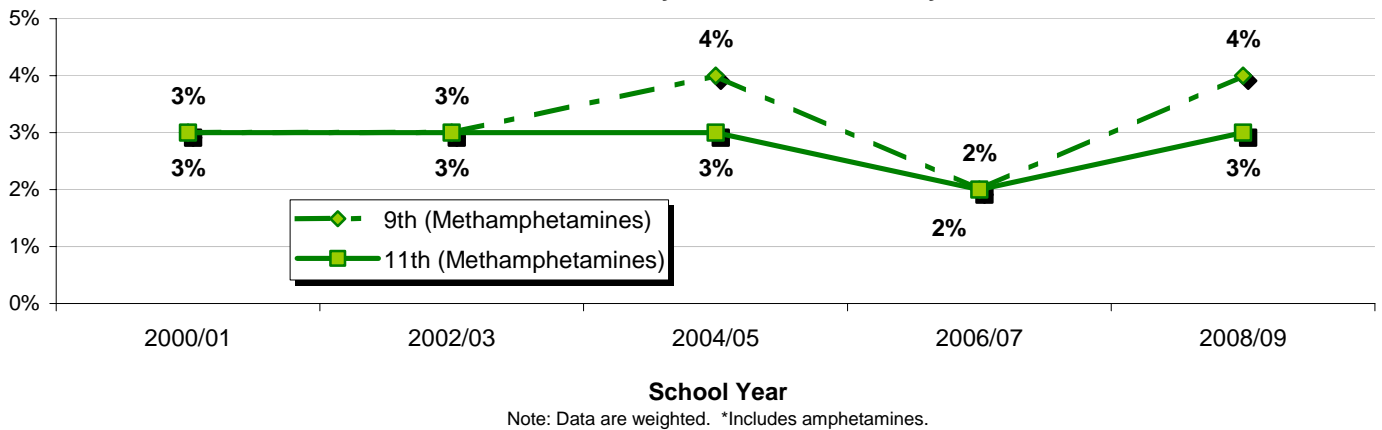


Figure IIC-5: Percent of 9th and 11th Grade Students Who Used Inhalants At Least Once in the Last 30 Days, Santa Cruz County, 2000-2009^{2,3}

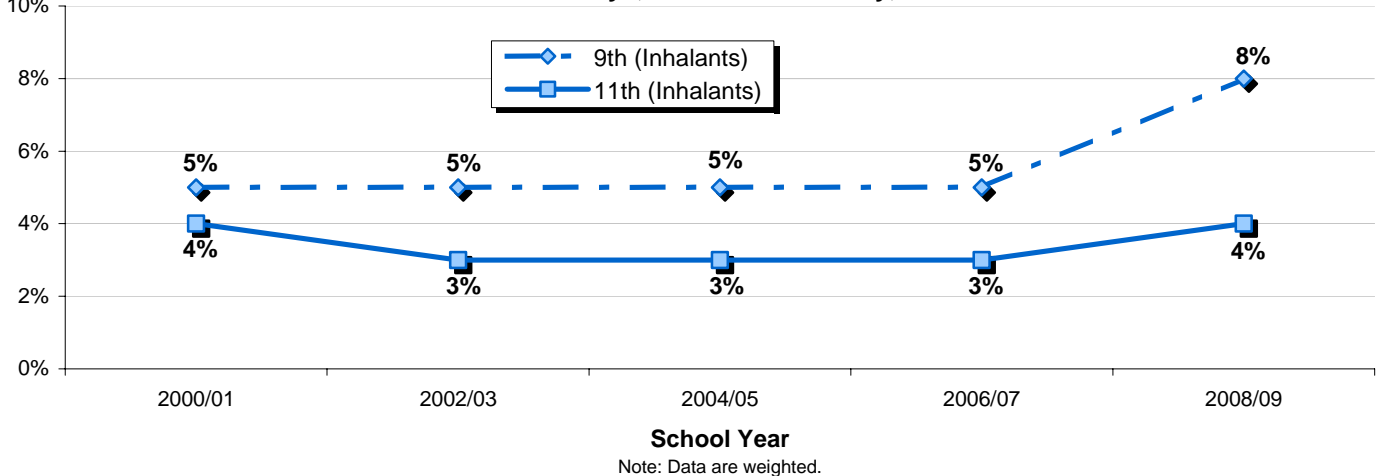
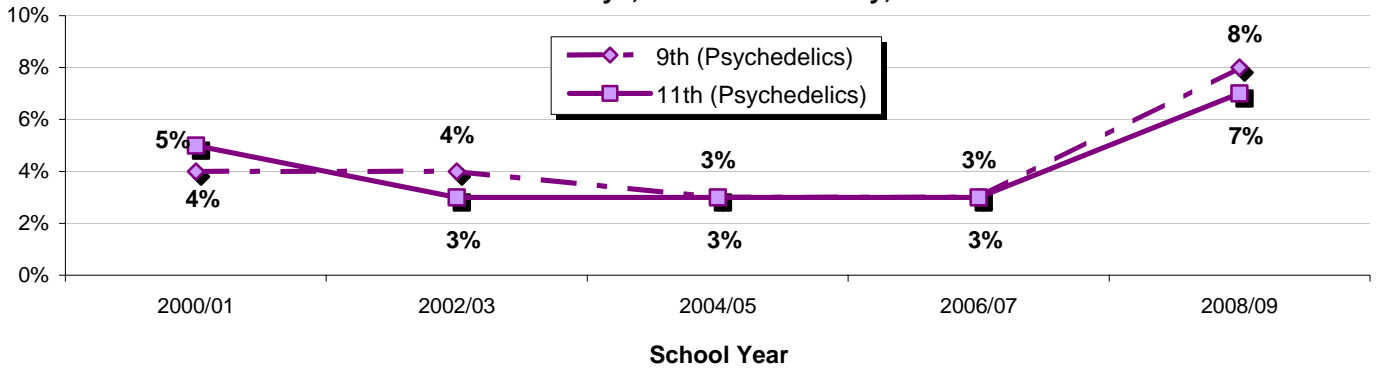


Figure IIC-6: Percent of 9th and 11th Grade Students Who Used Psychedelics* At Least Once in the Last 30 Days, Santa Cruz County, 2000-2009^{2,3}



Note: Data are weighted. *Includes Ecstasy, LSD, or other psychedelics.

Primary Prevention Activities

- **Santa Cruz County Friday Night Live Partnership** comprises the Friday Night Live (FNL) and Club Live (CL) programs. These programs are multi-cultural and youth-driven and -led, designed to prevent alcohol, tobacco, and other drug use among middle school and high school students.

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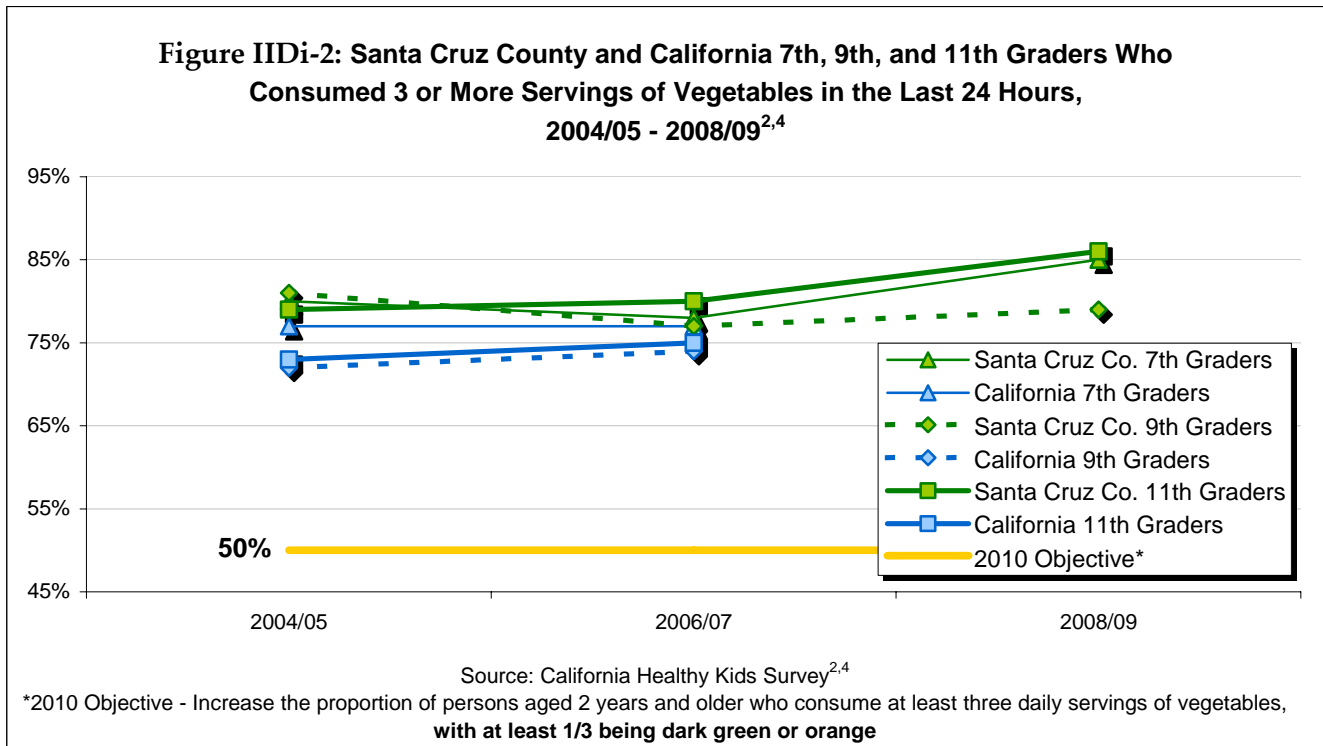
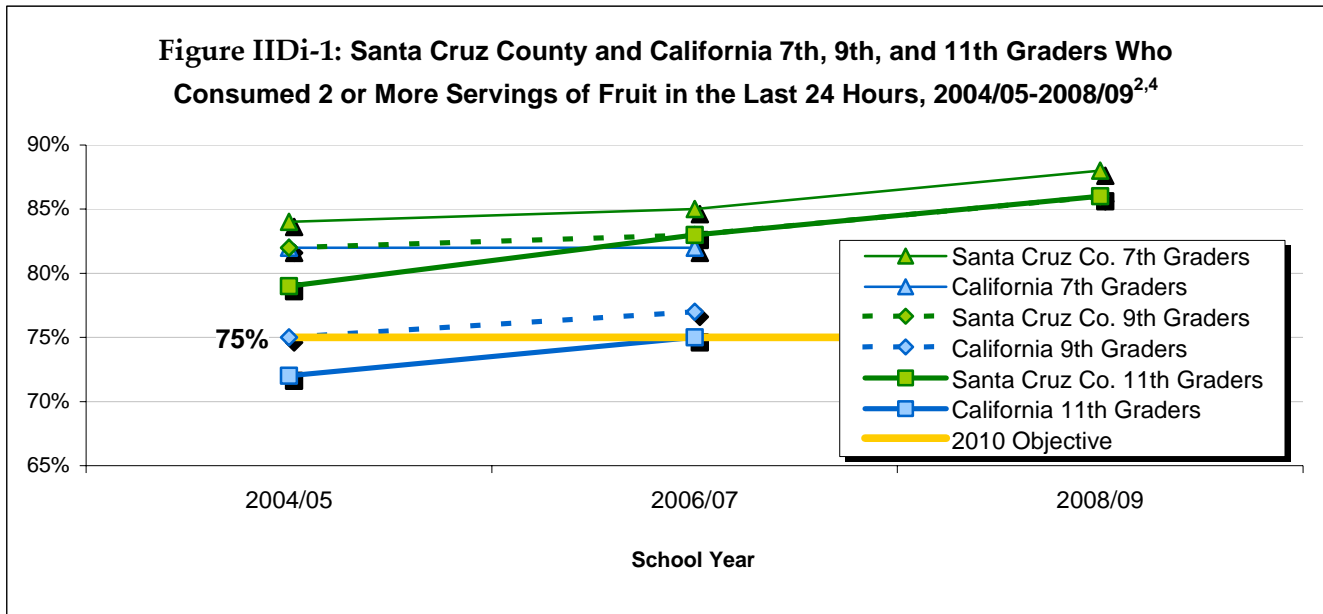
D-i,ii. DIET AND EXERCISE

<p>Importance</p>	<p>Regular physical activity and eating a healthy diet are key to maintaining and improving one's health, and preventing and controlling chronic diseases. Both efforts substantially reduce the risk of dying from coronary heart disease, decrease the risk for stroke, colon cancer, diabetes, and high blood pressure, and help prevent overweight and obesity. Physical activity also contributes to healthy bones, muscles, and joints; reduces falls among older adults; helps to relieve the pain of arthritis; reduces anxiety and depression; and is associated with fewer hospitalizations, physician visits, and medications.</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ Santa Cruz County teens meet and exceed HP 2010 goals for percentage of persons consuming enough servings of fruits and vegetables.¹ ▪ Santa Cruz County adults met the HP 2010 goal of 50% of all adults participating in a moderate activity at least 5 days per week in 2005 and held that accomplishment in 2007.²
<p>Healthy People 2010 Objectives</p>	<p>Nutrition</p> <ul style="list-style-type: none"> ▪ Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit to 75% ▪ Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least 1/3 being dark green or orange, to 50% <p>Physical Activity</p> <ul style="list-style-type: none"> ▪ Minimum percentage of adults who participate in moderate activity 5 or more days per week is 50% ▪ Minimum percentage of teens who participate in vigorous physical activity at least 3 days per week is 85%

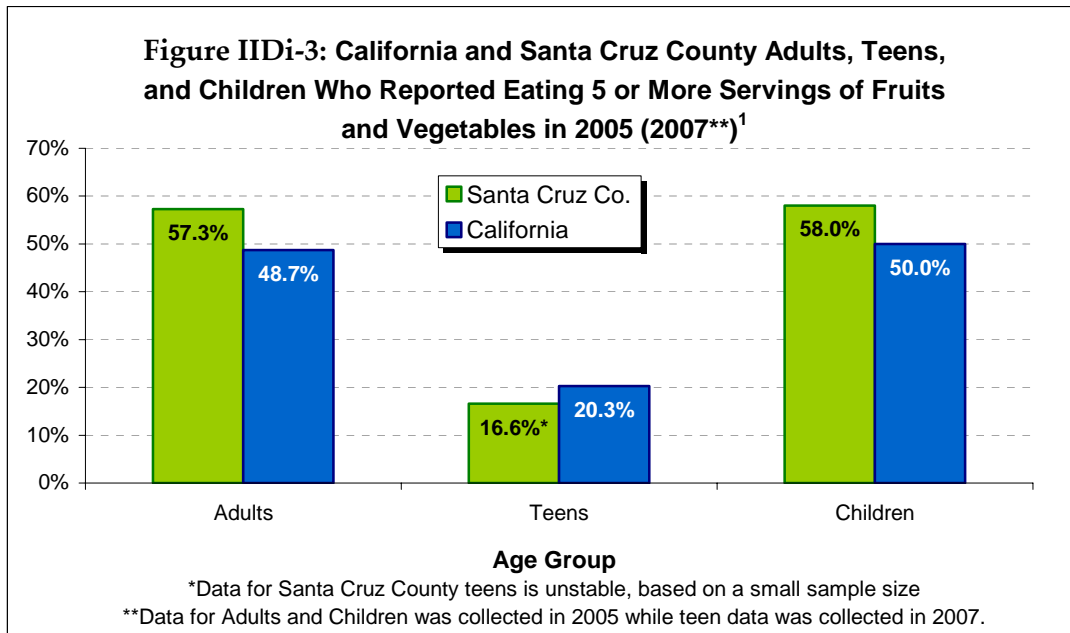
i. NUTRITION

A balanced diet is necessary for proper growth and development of children as well as for maintaining a healthy body and preventing chronic disease in everyone. According to NHANES, in 2004, 40% of Americans consumed at least 2 servings of fruit in the last 24 hours and only 4% of Americans consumed at least 3 servings of vegetables in the last 24 hours.³ Based on California Healthy Kids Survey results, Santa Cruz County teens surpass both of the Healthy People 2010 Objectives for eating 2 or more servings of fruit and 3 or more servings of vegetables.^{2,4} Additionally, consistently higher percentages of Santa Cruz County teens than California teens reported eating the recommended servings of fruit and vegetables (see Figure IIDi-1 and Figure IIDi-2).^{2,4}

i. NUTRITION (CONT.)



A separate survey conducted in California, the California Health Interview Survey, focused on whether respondents consumed 5 servings of fruits and vegetables.¹ Results from the 2005 survey showed that more Santa Cruz County adults (57.3%) than California adults (48.7%) ate the recommended 5 fruits and vegetables in the last 24 hours.¹ In the same 2005 survey, 58% of Santa Cruz County children (under 12) and 50% of California children ate the recommended 5 servings of fruits and vegetables; these numbers were not significantly different from one another (Figure IIDi-3).¹



ii. PHYSICAL ACTIVITY

Regular physical activity reduces the risk of dying from coronary heart disease and of developing high blood pressure, colon cancer, and diabetes, helps maintain healthy bones, muscles and joints, helps control weight, can help reduce blood pressure in some people with hypertension, reduces symptoms of anxiety and depression, and fosters improvements in mood and feelings of well-being.⁵ While vigorous activity is recommended for a healthy cardiovascular system, an inactive person can benefit from even a small increase of physical activity.⁶

Despite the proven benefits of physical activity, more than 50% of American adults do not get enough physical activity to attain health benefits.⁷ Additionally, 25.4% of American adults had no leisure-time physical activity in 2008, slightly more than California, where 23.5% of adults had no leisure-time physical activity.⁸

Santa Cruz County adults met the 2010 national objective in 2005, with 50% of adults engaging in moderate physical activity for at least 5 days per week. California adults were better at 53%, but the nation overall was much lower at 30% (see Figure IIDii-1).^{3,9}

Additionally, income level is positively related to physical activity.¹⁰

Physical activity is a key factor for children and adolescents to maintain a healthy weight and develop healthy habits that will help prevent chronic disease as they become adults. Children and adolescents aged 6 to 17 years should do at least one hour a day of aerobic physical activity of moderate or vigorous intensity. Three of those days should be vigorous intensity physical activity.¹ The HP 2010 goal for teens is for 85% of adolescents to participate in 20 minutes of vigorous activity three days a week. Consistently, only 60-61% of Santa Cruz teens achieved this level of activity, while California and U.S. teens have improved slightly to 65% and 64% in 2007 (see Figure IIDii-2).^{1,11} Additionally, the CDC recommends that adolescents participate in muscle-strengthening activities and bone-strengthening activities three days a week for each activity type.¹

Figure IIDii-1: Adults Participating in 30 Minutes of Moderate Activity 5 or More Days per Week^{3,9}

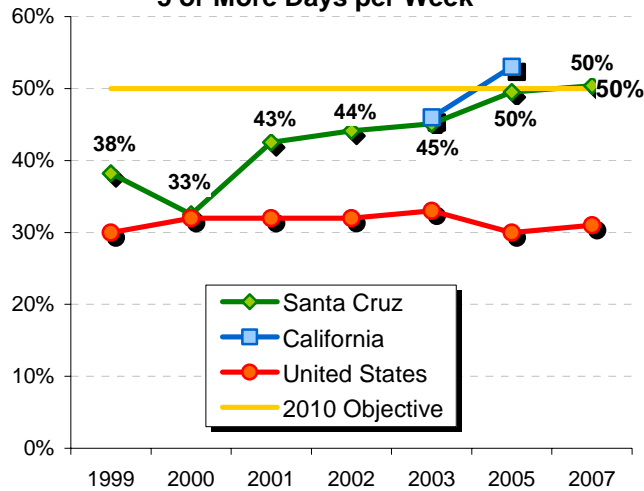
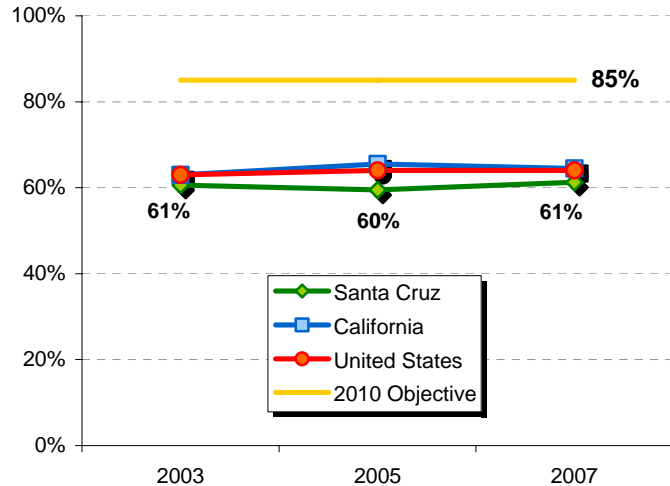


Figure IIDii-2: Teens Participating in 20 Minutes of Vigorous Activity 3 Days per Week^{1,11}



Primary Prevention Activities

- The Santa Cruz Public Health Department is a partner in the **Go For Health Collaborative**, a local childhood obesity prevention coalition focusing on the Pajaro Valley. http://www.unitedwaysc.org/Go_for_Health.php
- **Nutrition and Fitness Collaborative of the Central Coast**, a regional coalition, focuses on reducing childhood obesity, increasing physical activity levels, and increasing access to affordable, nutritious food. <http://www.co.monterey.ca.us/health/CommunityHealth/Nutrition/Collaborative.htm>
- **Superstar Nutrition for Kids** (ended June 2009) was a program to promote healthy eating and physical activity in communities throughout Santa Cruz County, through schools and youth organizations and participation in the above-mentioned coalitions.

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II. Behaviors

D-iii. OVERWEIGHT AND OBESITY

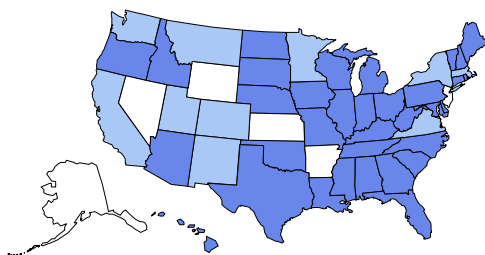
<p>Importance</p>	<p>Local, state, and national rates of overweight and obesity have skyrocketed in recent decades. Overweight or obese individuals are at greater risk for hypertension, coronary heart disease, stroke, type 2 diabetes, asthma, gallbladder disease, arthritis, sleep apnea, and certain cancers.</p> <p>In addition, overweight children are at higher risk for developing hypertension, asthma, orthopedic problems, gallstones, low self-esteem, poor body image, and depression. Overweight children are twice as likely to become obese adults.</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ Santa Cruz County adults have relatively low rates of overweight and obesity. ▪ Santa Cruz County children also have rates slightly better than statewide rates. ▪ <i>However, among low-income children, Santa Cruz County has nearly the highest rates of overweight in the state, and California has nearly the highest rates in the nation.</i> ▪ Obesity rates among Hispanics are much higher than rates among Whites, nationwide. ▪ Obesity, in combination with physical inactivity, is second only to smoking as a cause of death in the United States.
<p>Definitions</p>	<p><u>Body Mass Index (BMI)</u>: a person’s weight (in kilograms) divided by the square of their height (in meters) – used as a measure of overweight or underweight</p> <p><u>Healthy Fitness Zone</u>: in children, the healthy BMI range between underweight and at risk of overweight</p> <p><u>Obese</u>: in an adult, having a BMI greater than or equal to 30</p> <p><u>Overweight</u>: in an adult, having a BMI of at least 25 but less than 30; in a child, having a BMI in at least the 95th percentile of CDC’s May 30, 2000 BMI-for-age-and-sex chart</p> <p><u>At Risk of Overweight</u>: in a child, having a BMI in the 85th to 95th percentile of CDC’s May 30, 2000 BMI-for-age-and-sex chart</p>
<p>Healthy People 2010 Objective</p>	<ul style="list-style-type: none"> ▪ Increase the proportion of adults (18 and over) who are at a healthy weight: 60% ▪ Reduce the proportion of adults (20 and over) who are obese: 15%

ADULTS

The percentage of overweight and obese individuals has been rapidly increasing throughout the United States since 1970.¹ This “obesity epidemic” is widely regarded as one of the greatest threats to Americans’ health, and some experts believe that the current generation of children may be the first generation in American history to have a shorter life expectancy than their parents – primarily because of being overweight.²

Obesity Trends* Among U.S. Adults
BRFSS, 1990

(*BMI ≥ 30, or ~ 30 lbs. overweight for 5’ 4” person)



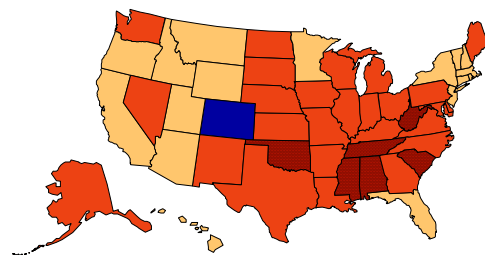
Legend: No Data, <10%, 10%-14%

Source: CDC Behavioral Risk Factor Surveillance System.



Obesity Trends* Among U.S. Adults
BRFSS, 2008

(*BMI ≥ 30, or ~ 30 lbs. overweight for 5’ 4” person)



Legend: No Data, <10%, 10%-14%, 15%-19%, 20%-24%, 25%-29%, ≥30%

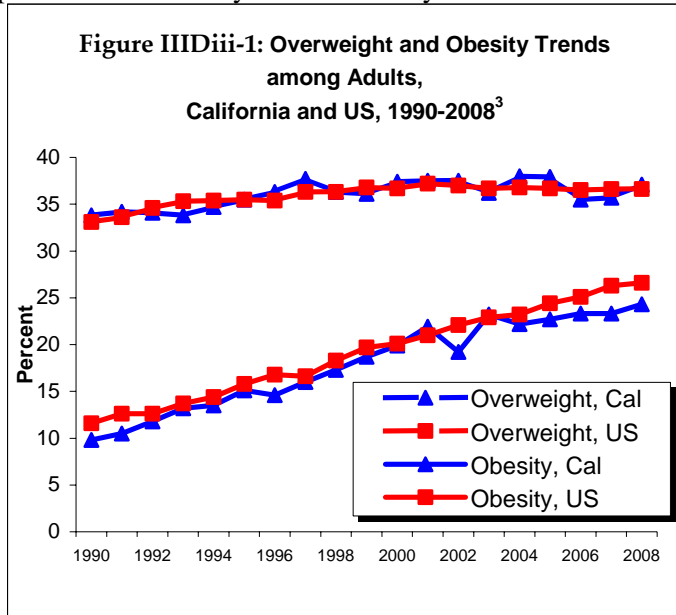
Source: CDC Behavioral Risk Factor Surveillance System.



ADULTS (CONT.)

Santa Cruz County and California are not exceptions to the trend. Data from the Behavioral Risk Factor Surveillance System (BRFSS) show that California's adult overweight and obesity rates have closely followed the national trends over the past two decades (although California has generally had slightly lower obesity rates than the nation as a whole).³

There are not many good sources for local data on adult weight. However, in 2007 the CDC published estimates⁴ of the prevalence of obesity for each county in the United States, based on probability modeling of BRFSS data. CDC estimated the rate of obesity among adults (age 20 and over) in Santa Cruz County as 17.4%, among the lowest in the state (trailing only San Francisco, San Mateo, Marin, and Placer Counties), and among the lowest in the entire nation. In 2008 CDC estimated that 23.7% of California adults were obese, which ranked California better than all but eight states and the District of Columbia.⁵



The California Health Interview Survey (CHIS) is one of the few other sources of local information on adult overweight. The most recent CHIS data, from 2007,⁶ support the BRFSS estimates and indicate that Santa Cruz County adults have lower rates of obesity than California adults do: 18% for the county, compared to 23% statewide. There was a striking disparity by ethnicity: only 15% of White adults were obese, compared to 24% of Hispanics. (A similar disparity was found statewide, with 20% of Whites obese, compared to 30% of Hispanics.)

The CHIS data, like the BRFSS data in Figure 6.2, show that *overweight* is even more common than *obesity*. In 2008, BRFSS found that 61% of California adults and 63% nationally were either overweight or obese. In 2007, CHIS found that 57% of California adults were either overweight or obese. Statewide, the percentages overweight were very similar among Hispanics and Whites (37% v. 35%); but *in Santa Cruz County, 51% of Hispanics were overweight, compared to 32% of Whites.*

The CHIS data, like the BRFSS data in Figure 6.2, show that *overweight* is even more common than *obesity*. In 2008, BRFSS found that 61% of California adults and 63% nationally were either overweight or obese. In 2007, CHIS found that 57% of California adults were either overweight or obese. Statewide, the percentages overweight were very similar among Hispanics and Whites (37% v. 35%); but *in Santa Cruz County, 51% of Hispanics were overweight, compared to 32% of Whites.*

CHILDREN

The most extensive information about childhood weight in Santa Cruz County comes from the California Department of Education's annual Physical Fitness Report.⁷ Each year, most children in grades 5, 7, and 9 are evaluated on a variety of fitness characteristics. During the 2008-2009 school year, the percentages of children in Santa Cruz County who fell outside the "Healthy Fitness Zone" were 31%, 29%, and 27% in grades 5, 7, and 9 respectively – slightly better than in the 2006-2007 testing. These percentages were also slightly better than the statewide averages: 32%, 31%, and 30%, respectively. (These numbers include both "overweight" and "at risk of overweight" children, and also include underweight children, who generally are about 5% of the total.)

