

AANA Responds to Frequently Asked Practice Questions (FAQs): Confronting COVID - 19 in the Clinical Setting

The AANA has received many questions and inquiries regarding clinical responses, implications, and precautionary measures to take during the COVID-19 pandemic. We understand these are trying times and CRNAs are rightly concerned about putting their patients, colleagues, family members, and selves at risk.

The international and national guidance is changing frequently, sometimes daily, so please follow this page. **We are trying to provide updated information as quickly as possible.**

Because this is a pandemic and there may be shortages of personal protective equipment (PPE), facility capacity, and staff, it may not be possible to follow anesthesia best practices. Instead, facilities, with anesthesia team input, may need to develop policies, procedures, and practices based on a risk assessment weighing several factors, including the extent of community COVID-19 transmission, patient population, extent of supplies on hand, reliability of supply chain, available staff, and intensive care capacity.

The responses provided to these FAQs are for information only and are not medical or legal advice. They are not official AANA policy (unless indicated) or peer-reviewed clinical practice guidelines, and they do not supersede laws, regulations, or government directives or dictate the decisions of the individual CRNA or facility. Please consult with appropriate healthcare and legal counsel to guide determinations to apply in the specific practice setting.

1. How do we care for patients with known COVID-19?

- Place patients in an airborne infection isolation room.
- Upon entering the patient's room, use airborne and contact precautions, including eye protection.
- Wear PPE, including:
 - Fit-tested N95 mask or a powered air-purifying respirator (PAPR).
 - Face shield or goggle.
 - Gown, impervious if possible.
 - Gloves.
- Perform hand hygiene before donning and after doffing PPE.
 - Use alcohol-based hand rubs or wash hands with soap and water.
 - If hands are visibly soiled, wash hands with soap and water.
- When removing and disposing PPE, minimize self-contamination risk.
 - To prepare, observe correct procedures for donning and doffing PPE and rehearse before patient care.

- For further details, see [CDC Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 \(COVID-19\) in Healthcare Settings](#).

2. How do we transport a patient with known or suspected COVID-19?

- Transport patients only for essential procedures.
- Collaborate with local infection control experts for current advice.
- Insert a “high quality” viral filter between the bag-valve-mask breathing device for intubated patients.
- Non-ventilated patients should wear a surgical mask.
- Do not routinely wear gowns and gloves for transport. If direct contact with the patient or contaminated equipment is anticipated, one transport team member should perform hand hygiene, don a fresh gown and gloves, and wear appropriate PPE. Ideally, another member who is not wearing a gown and gloves should accompany the transport to interact with the environment.

3. How do we perform a procedure for a patient with known or suspected COVID-19?

- Consider postponing non-urgent procedures until the patient is non-infectious or not infected.
- Designate an operating room (OR) for this purpose and post appropriate signage to minimize personnel exposure.
- If postponing a procedure or performing the procedure at the bedside is not possible, minimize the number of healthcare team members and other patients present in the operative suite.
- Do not bring the patient to the holding area, induction room, or post anesthesia care unit (PACU).
- If respiratory support is necessary, prepare in order to avoid the need for rescue interventions (e.g., crash intubations), which increase COVID-19 transmission risk if barrier protections fail.
- If the patient has acute respiratory failure, proceed directly to endotracheal intubation; non-invasive ventilation (e.g. CPAP or biPAP) could increase the risk of infection transmission.
- If possible, perform the procedure in an airborne infection isolation room rather than an OR. Airborne isolation rooms have negative-pressure relative to the surrounding area. ORs generally have positive-pressure and incoming air is usually flow-directed, filtered, and temperature and humidity controlled.
- Collaborate with local infection control experts (e.g., state and county health departments, nearby healthcare systems and facilities) for additional guidance.
- **For performing procedures without general anesthesia:**
 - The patient should continue to wear the surgical mask.

