

# Asthma

## Summary of Significant Trends:

Asthma is a serious lung disease, which has reached the epidemic level especially among children throughout the world. Asthma is the sixth-ranking chronic condition in our nation and the leading serious chronic illness of children in the U.S. An estimated 14.6 million Americans suffer from asthma, 4.8 million are under the age of 18. The national health and economic consequences of asthma are substantial, including: 5,000 deaths per year; 470,000 hospitalizations; 100 million days of restricted activity; \$7 to \$9 billion a year in direct and indirect costs; and 10 million missed school days per year.

In North Carolina, though thought to be an underestimation, approximately 390,000 North Carolinians have asthma, 120,000 who are under the age of 18. A study including all eighth grade students in North Carolina in 2000 revealed that 11% have asthma and another 12% have asthma-like symptoms. Between 1982 and 1994 the prevalence rate—the rate per thousand persons—of asthma rose from 34.8 to 56.1, an increase of 61.2%. Pediatric asthma rose, over the same period from 40.1% to 69.1—a 72.3% increase. In 1998, asthma incurred an estimated annual economic cost of 11.3 billion dollars.

## Emerging Trends:

A variety of environmental exposures have been linked to increased potential of developing asthma and/or increased severity of asthma. Since people spend approximately 90 percent of their time indoors, indoor as well as outdoor triggers and control recommendations need to be explored. Asthma and potential environmental triggers are being addressed in the public school systems. As a result, programming is also being requested on asthma and potential environmental triggers in child care settings.

## Relevance of Trends to County Programs:

Asthma can be controlled. Through educational outreach efforts, people can become informed on the potential triggers and/or sources and recommended control methods within the home, workplace, school and childcare setting. The County Extension Center is, and has been, the primary source for information and training for indoor air quality issues including potential asthma triggers, sources and control methods. Extension agents are well known for the quality of their educational programming on environmental health related issues. A \$22,000 EPA grant has been awarded for year 2003 to support this program.

## Sources of Supporting Data:

<http://www.montana.edu/wwwcxair/asthma.htm>

<http://wch.dhhs.state.nc.us/Asthma/AANC.htm>

<http://www.cehi.org/>

<http://www.cehn.org>

Other relevant sites may be accessed through a Google search.

Key words are: Asthma, Indoor Air Quality, and Children's Environmental Health

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