



Advent Health

Breathing Circuit Filters

COVID-19 Guidelines

American Society of Anesthesiologists

“Breathing circuit filters...best practice that should be adopted as standard policy in all practice locations now.”

“There are no data testing the efficacy of breathing circuit filters for preventing transmission COVID-19 to the anesthesia machine.”

Anesthesia Patient Safety Foundation

“There are no data testing the efficacy of breathing circuit filters for preventing transmission SARS COV-2 to healthcare workers or patients”

“Unfortunately, we do not have any data on the minimum amount of viral filtration efficiency (VFE) that will be protective”

“The minimum VFE required to guarantee that SARS COV-2 virus does not pass from the patient to the anesthesia machine is not known”

Anesthesia Patient Safety Foundation

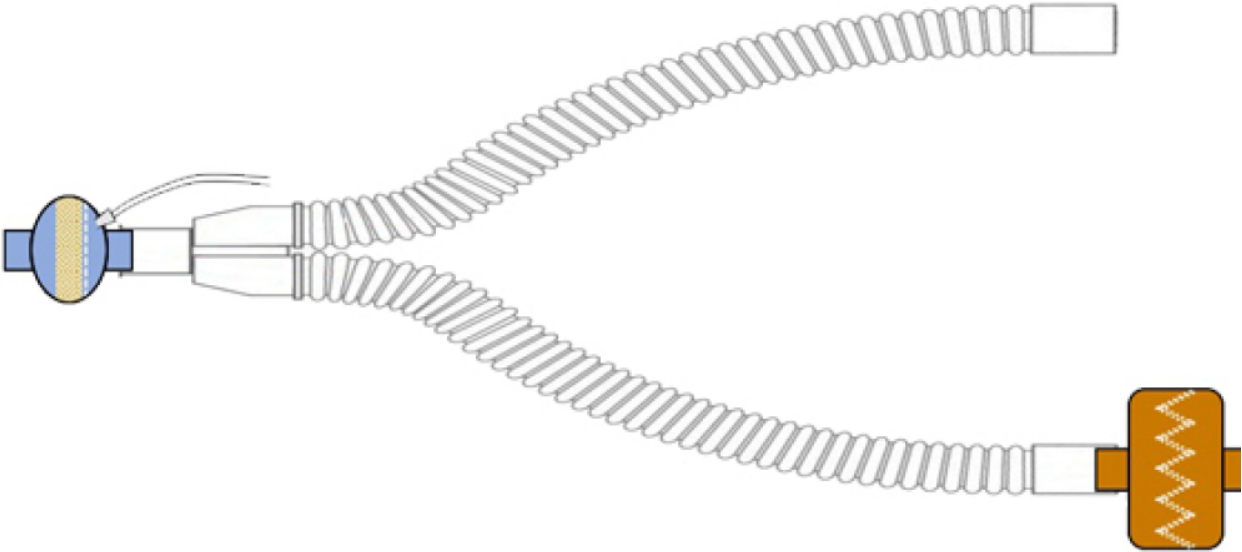
“Recommendations for using high quality viral filters are intended to eliminate the risk of contaminating the anesthesia machine internally so cleaning procedures should not be needed. Although it is unlikely that the machine would be contaminated and capable of infecting a subsequent patient, there are no objective data that recommended practices can absolutely prevent cross infection of patients.”

