



Shaping Tomorrow's  
Built Environment Today

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M. Dennis Knight  
2024-2025 ASHRAE President

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February 5, 2025

The Honorable Patty Hayes  
Chair  
Washington State Board of Health  
P.O. Box 47990  
Olympia, WA 98507-7990

Sent via email to: [wsboh@sboh.wa.gov](mailto:wsboh@sboh.wa.gov)

Re: Update to WAC 246-370, "School Environmental Health and Safety"

Dear Chair Hayes and Board Members:

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 54,000 members, including over 900 in Washington State, focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

**ASHRAE recommends including ASHRAE's consensus based indoor air quality and water system safety standards in the proposed update to the Washington State Board of Health's School Environmental Health and Safety regulation.** Specifically, we recommend the School Board of Health adopt by reference:

- ANSI/ASHRAE Standard 62.1-2022, *Ventilation and Acceptable Indoor Air Quality*;
- ANSI/ASHRAE Standard 188-2021, *Legionellosis: Risk Management for Building Water Systems*;
- ASHRAE Standard 241-2023, *Control of Infectious Aerosols*; and
- ASHRAE Guideline 44-2024, *Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events*.

Indoor air quality (IAQ) can significantly affect student learning and development, and the COVID-19 pandemic increased awareness of the impacts of IAQ on student health.<sup>1</sup> Adhering to the most up-to-date consensus-based ASHRAE standards will help meet the objectives of good indoor air quality. ASHRAE Standard 62.1-2022, *Ventilation and Acceptable Indoor Air Quality*, establishes minimum ventilation rates and other measures intended to provide indoor air quality that is acceptable to human occupants and minimizes adverse health effects due to poor indoor air quality. It defines the requirements for ventilation and air-cleaning system design, installation, commissioning, and operations and maintenance. The latest edition (published in 2022) includes updates to the procedures and methods for meeting minimum ventilation and indoor air quality requirements, and improvements to the Indoor Air Quality Procedure.

ASHRAE has also developed Standard 241-2023, *Control of Infectious Aerosols*, a standard for buildings that is focused on airborne infection risk mitigation. ASHRAE Standard 241 is meant to be applied in periods of elevated risk, for example the risk of transmission of pathogens like COVID-19. It establishes minimum requirements for control of infectious aerosols to reduce the risk of disease transmission in buildings. Its requirements for ventilation are given in terms of equivalent clean air per person rather than outdoor air, which facilitates flexible use of alternatives to outdoor air to meet risk reduction goals. The equivalent clean air requirements are based on a rigorous risk assessment.

ANSI/ASHRAE Standard 188-2021, *Legionellosis: Risk Management for Building Water Systems* establishes minimum risk management requirements. It contains extensive input from industry, academia, and healthcare and from city, state, and national public health departments and regulatory authorities.

ASHRAE Guideline 44-2024, *Protecting Building Occupants from Smoke During Wildfire and Prescribed Burn Events*, includes tailored recommendations for spaces occupied by at-risk groups, such as children and the elderly; best practices for new buildings and retrofits; and guidance for the installation, commissioning, operation and maintenance of building envelopes, ventilation systems and air-cleaning technologies to mitigate smoke infiltration and improve IAQ.

Thank you for your consideration of incorporating by reference these ASHRAE standards and guideline.

If you have any questions or need additional information, please do not hesitate to contact me or have your staff email [GovAffairs@ashrae.org](mailto:GovAffairs@ashrae.org). Thank you for the work you are doing to protect the health and well-being of building occupants.

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<sup>1</sup> Managing Air Quality During the Pandemic: How K-12 Schools Addressed Air Quality in the Second Year of COVID19, ASHRAE and USGBC Center for Green Schools, May 2022: [https://www.ashrae.org/file%20library/technical%20resources/covid19/managing\\_air\\_quality\\_during\\_the\\_pandemic.pdf](https://www.ashrae.org/file%20library/technical%20resources/covid19/managing_air_quality_during_the_pandemic.pdf)

Sincerely,

A handwritten signature in blue ink that reads "M. Dennis Knight". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

M. Dennis Knight  
2024-2025 ASHRAE President