

00-06

#### STATEMENT OF POLICY

## **Asthma Prevention**

### **Policy**

The National Association of County and City Health Officials (NACCHO) supports policies and programs that reduce and prevent poverty, substandard housing, air pollution, environmental tobacco smoke, and other detrimental conditions that can exacerbate asthma and other respiratory diseases and trigger asthma attacks.

- NACCHO supports federal, state, and non-governmental assistance to local health
  departments and other local community partners to work collaboratively to reduce
  the impact of, and prevent asthma, in their communities, particularly through
  educational and social marketing efforts regarding root causes of asthma,
  elimination of conditions that exacerbate asthma, improved asthma surveillance,
  and formation of community-based coalitions for prevention.
- NACCHO supports federal, state, and local public health policies and activities such as community environmental health assessments that identify and define the characteristics and social conditions of communities vulnerable to exacerbations of asthma.
- NACCHO supports seeking the Center for Medicare and Medicaid approval of reimbursement for home screening for asthma triggers.
- NACCHO supports federal, state, local, and non-governmental funding to local health departments and other local community partners to work collaboratively in developing comprehensive home-based multi-trigger and multi-component interventions with an environmental focus to reduce exposure to asthma triggers.
- NACCHO supports public health policies that improve and promote access to safe, affordable, and high-quality asthma treatment and asthma management while also addressing the root causes of asthma to help improve overall quality of life and productivity of individuals suffering from asthma.
- NACCHO supports programs that educate people in communities about climate change as a plausible contributor to asthma as a result of increase in pollen exposure, increase in ozone and particulate levels, and an increase in the frequency of such occurrences. NACCHO also supports education that increases

understanding of the preventative approaches that provide opportunities for wellness.

- NACCHO supports the development of a national surveillance system to track asthma
  incidence, prevalence, morbidity and mortality, and coordination with other disease tracking
  efforts that not only assures consistent data on healthcare access, but also includes data by
  patient race, ethnicity, occupation, socioeconomic status, and primary language.<sup>1</sup>
- NACCHO supports efforts by the U.S. Environmental Protection Agency (EPA) to strengthen clean air standards and improve health.
- NACCHO supports continued funding for the Centers for Disease Control and Prevention's (CDC's) National Environmental Public Health Tracking Network and National Asthma Control Program in states to make asthma-related data more widely and uniformly available.

# **Justification**

Asthma is a serious public health concern, ranking among the top ten most common chronic conditions in the United States. The CDC estimated that about 4.7 million children and 20 million adults had asthma in 2021.<sup>2</sup> Asthma is most prevalent among young children (ages 5-17).<sup>3</sup> In 2008, asthma accounted for an estimated 10.5 million lost school days for children and 14.2 million lost work days for adults.<sup>3</sup> Each year, asthma is responsible for approximately 3,500 deaths, 500,000 hospitalizations, and 1.9 million visits to the emergency room.<sup>4,5</sup> This chronic disease costs our nation \$80 billion each year in medical expenses, days missed from work and school, and deaths.<sup>6</sup>

Social determinants of health, such as socioeconomic and minority status, are consistently reported to be related to increased asthma morbidity and mortality. African American adults are three times more likely to die from asthma than White adults, and the death rate from asthma among Puerto Rican adults is almost three times the rate of White adults.<sup>7,8</sup> There are race/ethnicity disparities in asthma health outcomes among children as well, including school absenteeism, hospitalizations, emergency visits. While asthma remains a leading health-related cause to school absenteeism, black children had worse outcomes and were over two times more likely than white children to be readmitted to the hospital.<sup>9</sup> In addition, adults who did not finish high school are more likely to have asthma than adults who graduated high school or college, and adults with an annual household income of \$75,000 or less are more likely to have asthma than adults with higher incomes.<sup>10</sup>

Asthma attacks are an allergen reaction to a trigger. Most of these triggers can be found in the home. These triggers include mold, pollen, pets, cold air, dry heat, air pollution, cleaning chemicals, pesticides, cockroaches, dust mites, environmental tobacco smoke, and the potential use of electronic cigarette or vaping. According to studies, e-cigarette use among teens might cause respiratory health concerns, acute and chronic lung damage, and reduced antiviral and antimicrobial actions which could lead to asthma. Additionally, studies have found a link between the presence of cockroaches and dust mites and an increase in the severity of asthma symptoms. These pests are most frequently found in urban areas and older dwellings.

Environmental tobacco smoke plays an important role in the severity and onset of asthma. One-third of children and adults with asthma are exposed to environmental tobacco smoke on a regular basis. Exposure to environmental tobacco smoke can trigger asthma attacks and make asthma symptoms more severe in persons who have asthma. Frequent exposure to environmental tobacco smoke also increases the risk of developing lifetime asthma in both children and adults. Emerging research has also discovered links between prenatal exposure to tobacco smoke and the development of asthma during childhood and adolescence. Disparities in environmental tobacco smoke exposure continue to persist among several sub- populations in the United States, including African American persons, persons living below the poverty level, and blue collar workers. Disproportionate environmental tobacco smoke exposure among these populations contributes to severe disparities in asthma development and management in the United States.

As local public health professionals concentrate on prevention by working to eliminate the environmental conditions that can exacerbate asthma, the health implications of climate change are just beginning to be understood. Atmospheric and temperature-related changes can cause an increase in the levels of particulates, pollutants, pollen, and fungi, which contributes to higher incidence, prevalence, and severity of asthmatic diseases. Particulate matter from power plant emissions, industries, and automobiles also play a large role in aggravating asthma. As part of the nation's ongoing effort to address these issues, the EPA announced a final rule to strengthen the annual health National Ambient Air Quality Standard for fine particles (PM<sub>2.5</sub>) to 9  $\mu$ g/m³ from 12  $\mu$ g/m³ on February 7, 2024. Phase of the province of the particles (PM<sub>2.5</sub>) to 9  $\mu$ g/m³ from 12  $\mu$ g/m³ on February 7, 2024.

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## **Record of Action**

Proposed by NACCHO Environmental Health Committee Adopted by NACCHO Board of Directors July 22, 2000 Updated July 2009 Updated January 2013 Updated July 2017 Updated June 2024