

 **PROTECTED INTUBATION/CODE BLUE**

General guiding principles to reduce potential exposure to health care workers where it relates to aerosol-generating procedures with high consequence pathogens, include minimizing staff and equipment entering room and modifying processes where possible (e.g. application of surgical mask on patient for compressions, avoiding direct laryngoscopy, pausing compressions for intubation and implementation appropriate donning and doffing).

This process map aim s to identify procedures that are not within routine practice. The assumption is that all standards of care and best practice continue to be employed with the addition of these modifications (e.g. delivering oxygen via nasal prong to venturi mask as required with increasing oxygen demands).

**Protected PPE: N95 mask, full face shield, +/- goggles, level 2 gown or Tyvek suit, nitrile gloves, +/- bouffant**

**PROTECTED INTUBATION:**

Staff performing this task must be cautious of PPE and identify immediately if a breach observed (e.g. visor up or fogged glasses). Do not use a stethoscope, confirm intubation with EtCO2.

* When pre-­‐oxygenating patient, if a seal can be maintained, may use BVM (no manual ventilation is recommended)
* Avoid manually ventilating the patient. If absolutely necessary, used small tidal volumes
* Lead intubator to determine and discuss with team plan A, B and C for intubation, paralytic drugs, and ensure all equipment and staff readily available to perform
* Pause compressions for intubation
* Avoid direct laryngoscopy. Intubate utilizing video laryngoscope (*GlideScope®*/*McGrath*™ as applicable).
* If unable to intubate, avoid manual ventilation with BVM. Insert LMA, then ventilate using BV-­‐LMA with resus bag with viral filter attached. Re-­‐assess airway plan and consider need for additional expertise or surgical airway
* If unfamiliar with equipment do not proceed without team discussion and consideration for modifying procedure or calling in additional staff

**AFTER ETT PLACED/INTUBATION:**

* Viral filter from BVM is placed directly on the ETT
* Calorimeter or end tidal is placed on BVM
* BVM is then attached to ETT to confirm
* After confirmation, remove BVM (note viral filter is still attached to ETT), attach the vent

**TRIGGER:**

Patient requiring O2 with clinical deterioration on physician initiation

**LOCATION:**

Whenever possible, perform in a negative pressure room (if unavailable, single patient room with door closed) **Decision point: Transfer pre/post intubation based on clinical need and MRP assessment**

|  |
| --- |
| **TEAMS MOBILIZED:** |
| **Code Blue protection:** Follow code blue policy but for patients suspected or unknown initiate code with Call the **“Code Blue Protected”:****First Responder:** Apply surgical mask to patient, don appropriate PPE and N95 Mask **Second Responder***: DO NOT Rush in*. Don appropriate PPE.Start compressions, close the door.Pause CPR if moving pt. from locationAssessment is need for consideration of early Intubation |  | **Emergency Department (ED):**MD/MRP to call intubationTeam huddle for intubation plan, and role determination **In Room:*** 1 MD to Intubate (may be ED)
* 1 RN/RRT
* If available 1 RN/RPN

\*Note: Determination of less or more staff than recommendations for inside room is at the discretion of the team in order to conduct a safe and manageable response.**Outside Room*** 1 RN/RPN – Runner (donned and ready to enter)

**AFTER SUCCESSFUL INTUBATION*** Connect directly to ventilator to avoid multiple circuit disconnect, and ensure closed circuit
* Confirmation with ETCO2 and chest x-ray
* **Contact RT for optimal vent settings**

Inform DI to prepare for tube confirmation (portable 1 view chest X-ray) |
|  |  |

**REMOVAL OF PPE:**

Staff to individually, slowly and methodically doff PPE while observed by team members as per doffing guidelines and report any breaches of PPE immediately to infection control.

**PLAN TRANSFER (if applicable):**

When bed available, transfer with closed circuit ventilation system. All staff to keep N95 and face shield on but don new gloves and disposable gown for transport. Disconnect any non‐essential equipment. Patient Transport to wipe bed rails/head board prior to transport. Runner to follow during in hospital transport and will be responsible to open doors/elevators while maintaining no contact with patient.

**ADDITIONAL EQUIPMENT NEEDED:**

If possible, minimize equipment going into room and remove all possible equipment prior to intubation:

* Bacterial/viral filter on the Resuscitation Bag
* Retrieve items from Crash Cart to bring into room (in addition to items deemed required): Medication Tray (with syringes etc.), Intubation Tray and relevant “Grab and Go Bag” as needed. (refer to COVID 19 kit list)
* Ensure Crash cart/equipment is not brought into room, or it will require cleaning and disinfection as per IPAC recommendations.

**ADDITIONAL EXPERTISE/SUPPORT REQUIRED?**

**Intubation:** ED may not always be most experienced in intubation, each ED is responsible for notifying back up MD/anesthesia as they may be called to any area to support with protected intubation.