

## **INDOOR AIR**

### **Protecting Adults and Children Where they Live, Work and Learn**

#### **Why EPA's Indoor Air Programs Are Important**

We spend 90% of our time inside – at home, school and workplaces or in other buildings. Depending on the specific pollutant, the extent of exposure and the sensitivity of the individual, exposure to indoor air pollutants can have immediate or long-term health effects. Mold, radon, fragrances from consumer products, chemicals in cleaning supplies, air fresheners, second-hand smoke, building products such as carpets, and even products advertised to test or clean the air can all affect indoor air quality.

For some people, especially children and people suffering from asthma, exposure to chemicals indoors can bring on an asthma attack serious enough to require an emergency room visit. Short-term symptoms can include irritation of the eyes, nose and throat; headaches; dizziness; and fatigue. Longer-term impacts from repeated exposure can include some respiratory diseases, heart disease and cancer, and can be severely debilitating or fatal. Exposure to radon in our homes – the leading cause of lung cancer for non-smokers – leads to 21,000 deaths each year. Exposure to mold can cause allergic symptoms or an asthma attack.

- An estimated 24 million people, including more than six million children, have asthma, and its prevalence is higher in families living on incomes below the poverty level.
- Annually, asthma accounts for 14.2 million visits to doctors, 8,439,000 hospital discharges and as many as 1.8 million emergency room visits.
- Asthma is one of the most common serious chronic diseases of childhood and is the third-ranking cause of hospitalization among children younger than 15. More than 10 million school days are missed each year due to asthma.

#### **How EPA's Indoor Air Programs Work**

Staff members in EPA's indoor air programs have long been regarded as the national experts on the health risks associated with indoor air quality and practical approaches to eliminating, reducing or avoiding those risks. The programs:

- Disseminate information about the latest research on indoor air quality to public health professionals and policymakers in the field
- Ensure indoor air quality is considered in housing, energy and education policies and coordinate with the Centers for Disease Control and Prevention, the Department of Health and Human Services, the Department of Energy and other federal agencies on policies and educational materials related to housing, commercial buildings and indoor air
- Support state and local asthma prevention programs, and recognize and share information about exemplary and innovative programs and approaches
- Develop guides and best practices for healthcare practitioners
- Staff a hotline that provides answers to questions about how to test for and reduce exposure to radon in homes
- Provide grants to state and local radon and asthma programs
- Support indoor air quality (IAQ) improvement efforts in schools with programs and materials including:

- The *IAQ Tools for Schools Action Kit*, which demonstrates ways to improve indoor air problems at little or no cost using straightforward activities and in-house staff;
- The *School IAQ Assessment Mobile App*, a “one-stop shop” for school personnel to address critical building-related environmental health issues such as ventilation, cleaning and maintenance;
- The *IAQ Master Class Professional Training Webinar Series* designed to build the capacity of school district staff across the country to start, improve or sustain an IAQ management program; and
- *Energy Savings Plus Health Guidelines for Schools*, which helps school officials protect and improve indoor air quality during energy efficiency upgrades and building renovations.
- Produce and disseminate information to raise public awareness about asthma triggers and exposure to radon
- Create voluntary partnerships such as *Indoor airPLUS*, which helps new home builders improve the quality of indoor air by requiring construction practices and product specifications that minimize exposure to airborne pollutants and contaminants

### **Consequences if the Programs Are Eliminated or Inadequately Funded**

- The health of children, especially in low-income communities, would be directly impacted by a lack of access to EPA-supported programs that work to improve indoor air quality.
- State and local healthcare and school programs, many of which rely on EPA for support, would be unable to provide the invaluable intervention services that reduce exposure to asthma triggers and decrease hospitalizations and missed school and work days due to asthma attacks.
- Residents would be denied access to invaluable information about radon in their homes and ways to reduce exposure.
- The public would lose EPA’s highly credible and respected voice urging the integration of indoor air quality considerations into building codes and other housing and building-related policies.

### **Demonstrated Successes**

- **AmeriHealth Caritas** implemented a comprehensive asthma management program serving Medicaid recipients in southeastern Pennsylvania’s five counties, including Philadelphia, that supports the delivery of asthma medication and supplies, asthma education and home environmental surveys to reduce asthma triggers.
- Esperanza Community Housing’s **Healthy Breathing Program** in South Los Angeles partners with federally qualified health centers, local hospitals and clinics to provide comprehensive services to asthma patients throughout the year. The program features repeated in-home visits and a yearlong patient evaluation; identifies and helps control in-home asthma triggers; and provides in-depth asthma education for patients, household members and caregivers. These efforts have led to improvements in prescription adherence, increases in the number of patients with asthma action plans, reduction in severe asthma episodes and more efficient referrals to medical homes and wrap-around services.

## **Funding for Three Major Indoor Air Programs**

Categorical Grant: Radon

Indoor Air: Radon Program

Reduce Risks from Indoor Air

FY2016 Baseline Budget: \$8.051 million

FY2017 President's Budget Proposal: \$0

FY2017 Amount Appropriated: \$8.036 million

FY2018 President's Budget Proposal: \$0

FY2018 Amount Appropriated: \$7.996 million

FY2019 President's Budget Proposal: \$0

FY2019 Amount Appropriated: \$8.051 million

FY2020 President's Budget Proposal: \$0

FY2016 Baseline Budget: \$3.082 million

FY2017 President's Budget Proposal: \$3.413 million

FY2017 Amount Appropriated: \$3.076 million

FY2018 President's Budget Proposal: \$0

FY2018 Amount Appropriated: \$3.273 million

FY2019 President's Budget Proposal: \$0

FY2019 Amount Appropriated: \$3.295 million

FY2020 President's Budget Proposal: \$0

FY2016 Baseline Budget: \$13.942 million

FY2017 President's Budget Proposal: \$14.601 million

FY2017 Amount Appropriated: \$13.916 million

FY2018 President's Budget Proposal: \$0

FY2018 Amount Appropriated: \$13.386 million

FY2019 President's Budget Proposal: \$0

FY2019 Amount Appropriated: \$13.695 million

FY2020 President's Budget Proposal: \$0