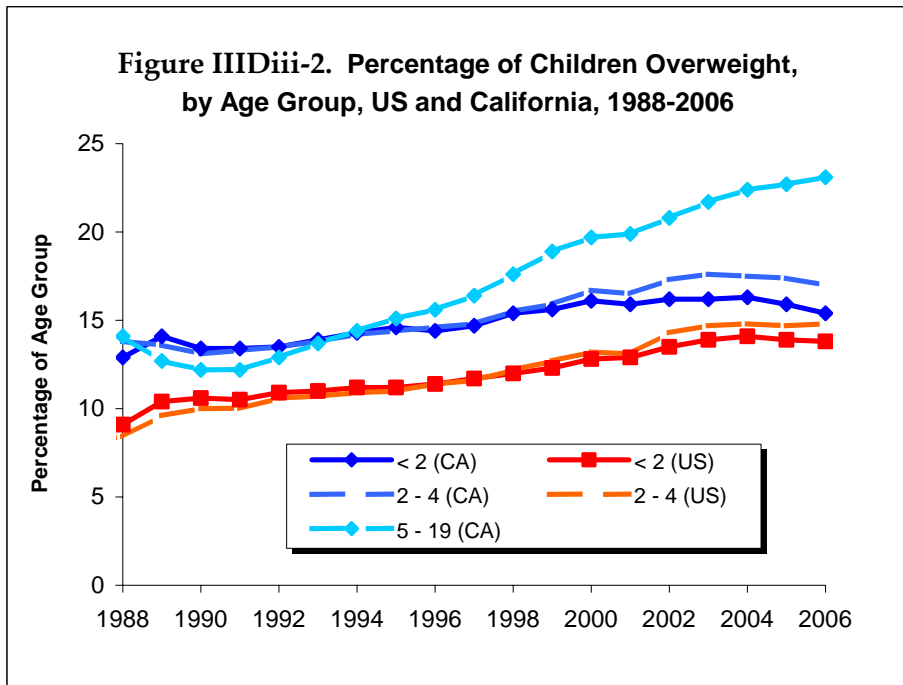
The DoE Physical Fitness Report shows a dramatic disparity between Hispanic and White children. *Both in Santa Cruz County and statewide, the percentages outside the Healthy Fitness Zone were around 20% for White children, but close to 40% for Hispanic children.*

Until recently, the California Healthy Kids Survey gave data on a large proportion of children in the 7th, 9th, and 11th grades every two years. Due to budget cuts, the Survey no longer generates this data. The most recent data, from 2004-2006,⁸ corresponds fairly well with the Physical Fitness Testing results. The Healthy Kids Survey reports separately on "overweight" and "at risk of overweight." In grades 7, 9, and 11, the percentages overweight were 15%, 12%, and 9% respectively, while the percentages "at risk of overweight" were 20%, 16%, and 13%. These were somewhat better than the statewide numbers: 15%, 14%, and 12% overweight, and 19%, 17%, and 15% "at risk of overweight."

CHILDREN (CONT.)

CHIS (2007) reports⁶ on young children (through age 11) and teens (ages 12-17) as separate groups. Among Santa Cruz County teens, CHIS found a much lower rate of obesity (4.7%) than the statewide average (13.3%). Similarly, among young children, CHIS reported only 6% overweight for age in Santa Cruz County compared to 11% statewide.

According to the CDC’s Pediatric Nutrition Surveillance System (PedNSS), California has nearly the highest percentage of overweight children in the nation, ranking 42nd out of the 44 participating states in 2008⁹. To make matters worse, Santa Cruz County children represented by PedNSS in 2008 were among the heaviest in the state, ranking 48th out of the 61 local health jurisdictions in California among children under age 2, 57th for children ages 2 to 4, and 60th for children ages 5 to 19.¹⁰ However, PedNSS looks only at low-income high-risk children getting government assistance, who are not representative of the broader population. Research is needed to determine possible reasons why the county rates of childhood overweight and obesity among the poor are so much higher than state and national rates, while the rates among the entire population are somewhat better than state and national rates.



<p>Primary Prevention Activities</p>	<ul style="list-style-type: none"> ▪ Santa Cruz County Health is a member of the <u>Go for Health! collaborative</u>, which includes over 150 organizations working to reduce childhood overweight in Santa Cruz County. Go for Health! works with schools, parents, health care professionals, local media, local businesses, city planners, and local and state policy-makers. Go for Health! has adopted the 5210 social marketing program, which advocates at least 5 servings of fruits and vegetables per day, no more than 2 hours of screen time (television, video games, etc.) per day, at least 1 hour of vigorous activity per day, and 0 sodas or other sugar drinks. ▪ The State of California passed <u>legislation in 2008</u> requiring chain restaurants to provide information on calories, saturated fat, carbohydrates, and sodium on their menus and indoor menu boards. This year’s national health insurance reform legislation adopted similar requirements, which are to go into effect in 2011.
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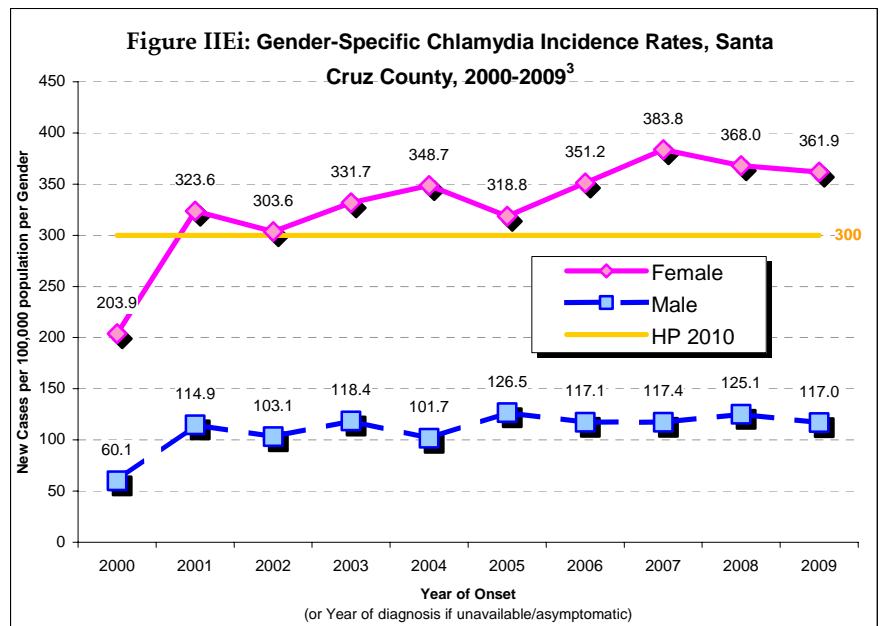
E. UNSAFE SEX

Importance	Unsafe sexual behavior increases the risk of such adverse outcomes as unintended pregnancy and transmission of sexually transmitted infections, which are associated with increased risk of cervical cancer, involuntary infertility, and premature death.
Healthy People 2010 Objectives¹	<ul style="list-style-type: none"> ▪ <u>Chlamydia</u>: Reduce rate to 300 cases per 100,000 population per year ▪ <u>Teen Birth Rate (Age 15-17)</u>: Reduce rate to 43 births per 1,000 population per year

i. CHLAMYDIA RATES

Chlamydia is the most common bacterial sexually transmitted infection in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain. On top of the negative health outcomes, the economic burden on society is high. The cost of managing chlamydia and its complications in the U.S. was approximately 2 billion dollars in 1994.²

From 2006 to 2009, an annual average of **646** infections with chlamydia were reported for Santa Cruz County residents.³ Since 2000, chlamydia rates have been roughly **three** times as high among females as males (see Figure IIEi). One reason is that females typically have more occasion than do males to access health care services and be tested. In addition, the majority of chlamydia infections among men are asymptomatic, and currently there is no recommendation for screening males without symptoms. In Santa Cruz County, 2008 rates of chlamydia were highest among persons aged 19-24 for females (partly due to screening recommendations), and ages 25-29 for males. During the same year, the overall incidence rate in Santa Cruz County was 249.7 cases per 100,000 residents, much better than the rate of 390.8 statewide.⁴ A national monitoring study of young adults (age 18-26) found a prevalence rate of 4.2% from 2001 to 2002,⁷ indicating that most cases go undetected and untreated.



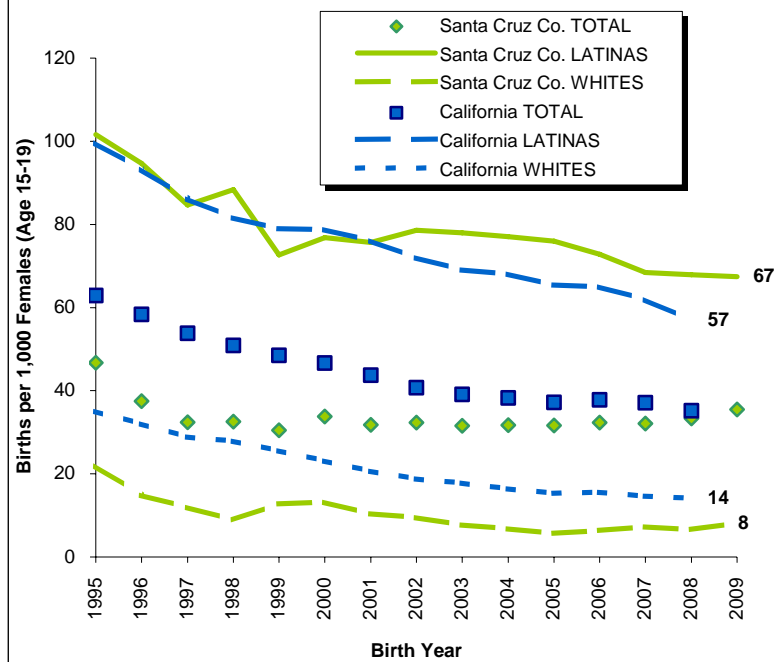
ii. TEEN BIRTH RATE (15-19 YEARS)

There are few social demographics that define a future life for an adolescent girl as significantly as having a baby as a teenager. Teen mothers are significantly less likely to graduate from high school, go to college, and become self-sufficiently employed. Teenage motherhood is a significant contributor to continuing a cycle of poverty from one generation to the next. This is a health outcome for which prevention is crucial for the future of children, families, and society. Santa Cruz County had the **28th** highest teen birth rate among the 58 counties in California, based on average rates from 2006-08 (worse than the ranking of 38th during 2005-07), for an age-specific birth rate of **32.6** per 1,000 teens – which is still better than the state and national rates of 36.6 and 42.5 respectively.⁵ In 2009, there were **314** births to Santa Cruz County teenagers ages 15-19, and **5** births to teens age 14 and under.

ii. TEEN BIRTH RATE (CONT.)

It is also important to look at teen birth rates by race/ethnicity. In 2009, **86%** of the teen births in Santa Cruz County were to Hispanic teenagers. Figure IIFii shows the overall and race/ethnicity-specific rates in Santa Cruz County and statewide. Note that rates among White Santa Cruz teens (**8** births per 1,000 teens in 2009) are consistently lower than their statewide counterparts (14 births per 1,000 teens in 2008). *The opposite is true among Hispanic teens in Santa Cruz County, with 67 births per 1,000 Hispanic teens in 2009, compared to 57 births per 1,000 Hispanic teens statewide in 2008.*⁶ The vast majority, or **79%**, of teen births in Santa Cruz County are to teens who reside in the southern region of the county, more specifically Freedom or Watsonville. This continues a trend that has been seen for many years.

Figure IIEii: (ages 15-19) Birth Rates by Race/Ethnicity, Santa Cruz County and California, 1995-2009⁶



Primary Prevention Activities

- **Communicable Disease (CD) Unit** The CD Unit attempts to interview and confirm appropriate treatment for all chlamydia cases age 19 and under. Education on safe sex is also given.
- **Teen Health Outreach (THO) Program** is a school-based pregnancy prevention program providing classroom presentations about reproductive health, individualized counseling, and referrals to various youth-oriented services within the community. The program helps enroll teens in Family PACT and get STD testing. They do pregnancy and HIV testing onsite at the school. These services are provided through grants from the California Wellness Foundation and the Office of Family Planning.
- **STD Community Interventions Program (SCIP)** provides STD prevention info, youth development, teen pregnancy prevention, and alcohol, drug use and violence prevention.
- **Community Challenge Grant** provides education in the schools and juvenile hall, as well as partnering with PVPSA and Planned Parenthood to provide sex education classes and run groups for high-risk students at some middle and high schools.

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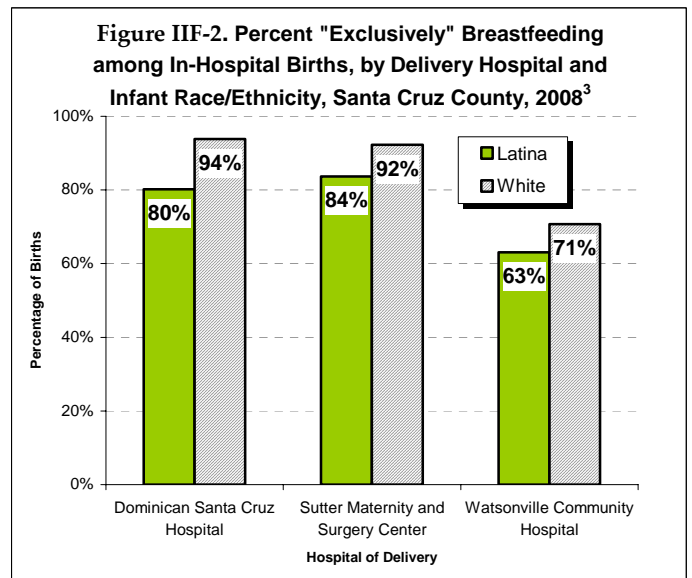
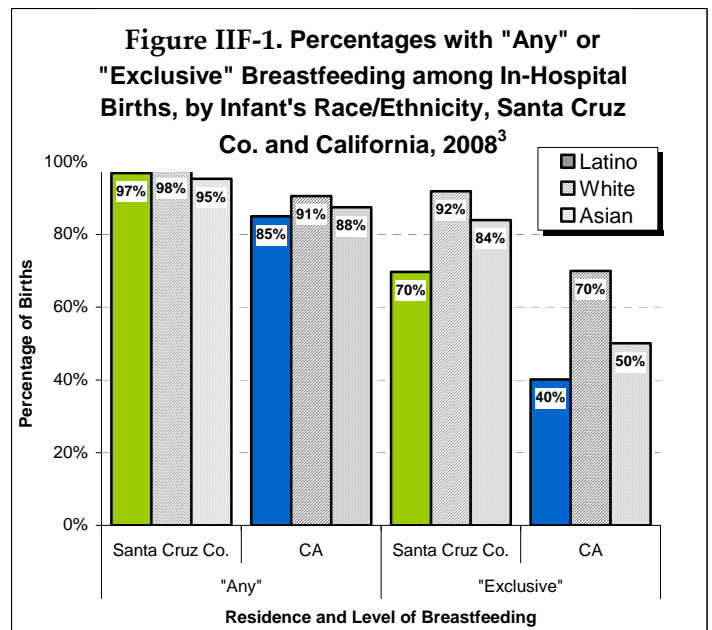
F. BREASTFEEDING

Importance	In general, exclusive breastfeeding for the first 6 months of life is the optimal way of feeding infants for healthy growth and development. Breastfeeding also contributes to the health and well-being of mothers by helping to space children and lowering the risk for ovarian cancer and breast cancer, and is a food-secure and environmentally safe option. ¹
Healthy People 2010 Objective	<ul style="list-style-type: none"> ▪ Increase the proportion of mothers who have <u>ever</u> breastfed their babies to 75% ▪ Increase the proportion of mothers <u>exclusively</u> breastfeeding their babies through three months to 40%

Both babies and their mothers benefit from breastfeeding. Breastmilk contains antibodies and other factors that protect babies from disease, infection, and allergies. The World Health Organization recommends breastfeeding as the perfect way to feed an infant. The more breastmilk a baby gets, the more benefits to the baby’s health and immune system.¹

Breastfeeding benefits the infant by reducing the risks of ear and respiratory infections, atopic dermatitis, gastroenteritis, necrotizing enterocolitis, type 2 diabetes, and sudden infant death syndrome (SIDS).² In the long term, a breastfed child has a lower likelihood of pediatric overweight, and it appears that the odds of overweight continue to lessen the longer a child is breastfed. While more research is needed, exclusive breastfeeding appears to have a stronger effect than combined breast and formula feeding. Breastfeeding also confers benefits to mothers, both in the short term and long term, by speeding the return of uterine tone, stopping post-birth bleeding, and temporarily suppressing ovulation—which aids in the spacing between births. In the long term, mothers who breastfeed have a decreased risk of breast and cervical cancer as well as type 2 diabetes.²

In Santa Cruz County and statewide, rates of “any” breastfeeding far exceed the Healthy People 2010 objective of 75% and there seems to be little variation by infant’s race/ethnicity.³ However, rates for “exclusive” breastfeeding vary greatly by race/ethnicity, with Latina mothers being the least likely to exclusively breastfeed, in both Santa Cruz County and California (see Figure IIF-1). The exclusive rates cannot be compared to the Healthy People 2010 objective of 40% at three months age, because data are only collected at time of birth, so the percentages at three months are likely much lower. However, it is still interesting to note the difference in exclusive rates by race/ethnicity and by hospital of birth (see Figure IIF-2). The percentage of exclusively breastfed infants increased in 2008 to 77% overall, compared to 69% just one year before.³



<p>Primary Prevention Activities</p>	<ul style="list-style-type: none"> ▪ <u>Comprehensive Perinatal Services Program (CPSP)</u> Health care practitioners in the community provide prenatal care that also includes assessments, education, childbirth education classes, support, and referrals for other needed services. All pregnant Central Coast Alliance for Health members and pregnancy-only Medi-Cal recipients are eligible to receive CPSP services when attending a CPSP provider for prenatal care. ▪ <u>Women, Infants and Children Program (WIC)</u> & Regalo De Amor Lactation Center for WIC participants ▪ <u>Hospital Lactation Consultants</u> ▪ <u>Nursing Mother’s Council</u> ▪ <u>Le Leche League</u>
<p>Helpful Websites</p>	<ul style="list-style-type: none"> ▪ World Health Organization (WHO): http://www.who.int/topics/breastfeeding/en/ ▪ Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/breastfeeding/ ▪ California Department of Public Health (CDPH): http://www.cdph.ca.gov/HealthInfo/healthyliving/childfamily/Pages/BreastfeedingandHealthyLiving.aspx ▪ County of Santa Cruz: http://www.santacruzhealth.org/phealth/family/3breastfeeding.htm ▪ State of Oregon / The Benefits of Breastfeeding: http://www.oregon.gov/DHS/ph/bf/benefits.shtml

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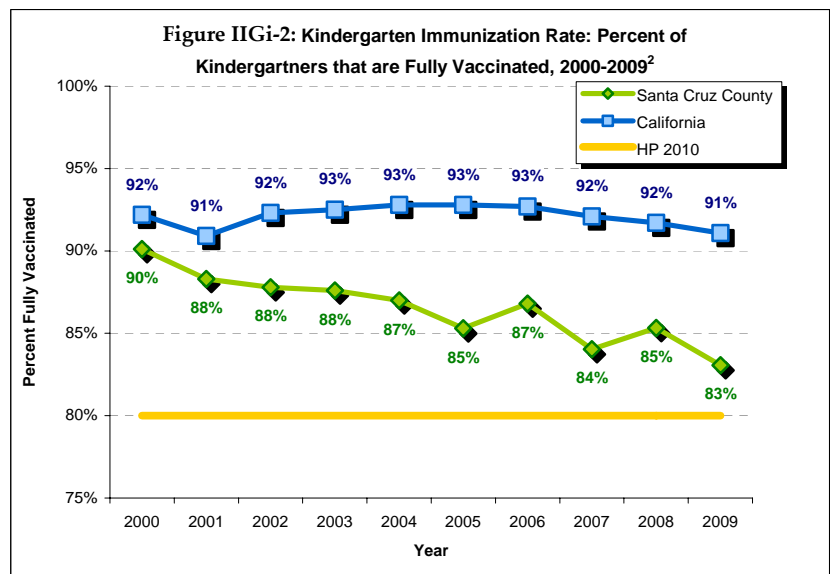
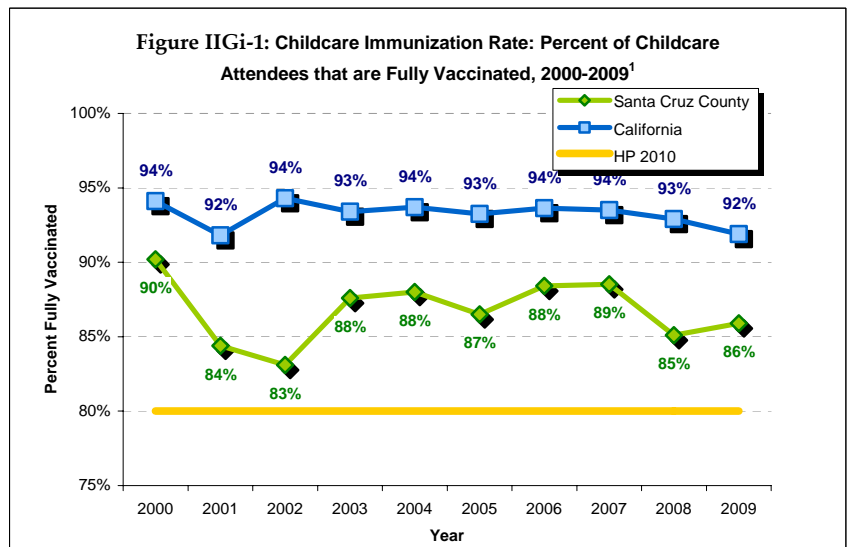
G. IMMUNIZATIONS

Importance	Disease prevention is the key to public health. It is always better to prevent a disease than to have to treat it. Vaccines prevent disease both directly, in the people who receive them, and indirectly, by reducing the number of infected people who could otherwise transmit infection. Vaccines are responsible for the control of many infectious diseases that were once common in this country (including polio, measles, diphtheria, pertussis/whooping cough, rubella/German measles, mumps, tetanus, and Haemophilus influenzae type b (Hib)).
Definitions	<p><u>Fully Immunized / All Required Vaccines:</u> In order to be fully vaccinated, a child must receive 4+ doses of DTP (diphtheria, tetanus and pertussis), 3+ Polio, 1+ MMR (measles, mumps and rubella-- 2+ doses of MMR for kindergarten), 1+ Hib (<i>Haemophilus influenzae</i> type B, not required for kindergarten), 3+ Hepatitis B, and 1+ varicella (or physician-documented varicella disease)</p> <p><u>Personal Belief Exemption (PBE):</u> a form that parents can choose to sign upon registering their child in daycare or kindergarten. This exempts the child from the required immunizations for school entry, with the caveat that should an outbreak of a vaccine-preventable disease occur, the child may be excluded from the classroom until the outbreak resolves or the child is protected by becoming either vaccinated or prophylaxed, or by acquiring natural immunity.</p>
Healthy People 2010 Objective	<ul style="list-style-type: none"> ▪ Increase proportion of young children who receive all vaccines that have been recommended for universal administration (for at least 5 years) to 80%

i. VACCINE COVERAGE

In 2009, 92% of childcare attendees statewide and 86% of attendees in Santa Cruz County were fully immunized.¹ In Santa Cruz County, that left 645 attendees not completely vaccinated, of whom 221 attendees were not fully vaccinated because of a personal belief exemption (PBE). During the same year, 91% of kindergartners statewide had received all required immunizations, compared to 83% of kindergartners in Santa Cruz County.² That left 571 Santa Cruz students incompletely vaccinated, of whom 219 were exempt under a personal belief exemption (PBE).

Parents considering non-medical exemptions for their children should be aware of the potential risk for disease both for their children and the public.



ii. VACCINE-PREVENTABLE DISEASES

Vaccine-preventable diseases have many social and economic costs: for example, sick children miss school and can cause parents to lose time from work. These diseases also result in doctor visits, hospitalization, and even premature death. There were **177** vaccine-preventable illnesses among county residents between 2005 and 2009, many occurring in school-aged clusters causing loss of classroom time.

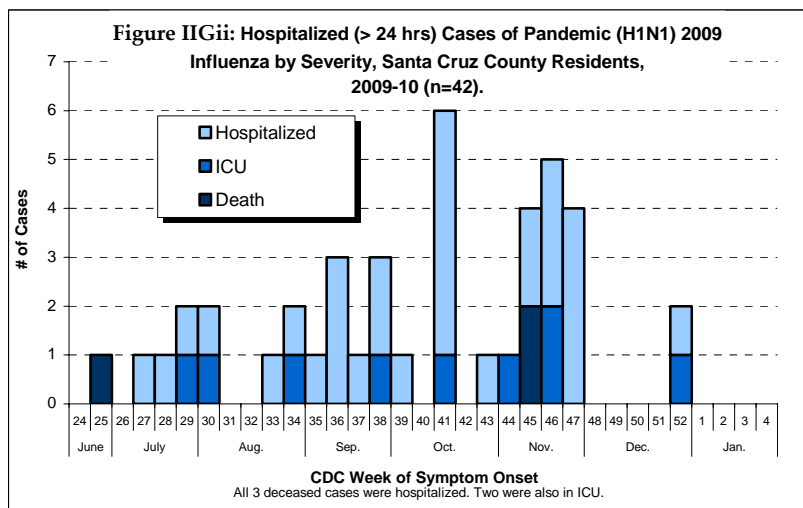
Disease prevention is the key to public health. It is always better to prevent a disease than to have to treat it. Vaccines prevent disease both directly, in the people who receive them, and indirectly, by reducing the number of infected people who could otherwise transmit infection. Vaccines help prevent infectious diseases and save lives. Vaccines are responsible for the control of many infectious diseases that were once common in this country (including polio, measles, diphtheria, pertussis/whooping cough, rubella/German measles, mumps, tetanus, and Haemophilus influenzae type b (Hib)).

VPD	Count
Viral Hepatitis A	11
Hepatitis B, Acute	11
Measles (Rubeola)	0
Mumps	8
Pertussis (Whooping cough)	147
TOTAL	177

PANDEMIC (H1N1) 2009 FLU

In April 2009, the world was introduced to a new strain of influenza, which the World Health Organization later determined to be a pandemic strain. By the end of the year, **42** Santa Cruz County residents had been hospitalized with lab-confirmed pandemic (H1N1) 2009 flu virus. Of them, **11** were admitted to an Intensive Care Unit and **3** residents died due to this pandemic strain.

A tremendous increase in influenza-associated pediatric deaths could be viewed as the most devastating impact the pandemic had on our nation, with nearly **2.5** times as many pediatric deaths as in a normal flu season. Fortunately, a vaccine became available towards the end of 2009, and a public/private partnership was established with a community vaccinator to administer vaccinations on a mass scale to the public through the Public Health Department. The number of flu cases has now decreased dramatically. It is noteworthy that the number of laboratory-confirmed cases far underestimates the true number of cases, because most people do not get tested for influenza unless they become severely ill.



