

Phase III guidelines for ventilation

I. Summary of Phase III ventilation research

Research continues to support that face coverings are one of the best defenses against the transmission of COVID-19 and other respiratory viruses¹.

To further mitigate airborne transmission, schools can improve the condition of indoor spaces by increasing outdoor air ventilation or filtering the air that recirculates within a room, a hallway, or a building.

HVAC systems with a minimum of 4-6 Air Changes per Hour (ACH) based on square footage/volume of space, no less than 15 cubic feet of ventilation of air per minute (cfm) per person, Minimum Efficiency Reporting Value 13 (MERV13) filters, and outside air would require no changes for use at standard classroom densities. HVAC systems with lower filtration ability will require an increase in the use of outside air or supplemental air filtration. Classrooms that can only achieve minor filtration/ventilation should be de-densified in accordance with the following chart developed by RIDOH based upon analysis of CDC guidance²:

ACH	Max % of Normal Occupants in Room	People in a 1000 ft ² classroom with 30 people last year
4+	100	Up to 30
3 to <4	50	Up to 15
2 to <3	33	Up to 10
1 to <2	16	Up to 5
<1	1 person	1

¹ <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html#recent-studies>

² <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html> “*Note: The ventilation intervention considerations listed above come with a range of initial costs and operating costs which, along with risk assessment parameters such as community incidence rates, facemask compliance expectations and classroom density, may affect considerations for which interventions are implemented.”