

A **PRINTED** copy of this guideline may not be the most recent version. The **OFFICIAL** version is located on [<http://ipac.vch.ca/Resource Manuals/Acute Care Resource Manual>]

## IPAC BEST PRACTICES GUIDELINE

Portable Fans in Acute Care

DATE: June 3, 2016

REVISED DATE: Sept 2018

REVIEWED DATE:

### PURPOSE

To prevent transmission of infectious microorganisms through the use of portable fans in acute healthcare settings when fans are used for temporary and exceptional circumstances (i.e. heat waves).

### BACKGROUND

In acute health care settings, the use of portable fans can promote the spread of dust, debris and microorganisms through the air and can pose a risk to patients, staff, and visitors. Organisms dispersed through the air can contaminate patient wounds, open areas, and environmental surfaces. Portable fans can disturb the normal air flow within a room or patient care area, altering the expected air flow pattern (e.g., disturbance in negative pressure room air exchanges).

Note: Propping doors and opening windows causes positive airflow pressure and may cause imbalances in mechanical airflow throughout healthcare facilities (similar to the use of portable fans).

### PROCEDURE

#### 1. Alternative cooling methods

- Contact Facilities Maintenance & Operations (FMO) to review and adjust airflow.
- Implement alternative cooling methods:
  - Cleanable window coverings
  - Cool washcloths, ice packs
  - Portable patient cooling blankets (where available).
- Consider strategies for staff comfort found at: [WorkSafe B.C. site for "Preventing Heat Stress at Work"](#) (2007).

#### 2. Assess environmental suitability

- **PORTABLE FAN USE IS STRICTLY PROHIBITED IN THE FOLLOWING AREAS:**
  - Adult Intensive Care Unit (ICU)
  - High Acuity Units
  - Neonatal Intensive Care Unit (ICU)
  - Operating Room (OR)
  - Dialysis Unit
  - Endoscopy Suite

- Sterile Processing Department (SPD)
- Areas used for storage of clean and sterile medical devices/supplies (SSD)
- Laboratory
- Oncology Unit
- Patient Isolation Room where any transmission -based precautions are in place, whether single or multi-bed room
- Airborne Infection Isolation Room
- Carefully assess unrestricted areas for risk of contamination to patient care equipment and health care delivery zones (e.g., proximity of administrative area to clean equipment/supply storage).
- Prior to implementing a portable fan, confirm:
  - Alternative cooling methods have been attempted with no success, **and**
  - the patient is in a non-restricted use location, **and**
  - the use of a fan is determined to be of benefit to the patient's clinical condition or well-being
- Refer to the [Algorithm for Portable Fan use within VCH](#)

### 3. Implementing a portable fan

- Use a clean portable fan approved by Facilities Management & Operations (FMO). Confirm FMO approves use of a fan in the chosen environment.
- The portable fan must be positioned so the air flow is directed at the patient and must not be placed where the air flow is directed towards the door of the room, or across environmental surfaces. The direction of air flow should be directed upwards towards the ceiling, avoiding smoke detectors.
- Portable fans should be used within a single patient room, or if used in a multi-patient room, within the patient's bed space with the curtains drawn. Fans will not be used in a room containing a patient on additional precautions.
- The portable fan is never to be placed at floor level and should be positioned to blow at the patient's bed level or higher. The portable fan should be placed on a clean surface at bed height (at least 24 inches or 61cm from the floor).
- The portable fan must not blow directly on burned skin, burn dressings, open wounds or directly in the patient's face.
- The portable fan should be turned off during patient care procedures (e.g., line insertions, surgical-type procedures, dressing changes, suctioning via an endotracheal tube or a tracheostomy site, during second stage of labour and delivery of a baby).

### 4. Cleaning and Disinfection

- Fans must be amenable to cleaning and disinfection between patients. Review with Infection Prevention and Control before purchase.
- Determine who will be responsible for cleaning and disinfection.
- While in use, the fan, including the grill and fan blades, must be cleaned and disinfected on a weekly basis and whenever it becomes visibly soiled.

- After discharge of the patient or when the fan is no longer required, it shall be cleaned and disinfected, and then removed to the storage area where it should be covered during storage.
- [Cleaning & Disinfecting Portable Fans Protocol](#)

## REFERENCES

Bartley, J. et. al. (2009). Heating, Ventilation and Air Conditioning. APIC Text of Infection Control and Epidemiology, 3<sup>rd</sup> Edition, 104:5-7.

Centres for Disease Control (CDC), Guidelines for Environmental Infection Control in Healthcare, 2003.

CSA Standards Z317.2-10 *Special requirements for heating, ventilation and air conditioning (HVAC) systems in healthcare facilities*

*CSA Standards for HVAC in Health Care Facilities (Z3172.2-01)*

MMWR (2003). *Guidelines for environmental infection control in healthcare*. 52(RR10); 1-42

Provincial Infectious Disease Advisory Committee (PIDAC), Routine Practices and Additional Precautions in All Healthcare Settings, July 2011.