Helpful Websites	<ul style="list-style-type: none"> World Health Organization (WHO): http://www.who.int/topics/immunization/en/ Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/vaccines/ California Department of Public Health (CDPH): http://www.cdph.ca.gov/programs/immunize/Pages/Default.aspx County of Santa Cruz: http://www.santacruzhealth.org/phealth/cd/3immunize.htm
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Sources	<ol style="list-style-type: none"> California Department of Public Health. Childcare Assessment Results – California, 2009. http://www.cdph.ca.gov/programs/immunize/Documents/2009ChildCareAssessmentReport.pdf California Department of Public Health. Kindergarten Assessment Results – California, 2009. http://www.cdph.ca.gov/programs/immunize/Documents/2009KindergartenAssessmentReport.pdf
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A. HEALTH INSURANCE & ACCESS TO CARE

<p>Importance</p>	<p>Access to health care is one of the fundamental determinants of good health, and in this country, health insurance is a fundamental determinant of access to care. Health care costs are rising much faster than incomes, and faster than other costs of living, leaving many people unable to afford medical care. Lack of health insurance leads people to forgo preventive medical care, resulting not only in worse health outcomes but also in greater monetary costs ultimately borne by society as a whole. Moreover, uninsured persons are more likely to present with more severe illness and to seek care at emergency rooms rather than using less expensive primary care practitioners to whom they have no access.</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ National health insurance reform is expected to eventually reduce the number of uninsured Americans by about four fifths. ▪ Nationwide, Hispanic ethnicity is very strongly associated with a lack of health insurance coverage. ▪ 22% of Hispanic adults in California were uninsured in 2007, compared to 7% of White adults. ▪ The proportion of uninsured Californians is higher than the national average. This is partly due to the large Hispanic population in California. ▪ Uninsured rates among adults in Santa Cruz County are similar to statewide rates, approximately 13% in 2007. ▪ Santa Cruz County has made the choice to insure young children, and nearly all children below age 5 are now covered. ▪ Lack of dental insurance is common in Santa Cruz County, and DentiCal coverage for adults has been virtually eliminated from the State budget.
<p>Definitions</p>	<p><u>Uninsured</u>: Usually refers to those <i>currently</i> without health insurance when asked; sometimes refers to those who were uninsured <i>at some point during the past year</i>.</p> <p><u>Underinsured</u>: Persons who spent at least 10% of their income on health care (5% for low-income persons), or at least 5% of their income on health insurance deductibles</p>
<p>Healthy People 2010 Objective</p>	<p>The Healthy People 2010 goal is health insurance coverage for 100% of the population. The county, the state, and the nation all fall far short of that goal. However, the recent health insurance reform bill is expected to bring the nation far closer to meeting the objective.</p>

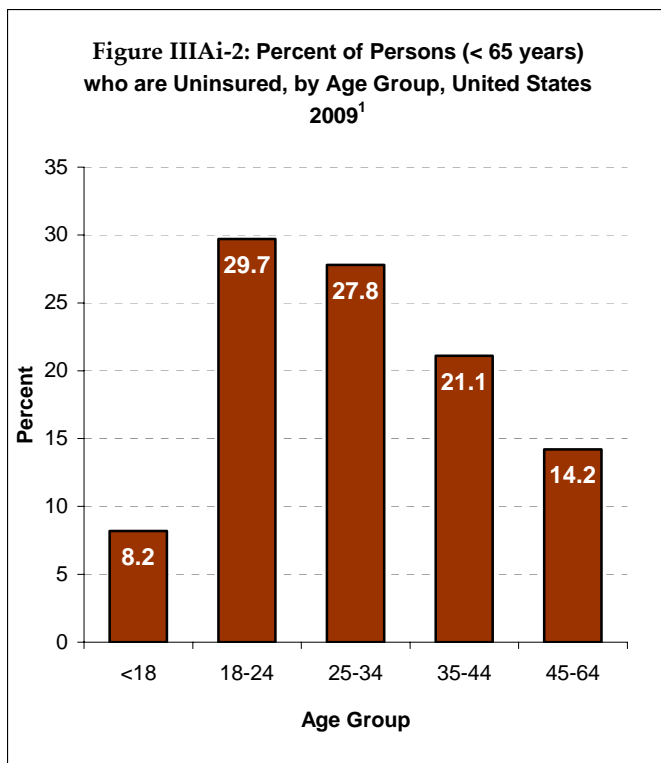
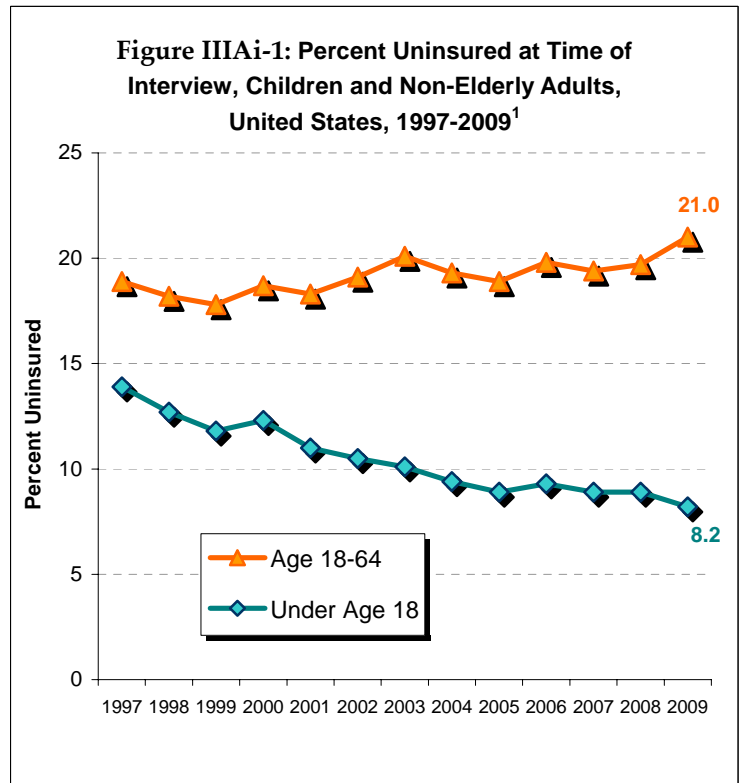
i. HEALTH INSURANCE COVERAGE

The passage of the national health insurance reform bill in 2010 will have a huge impact on health insurance coverage nationwide. Although it is difficult to predict all of the changes that will occur, the new law is certain to dramatically reduce the number of Americans without health insurance. The law mandates that most people obtain coverage, provides subsidies to those who need financial assistance, prohibits the denial of coverage on the basis of pre-existing conditions, prohibits rescission of coverage as a result of getting ill, expands eligibility for Medicaid (MediCal), allows parents to maintain their children on their insurance plan through age 26, provides significant incentive for employers to provide insurance, eliminates lifetime coverage caps, prohibits co-pays for preventive services, closes the prescription drug benefit hole, and makes many other changes to broaden insurance coverage. Many of these provisions will not go into effect for many years, but they are eventually expected to extend health insurance coverage to 32 million of the estimated 40 million Americans currently without coverage. On the other hand, since the cost of employer-provided family coverage is in the range of \$8000 per year, while the fine imposed under the new law for failing to provide coverage is only \$2000 per year, it is likely that many employers will stop providing insurance, and there will be extensive and painful dislocations until the mandated regulations actually take effect and equalize access to care.

i. HEALTH INSURANCE COVERAGE (CONT.)

From 1997-2008 there was no substantial change in the proportion of non-elderly adult Americans (ages 18-64) living without health insurance (Figure IIIAi-1).¹ The economic decline that began in 2007 led to a jump in 2009 in the number of uninsured adults. But children (under age 18) are increasingly likely to be insured; children's uninsured rates nationally have dropped fairly steadily from 14% in 1997 to barely 8% in 2009. In Santa Cruz County, most children had gained some form of health insurance, but the economic downturn is believed to have increased the number of uninsured.²

Young adults (ages 18 to 24) are the age group most likely to be uninsured (Figure IIIAi-2). The percentage of uninsured persons decreases in each successive age group, from 30% in the 18-24 age group to 14% in the 45-64 age group.¹ This may reflect both a lesser perceived need for insurance among young adults and a lesser ability to pay for insurance.



Young men are more likely to be uninsured than young women. The difference is close to 10% in the 18-to-24 age group, and shrinks in successive age groups until it almost disappears (1%) in the 45-to-64 age group.¹

Latinos are three times as likely as non-Hispanic Whites to be uninsured – 31% compared to 11% – while the rates among Blacks and Asians are 17% and 14% respectively (Figure IIIAi-3).³

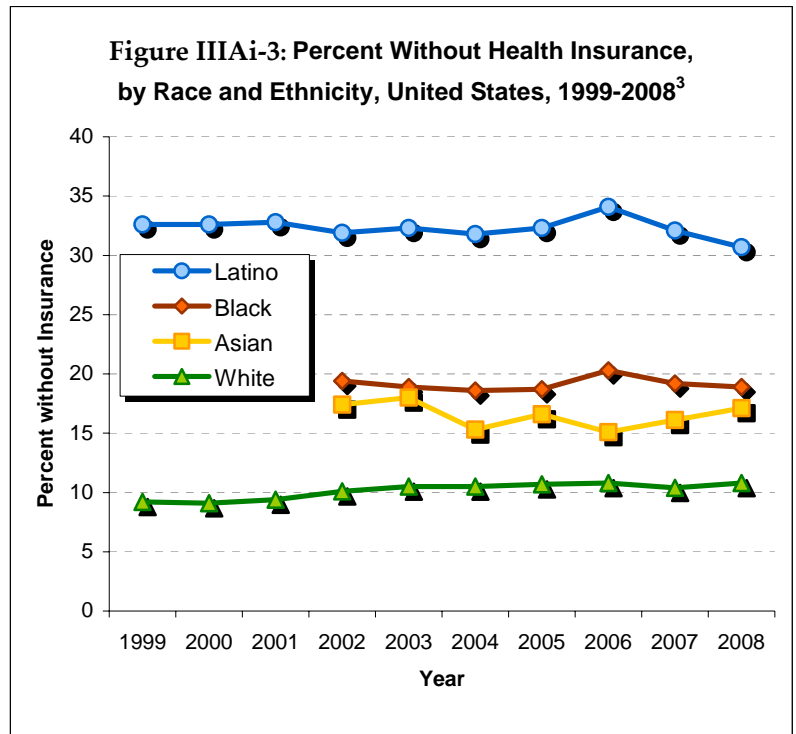
California has a higher proportion of uninsured persons than most other states. Averaged over the years 2006-2008, 18.5% of California residents were without coverage; the rate for the US as a whole was 15.5%, and only six states had higher rates than California.⁴ California's high proportion of uninsured persons is partly explained by its high proportion of Latinos (second highest among all states), who have very high uninsured rates. California Latinos, non-Hispanic Whites, and non-Hispanic Blacks each have uninsured rates fairly similar to national rates for those groups, respectively.^{3,5}

Santa Cruz County uninsured rates among non-elderly persons are similar to statewide rates, about 18-19% for ages 19-64, or about 14-15% for ages 0-64. However, children age 18 and under in Santa Cruz County have much lower uninsured rates than children statewide: 2.8%, compared to 6.4%.⁶

i. HEALTH INSURANCE COVERAGE (CONT.)

Unfortunately, many people's health insurance coverage does not adequately protect them from large medical expenses. As of 2007, there were an estimated 25 million "underinsured" adults in the United States, a 60 percent increase since 2003.⁷

Underinsured persons are those who spent at least 10% of their income on health care (5% for low-income persons), or at least 5% of their income on health insurance deductibles. Being underinsured is a problem that goes beyond the poor; even among those with annual incomes of \$40,000 to \$59,000, the underinsured percentage reached double digits in 2007. More than half of underinsured persons went without needed care, including not seeing a doctor when sick, not filling prescriptions, and not following up on recommended tests or treatment.



ii. DENTAL INSURANCE COVERAGE

Dental health is important in its own right, but also contributes in important ways to overall health. Research has pointed to possible associations between chronic oral infections and cardiovascular disease, stroke, fatal heart attacks, bacterial pneumonia, and premature birth, as well as making the control of diabetes more difficult.⁸ In addition, attentive oral health care can contribute to early detection of a wide variety of other illnesses. A thorough oral examination can detect signs of nutritional deficiencies as well as a number of systemic diseases, including microbial infections, immune disorders, injuries, and some cancers.⁸

Dental health is a challenge in Santa Cruz County, particularly due to the county's inability as yet to establish a drinking water fluoridation program. Lack of dental health insurance coverage is much more widespread than lack of medical health insurance. The percentage of adults who were without dental insurance for all or part of 2007 was higher in Santa Cruz County (47%) than statewide (41%), although the percentage of uninsured children was lower in the county than statewide (13% v. 20%).⁶ Some of the same nutritional issues that contribute to overweight and obesity also contribute to poor dental health.

State budget cuts eliminated DentiCal coverage for nearly all adult services, beginning July 1, 2009. The majority of dentists no longer accept Denti-Cal even for children, because of the low reimbursement rates.

The Dientes program provides emergency, preventive, restorative, and rehabilitative services to uninsured and publicly insured patients (e.g., MediCal, Healthy Families, and Healthy Kids). Dientes provided over 18,600 visits to more than 6,400 individual patients in 2009. Dientes brings services to the Women, Infants, and Children center in Watsonville, to children in eight elementary schools across the county, and to elderly and disabled persons in skilled nursing facilities. Unfortunately, Dientes' resources are limited. Patients who do not have DentiCal or Healthy Kids/Healthy Families coverage pay on a sliding fee scale, with rates typically 50% of those ordinarily charged by dentists in private practice. The County of Santa Cruz provides some funding through the Homeless Persons Health Project and the Human Services Department.

ii. DENTAL INSURANCE COVERAGE (CONT.)

There is virtually no other source of specialized dental care in the county for uninsured or publicly insured patients; individuals needing a licensed Pedodontist, root canals, or other special services must usually travel out of the county when Dientes does not have sufficient resources to serve them.

iii. PRIMARY CARE PROVIDER RATE

The primary care provider (PCP) rate is the number of practicing primary care physicians per 100,000 persons; a high number indicates ready availability of primary care, while a low number may indicate a shortage of primary health care providers. High PCP rates are strongly correlated with high life expectancies. According to one source, PCP rates (including OB/GYNs) vary from as few as 29 per 100,000 in Glenn County to as many as 261 per 100,000 in San Francisco, while Alpine and Sierra have no PCPs at all. The statewide average PCP rate is 116, and Santa Cruz County's rate is 150, which ranks the county in a tie for 8th best in the state.⁹

However, the California Healthcare Foundation recently reported¹⁰ a PCP rate of just 58 per 100,000 for Santa Cruz County, compared to a statewide average of 59, and recent work by the local Health Improvement Partnership generated county numbers that are closely in line with CHCF's data. The CHCF and HIP data did not include OB/GYNs, did not count "inactive" physicians (retirees, administrators, physicians who practice only in other counties, etc.), and only included physicians who accept MediCal patients; it's not clear whether that explains the very large difference between those sources and the County Health Rankings results.

A low PCP rate makes it difficult for patients, whether insured or not, to gain access to primary care, preventive care, and referrals when they need them. There is evidence that good access to primary care can reduce overall demand for medical care, probably through enhanced coordination of care and a preventive care focus.¹¹ Yet many PCPs in California already are not accepting any new patients, and the problem is expected to get worse: the population continues to grow, but the number of new physicians remains fairly constant; a large proportion of physicians are nearing retirement age, while only a limited number of new physicians will be available to replace them; and we can expect an increased demand for medical care as a result of health care reform.¹²

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B. QUALITY OF CARE

<p>Importance</p>	<p>The Institute of Medicine defines health care quality as "the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."¹ The goal of improving quality of care is to decrease the complication rate, morbidity, mortality, and cost of care.</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ In Santa Cruz County, the percentage of mothers receiving early (1st trimester) and adequate prenatal care has decreased in the past few years—primarily among Latina mothers.³ ▪ In the United States, low-income populations tend to have higher rates of preventable hospital admissions.⁵ ▪ Low-income and uninsured populations are known to face barriers to health care.⁵ ▪ Hospice use in the State of California increased over 27% from 2003 to 2007.¹⁰ ▪ Medical expenditures for managing diabetes were over \$92 billion in 2002.⁷
<p>Definitions</p>	<p><u>APNCU</u>: Adequacy of Prenatal Care Utilization Index (also referred to as the Kotelchuck Index). The APNCU is a measure of prenatal care utilization that combines the month that prenatal care began with the number of prenatal visits. Rates can be classified as "intensive use," "adequate," "intermediate," or "less than adequate."</p> <p><u>Preventable Hospital Stays / Ambulatory Care Sensitive Conditions (ACSC)</u>: Preventable hospital stays are also known as ACSC – conditions for which good outpatient care can prevent the need for hospitalizations or for which early intervention can prevent complications or more severe disease.⁵</p> <p><u>Prevention Quality Indicators (PQIs)</u>: PQIs are a set of conditions used with hospital inpatient discharge data to evaluate quality of care for ACSC.⁵</p> <p><u>Diabetic Screening Rate</u>: the percentage of diabetic Medicare patients whose blood sugar control was screened in the past year by testing their glyated hemoglobin (HbA1C) levels.⁷</p> <p><u>Hospice</u>: Hospice care is designed to give supportive care to people in the final phase of a terminal illness and focus on comfort and quality of life, rather than cure. The goal is to enable patients to be comfortable and free of pain, so that they live each day as fully as possible. The philosophy of hospice is to provide support for the patient's emotional, social, and spiritual needs as well as medical symptoms as part of treating the whole person.⁹</p>
<p>Healthy People 2010 Objective</p>	<ul style="list-style-type: none"> ▪ Increase the percentage of pregnant females receiving early (1st trimester) prenatal care to 90% ▪ Increase the percentage of pregnant females receiving adequate or better prenatal care by the APNCU to 90%

i. PRENATAL CARE

EARLY (1ST TRIMESTER)

It is recommended that women seek prenatal care as soon as they suspect or know they are pregnant—ideally within the first trimester. In addition to monitoring the baby’s health during prenatal visits, an early provider visit can also be helpful and informative regarding nutrition; alcohol, tobacco or substance abuse; infections; fertility; family changes and much more.

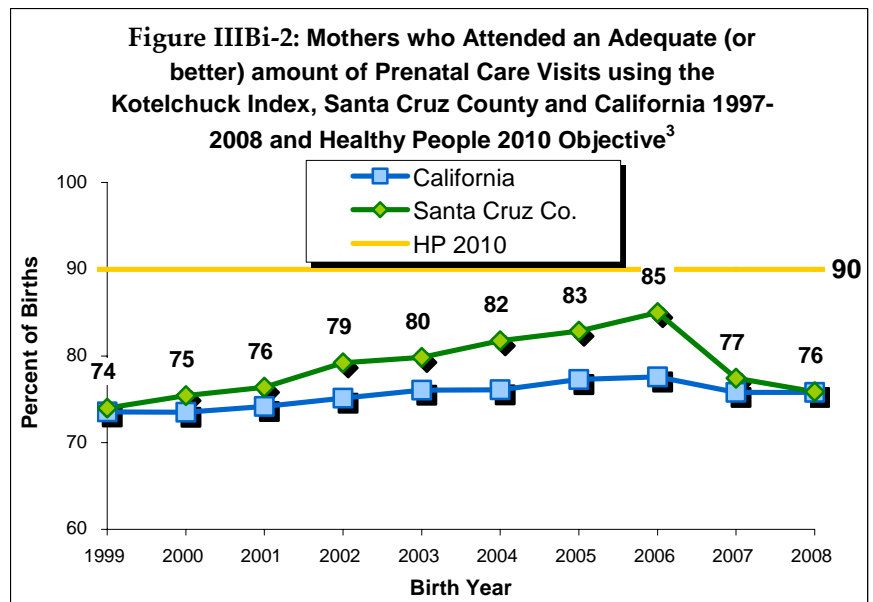
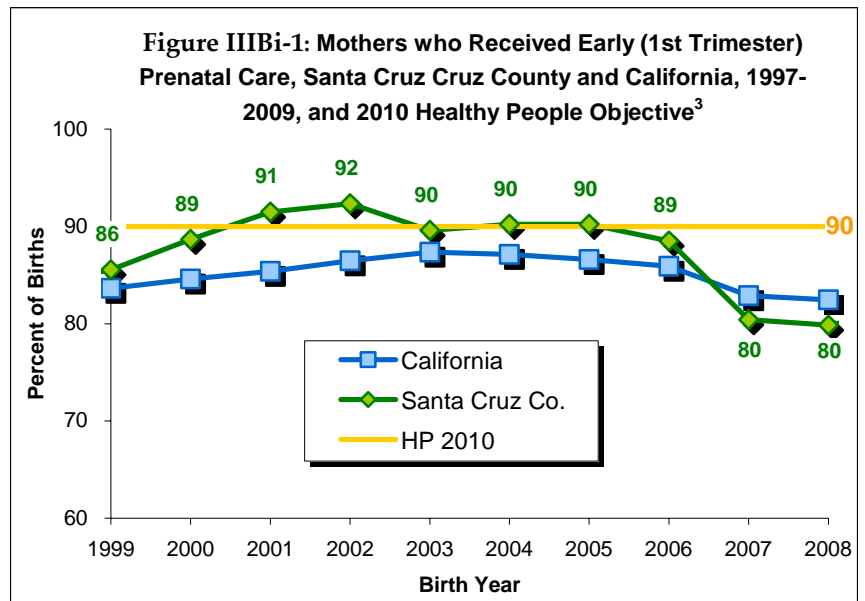
In Santa Cruz County, the rate of mother’s receiving early prenatal care fell from 90% to 80% between 2004 and 2008 (see Figure IIIBi-1). The drop coincided with the economic decline. When looking at rates by race/ethnicity, although the same trend can be seen among White mothers, the magnitude of the change is greatest among Latina mothers, dropping roughly 20% from 2004 to 2008.³

ADEQUACY (KOTELCHUCK INDEX)

The adequacy measure is based on the number of visits for prenatal care. The Kotelchuck Index is a standard for the appropriate number of prenatal visits, while considering the baby’s gestational age and when the mother first sought prenatal care. The Index is a ratio of the actual number of visits over the expected number. Attending 80% or more of the expected visits equates to a Kotelchuck Index of Adequate or better. Figure IIIBi-2 shows the percentage of Santa Cruz County mothers meeting that level of utilization over time.

In Santa Cruz County, the percentage with adequate or better care increased significantly from 1999 to 2006. However, the percentage dropped significantly in 2007. Similar changes occurred statewide, although they were not as pronounced.³

Again, these changes both upward and downward occurred primarily among Latina mothers. In fact, there was no significant change over time among White mothers, and an increasing trend (without the decrease) among Black mothers in Santa Cruz County.³



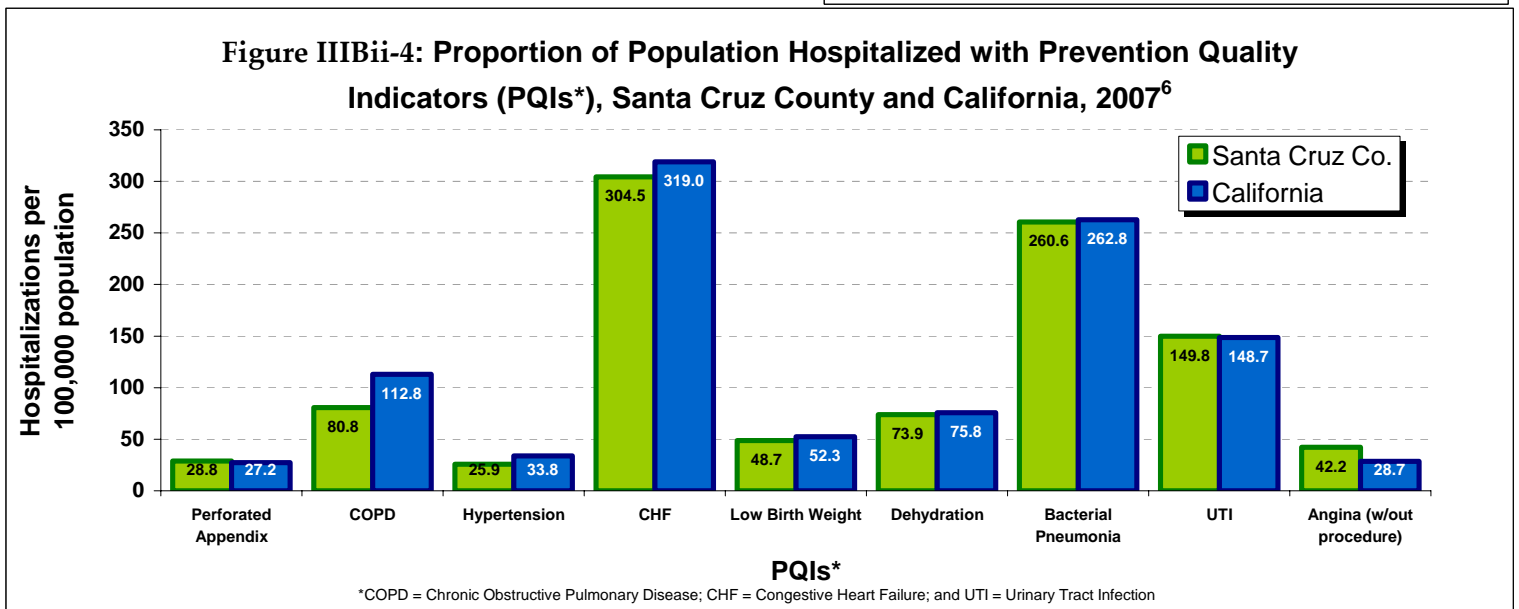
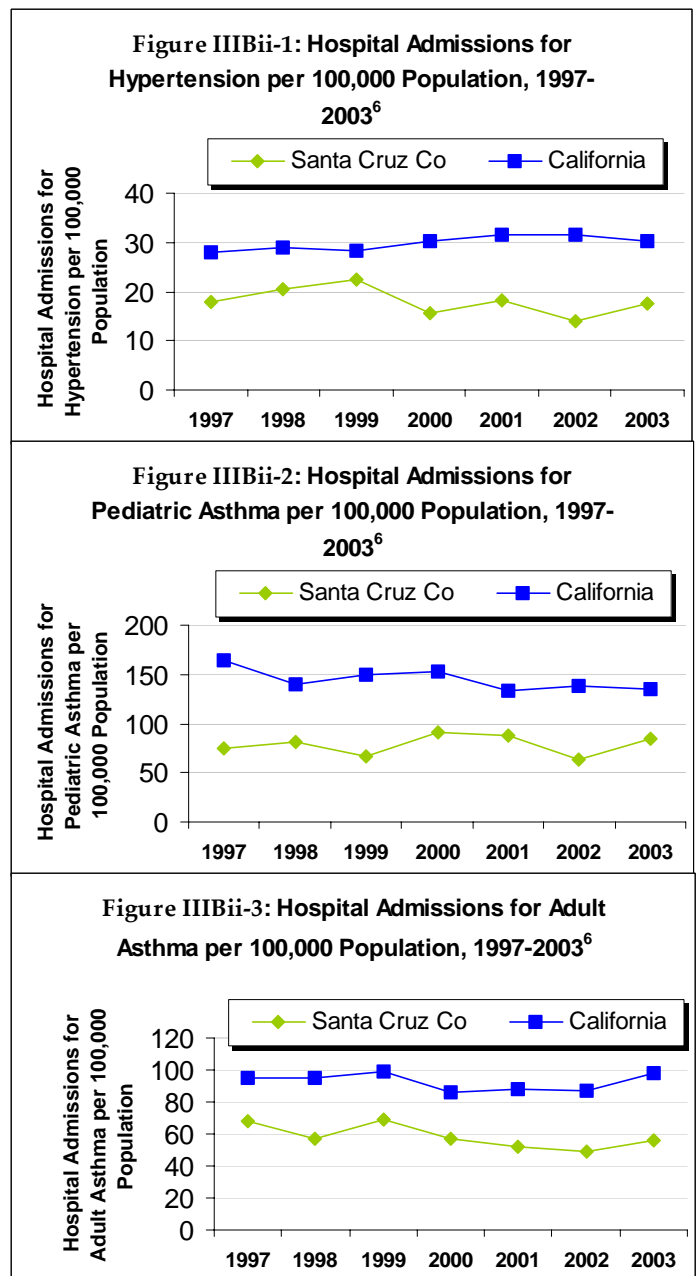
ii. PREVENTABLE HOSPITAL STAYS

Certain chronic medical conditions (e.g., asthma, diabetes, and hypertension) can often be managed with timely and effective treatment in an outpatient setting, thereby preventing hospitalizations; these conditions are also known as Prevention Quality Indicators (PQIs). With high-quality community-based primary care, hospitalizations for these illnesses often can be avoided. However, this measure may also represent a population's tendency to overuse the hospital as their primary source of care.⁵

According to the MATCH report and data derived from the Dartmouth Atlas of Healthcare, using Medicare claims data from 2005-2006, Santa Cruz County had 52 preventable hospital stays per 1,000 enrollees, while California had 62 per 1,000 Medicare enrollees.⁴

The figures to the right display both county and state hospitalization rates (admissions per 100,000 population) from 1997 to 2003 for selected PQIs.⁵ Santa Cruz County rates were better than statewide rates for all the PQIs shown.

The table below compares the admission rates for PQIs (excluding diabetic indicators) for Santa Cruz County and California in 2007.⁶ For most indicators, Santa Cruz County rates are fairly similar to state rates. COPD and hypertension are areas where Santa Cruz County does particularly well, while angina (without procedure) is a condition for which our primary care may need to be looked at more closely.



iii. DIABETIC SCREENING

Seventy-eight percent of the Medicare diabetic population in Santa Cruz County are screened regularly for diabetes, compared with 76% of the Medicare diabetic population in California.⁴ The diabetic screening rate is the percentage of diabetic Medicare patients whose blood sugar control was screened in the past year by testing their glycated hemoglobin (HbA1c) levels.⁴

The figures to the right compare the rates of hospitalizations in Santa Cruz County and statewide due to short-term and long-term diabetes complications, and rates of lower extremity amputation among diabetic patients.⁵ In California five to eight percent increases in admission rates were seen across all three diabetic indicators; short-term complications or uncontrolled (5.0%), long-term complications (8.2%), and lower extremity amputation (4.9%).⁵ In Santa Cruz County there was a large increase (57%) in the proportion of hospitalizations per 100,000 population due to short term diabetes complications or lack of control.⁶ The proportion of hospital admissions for long term diabetes complications (2.4%) and diabetes related lower extremity amputations (15.3%) both decreased in Santa Cruz County during that same time period.

