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How do you help ensure a safe, healthy indoor environment for your students, staff and educators?

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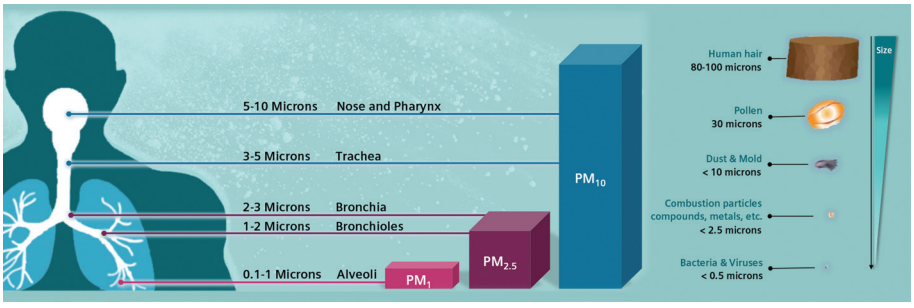
It is well understood that indoor environments have a tremendous impact on the health, productivity, and well-being of building occupants and this is even more true in the learning environment. Contaminants inside a facility can adversely affect occupants, from classrooms and study halls to dormitories and research labs.

Consequences of a Poor Indoor Environment

Potential Impact to Students/Educators	Potential Impact to Education
• Increases sickness, fatigue, asthma, allergies, and headaches	• Decreases productivity
• Decreases concentration	• Increases absenteeism
• Reduces satisfaction	• Increases employee turnover
• Heightens stress and fear	• Creates risk to continuity of education
• Reduces trust and loyalty	• Potential legal fees and tarnished brand

Airborne Contaminates and the Respiratory System

Airborne contaminants less than 10 microns, which includes mold, mildew, bacteria, and an assortment of viruses, pose the greatest health risk because they can penetrate deep into the lungs.



Facilities often address contaminates using a traditional approach. For example, increasing the ventilation rates or installing more effective air filters. However, this may increase energy consumption and noise, and it might not resolve the problem.

Controlling indoor environments can be complex due to the varying interactions between the outdoor climate, building occupants, potential contaminants, operations, and the HVAC system.

DID YOU KNOW?

- Pollutants can penetrate inside a building and be 2-5 times higher than the outdoors.[1]
- Americans, on average, spend approximately 90% of their time indoors.[2]
- Performance losses due to poor indoor air typically equal 2-4%.[3]
- 30% of adults and 40% of children in the U.S. have allergies.[4]

1-3 Environmental Protection Agency
4 WebMD, LLC

A healthy indoor environment creates the best environment for teaching and learning–so that students can reach their potential and educational institutions can achieve their mission.

Successful mitigation of contaminant risk

For the best result, issues need to be addressed and variables that impact the indoor environment need to be monitored and managed. These variables include contaminates, ventilation, maintenance effectiveness, and precise building control parameters including temperature, humidity, and building differential pressure.

Siemens Smart Air Quality™ Program

Siemens Air IQ Program provides a holistic approach to mitigate contaminant risk. With the support of our knowledgeable professionals, the latest technology, and smart processes, we can provide a customized service program that helps you achieve your goals.

Detailed Assessment

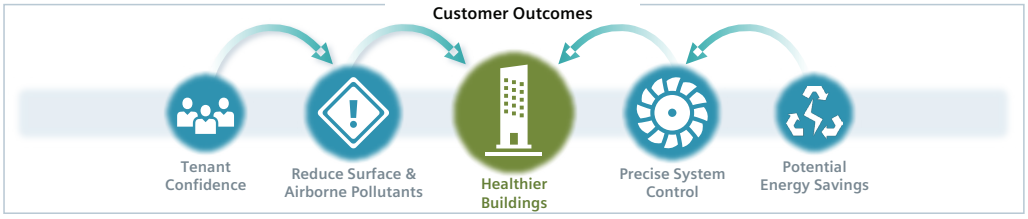
- Comprehensive ventilation assessment
- Assess equipment maintenance
- Review contamination sources
- Prepare findings and budget for customer

Project Implementation

- UV, ionization, other advanced technologies
- Duct and coil cleaning
- Filtration improvements
- Precise system control
- Repairs to HVAC / BMS

Ongoing Services

- Preventative maintenance for HVAC / BMS
- Building temp humidity management
- Building pressurization
- Energy monitoring
- Monitor KPIs for new technologies



Primary Contaminants and Technology to Mitigate Risk		
Contaminant Type	**Examples**	**Mitigation Technology**
Particulate	Dust, Lint, Hair, Dirt, Soot	Maintenance, filter upgrades, ionization
Biological	Bacteria, Viruses, Molds, Pollen	Maintenance, Ionization, Ultraviolet
Gaseous	Volatile Organic Compounds (Vocs), Chemicals Vapors, Cleaning Solvents Off Gases, Carbon Dioxide (Co_2)	Advance Filtration / Air Scrubber, ionization

Contact your local Siemens office today to learn how Siemens Air IQ Program can help you achieve a healthy indoor environment at usa.siemens.com/education

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