

Dear School Administrator,

We are scientists and engineers who study disease transmission and indoor air quality. We urge you to reduce COVID-19 transmission by improving indoor air in schools.

Now that we understand that COVID-19 is primarily an airborne disease, **efforts to protect children and staff in schools must focus on the air**. We know that the spread of SARS-CoV-2 can be greatly reduced by filtering and ventilating the air in indoor environments – including school buildings and classrooms.

Even with vaccination approval for children aged 5 to 11 years, the increased threat from the much more highly contagious Omicron variant demands that schools continue to attend to air safety, using safe, proven methods and technologies.

Specifically, school administrators should:

- Assess classrooms and common areas to ensure that they can meet updated COVID-19 air filtration guidance, including MERV-13 filters and at least 6 air changes per hour of outdoor or filtered air, as recommended by ASHRAE and the CDC.
- Purchase or build HEPA air filtration units to be placed in classrooms and commonly occupied areas that do not or cannot meet updated standards.
- Upgrade heating, ventilation, and air conditioning systems so that they can bring in as much outdoor air as safely possible.
- Use only proven technologies for improving indoor air quality: ventilation, filtration, or ultraviolet germicidal irradiation.
- NOT USE unproven or additive technologies such as ionization, ozone generators, plasma, and air disinfection with chemical foggers and sprays, as the health benefits of these technologies are not clear and many scientists and engineers are concerned about potential adverse health impacts.

Schools can use funding provided by the American Rescue Plan, CARES Act, and other legislation to offset the costs associated with these upgrades. Schools can also use the money saved by stopping additional surface cleaning, which is much less effective at preventing airborne disease than air quality improvement.

Ensuring that schools have healthy air to breathe is a no-regrets investment and a cost-effective public health measure to reduce SARS-CoV-2 transmission, provide a safer environment, and improve learning.

You can learn more about this topic here: https://bit.ly/3EuHPtL.

Signed,

Paula Olsiewski, Ph.D. Biochemist Johns Hopkins Center for Health Security

William P. Bahnfleth, Ph.D., PE Mechanical Engineer Penn State University Fellow/Presidential Member, ASHRAE Gigi Kwik Gronvall, Ph.D. Immunologist Johns Hopkins Center for Health Security

Richard Bruns, Ph.D. Economist Johns Hopkins Center for Health Security