MEMO

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DATE: Wednesday, March 18, 2020

TO: All Respiratory Therapists
All Anesthetists
All Critical Care and Emergency Department Staff and Physicians

FROM: Dr. Johan Viljoen, Chief of Staff
Derek McNally, Executive Vice President, Clinical Services and Chief Nursing Executive

RE: NH Standardized procedures for intubation of the COVID-19 suspected or positive patient.

As you well know, aerosol-generating-procedures (AGPs) increase the risk of respiratory pathogen transmission. In this current climate, we have developed the following guidelines to provide clinical direction for Intubation of COVID 19 suspected or positive patient.

Subject matter experts have reviewed the scientific evidence and have provided the following guidance:

STAFF SAFETY FIRST

Preparation:

- Intubate the patient early once they fail nasal cannula oxygenation at 5 LPM.
- Do not use BiPAP, CPAP or high flow nasal cannula (HFNC).
- If patient declines intubation, BiPAP and HFNC will not be offered as alternative therapy.
- Proper airborne precautions are required for airway management or any aerosol generating procedure (N95 mask, isolation gown, high-cuffed double gloves[1] for the intubator to sheath glideslopes cover post intubation, eye protection). Refer to SourceNet for up to date information.
- Move patient to negative pressure room or room with a HEPA filter.
- Closed loop communication planning between staff participating.
- Respiratory Therapists will prepare airway equipment and ventilators.
- Nurses will manage medications as directed.
- Ensure the MOST experienced airway manager is performing the intubation.
- Consider leveraging Anesthesiology early for intubation of a COVID-19 suspected or confirmed patient if airway is assessed at higher risk.
- Limit the number of staff and equipment in the room.
- Establish Safety Officer role to guide staff through donning and doffing to ensure strict adherence to PPE protocol.

Equipment:

- Have all routine intubation equipment available in the room.
- Ensure additional difficult airway equipment that may be required is maintained in the anteroom (for example LMA's and that the Difficult Airway cart should be immediately available).
- Disposable video laryngoscopy is the preferred method to maintain distance.
- A high efficiency filter (>99.9%) to be used with resuscitation bag non-heated breathing circuit, and anesthetic gas machine breathing circuit.

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[1] Footnote/comment for long glove during intubation for the INTUBATOR ONLY:
The use of long cuff gloves is not a current PPE standard for AGPs. This deviation is undertaken due to the peculiar mechanical nature of the process of performing the intubation.

- Medications for RSI. Ensure full paralytic dose is utilized.
- When mechanically ventilating outside ICU, utilize a transport ventilator or anesthetic gas machine with high efficiency filter and closed suction system.
- When mechanically ventilating in ICU, utilize a heated humidity circuit with closed suction system.

Procedure:

- Preoxygenate with tight fitting, low flow, Non-Rebreather Mask for at least 5 minutes.
- Do not topicalize airway.
- RSI procedures. Full paralytic doses.
- If an awake intubation is required, contact anaesthesia.
- Plan for NO manual facemask ventilation.
- If manual facemask ventilation required - use two person technique to ensure a good seal with high efficiency filter placed between facemask and resuscitation bag and use small tidal volumes.
- Once endotracheal tube in situ, clamp tube and inflate cuff.
- Connect resuscitation bag with a high efficiency filter placed in between CO2 detector and closed suction system, unclamp tube, and manually ventilate with small tidal volumes to confirm proper endotracheal tube placement.

Post-Intubation:

- Connect to ventilator by first clamping endotracheal tube, remove CO2 detector (and high efficiency filter if using heated humidity circuit), then attach the circuit to closed suction system and unclamp tube.
- Routine sedation is a priority.
- Discard disposable equipment and decontaminate reusable equipment fully and according to hospital procedures found on SourceNet.

Transporting Intubated Patient:

- To transport patients internally and externally, utilize a transport ventilator with a high efficiency filter and closed suction system. If any circuit disconnections are required, clamp the endotracheal tube first.
- Transport staff to maintain droplet precautions in transport.