

Improving Health Outcomes for People with Asthma

Making a Difference with Education and Outreach

EPA Science Forum

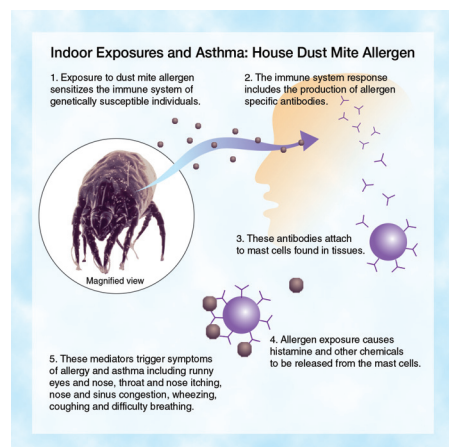
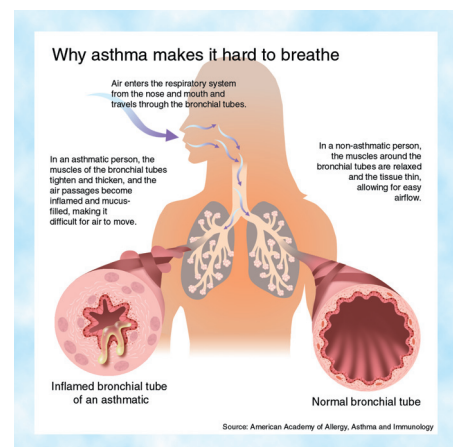
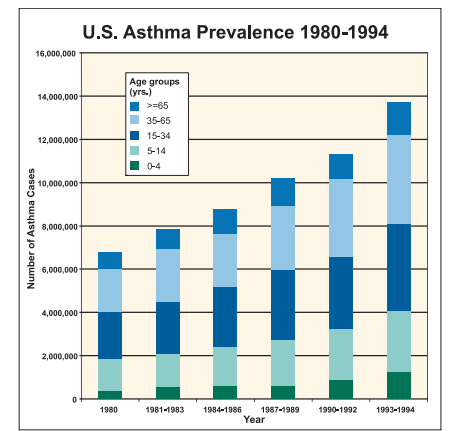
Healthy Communities and Ecosystems

U.S. EPA Indoor Environments Division Author: Asthma Team

The Indoor Environments Asthma Program is increasing public awareness and action to manage environmental asthma triggers so people with asthma can reduce asthma attacks, emergency room visits, and missed school/work days, and lead fuller lives.

The Problem

- More than 20 million people, including 6 million children, in the U.S. have asthma.
- Asthma accounts for more than 10 million outpatient clinic visits and nearly 2 million emergency department visits each year.
- Between 1980 and 1994, the prevalence of asthma in the U.S. increased 75% overall.
- The number of deaths related to asthma in children nearly tripled between 1979 and 1996.
- Asthma is the most common serious chronic disease of childhood.
- Asthma is the leading cause of school absenteeism from a chronic childhood condition: 14 million school days are missed each year due to asthma.
- Health care and lost productivity due to asthma totaled \$14 billion in 2002.



The Science

- Environmental pollutants are linked to the development and exacerbation of asthma.
- National guidelines for the diagnosis and management of asthma stress the importance of controlling environmental triggers.
- The Asthma Program continues to evaluate scientific evidence supporting the link between environmental exposures and asthma

The Solution

EPA educates the public through a multi-faceted outreach program that includes a bi-lingual national media campaign, the *Indoor Air Quality Tools for Schools* Program, the *Smoke-free Home Pledge* Program, School and Childcare-Based Asthma Education, Health Care Plan and Provider Education, and an In-home Asthma Education Component.

In-Home asthma education is modeled on programs with demonstrated success in improving health outcomes.

- HQ and Region 3 supported the Children's Hospital of Philadelphia's Community Asthma Prevention Program to provide in-home environmental interventions:
 - ◆ 60% decrease in children's emergency room visits
 - ◆ 34% decrease in children's hospitalizations
- Region 2 supported The Clinical Directors Network, Inc.'s in-home intervention program:
 - ◆ 23% decrease in unscheduled doctor's visits
 - ◆ 69% of children in the program never visited the emergency department over a 10 month period
- Region 8 supported the Denver Health and Hospital Authority's Program that prevented 45 hospitalizations and 42 emergency department visits for the 94 patients in the asthma education program.
- Six additional home-based intervention projects are underway.



"I feel like a fish with no water"

- Jesse, age 5 describing asthma

Environmental asthma trigger education and action leads to better health outcomes for adults and children!

Learn more at www.epa.gov/asthma

Using Science to Make a Difference