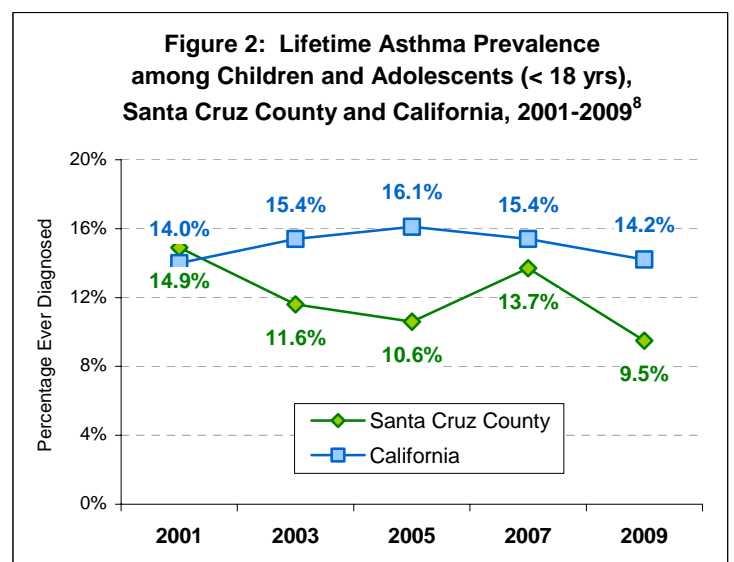
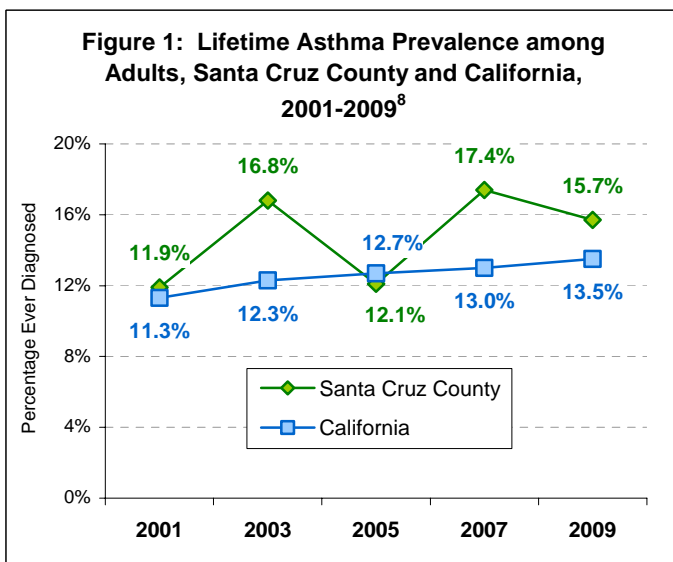


CHRONIC DISEASE ~ ASTHMA

<p>Importance</p>	<p>Asthma is one of the most common chronic diseases in the United States; 18.7 million adults (8.2%) and 7.0 million children (9.4%) currently have asthma.^{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 From 1997-2007, the prevalence of asthma increased, but severe outcomes from asthma decreased.¹ Asthma is the most common chronic condition among children.⁶ Nearly 5 million asthma sufferers are under age 18. It is the most common chronic childhood disease. Racial and ethnic differences in asthma prevalence, morbidity, and mortality are associated with poverty and inadequate medical care. Nine people die each day from asthma, and asthma costs our nation \$56 billion per year to treat and manage.³</p>
<p>Definitions</p>	<p><u>Asthma</u>: Asthma is a chronic inflammatory lung condition characterized by irregular periods of breathlessness, wheezing, coughing, and chest tightness.¹</p>
<p>Healthy People 2020 Objective</p>	<ul style="list-style-type: none"> Reduce asthma deaths. (Targets: No target set for children, 6.0 deaths per million for adults aged 35 to 64, and 22.9 deaths per million for adults aged 65 and older)⁷ Reduce hospitalizations for asthma. (Targets: 18.1 per 10,000 for children under age 5, 8.6 per 10,000 for children and adults aged 5 to 64, and 20.3 per 10,000 for adults aged 65 and older)⁷ Reduce hospital emergency department visits for asthma. (Targets: 95.5 per 10,000 for children under age 5, 49.1 per 10,000 for children and adults aged 5 to 64, and 13.2 per 10,000 for adults aged 65 and older)⁷

