



CVP

Center for Vulnerable Populations
at San Francisco General Hospital and
Trauma Center

CHARM

Center for Health And Risk in
Minority youth and young adults

Funded by the National Institute of Minority and Health Disparities

Issue Brief: Chronic Disease — Childhood Asthma

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Asthma is the most common chronic disease among children

Key Insights

- Asthma is one of the leading causes of days missed in school. In 2008 nearly 14 million school days were missed by children with an asthma attack in the previous year¹
- Early life exposure to NO₂, most commonly sourced from car exhaust, is associated with asthma
- There may be genetic, socioeconomic, or behavioral traits that make minorities more susceptible to pollution-induced asthma
- African Americans and Puerto Ricans die from asthma at nearly 3 times the rate as Whites

Overview

Asthma is the most common chronic disease among children. There may be genetic, socioeconomic, and/or behavioral traits that increase the risk among children, particularly among minority children, who tend to live in close proximity to sources of traffic-related air pollution.

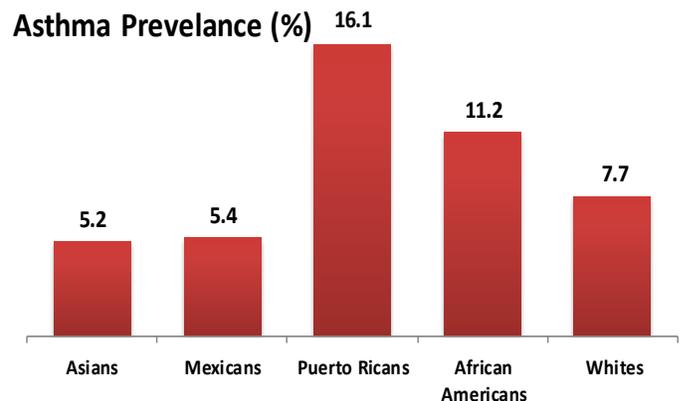
Have you ever had asthma in your life?

- The percentage of people with asthma has been increasing in the past decades
- 40 million people in the United States have had asthma
- Asthma is most common among those aged 5-17 (9 million are affected)
- While 5-17 year-olds make up 18% of the population, they represent 23% of people with asthma

Do you currently have asthma?

- Asthma is more common among boys than among girls
- Among adults, asthma is more common among women than men
- 1 in 11 children has asthma — that's 7 million children

Racial differences



Deaths due to asthma

- African Americans and Puerto Ricans die from asthma at nearly 3 times the rate as Whites
- Deaths are rare among children but the risk increases with age
- Asthma-related death rate is highest among Blacks and Puerto Ricans

Asthma risk factors

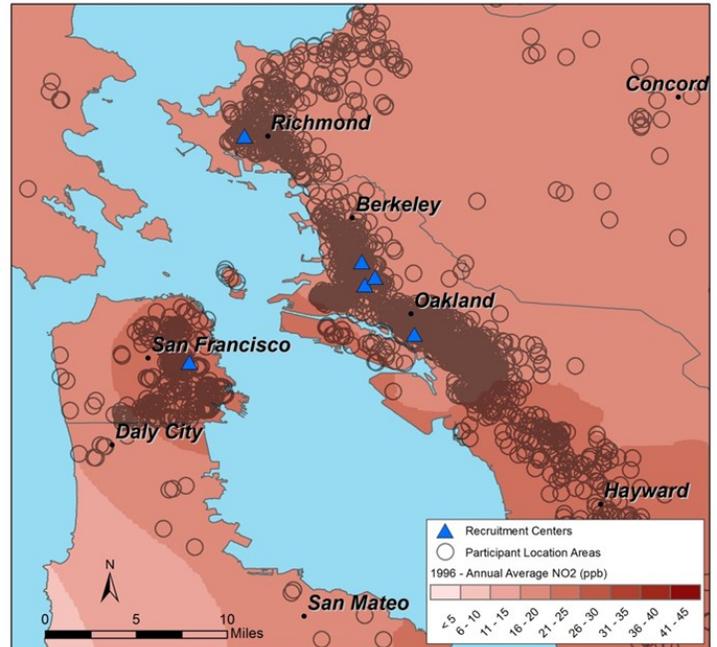
- Family history
- Environmental
 - House dust and mold; air pollution; roaches; furry pets
- Sociobehavioral
 - Cigarette smoke
 - Smokers are at higher risk for asthma and asthma exacerbations
 - Being around smokers (in the home, in the car, or wherever you spend a lot of time) increases risk for asthma and asthma exacerbations
 - Mothers smoking during pregnancy increase the risk for asthma and asthma exacerbations in their unborn child
 - Low income and low education are both risk factors for asthma

Asthma consequences

- Asthma affects a person's ability to sleep and learn
- \$56 billion in lost costs due to asthma
 - Unnecessary missed days of school and work
 - Unnecessary hospitalizations
- On average, the cost of caring for a child with asthma in 2009 was \$1039

Air Quality

The map of the San Francisco Bay Area below shows the level of a traffic-related pollutant (NO₂) that today's youth live with.



References

¹Asthma and Children Fact Sheet. Lung Association. 2012. <http://www.lung.org/lung-disease/asthma/resources/facts-and-figures/asthma-children-fact-sheet.html#9>

For more information go to our website

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