The costs for treating diabetes are rising: direct medical expenditures were estimated at \$92 billion in 2002, compared with \$44 billion in 1997.⁷ In 2002, the breakdown for the costs included 44% inpatient hospital care, 15% nursing home care, and 11% physician office visits. Health care costs for people with diabetes are higher than for those without diabetes.⁷ In 2002, medical expenditures totaled \$13,243 for people with diabetes, compared to \$2,560 for people without diabetes; that difference when age-adjusted is 2.4 times more for people with diabetes.⁷

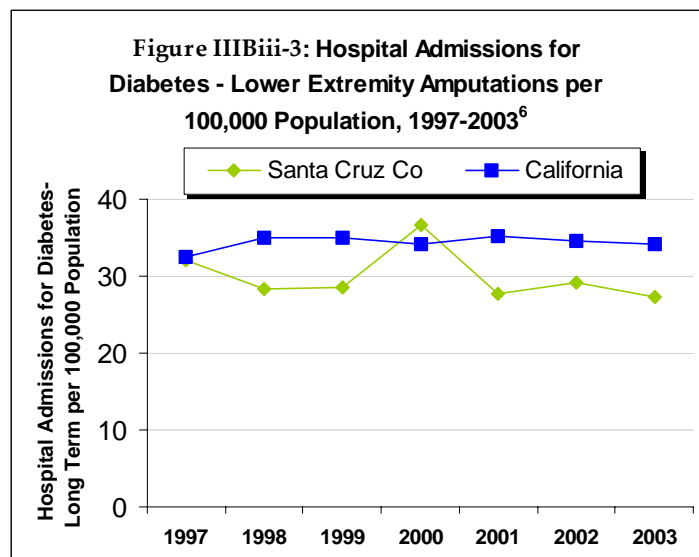
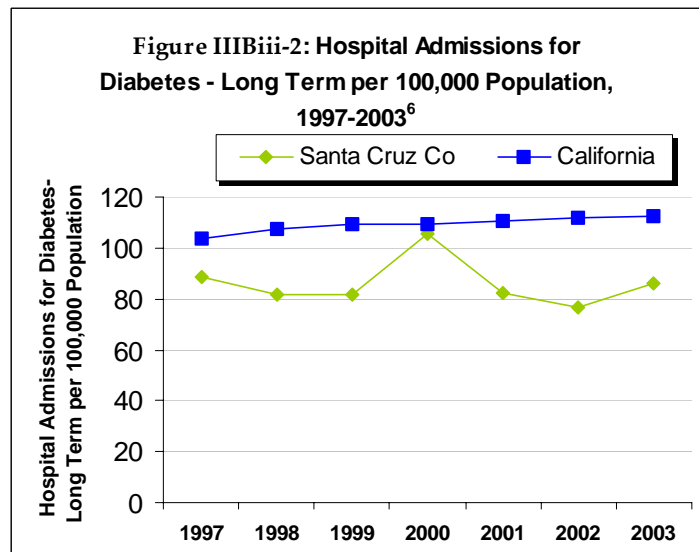
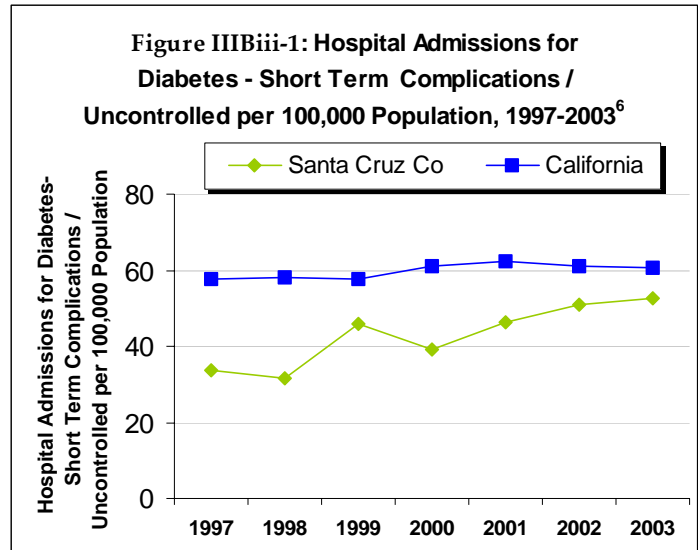


Figure IIIBiv-2: Hospice Use by Age, Santa Cruz County 2004 {10}

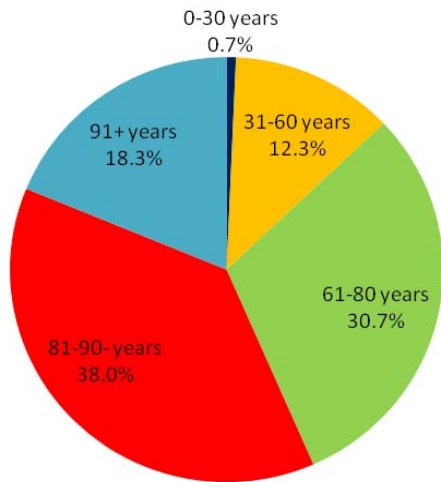
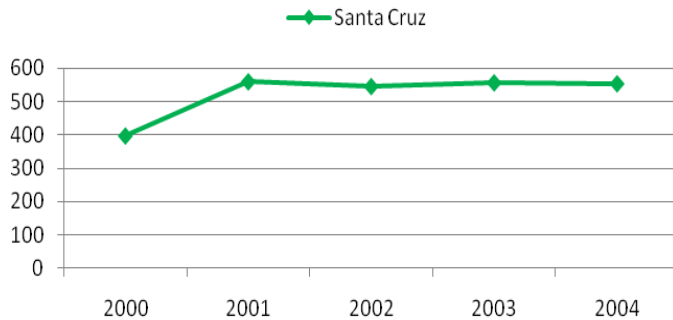


Figure IIIBiv-3: Patients of Hospice, Santa Cruz County 2000-2004 {10}



IV. HOSPICE USE

Thirty-six percent of terminally ill Medicare patients in Santa Cruz County were enrolled in hospice care during their last 6 months of life,⁴ ranking Santa Cruz County fifth among all California counties; statewide, only 28% were enrolled in hospice. This significant difference may be one reason why Santa Cruz County health care costs are relatively low, according to the Dartmouth Atlas, despite one of the highest cost-of-living indexes in the country. Medicare remains the dominant payer source for hospice services in California. Between 2003 and 2007, United States Medicare expenditures for hospice increased by 79%, while California Medicare expenditures for hospice increased only 67%.⁹

As the population ages, the demand for long-term care will likely increase. The number of California residents age 65 and older is projected to triple from 2000 to 2050.⁹ The use of hospice services in California increased by 27.1% just from 2003 to 2007.⁹ The use of hospice services also increased in Santa Cruz County from 2000 to 2004.⁹

Persons in the age group 81 to 90 years (38.0%) were the largest users of hospice services in Santa Cruz County in 2004, and persons in the age group 61 to 80 years (30.7%) were the next largest users of hospice services.¹⁰

Primary Prevention Activities

- **Comprehensive Perinatal Services Program (CPSP):** Health care practitioners in the community provide prenatal care that also includes assessments, education, childbirth education classes, support, and referrals for other needed services. All pregnant Central Coast Alliance for Health members and pregnancy-only Medi-Cal recipients are eligible to receive CPSP services.
- **Pregnancy Outreach and Education (POE):** Program provides education, information, referrals, and coordination to assist pregnant women in obtaining early and comprehensive prenatal health care and other needed services. In particular, program assists pregnant women with substance use and/or mental health concerns.

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A. ENVIRONMENTAL HEALTH INDICATORS

<p>Importance</p>	<p>The environment matters because it is where we live, breathe, eat, drink, raise our children, etc. Our entire life support system is dependent on the well-being of the species living on this planet. The deterioration of the environment threatens our natural resources, such as the air we breathe, our clean water supply, and our food supply.</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ The air in Santa Cruz County is among the cleanest in the nation, according to a report released April 2010 by the American Lung Association.¹ ▪ Santa Cruz County had no days with high ozone levels, scoring an A grade along with just 48 other counties in the U.S., eight of them in California.¹ ▪ Santa Cruz County had no days with high levels of particulate pollution, scoring an A grade along with just four other California counties.¹ ▪ Agriculture uses 60% of the county's water, while urban, residential, and commercial activities use the remaining 40%.² ▪ Santa Cruz County's drinking water supply comes predominantly from within the boundaries of the county.² ▪ About 80% of water consumed in the county comes from underground aquifers.²
<p>Definitions</p>	<p><u>Air Quality</u>: Air pollution is any undesirable substance that enters the atmosphere. Air pollution is a major problem in modern society. Pollutants include various gases and tiny particles (particulates) that can harm human health or damage the environment. Pollution occurs on different levels – personal, national, and global.-</p> <p><u>Water Quality</u>: Water is our most precious global resource. Clean and safe drinking water is critical to sustain human life; without it, waterborne illness is a serious problem. Water provides for recreational water activities such as swimming, which help promote healthy living. Often, water's vital role is most apparent during an emergency or disaster.³</p>
<p>Healthy People 2010 Objective</p>	<ul style="list-style-type: none"> ▪ Objective 8-1: Reduce the proportion of persons exposed to air that does not meet the United States Environmental Protection Agency's health-based standards for harmful air pollutants.⁴ (Target: 0% of all air pollutants) ▪ Objective 8-5: Increase the proportion of persons served by community water systems who receive a supply of drinking water that meets the regulations of the Safe Drinking Water Act.⁴ (Target: 95% of persons served by a community to receive safe drinking water) ▪ Objective 8-6: Reduce waterborne disease outbreaks arising from water intended for drinking among persons served by community water systems.⁴ (Target: 2 outbreaks per year from community water systems) ▪ Objective 8-7: Reduce per capita domestic water withdrawals.⁴ (Target: 90.9 gallons, 10% improvement)

i. AIR QUALITY

Table IVAi depicts the ambient air quality in Santa Cruz County, 2007, compared with the state and national standards.^{5,6} The State of the Air 2010 shows that the air quality in many places has improved nationwide, but that over 175 million Americans (58%) still suffer from air pollution levels that are too often dangerous to breathe.¹ Unhealthy air remains a threat to the lives and the health of millions of people in the United States, despite great progress.⁷ According to the State of the Air 2010, Santa Cruz County ranked among the cleanest counties in both ozone and particle pollution.

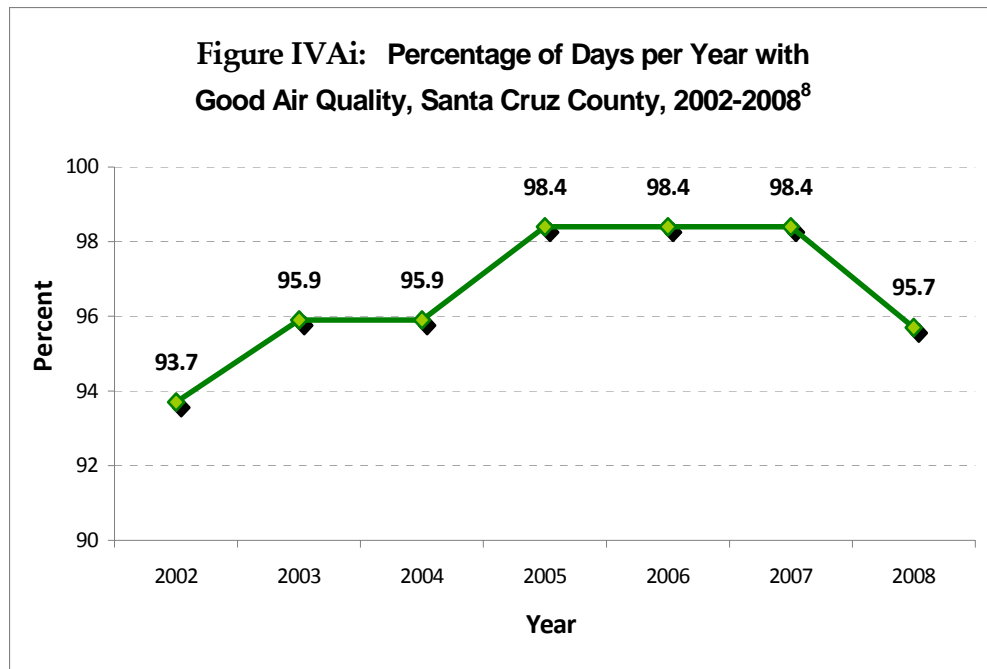
i. AIR QUALITY (CONT.)

Ozone (O₃) is an extremely reactive gas and is the primary contributor to smog. Ozone can cause lung inflammation even at very low exposure concentrations. It is estimated that nationally, over 3,700 deaths annually could be attributed to an increase of ozone levels in the air.¹ Particulate matter (PM) pollution refers to a mix of very tiny solid and liquid particles in the air – regardless of the size, particles can be harmful to our health.

Table IVAi: Ambient Air Quality, Santa Cruz County, 2007 vs. State and National Air Standards ^{5,6}			
	Particulate Matter (PM)		
	Ozone	PM 10	PM 2.5
Santa Cruz County 2007 **	0.069 ppm	51 ug/m ³	18.3 ug/m ³
California Standards *	0.070 ppm	50 ug/m ³	35 ug/m ³
United States Standards *	0.075 ppm	150 ug/m ³	35 ug/m ³

* Ambient Air Quality Standards, PM 24 hours, ozone 8 hours
 ** 2007 Average Air Quality Measurements of Santa Cruz County, PM 24 hours, ozone 8 hours

Figure IVAi illustrates the percentage of days per year with good air quality in Santa Cruz County, from 2002 through 2008. Santa Cruz County’s air quality in 2008 was good 95.7% of days, slightly down from the 98.4% in 2007.⁸ Although much of California is known for its smog, Santa Cruz County has consistently had lower levels of ozone and particulate pollution than the rest of the state.⁸ The city of Santa Cruz generates enough renewable energy to account for the 33% of energy used by the city. Santa Cruz also purchases 13% renewable energy from PG&E – this clean energy keeps dirty fossil-fuel emissions out of the air.⁸



ii. WATER QUALITY

Table IVAii illustrates the safety of our beaches in Santa Cruz County using a letter grade system. The beach report card is the only comprehensive analysis of coastline water quality in California.⁹ More than 350 beaches are monitored weekly from Oregon to the Mexico border and assigned a letter grade from A to F.⁹ The grades are based on the health risks of swimming or surfing at that location. All standards are set by the California Department of Health Services' Beach Bathing Water Standards.⁹ The worse the grade, the greater the risk of getting sick.⁹ The beach report card provides grades for both dry and wet weather to allow a clear analysis of the water quality at any given monitoring location.⁹ Water quality significantly drops in grade during and immediately after a storm.⁹ Grades for dry weather are calculated based on days without rain, at least three days after it last rained.⁹ Grades for wet weather pertain to samples collected on days that experience rain, including the three days after the rain stops.⁹

Table IVAii: Beach Report Card, Santa Cruz County, 2002-2009⁹

	2002		2003		2004		2005		2006		2007		2008		2009	
	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Santa Cruz Main Beach Boardwalk	A	F	A	F	A	F	B	D	A	A	A	D	B	C	A	B
Seacliff State Beach	A	F	B	F	A+	C	A	D	A+	A	A+	B	A	A	A	A
Seabright Beach	A+	F	A	F	A	D	A	F	A+	A	A+	D	A	B	A	D
Twin Lakes Beach	A	F	A	F	A+	D	A	F	A	A	A	B	A+	A	A+	B
Capitola Beach West of Jetty	F	F	F	F	B	F	B	F	C	C	C	F	A	D	C	F
Natural Bridges State Beach	A	F	A+	F	A+	A+	A+	A	A+	A	A+	A	A	A	A+	B
New Brighton Beach	A	F	B	F	A	D	A	F	A+	A	A+	C	A	A	A	C
Rio Del Mar Beach	C	F	B	F	F	F	A	F	A	B	A+	C	A	B	A	B

Primary Prevention Activities

- **Bike to Work Week** is an inexpensive, healthy, and fun means to alleviate gridlock and reduce air pollution.
- In 2000, the city adopted a **Water Conservation Plan**, the goal of which is to reduce water demand system-wide by 282 million gallons per year in 2010. Through plumbing fixture and appliance rebate programs, technical assistance, regulations, and other strategies, residential and commercial customers have saved over 217 million gallons of water per year so far.

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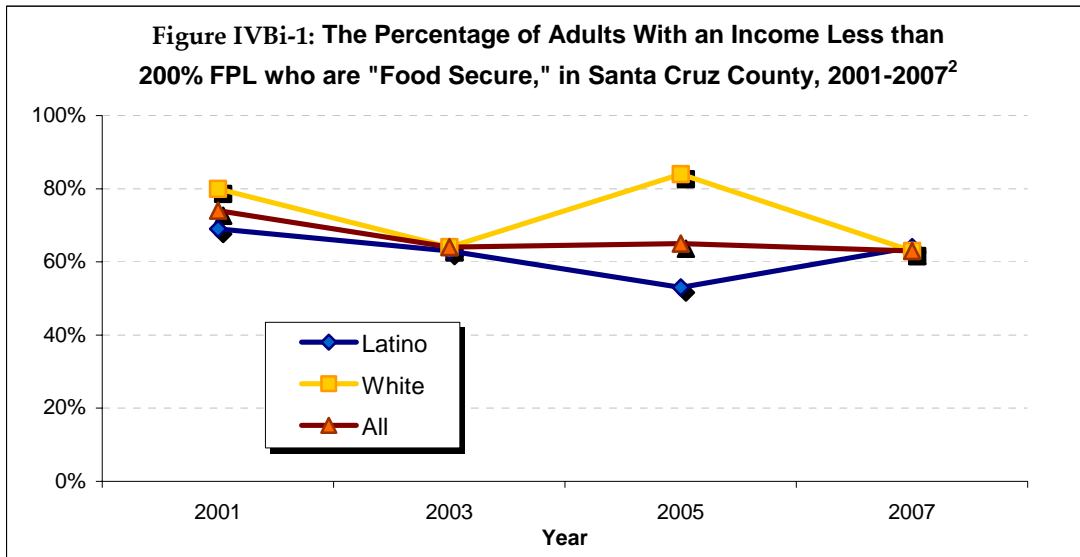
B. BUILT ENVIRONMENT

Importance	The environment in which we live often shapes the choices we make. If our built environment offers fast food restaurants and liquor stores and we have limited transportation, our ability to make healthy choices is limited. Transportation is also a factor in a person's ability to access healthcare and employment.
Highlights	<ul style="list-style-type: none"> ▪ Out of 24 California counties with populations of at least 250,000, Santa Cruz County had the 2nd best RFEI* ratio (of available fresh fruits and vegetables compared to fast-food restaurants and convenience stores).¹ ▪ Between 2001 and 2007, the percentage of adults with an income below the 200% federal poverty level (FPL) who were "food secure" dropped from 80% to 69% among Santa Cruz County Whites, but changed little (from 63% to 64%) among Latinos.² ▪ Santa Cruz County has 1.2 liquor stores per 10,000 population, compared to 0.9 per 10,000 population in California.³ ▪ The percentage of Santa Cruz County residents who commute to work by walking (4.7%) or riding their bicycle (4.0%) was higher than either California or the US in 2008.⁴
Definitions	<p><u>*Retail Food Environment Index (RFEI)</u>: The number of fast-food restaurants and convenience stores, divided by the number of supermarkets, produce stores, and farmers' markets. A community with twice as many fast-food restaurants and convenience stores will have an RFEI of 2.0. A low RFEI shows good access to healthy food. In California, county RFEI scores range from 2.06-5.60.⁵</p> <p><u>Food Security</u>: Access, at all times, to enough nutritious food for an active, healthy life.⁶</p> <p><u>Alcohol Outlet</u>: An establishment where alcohol is sold for consumption off premises, called an "off-sale establishment" (supermarkets, liquor stores, etc.), or where alcohol is consumed on the premises (bars, restaurants, etc.).⁷</p>
Healthy People 2010 Objective	<ul style="list-style-type: none"> ▪ Increase the proportion of food secure households (thereby reducing hunger) to 94%

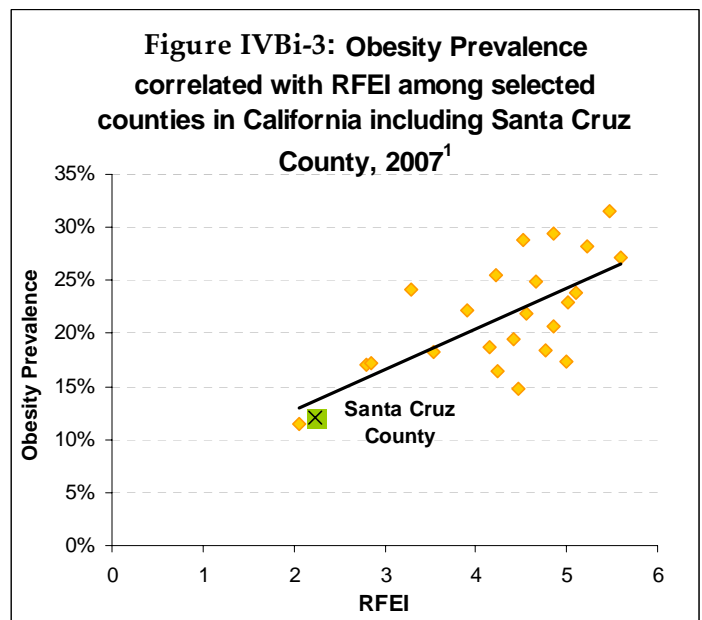
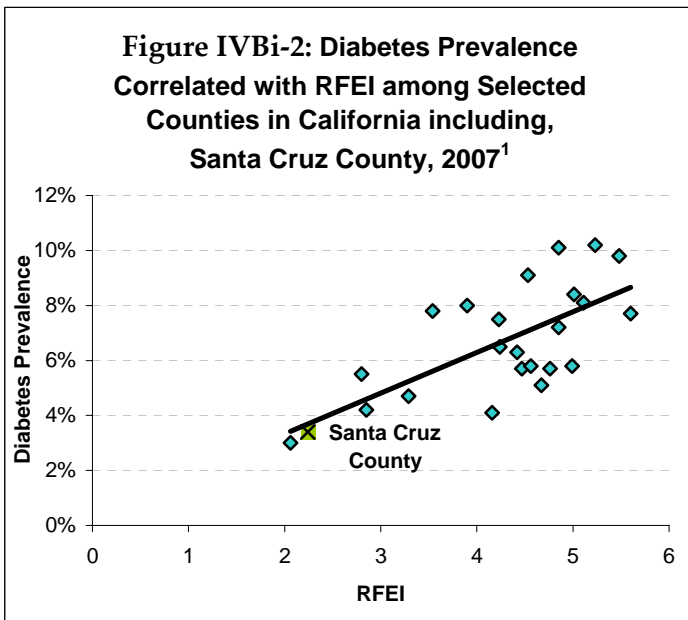
i. ACCESS TO HEALTHY FOODS

Food security, or being able to afford a complete and balanced diet, is a very important measure of health. The Healthy People 2010 goal is to increase the proportion of food secure households to 94%. Nationally, the proportion of food secure households was 89% as of 2006.⁸ In Santa Cruz, only persons with incomes below 200% of Federal Poverty Level (FPL) were asked about food security. In 2001, among Santa Cruz County adults with an income below 200% FPL, 80% of Whites reported being food secure, compared to 69% of Latinos (Figure IVBi-1).² In 2007, 63% of White adults reported being food secure, compared to 64% of Latino adults.² Between 2001 and 2007, the percentage of all Santa Cruz adults with incomes below 200% FPL who were food secure dropped from 74% to 63%.²

i. ACCESS TO HEALTHY FOODS (CONT.)

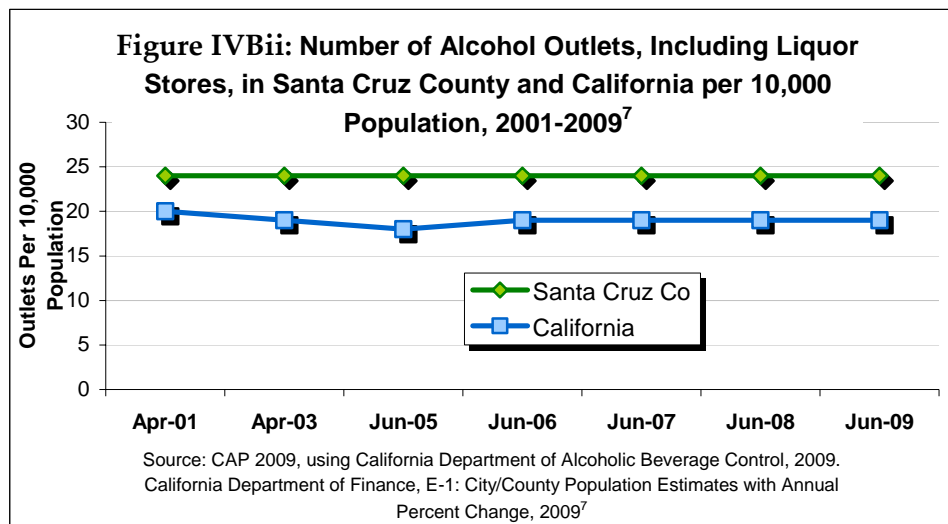


The amount of nutritious food available affects the food decisions that children, teens, and adults make. If healthy options are not available, then healthy options cannot be selected. Santa Cruz County ranks second best for Retail Food Environment Index (RFEI) out of the 24 California counties with populations greater than 250,000.¹ Based on data from the 2005 California Health Interview Survey and the 2005 InfoUSA Business File, the RFEI was calculated for each adult CHIS respondent by dividing the total number of fast-food restaurants and convenience stores by the total number of grocery stores and produce vendors within a given radius (a half-mile in urban areas, one mile in smaller cities and suburban areas, and five miles in rural areas) around the respondent's home address. These individual RFEI's were then averaged for the entire county. Santa Cruz County had an RFEI of 2.2, which can be interpreted as 2.2 fast food or convenience stores for each grocery store, produce stand, or farmer's market.¹ As can be seen in figures IVBi-2 and IVBi-3, higher RFEIs are positively correlated with the percentages of obesity and diabetes within a county.¹



ii. LIQUOR STORE DENSITY

The presence of liquor outlets, including liquor stores, restaurants, and supermarkets, is associated with increased underage drinking, binge drinking, violence, and poor health outcomes such as high mortality rates due to liver cirrhosis.³ In Santa Cruz County, alcohol outlet density has stayed steady at 24 outlets per 10,000 population, while California has experienced little change (between 18 and 20 outlets per 10,000 population between 2001 and 2009 (Figure IVBii)).⁷ Adult binge drinking between 2003 and 2005 and adolescent binge drinking between 2005 and 2007 remained similarly constant (see Alcohol Use).



