

Klachkova, Anastasiya (CSC/SCC)

From: Dunn Kathleen (NHQ-AC)
Sent: March 12, 2021 10:31 AM
To: Massicotte Nancy (QUE)
Cc: Clement Chris (NHQ-AC); Varsaneux Olivia (NHQ-AC); Nadeau Jean-Pascal (QUE); Ouellet Jonathan (QUE); Varsaneux Olivia (NHQ-AC)
Subject: RE: HEPA filter

Nancy

This may be a question for someone with more expertise in environmental health, in terms of the actual physical space, & relevant measures to mitigate risk and improve ventilation, as well as what would be an appropriate product I know there have been a few studies on use of portable air filtration systems, with varying results depending on type. Marketplace (CBC) had a feature on claims and actual effectiveness. Price was not a factor – some of the better models were less expensive, but many did not meet claims.

A few guidance docs, that may be helpful. There may be benefit, but I am not an expert on HVAC.

Kathy

COVID-19: Guidance on indoor ventilation during the pandemic
<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/guidance-documents/guide-indoor-ventilation-covid-19-pandemic.html>

Ventilation in buildings (CDC)
<https://www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html>

CDC recommends a layered strategy to reduce exposures to SARS-CoV-2, the virus that causes COVID-19; the guidance includes a list of ventilation interventions that can help reduce the concentration of virus particles in the air (i.e. improving central air filtration, & increase outdoor air ventilation)

For HEPA:

Consider portable high-efficiency particulate air (HEPA) fan/filtration systems to help enhance air cleaning (especially in higher risk areas such as a nurse's office or areas frequently inhabited by persons with higher likelihood of COVID-19 and/or increased risk of getting COVID-19).

- Research shows that the particle size of SARS-CoV-2, the virus that causes COVID-19, is around 0.1 micrometer (μm). However, the virus generally does not travel through the air by itself.
- These viral particles are human-generated, so the virus is trapped in respiratory droplets and droplet nuclei (dried respiratory droplets) that are larger.
- Most of the respiratory droplets and particles exhaled during talking, singing, breathing, and coughing are less than 5 μm in size.
- By definition, a High Efficiency Particulate Air (HEPA) filter is at least 99.97% efficient at capturing particles 0.3 μm in size.
- This 0.3 μm particle approximates the most penetrating particle size (MPPS) through the filter.
- HEPA filters are even more efficient at capturing particles larger and smaller than the MPPS.

- Thus, HEPA filters are no less than 99.97% efficient at capturing human-generated viral particles associated with SARS-CoV-2

From: Clement Chris (NHQ-AC) <Chris.Clement@CSC-SCC.GC.CA>
Sent: March 12, 2021 8:15 AM
To: Dunn Kathleen (NHQ-AC) <Kathleen.Dunn@CSC-SCC.GC.CA>
Subject: FW: HEPA filter

Morning Kathy,
Hope your cake baking went well last evening.
I am sending this over to you.
Thanks
CC

From: Massicotte Nancy (QUE) <Nancy.Massicotte@CSC-SCC.GC.CA>
Sent: March 12, 2021 6:54 AM
To: Clement Chris (NHQ-AC) <Chris.Clement@CSC-SCC.GC.CA>
Cc: Varsaneux Olivia (NHQ-AC) <Olivia.Varsaneux@CSC-SCC.GC.CA>; Poirier Nancy (QUE) <Nancy.Poirier@CSC-SCC.GC.CA>; Nadeau Jean-Pascal (QUE) <jean-pascal.nadeau@csc-scc.gc.ca>; Ouellet Jonathan (QUE) <Jonathan.Ouellet@csc-scc.gc.ca>
Subject: HEPA filter

Hi Chris,

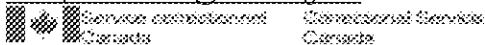
We worked really hard to have less person on site and find solution to have people work alone but their is some area that we can't do it. By example, the acute care unit at the Treatment Center have at least 4 persons in it (2 NU and 2 CX).

Do you think we could use HEPA filter for those small area that we need staff in it?

Thank you

Nancy Massicotte

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I encourage you to answer this email in the official language of your choice.