Ventilator Circuit Reprocessing

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The purpose of this document is to provide guidance for the reprocessing and disinfection/sterilization of ventilator circuits.

Key considerations:

1. This test was performed on circuits (V60 RT 219 and RT 210) containing a heating coil.
2. If unable to use a closed SPD, process circuits after sterile instrument processing hours.
3. Run on Duo cycle or a flexible scope approved cycle. A biologic vial should be placed inside the lumen of the circuits.
4. Testing was done with one circuit on each shelf. Load and test to the capacity of your sterilizer.
5. This process was created and tested with a Sterrad 100NX, if using a different device, recommend test run on a cycle for flexible scopes with lumens and with a biologic vial inside tubing for test runs to assure adequate sterilant penetration.

Process:

1. After extubation of patient:
   - Disconnect circuit, disinfect the exterior of the circuit tubing and chamber with an EPA approved disinfectant. Dry, allow for appropriate dwell time.
   - Place chamber in storage for reuse.
   - Place tubing in red biohazard bin, transport to SPD decontamination area.
2. After arriving to SPD:
   - Inspect circuit tubing for condensation. If present, hang to dry for 72 hours. If condensation is still present, discard.
   - Disinfect outside of tubing with EPA approved disinfectant, allow to dry for appropriate dwell time.
   - Load in sterilizer. Either directly on shelf or in a manufacturer-approved container. There is no need to wrap items.
   - Run on duo cycle (one hour cycle) or a flex scope approved cycle.
   - After cycle ends, remove and aerate for one hour.
   - Inspect for visible damage.
   - Place in dust cover and package, label clean not sterile.
   - Transport to logistics.
3. Prior to use, inspect for damage.

See visual guide to vent reprocessing ->