

MODEL CLEAN INDOOR AIR ACT



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

Center for
Health Security

The COVID-19 pandemic highlighted the importance of indoor air quality (IAQ) to public health. Improving IAQ can help slow the spread of airborne infectious diseases, including COVID-19, influenza, measles, and RSV; improve cognitive function; and lower the risk of other conditions, including asthma, certain cancers, and cardiovascular disease. To propel efforts to enhance IAQ, the Johns Hopkins Center for Health Security, with input from partners and a national expert advisory panel, created a [model law](#) that US states may use as a template to monitor, regulate, and improve IAQ so people can breathe healthy air.

PROBLEM

We spend nearly 90% of our lives indoors,¹ making IAQ essential to our health, learning, and productivity. But when we walk into a store or office building, we have no idea if we are breathing in clean air, dangerous air, or an infectious disease, because most places do not monitor or regulate IAQ. In fact, more than 90% of most airborne respiratory disease transmissions occur from breathing indoor air.² These diseases cause tens of thousands of deaths and tens of millions of employee and student absences in the US each year. During future infectious disease outbreaks, better IAQ could prevent interrupted business and school functioning and avert excess illness and death. Improved IAQ also mitigates the negative impacts of other contaminants, especially particulate matter.

PROPOSED SOLUTION

Just as drinking water is made safe through filtration and sanitation measures, indoor air within public buildings can be made safe through filtration, ventilation, and other measures. The model act provides a comprehensive framework for states to create legislation to improve indoor air and protect health.

THE MODEL CLEAN INDOOR AIR ACT enables state legislatures to:

- Develop their own precise regulatory language and establish their own protective airflow rates and allowable contaminant levels that are appropriate to local conditions.
- Mandate IAQ testing in publicly accessible buildings and require public posting of IAQ test results so that building occupants know the quality of the air they are breathing.
- Establish a system for people to file complaints about bad air quality and respond to those complaints, often with inspection by a state agency.
- Incentivize building owners to voluntarily make repairs and upgrades of HVAC systems when necessary to improve IAQ.
- Establish procedures for IAQ inspections and penalties for noncompliance.
- Authorize a state agency to collect data and conduct research and require them to develop an IAQ plan, including the production of educational content.

BREATH OF FRESH AIR

The model act provides a flexible, state-of-the-art blueprint for states to tailor their own IAQ legislation, equipping them to improve indoor air quality and create healthier, more beneficial indoor environments.

CONTACT US

For more information, please visit <https://centerforhealthsecurity.org/indoor-air>.

1. Klepeis N, Nelson W, Ott W, et al. The National Human Activity Pattern Survey (NHAPS): a resource for assessing exposure to environmental pollutants. *J Expo Sci Environ Epidemiol*. 2001;11:231-252.

2. Bulfone TC, Malekinejad M, Rutherford GW, Razani N. Outdoor Transmission of SARS-CoV-2 and Other Respiratory Viruses: A Systematic Review. *J Infect Dis*. 2021;223(4):550-561.