ACTION CARD
1: PREPARATION FOR INTUBATION OF COVID-19 PATIENT

Objective: Preparation of equipment and staff for intubation of a suspected COVID-19 patient.

Pre-Induction

In Clean Room

1. Assemble team in clean room
   - Two hot-room team roles: Intubator, assistant / drug administration/monitoring
   - Clean-room team roles: runner / donning buddy
   - COVID supply cart outside OR
2. Use Intubation Equipment List to ensure all supplies available
3. Remove personal items (i.e. phone, ID badge)
4. Don and check PPE equipment
   - Goggles, footwear, double gown (surgical gown with a blue isolation gown over) and double glove technique
   - N95 mask or PAPR device
5. Move to hot room
   - Any additional equipment will be handled through by the runner in sterile corridor to a rolling table
6. Discuss disposition of ALL non-essential staff out of hot room during intubation

Intubation Equipment List

1. Intubation Equipment:
   - Videolaryngoscope (primary intubation), Direct laryngoscopy (backup)
   - LMA in various sizes (backup), Bougie
   - Absorbent chux pads, Double zip-lock plastic bags *(respiratory soiled contents)*
2. Breathing Circuit:
   - HME filters at both patient and machine ends of circuit
   - Capnography connected between HME filter and ventilator
   - HEPA machine near head of bed (if feasible)
   - Inline suction system, Tracheal tube clamp
   - DO NOT USE high flow nasal oxygenation
3. Drugs:
   - Induction drugs for RSI
   - Emergency drugs (i.e. Vasoactives)
   - Maintenance drugs and equipment (i.e. Pumps, TIVA PRN)
4. Avoid Bair hugger, Use Thermoflect – Warming Blanket. Keyboard/Computer Plastic Covers
5. Rescue Devices: Disposable Ambu-Scope (keep in clean room)

ACTION CARD
2: INTUBATION OF COVID-19 PATIENT

Objective: Intubation of a suspected COVID-19 patient minimizing risk to staff.

Intubation

In Hot Room

1. Patient is transported directly into designated OR *(bypass Preop/holding area)*
2. Check IV access functional
3. Check HME filters attached to both ends of breathing circuit *(patient and expiratory limb)*
4. Turn HEPA filter machine ON low near head of bed *(Turn OFF prior to incision)*
5. Pre-oxygenate for 5 minutes with tight seal on mask
6. Give RSI drugs (Cricoid only when indicated)
   - Consider avoidance of manual ventilation
   - If hypoxia low pressure/low volume mask ventilation (2 hand technique)
7. Turn oxygen off before removing mask *(Pause Gas Flow)*
   - Perform Plan A: Primary Intubation
8. If intubation successful:
   - Perform post-intubation actions
9. If laryngoscopy difficult: Insert LMA and ventilate; Perform Plan B: Secondary intubation
10. If cannot ventilate via LMA: Perform Plan C: Mask ventilation
11. If cannot mask ventilate: Perform Plan D: Front of neck airway

Airway Plans

1. Plan A: Primary Intubation
   - Laryngoscopy with videolaryngoscope *(Direct laryngoscopy ONLY if essential)*
2. Plan B: Secondary Intubation
   - Request disposable Ambu-Scope from clean room: Intubate through LMA using Ambu-Scope
3. Plan C: Mask Ventilation
   - Low pressure/low volume mask ventilation
   - Two-handed technique to maintain seal
4. Plan D: Front of neck airway
   - Scalpel (size 10 blade), Bougie, Size 6.0 tracheal tube

Post-intubation Actions

1. Place all soiled airway items (including outer glove, blue isolation gown, facemask) in absorbant chux pad or double zip-locked bags; discard in regular trash.
2. Connect breathing circuit, inflate cuff BEFORE ventilation
3. Turn oxygen (gas-flows) on
4. Check ETT cuff pressure, must be > 5cmH20 above inspiratory pressure to minimize leak
5. If circuit must be disconnected, occlude tracheal tube with clamp before detaching
6. DO NOT OPEN OR DOORS for 14 minutes have elapsed post intubation

ACTION CARD
3: EXTUBATION OF COVID-19 PATIENT

Objective: Extubation of suspected COVID-19 patient while minimizing aerosolization of virus particles

Extubation

In Hot Room

1. Discuss whether to extubate AND recover in the OR or transfer intubated to ICU
2. Prepare patient for extubation: Turn HEPA machine ON low
   - All non-essential OR team members should leave OR
   - Consider deep extubation technique to minimize aerosolization post extubation
3. Prepare equipment (See Minimum Equipment List)
4. Clear airway of secretions
   - Careful oral suction with Yankauer suction and Tracheal suction with inline suction system
5. Perform final pre-extubation checks: Ensure established self-ventilation
6. Prepare team for extubation process
   - Fully open APL valve, do NOT apply positive pressure breath on extubation
   - Turn off oxygen and volatile agent *(Pause Gas Flow)*
   - Deflate cuff at the point of extubation then remove ETT onto absorbent chux pad *(discard in regular trash)*
   - Apply anesthetic face mask immediately and maintain tight seal *(discard facemask after use)*
   - Apply simple face mask or non-rebreather facemask with low oxygen flow rate

Location Risk Assessment

Consideration must be given to extubate in OR table or bed

1. If extubating on OR table then transfer post-extubation will be required. Take care to maintain distance from the airway when this happens. It may be appropriate to keep patient sitting upright on OR table for longer period than normal to ensure airway is clear and there will be no further coughing
2. If extubating on bed then a transfer prior to extubation will be required. If patient is already self-ventilating then it will not be possible to clamp the tube and disconnect breathing circuit during transfer. Extra care MUST be taken to avoid accidental disconnection or extubation during transfer.
3. Post-extubation monitoring, and recovery should occur in the OR *(bypass PACU)*
4. If transporting intubated to ICU, apply HME filter between ETT and Ambu-Bag

Minimum Equipment List

1. Oropharyngeal airways
2. Anesthetic facemask
3. Non-rebreather facemask
4. Surgical Facemask
5. LMA
6. Absorbent Chux Pads