CLEAN INDOOR AIR

AN ACTION PLAN FOR STATE HEALTH DEPARTMENTS

WHY INDOOR AIR QUALITY MATTERS

- Americans spend 90% of their time indoors
- Indoor air can be 2 to 5 times—or even 100 times—more polluted than outdoor air
- Poor indoor air is linked to asthma, cardiovascular disease, and other chronic health conditions.
- Roughly 230,000 to 300,000 Americans die each year from exposure to fine particulate matter—the majority of this exposure occurs indoors.
- Clean indoor air reduces sick days and worker absenteeism, and boosts performance and productivity in the workplace.
- Roughly 80% of exposure to wildfire smoke from wildfires will occur indoors.

RECOMMENDATIONS

1. Publish guidance and resources.

State health departments can publish IAQ guidance, including targeted guidance for high-priority sectors such as schools, homes, and long-term care facilities. States may choose to develop their own guidance or amplify existing resources from trusted sources, including:

- Environmental Protection Agency: IAQ Guidance and Tools for Schools
- Centers for Disease Control and Prevention: How Much Ventilation is Enough
- Harvard Healthy Buildings: Indoor Air Quality Research
- ASHRAE: Standards 62.1 & 62.2 Ventilation for Acceptable Indoor Air Quality
- ASHRAE: Standard 241: Control of Infectious Aerosols

2. Set targets for indoor air quality.

There are no federal targets for indoor air quality. While the EPA's Air Quality Index (AQI) and National Ambient Air Quality Standards set targets for outdoor air quality, no equivalent federal targets exist for indoor environments. Indoor air quality targets are important because they help the public understand *what* to aim for and *when* to take action. In the absence of federal action, state health or environmental departments should develop or point to existing air quality targets from reputable sources, including:

- Centers for Disease Control and Prevention: Aim for 5 air changes per hour
- U.S. Environmental Protection Agency: National Ambient Air Quality Standards
- World Health Organization: Global Air Quality Guidelines
- Health Canada: Residential Indoor Air Quality Guidelines

3. Identify an indoor air coordinator.

Indoor air quality often falls between the cracks of various government programs and agencies. Often, there is no clear point person in charge of indoor air quality at the state level, or the responsibility is diffused across multiple state agencies. To improve coordination, the governor's office or state leadership should appoint an Indoor Air Coordinator to bring together voices from across the state. Additionally, depending on state and local needs, state health departments could establish an (a) indoor air quality program, (b) interagency coordinating body, or (c) IAQ advisory council with external advisors, experts, and community members.

Case Study: Montana

The Montana Department of Public Health and Human Services developed a set of educational resources, including a Wildfire Smoke Response Toolkit, Clean Air Center Resource Guide, and Wildfire Smoke Toolkit for Schools. The toolkit includes example social media posts, flyers, checklists, and more detailed guidance. The department also hosts technical training for building and HVAC managers on managing wildfire smoke.

Case Study: Rhode Island

The Rhode Island Department of Health received EPA funding to launch a pilot program monitoring indoor and outdoor air quality for communities affected by asthma in Providence, RI. The project is installing 70 IAQ monitors in public housing family developments (PHA) and community spaces and 50 air purifiers in PHAs. The project aims to increase community awareness around IAQ, asthma, and healthy housing, develop community action plans for mitigating PM2.5 pollution, and inform future state and local policies.

Resource: Environmental Law Institute Database of State Indoor Air Quality Laws

The ELI Database of State Indoor Air Quality Laws is a compilation of laws reflecting a wide range of state policy strategies to improve indoor air quality. The Database is updated annually.