

June 10, 2020

From: COVID-19 Scientific Research Committee

To: Pandemic Response Team, CFD Testing Advisory Strategy Group and Med Staff

Dear Committees:

The Scientific Research Committee was asked to review the literature surrounding ventilator circuit filters as it relates to COVID-19. The American Society of Anesthesiologists (ASA) state that there are no data testing the efficacy of breathing circuit filters for preventing transmission COVID-19 to the anesthesia machine.

The ASA and Anesthesia Patient Safety Foundation (APSF) recommends covering the anesthesia machine and high-touch surfaces with plastic to reduce the bioburden.

Additional recommendations include:

1. High quality breathing circuit filters
 - a. Using more than one filter is recommended by the ASA
2. Sample line filtration
 - a. Filter the analyzer gas if effluent is discharged into the room or back into the breathing system
 - b. High level filtration in the water trap is not as important
3. Limited supply recommendations
 - a. Reuse filters
 - i. Follow manufacturer recommendations for changing filters. Continuing to use the filter is better than nothing.
 - b. Single use solution
 - i. High quality airway mounted filter
 - ii. Expiratory limb filter

We would like to raise this topic to the CFD Testing Advisory Strategy Group for consideration.

Sincerely,

COVID-19 Scientific Committee

Dr. Alric Simmonds, MD, Chair
Ariel Watson, OTR/L, Project Manager
Dr. Rizwan Ahmed, MD
Nancy Aldrich, MLIS
Dr. Atalie Ashley-West, PhD, MPH, CPH
Dr. Fortune Alabi, MD
Dr. Amy Carr, PharmD, BCPS-AQ ID
Cherie Danielson, BS
Dr. Benita David, DBA

Stephanie Harris, MLS, AHIP
Dr. Daniel Lupu, MD, PhD
Dr. Frederick Mansfield, MD
Dr. Sarah Minor, PharmD, BCPS-AQ ID
Dr. Alberto Monreal, MD
Dr. Okorie Okorie, MD
Dr. Amay Parikh, MD
Lynn Penyak, MHR, CSPO
Dr. Richard Pratley, MD

Dr. Patricia Robinson, PhD, APRN, NE-BC
Dr. Steve Smith, MD
Dr. Joshua Spiegel, MD MPH
Dr. Jingwei Sun, PhD
Dr. Mandy Wollitz, PhD
Dr. Michael Yurso, MD