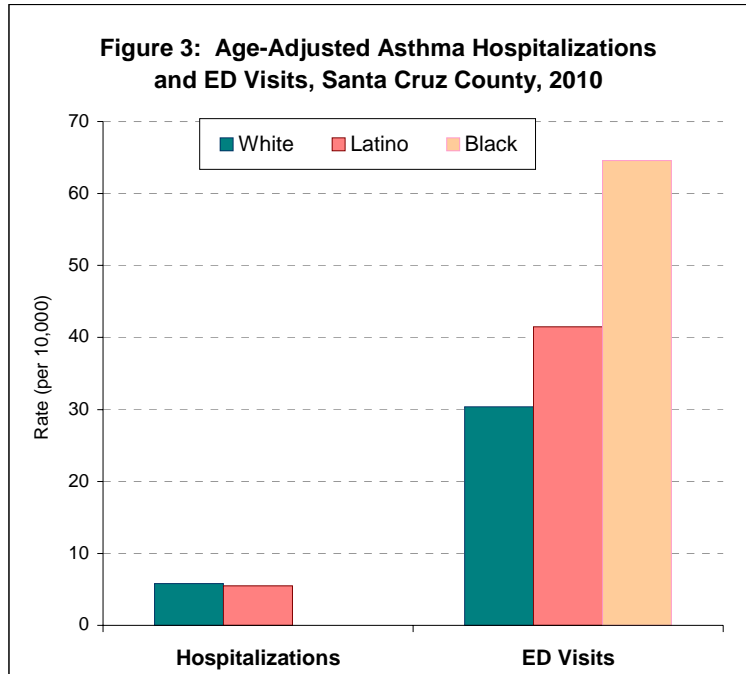
The California Health Interview Survey (CHIS) asked adults (ages 18 and older) if they had ever been diagnosed with asthma. From 2001 to 2009, Santa Cruz County rates varied, but were usually higher than California rates (see Figure 1).⁸ Both the state and county rates appeared to be trending upward, in keeping with the national trend. In 2009, about 8.9% of county residents (all ages) said that they currently have asthma after diagnosis by a physician, compared to 13.7% of all Californians.

Figure 2 shows lifetime prevalence of asthma diagnosis among children and adolescents (under 18 years old) for the state and county. Statewide levels show no trend from 2001-2009; local rates show much greater fluctuation, as is expected due to smaller sample sizes at the county level, but have generally been lower than the state and suggest a downward trend.⁸



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Figure 3 shows racial and ethnic disparities in the impact of asthma in Santa Cruz County.⁴ Blacks have the highest prevalence of asthma, significantly higher than other race and ethnicity groups.^{8,11} Although asthma occurs among people at all socioeconomic levels, it disproportionately affects low-income Californians, who miss more days of work and school, are more likely to have frequent asthma symptoms, and are more likely to go to the emergency department or be hospitalized for asthma care.⁹ 8.7% of Californians with incomes below 200% of the Federal Poverty Level (FPL) have current asthma, compared to 7.8% of those with incomes at or above 400% FPL.⁹ 31.9% of low-income California adults with current asthma experience asthma symptoms at least once a week, compared to just 19.3% of their higher-income counterparts.⁹ Low-income Californians with current asthma are more likely to be children and people of color.⁹



Tables 1 and 2 summarize the numbers 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 at 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 have consistently higher rates of asthma hospitalizations than any other race or ethnicity.¹ Asthma hospitalization rates are highest among children 0 to 4 years of age. In 2009, the most recent year for which data are available, asthma accounted for 3,388 deaths in the United States, 479,300 hospitalizations, 1.9 million ER visits, and 8.9 million visits to physicians' offices, the CDC said. The estimated costs to society were \$50.1 billion per year due to medical expenses, \$3.8 billion resulting from missing work and school, and \$2.1 billion from premature deaths.^{3,10}

