

HEPA filters

Information Sheet

2021-01-22

Use of HEPA filters

A portable HEPA filtration unit is a portable air purification system that is used to clean the air and lower microbial counts that is used as a substitute for negative pressure Airborne Infection Isolation Rooms (AIIR) for airborne pathogens. See the [IC - Tuberculosis Protocol](#).

They have been utilized during the COVID pandemic for **ongoing AGMPs** (including AGMP surgeries such as ENT, Thoracic, and transsphenoidal neurosurgery) as an additional safeguard, however public health guidelines state that for COVID patients undergoing ongoing AGMPs a single patient room with the door closed, and with all staff wearing an N95 is adequate protection. Please refer to [CLINICAL - Aerosol Generating Medical Procedures \(AGMP's\) of Relevance During COVID-19](#).

Portable HEPA filtration units are a corporate/site resource and are purchased centrally through HHS Procurement; clinical units do not need to purchase their own. If a unit requires a portable HEPA filtration unit they can request one through the established HHS process. The unit will be delivered to Facilities Management, tagged for ongoing maintenance and delivered to the requesting unit. Please read [IC - Airborne Infection Isolation \(negative pressure\) rooms and High Efficiency Particulate Air \(HEPA\) Filters - Care, storage and maintenance of](#).

Transient AGMPs in COVID patients do not require a portable HEPA filtration unit. (e.g., Intubation). After an AGMP is completed there is no ongoing aerosol risk, and no need to await a duration for settle time. Please read the [recommendations from Ontario Health](#).

Patient populations

The prioritization of HEPA filters for patients is based on the following categories:

- 1) Airborne pathogens (e.g. TB, Chicken Pox, Measles, Disseminated Zoster).
- 2) Known COVID positive patients requiring ongoing AGMPs. (Intubated ventilated patients do not require a portable HEPA filtration unit, as this is not considered an ongoing AGMP, per [Public Health guidance](#)).
- 3) COVID Pending patients that are symptomatic requiring an ongoing AGMP until negative test result
- 4) COVID exposed patients in additional precautions for 14 days, requiring an ongoing AGMP even if tests are negative on day 0 and/or day 7.

- 5) COVID Pending patients that are asymptomatic and require an ongoing AGMP until negative test result

Patients requiring ongoing AGMPs who have recovered from COVID-19 and are no longer in additional precautions do not require a HEPA filter.

Patient placement

Category 1 patients require an AIIR. If an AIIR is not available, then they should be placed in a single patient room, with a portable HEPA filtration unit.

Cohorting of patients requiring a portable HEPA filtration unit should be discussed with the site administrator, the admitting physician and Infection Prevention and Control.

If there is a shortage of portable HEPA filtration units:

- patients in categories 2 to 5 can be cohorted with patients in the same categories in multi-bed rooms
- A single bed room with the door closed and staff wearing N95 is considered safe for COVID care

Essential Caregivers and Visiting Restrictions to COVID-positive or pending patient requiring an ongoing AGMP

- Is restricted as visitors are not N95 mask fitted.
- If the AGMP can be held to accommodate a visit, or there are extenuating circumstances (e.g. pediatric or for compassionate reasons), an exception can be authorized by the clinical manager or delegate. In such a circumstance, consultation with Infection Control should occur as reporting this as an exposure to Public Health may be necessary. Visitors will be given a medical mask.
- Visitors are allowed once the patient is out of precautions, or patient no longer requires an ongoing AGMP.