Chief Medical Officers

Dr. Neil Finkler, MD
Dr. Jay Ball, MD
Dr. Victor Herrera, MD

Dr. Vincent Carfi, MD
Dr. Dennis deLeon, MD
Dr. Michael Keating, MD

Dr. Jennifer Keehbaugh, MD
Dr. Omayra Mansfield, MD
Dr. Sanjay Pattani, MD

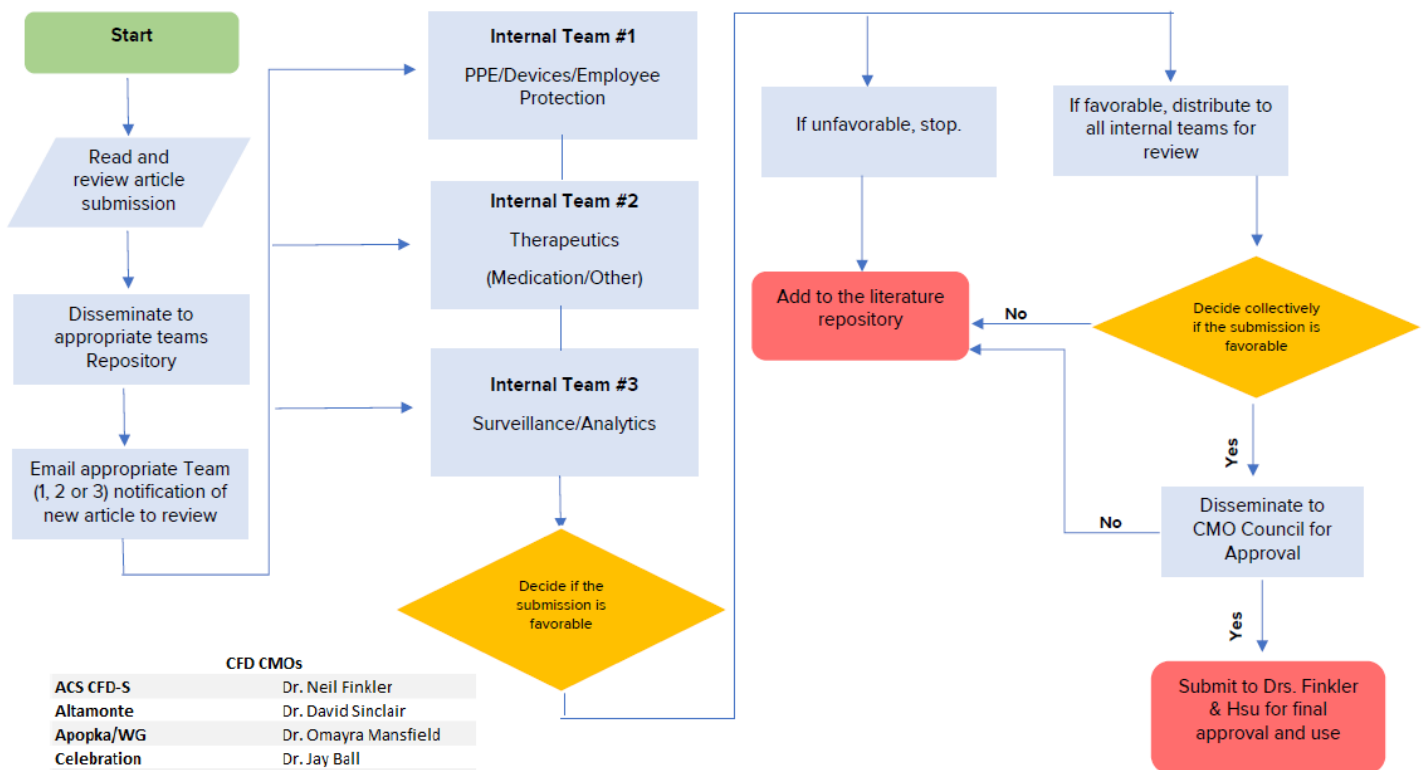
Dr. David Sinclair, MD
Dr. Alric Simmonds Jr., MD
Dr. Joe Smith, MD

References

- American Society of Anesthesiologists. (2020, May 7). *COVID-19 FAQs*. <https://www.asahq.org/about-asa/governance-and-committees/asa-committees/committee-on-occupational-health/coronavirus/clinical-faqs>
- Duan, N., Gao, W., & Wang, Q. Preparedness and disinfection of anesthetic equipment in COVID-19. *Journal of Clinical Anesthesia*, 66. <https://doi:10.1016/j.jclinane.2020.109924>
- Haina, K. M. K. (2020). Use of anesthesia machines in a critical care setting during the coronavirus disease 2019 pandemic. *A&A Practice*, 14(7), e01243. <https://doi:10.1213/XAA.0000000000001243>
- London, M. J. (2020). Coronavirus disease 2019 (COVID-19): Anesthetic concerns, including airway management and infection control. *UpToDate*. Retrieved June 5, 2020, from <https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19-anesthetic-concerns-including-airway-management-and-infection-control>

Disclaimer: The Scientific Committee was formed under the Medical Management Branch of the COVID-19 Pandemic Response Team. The committee’s goal is to create a repository, interrogate research literature as it pertains to the treatment of COVID-19 and provides a rapid approval process. The algorithm below is the decision-making process that governs our decisions.

Scientific Subcommittee Approval Process



CFD CMOs

ACS CFD-S	Dr. Neil Finkler
Altamonte	Dr. David Sinclair
Apopka/WG	Dr. Omayra Mansfield
Celebration	Dr. Jay Ball
Mission Control	Dr. Sanjay Pattani
East Orlando	Dr. Alric Simmonds Jr.
Orlando	Dr. Victor Herrera
Children's	Dr. Michael Keating
Heart of Florida / Lake Wales	Dr. Vincent Carifi
Winter Park	Dr. Jennifer Keehbauch
Kissimmee	Dr. Dennis DeLeon

Internal Team Legend

Internal Team #1	Drs. Simmonds & Rizwan
Internal Team #2	Drs. Parikh & Smith
Internal Team #3	Drs. Parikh & West
	Drs. Mansfield & Herrera to be added