Providence HEALTH CARE	Department: **Respiratory Services**	Date Originated: September 1986 Date Reviewed/Revised: **March 2011**
POLICY & PROCEDURE	Topic: Critical Care – Equipment Cleaning and Ventilator Cicuit Changes (Respiratory Therapy) Number: B-00-12-12053	Related Links: CaviCide® MSDS

APPLICABLE SITES:

St. Paul's Hospital
Mount Saint Joseph Hospital

POLICY STATEMENT:

All ventilators and related respiratory equipment must be thoroughly cleaned after use, between patients, and when visibly soiled.

CaviCide® surface disinfectant will be used to surface wipe all components of the ventilator or related respiratory equipment including screens and monitors ***(ensure screens and monitors are rinsed/wiped off afterwards).***

GENERAL INFORMATION:

Ventilator circuit changes will be performed under the following guidelines:

1. Between patients
2. When the circuit is visibly soiled or contaminated
3. When there has been a circuit malfunction

Disposable components such as circuits and humidifier chambers will be discarded.

Reusable components such as filters and temperature probes will be sent to SPD, and will be sealed in separate plastic bags prior to being placed in the SPD dirty equipment bin:

1. Temperature probes
2. Expiratory filters

CAVICIDE® PRODUCT INFORMATION:

Refer to the following link for the Material Safety Data Sheet:

http://www.metrex.com/msds/metrex/canada/english/Cavicide%20(CAN).pdf

PROCEDURE for ROUTINE VENTILATOR AND EQUIPMENT CLEANING:

1. Remove ventilator from the bedside and place in the dirty utility room.

2. Wearing gloves and appropriate personal protective equipment remove disposable circuit components and discard.

3. Remove the reusable components and place in the SPD respiratory equipment bin.

   NOTE: Expiratory filters must be placed in a plastic bag and sealed. The water trap must be removed from the filter and placed in the SPD bin separate from the filter.

4. Remove the temperature probe and seal in a plastic bag for SPD.

5. Remove contaminated gloves, wash hands, and don clean gloves.

6. Using the CaviCide® surface cleaning solution, spray liberally on a cloth and wipe all surfaces of the equipment thoroughly, including high pressure hoses and power cords.

   NOTE: The cleaning process must be repeated two times. The first step is to clean the equipment by removing any debris and soil, and the second step is for disinfection.

7. Place ventilator in the equipment room, re-circuit, and check out as per B-00-11-12009.

PROCEDURE FOR ISOLATION PRECAUTIONS VENTILATOR AND EQUIPMENT CLEANING:

1. While still in the isolation room and wearing personal protective equipment, remove disposable circuit components and discard.

2. Remove the temperature probe and seal in a plastic bag. Remove the expiratory filter and seal in a plastic bag.

3. Use a water-dampened cloth to remove visible contaminants from the ventilator.

4. Using the CaviCide® surface cleaning solution, spray liberally on a cloth and wipe all surfaces of the equipment thoroughly, including high pressure hoses and power cords.

5. Remove contaminated personal protective equipment and wash hands. Don new gloves and remove the ventilator and bagged circuitry from the isolation room. Place the bagged reusable components in the SPD respiratory equipment bin.

6. Place the ventilator in the dirty equipment room.

7. Using the CaviCide® surface cleaning solution, spray liberally on a cloth and wipe all surfaces of the equipment thoroughly, including high pressure hoses and power cords.

   NOTE: The cleaning process must be repeated two times. The first step is to clean the equipment by removing any debris and soil, and the second step is for disinfection.

8. Place ventilator in the equipment room, re-circuit, and check out as per B-00-11-12009.

PROCEDURE FOR CIRCUIT CHANGES:

Equipment (varies as to the type of ventilator):

- Circuit
- Humidifier chamber
- Temperature probe
- Expiratory filter **check date
- Inspiratory filter **check date
- Water trap
- Oxygen analyzer with tee
- HMEF

1. Open the packaging of the required components.

2. Connect the various components as needed to complete the circuit as applicable for the type of ventilator to be re-circuited.

3. Ensure all connections are tight and there are no visible leaks in the system.

4. Perform ventilator specific self-test and performance check as per B-00-11-12009.

REFERENCES:

1. Centers for Disease Control and Prevention. Fundamental Elements Needed to Prevent Transmission of Infection Agents in Healthcare Settings. 2007. Available at: www.cdc.gov/hipac/pdf/isolation/pages 41_65_Isolation2007.pdf

2. Centers for Disease Control and Prevention. Interim Recommendations for Cleaning and Disinfection of the SARS Patient Environment. April 2003. Available at: www.ecu.edu/cs-dhs/prspectivehealth/customcf/infectioncontrol/cleaninpatientenviro.pdf

3. US Environmental Protection Agency. List H: EPA's Registered Products Effective against MRSA and VRE. January 2009. Available at: www.epa.gov/oppad001/list_h_mrsa_vre.pdf