- **For performing procedures with general anesthesia:**
 - Insert a “high quality” viral filter between the Y-piece of the breathing circuit and the patient’s mask, endotracheal tube, or laryngeal mask airway.
 - For pediatric patients or patients that may experience problems with the additional space/weight of the filter, place the “high quality” viral filter on the expiratory end of the corrugated breathing circuit before expired gas enters the anesthesia machine.
 - Ensure that the gas sampling tubing is protected with a “high quality” viral filter.
 - For further details, see [APSF FAQ on Anesthesia Machine Use, Protection, and Decontamination During the COVID-19 Pandemic](#)

- **For laryngoscopy and intubation:**
 - To prepare for emergency intubations, ensure all emergency kits are equipped with the appropriate PPE.
 - Double glove and shed the outer gloves after intubation and minimize subsequent environmental contamination.
 - When possible, have the most experienced anesthesia professional available intubate the patient.
 - Unless required, avoid awake fiberoptic intubation.
 - When possible, avoid manual ventilation and perform rapid sequence induction (RSI).
 - If manual ventilation is necessary, apply small tidal volumes.
 - After extubation, turn down flows, if possible, to avoid contaminating the environment.
 - After doffing PPE, immediately perform hand hygiene and refrain from touching your hair and face.

- For airway suctioning, use a closed suction system if available.
- To minimize surface contamination, use disposable covers (e.g., plastic surface sheets, ultrasound probe sheath covers).
- Recover the patient in the operating room or transfer the patient to an airborne infection isolation room.
- Once the patient leaves the OR, maximize the time before the next case. This time interval depends on the number of air exchanges per hour in that space. See [CDC - Air Guidelines for Environmental Infection Control in Health-Care Facilities](#).
- When using point-of-care ultrasound or other devices:
 - Cover the ultrasound unit and cable with a long sheath.
 - Cover non-essential parts of the ultrasound cart with drapes.

4. After treating a patient with known or suspected COVID-19, how do we clean the anesthesia machine?

- Cleaning procedures are the same for all patients if a high-quality heat moisture exchange filter (HMEF) is placed between the circuit and the airway. Discard disposable items – breathing circuit, reservoir bag, gas sampling tubing, mask and wipe all exposed surfaces. Manufacturers' cleaning recommendations are useful for individual devices.
- If appropriate breathing circuit filters were used as directed, internal components of the anesthesia machine do not need special cleaning.
- For further details, see [APSF FAQ on Anesthesia Machine Use, Protection, and Decontamination During the COVID-19 Pandemic](#).

5. Should we repurpose our anesthesia machines as ventilators for ICU patients?

- Please see [APSF FAQ on Anesthesia Machine Use, Protection, and Decontamination During the COVID-19 Pandemic](#).

6. Since we don't know if a patient is COVID-19 positive, do we treat all patients as positive? (Updated: March 23, 2020)

- For details, see AANA, ASA, APSF, AAAA Joint Position Statement - [The Use of Personal Protective Equipment by Anesthesia Professionals during the COVID-19 Pandemic](#).
- Due to close patient contact and the need for airway instrumentation, anesthesia professionals are at increased risk of exposure and infection for all diagnostic, therapeutic, and surgical procedures during this rapidly escalating COVID-19 pandemic in the U.S.
- AANA, ASA, APSF, AAAA recommend as optimal practice that all anesthesia professionals should utilize PPE appropriate for aerosol-generating procedures for all patients when working near the airway.
- Issuance of N95 masks or availability of PAPRs for all clinical anesthesia personnel should be a priority. If a facility has existing or projected shortages of N95 masks or PAPRs, however, temporary mitigation plans based on current CDC recommendations should be enacted. These plans should include facility and case-by-case reviews of the potential of patients and procedures to generate aerosolized particles, as well as assessments of respiratory pathogen characteristics (e.g., routes of transmission, community spread, prevalence of disease in the region, infection attack rate, and severity of illness) and local conditions (e.g., number of disposable N95 mask available, current respirator usage rate, and success of other PPE conservation strategies).
- If COVID-19 is known or suspected, please refer to the [FAQ #1 How do we care for patients with known COVID-19?](#)
- For further details, see [Interim Guidance for Healthcare Facilities: Preparing for Community Transmission of COVID-19 in the United States](#).

