

OUTMATCH OUTBREAKS WITH HEALTHIER AIRFLOW

DO YOU TRUST THE AIRFLOW MANAGEMENT SYSTEM IN YOUR HEALTHCARE FACILITY?

Infection and virus containment is a major concern for healthcare facility managers, executives and staff members every day. Many factors go into keeping a healthcare environment infection free, but when it comes to containing the spread of airborne contamination sources such as bacteria, viruses and other microorganisms, **a responsive and effective airflow management system is a must.**

A pandemic can occur when a strain of a virus mutates into a form not easily handled by the human immune system and is resistant to treatment with known medications. Without a proper airflow and pressure management system, rooms and floors can be quickly become contaminated by the spreading from patient and doctors to others outside of the initially infected area. The isolation of the contaminated area is not only critical for the safety inside but it is also important for the area outside of the space.

For airborne transmission cases, the Centers for Disease Control and Prevention recommends that patients be placed in an airborne infection isolation room (AIIR) constructed according to their Guideline for Isolation Precautions.* This single-patient room must meet the American Institute of Architects/Facility Guidelines Institute (AIA/FGI) standards, which include:

- Monitored negative pressure relative to the surrounding area
- Twelve air exchanges per hour for new construction/renovation and six air exchanges per hour for existing facilities
- Air exhausted directly to the outside or recirculated through HEPA filtration before return

By not containing the virus to local, contaminated areas, the risk can grow from patients and staff to the hospital operations as a whole. Nearly every hospital has an adjustable HVAC system to manage airflow, so what is the issue? **The problem comes down to speed and accuracy of the airflow management.**

Many common infections can spread by airborne transmission, such as:

- Influenza
- Anthrax (inhalational)
- SARS
- Measles
- Chickenpox
- Cryptococcosis
- Tuberculosis

PHOENIX CONTROLS VENTURI VALVES PROVIDE THE BEST AND MOST EFFECTIVE CONTAINMENT SOLUTION



WHY A PHOENIX CONTROLS SYSTEM IN A HEALTHCARE FACILITY?

- A Phoenix Controls airflow control system provides fast, stable and repeatable space ventilation and pressurization control
- All of our venturi valves are characterized on NVLAP Accredited Airstations, Lab Code 200992-0. NVLAP is administered by the National Institute of Standards and Technology (NIST). This provides an unmatched level of accuracy and repeatability
- Unlike other airflow control devices, including VAV boxes and competitors' valves, which measure airflow, Phoenix Controls venturi valves are not susceptible to sensor drift and contamination that can lead to compromised containment of airborne pathogens
- Phoenix Controls valves have obtained an OSHPD Pre Approval rating

When a Phoenix Controls venturi valve was tested and compared to a VAV box system, the venturi was more responsive and more effective in reducing air particles in a patient room. It also averaged a nearly 60% reduction in particulate count compared to a controlled contaminant in an ICU room at the beginning (0-8 minutes) and end (37-42 minutes) of the cycle. **

MOVING AHEAD WITH A HEALTHIER FACILITY



In new construction or retrofit projects, incorporate Phoenix Controls venturi valves into your plan for a healthier and pandemic-ready facility, to provide the most flexibility for patient care.

Venturi valves work well in retrofit applications by providing accuracy and repeatability even where existing duct configurations present challenges for traditional VAV solutions.

“The venturi valve design is especially useful for isolation room retrofits. It has proven to be largely unaffected by unusual transitions, bends and irregularities commonly found on older ducting.”

- Martin Ford, engineering firm
Pruett-Ford & Associates

CHOOSE EXPERIENCE, KNOWLEDGE, QUALITY

Since 1985, Phoenix Controls has been the recognized leader in precision airflow control systems for use in critical room environments. The increased focus on reducing healthcare-acquired infections, along with budget management necessity, calls for Phoenix Controls' airflow products and experience in the critical environment industry.

From design assistance, consultation, installation and service support, the Phoenix Controls team and extended representative network is your experienced resource.

Contact your local Phoenix Controls representative or visit www.phoenixcontrols.com/howtobuy to start making your facility safer and better prepared.

PHOENIX CONTROLS' SOLUTION CAN BE INTEGRATED WITH ANY BUILDING MANAGEMENT SYSTEM TO ENHANCE:

- Room Pressure/Infection Control Strategies
- Patient Health and Comfort Automation
- Accreditation Management
- Facility Operations/ Maintenance Savings
- Flexible Surgical and Critical Care Control Strategies
- Energy Management Optimization
- Reliable, Accurate, HVAC Performance

*<https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>

** “Wagner, Greeley, and Gormley ICU Environmental Quality study” I-9 - DOI: 10.1177/1937586719854218

