

Ventilator Transport Considerations

VERSIONS:

March 16, 2020: Original

March 20, 2020: Updated with GMR Basware purchase information

Transport of ventilator dependent patients poses an increased risk of exposure to respiratory conditions due to the bypass of the body’s natural protective mechanisms. Considering recent events and the possibility of transporting patients with highly contagious disease, we want to remind providers of the importance of proper vent circuit set-up.

Transport ventilators often use a single limb or a closed-loop circuit system which allows the patient’s exhaled air to enter the airspace near the exhalation valve. A commercially available filter should be in place at the patient end of the circuit. This allows for two-way filtration from the vent to the patient and from the patient to the exhalation port. The recommended filter is one that has both bacterial and viral properties as well as the ability to provide heat and moisture exchange (HME). This offers the most comfort and protection for the patient as well as protection from cross contamination for those near the exhalation valve. Each patient should be transported with this single-use HME or other applicable viral/bacterial filter. The ventilator should be externally cleaned after each use per manufacturer guidelines. An additional non-HME filter can be used at the vent end if preferred by local medical direction.

*** An HMEF or bacterial/viral filter also must be used if a patient is being bagged – between the bag and mask, between the bag and endotracheal tube, between the bag and iGel, or any other airway device.

Another concern is the access to suction the patient. It is important not to disconnect the circuit while transporting these patients and the best way to accomplish this is using a closed suction system. Remember to pre-oxygenate the patient prior to suction and flush the catheter when suctioning is completed.

Below are some examples of the devices and setup that was described above. The circuit pictured is for an LTV 1200 ventilator. Circuit designs may vary by ventilator, please consult local clinical resources for additional guidance.

GMR Basware Purchase Information

Item # 19402 – Filter, humid vent (25/CS) TELFLX – **HMEF**

Item # 1109626 – Filter, humid vent (50/CS) MCKESSON – **HMEF**

Item # 264639 – Filter, bacteria (50/CS) CARFUS – **Non-HME bacterial/viral filter**

Item # 233415 – Trach care kit, Str 14FR (20/CS) AVANOS - HALYARD – **Closed suction system**

