

Use of Fans and Portable Air Conditioners in Healthcare Settings

Note: This document primarily addresses infection prevention and control considerations. It does not focus on 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.

Best practice recommendations

1. Portable bedside fans and air conditioners are considered a risk for enhancing transmission of respiratory droplets in all healthcare settings, including (but not limited to) acute care, continuing care, and supportive living. As such, they should **not** be routinely used in these settings.
 - 1.1 Use other cooling strategies (adapted from the [Public Health Ontario](#) recommendations, see page 5) such as:
 - Adequate hydration, e.g., easy access to liquids, adding water coolers, popsicles.
 - Provide cooling supplies, e.g., cool washcloths, ice packs, cooling jackets, cooling blankets, ice water baths, and appropriate support to avoid both heat and cold injury. [Follow Principles for Environmental Cleaning and Disinfection.](#)
 - Block direct sun using window awnings, shutters, thermal curtains/blinds, and outdoor umbrellas.
 - Increase airflow, e.g., cross breezes by opening windows, providing the humidity outside is low (relative humidity of 30 to 50% is normal).
 - Central dehumidification for areas with high humidity. Note: Portable dehumidifiers can release heat and may raise the temperature in the room.
 - Consider evacuating the room on a case-by-case basis if extremely high temperature occurs.
 2. Portable fans and air conditioners may be considered on a case-by-case basis using a risk-based approach, balancing the risks of enhancing transmission of respiratory viruses (including SARS-CoV-2) with the benefits of using fans:
 - to avoid high risk situations for dehydration;
 - as a component of palliative care for end-of-life considerations and/or patient comfort;
 - on compassionate grounds (other than end-of-life); and
 - when other cooling strategies cannot be employed or are ineffective.
 - 2.1 Consult with Infection Prevention and Control, Workplace Health and Safety (WHS) and/or Public Health before use.
 - 2.2 Consult Facilities, Maintenance and Engineering regarding heating ventilation and air conditioning (HVAC), infrastructure and electrical requirements. Fans must comply with all fire safety/electrical safety and facility requirements for the use of electrical appliances.

For more information contact
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3. If use of portable fans or air conditioners is determined to be necessary after assessing as above:
 - 3.1 Ensure fans are not blowing directly from one person to another (patient, resident or healthcare worker).
 - 3.2 Follow the manufacturer's instructions to clean, disinfect and maintain the fan on a scheduled basis, i.e., daily, weekly, or monthly.
 - 3.3 Follow WHS recommendations so the fan does not create a safety hazard in clinical or staff only/non-clinical areas.
 - Position the fan so it does not create a tripping hazard, i.e., so staff do not trip on the fan itself or its electrical cord.
 - Consider electrical safety. Do not use a fan with a damaged electrical cord. Do not place the plugged-in fan on the edge of a sink filled with water.
 - Place the fan on a stable surface where it is not easily bumped off, e.g., do not place the fan high on a bookshelf where someone could brush against the cord, causing it to fall.
 - Do not leave personal fans on when unattended, e.g., do not leave the fan on in an office when going home.
 - Use of the fan should not result in detrimental work conditions for the individual using the fan or for others.
 - Fans should not create a disturbance or an annoyance to others. The noise of the fan should be tolerable for bystanders/co-workers. The fan should not result in uncomfortable air currents or temperature changes for bystanders/co-workers.
 - Fans should not interfere with other equipment required to perform work tasks, e.g., clip-on fan interfering with personal protective equipment [PPE] use, desk fan blocking access to a printer, etc.
4. Ceiling fans
 - 4.1 Ceiling fans may be used in continuing care only. Ceiling fans are not used in acute care.
 - Follow the manufacturer's instructions to clean, disinfect and maintain the ceiling fan on a scheduled basis, e.g., annually, and as required.
 - 4.2 In common areas, e.g., dining rooms, recreation areas:
 - To decrease risk of possible transmission, residents with symptoms of respiratory infection should not be in common areas with ceiling fans in use.
 - If there is an outbreak in the facility, follow Public Health guidance. Ceiling fans may need to be switched off in common areas for the duration of the outbreak.
 - 4.3 In resident rooms:
 - May be used to keep the resident comfortable.
 - If the resident has respiratory symptoms, staff may switch off the fan while in the room.

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5. Portable bedside air conditioners

5.1 Portable air conditioners are not used in acute care.

5.2 Portable bedside air conditioners may be permitted in continuing care settings on a case-by-case basis if approved by the facility or unit management following evaluation of safety, maintenance and care requirements.

5.3 Portable air conditioner drip pans and other components can become contaminated if they are not cleaned and maintained properly. Once contaminated, air conditioners may spread healthcare associated pathogens leading to severe infections or outbreaks. If portable bedside air conditioners are used:

- Perform hand hygiene when cleaning, handling, or maintaining air conditioner components.
- Follow the manufacturer's instructions to clean, disinfect and maintain the air conditioner on a scheduled basis, e.g., daily, weekly, monthly.
- Never leave water sitting in the air conditioner when it is not in daily use. The following are recommended:
 - empty, clean, and disinfect the drip pan; and
 - allow the drip pan to dry before storing.

5.4 Consult Facilities, Maintenance and Engineering regarding heating ventilation and air conditioning (HVAC), infrastructure and electrical requirements.

References

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