7. What should we do about MAC cases?

- The AANA and the ASA are in agreement regarding MAC cases:
 - If dispersion of potentially contaminated exhaled gases from an open airway (e.g., “MAC”) is a risk, consider alternate anesthesia plans. Potential contamination of your workspace and the room should be considered.
 - For further details, see [ASA Committee on Occupational Health Clinical COVID-19 FAQs](#).

8. Are there specific recommendations for EGD procedures, and other cases with a high risk of aerosolization?

- When deciding whether to cancel a case or use higher-level PPE, consider your local COVID-19 risk profile related to community spread.
- In addition, when making these decisions, consult with local infection control experts. This will inform your own risk assessment considering the patient, skill sets of the endoscopists, and local resources.
- For cases with a high risk of aerosolization, ETTs provide the most secure airway. Airway masks with apertures for gastroscopes such as a POM (Procedural Oxygen Mask by Curaplex) or similar masks may limit dispersion as an alternative when N95 supplies are low.
- Best practices may be in flux because of shortages of N95 masks and other PPE for patients with known COVID-19, as well as for those who are undiagnosed or asymptomatic.

9. How do we manage an “open airway” case?

- The AANA and the ASA agree regarding “open airway” cases:
 - Originally, the Anesthesia Patient Safety Foundation (APSF) recommended elevated precautions for an “open airway” case. This was in large part due to an increased risk of aerosolization and disease transmission. The definition of “open airway” included cases such as tracheostomies and upper endoscopies that have a high degree of aerosolizing body fluids. APSF did not intend this definition to include all “MAC” cases.
 - Newer recommendations focus on the risk of exposure from aerosolization of the disease and emphasize attempting to minimize aerosolization of body fluids when caring for all patients. In situations with risk of high degree of aerosolization of body fluids, a properly fitted N95 mask, or PAPR provides the best protection from COVID-19 exposure. Traditional face masks do not provide protection against aerosolized small particles.

10. Are there specific recommendations for caring for obstetric patients?

- For details, see the Society for Obstetric Anesthesia and Perinatology (SOAP) [Interim Considerations for Obstetric Anesthesia Care Related to COVID-19](#).
- Additionally, the CDC has an [information page on COVID-19 and pregnant women and children](#) and posted a webinar from March 12, 2020 discussing [information for clinicians caring for children and pregnant women](#).

11. How does COVID-19 affect practicing pregnant CRNAs?

- For details, see the CDC [Information for Healthcare Providers: COVID-19 and Pregnant Women](#). The CDC recommends that:
 - Healthcare providers adhere to [risk assessment](#) and [infection control](#) guidelines for healthcare personnel exposed to patients with known or suspected COVID-19.
 - Facilities limit exposure of pregnant healthcare personnel to patients with known or suspected COVID-19, especially during higher risk procedures (e.g., aerosol-generating procedures) if feasible based on staffing availability.
- The American College of Obstetricians and Gynecologists (ACOG) [Novel Coronavirus 2019 \(COVID-19\) Practice Advisory](#) is consistent with the CDC recommendations.

12. What are the current recommendations for canceling or rescheduling elective surgeries?

- The Center for Medicare & Medicaid Services (CMS) recommends that all elective surgeries and non-essential medical, surgical, and dental procedures be delayed during the COVID-19 pandemic. For further details, see [CMS Adult Elective Surgery and Procedures Recommendations: Limit all non-essential planned surgeries and procedures, including dental, until further notice](#).
- For facilities located in areas with expected or increasing spread of COVID-19, please see the [CDC Interim Guidance for Healthcare Facilities: Preparing for Community Transmission of COVID-19 in the United States to reduce non-urgent surgical, diagnostic, and interventional procedures](#). The CDC recommends facilities:
 - Reschedule non-critical procedures for the future when community transmission of COVID-19 has ceased.
 - Prioritize critical procedures according to patient need and facility resources.
 - Consider outpatient settings to alleviate depletion of hospital resources and allow for resource allocation, such as training healthcare providers on proper protective practices (e.g., donning and doffing PPE, fit testing N95 masks).

- For further details, see [ASA - APSF Joint Statement on Non-Urgent Care during the COVID-19 Outbreak](#).

13. My hospital thinks the AANA guidance is too strict or is inconsistent with CDC guidance. How should I discuss AANA guidance with my facility or department?

