Recommendations for Airway Management in a Patient with Suspected Coronavirus (2019-nCoV) Infection

Liana Zucco[1, 2], Nadav Levy[1,2], Desire Ketchandji[3], Mike Aziz[3], Satya Krishna Ramachandran[1]
1.Beth Israel Deaconess Medical Center Dept Anesthesia, Critical Care & Pain Medicine, Boston, USA
2. Healthcare Quality and Safety (MHQS), Harvard Medical School, Boston, USA
3. Oregon Health & Science University, Department of Anesthesiology & Perioperative Medicine, Portland, Oregon, USA

General

Your personal protection is **the** priority. Personal protective equipment (PPE) should be available for all providers to ensure droplet/contact isolation precautions can be achieved. Providers and organizations should review protocols for donning and doffing PPE. Careful attention is required to avoid self-contamination.

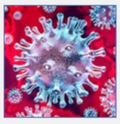
Patients with confirmed or suspected 2019-nCoV infected cases:

- Should **NOT** be brought to holding or PACU areas
- Should be managed in a **designated OR**, with signs posted on the doors to minimize staff exposure.
- Should be **recovered in the OR** or **transferred to ICU** into a negative pressure room. Ensure an adequate hydrophobic filter is placed between the ETT and reservoir bag during transfers to avoid contaminating the atmosphere.

Plan ahead:

- For time to allow all staff to apply PPE and barrier precautions
- Consider intubation early to avoid the risk of a crash intubation when PPE cannot be applied safely.

During Airway Manipulation



Apply:

- Disposable mask, goggles, footwear, gown and gloves. Consider adopting the **double glove** technique.
- Standard ASA monitoring should be applied before induction of anesthesia.
- N95 mask at a minimum should be utilized. PAPR devices may offer superior protection when manipulating an airway of an infected patient.

Assign:

- Designate the most experienced anesthesia professionals available to perform intubation, if possible. Avoid trainee intubation for sick patients.

Avoid:

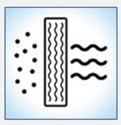
- Awake fiberoptic intubation, unless specifically indicated. Atomized local anesthetic can aerosolize the virus.

Prepare to:

- Preoxygenate for 5 minutes with 100% FiO2
- Perform a rapid sequence induction (RSI) to avoid manual ventilation of patient's lungs and potential aerosolization of virus from airways.
- Consider using a video-laryngoscope.

RSI:

- Depending on the clinical condition, the RSI may need to be modified. If manual ventilation is required, apply small tidal volumes.



Use:

- Ensure there is a high efficiency hydrophobic filter placed in between the facemask and breathing circuit or between facemask and reservoir bag.

Dispose:

- Re-sheath the laryngoscope immediately post intubation (**double glove technique**)
- Seal all used airway equipment in a double zip-locked plastic bag. It must then be removed for decontamination and disinfection.

Remember:

- After removing protective equipment, avoid touching your hair or face before washing hands.

Anesthesia Patient Safety Foundation

Adapted from Kamming D, Gardam M, Chung F. I. Anaesthesia and SARS. Br J Anaesth 2003;90:715-18