12. Ventilation and HVAC Considerations

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Considerations	Plan 1 – Return to School	Plan 2 – Blended & Remote
Because the transmission of COVID-19 through the air is likely, steps should be taken to control airborne exposure. 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 the COVID-19 virus and thus the risk of transmission through the air.		
Consider the health of individuals in unconditioned spaces. Resulting health impacts may be life threatening and reduce an individual's resistance to infection. ASHRAE doe not recommend the disabling of heating, ventilating and air-conditioning systems.		
Consideration should be made to recirculation of infectious particles (< 5 microns) remaining airborne that could lead to the transmission of infection within building areas. - The Federation of European Heating, Ventilation and Air Conditioning Associations (REHVA) recommends "no use of recirculation" in any building with a mechanical ventilation system - - "Virus particles in return ducts can also re-enter a building when centralized air handling units are equipped with recirculation sectors" -- Avoid recirculation of air during COVID-19 episodes by closing the recirculation dampers (via the building management system or manually		

-- Air handling units and recirculation sections equipped with return air filters (even HEPA) may not filter out virus size particles effectively		
When the humidity is higher, the droplets become heavier and fall to the surface, where they are easier to control. Humidity comfort levels should be between 30-60% to avoid infection		