

TERMS

FILTRATION

Involves the use of different types of fibrous media designed to remove particles from the airstream.

VENTILATION

The supply/distribution or removal of air from a space by mechanical or natural means.

Ventilation measures aim to increase the flow of outdoor/fresh air for diluting the concentration of any infectious particles.

The type of ventilation system in a school is primarily based on when the school and any subsequent building additions were built.

MECHANICAL VENTILATION

The process of actively supplying air to or removing it from an indoor space by powered equipment, such as motor-driven fans and blowers, often part of a heating, ventilation and air conditioning (HVAC) system.

PARTIAL MECHANICAL VENTILATION

School buildings typically have many additions that have been added over time and as a result have a combination of ventilation systems, which could include older sections of the facility that are naturally ventilated and newer sections that are mechanically ventilated.

NON-MECHANICAL VENTILATION *(as defined for the Standardized Ventilation Measures Report)*

The process of supplying fresh air to and removing air from an indoor space through natural ventilation and/or exhaust-based ventilation systems.

NATURAL VENTILATION

The process of supplying fresh air to and removing air from an indoor space through intentionally provided openings (such as windows and doors), through nonpowered ventilators, or by infiltration.

EXHAUST VENTILATION SYSTEM

The process of removing air / depressurizing the building whereby makeup air enters the building through intentional passive vents and infiltration.

VENTILATION STRATEGY

The overall set of measures, actions as well as policies and investments taken by a school board to optimize air quality in schools

VENTILATION AND FILTRATION MEASURES

VENTILATION ASSESSED

Where ventilation is assessed in house (by qualified board staff) or by a third party (including system recommissioning) and the assessment is aligned with manufacturer's requirements and best practice guidance, including from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

RUNNING VENTILATION SYSTEMS LONGER

In instances where there are mechanical ventilation systems present in a building (with applicable system controls in place), these systems are expected to operate two hours or more before and after occupancy of the school.

HIGHER GRADE FILTERS INSTALLED

Where HVAC filters have been upgraded to the highest grade possible, preferably MERV 13.

The effectiveness of a filter is rated by the Minimum Efficiency Reporting Value (MERV), based on the fraction of particles removed from air passing through it under standard conditions.

Higher efficiency filters may not be a viable option for some mechanical ventilation systems as they may cause greater resistance to air flow than allowable by design specifications.

INCREASED FREQUENCY OF FILTER CHANGES

Where the mechanical ventilation system filters are changed more frequently to ensure optimal air flow and filtration.

INCREASED FRESH AIR INTAKE (WINDOWS AND/OR MECHANICAL VENTILATION SYSTEMS)

Where the intake of fresh air is increased through mechanical ventilation systems and/or through opened windows.

STANDALONE HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTER UNITS

A standalone appliance/device with a high efficiency particulate air (HEPA) filter intended for use in a localized area within a building. A HEPA filter is a type of pleated mechanical filter that can remove particles with a size of 0.3 μm with a minimum efficiency of 99.97%.

Ontario's Science Advisory Table, as part of its science brief on school-based measures, identified the use of standalone HEPA filter units as a strategy for classrooms and spaces with challenges in achieving adequate ventilation.

Note: Definitions based on information from the [Ontario COVID-19 Science Advisory Table](#), Public Health Ontario ([Heating, Ventilation and Air Condition \(HVAC\) Systems in Buildings and COVID-19](#) and [Use of Portable Air Cleaners and Transmission of COVID-19](#)) and ASHRAE.