

APSF/ASA Guidance on Purposing Anesthesia Machines as ICU Ventilators

Issued: April 7, 2020

The American Society of Anesthesiologist (ASA) and the Anesthesia Patient Safety Foundation (APSF) have written a document on utilization of the anesthesia machines as ICU ventilators. This document will guide facilities on the proper use of using anesthesia machines effectively and safely as ICU ventilators.

Background:

Anesthesia machines are equipped with ventilators for the everyday use to sustain ventilation to patient during surgical procedures. The FDA approved labeling does not support the use for anesthesia ventilators for long term ventilation therapy. In light of the COVID-19 pandemic, the FDA has temporarily approved the emergency use of certain anesthesia ventilators as ICU ventilators under an Emergency Use Authorization (EUA).

Facility Level Decision:

- It's important to begin planning early in anticipation of supplies needed. Work with your facility supply chain leaders on expected increase in supplies and stock / par levels required.
- Each facility must evaluate carefully which machines listed in the FDA EUA will / can be used.
- Labor and Delivery machines should remain in place

Who Should Manage the Machines?

- An anesthesia professional should be immediately available at all times to manage the anesthesia machine as an ICU ventilator. (24/7/365)
- It is recommended that an anesthesia professional round on these machines every hour
- Anesthesia professionals should work in teams of two when setting the machines up for ICU ventilation using a standardized checklist to reduce the risk of errors.

Utilization:

- Please refer to the [ASA / APSF guidelines](#) for setting up, monitoring and cleaning details
- Consider using anesthesia machines as ICU ventilators on patients who are NOT COVID-19 positive.
 - This will reduce the risk of the rebreathing system becoming a COVID -19 path
- Physical space and sources of high pressure air and oxygen are the only requirements for using the anesthesia machine as a ventilator.
- Documentation will most likely need to be completed ad hoc by the anesthesia professional or RT

Clinical Education:

- Click [here](#) for the BOX folder with articles, guidelines, set up and monitoring quick references
- COVID Activated Emergency Scaling of Anesthesiology Responsibilities (CAESAR) ICU is an educational program from the ASA Committee on Critical Care and the Society of Critical Care Medicine. This program is intended to provide guidance for managing critically ill patients with COVID 19 and is available to any healthcare professional. The program can be accessed at <https://www.asahq.org/in-the-spotlight/coronavirus-covid-19-information/caesar>

Patient/Family Education:

- Part of the FDA's expectation when issuing a EUA is that all patients (or their personal representatives) who are treated with a drug, device, in-vitro diagnostic, etc. under a EUA will receive basic information about the EUA item as part of an informed consent discussion. A fact sheet from the FDA is in the [Anesthesia Machines for ICU Ventilation](#) BOX folder.