- AANA guidance focuses on patient and anesthesia professional health and safety and is based on current CDC and APSF recommendations for protecting healthcare providers if patients have known or suspected COVID-19 infection.
- During the SARS outbreak in the 2000's, CDC learned that SARS infected healthcare providers caring for SARS patients even though these providers followed contact and droplet precautions. Droplet particles from coughing, sneezing, or airway procedures (e.g., laryngoscopy, intubation, suctioning, bronchoscopy) could aerosolize into finer particles suspended in air currents and penetrate ordinary surgical masks.
- The AANA recommends taking steps to reduce the risk of droplet particle aerosolization, including:
 1. Having the most experienced anesthesia professional available intubate the patient, if possible.
 2. Wearing PPE including:
 - Fit-tested N95 mask or a powered air purifying respirator (PAPR).*
 - Face shield or goggle.
 - Gown, impervious if possible.
 - Gloves.
 - Double glove and shed the outer gloves after intubation and minimize subsequent environmental contamination.
 3. Avoid awake fiberoptic intubation unless necessary.
 4. Consider RSI. Apply small tidal volumes if manual ventilation is necessary.

* For further details, see the AANA, ASA, APSF, AAAA Joint Position Statement - [The Use of Personal Protective Equipment by Anesthesia Professionals during the COVID-19 Pandemic](#).

14. When should we use a N95 mask? (Updated: March 23, 2020)

- When the CRNA will be at an increased exposure risk, such as open-airway procedures, the N95 mask provides the best protection from the spread of COVID-19. During these procedures, it is prudent to consider all patients to be carriers of COVID-19, as patients may be asymptomatic at the time of their procedure.
- Issuance of N95 masks or availability of PAPRs for all clinical anesthesia personnel should be a priority.

- If appropriate resources are not available, the safety of the provider and the patient should be the most important factors in when to use masks and when to cancel elective procedures.
- Further detail, see the AANA, ASA, APSF, AAAA Joint Position Statement - [The Use of Personal Protective Equipment by Anesthesia Professionals during the COVID-19 Pandemic](#).

15. Can we re-use PPE, including the N95 masks? (Updated: March 23, 2020)

- Further details see the AANA, ASA, APSF, AAAA Joint Position Statement - [The Use of Personal Protective Equipment by Anesthesia Professionals during the COVID-19 Pandemic](#).

16. Where can a retired CRNA find volunteering opportunities? (Updated: March 26, 2020)

- The AANA recommends reaching out to organizations directly regarding opportunities to volunteer your services. We also suggest using Google or other search engines for state or city-specific information, utilizing searches such as “covid healthcare volunteer opportunities Illinois.”

In addition, executive orders from state governors may include specific provisions concerning retired healthcare providers, including expedited reactivation of licensure for recently retired healthcare providers and opportunities for volunteering. Please check your state board of nursing website for postings with more information; website and contact information for all boards is at <https://www.ncsbn.org/contact-bon.htm>.

Please also check [COVID-19 State Government Affair Resources](#), which provides information on state emergency declarations, legislation, and regulations that may affect state licensure requirements for volunteers. For example, state government action may authorize use of out-of-state nursing licensees and/or facilitate use of in-state inactive licensees and retired healthcare providers.

Some state boards of nursing are also auto-renewing active licenses that are about to expire. Information regarding your current licensure status is available on most board of nursing websites (see link above), and also at [nursys.com](https://www.nursys.com). Please utilize internet resources as much as possible, as board of nursing telephone and staff resources are likely to be inundated with calls and questions.

17. What is AANA’s position when CRNAs are asked to assume critical care responsibilities during the COVID-19 pandemic? (Updated: March 24, 2020)

- Please see the AANA position statements [CRNAs Asked to Assume Critical Care Responsibilities During the COVID-19 Pandemic](#), published on 3/17/20, and [Utilizing CRNAs Unique Skill Set during COVID-19 Crisis](#), published on 3/21/20. Ultimately, the decision to assume new responsibilities is based on an array of considerations unique to the individual CRNA, facility, and state.