Liquor stores sell larger quantities of alcohol than other liquor outlets.³ Santa Cruz County's density of liquor stores is 1.2 per 10,000 population, compared to California, which is 0.9 per 10,000 population, with other counties ranging from 0.0 to 3.1 per 10,000 population, based on 2006 data from the US Census Bureau's County Business Patterns.³

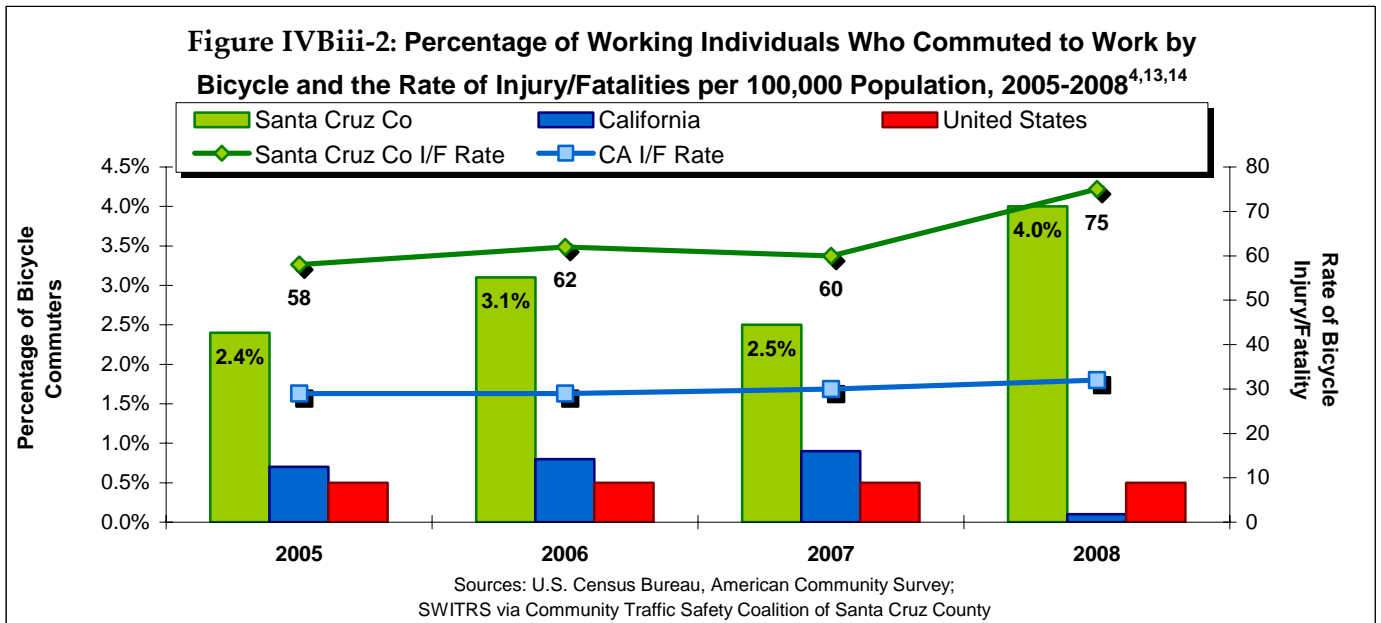
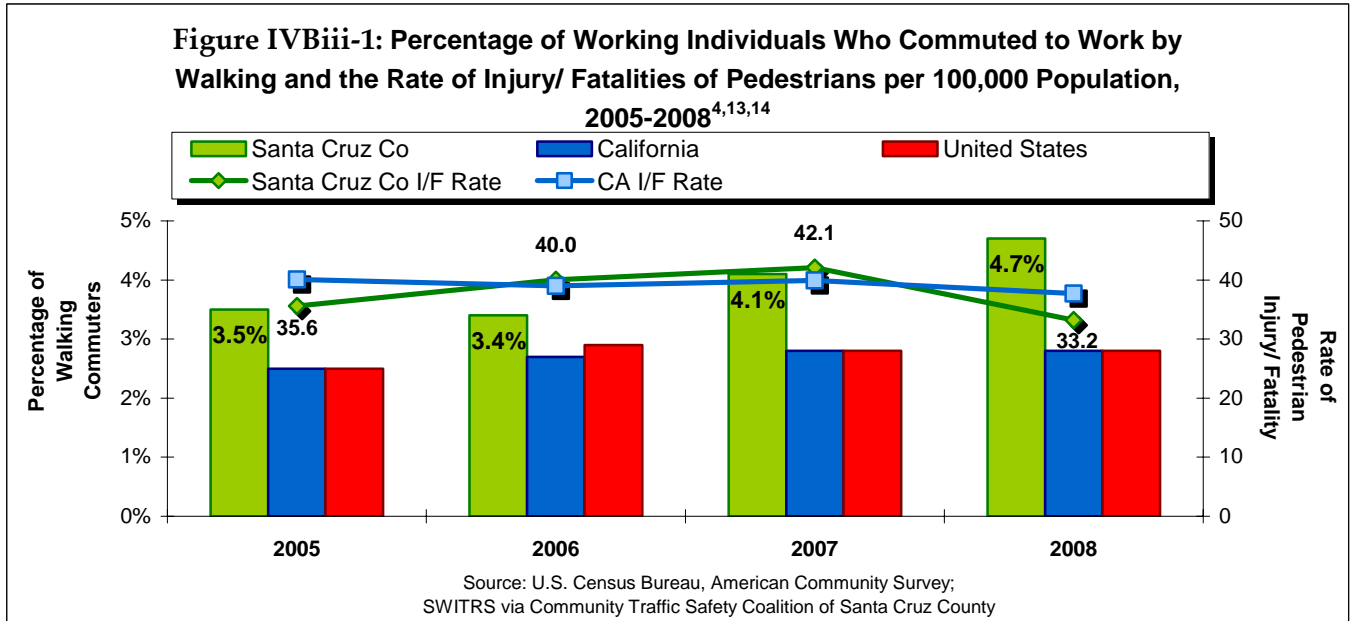
iii. TRANSPORTATION

Within Santa Cruz County, residents use alternative modes of transportation to work more often than residents of California and the United States. In Santa Cruz County, 4% of working individuals bike to work, which is a much higher rate than both California and the United States.⁴ Notably, the City of Santa Cruz was designated a Silver Level Bicycle-Friendly Community by the League of American Bicyclists in early 2008.⁹

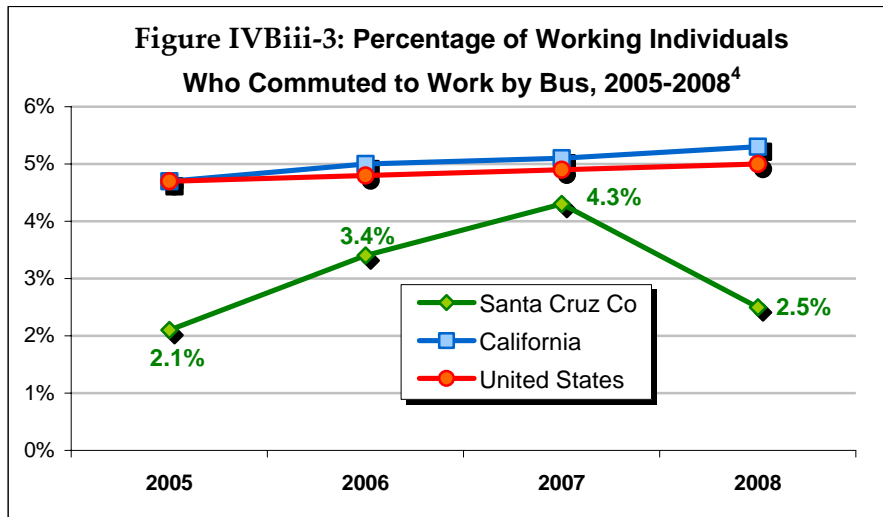
4.7% of working individuals walk to work in Santa Cruz County, compared to 2.8% statewide and 2.8% across the nation.⁴ This percentage has increased from 3.5% in 2005.⁴ Pedestrian facilities in Santa Cruz County range from large sidewalks in city centers with conveniently located businesses to rural roads without sidewalks. Unfortunately, poor driving behaviors and poorly maintained or absent sidewalks often affect community walkability in Santa Cruz County.^{10,11} Programs such as Pace Car and Ride n' Stride Bicycle and Pedestrian Safety Program have been initiated to improve transportation conditions for all members of the community.¹²

The proportion of working individuals who walk or bike to work is significantly higher in Santa Cruz County than in California or the United States, while the proportion of Santa Cruz County commuters who use the bus is lower than in the United States and California (Figure IVBiii-3).⁴ Additionally, between 2005 and 2008, increasing percentages of commuters have walked or biked to work in Santa Cruz County, and bus usage has experienced a slight increase from 2.1% to 2.5%.⁴ Meanwhile, across the state and the nation, bus usage has progressively increased, while walking and biking have stayed stagnant or decreased.

iii. TRANSPORTATION (CONT.)



While walking and bicycling to commute to work are considered health-conscious modes of transportation, a pedestrian or bicyclist faces a different set of dangers and safety precautions than a driver does. In the United States, 37,261 people were killed in traffic accidents in 2008, and 4,378 (12%) of them were pedestrians. 716 (rate of 1.44 per 100,000 population) or 2% of them were pedalcyclists (includes bicycles, tricycles, etc).¹³ The national pedestrian injury/fatality rate for 2008 was 24.1 per 100,000 population.¹³ In California there were 3,401 traffic fatalities in 2008, and 642 (18.9%) were pedestrian fatalities, for a rate of 1.7 fatalities per 100,000 population.¹⁴ There were 130 bicyclist fatalities, for a rate of 0.4 fatalities per 100,000 population.¹⁴ The combined pedestrian injury/fatality rate increased in 2006 and 2007, but 2008 was lower than the 2005 rate, even though commuting to work by walking has continued to increase (Figure IVBiii-1).^{13,14} The combined bicyclist injury/fatality rate increased dramatically by 29% between 2005 and 2008, corresponding with the 67% increase of those commuting to work by bicycle during that same time period (Figure IVBiii-2).^{13,14}



Primary Prevention Activities	<ul style="list-style-type: none"> ▪ To improve safe bicycling practices in the county, the Community Traffic Safety Coalition (CTSC) developed a Bicycle Traffic Safety School in 2008 for bicycle traffic offenders.¹² ▪ Programs such as Pace Car and Ride n' Stride Bicycle and Pedestrian Safety Program have been initiated to improve transportation conditions for all members of the community.¹²
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Sources	<ol style="list-style-type: none"> 1. UCLA Center for Health Policy Research. "Designed For Disease: The Link Between Local Food Environments and Obesity and Diabetes (County RFEI Tables)." 29 Apr 2008. http://www.publichealthadvocacy.org/PDFs/RFEI_countycharts.pdf 2. California Health Interview Survey 2001, 2003, 2005, 2007. http://www.chis.ucla.edu/main/default.asp?timeout=1 3. University of Wisconsin Population Health Institute. County Health Rankings 2010. Accessed July-September 2010. www.countyhealthrankings.org 4. U.S. Census Bureau. <i>American Community Survey: Economic Characteristics</i>, 2006 Estimates. Accessed May 2010. <http://factfinder.census.gov/>. 5. California Center for Public Health Advocacy. "Searching for Healthy Food: The Food Landscape in California Cities and Counties." January 2007. http://www.publichealthadvocacy.org/searchingforhealthyfood.html 6. United States Department of Agriculture. "Food Security Resources." <u>United States Food and Agriculture Food and Nutrition Service</u>. 3 Jul 2008. http://www.fns.usda.gov/fsec/. 7. Applied Survey Research. <u>Community Assessment Project Report</u>. Year 15. 2009. http://www.appliedsurveyresearch.org/projects/cap.html 8. U.S. Census Bureau. Food Security Supplement to the Current Population Survey (CPS). 9. League of American Bicyclists. <u>Bike Friendly Community Designation, 2007</u>. 01 May 2008. http://www.bikeleague.org/media/press/. 10. The Nutrition and Fitness Collaborative of the Central Coast. <u>Taking a Step in the Right Direction! Placing a Premium on Health by Promoting More Walkable Central Coast Communities</u>. August 2007. http://www.co.monterey.ca.us/health/CommunityHealth/pdfs/TakingAstep.pdf. 11. The Nutrition and Fitness Collaborative of the Central Coast. <u>1999 Santa Cruz County Walk-ability Survey</u>. 12. Community Traffic Safety Coalition of Santa Cruz County. <u>CTSC- Projects, May 2010</u>. http://www.sctrfficsafety.org/projects.html 13. National Highway Traffic Safety Administration's National Center for Statistics and Analysis. <u>Traffic Safety Facts 2008 Data</u>. Accessed 15 Sep 2010. http://www.walkinginfo.org/facts/docs/PedTSF_2008.pdf 14. Community Traffic Safety Coalition of Santa Cruz. <u>2008 Bicycle (Pedestrian) State of the County Health Reports</u>. Accessed 15 Sep 2010. http://www.sctrfficsafety.org/safe_info.html.
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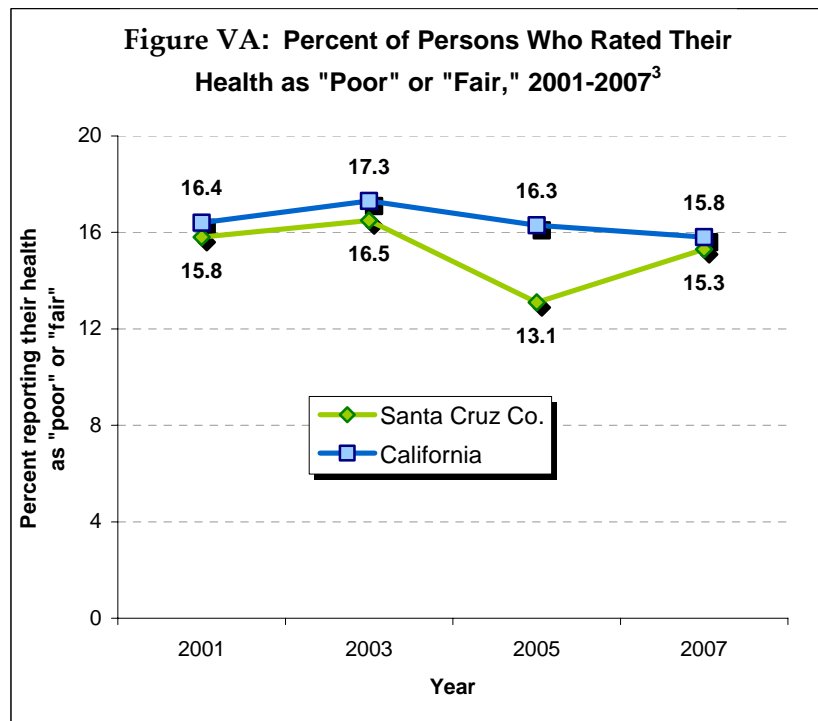
A-C. HEALTHY DAYS

Importance	Quality of life refers to a person's perception of their own physical and mental well-being. Increasing understanding of quality of life issues will hopefully help people live more meaningful and enjoyable lives.
Definitions	<ul style="list-style-type: none"> ▪ Health: a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organization, 1948).¹

A. POOR (OR FAIR) OVERALL HEALTH DAYS

The Centers for Disease Control and Prevention conducts the nationwide survey known as the Behavioral Risk Factor Surveillance System (BRFSS). Due to small sampling sizes in Santa Cruz County, data for the years 2002 through 2008 were combined. According to the 2010 MATCH Report, **16%** of Santa Cruz County adults and **18%** of state residents (age-adjusted) said their health was only “poor” or “fair” when asked, “In general, would you say that your health is excellent, very good, good, fair, or poor?”²

The figure below provides another look at this question over a few years, 2001 through 2007, using data collected via the statewide California Health Interview Survey (CHIS). This data can often be unstable at the county level, due to small sampling sizes. However, the range of values is similar to the BRFSS data cited in the MATCH report, and Santa Cruz County remains consistently better than California. There is an effort to get this question added to the Santa Cruz County Community Assessment Project (CAP) *Telephone Survey* in upcoming years.



B. POOR (OR FAIR) PHYSICAL HEALTH DAYS

People’s reports of days when their physical health was not good are a reliable estimate of their recent health. BRFSS includes the following question, “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?” In Santa Cruz County between 2002 and 2008, the average adult (adjusted for age) said **3 days**, while the average California adult said **3.6 days**.² Unfortunately no similar question is asked by either CHIS or the CAP *Telephone Survey*.

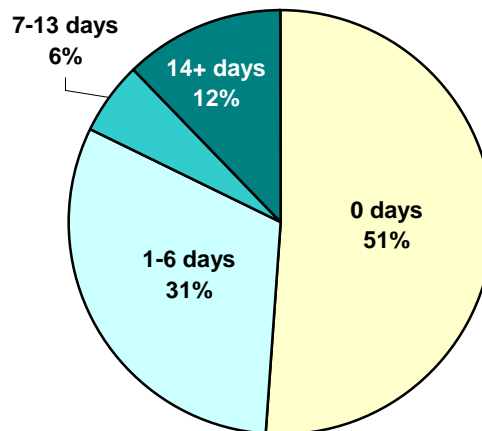
C. POOR (OR FAIR) MENTAL HEALTH DAYS

Overall health depends on both physical and mental well-being. The number of days when people report they had poor mental health represents an important facet of health-related quality of life. BRFSS asks the question similarly to physical health, “Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?” In Santa Cruz County between 2002 and 2008, the average adult (adjusted for age) said **3.6 days**, and the average California adult also said **3.6 days**.²

CHIS asked a similar question in 2005, “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?” The figure below shows nearly half (49%) of Santa Cruz County residents answering 1 or more days—which is slightly higher than the entire state, with 46% answering 1 or more days. In addition, **12.2%** respondents said there were 14 or more days of the past 30 when mental health (including stress, depression and problems with emotions) was perceived to be not good—this is the definition of a condition known as frequent mental distress (FMD).³

CAP also collected data on mental health; however, they asked with regard to the previous year. CAP asked, “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?” Overall, **13%** of residents answered, “yes” to the question in 2009. However, when looking at race/ethnicity separately, **11.3%** of White residents said yes, while nearly twice as many Latinos (or **21.7%**) said yes.⁴

Figure VC: Number of Days in Poor Mental Health During Past Month, Santa Cruz County Residents, 2005³



Sources

1. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.
2. University of Wisconsin Population Health Institute. *County Health Rankings 2010*. <http://www.countyhealthrankings.org/>.
3. University of California, Los Angeles. California Health Interview Survey (CHIS). <http://www.chis.ucla.edu>.
4. Applied Survey Research, Community Assessment Project Report. Year 15. 2009. <http://www.appliedsurveyresearch.org/projects/cap.html>.

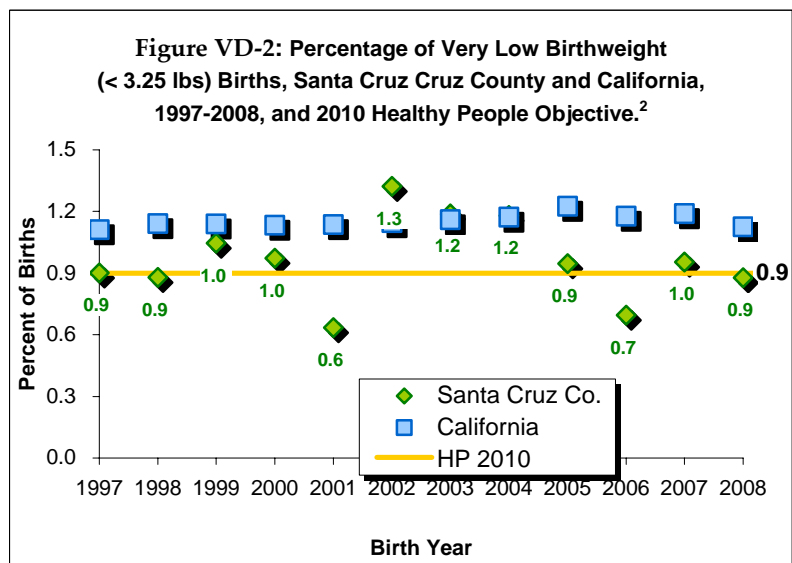
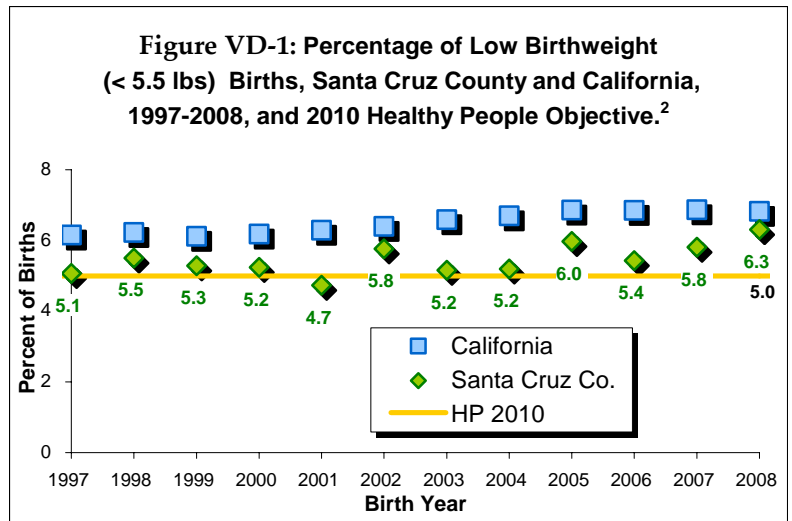
D. LOW BIRTHWEIGHT

<p>General Importance</p>	<p>About 1 in every 12 babies in the United States is born with low birthweight.¹ Advances in newborn medical care have greatly reduced the number of deaths associated with low birthweight. However, a small percentage of survivors develop mental retardation, learning problems, cerebral palsy, and vision and hearing loss.</p>
<p>General Definitions</p>	<p><u>Low Birthweight (LBW)</u>: Weight less than or equal to 2500 grams or 5.5 lbs. <u>Very Low Birthweight (VLBW)</u>: Weight less than or equal to 1500 grams or 3.5 lbs.</p>
<p>Healthy People 2010 Objective</p>	<ul style="list-style-type: none"> ▪ Reduce percent of low birth weight (< 5.5 lbs) to 5% of births ▪ Reduce percent of very low birth weight (< 2.5 lbs) to 0.9% of births

Premature labor (gestation < 37 weeks) often results in the birth of a low birth weight baby (under 2500g or 5.5 lbs).¹ Although the causes are not fully understood, there is a significantly elevated risk for mothers who previously had a premature baby, mothers pregnant with twins, triplets or more, and mothers with certain abnormalities of the uterus or cervix. Other possible risk factors include birth defects, chronic health problems in the mothers, smoking, alcohol and illicit drug use, certain infections, placental problems, inadequate maternal weight gain, and socioeconomic factors.¹

Low birth weight babies start out life with greater odds of having health problems during the newborn period as well as later in life, with greater risk of neurological problems, learning disabilities, and both acute and chronic disease.¹ Many of these babies require specialized care in a neonatal intensive care unit. Serious medical problems are most common in babies born at very low birth weight (under 1500g or 3.5 lbs).

In Santa Cruz County, there has been a significant increase in the percentage of low birth weight births from 1997 to 2008 (see Figure VD-1).² By race/ethnicity, the percentage is increasing among White mothers, while not significantly changing among Latina mothers.² This difference might be partly due to multiple births (twins/triplets), which have been more frequent among low birth weight births to White mothers than to Latina mothers. Over the past three years, 28%-50% of low birth weight births to White mothers were multiple births, compared to 17%-18% of low birth weight births to Hispanic mothers.³



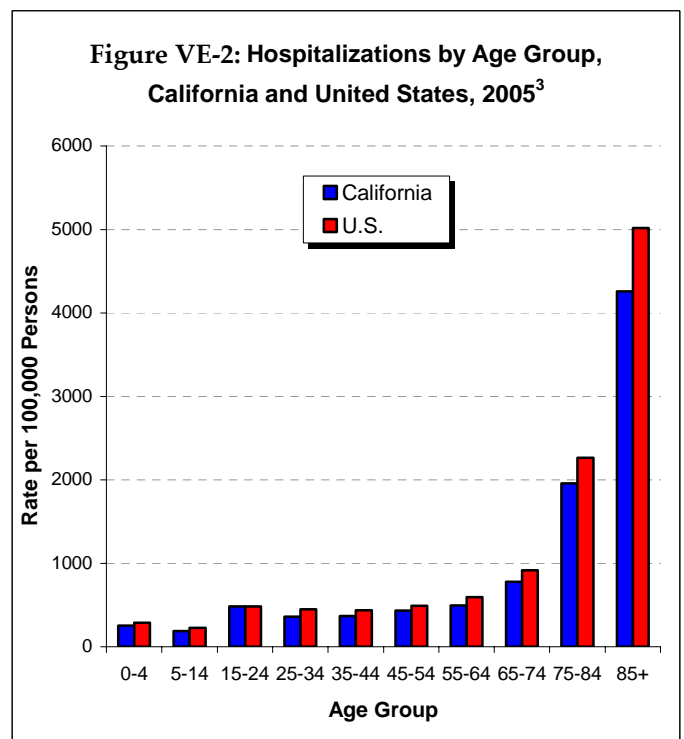
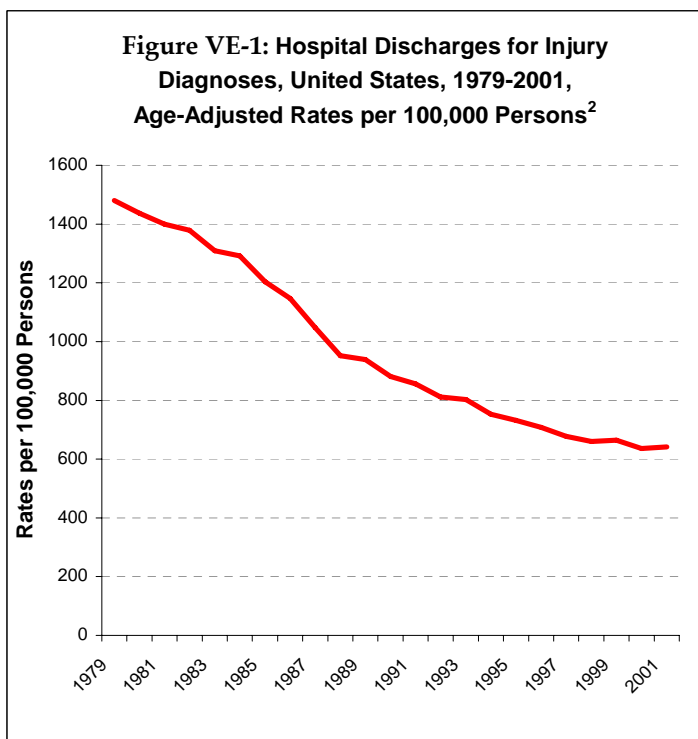
<p>Primary Prevention Activities</p>	<ul style="list-style-type: none"> ▪ <u>Comprehensive Perinatal Services Program (CPSP)</u> Health care practitioners in the community provide prenatal care that also includes assessments, education, childbirth education classes, support, and referrals for other needed services. All pregnant Central Coast Alliance for Health members and pregnancy-only Medi-Cal recipients are eligible to receive services when attending a CPSP provider for prenatal care. ▪ <u>Pregnancy Outreach and Education (POE)</u> Program provides education, information, referrals, and coordination to assist pregnant women in obtaining early and comprehensive prenatal health care and other needed services. In particular, the program assists pregnant women with substance use and/or mental health concerns.
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<p>Sources</p>	<ol style="list-style-type: none"> 1. Low Birthweight Quick Reference: Fact Sheet. March of Dimes. May 2008. http://www.marchofdimes.com/professionals/14332_1153.asp 2. California County MCAH Data, Santa Cruz County. Family Health Outcomes Project (FHOP). University of California, San Francisco 27 Apr 2010 http://familymedicine.medschool.ucsf.edu/fhop/htm/ca_mcah/counties/44santacruz.htm 3. 2009 Birth Certificate Data (unpublished). County of Santa Cruz, Vital Statistics.
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E. NON-FATAL INJURIES

Importance	Non-fatal injuries are responsible for disability and lost productivity, pain and suffering, and medical costs. They also serve as an indicator of risk for fatal injuries. Injuries cost over \$400 billion per year in medical expenses and lost productivity.
Highlights	<ul style="list-style-type: none"> ▪ Non-fatal injury rates fell steadily until about 2000, but have leveled off since. ▪ California's hospitalized injury rate remains well below the national average. ▪ Santa Cruz County's hospitalized injury rate is higher than the California average.
Definitions	Non-fatal injury: usually defined as an injury that requires hospitalization but does not cause death. Includes both intentional injuries (assault and attempted suicide) and unintentional injuries such as falls, motor vehicle accidents, etc.
Healthy People 2010 Objective	<ul style="list-style-type: none"> ▪ Reduce hospital emergency department visits caused by injuries to 126 per 1000 population. ▪ Reduce nonfatal injuries caused by motor vehicle crashes to 933 per 100,000 population. ▪ Reduce nonfatal poisonings to 292 per 100,000 population. ▪ Reduce nonfatal firearm injuries to 8.6 per 100,000 population.

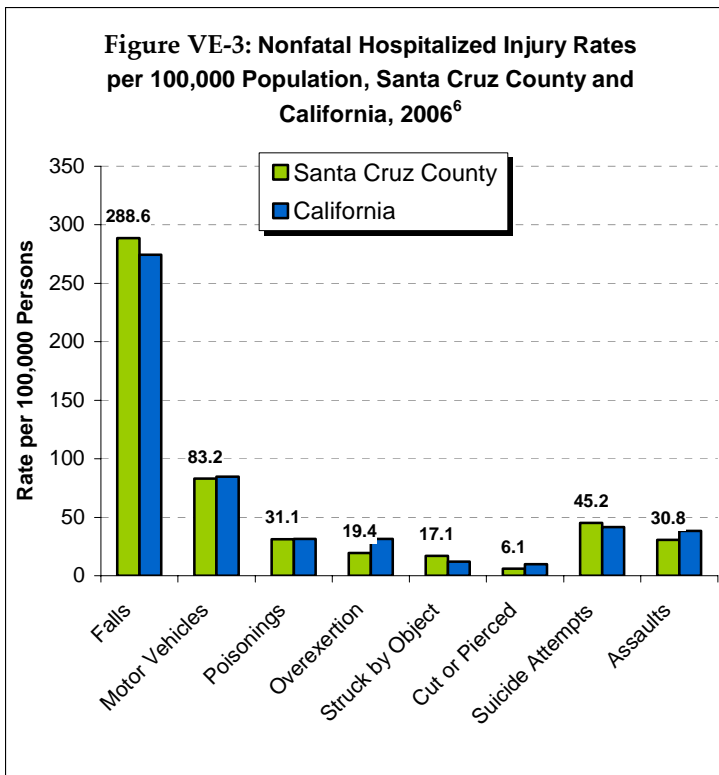
Non-fatal injuries are at least ten times as common as fatal injuries.¹ National rates of hospital discharge for injury diagnoses decreased steadily from 1979 through 2001 (Figure VE-1), dropping by an average of 4.3% per year; the age-adjusted rate fell from 1480 per 100,000 persons in 1979 to 642 in 2001.² The rate stayed essentially unchanged from the late 1990s through 2005.¹ In 1979 the rate among males was 44% higher than the rate among females, but rates have fallen faster among males than among females, and they are no longer much different from one another.² Rates among black women have dropped slightly below those among white men and women, but rates among black men remain elevated.²



NON-FATAL INJURIES (CONT.)

The rate of non-fatal injury hospitalizations is strongly linked to age, varying more than 20-fold between 5-14 year-olds and the very elderly (Figure VE-2).³ This may have much more to do with the fragility of the elderly than with a higher propensity for accidents, but both are probably important factors.

Californians in 2005 incurred a total of 183,962 injury hospitalization episodes,³ with an age-adjusted rate of 527.2 per 100,000 persons, which ranked the state 13th-best among the 33 states that provided data, comparing favorably to the overall U.S. rate of 605.3. California continues to have very low rates of hospitalization due to poisonings (55.1, 4th-best) and attempted suicides (29.6, 3rd-best). On the other hand, our rate of assault injury was 36.1, almost half again the national average, and ranked 30th out of 33 reporting states. The state's rates of 227.9 for falls and 76.6 for motor vehicle injuries were similar to the national rates, and ranked in the middle of reporting states. Firearms injuries, fire injuries, and drowning hospitalizations represent relatively small fractions of all injuries.



In California, in 2006, the most common causes of unintended injuries requiring hospital admission were falls, motor vehicle accidents, and poisoning.⁴ Falls are by far the most common cause of unintended injuries requiring emergency department visits,⁵ followed by striking or being struck by an object. Overexertion, motor vehicle accidents, and cuts or piercings are the third, fourth, and fifth most common categories.

Santa Cruz County's overall nonfatal hospitalized injury rate in 2006 (not age-adjusted) was 720.4 per 100,000 population, higher than the statewide rate of 662.5.⁶ The county had a higher rate of unintentional injuries than the state (569.7 versus 539.0), a slightly higher rate of self-inflicted injuries (45.2 v. 41.6), and a lower rate of assault injuries (30.8 v. 38.4) (Figure VE-3).