High Quality Breathing Circuit Filters

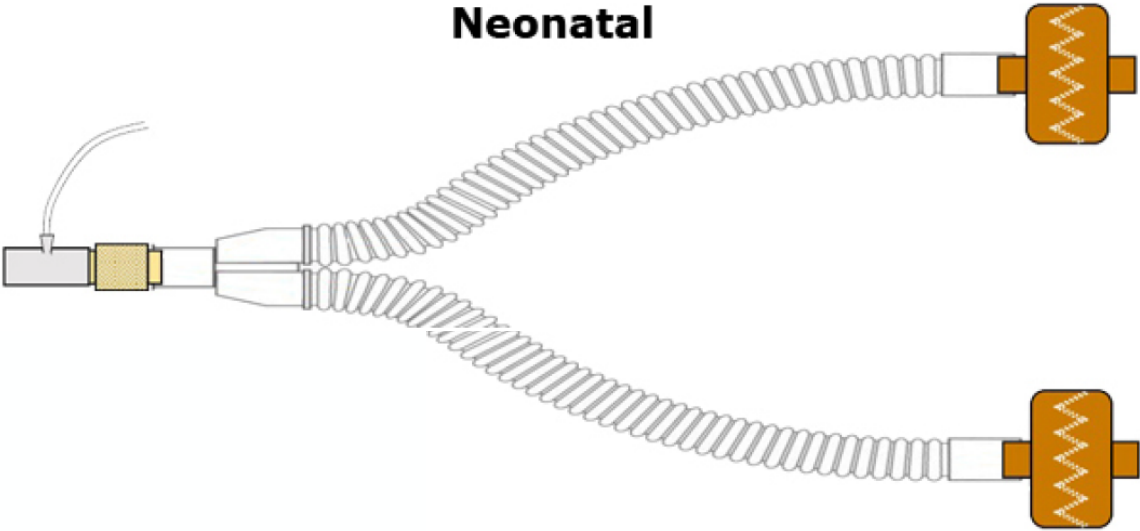
1. “Using more than one filter is recommended” – ASA
 - The internal components do not need terminal cleaning if breathing circuit filters have been used as directed