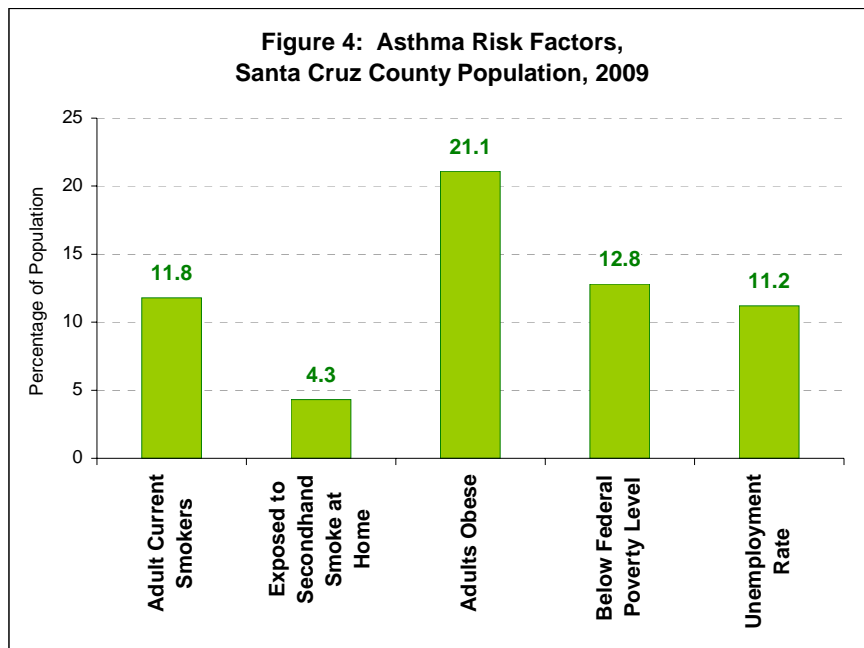
Age	Santa Cruz County		California	
	Count	Rate	Count	Rate
Children (0-4 years)	26	16.1	6,554	24.5
(5-17 years)	17	-	4,881	7.2
Total (0-17 years)	43	7.3	11,435	11.9
Adults (18-64 years)	64	3.4	13,376	5.8
(65+ years)	38	14.2	8,082	19.6
Total (18+ years)	102	5.2	21,818	8.1

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Age	Santa Cruz County		California	
	Count	Rate	Count	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 RISK FACTORS

Some factors associated with development of asthma or triggering of asthma attacks are tobacco smoke exposure (either active smoking or secondhand smoke), obesity, poverty, and unemployment.¹ In Santa Cruz County in 2009, 11.8% of adults said that they currently smoked, while 4.3% of adults and children were exposed to second-hand smoke.⁴ 21.1% of adults were obese.⁴ 12.8% of residents had household incomes below the Federal Poverty Level.⁴ The unemployment rate in Santa Cruz County was 11.2%.



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, 21.1% of people with asthma have **NOT** received an asthma management plan from a health care provider.⁴

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<p>Primary Prevention Activities</p>	<p>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.¹¹</p>	
<p>Helpful Websites</p>	<p>California Breathing</p>	<p>www.californiabreathing.org</p>
<p>Sources</p>	<p>(1) Milet M, Tran S, Eatherton M, Flattery J, Kreutzer R. <i>The Burden of Asthma in California: A Surveillance Report</i>. Richmond, CA: California Department of Health Services, Environmental Health Investigations Branch, June 2007.</p> <p>(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. Centers for Disease Control and Prevention. http://www.cdc.gov/asthma/.</p> <p>(3) Santa Cruz County Asthma Profile, May 2011. www.californiabreathing.org.</p> <p>(4) 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.</p> <p>(5) California Department of Public Health, Environmental Health Investigations Branch, California Environmental Health Tracking Program (CEHTP). 2009. http://www.ehib.org/page.jsp?page_key=24.</p> <p>(6) U.S. Department of Health and Human Services. <i>Healthy People 2020</i>. Washington, DC: U.S. Government Printing Office. 2nd ed. 2000.</p> <p>(7) California Health Interview Survey (CHIS). http://www.chis.ucla.edu/.</p> <p>(8) Wolstein J, Meng YY, Babey SH. <i>Income Disparities in Asthma Burden and Care in California</i>. Los Angeles, CA: UCLA Center for Health Policy Research 2010.</p> <p>(9) National Health Interview Survey, National Center for Health Statistics, CDC, 2012.</p> <p>(10) California Department of Public Health. <i>Strategic Plan for Asthma in California 2008-2012</i>. February 2008. Accessed at http://www.asthmapartners.org/ (free registration required).</p>	