

Blueprint
for

Asthma Action

Executive Summary for Contra Costa County

The “Blueprint for Asthma Action” was developed by the Contra Costa Asthma Coalition to provide a status on asthma for Contra Costa County, create a plan to address issues associated with asthma, and educate stakeholders on how to reduce the health impacts of asthma on the communities within Contra Costa County.

Asthma is the most common chronic childhood disease, affecting 4.8 million children nationwide and accounts for one-third of all pediatric emergency visits. For children in the United States, it is the #1 cause of school absenteeism due to a chronic illness. In Contra Costa County, some areas of Richmond and San Pablo have hospitalization rates of asthma which are more than double that of the state average among children 0-14 years of age. In the County as a whole, the average hospitalization rate for African American children with asthma is more than four times that of Latino children, and almost five times that of white children. Factors contributing to these disparities include poor outdoor and indoor air quality, limited access to health care, and lack of asthma education programs and social support.

While experts continue to debate the causes of asthma, which include genetic and environmental factors, there is strong consensus that asthma episodes are triggered by colds, exercise, flu and poor outdoor and indoor environmental conditions.

Children spend close to 90% of their time in the home and school environment, which largely explains why a child with asthma is vulnerable to poor indoor air quality. Indoor asthma triggers include tobacco smoke, perfume, paint, or other household items that emit strong odors or fumes, allergens such as dust and dust mites, pollen, molds, pollution, and animal dander.

Outdoor triggers for asthma can originate from three categories: stationary sources such as power plants, area sources such as wood stoves, and mobile sources such as trucks that run on diesel fuel. Sources in all of these categories emit sulfur dioxide (SO₂), particulate matter, and nitrogen dioxide (NO₂). Studies have shown that there are strong relationships between the levels of SO₂, NO₂, particulate matter, and a major component of smog with the occurrence of asthma episodes in children and decreases in lung function and growth.

When trying to improve asthma outcomes, special attention should be paid to communities of color and of lower socio-economic status. These communities may experience more exposure to indoor asthma triggers due to poorer housing stock. In addition, these same communities may be subjected to increased levels of outdoor asthma triggers due to their close proximity to industrial facilities and freeways. For example, some areas within West Contra Costa County have an estimated 6 times more diesel pollution released per square mile than



in the county as a whole, and 40 times more than the state average. The disproportionate exposure to environmental triggers for asthma can lead to more frequent and severe episodes and higher hospitalization rates.

The prevalence and burden from asthma in Contra Costa County has been increasing. Public health advocates in Contra Costa County can work to promote educational interventions and policies that address the reduction of these pollutants and the management of their effects.

Below are a few key findings and recommendations for advocacy actions that can be taken by Asthma Coalition members, local policy makers and community members to help lessen Contra Costa's burden from asthma.

Finding: Hospitalization rates are highest among the school-aged African American children.

Action: Support interventions at home and in schools that improve self-management skills to reduce hospitalization rates.

Finding: Special attention needs to be paid to Diesel Particulate Matter due to the harm it causes, its disproportionate impact, and weak regulatory control.

Action: Support the Board of Supervisors in the enforcement of the Airborne Toxic Control Measure To Limit Diesel Fueled Commercial Motor Vehicle Idling.

Finding: Indoor Air Quality in Homes and Schools in Contra Costa County Needs Improvement

Action: Work to ensure that housing is free of triggers and the conditions that promote their existence is removed.

Finding: Pollen Can Intensify Asthma Symptoms

Action: People with asthma must have appropriate access to health care to identify if pollen is one of their triggers. Advocate for access to appropriate health care so that patients and their families have the tools and knowledge to identify, avoid, and reduce the impact of triggers.

The Contra Costa Asthma Coalition (CCAC) is an inclusive, broad-based partnership of organizations and individuals whose mission is to strengthen Contra Costa County's ability to prevent asthma and improve the lives of people affected by asthma. More information about the Coalition can be obtained at www.calasthma.org. To obtain a full copy of the Blueprint, please contact Carol Shenon at ccac-admin@hotmail.com.

Contra Costa Asthma Coalition

This publication was supported by Cooperative Agreement Number U50/CCU922449 from the Centers for Disease Control and Prevention (CDC) as part of the National Environmental Public Health Tracking Program. Its contents do not necessarily represent the official views of CDC. The design and printing of this publication was provided by funding from The California Endowment, Contra Costa Health Services, and Kaiser Permanente.