<p>Primary Prevention Activities</p>	<ul style="list-style-type: none"> ▪ Santa Cruz County Public Health maintains a traffic injury prevention program that encompasses automotive, bicycle, and pedestrian safety. The Child Passenger Safety Outreach and Education Program performs education and training about the installation and use of child car seats, and assists low-income families in obtaining car seats. ▪ Safe Kids Santa Cruz County is a coalition of the County Health Department, local police and fire departments, hospitals, family service organizations, health and child care providers, and others, which performs public education and advocacy and implements child passenger safety programs and services.
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Sources

1. Centers for Disease Control, National Center for Health Statistics. *Injury in the United States: 2007 Chartbook*. 2008. <http://www.cdc.gov/nchs/data/misc/injury2007.pdf>
2. Centers for Disease Control, National Center for Health Statistics. *National Trends in Injury Hospitalizations 1979-2001*. March 2005. http://www.cdc.gov/nchs/injury/injury_chartbook.htm
3. Centers for Disease Control, National Center for Injury Prevention and Control. *State Injury Indicators Report, Fourth Edition – 2005 Data*. <http://www.cdc.gov/Injury/indicators2005.html>
4. California Department of Health Services, EPICenter. http://www.applications.dhs.ca.gov/epicdata/content/sum_topfive.htm
5. Centers for Disease Control, National Center for Injury Prevention and Control. "National Estimates of the 10 Leading Causes of Nonfatal Injuries Treated in Hospital Emergency Departments, United States, 2007." <http://www.cdc.gov/injury/wisqars/LeadingCauses.html>
6. California Department of Health Services. EPICenter. <http://www.applications.dhs.ca.gov/epicdata/default.htm>

F. COMMUNICABLE DISEASES

Importance	Monitoring diseases and preventing their spread by educating and promoting health decreases the impact of infectious diseases in the community.
Definitions	<u>Communicable Diseases (CD)</u> : Diseases that are transmitted directly through contact with an infected individual or animal, or indirectly through a vector (such as a mosquito or tick), contaminated food or water, or fomites (contaminated surfaces, such as a tissue, blanket, or needle).
Healthy People 2010 Objectives	<ul style="list-style-type: none"> ▪ <u>Chlamydia</u>: Reduce rate to 300 cases per 100,000 population per year ▪ <u>Gonorrhea</u>: Reduce rate to 19 cases per 100,000 population per year

California law mandates that health care providers and laboratories report any known or suspected case of specified conditions of public health importance, such as certain communicable and non-communicable diseases, outbreaks, and unusual occurrences. Providers report to their local health authority, which is the source of the county’s data. Therefore, the accuracy of the data presented is limited by the quality and completeness of the disease reporting process. Additionally, since providers and labs can only report on patients who seek care and receive appropriate testing, data regarding persons who do not see a provider nor complete confirmatory lab testing are not included in the statistics in this section—which inherently skews the data towards the type of people who seek and receive health care.

i. TUBERCULOSIS

Tuberculosis (TB) is an airborne infection that has afflicted humans for thousands of years. Although one-third of the world’s population is believed to be infected with the TB germ, only 5-10% of those persons will go on to develop active (or contagious) TB. Nonetheless, tuberculosis continues to be one of the leading causes of death due to infectious disease in the world.

In 2008, Santa Cruz County had a TB incidence rate of 3.4 cases per 100,000 population, compared to a rate of 7 cases per 100,000 statewide,⁶ ranking the county 4th best among the 32 counties in California with 5 or more cases. In Santa Cruz County, rates are disproportionately high among Latinos and Asians. Most cases live in either Santa Cruz or Watsonville. A disproportion are homeless and/or consume excess alcohol (see Table VFi), making their case and contact management more labor intensive.¹ However, studies over the years have shown that resources spent on TB are necessary to keep TB under control.

Fortunately, only one case of poly-drug-resistant TB has been reported in Santa Cruz County, in 2003.¹

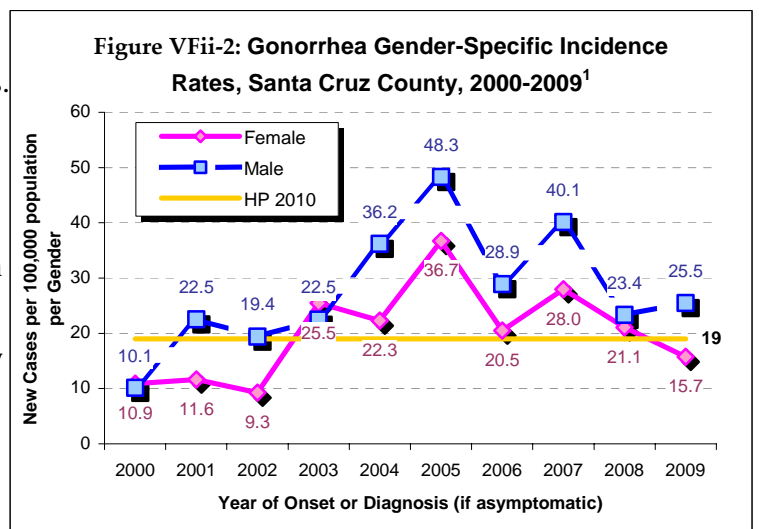
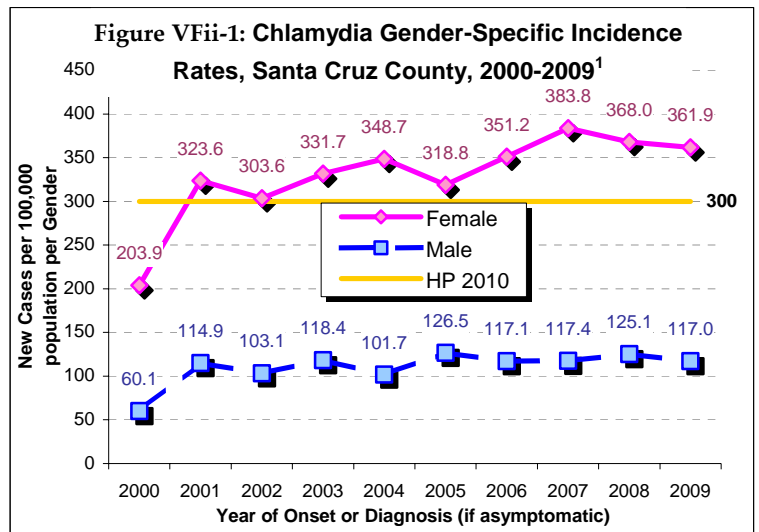
	Cases	Percent
GENDER		
Male	23	56%
Female	18	44%
AGE		
0-4	1	2%
5-14	1	2%
15-24	3	7%
25-44	16	39%
45-64	11	27%
65+	9	22%
ETHNICITY/RACE		
White	9	21%
Latino	21	50%
Asian/P.I.	8	19%
Black	2	5%
Am. Indian/ Alaska Native	2	5%
CITY OF RESIDENCE		
Santa Cruz	16	39%
Watsonville	18	44%
Elsewhere in SC County	7	17%
HOMELESS		
Yes	11	27%
No	30	73%
EXCESS ALCOHOL USE IN PAST YEAR		
Yes	9	23%
No	31	78%
5-YEAR TOTAL	41	100%

ii. SEXUALLY TRANSMITTED DISEASES

Sexually transmitted diseases (STDs) account for the largest number of reported diseases among Santa Cruz County residents. From 2006 to 2009, annual averages of **646** infections with chlamydia, **68** with gonorrhea, and approximately **6** cases of infectious syphilis (defined as primary, secondary or early latent) were reported for Santa Cruz County residents.²

Since 2000, chlamydia rates have been roughly **three** times as high among females as males, a ratio that has also been seen statewide for many years. One reason is that females typically have more occasions than do males to access health care services and be tested. In addition, the majority of chlamydia infections among men are asymptomatic, and there currently is no recommendation for screening males without symptoms. In Santa Cruz County, 2008 rates of chlamydia were highest among persons aged 19-24 for females (partly due to screening recommendations), and ages 25-29 for males. The overall incidence rate in Santa Cruz County was 249.7 cases per 100,000 residents, much better than the rate of 390.8 statewide.³

Gonorrhea cases in Santa Cruz County are more equally distributed by gender, although rates are usually higher among men (sometimes up to two-fold). The rates among both females and males are highest in the 15-19 age group. The overall incidence rate in Santa Cruz County was 22.8 cases per 100,000 residents, compared to a rate of 66.7 statewide.³



HIV & AIDS

HIV, or Human Immunodeficiency Virus, is a virus that can only be transmitted through contact with HIV-infected blood, semen, vaginal secretions, or breastmilk. HIV is the causative agent of AIDS, or Acquired Immunodeficiency Syndrome; only persons infected with HIV can progress to the more severe syndrome known as AIDS.

Since 1982, **843** Santa Cruz County residents have been diagnosed with HIV (212) or AIDS (631). As of the end of 2009, **494** of those persons (59%) were known to be living with either HIV (210) or AIDS (284).⁴ Incident cases (newly diagnosed cases) of AIDS have been decreasing since the early 1990s; however, from 2006 to 2009 an average of 12 new cases of HIV and 12 new cases of AIDS were reported each year.

Of the persons living with HIV or AIDS in Santa Cruz County, approximately 85% are male. The majority of cases were diagnosed between the ages of 30 and 49. In Santa Cruz County, a larger percentage of cases have been among Hispanics in recent years than in earlier years.

In the last five years, the primary mode of transmission among males with HIV or AIDS, accounting for 80% of new cases, is bisexual or homosexual contact. Among recent female cases, the primary mode of transmission (accounting for over 75% of new cases in the last five years) is heterosexual contact.

iii. ENTERICS

Enteric illnesses are those that are transmitted by mouth, usually through ingestion of contaminated food and/or water – see Figure VFiii for a list of the reportable enteric diseases and how many cases occurred between 2005 and 2009. The CD Unit begins an investigation of an enteric illness by finding out if the case works in a sensitive occupation or situation (SOS) such as a cook in a restaurant. Persons who are SOS are often restricted from working until they are no longer infectious. The CD Unit also investigates whether the illness has occurred in any of the case’s close contacts. If so, those persons are also assessed for whether or not they need to be restricted.

Enforcing these restrictions is one of the most obvious ways to protect the public’s health. Between 2005 and 2009, **61** persons were restricted from higher-risk situations (e.g., working in a daycare or restaurant).¹ During the same time period, it was found that enteric illnesses were most likely to occur in children under 10 years old, followed by persons 66 years and older. These two groups generally have lower-functioning immune systems.

iv. OUTBREAKS

The Santa Cruz County CD Unit investigated 25 outbreaks reported between July 2008 and June 2009.¹ Of these outbreaks, 2 were caused by vaccine-preventable diseases (chicken pox), 9 were either suspected or confirmed to be caused by norovirus (a.k.a. “stomach flu”), and the remaining outbreaks were caused by either scabies, salmonella, rhinovirus, streptococcus, or head lice. Long-Term Care Facilities (LTCFs) are the most common sites for outbreaks to occur, be recognized, and be reported (see Table VFiv).¹

Table VFiii: Enteric Illnesses, Santa Cruz County, 2005-2009¹

Enteric Illness	Count
Amebiasis	5
Campylobacteriosis	251
Cryptosporidium	16
Cysticercosis/Taeniasis	4
E. coli (pathogenic)	19
Giardiasis	82
Hepatitis A	11
Listeria	6
Salmonella	222
Scombroid Fish Poisoning	1
Shigella	71
Typhoid Fever	4
Vibrio infections	8
Yersiniosis	4
TOTAL	704

Table VFiv: Reported Disease Outbreaks, Santa Cruz County, July 2008 - June 2009¹

Date	Location Type	Etiology	~ # ill
Jul-08	Long-Term Care Facility (LTCF)	Scabies	5
"	LTC Facility	Scabies	16
"	Restaurant(s)	Salmonella	17
Oct-08	LTC Facility	Rhinovirus	31
"	LTC Facility	Norovirus - confirmed	14
Nov-08	School	Chicken Pox	8
"	School	Chicken Pox	9
Dec-08	School	Head Lice	61
"	LTC Facility	Scabies	2
Jan-09	LTC Facility	Norovirus - confirmed	30
"	LTC Facility	Norovirus - confirmed	46
"	School	Norovirus - confirmed	58
"	Preschool	Head Lice	7
"	LTC Facility	Norovirus - suspected	23
"	Corrections	Norovirus - suspected	9
Feb-09	School	Streptococcus	15
"	LTC Facility	Norovirus - suspected	35
Apr-09	Private Party	Foodborne (unknown)	15
"	School	Norovirus - confirmed	18
"	LTC Facility	Norovirus - suspected	34
May-09	Preschool	Streptococcus	3
Jun-09	Residential Care	Influenza (H1N1) 2009	5
"	School	Influenza (H1N1) 2009	25
"	Children's Center	Head Lice	6
"	Camp	Influenza (H1N1) 2009	32
TOTAL		25	524

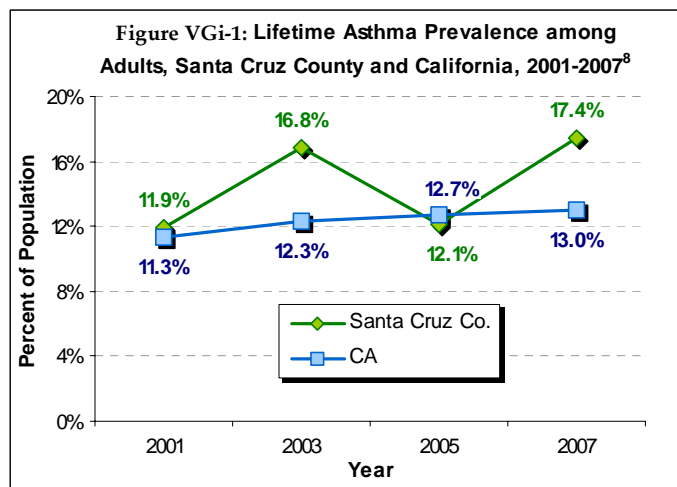
<p>Helpful Websites</p>	<ul style="list-style-type: none"> ▪ World Health Organization (WHO): http://www.who.int/topics/infectious_diseases/en/index.html ▪ Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/ncezid/ ▪ California Department of Public Health (CDPH): http://www.cdph.ca.gov/programs/cid/Pages/default.aspx ▪ County of Santa Cruz: http://www.santacruzhealth.org/phealth/cd/3communicable.htm
<p>Primary Prevention Activities</p>	<ul style="list-style-type: none"> ▪ Interviewing cases to learn about potential sources and/or spread. ▪ Providing education. ▪ Facilitating vaccination and/or other treatment to mitigate illness. ▪ Imposing restriction to help prevent further morbidity.

<p>Sources</p>	<ol style="list-style-type: none"> 1. County of Santa Cruz, Public Health Department, Communicable Disease Unit (Unpublished Data); May 2010. 2. <i>California Local Health Jurisdiction STD Data Summaries, 2008 Provisional Data</i> (July 2009). http://www.cdph.ca.gov/data/statistics/Documents/STD-Data-LHJ-SantaCruz.pdf. 3. County of Santa Cruz, Public Health Department, HIV/AIDS Unit; (Unpublished Data); Feb 2010. 4. County of Santa Cruz, Provisional Counts of Selected Reportable Conditions by Quarter and Year of "Best Onset Date," Santa Cruz County Residents, 2006-2010. http://www.santacruzhealth.org/pdf/CDStats2006-2010.pdf. 5. California Department of Public Health. Report on Tuberculosis in California, 2008. August 2009. http://www.cdph.ca.gov/data/statistics/Pages/TuberculosisDiseaseData.aspx
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G-i. CHRONIC DISEASE (ASTHMA)

<p>Importance</p>	<p>Asthma is one of the most common chronic diseases in the United States; 16.4 million adults (7.3%) and 7.0 million children (9.4%) currently have asthma.^{1,2,3} Approximately 3.7 million adults (13.7%) and 1.7 million children (13.3%) in California have been diagnosed with asthma at some point in their lives.¹ In the past 10 years, the prevalence of asthma has increased, but severe outcomes from asthma have decreased.¹ Children make up a large part of the asthma burden.¹ On average, a child with asthma misses 2.6 days of school per year due to his/her asthma.¹ In addition to its impacts on health, asthma has a substantial economic impact. In 2000, total costs due to asthma in the United States were estimated at \$18.3 billion.^{1,2,3}</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ From 1999-2004, there were an average of 508 asthma deaths per year, a rate of 15.5 per million California residents.¹ ▪ These deaths corresponded to an average of 8,400 years of potential life lost each year, or 16 years of potential life lost per person.¹ ▪ The rate of asthma deaths in California has been decreasing from 1999-2004.¹ ▪ In Santa Cruz County, approximately 29,000 children and adults have been diagnosed with asthma.⁴ ▪ The American Thoracic Society estimates that 15% of adult asthma is related to workplace exposure.^{4,5} This means that an estimated 2,000 adults in Santa Cruz County may have work-related asthma.^{4,5}
<p>Definitions</p>	<p><u>Asthma:</u> Asthma is a chronic inflammatory lung condition. Asthma is characterized by ongoing inflammation of the lining of the lungs. Frequently, this inflammation does not cause symptoms. Other times, the lung passages undergo spasms, resulting in symptoms such as recurrent flares or exacerbations of breathlessness, wheezing, coughing, and chest tightness.^{1,6}</p>
<p>Healthy People 2010 Objective⁷</p>	<p>“Promote respiratory health through better prevention, detection, treatment, and education efforts.”</p> <ul style="list-style-type: none"> ▪ Reduce asthma deaths. (Target: 1 per million for children 0 to 14 years, 2 per million for adolescents and adults aged 15 to 34 years, 9 per million for adults aged 35 to 67 years, and 60 per million for adults aged 65 years and older) ▪ Reduce hospitalizations for asthma. (Target: 25 per 10,000 for children under age 5 years, 7.7 per 10,000 for children and adults aged 5 to 64 years, and 11 per 10,000 for adults aged 65 years and older) ▪ Reduce hospital emergency department visits for asthma. (Target: 80 per 10,000 for children under age 5 years, 50 per 10,000 for children and adults aged 5 to 64 years, and 15 per 10,000 for adults aged 65 years and older)

A person has lifetime asthma if he or she has been diagnosed with asthma by a health care provider at any time in the past, whereas a person has current asthma if he or she reports still having asthma.¹ Not everyone with asthma continues to have asthma symptoms.¹ Figure VGi-1 summarizes the lifetime asthma prevalence of adults (ages 18 and older) at the state and county level from 2001 to 2007.⁸ The percentage of adults with lifetime asthma has increased, but the percentage of adults with current asthma has not changed by much.¹ Lifetime asthma prevalence in California is higher than the national prevalence, which was 11% in 2007.^{1,9}



ASTHMA (CONT.)

Figure VGi-2 shows lifetime asthma prevalence among children and adolescents (under 18 years old) for the state and county. Statewide levels show a steady increase, while local rates have much greater fluctuation, as is expected due to smaller sample sizes on the county level.⁸

Figure VGi-3 shows asthma prevalence by gender and age in 2007. State and national asthma prevalence were significantly higher for male children than for female children.^{8,9} But among adults, prevalences were higher for females than for males.^{8,9} Santa Cruz County rates for children are unstable because of small sample sizes.

Figure VGi-4 shows statewide asthma prevalence by race/ethnicity. Blacks had the highest prevalence of asthma, significantly higher than other race/ethnicity groups.⁸ Latinos had the lowest asthma prevalence.

Tables VGi-1 and VGi-2 summarize the number of hospitalizations and emergency department (ED) visits due to asthma. In 2005, there were 144,945 asthma ED visits in California that did not result in an inpatient hospitalization.¹ This translates to an estimated yearly rate of 39.1 ED visits per 10,000 residents.¹ African-Americans have the highest rate of asthma ED visits (106.9 per 10,000) compared to Whites (34.9 per 10,000).¹ Rates of asthma ED visits decrease with age, with the highest rate in the youngest age group at 92.6 per 10,000.¹ From 1995-2005 there were over 38,000 asthma hospitalizations per year.¹ Of the people who were hospitalized for asthma in 2005, 13% were hospitalized more than once (repeat hospitalizations).¹ Asthma hospitalization rates in California have decreased slightly in the past decade and have been consistently lower than national rates.¹ African-Americans consistently had higher rates of asthma hospitalizations than any other race/ethnicity.¹ Asthma hospitalization rates are highest among children under 5 years of age and adults over the age of 65 years.¹

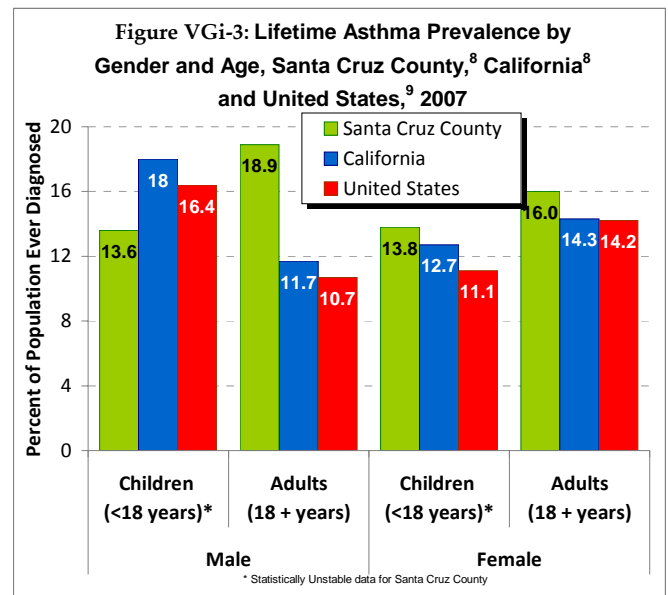
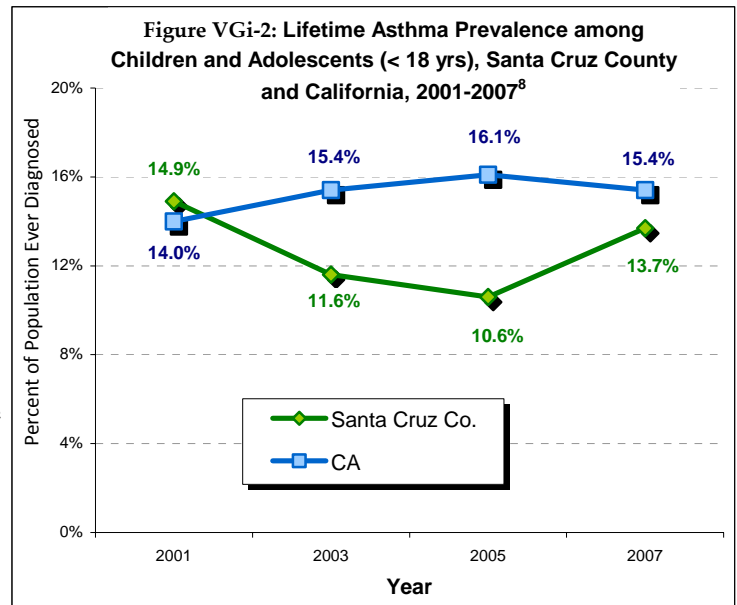
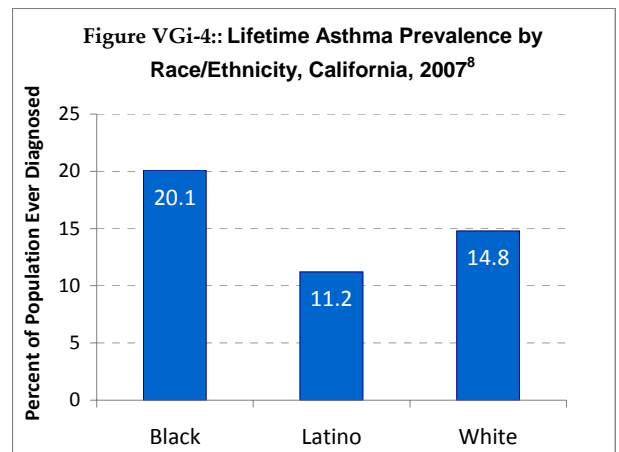


Table VGi-1: Number and Age-Adjusted Rate (per 10,000 residents) of Asthma Hospitalization, 2006.⁴

Age	Santa Cruz County		California	
	N	Rate	N	Rate
Children (0-4 years)	26	16.1	6,554	24.5
(5-17 years)	17	-	4,881	7.2
Total (0-17 years)	43	7.3	11,435	11.9
Adults (18-64 years)	64	3.4	13,376	5.8
65+ years	38	14.2	8,082	19.6
Total (18+ years)	102	5.2	21,818	8.1



ASTHMA (CONT.)

Asthma risk factors:

Exposure to tobacco smoke increases one's risk of asthma. In Santa Cruz County, 13% of adults currently smoke, while 6.7% of adults and children are exposed to second-hand smoke.⁴ People who are obese are more likely to have asthma. In Santa Cruz County, 12.1% of adults and adolescents are obese.⁴ Low income has been linked to more severe asthma.^{1,4} In Santa Cruz County, 10.8% of residents have household incomes below the Federal Poverty Level.⁴

Table VGi-2: Number and Age-Adjusted Rate (per 10,000 residents) of ED Visits due to Asthma, 2008⁴				
Age	Santa Cruz County		California	
	N	Rate	N	Rate
Children (0-4 years)	167	103.7	27,462	103.1
(5-17 years)	181	43.0	37,877	55.2
Total (0-17 years)	348	59.3	65,339	68.0
Adults (18-64 years)	427	23.8	84,589	35.9
65+ years	63	23.6	14,406	35.1
Total (18+ years)	490	23.8	98,995	35.8

Asthma management plan:

National guidelines recommend that health care providers give all their patients with asthma a written self-management plan.⁴ In Santa Cruz County, 70% of people with asthma have not received an asthma management plan from a health care provider.⁴

Primary Prevention Activities	<ul style="list-style-type: none"> ▪ California Asthma Partner is managed and supported by California Breathing, a program of the California Department of Public Health. The California Department of Public Health sponsored the development of The Strategic Plan for Asthma in California, 2008-2012. The purpose of the plan is to set a direction for asthma and help make a difference in the lives of people who have asthma over the next five years.¹⁰
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Sources	<ol style="list-style-type: none"> 1. Milet M, Tran S, Eatherton M, Flattery J, Kreutzer R. "The Burden of Asthma in California: A Surveillance Report." Richmond, CA: California Department of Health Services, Environmental Health Investigations Branch, June 2007. 2. Pleis JR, Lucas JW, Ward BW. Summary health statistics for U.S. adults: National Health Interview Survey, 2008. National Center for Health Statistics. <i>Vital Health Stat</i> 10(242). 2009. 3. Centers for Disease Control and Prevention. 1600 Clifton Rd., Atlanta, GA 30333, USA. cdcinfo@cdc.gov. 4. Santa Cruz County Asthma Profile, July 2008. www.californiabreathing.org. 5. Balmes J, Becklake M, Blanc P, et al. Environmental and Occupational Health Assembly, American Thoracic Society. American Thoracic Society. <i>Am J Respir Crit Care Med</i>. 2003;167:787-797. 6. California Environmental Health Tracking Program (CEHTP), California Department of Public Health, Environmental Health Investigation Branch. 2009. http://www.ehib.org/page.jsp?page_key=34#about_info. 7. U.S. Department of Health and Human Services. Healthy People 2010. Washington, DC: U.S. Government Printing Office. 2nd ed. 2000. 8. California Health Interview Survey (CHIS), 2001-2007. http://www.chis.ucla.edu/. 9. National Health Interview Survey, National Center for Health Statistics, CDC, 2008. 10. California Asthma Partners, Strategic Plan for Asthma in California, 2008-2012. http://www.asthmapartners.org/.
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G-ii. CHRONIC DISEASE (DIABETES)

<p>Importance</p>	<p>Diabetes was the 7th leading cause of death in the United States in 2006.¹ It is estimated that nearly 24 million people in the United States (8%) have diabetes, an increase of more than 3 million in two years.¹ Approximately 186,000 (0.2%) are younger than 20 years of age.¹ In 2007, nearly 1.6 million new cases of diabetes were diagnosed in people ages 20 years or older.¹ In 2007, the estimated cost of diabetes in the United States was approximately \$174 billion.¹</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ 70% of the diabetic population residing in the Santa Cruz County in 2005 were either overweight or obese.^{2,3} ▪ Santa Cruz County compared to all other counties in California has the lowest rate of people among the diabetic population in 2005 for not having a regular health care provider.^{2,3} ▪ Santa Cruz County is one of the counties in California who has the highest number of people among the diabetic population in 2005 who consumes more than five fruits and vegetables per day.^{2,3}
<p>Definitions</p>	<p><u>Diabetes:</u> Diabetes is a group of diseases marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. Diabetes can lead to serious complications and premature death, but people with diabetes can take steps to control the disease and lower the risk for complications.⁴ If the diabetes trend continues unchanged, one out of three children born in 2000 will develop diabetes in their lifetime.⁴</p> <p><u>Type 2 diabetes:</u> Type 2 diabetes was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes. In adults, type 2 diabetes accounts for about 90% to 95% of all diagnosed cases. Type 2 diabetes used to be uncommon in children, but the rate of diagnosis of type 2 diabetes in children and adolescents is increasing at an alarming rate. The incidence of type 2 diabetes in adolescents has increased 10-fold over the last decade.⁴ It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As insulin rises, the pancreas gradually loses the ability to produce it. Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical activity, and race/ethnicity.⁴</p>
<p>Healthy People 2010 Objective</p>	<p>“Through prevention programs, reduce the disease and economic burden of diabetes, and improve the quality of life for persons who have or are at risk for diabetes.”⁵</p> <ul style="list-style-type: none"> ▪ Increase the proportion of adults with diabetes whose condition has been diagnosed (Target: 80%) (Baseline: 68% of adults aged 20 years and older with diabetes had been diagnosed in 1988-1994).⁵ ▪ Increase the proportion of persons with diabetes who receive formal diabetes education (Target: 60%) (Baseline: 45% of persons with diabetes received formal diabetes education in 1988).⁵ ▪ Reduce diabetes-related deaths among persons with diabetes (Target: 7.8 deaths per 1000 persons with diabetes) (Baseline: 8.8 deaths per 1,000, listed anywhere on the death certificate, occurred in 1997).⁵

DIABETES (CONT.)

