IGS Policy Brief

Local Regulations, Community Science, and Increased Capacity Can Improve Classroom Air Quality

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Fifty million U.S. children attend K-12 schools daily, spending about 6-10 hours inside school buildings.

Consistent exposure to indoor pollutants can lead to acute respiratory infections, asthma, decreased lung function, and cognitive deficits.

KEY TAKEAWAYS

- **School districts are demonstrating limited adoption of indoor air quality best practices.** Almost 65% of schools in the study did not have a state or local mandate to assess indoor air quality and ~32% did not monitor classroom ventilation systematically or conduct systematic inspections.
- **School administrations are wary of the consequences of data transparency.** Concerns about public image and enrollment stop schools from publicizing indoor air quality data and inspection reports.
- **Limited resources are a significant barrier.** Due to budget constraints, monitoring indoor air quality may not be an option. Instead, schools can invest in integrated pest management, filtration, or ventilation system upgrades.
- **Mechanical ventilation improvements and indoor air quality management practices are an alternative to indoor air quality monitoring.** For schools/districts with fewer resources, investing in heating, ventilation, and mechanical cooling maintenance and upgrades is an alternative pathway.
- **Capacity for implementation and coordination is scarce.** Lack of staff to coordinate indoor air quality policy is a barrier to implementing preventative guidelines from public health agencies.
- **Community science can support indoor air quality efforts.** Community science initiatives can raise awareness and encourage school districts to address indoor air quality.
- **Local indoor air quality regulations can improve school indoor air quality practices.** State requirements for indoor air quality may cultivate an awareness of classroom air quality and facilitate implementing good indoor air quality practices.

RESEARCH METHODS OVERVIEW

These findings are based on a manual web search of questions regarding indoor air quality policies and monitoring in schools and alignment with EPA indoor air quality best practices for schools. The study focused on the two largest school districts in each of the nine climate regions in the U.S., also including the largest school districts in Alaska, Hawaii, Puerto Rico, Washington DC, and Boston, for a total of 23 K-12 districts.

Read the report

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Gunn et al. 2024. Toward healthier air in schools: The state of indoor air quality programs in K-12 schools in the U.S. & findings to guide action, 2024.

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