18. CRNAs are being asked to assume ICU APRN roles at our hospital. What are some resources to support us in this role? (NEW) March 24, 2020

- The AANA encourages CRNAs who are being asked to assume APRN roles in the ICU to utilize the resources provided by the Society of Critical Care Medicine (SCCM).
 - [SCCM Emergency Resources: COVID-19](#)
 - [Critical Care for the Non-ICU Clinician](#)
 - [Caring for Critically Ill Patients with Novel Coronavirus](#)
 - [Preparing Your ICU For Disaster Response](#)
- Please see AANA's position statements [CRNAs Asked to Assume Critical Care Responsibilities During the COVID-19 Pandemic](#), published on 3/17/20, and [Utilizing CRNAs Unique Skill Set during COVID-19 Crisis](#), published on 3/21/20.
- Hospitals are also sharing their resources online, such as [Brigham and Women's Hospital COVID-19 Critical Care Clinical Guidelines](#). Note, these are provided only as reference, not an endorsement by AANA.

19. Are we covered by malpractice insurance if we are asked to function in the capacity of a registered nurse (RN)?

- Due to the challenges faced by the healthcare community during the COVID-19 pandemic, the AANA and AANA Insurance Services understand that nurse anesthetists may be asked to function in the capacity of RNs.

To be clear, neither the AANA nor AANA Insurance Services are suggesting that nurse anesthetists should be mandated to function as RNs. However, if a nurse anesthetist decides to function as an RN (e.g., in the ICU or emergency department), we want to assure you that if you have your malpractice liability insurance through AANA Insurance Services, your Medical Protective (MedPro) policy provides you with coverage not only for the work you do as a nurse anesthetist, but also any work you do as an RN.

There is a specific endorsement on your MedPro policy titled **Expanded Professional Services Endorsement**. This endorsement expands the definition of "Professional Services" on your policy to include any professional services you provide as an RN. With your MedPro policy, you can work to the full licensure and scope of practice as both a nurse anesthetist and an RN.

If you purchased your own malpractice liability insurance policy from a company other than AANA Insurance Services, there is a real possibility that your policy does not include coverage for any professional services you provide as an RN.

Even if your agent tells you that you will be covered for RN work, be sure your agent puts that in writing to you.

If you have any questions or need any additional information about malpractice insurance, contact [AANA Insurance Services](#).

20. What are Medicare and Medicaid Section 1135 waivers and how do they affect CRNA practice? (NEW) March 25, 2020

- For details, see [FAQs on Medicare and Medicaid Section 1135 Waivers and How They Affect CRNA Practice](#).

21. Will Medicare pay CRNAs for providing critical care services during the COVID-19 pandemic? (NEW) March 26, 2020

- For details, see [FAQs on Medicare Reimbursement for Critical Care During the COVID-19 Pandemic](#).

FAQ Sources:

- [CDC Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 \(COVID-19\) in Healthcare Settings](#) (March 19, 2020)
- [CDC Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings](#) (March 28, 2018)
- [CDC Checklist for Healthcare Facilities: Strategies for Optimizing the Supply of N95 Respirators during the COVID-19 Response](#) (March 5, 2020)
- [CDC Strategies for Optimizing the Supply of N95 Respirators](#) (February 29, 2020)
- [CDC Air Guidelines for Environmental Infection Control in Health-Care Facilities](#) (May 27, 2003)
- [CDC Interim Guidance for Healthcare Facilities: Preparing for Community Transmission of COVID-19 in the United States](#) (February 29, 2020)
- [ASA - APSF Joint Statement on Non-Urgent Care during the COVID-19 Outbreak](#) (March 17, 2020)
- [ASA Committee on Occupational Health Clinical COVID-19 FAQs](#) (March 17, 2020)
- [APIC Position Paper: Extending the Use and/or Reusing Respiratory Protection in Healthcare Settings During Disasters](#) (December 4, 2009)
- [APSF FAQ on Anesthesia Machine Use, Protection, and Decontamination During the COVID-19 Pandemic](#) (March 19, 2020)
- [ACS Recommendations for Management of Elective Surgical Procedures](#) (March 13, 2020)
- [ACS Guidance for Triage of Non-Emergent Surgical Procedures](#) (March 17, 2020)