

# IS YOUR HOSPITAL UNDER INCREASED PRESSURE?

## PROTECTING YOUR PATIENTS, STAFF AND ENVIRONMENT TO REDUCE THE RISK OF CONTAMINATION

*Coronavirus is known to spread primarily through contact with an infected person when they cough or sneeze. It can also spread when a person touches a surface or object that has the virus on it, then touches their eyes, nose, or mouth.*

*Therefore, the CDC recommends a number of procedures be put in place to minimize the spread of infection, including isolating symptomatic patients as soon as possible. Set up separate, well-ventilated triage areas, for patients with suspected or confirmed COVID-19 in private rooms with closed doors and private bathroom (when possible) and prioritize Airborne Infection Isolation Rooms (AIIRs) for patients undergoing aerosol-generating procedures.<sup>1</sup>*

### THE POTENTIAL PROBLEM

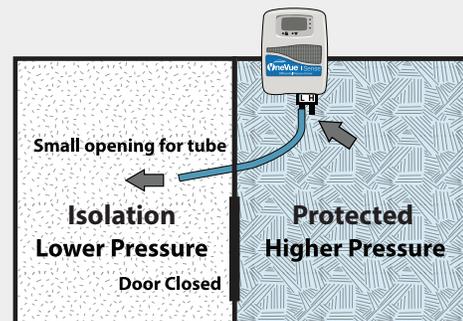
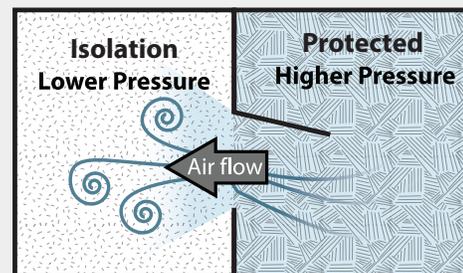
An AIIR is a single occupancy patient care room used to isolate persons with a suspected or confirmed airborne infectious disease. With an increase for the need of converting standard patient rooms to isolation rooms, the need to monitor air flow quickly is important. Surprisingly, many healthcare facilities still monitor air pressure in AIIRs using manual smoke tests or flutter tests. However, many are now moving to a more consistent, continuous, automated method of monitoring negative pressure to ensure patient safety and compliance.

### DIFFERENTIAL PRESSURE MONITORING EXCEEDS THE GUIDELINES FOR MANAGING THE SPREAD OF AIIRS

Primex OneVue Sense Differential Pressure Sensor continuously monitors differential pressure and other key conditions to protect patients and staff. Leveraging your existing Wi-Fi infrastructure, you can deploy continuous monitoring more quickly than systems that require transmitters, bridges or other communication hardware. Providing an effective, yet adaptable containment solution for COVID-19, OneVue Sense Differential Pressure Sensors are portable and easy to install, allowing you to quickly monitor airflow in isolation or quarantine areas. They also can easily be removed and installed in other rooms when needed.

### ONEVUE SENSE ENVIRONMENTAL MONITORING

In a healthcare facility, control of airborne contaminants is essential to providing a safe, healing environment.



### HOW DIFFERENTIAL PRESSURE MONITORING WORKS

- Pressure is provided via the HVAC system – a combination of fan speeds and damper settings give a room more or less air than surrounding areas
- When a door between two spaces is open, air flows from high to low pressure
- That air flow can carry microorganisms, dust, debris and other contaminants
- When the door is closed, the differential pressure will often get higher
- When the door is open, air flow causes the differential pressure to equalize (get smaller)

## GUIDELINES FROM AUTHORITIES HAVING JURISDICTION

In a healthcare facility, control of contaminants is essential to providing a safe, healing environment. Some accepted guidelines call for permanently installed monitoring devices for more precise control and safety. There are a number of guidelines from authorities having jurisdiction. Below is a summary of a few key guidelines published by various compliance agencies.

- An airborne infection isolation room (AIIR) should have differential pressure less than -2.5 Pa (-0.01" water) when compared to an adjacent space, whether that's a protective environment like an anteroom or simply the hallway. (Note that this requirement is the same as having the protective environment being greater than 2.5PA (or 0.01" water).
- The CDC FAQ (March 10, 2020) says patients with confirmed or suspected COVID-19 should be placed in "regular examination room with the door closed. Airborne infection isolation rooms should be reserved for patients undergoing aerosol generating procedures or for diagnoses such as active tuberculosis".
- Constant monitoring of this pressure differential is required when the room is occupied by an isolated patient.

OneVue Sense Differential Pressure sensors offer automatic and continuous monitoring of the room so that notifications are sent if the room is not properly pressurized. In addition, reports are available to provide evidence that there were no excursions.

## PROVIDE ASSURANCE FOR YOUR FACILITY WITH ONEVUE SENSE DIFFERENTIAL PRESSURE SENSOR

The Primex OneVue Sense™ Differential Pressure Monitoring solution employs highly sensitive, sensors with the ability to detect ultra-low changes in air pressure between two spaces that could affect patient safety. The sensors require only a minuscule amount of air flow through the unit to detect pressure changes. If pressure does go out of range, visual, audible and email alerts are triggered to protect the safety of patients, staff and visitors.

- LCD screen with intuitive graphic display shows pressure differential to  $\pm .001$  inches H<sub>2</sub>O, providing immediate visual verification of correct pressure.
- Customizable user span settings help minimize "nuisance" alarms by initiating alerts only when pressure thresholds have been breached for a pre-determined length of time.
- Captures and documents pressure readings at user-defined intervals.
- Features both an 802.11 b/g Wi-Fi radio and Ethernet port for easy network communication.
- Comprehensive documentation is easily accessible through the Web-enabled AMP interface to prove compliance to all authorities having jurisdiction.

Easy to install, portable and adaptable to most environments – OneVue Sense Differential Pressure is the practical choice to help monitor airflow in your facility.

### ADDITIONAL RESOURCES AVAILABLE:

Healthcare Infection Prevention and Control FAQs for COVID-19

<https://www.cdc.gov/coronavirus/2019-ncov/infection-control/infection-prevention-control-faq.html>

CDC - Implement Environmental Infection Control

[https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html#infection\\_control](https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html#infection_control)

ASHRAE Standard 170, Ventilation of Health Care Facilities

[https://www.techstreet.com/ashrae/standards/ashrae-170-2017?product\\_id=1999079&ashrae\\_auth\\_token=12ce7b1d-2e2e-472b-b689-8065208f2e36](https://www.techstreet.com/ashrae/standards/ashrae-170-2017?product_id=1999079&ashrae_auth_token=12ce7b1d-2e2e-472b-b689-8065208f2e36)

Facility Guideline Institute Guidelines for Design and Construction of Healthcare Facilities (2018)

<https://fgiguilines.org/guidelines/2018-fgi-guidelines/>

<sup>1</sup> [https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhpc%2Finfection-control.html](https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhpc%2Finfection-control.html)