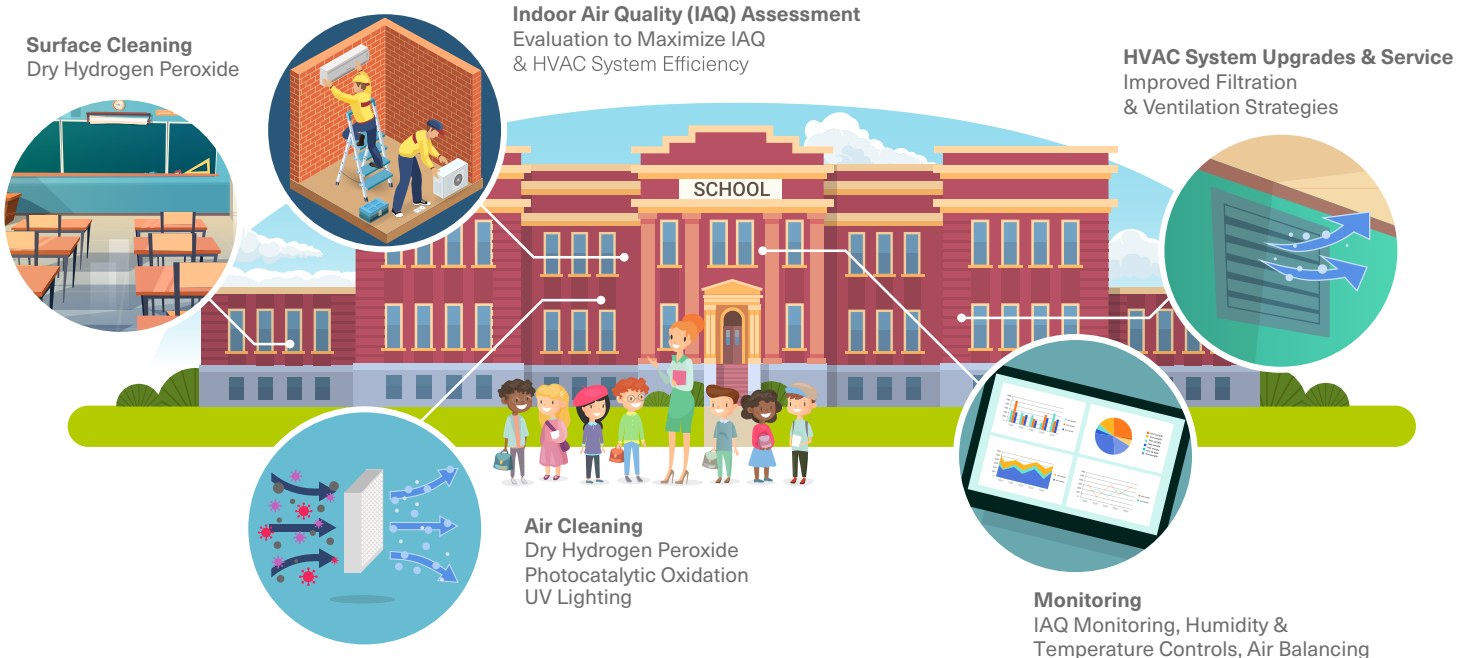


# Positive Change. It's in the air.



## Trane WellSphere™ solutions for healthy schools.

How important is the air inside your school? Researchers have known for a long time that maintaining proper IAQ can help reduce absenteeism, affect test scores, and enhance student and staff perceptions of productivity.<sup>1</sup> Even before the pandemic, cold and flu viruses caused an average of 164 million student absences nationally in grades K-12 each year. Depending on student populations and per student funding, school districts could potentially suffer millions of dollars in funding losses and the financial impact can spread through the community.<sup>2</sup> Parents missing work to care for sick kids contributes to the \$20+ billion lost to employee absenteeism each year.<sup>3</sup>

Today there are more ways than ever to manage and monitor indoor air quality, while keeping your goals for cost and sustainability in sight. Trane is a leader in indoor air quality. We can help you align with air quality guidelines set by the Centers for Disease Control using innovative technologies and proven solutions... brought to life through STEM.

**“Schools are an important part of the infrastructure of communities. They provide safe, supportive learning environments for students and employ teachers and other staff. Schools also provide critical services including school meal programs and social, physical, behavioral, and mental health services. Schools have indirect benefits to the community, including enabling parents, guardians, and caregivers to work.”<sup>4</sup>**

**—Center for Disease Control and Prevention (CDC)**

<sup>1</sup> [Creating Healthy Indoor Air Quality in Schools | US EPA](#)

<sup>2</sup> [SCHOOL ABSENTEEISM DUE TO ILLNESS - FACT OR FICTION?](#)

<sup>3</sup> [The Economic Burden of Non-Influenza-Related Viral Respiratory Tract Infection in the United States](#)

<sup>4</sup> [Science Brief: Transmission of SARS-CoV-2 in K-12 schools](#)

## Clean air technologies by Trane.



Bring IAQ technologies into STEM learning. Ask about our curriculum support programs.

## Assess, Mitigate, Manage. Three Steps to Indoor Air Quality.

Managing and monitoring indoor air is an important part of keeping schools open, and communities healthy and productive.

### ASSESS

#### What's in your air?

Effective IAQ solutions are *not* one-size-fits-all. Trane provides IAQ recommendations specific to each school. Improvement begins with a scientific, baseline assessment of current-state indoor air quality.

*Comparative data gained through independent testing, conducted by LMS Technologies, Inc., gives us the facts we need to objectively recommend the options that are best for your school.*

*The CDC recommends an "Assessment" of the HVAC system and controls calibrated per manufacturer specifications.<sup>5</sup>*

[5 K-12 Schools COVID-19 Mitigation Toolkit](#)

### MITIGATE

Your assessment will take into consideration strategies rooted in four pillars for improving indoor air through the HVAC system: **Dilute, Exhaust, Contain and Clean**. We will work with you to understand the practical realities of your building systems to implement the best strategies for your school.

#### Explore the science behind air and surface cleaning technologies.

The following technologies clear the air by trapping and destroying certain viruses and particles.

**Dry Hydrogen Peroxide:** Reduces pathogens (bacteria, mold, certain viruses) by oxidizing their cell membranes and disrupting the chemical structures. Technology solutions produce DHP from humidity and oxygen in the air within acceptable safety thresholds for continuous use in occupied spaces.

**Photocatalytic Oxidation (PCO):** Uses short wavelength ultraviolet light (UV-C) to inactivate microorganisms by destroying nucleic acids, altering the structure of the RNA.

**Ultraviolet Germicidal Irradiation (UVGI):** Uses short wavelength ultraviolet light (UV-C) to inactivate microorganisms by destroying nucleic acids, altering the structure of the RNA.

**Filtration:** MERV 13+ and HEPA filters trap particles and some airborne pathogens more effectively compared to lower-rated products.

### MANAGE

#### Show results—and maintain what you've gained.

The key to sustained success is continuous monitoring and management of your air quality through your building control system. Trane offers IAQ-focused solutions such as sensing technologies and real-time monitoring.

Reach out to your Trane Account Manager today to find out how the Wellsphere™ approach can help your building and your bottom line.



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.com](http://trane.com) or [tranetechnologies.com](http://tranetechnologies.com).

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