Figure VGii-1 shows the trends in diabetes rates from 2004 to 2008 on the national, state, and local levels. The nation is in the midst of an unprecedented epidemic of diabetes. Far more adults and children have the disease than ever before.⁶ The increase in diabetes among adults and the emergence of Type 2 diabetes in children are associated with the dramatic rise in obesity and overweight in recent years.⁶ The prevalence of diabetes may be up to twice as high in low-income populations as in high-income populations.⁷ In patients with diabetes, low income is associated with an increased rate of hospitalizations for acute diabetes-related complications.⁷ In 2007, Santa Cruz County had the second lowest rate among all California counties of diagnosed diabetes among adults (at least 20 years of age).¹

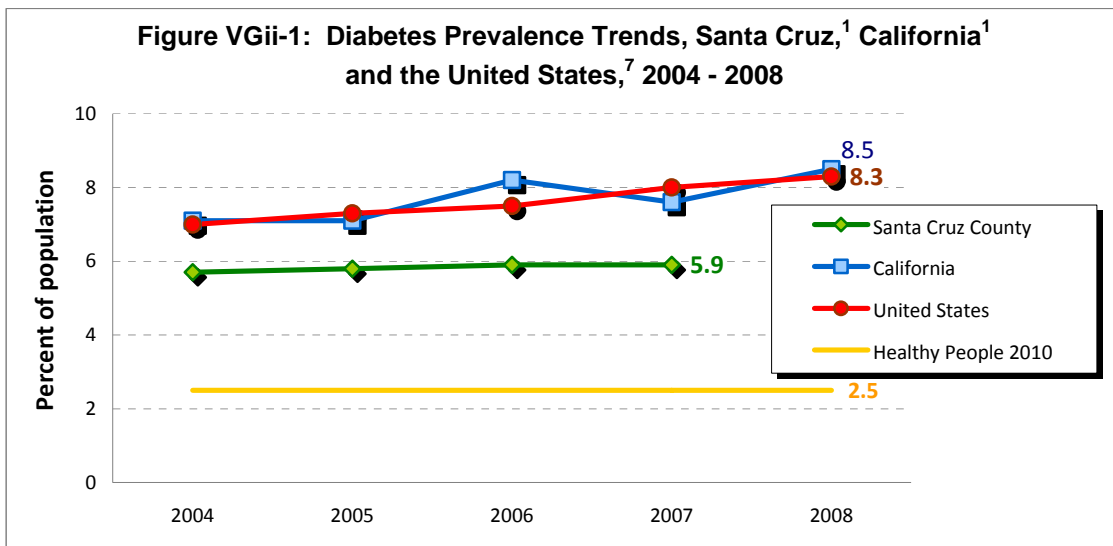
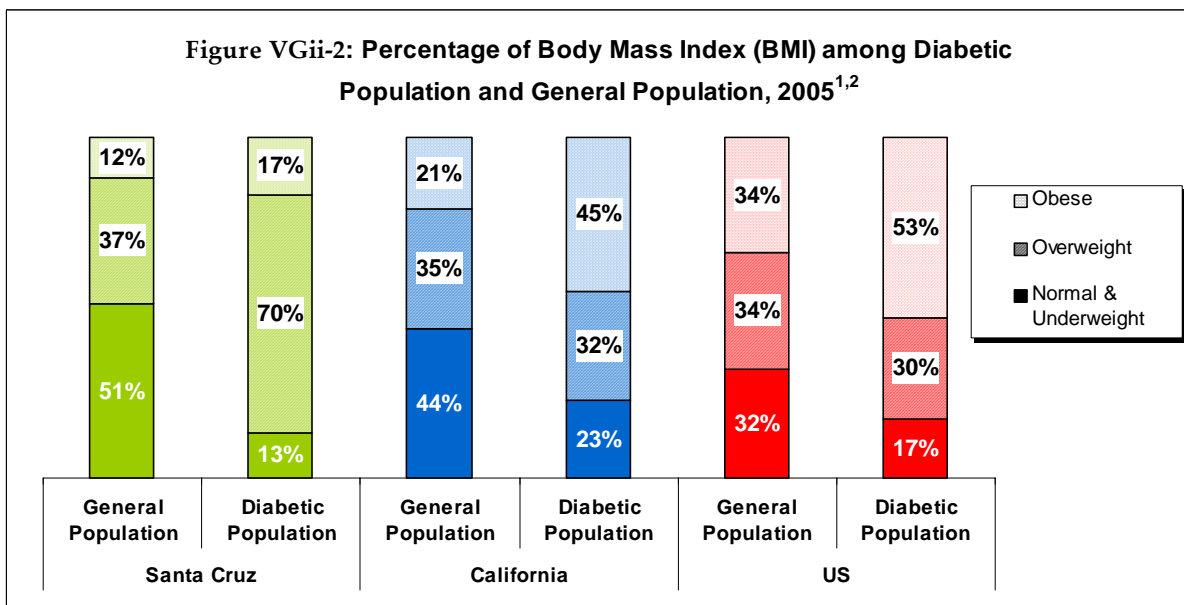


Figure VGii-2 compares the percentages of overweight and obesity among the diabetic population and the general population. From 1991 to 2001, obesity among adults rose 74% nationally; 65% of adults in the U.S. were overweight or obese, including 59% of Californians.^{8,9} The risk of developing diabetes increases with modest weight gain; a gain of 11 to 18 pounds doubles the risk.^{8,9} Studies have shown that type 2 diabetes increases strongly in prevalence with increasing weight class among both younger and older age groups.



DIABETES (CONT.)

Figure VGii-3 compares the health status among the diabetic population and the general population in Santa Cruz County. Data was obtained by the California Health Interview Survey (CHIS) 2005. Many diabetic complications (35-75%) can be attributed to hypertension.¹⁰ The prevalence of hypertension among diabetics appears to be double that among non-diabetics.^{10,11} Treatment of hypertension reduces the progression of diabetic renal disease. Likewise, improved glycemic control reduces vascular disease.¹¹ Individuals with diabetes are at increased risk of vascular disease.¹⁰

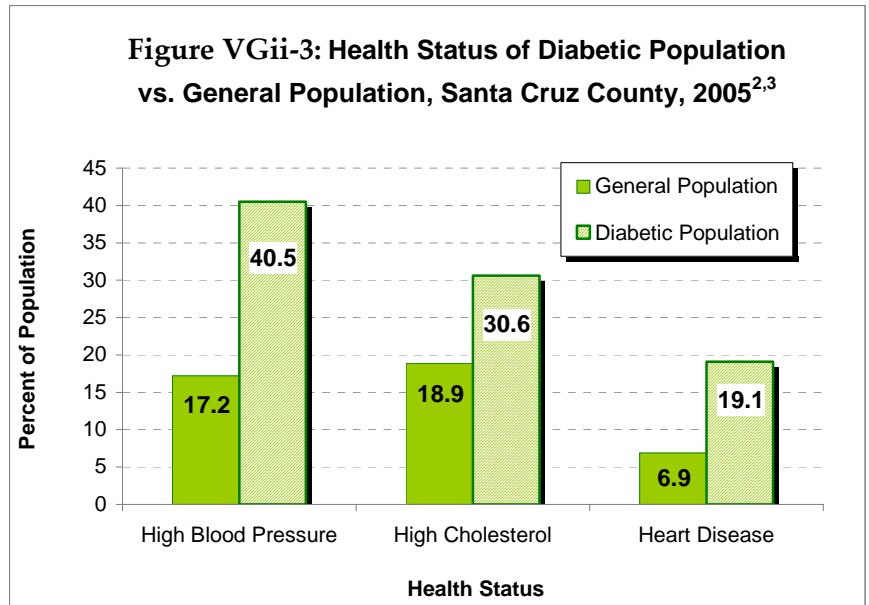
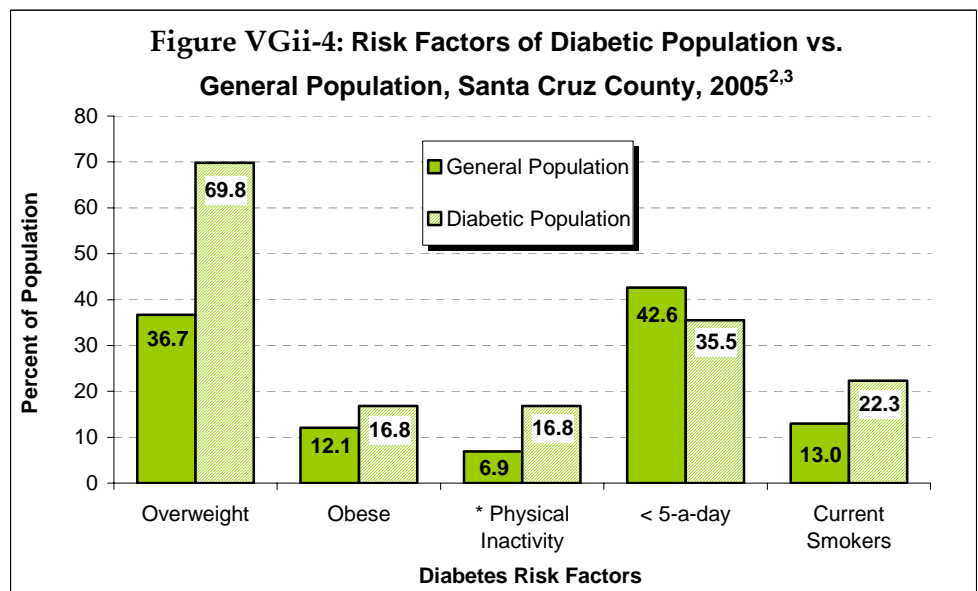


Figure VGii-4 describes general risk factors for the development of diabetes. Smoking raises blood sugar levels and reduces the body's ability to use insulin. Smoking only one cigarette can reduce the body's ability to use insulin by 15%.^{12,19} A recent study depicted as smoking increased, the rates of diabetes had also increased for both men and women.¹³ Among those who smoked greater than 2 packs of cigarettes per day, men had a 45% higher diabetes rate than men who had never smoked; the comparable increase for women was 74%.¹³ Obesity and diabetes among U.S. adults continue to rise in both sexes, all ages, all races, all educational levels, and all smoking levels.¹⁴ Moreover, adults with less than a high school education had the highest rate (13.0%) of developing diabetes among all educational levels.¹⁴ Both overweight and obese adults were 7.37 times more likely to develop diabetes than adults with normal weight.¹⁴ Both obesity and type 2 diabetes are preventable. Changes in lifestyle are effective in preventing both diabetes and obesity. Increasing physical activity, improving diet, and sustaining these lifestyle changes can reduce both body weight and the risk of developing diabetes.¹⁴



DIABETES (CONT.)

Figure VGii-5 describes some medical tests that should be performed by doctors who manage diabetes. Overall, there has been a significant increase in the percentage of Californians with diabetes who received formal diabetes management and education, from 51.4% in 2000 to 64.2% in 2006.¹⁵ Females had slightly higher rates of formal diabetic education and management than males, 65.8% versus 63.1% respectively.¹⁵ The percentage of the White population who received formal education and management of their diabetes rose from 51.4% in 2000 to 66.5% in 2006, while the percentage among Hispanics increased from 49.5% in 2000 to 63.8% in 2006.¹⁵

Blacks, Latinos, American Indians, some Asian Americans, and Pacific Islanders are at particularly high risk for developing type 2 diabetes and further complications.⁴ Type 2 diabetes in children and adolescents is being diagnosed more frequently among American Indians, Blacks, Latinos, and Asian/Pacific Islanders.⁴ After adjusting for age, the 2004-2006 national survey data aged 20 years or older showed that 6.6% of Whites, 7.5% of Asian Americans, 10.4% of Latinos, and 11.6%

of Blacks were diagnosed with diabetes. Among just the Latino population, rates for diagnosed diabetes were 8.2% for Cubans, 11.9% for Mexican Americans, and 12.6% for Puerto Ricans.⁴ The rate of new cases of type 1 diabetes was higher than the rate for type 2 diabetes among White youth aged 10-19 years. Among Black and Latino youth aged 10-19 years, the rates of new cases of type 1 and type 2 diabetes were similar.⁴

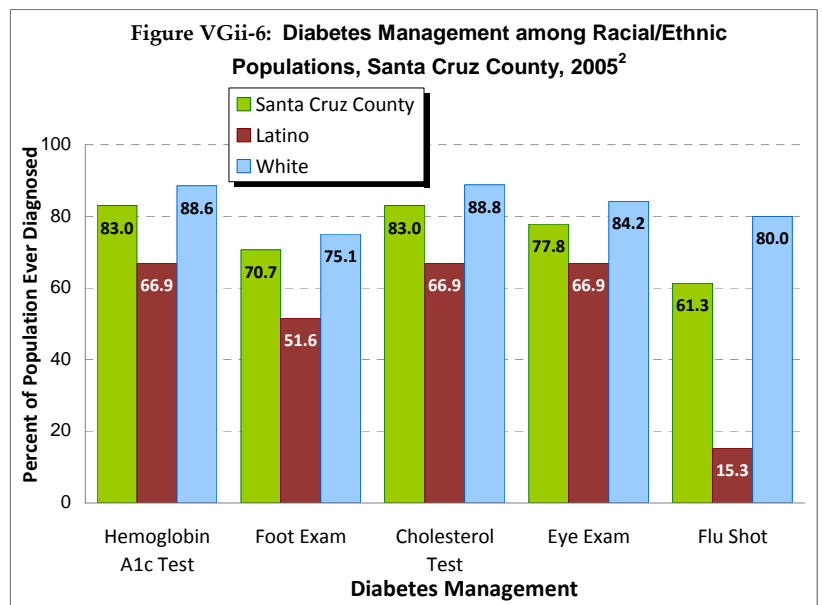
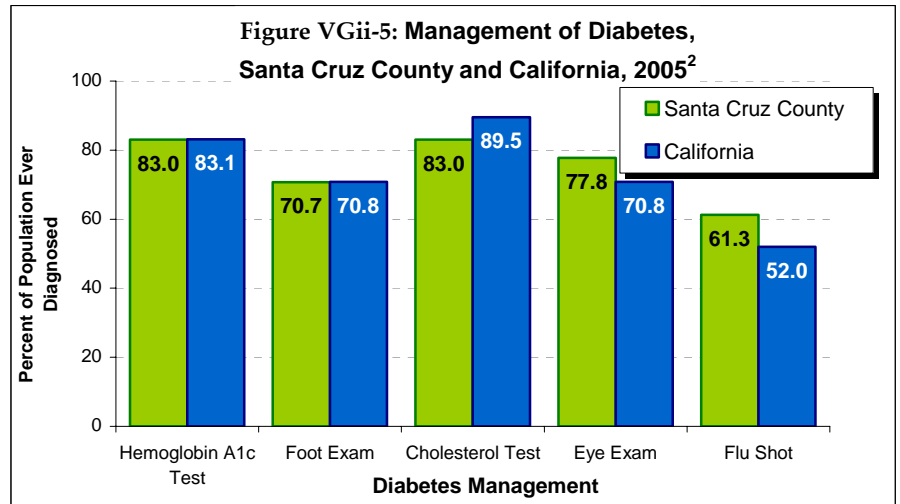
Complications of Diabetes:

Diabetes can lead to serious complications and premature death, but people with diabetes can take steps to control the disease and lower the risk of complications.⁴ Diabetes can lead to blindness, kidney damage, cardiovascular disease, and lower-limb amputations.⁴

Diabetes is the leading cause of new cases of blindness among adults.^{1,4,16} Diabetes is the leading cause of kidney failure, accounting for 44% of all new cases in 2005.^{1,4,16} More than 60% of non-traumatic lower-limb amputations occur in people with diabetes.^{1,4,16} Persons with poorly controlled diabetes (A1c > 9%) were three times more likely to have severe periodontitis than those without diabetes.^{1,4,16}

Diabetics are more likely to die with pneumonia or influenza than people who do not have diabetes.^{1,4}

Diabetes mellitus (DM) has been associated with increased rates of infection, which may be partially explained by a decreased T cell-mediated immune response.¹⁷ People with diabetes can lower the occurrence of these and other diabetes complications by controlling blood glucose, blood pressure, and blood lipids.⁴ People with diabetes are three times as likely to die of cardiovascular diseases. Smoking and diabetes together make a person 11 times more likely to die of a heart attack or stroke.^{12,19}



Primary Prevention Activities

- **Regional Diabetes Collaborative (RDC).** The mission of the RDC is to promote, support, and coordinate efforts to prevent and manage diabetes in Santa Cruz, San Benito, and Monterey Counties. The Regional Diabetes Collaborative was founded in 2002. For more information, please consult their website: www.pyhealthtrust.org¹⁷
- **Go for Health** is a broad-based collaborative in Santa Cruz County with over 150 members. The collaborative was first convened in August 2003 by the United Way of Santa Cruz County, the Children's Network, the Children's Food and Fitness Coalition, and the Pajaro Valley Health Trust to address the childhood obesity crisis in Santa Cruz County. Go for Health's goal is to increase healthy eating and regular physical activity among children and youth in Santa Cruz County.¹⁸

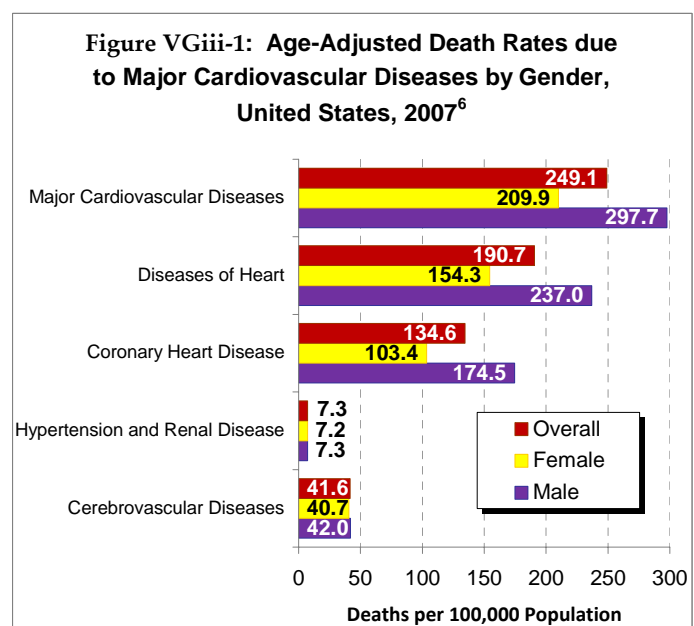
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G-iii. CHRONIC DISEASE (HEART DISEASE)

<p>Importance</p>	<p>Heart disease is the leading cause of death for both men and women in the United States.¹ Half the deaths due to heart disease in 2006 were in women.¹ In 2006, 631,636 people died of heart disease in the United States (more than one in every four deaths).¹ In 2009, an estimated 785,000 Americans had a first heart attack, with an average of 1 death every 37 seconds.^{1,2} In 2010, heart disease will cost the United States \$316.4 billion; this total includes the cost of health care services, medications, and loss of productivity.²</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ About 12 million people in the United States have coronary heart disease.³ ▪ According to 2006 mortality data, nearly 2300 Americans die of cardiovascular disease each day.² ▪ Among an estimated 45 million people with functional disabilities in the United States, heart disease, stroke, and hypertension are among the leading conditions that caused those disabilities.² ▪ Santa Cruz County ranked 23rd among all California counties for age-adjusted death rate due to coronary heart disease.⁴ ▪ Forty-six California counties and the state of California met the Healthy People 2010 National Objective.⁴
<p>Definitions</p>	<p><u>Heart Disease:</u> Heart disease includes a number of different diseases that affect the heart and circulatory system. Common types of heart diseases include angina and heart attack (also known as acute myocardial infarction or acute coronary syndrome); sudden cardiac arrest; arrhythmias such as atrial fibrillation; coronary artery disease (including atherosclerosis); cardiomyopathy; congenital heart defects; and heart failure. Coronary heart disease (CHD) accounts for the largest proportion of heart disease.³</p> <p><u>Coronary Heart Disease (CHD):</u> A condition in which the flow of blood to the heart muscle is reduced. When the coronary arteries become narrowed or clogged, they cannot supply enough blood to the heart.³</p>
<p>Healthy People 2010 Objective⁵</p>	<p>“Improve cardiovascular health and quality of life through prevention, detection, and treatment of risk factors.”</p> <ul style="list-style-type: none"> ▪ Reduce coronary heart disease deaths (Target: 166 deaths per 100,000 population) ▪ Reduce the proportion of adults with high blood pressure (Target:16%) ▪ Reduce the proportion of adults with high total blood cholesterol levels (Target: 17%)

Major cardiovascular diseases include diseases of the heart, hypertension and renal disease, and cerebrovascular diseases.⁶ For all categories of major cardiovascular disease deaths, males had higher age-adjusted death rates than females (see Figure VGiii-1).⁶ The death rate from major cardiovascular diseases is 42% higher for males than females.⁶ The death rate from diseases of the heart is 54% higher for males than females.⁶ The death rate for coronary heart disease is 69% higher for males than females.⁶

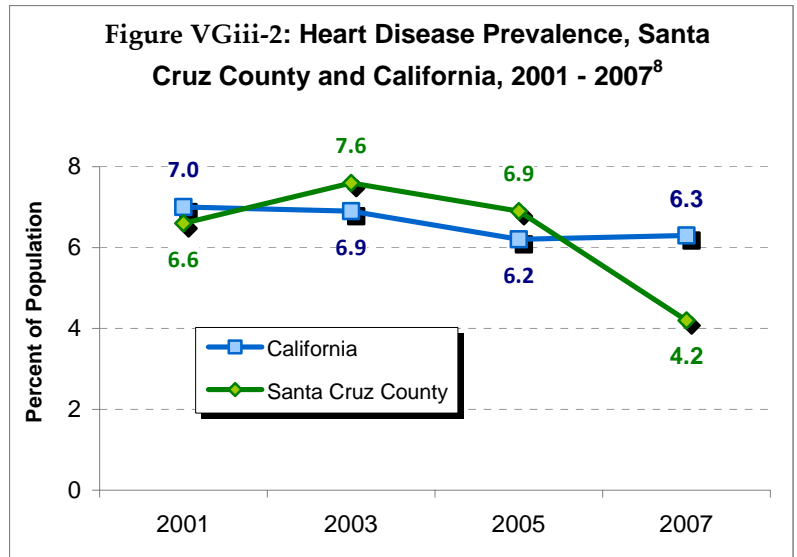


HEART DISEASE (CONT.)

Figure VGiii-2 describes the heart disease trend from 2001-2007. Although cardiovascular disease (CVD) rates are declining, CVD is still the number 1 cause of death in the United States, and risk factor control remains a challenge for many Americans; the prevalence of many risk factors is holding steady or increasing.⁷

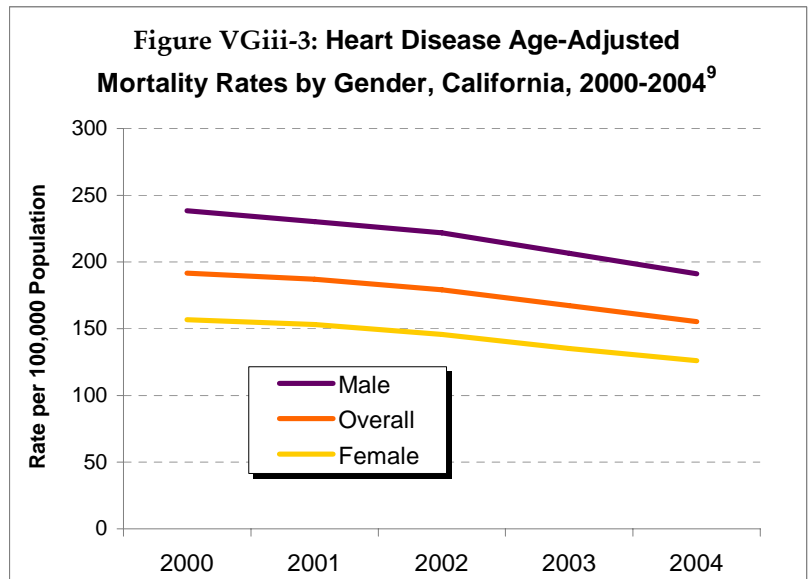
Overweight and obesity, in both adults and children, have been rising for several decades.⁷ Smoking, which raises the coronary heart disease death rate two to three times, clearly still remains the number one cause of death.⁷ More than 46 million U.S. adults are daily smokers, and about 4,000 people ages 12-17 begin smoking every day.⁷ Based on 1984-2004 National Health and Nutrition Examination

Surveys, it is projected that diabetes prevalence will more than double from 2005-2050 (at least 65% of people with diabetes die from some type of cardiovascular disease).⁷



U.S. hospitals in 2002-2004 showed improvements in clinical outcomes and in the number of patients receiving counseling at discharge, smoking cessation counseling, and medication counseling.⁷ While the quality of hospital care for patients with cardiovascular disease appears to be improving, the cost associated with CVD has increased over \$16 billion from 2007. Cardiovascular disease, the leading cause of disability and death in the United States, is highly preventable and very treatable – if people make themselves aware of their modifiable risk factors.⁷

Figure VGiii-3 depicts a 19.4% decline in California's overall heart disease mortality rate from 2000 through 2004.³ Although men's rates are about 50% higher than women's, men and women experienced similar percentage improvements –19.8% for men and 19.5% for women.³ California's overall heart disease mortality rate was 155.2 deaths per 100,000 for 2004.³ The counties in California with the highest rates of heart disease are located in the southeastern part of the state; Tulare, Kern, San Bernardino, and Riverside. The central coast and the San Francisco Bay area have relatively low rates of heart disease mortality.³



HEART DISEASE (CONT.)

Table VGiii-1 shows the percentages of California deaths that were due to heart disease, by race/ethnicity. Heart disease mortality rates improved among all race/ethnicity groups from 2000 through 2004 (data not shown).³ The decrease was greatest among American Indians (28.4%) and African-Americans (22.2%), while Latino rates dropped just 3.6%. Despite the substantial improvement for African-Americans, mortality rates in this group nonetheless remain considerably higher than those of the other racial/ethnic groups.

Race of Ethnic Group	% of Deaths
African Americans	25.8
American Indians or Alaska Natives	19.8
Asians or Pacific Islanders	24.6
Hispanics	22.7
Whites	27.5

Table VGiii-2 illustrates the modifiable risk factors for the development of heart disease and the percentage of United States adults with these risk factors. For people without heart disease, studies have shown that lowering cholesterol and blood pressure, maintaining a healthy weight, managing or preventing diabetes, eliminating smoking, and increasing physical activity can reduce the risk of developing heart disease.^{10,11} In 2003, approximately 37% of United States adults reported having two or more of the risk factors listed in table VGiii-2.¹¹

Risk Factors	%
Inactivity	39.5
Obesity	33.9
High Blood Pressure	30.5
Cigarette Smoking	20.8
High Cholesterol	15.6
Diabetes	10.1

Helpful Websites

- National Heart Lung and Blood Institute: http://www.nhlbi.nih.gov/health/dci/Diseases/hd/hd_risk.htm
- Centers for Disease Control and Prevention: <http://www.cdc.gov/heartdisease/facts.htm>
- American Heart Association: <http://www.heart.org/HEARTORG/>

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G-iv. CHRONIC DISEASE (CANCER)

<p>Importance</p>	<p>Cancer is the second leading cause of death among adults in the United States.^{1,2} 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 3.² The National Cancer Institute estimates that approximately 11.1 million Americans with a history of cancer were alive in January 2005.³ 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.^{2,3,4} In the United States, cancer accounts for nearly 1 in 4 deaths.^{2,3,4} The 5-year relative survival rate for all cancers diagnosed between 1996-2004 was 66%, up from 50% in 1975-1977.^{2,3,4} The improvement in survival reflects progress in diagnosing certain cancers at an earlier stage and improvements in treatment.¹</p>
<p>Highlights</p>	<ul style="list-style-type: none"> ▪ 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.⁵ ▪ 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%.⁵ ▪ 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.⁵ ▪ The overall incidence rate of new cancers in the Greater Bay Area declined by 16% for males and 10% for females from 1988-2005.⁶ ▪ From 1988-2005, cancer mortality rates in the Greater Bay Area declined by 27% for males and 21% for females.⁶
<p>Definitions</p>	<p>Cancer: 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.⁷ Cancer is not just one disease but many diseases. There are more than 100 different types of cancer.⁷ 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.⁷</p>
<p>Healthy People 2010 Objective⁸</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"> ▪ Reduce the overall cancer death rate. (Target 158.6 deaths per 100,000 population, a 21% improvement) ▪ 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) ▪ Increase the proportion of cancer survivors who are living 5 years or longer after diagnosis. (Target 70%, a 19% improvement)

Over 1.2 million Californians have a history of cancer, presently living either with cancer or with no evidence of cancer.⁹ 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.⁹ About 85,731 (three out of five) Californians who get cancer this year will be alive five years after diagnosis.⁹ The relative five-year survival rate for all cancers combined is 64%.⁹

CANCER (CONT.)

