

# Use of Portable Bedside Humidifiers in Facility and Supportive Living

**Note:** This best practice recommendation was developed by the IPC Continuing Care Working Group.

This document covers infection prevention and control measures only and does not cover operational issues such as cost, noise, electrical requirements, responsibility for purchase, or assignment of cleaning responsibility.

If you have any questions or comments contact IPC at [ipcsurvstdadmin@ahs.ca](mailto:ipcsurvstdadmin@ahs.ca).

## Best practice recommendations

1. Portable bedside steam or evaporative humidifiers may be permitted in facility and supportive living settings on a case-by-case basis if approved by the facility or unit management following evaluation of safety, maintenance and care requirements.
  - 1.1 Steam humidifiers boil water and produce steam to moisturize the air. Evaporative humidifiers draw moisture through a wick and the moisture is then dispersed into the air. Refer to [Example Table: Portable Bedside Humidifiers](#) for more information.
2. If portable bedside steam or evaporative humidifiers are used:
  - 2.1 Perform hand hygiene when cleaning, handling, filling or maintaining humidifiers.
  - 2.2 Follow the manufacturer's instructions for use to clean and disinfect the humidifier on a scheduled basis (e.g., daily, weekly, monthly, etc.).
  - 2.3 Do not leave water sitting in humidifiers when they are not in daily use.
    - 2.3.1 Empty, clean and disinfect the water reservoir.
    - 2.3.2 Allow the reservoir to dry before storing.
    - 2.3.3 Clean and refill the water reservoir following the manufacturer's instructions for use before the device is used again.
  - 2.4 Empty, clean and air-dry the water reservoir before refilling.
    - 2.4.1 Do not top-up the water reservoir.
    - 2.4.2 Do not add anything to the water in the reservoir (e.g., essential oils, disinfectants).
3. Ultrasonic and impeller humidifiers are not permitted because:
  - 3.1 They produce aerosols/tiny droplets in a cool mist that may spread microbial contaminants small enough to be inhaled into the lungs causing an increased risk of infection.
  - 3.2 Once contaminated, reservoirs cannot be reliably decontaminated. Contaminated reservoirs contribute to the spread of microorganisms and may lead to severe infections and outbreaks.
4. Consult Facilities, Maintenance and Engineering for electrical questions.

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**Example Table: Portable Bedside Humidifiers**

Steam or Evaporative Humidifier (May be permitted on a case-by-case basis)	Ultrasonic and Impeller humidifiers (Not permitted)
	
<p><b>Steam or Evaporative Humidifiers</b> present a lower risk of infection because they do not aerosolize droplets</p> <ul style="list-style-type: none"> <li>• <b>Steam</b> humidifiers disperses moisture through steam</li> <li>• <b>Evaporative</b> humidifiers work by drawing water through a wick filter. A fan blows air over the filter creating moisture via evaporation</li> </ul>	<p><b>Ultrasonic and impeller humidifiers</b> present a higher risk of infection because they create aerosols/tiny droplets in a cool mist that may spread microbial contaminants small enough to be inhaled into the lungs</p>

### References

Public Health Ontario. 2017. Evidence Brief: Humidifier use in health care. Retrieved from <https://www.publichealthontario.ca/-/media/documents/eb-humidifier-hc.pdf>