

## COVID-19 Risk Reduction Strategies for Reopening School Facilities

### General Information

- This document outlines some primarily ventilation related considerations for COVID-19 risk reduction strategies. Of course, risk reduction does not mean there is zero risk.
- The primary mode of COVID-19 transmission is person-to-person close contact, but airborne fine droplets (aerosols) can also transmit coronavirus beyond 6 feet in certain conditions. The riskiest environments for transmission are indoor areas with poor fresh-air ventilation.
- Major facilities modifications are not practical nor affordable given time and funding constraints; the focus should be on maintenance practices and space-use needs and policies.
- Of course, strict adherence to control measures, including handwashing, maximizing distance, and face masks are critical to any risk reduction strategy.
- All risk reduction strategies regarding the configuration of school facilities should be concurrent with all other provided COVID-19 mitigation guidance.

### Focus on Air Quality

- Maximize time outdoors and minimize time in enclosed spaces
- Avoid the use of poorly ventilated spaces as much as possible
- Clean and properly install air filters so that air goes through the filters, rather than around them, with as high a MERV rated filter as can be accommodated by the HVAC system
- Implement a strict preventive maintenance program focused on air handling units and exhaust fans to ensure they are working properly
- Maximize outside air by using the highest outside air setting possible for the equipment
- Open windows and doors as much as safely possible
  - Even a couple of inches can really increase the number of air changes in the room
- CO2 levels can provide a good proxy of ventilation. In occupied areas, the IAC [Educational Sufficiency Standards](#) set the CO2 maximum for occupied spaces at 1,200 PPM, although levels should mostly be below 1,000 ppm, and levels in the 600-800 PPM range are preferred indicating very good ventilation. If available, inexpensive portable CO2 meters can be used to evaluate areas where there is a question of ventilation adequacy
- Portable HEPA air filtration units can be effective in small spaces such as offices, health suites/nursing suites, and isolation rooms (particularly if they are poorly ventilated), though they are usually not effective for larger areas.

### Resources

- [Center for Cities+Schools COVID-19: Resources for Opening Healthy School Facilities](#)
- [ASHRAE Reopening Guide for Schools and Universities](#)

