



KEEP YOUR FOCUS ON THE PATIENT, WITH A HEALTHIER ENVIRONMENT.

CREATE A HEALTHIER AND MORE RESPONSIVE PATIENT CARE ENVIRONMENT BY INCLUDING PHOENIX CONTROLS WITH YOUR BUILDING MANAGEMENT SYSTEM

Healthcare spaces today require better environmental management to address the increased risk of airborne contamination sources such as bacteria, viruses and other microorganisms, also known as Healthcare Associated Infections (HAIs). Research has shown nearly 1.7 million people per year are infected during a hospital stay – over 30% of the annual patient visits – and almost 100,000 people die annually in the US from HAIs*.

From operating rooms to Intensive Care Units (ICUs), the ability to quickly detect, adjust and maintain the environment in a designated space not only increases the flexibility of the patient space, but also provides a more aseptic environment more suitable for bedside procedures.

With 1,000 to 10,000 shed skin cells per person per minute, people are an active source of airborne Colony Forming Units (CFU). Activity by doctors, nurses and others actively entering and leaving the critical space, all contribute to the integrity of the environment and can impact the infection risk. To help maintain a healthy environment, stable, reliable, quick-to-adjust air flow must be maintained. **Healthcare facilities across the world turn to the Phoenix Controls venturi valve to manage and control their critical environments.**

The hospital cost of a single HAI case can range from just under

\$1,000

to nearly

\$50,000 or more

depending upon the type of infection and length of extended stay***

In a recent study posted in the Health Environments Research & Design Journal** when a venturi valve was tested and compared to a VAV terminal box system, the venturi was more responsive and more effective in reducing CFU near the patient bedside. In addition, it averaged ~60% reduction in ppm of controlled contaminant in the ICU room at the beginning (0-8 minutes) and end (37-42 minutes) of the cycle.

In the Wagner, Greeley, and Gormley ICU Environmental Quality study**, the venturi valve clearly demonstrated a faster transition and stabilization of Air Changes per Hour (ACH) compared to a VAV box:

ACH	VAV box	Venturi valve
Transition from 2 to 6 ACH	41 sec	19 sec
Transition from 6 to 15 ACH	72 sec	35 sec
Transition from 3 to 15 ACH	100 sec	39 sec

PHOENIX CONTROLS HAS THE EXPERTISE AND EQUIPMENT

Since 1985, Phoenix Controls continues to be a recognized leader in the design and manufacturing of precision airflow control systems for use in critical room environments. The increased focus on reducing healthcare acquired infections, along with the never-ending budget management necessity, calls for the air flow products and experience Phoenix Controls provides the critical environment industry.

AN INNOVATIVE SOLUTION

As your critical environment front end, **Phoenix Controls'** **Vision CE** can provide real-time, focused environmental tools for analysis that allows you to customize reporting, scheduling, and even alarm management. Combine that with the Phoenix Controls Venturi Valve which is designed to deliver high-quality performance, accuracy, stability, and directional airflow needed to quickly transition spaces to "procedure mode" or simple bedside pre-operative conditions".

Managing ventilation and monitoring the critical environment

Phoenix Controls, in conjunction with your BACnet®- running BMS, can assist with:

- 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

is now achievable to support the hospital in providing quality environments for better patient care. Our solutions integrate easily into a BACnet®- running, Building Management System (BMS). As a result, healthcare facilities across North America are experiencing how Phoenix Controls makes it easier to manage these spaces immediately or on a scheduled basis.

EFFICIENT & EFFECTIVE

Sustainability and environmental stewardship is also supported when rooms have less environmental contamination sources resulting from patient vacancy and intermittent occupancy. A BMS, combined with a Phoenix Controls venturi valve and Vision CE, can quickly and easily be adjusted to manage building utility and operational costs. Plus, they can be monitored either on-premises or remotely through your BMS, making confirmation of immediate and responsive impact on the health of your patients and staff verifiable and reportable.

EXPERIENCE & LEADERS

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 more efficient.



"Contamination originating in the corridor was effectively prevented from detection inside the ICU room by airflow control systems designed to modulate air exchange rates and room pressurization in a critical care space."**

* "Estimating Health Care-Associated Infections and Deaths in U.S. Hospitals, 2002" Public Health Rep. 2007 Mar-Apr; 122(2): 160-166. doi: 10.1177/00335490712200205

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

*** ClinicoEconomics and Outcomes Research – 2016

