

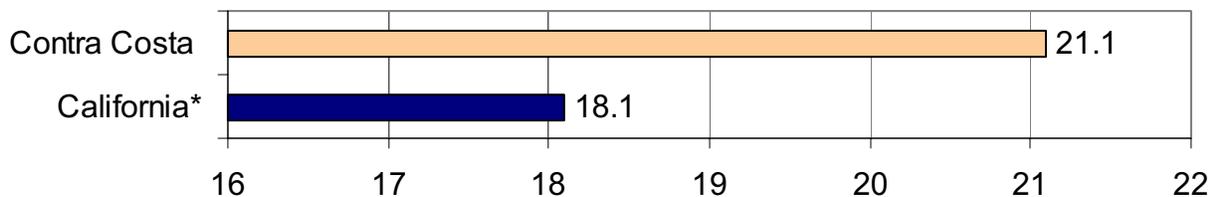
Childhood Asthma – Hospitalizations

Contra Costa children, particularly African American children, have a high rate of hospitalization for asthma



Children living in Contra Costa are more likely than children living in California to be hospitalized for asthma.

Figure 3. Asthma hospitalization rate, 1998 - 2000



* Indicates that the age-adjusted asthma hospitalization rate per 10,000 is significantly higher among children in Contra Costa compared to California.

Over the three-year period 1998-2000, there were 1,256 hospitalizations for asthma among Contra Costa children age 0-14 years. This means that **approximately 419 Contra Costa children are hospitalized for asthma each year.**

African American children have high rates of hospitalization for asthma

In Contra Costa, **African American children are hospitalized for asthma at a rate almost five times that of White children.**

Table 24. Hospitalization for asthma, children 0-14, by race/ethnicity. Contra Costa, 1998-2000

	Rate
African American	*62.7
Hispanic/Latino	15.5
Asian/Pacific Islander	13.8
White	12.9
Contra Costa	21.1

* Indicates that the age-adjusted asthma hospitalization rate per 10,000 among children is significantly higher for African Americans compared to the county as a whole.

Some communities have higher hospitalization rates for asthma

Children living in the Richmond and San Pablo zip codes of 94804, 94801, and 94806 are more likely to be hospitalized for asthma than those in other parts of the county.

Rates of asthma hospitalization among children living in Richmond and San Pablo range from 41.8 - 23.2 per 10,000, depending on the zip code.

Countywide, there are 21.1 asthma hospitalizations per 10,000 children. Rates in other zip codes range from a high of 21.7 per 10,000 in the Concord zip code of 94520 to a low of 6.6 per 10,000 in the Walnut Creek zip code of 94598.

Table 25. Zip codes with the highest rates of childhood asthma hospitalizations.

Zip code	Rate
94804	*41.8
94801	*39.7
94806	*39.6
94803	31.4
94805	23.2
Countywide	21.1

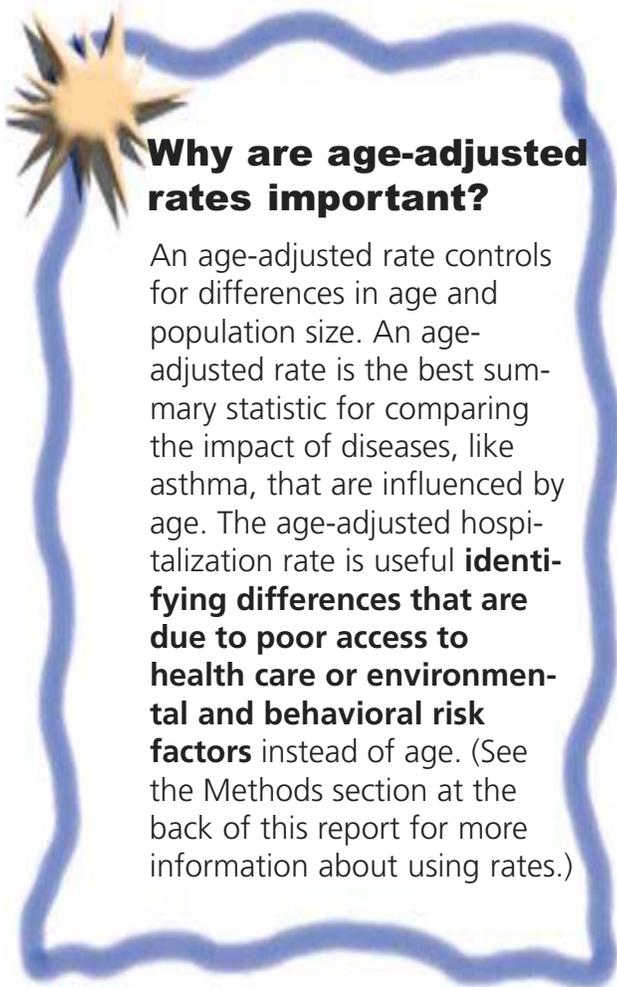
* Indicates that the age-adjusted asthma hospitalization rate per 10,000 among children age 0 - 14 years is significantly higher in the 94804, 94801 and 94806 zip codes compared to the county overall.