Best Strategy

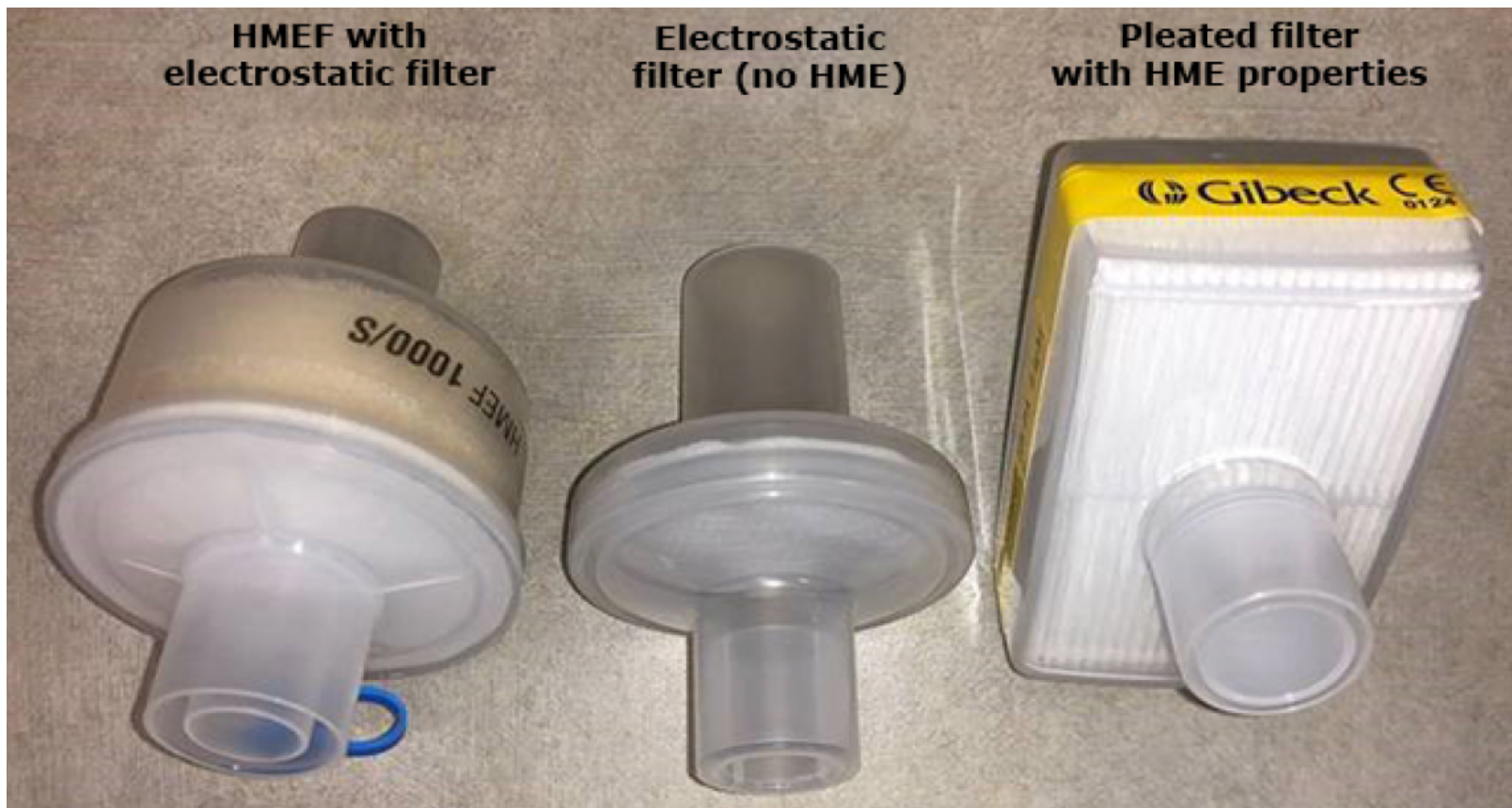
Adult or pediatric



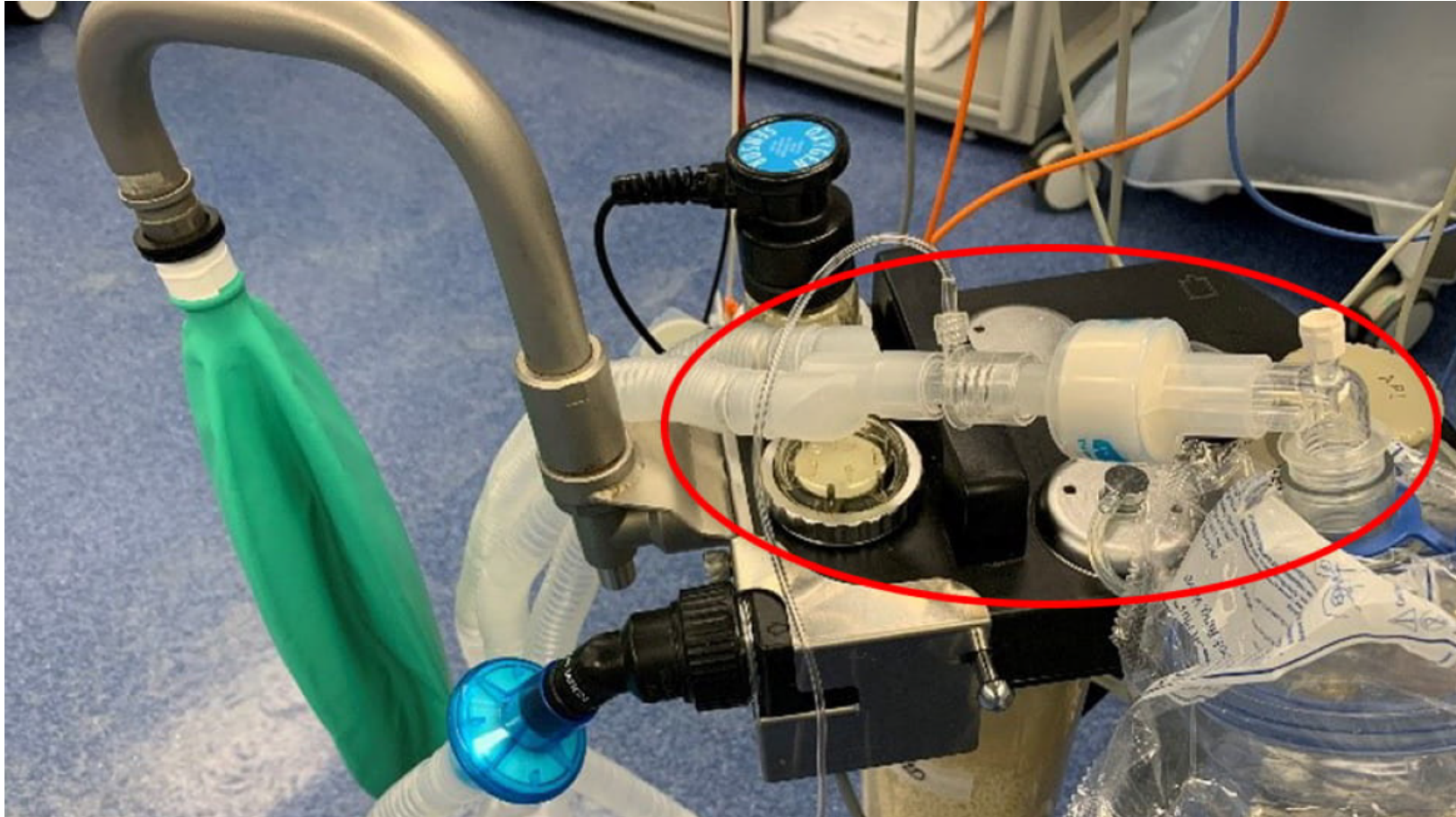
Neonatal



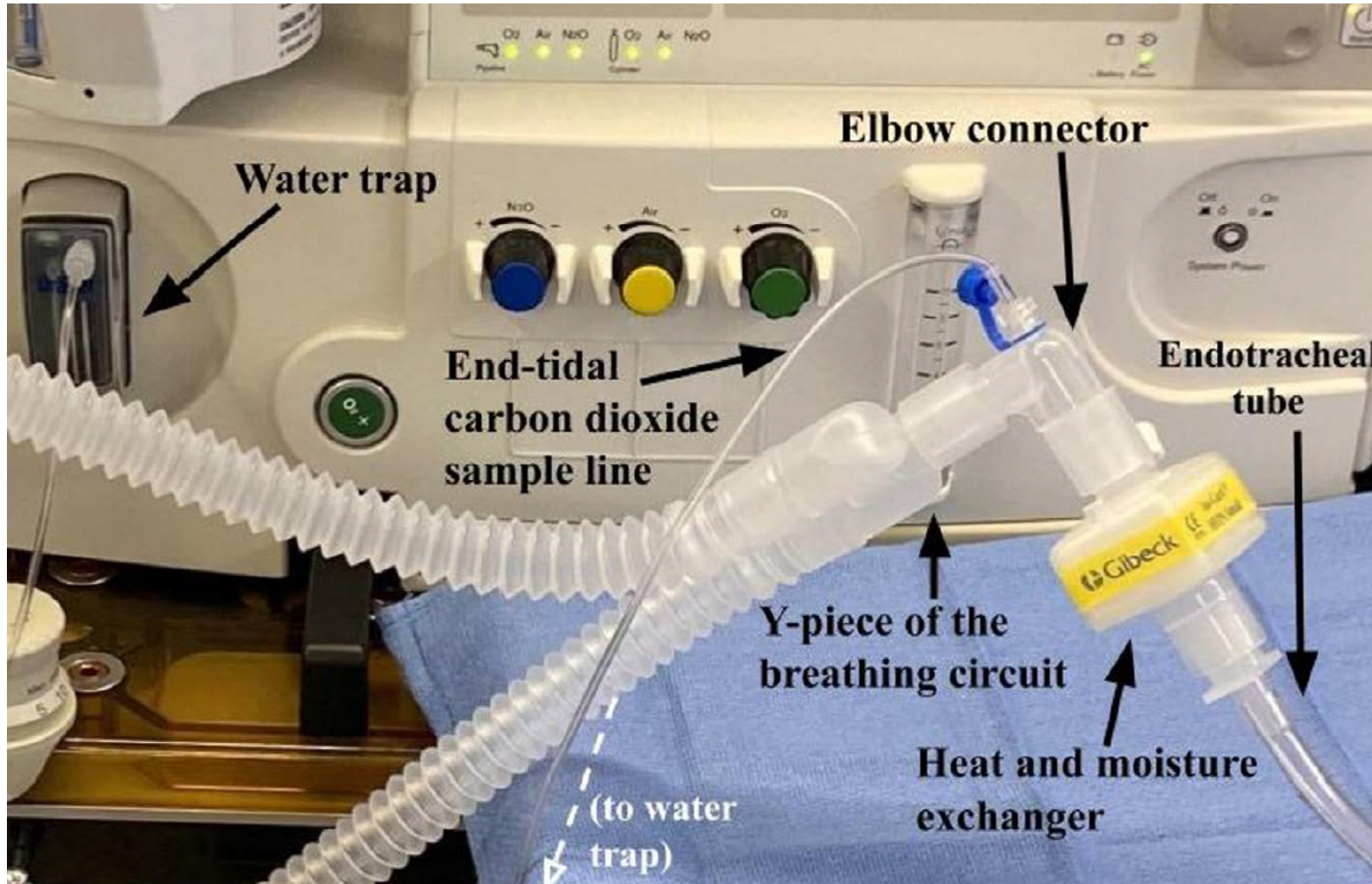
Best Strategy



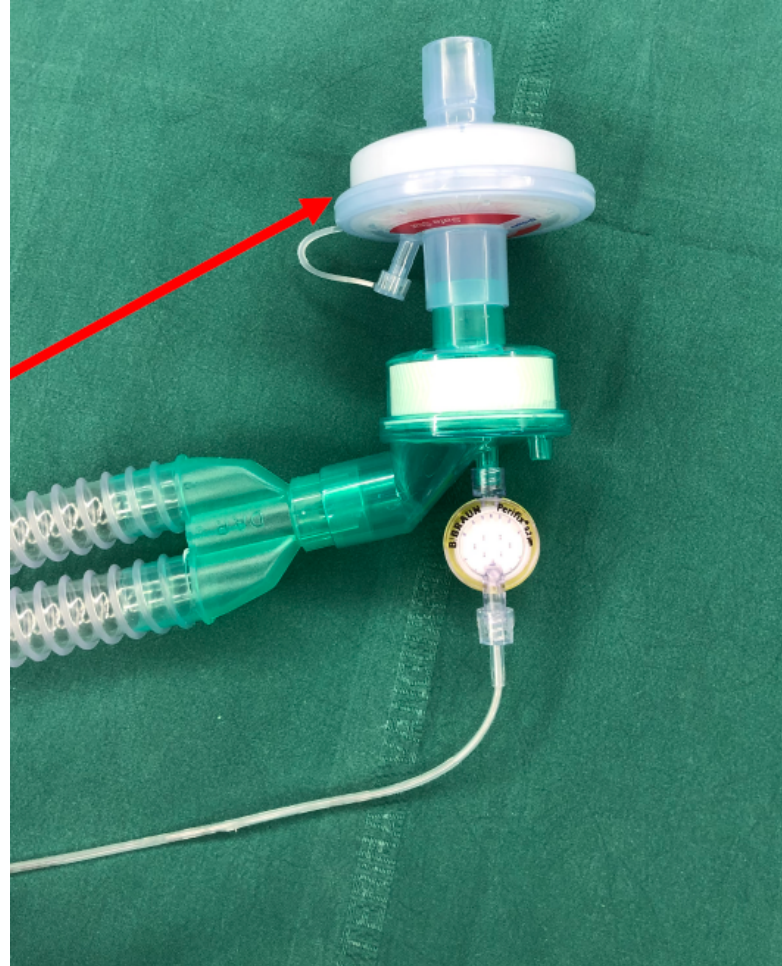
Best Strategy



Best Strategy



Best Strategy



Sample line filtration

2. “Filter the analyzer gas if the effluent is discharged

- into the room” - ASA
- back into the breathing system” – ASA

“High level filtration in the water trap is not as important

- directed to a suction or scavenging system” – APSF

✓ Water trap

GE Medical D-Fend water trap (should be sufficient - APSF)

Draeger Medical Watertrap 2 (should be sufficient - APSF)

✓ Machine-side of High Quality breathing circuit Filter

✓ Drug injection filter

Limited Supply/2-filter not possible

3. Reuse filters: Follow manufacturer recommendations for changing filters. Continuing to use the filter is better than nothing. - APSF

- Airway mounted filter – consider changing
- Expiratory limb filter

4. Single filter solution - APSF

- High quality airway mounted filter
- Expiratory limb filter
- Sampled gas: watertrap filter or drug injection filter