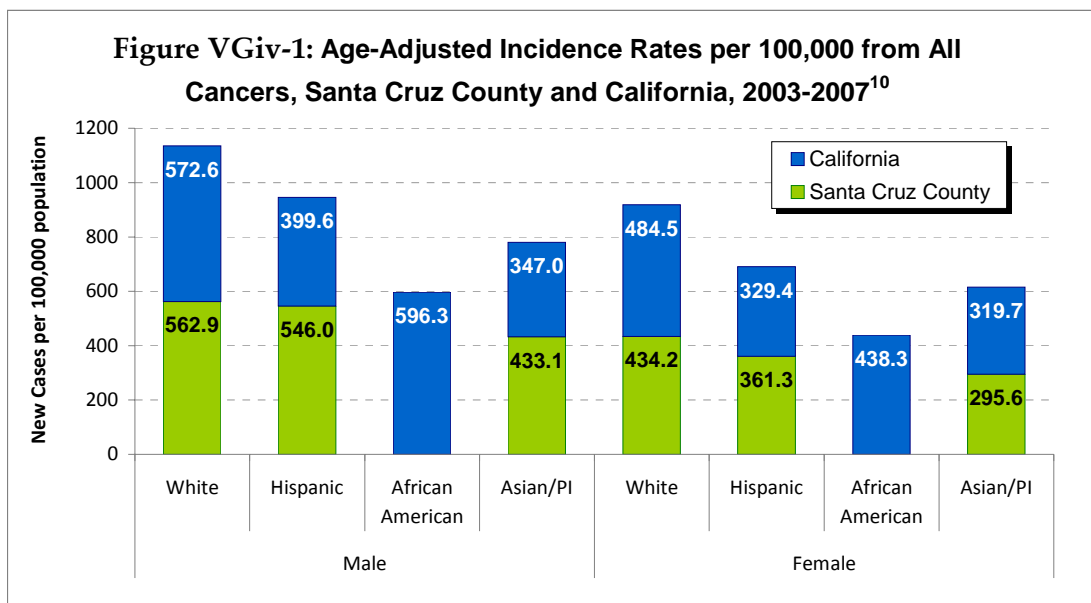
Table VGiv-1 describes the annual incidence of new cancer cases and cancer deaths in California and Santa Cruz County between 2006 and 2008.¹⁰ Santa Cruz County has fairly low rates statewide for lung and colon cancer – ranking below 30th when the 47 counties/county-areas are ordered with the highest rates at the top. However, it is of great concern that Santa Cruz County ranks 2nd in the state for deaths from breast cancer and 4th in the state for new cases of prostate cancer.¹⁰

Table VGiv-1: Age-Adjusted Incidence and Mortality Rates by Cancer Type								
Santa Cruz County and California, 2006-2008¹⁰								
	Incidence Rate per 100,000				Mortality Rate per 100,000			
	Prostate	Breast*	Lung	Colon	Prostate	Breast*	Lung	Colon
Santa Cruz County	183.7	141.0	44.6	29.9	18.7	28.1	34.4	10.8
California	140.5	151.0	50.6	32.3	22.1	21.9	39.3	12.2
State Rank (among 47 counties/grouped counties)	4 th	29 th	44 th	33 rd	42 nd	2 nd	43 rd	34 th

*Breast=female breast cancer only

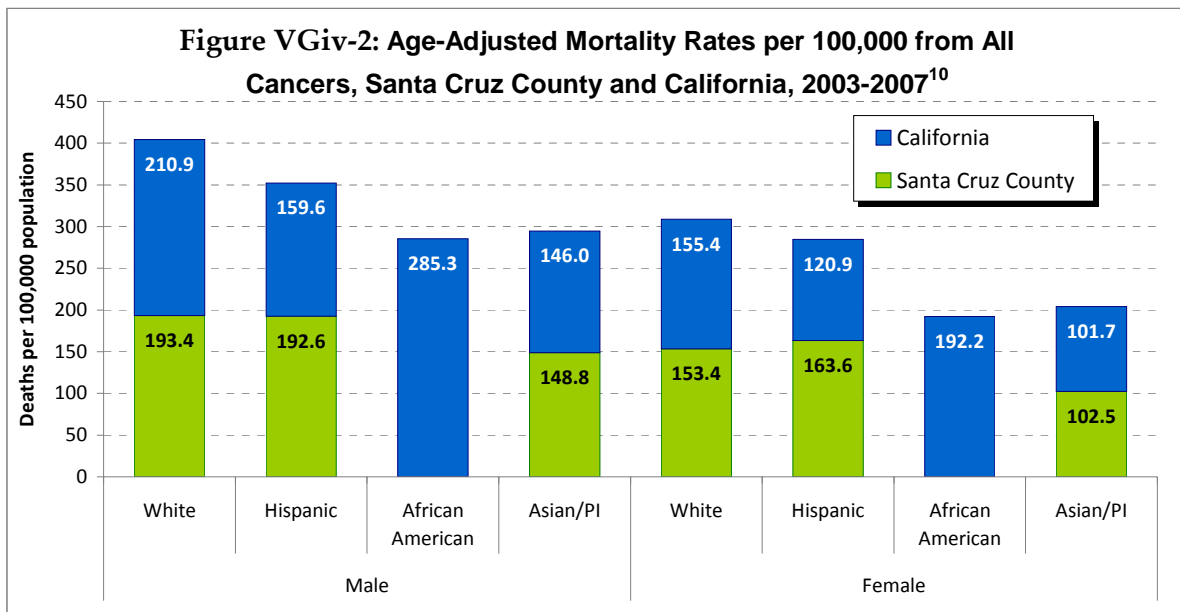
Female breast cancer incidence rate in California has decreased by 7 percent.⁹ The prostate cancer incidence rate increased by 70 percent from 1988 to 1992, but has since declined.⁹ Colon and rectum cancer incidence rates are declining in most racial/ethnic groups.⁹ The most commonly diagnosed types 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.¹¹ 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%.¹¹ 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.¹¹ Breast cancer alone accounts for 27% of all newly diagnosed cancer cases among women.¹¹

Overall, the incidence rate of cancer in California has declined by 11 percent from 1988-2007.⁹ 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).⁹ 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.⁹



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.⁹ Mortality rates declined for all four major racial/ethnic groups in the state.⁹ Cancer incidence and mortality rates vary considerably among racial and ethnic groups.¹¹ 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.¹¹ 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.¹¹



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.¹¹ 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.¹² 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.”¹² 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.¹²

**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/>

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A-C. MORTALITY

Importance	Examination of the frequencies of the various causes of death in a population can help to identify opportunities for intervention to reduce illness, injury, and death. Unintentional injuries, suicide, and homicide are the 5 th , 11 th , and 15 th leading causes of death in the United States. Moreover, fatal injuries may be considered as particularly important causes of death since they tend to affect a young population and thus cause a disproportionate share of Years of Potential Life Lost. Completed suicides are also an indicator for suicide attempts, which constitute a major nonfatal injury category, and for emotional distress, which is a strong indicator of the well-being of the population. Infant mortality is an important measure of a nation's health and a worldwide indicator of health status and social well-being.
Highlights	<ul style="list-style-type: none"> ▪ The 2006-2008 overall age-adjusted death rate was significantly lower in Santa Cruz County and in the state of California than in the rest of the nation. ▪ The County's rate of death from coronary heart disease was significantly lower than the state and national rates. ▪ The county's homicide rate was significantly lower than the state and national rates. ▪ In the United States, homicide death rates are highest among Blacks (8 times the rate among Whites) and Hispanics (2.7 times the rate among Whites). ▪ Homicide death rates are almost 4 times higher among males than females. ▪ Suicide rates among Whites are more than double those among Blacks, Asians, and Hispanics. ▪ California and Santa Cruz County infant mortality rates have been declining for years; in most years, Santa Cruz rates are lower than California's and meet the HP2010 objective.
Definitions	<p><u>Years of Potential Life Lost</u>: the number of years between a person's age at death and an age to which they might have been expected to live had they not died of their actual cause of death (often set at 75) – a measure of mortality that emphasizes the importance of death at early age.</p> <p><u>Unintentional injury</u>: an injury that is not inflicted by deliberate means and not intended to harm anyone, regardless of whether the injury was inflicted by oneself or by another person: e.g., motor vehicle crashes, drownings, fires, falls, poisonings, and accidental firearm fatalities. Does not include intentional injuries such as homicides and suicides. Cases of unknown or undetermined intent are usually classified as unintentional injuries.</p>
Healthy People 2010 Objective	<ul style="list-style-type: none"> ▪ Reduce deaths from unintentional injuries to 17.1 per 100,000 persons (age-adjusted). ▪ Reduce homicides to no more than 2.8 per 100,000 population (age-adjusted). ▪ Reduce suicides to no more than 4.8 per 100,000 population (age-adjusted).

In Santa Cruz County, the age-adjusted death rate from all causes was 669.8 deaths per 100,000 population, on average, from 2006 through 2008.¹ The rate was similar to the state rate of 666.4 deaths per 100,000, and significantly better than the 2007 national rate of 760.3 per 100,000.²

A. YEARS OF POTENTIAL LIFE LOST

“Years of Potential Life Lost” (YPLL) is a widely used measure of a community's health. YPLL is the number of years of potential life lost due to premature mortality. It is measured by calculating the difference between the actual age of death (only for deaths occurring before a selected age) and the selected age; the age selected is usually 65 or 75. For example, if the selected age is 75, then a death occurring at age 60 would contribute 15 YPLL; a death occurring at age 20 would contribute 55 YPLL. YPLL is usually presented as an age-adjusted rate of YPLL per 100,000 persons.

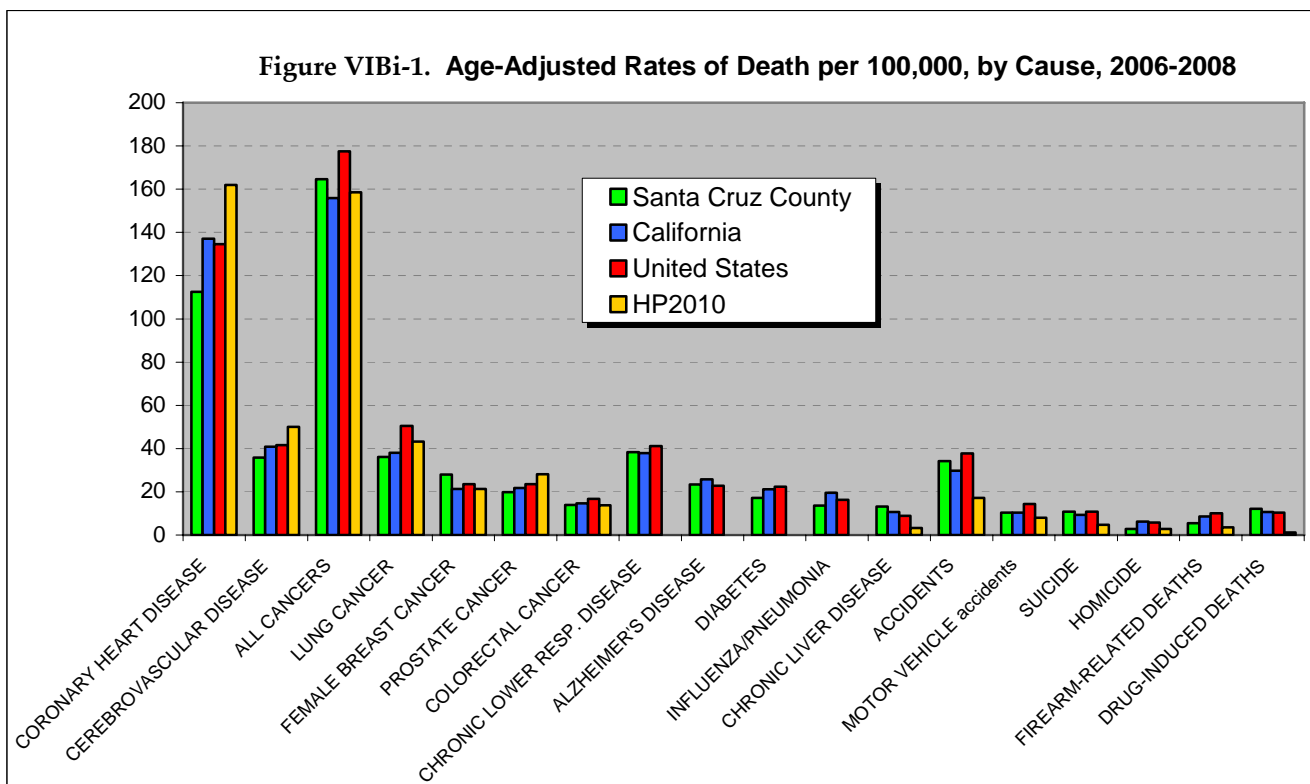
A. YEARS OF POTENTIAL LIFE LOST (CONT.)

The National Vital Statistics System calculated the YPLL (with a selected age of 75) for each individual county in the United States for the years 2004-2006.³ California's statewide average YPLL was 6196. Santa Cruz County ranked sixth best among all California counties, with a YPLL of just 5199.

B. CAUSES OF DEATH

The leading cause of death in the United States is heart disease,⁴ primarily coronary heart disease. In Santa Cruz County in 2006-2008, the age-adjusted death rate from coronary heart disease (112.5 per 100,000 population) was significantly lower than the statewide rate (137.1) and the national rate (134.5).² Santa Cruz County death rates were also significantly lower than statewide rates for homicide (2.8 versus 6.3 per 100,000) and for pneumonia and influenza. The county did not have rates significantly higher than statewide rates for any leading cause of death.

The second leading cause of death in the U.S. is cancer.⁴ The county's rate of death from all types of cancer combined was higher than the statewide rate, but lower than the national rate, and not significantly different from either.² County rates of death from cerebrovascular disease (stroke), diabetes, and Alzheimer's disease were lower than state rates, but not significantly lower. Rates of death from accidents, suicide, drug-induced injury, and liver disease were higher than state rates, but not significantly higher.



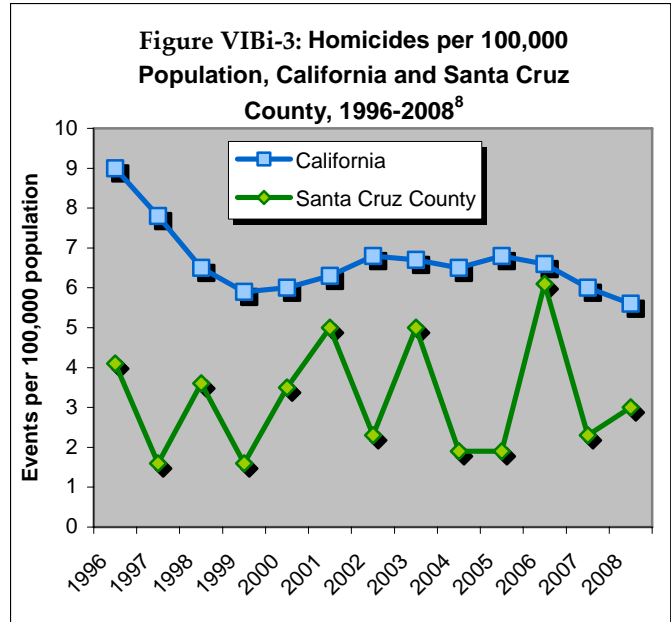
In the last 100 years, public health advances such as improved sanitation, refrigeration, vaccinations, and antibiotics have greatly reduced the death toll from infectious disease. Nowadays, changes in lifestyle can substantially reduce most of the major causes of death due to chronic diseases, such as heart disease, cancer, stroke, chronic lower respiratory disease, diabetes, and cirrhosis of the liver.

B. CAUSES OF DEATH (CONT.)

The single greatest actual cause of death in developed countries is tobacco.⁵ The second greatest is the combination of poor diet and physical inactivity; in the U.S., that combination threatens to overtake tobacco as the leading cause of death. The third greatest is alcohol, which contributes heavily to liver disease, to deaths by accident, homicide and suicide, and to certain cancers. Each of these major causes of death involves personal lifestyle choices that are ripe for public health intervention. Reductions in tobacco and alcohol usage and improvements in diet and physical activity are keys to improving health and extending lifespans in the 21st century.

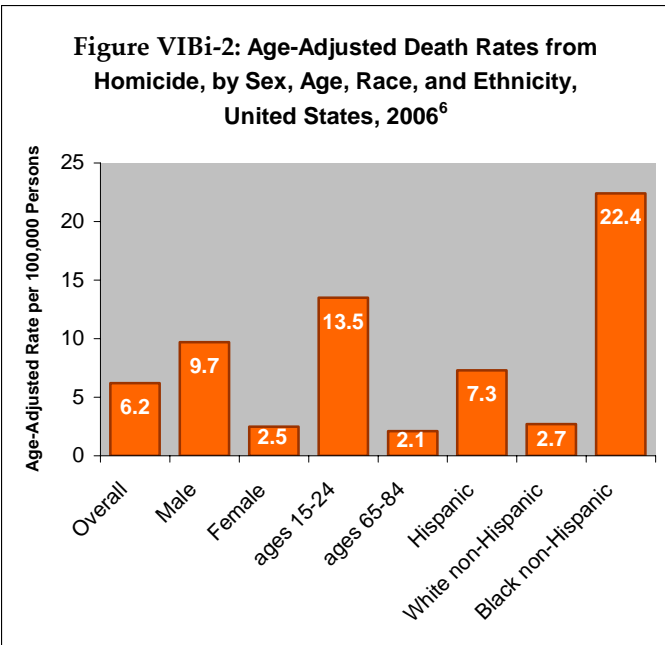
i. HOMICIDE

The United States had an age-adjusted homicide rate of 6.2 per 100,000 in 2006,⁶ more than double the rate of most industrialized countries. Homicide death rates in 2006 were highest among Blacks (over eight times the rate among non-Hispanic Whites) and Hispanics (2.7 times the rate among Whites), adolescents and young adults (over six times the rate



among the elderly), and males (almost four times the rate among females) (Figure VIBi-2).

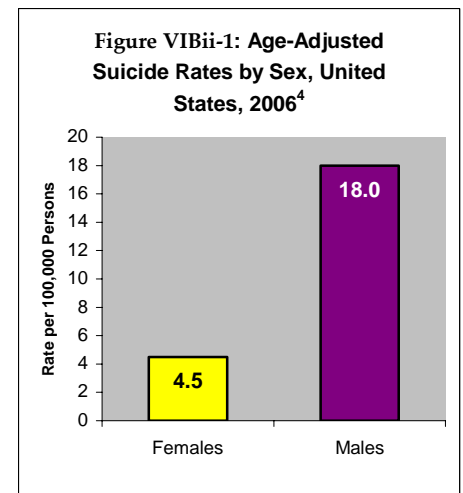
Most homicides are committed by someone who knows the victim. Two-thirds of homicides are committed with firearms. Homicide rates vary between urban and rural settings, but that relationship has not been studied well enough to describe with confidence.⁷



Over the past 15 years, Santa Cruz County has consistently had homicide rates lower than statewide and national rates. County rates were significantly lower in most years, averaging less than half of state rates over the period shown in Figure VIBi-3.⁸ Homicide rates, along with other violent crime rates, track with economic conditions. California homicide rates dropped sharply during the economic boom of the 1990s and rebounded somewhat during the economic slump of the early 2000s.⁸ The period shown does not include much of the recent far more severe economic downturn; there may have been a further upswing in homicide rates as economic conditions continued to worsen.

ii. SUICIDE

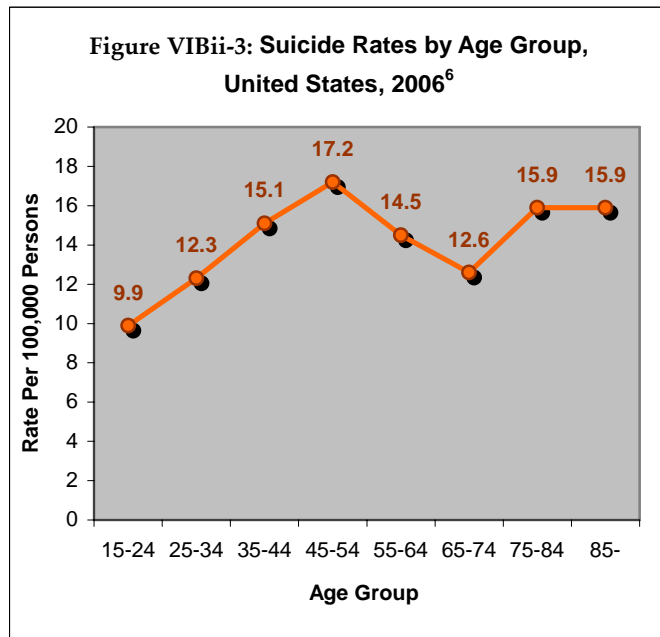
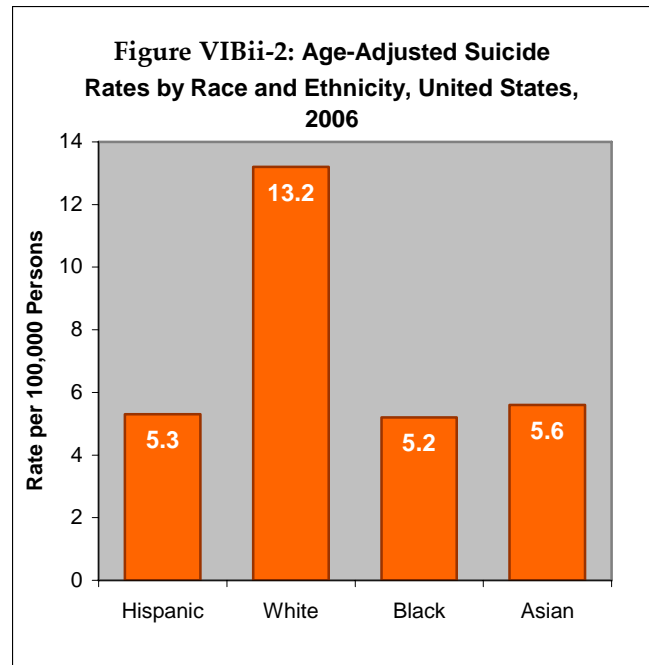
Suicide is the 11th leading cause of death nationally, taking the lives of about 33,000 people per year, almost 1.4% of all deaths in the United States.⁴ Suicide causes almost twice as many American deaths as homicide does.



ii. SUICIDE (CONT.)

Suicide rates are strongly linked to sex, age, race, and ethnicity. Suicide rates are four times as high among men as among women⁶ (although women are more likely to *attempt* suicide). Suicide rates among Whites are more than double those among Blacks, Asians, and Hispanics (see Figure VIBii-2).

Suicide rates increase with age; the rate per 100,000 rises from about 10 in the 15-24 age group to a peak of about 17 in the 45-54 age group, drops to about 13 in the 55-64 and 65-74 age groups, and then climbs to about 16 in the oldest age groups (Figure VIBii-3). Other risk factors for suicide include depression, substance abuse, availability of firearms in the home, family violence, family history of suicide or mental illness, social isolation, rural residence, stress, and lack of mental health care.



The age-adjusted rate of death by suicide for the years 2006-2008 in Santa Cruz County was 10.8 per 100,000 persons, the same as the national age-adjusted rate in 2007, somewhat higher than the statewide rate of 9.4.² Santa Cruz ranked exactly in the middle among California counties, 29th out of 58.¹ Santa Cruz County's suicide rates since 1980 have been fairly typical for a partly urban and partly rural county with a mid-sized population.

Suicide *attempts* are far more frequent than actual suicides.⁹ Although suicide rates generally increase with age, the rate of suicide *attempts* decreases with age. The number of suicide attempts compared to completed suicides may be as high as 200 to 1 among 15 to 24 year olds, and drop to as low as 4 to 1 among adults over age 65.¹⁰

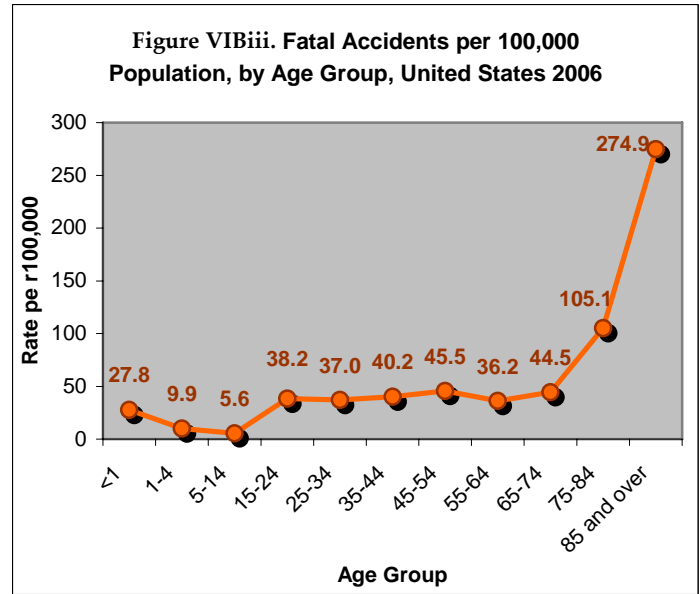
A failed suicide attempt is one of the strongest predictors of subsequent attempts and completed suicide. Development of an effective tracking system for suicide attempts could facilitate targeted intervention that might significantly reduce the incidence of suicide.

About half of all suicides in this country involve firearms. In Santa Cruz County since 1991 the proportion has been lower, just over 40%. Nevertheless, reduced access to firearms would probably reduce the incidence of suicide.

Suicide is associated with depression, an illness treatable both by psychotherapy and by medication. Training physicians to identify and treat depression, and increasing the availability of mental health resources, could reduce the incidence of suicide. Other interventions could include steps to reduce substance abuse, prevent social isolation, and reduce the incidence of chronic diseases.

iii. UNINTENDED FATAL INJURIES

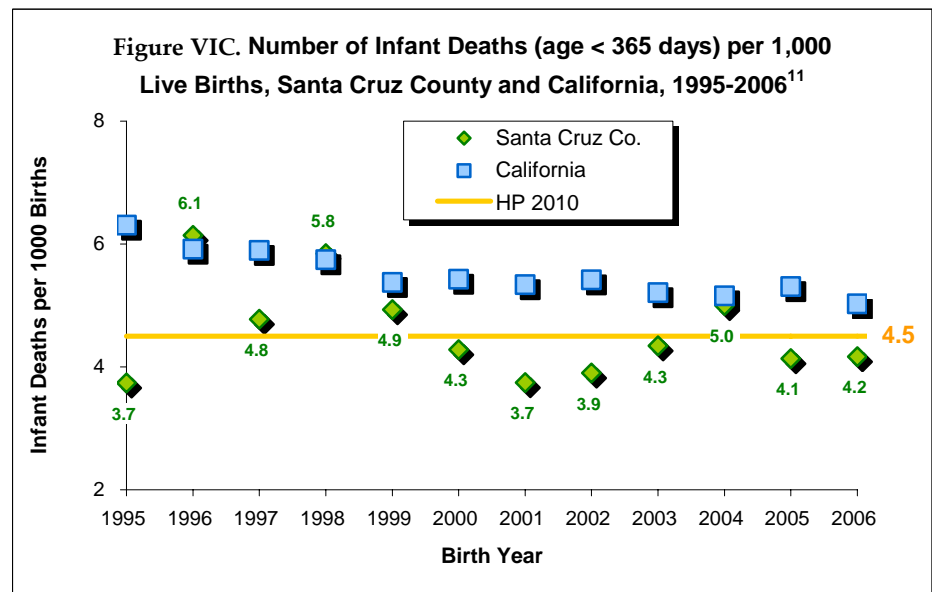
Unintended injuries are the fifth leading cause of death in the United States, with an age-adjusted death rate of 39.1 per 100,000 persons, accounting for 117,000 deaths in 2007, or 4.8% of all deaths.⁴ Rates have been gradually increasing since a low of 33.2 per 100,000 in 1992. Males were 2.2 times as likely as females to die in accidents in 2006.⁶ Whites and Blacks had fairly similar age-adjusted death rates due to unintended injuries, 33% and 25% higher than the rate among Hispanics; the rate among Asians and Pacific Islanders was barely 40% that among Whites. Rates among children 14 and under are lower than for older age groups (Figure VICiii). Rates varied from about 36-45 per 100,000 among the age groups between 15 and 74, then doubled to 105 among 75-84 year-olds, and more than doubled again to 275 among those over 85. Unintended injuries are the leading cause of death in all groups below age 45.



During the period 2006-2008, Santa Cruz County ranked 22nd among California counties, with an average annual age-adjusted mortality rate from unintentional injuries of 34.2 per 100,000 persons. That was better than the national rate of 37.8, but worse than California's rate of 29.7. The Healthy People 2010 objective is 17.1 per 100,000; no county in California has attained the objective.¹

C. INFANT MORTALITY

Infant mortality is an important measure of a nation's health and a worldwide indicator of health status and social well-being. Since 1995, California has seen an improving trend in infant mortality (see Figure VIC). Santa Cruz County rates are unstable, due to our smaller population, but also appear to show an improving trend.¹¹ In most years, the county's rates are lower than statewide rates and meet the HP2010 objective.



The three leading causes of infant mortality (congenital malformations, disorders related to short gestation and low birth weight, and sudden infant death syndrome) accounted for approximately 43% of all infant deaths in the United States in 2005.¹²

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