CLEAN INDOOR AIR

AN ACTION PLAN FOR SCHOOLS

WHY INDOOR AIR QUALITY MATTERS

- Americans—including children and teachers—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 childhood asthma, cardiovascular disease, and other childhood chronic health conditions.
- 1 in 12 children have asthma in the U.S., causing 13 million missed school days each year.
- Improved indoor air quality can <u>decrease absenteeism</u> by 3.4% and increase the percentage of students passing standardized tests by 3%.

Improving indoor air quality in schools is <u>essential for</u> student and teacher health, well-being, and learning. Clean indoor air improves <u>test scores</u>, reduces sick days and <u>absenteeism</u>, and helps prevent <u>infectious</u> and chronic diseases such as asthma and influenza. Asthma is a <u>leading cause</u> of school absenteeism, causing more than 13 million missed school days.

Yet, providing students with clean air has been a challenge for our aging school buildings. According to the EPA, nearly half of the nation's schools have reported to have problems related to indoor air quality. An estimated <u>one-third of schools</u> needed HVAC system updates, and HVAC systems are the building system or feature most frequently in need of repair. As a result, millions of children and educators face significant hazards from mold, heat, infectious disease, pollutant exposure, and <u>insufficient ventilation</u>.

RECOMMENDATIONS

1. Develop an IAQ management plan.

<u>IAQ management plans</u> help school districts establish clear policies and procedures for preventing, identifying, and addressing indoor air quality issues across their facilities. A comprehensive IAQ management plan serves as a district-wide framework for maintaining healthy indoor environments through operations and maintenance practices, staff training, communication protocols, and compliance with local, state, and federal regulations. IAQ management plans should be written, regularly updated, accessible to staff, and tailored to district resources and priorities. Key components of plans may include:

- Ventilation and filtration performance
- Mold and moisture control
- Integrated pest management
- Cleaning products and protocols

- Building inspections and preventive maintenance
- Continuous air quality monitoring
- Designation of an IAQ Coordinator

Resource: EPA & Center for Green Schools

Example IAQ management plans include EPA's <u>Tools for Schools</u> and the US Green Building Council's <u>School District IAQ Management Plan Toolkit</u>. Both model IAQ management plans recommend the establishment of an IAQ coordinator at the district level to lead IAQ management.

2. Conduct regular building assessments.

Routine inspections and preventative maintenance—including building walkthroughs and HVAC and ventilation inspections—are essential to identifying deficiencies in HVAC systems and ensuring they operate as intended. School districts can require periodic inspections by qualified professionals to verify that HVAC systems meet ventilation, filtration, and maintenance standards, and to address problems proactively before they impact student health.

Case Study: Connecticut

<u>Connecticut state law</u> requires school districts to conduct (1) an annual inspection and evaluation of indoor air quality (IAQ) in each school building and (2) an inspection and evaluation of the heating, ventilation, and air conditioning (HVAC) system in each school building once every five years. Schools must also make the results of inspections publicly available.

3. Publish guidance for cleaner air in schools.

State health and education departments should publish clear guidance, technical resources, and educational materials. This guidance can help school districts, facilities staff, administrators, and school boards better understand best practices for managing IAQ, navigate available resources, and implement effective policies and procedures. Guidance could include targets for ventilation and filtration. States can link to or adapt resources such as:

- **EPA**: Tools for Schools
- US Green Building Council: <u>School District IAQ Management Plan Toolkit</u> & <u>School IAQ Fact</u> Sheet Series
- American Lung Association: Indoor Air Quality in Schools Guide
- Environmental Law Institute: Indoor Air Quality in Schools