Rates per 10,000 in other Contra Costa communities range from 21.7 - 15.2 in Concord, 21.3 in Pittsburg and Bay Point, 18.3 in Antioch and Martinez, 15.3 in Oakley, 12.8 in Pinole, 11.5 - 6.6 in Walnut Creek, and 7.5 in Brentwood.

Using this data to plan interventions

In order to reduce health differences, it is important to target the groups with the highest rates of hospitalization and improve their access to outpatient care. For childhood asthma, these are African American children, and children living in Richmond and San Pablo.

Interventions to address childhood asthma could include teaching children and parents how to recognize and respond to the symptoms of an asthma attack, or problem-solving around how to control common household triggers such as secondhand smoke, mold and pet hair.



Why are age-adjusted rates important?

An age-adjusted rate controls for differences in age and population size. An age-adjusted rate is the best summary statistic for comparing the impact of diseases, like asthma, that are influenced by age. The age-adjusted hospitalization rate is useful **identifying differences that are due to poor access to health care or environmental and behavioral risk factors** instead of age. (See the Methods section at the back of this report for more information about using rates.)

The differences highlighted above are statistically significant. This means that we are 95% certain that these differences are not due to chance.

Interpreting this data

The above statistics present the rate of asthma hospitalization per 10,000 children. The statistics are based on all hospital discharges in which asthma was the primary diagnosis. They do not include treatment that takes place in a doctor's office, health clinic, or emergency room. A single child can be counted multiple times for multiple asthma hospitalizations.

The statistics indicate that some groups and communities are more likely to be hospitalized for asthma compared to the

county as a whole. They do not tell us whether the increased risk is due to a large proportion of children being hospitalized for asthma, or to frequent asthma hospitalizations among certain subpopulations in that group or community.

ZIP code boundaries

We selected the ZIP codes that "best fit" for each of the communities listed above. For this analysis, the ZIP codes are as follows: Antioch (94509 and 94531), Brentwood (94513), Concord (94518, 94519, 94520 and 94521), Martinez (94553), Oakley (94561), Pinole (94564), Pittsburg and Bay Point (94565), Richmond and San Pablo (94801, 94803, 94804, 94805 and 94806) and Walnut Creek (94595, 94596, 94598). Due to shared ZIP codes, the communities of Pittsburg and Bay Point, and Richmond and San Pablo, were combined.

Data sources

Hospitalization data from Stockman JK, Shaik N, Von Behren J, Bembom O, Kreutzer R. California County Asthma Hospitalization Chart Book: Data from 1998-2000. Oakland, CA: California

Hospitalization data by community from Community Action to Fight Asthma, an Initiative of the California Endowment. Asthma Hospitalization Rates by Zip Code Tabulation Area For Selected California Communities: Bay Area, 1998-2000.

National data about asthma prevalence is from **Summary Health Statistics for U.S. Children: National Health Interview Survey**, 2002 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention National Center for Health Statistics, March 2004, DHHS Publication No. (PHS) 2004-1549. This document is available online at <http://www.cdc.gov/nchs/data/fastats/asthma.htm>.