

## **Cleaning and Disinfection of Jetted Tubs**

### **Background**

The purpose of this document is to standardize cleaning and disinfection practices for jetted tubs within the Long Term Care sector of the Winnipeg Health Region. Jetted tubs include hydrotherapy, extremity (arm and leg) as well as any other tub with jets.

Note: Air jetted tubs and chlorinated tubs or pools are not within the scope of this document.

### **Discussion of Issue**

Jetted tubs have the potential to act as reservoirs in the spread of infection. Water in jetted tubs may transmit microorganisms through ingestion, inhalation, contact with mucous membranes, non-intact skin and/or wounds. Agitation of water by jets increases the risk of aerosol generation and inhalation of microorganisms (from people as well as tap water). Literature reports indicate infections due to transmission of microorganisms such as *Pseudomonas* and *Mycobacteria* from jetted tubs. Additional cleaning and disinfection is required for jetted tub plumbing but it is often difficult to disinfect these systems.

Jetted tubs require intermediate level disinfection due to increased risk for infection transmission resulting from both exposure to aerosolized water that has been in tubing which cannot be effectively cleaned and dried, as well as exposure to mucous membranes or non-intact skin.

Intermediate level disinfectants kill vegetative bacteria, most viruses and most fungi but not resistant bacterial spores. Note: intermediate level disinfectants are effective against mycobacteria.

Low level disinfection is adequate for extremity jetted tubs used for patients with **intact** skin. Jets in tubs may be capped to avoid increased risk posed by jetted tubs.

### **Options and Analysis**

1. Clean and disinfect all jetted tubs and associated plumbing, with an intermediate level disinfectant after each use with the exception of jetted tubs used for intact extremities. Extremity tubs used with only intact skin may be low level disinfected. Additional cleaning/ disinfection of jetted tubs may be required per manufacturer's recommendations. This option is the least effective at preventing the risk of transmission.
2. Cover existing jets with a manufacturer-approved cap. Jet capping includes completely removing the whirlpool system, tubing, motor and supportive components.
3. Replace jetted tubs with non-jetted tubs or showers during renovations.
4. Assess appropriateness of use of jetted tubs for patients/residents/clients with non-intact skin on a case- by-case basis. Exposure of mucous membranes, open wounds, and non-intact skin increases

**Recommendations:**

1. Cover jets with a manufacturer approved cap. Jet capping includes completely removing the whirlpool system, tubing, motor and supportive components.
2. Replace jetted tubs with non-jetted tubs or showers during renovations.
3. Assess appropriateness of use of jetted tubs for individuals with non-intact skin on a case-by-case basis.

**References:**

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