Guidelines for Anesthesia and Airway Management of Asymptomatic Patients with Unknown COVID-19 status
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Situation and Background: Patients infected with SARS-CoV-2 can be asymptomatic. Current data is insufficient to estimate with reasonable certainty the fraction of our patient population who may present with an asymptomatic SARS-CoV-2 infection. Although data are lacking, our current understanding is that transmission from asymptomatic individuals is uncommon in most transient clinical encounters. However, this risk is likely elevated during aerosol generating procedures. To reduce the risk to the anesthesia and surgical teams caring for these patients, who are at a particularly high risk of SARS-CoV-2 exposure given the frequency of performing aerosol-generating procedures, we have developed these sets of guidelines for the anesthetic and airway care of asymptomatic patients with unknown COVID-19 status. **Unknown status is operationally defined here as someone who has not been tested for COVID-19 AND has no symptoms/signs of COVID-19.** This document complements UW Medicine COVID-19 policies and procedures. You will find the most up to date UW Medicine information, policies, and procedures related to care of patients with COVID-19 at our [UW Medicine COVID-19 Website](https://www.uwmedicine.org/covid-19).

UW Medicine has instituted a policy to test all patients for SARS-CoV-2 undergoing non-emergent procedures with the potential for aerosol generation. Once fully operationalized, the majority of surgical patients during the pandemic should be tested and their COVID-19 status known. Testing should be completed within 72 hours prior to the anesthesia or airway care for a negative test to be considered valid. If a patient subsequently becomes symptomatic of COVID-19 after completion of the test, they should be retested. If the patient is positive for COVID-19 or symptomatic and therefore suspected COVID-19, this guideline does not apply to them. For these patients see the [A&PM guidelines for anesthesia and airway management of suspected or confirmed COVID-19](https://www.uwmedicine.org/covid-19).

**Principles:** Policies, Procedures, and Guidelines have to satisfy a duty of appropriate patient care while minimizing exposure of staff to infection. To meet these goals, we need a set of policies, procedures, and guidelines for anesthetic and airway management that protect caregivers and patients with judicious use of resources, including PPE.

**Policies, Procedures, and Guidelines:**

1. For asymptomatic patients with unknown COVID-19 status, routine precautions are in effect for all aspects of the anesthetic care of the patient except during and 30 minutes immediately after aerosol-generation, including airway management. This includes patients undergoing anesthetic procedures that will be unlikely to require significant airway manipulation (spontaneous ventilation; no oral or nasal airways).

2. For procedures where there is an unknown probability of an aerosol-generating procedure (for example some Monitored anesthesia care cases), the anesthesia and procedure teams should agree during the time out prior to the procedure in terms of that probability and either use routine precautions or aerosol-generating procedure precautions as appropriate.

3. For airway management and for any other aerosol-generating procedures (whether as part of the anesthetic care, for emergent airway management elsewhere, or as part of the surgical procedure),
airborne precautions are in effect for all personnel in the room during the procedure and for 30 minutes after the completion of the procedure. Ideally, for PPE conservation, only anesthesia personnel should be present for the anesthesia aerosol-generating procedures; however, surgeons, nurses, and other personnel can be present with proper airborne PPE if deemed best for patient safety.

4. Aerosol-generating procedure PPE includes gown, double gloves, N95 mask or PAPR/CAPR, and eye protection (goggles and/or face shield or PAPR/CAPR).

5. Aerosol-generating procedures include but are not limited to: airway manipulation (positive pressure mask ventilation, oral/nasal airway placement), BIPAP, Nebulizer-treatment, LMA-placement, endotracheal intubation, NG/OG placement, TEE, extubation, airway suctioning (ETT (unless done with inline suctioning) or pharyngeal), surgery on the respiratory tract (mouth, nose, sinuses, pharynx, trachea, bronchi, lungs), bronchoscopy, endoscopy, CPR.

6. For known or suspected COVID-19 patients, strict Donning and Doffing protocols should be followed.

7. However, for asymptomatic patients with unknown COVID-19 status as defined above, strict Donning and Doffing protocols are not required but may be used at the practitioner’s discretion. Liberalizing donning and doffing protocols may conserve PPE by allowing the wearing of an N95 mask for the care of more than one patient and removal of the N95 mask during the surgical procedure, if aerosol generation is not of concern, while maintaining a standard surgical mask in place. This also allows anesthesia attendings supervising more than one room to streamline PPE donning and doffing so as to maintain ready availability.

8. If N95 masks are to be worn throughout the day for multiple patients, a standard surgical mask or face shield should be worn over it to reduce the soiling. Under these circumstances, if removed, the N95 masks should not be placed on any surface outside of the contaminated procedure suite and should be assumed to be contaminated and therefore handled with gloves that are subsequently removed. N95 masks can be placed temporarily in paper bags or paper-based containers for later reuse. At the end of the day, they should be disposed according to hospital protocol.

9. In terms of anesthesia staffing, ideally the anesthesia attending will be assigned to care only for the patient with unknown COVID-19 status with or without a CRNA or resident as the primary provider. This will reduce donning and doffing, PPE usage, and potential for urgent attention to patient care outside of the operating room.

10. After extubation, the patient should remain in the room for a minimum of 30 minutes before transport to the ICU or recovery room. Coughing or airway manipulation (oral/nasal airway, positive pressure mask ventilation) should not be ongoing at the time of transport. The patient should have a patent airway and stable spontaneous ventilation pattern. A simple face mask or nasal cannula oxygen should be used for transport to PACU unless there is significant concern for coughing. If so, a surgical mask can placed over the face mask or nasal cannula.

11. Upon arrival in the PACU, if test is still pending or negative change to routine precautions. If test is positive, change to special contact/droplet precautions.

12. PPE for these contact/droplet precaution situations should include gown, double gloves, surgical mask, eye protection (goggles or face shield)

13. The anesthesia team should then thoroughly wash hands and change any head and feet covering, before moving into contact with other patients.

This policy will be regularly reviewed and may be adapted in circumstances of supply and staffing constraints, while still maintaining patient and practitioner safety.