

# Why you need to ventilate during Covid-19 pandemic?

## Putting personal safety, first.

Protection against viral transmissions is composed of several components, with personal protective equipment (PPE) being the first line of defense. However, there are ways to improve air quality in large, non-air conditioned spaces.

“No one knows how much virus it takes to transmit the illness, and trying to estimate the amount of viral particles expelled by an unknown number of infected people makes this a nearly unsolvable problem,” he says. “There is general agreement, however, that the lower the viral contamination, the less chance of transmission of infection.” ~ Keith Simon, senior development manager at Airmaster

The more outside air you bring into an environment lowers the viral concentration and therefore lowers the risk. Perhaps the best method of providing dilution air to a factory or warehouse is the use of panel fans or roof ventilators. Both are mounted well above the floor, and produce a constant low velocity airflow while providing large amounts of dilution air.

Key issues:

1. Velocity - use the lowest velocity that is compatible with comfort, and allow velocity to dissipate safely.
2. Direction - “Clean to Dirty”, pull air from an uncontaminated source, past workers, and then to an unoccupied area (or outside).

“The traditional methods of ventilating an industrial building remain among the best way of providing dilution of air,” says Simon. “This is because the velocity from these devices dissipates before the air reaches the work floor.”

In the past, facilities might have used a single large air circulator that sent air down the length of an assembly line cooling a large number of workers. This approach is not advisable today because it risks carrying contamination from worker to worker. Instead, Airmaster suggests using multiple smaller air circulators perpendicular to the assembly line, creating a “dirty zone” behind the line of workers. It’s best to tilt the air circulator in a downward direction so that any contamination goes toward the floor.

Airmaster advises against using oscillating fans during the pandemic because the constant movement makes it difficult to control the direction of airflow.

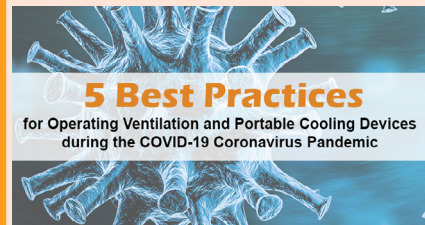
More information about ventilation in a large unconditioned space during Covid-19 Pandemic can be found in the Airmaster Webinar link:  
[Webinar : Use of air moving equipment during current Pandemic.](#)

Additional topic such as: Identify the Need for Ventilation (Warning Signs), Negative Pressure within a Building and other Webinar presentations are also available to view from the Airmaster website. [Click Here](#)

On the recommendation of the ASHRAE Epidemic Task Force, ASHRAE leadership has approved the following two statements regarding transmission of SARS-CoV-2 and the operation of HVAC systems during the COVID-19 pandemic.

Transmission of SARS-CoV-2 through the air is sufficiently likely that airborne exposure to the virus should be controlled. Changes to building operations, including the operation of heating, ventilating, and air-conditioning systems can reduce airborne exposures.

Ventilation and filtration provided by heating, ventilating, and air-conditioning systems can reduce the airborne concentration of SARS-CoV-2 and thus the risk of transmission through the air. Unconditioned spaces can cause thermal stress to people that may be directly life threatening and that may also lower resistance to infection. In general, disabling of heating, ventilating, and air-conditioning systems is not a recommended measure to reduce the transmission of the virus.



The full article can be downloaded from the Airmaster Website - [Click Here](#)

1. Do NOT Disable Ventilation Equipment
2. Remember to use Common Sense when using ventilation equipment.
3. Air velocity and direction should be used in tandem.
4. Cross ventilation is an effective method
5. For using air circulators, low speed and airflow direction MUST be considered