



Safety Tips

The following are simple recommendations facilities can follow to reduce the risk of airborne pathogen transmission, including COVID-19. These recommendations focus largely on building modifications and are based on guidance from the CDC and other trusted sources. Note that the recommendations only **reduce** the risk of transmission but do not **eliminate** it. They are not intended to encourage or discourage business opening, but to provide information on how to more safely operate under current circumstances.

Remember the basics



Face masks remain one of the most effective means of reducing transmission risk. Employees and building users should always wear masks when not eating or drinking. Post signs in visible locations to promote proper mask wearing, and have extra masks available if possible.



Use signs to encourage hand washing. Ensure that there are adequate supplies (hand sanitizer, tissues, etc.) to promote hygiene.



Encourage staff to use sick days if they are not feeling well and remove financial barriers if possible.



Clean and disinfect frequently touched surfaces at least daily and as much as possible. Limit use of shared objects.



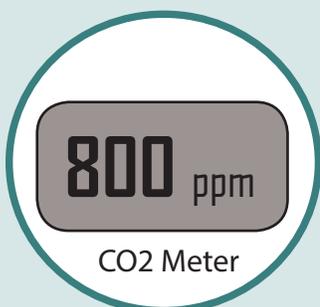
Require employees to be tested for COVID-19 regularly to catch asymptomatic carriers.

Social distancing

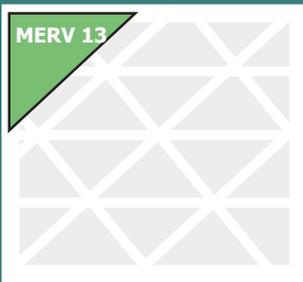
Set up seating and lines so that people are at least 6 ft apart. Tape off or place signs on tables and floors to guide occupants and maintain distancing. Post signs that discourage congregating. For restaurants, encourage curbside or drive through services, recognize that indoor seating is inherently riskier than outdoor seating, and avoid bar seating.



Increase outside air ventilation



Business owners can purchase handheld CO2 monitors at relatively low cost to spot check for adequate ventilation if their system does not monitor CO2 already. In general, for sedentary occupancy, 800 ppm of CO2 is indicative of fresh air flows meeting 40cfm/person. Proper ventilation rates can be maintained by opening windows, HVAC unit dampers, or limiting occupancy.

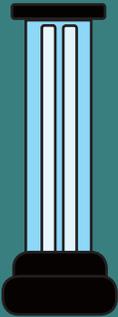
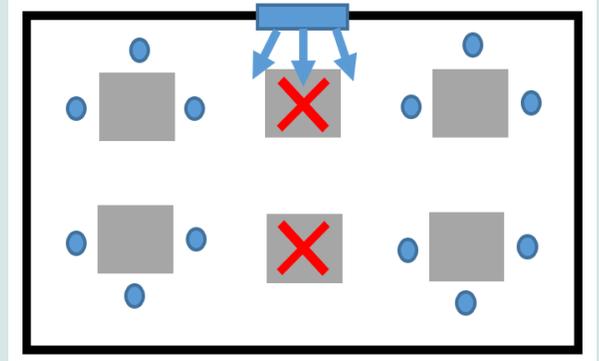


Increase filtration to minimum MERV 13

MERV 13 filtration in central air handling systems can capture up to 90% of viruses in the airflow. MERV 13 filters can be purchased with similar pressure drops to existing MERV 8 or MERV 11 filters most common in commercial fan systems, and for similar cost. Ask your HVAC provider for options.

Place occupants away from strong airflows

If a supply or return air diffuser is directly over a table, or a window or other fan system is near a table, do not seat occupants there. Strong airflow can carry airborne pathogens long distances and increase transmission risk. Ideally, airflow should not be able to be felt.



UV-C Germicidal Irradiation (UVGI)

UVGI can be added to central air systems to purify the airstream and clean filters and coils. UVGI can also be used to disinfect surfaces, and generally has a higher effectiveness than spray-and-wipe disinfectants. Upper room UVGI, where specialized lamps are installed high on walls, is an alternative to central-air UVGI, but generally is more expensive to install.

Additional measures



Install physical barriers (sneeze guards, partitions) to separate staff from occupants. Plexiglass or shower curtains can be used.



Reduce or eliminate background music. People who speak loudly over background music emit more airborne droplets at higher velocity.



Consider portable HEPA filters or other air purification systems to reduce air contaminants.

Need help?

Businesses wanting a more detailed examination of their potential risks and ways to make their facilities safe can contact SEDAC at info@sedac.org or **800-214-7954** to speak with one of our engineers. SEDAC is an applied research and training center at the University of Illinois with a mission to reduce the energy footprint of Illinois.

