

PROTECTED CODE BLUE/EMERGENT MEDICAL INTERVENTION EMERGENCY DEPARTMENT AND INTENSIVE CARE UNITS

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 of a Safety Leader for donning and doffing). See *Guidance Document for Aerosol-Generating Procedures with High Consequence Pathogens* for more information.

This process map aims 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, level 2/yellow cloth gown, one pair regular cuff nitrile gloves, +/- blue bouffant (staff preference). Last Updated 2020/03/17.

TRIGGER:

Patient found unresponsive or in active cardiac arrest.
ED Specific: admission of cardiac or pulmonary arrest/failure

RESPONDER 1 (RN):

- 1st responder: pull call bell cord out of wall to communicate activation of *Protected Code Blue* response,
- Apply surgical mask on patient and place bed in CPR mode (if able), this is for preparation when responder #2 arrives to begin compressions
- **Leave room to don N95 respirator and appropriate PPE and return to support response.**

RESPONDER 2 (RN):

- 2nd responder: do not rush inside.**
- Confirm Protected Code Blue communicated to staff
 - Retrieve back board and don PPE with Safety Leader prior to entering room to start compressions team arrives to support. Keep door(s) closed.
 - **Do not provide manual ventilation via BVM.**

RESPONDING STAFF ARRIVAL:

Upon arrival: do not rush inside. Don appropriate PPE and enter room individually with equipment needed to support ongoing resuscitation. Perform team huddle between rhythm/pulse checks or once all providers in the room. Experienced staff MD to confirm intubation plan, drugs and equipment and decision on who will perform the intubation. Brief team with plan, roles and responsibilities.
* If intubation support required, or known or anticipated difficult airway, call Anesthesia Staff (EXT. 7878), will bring *GlideScope®* with them from the O.R.

ADDITIONAL EQUIPMENT NEEDED:

- If possible, minimize equipment going into room:
- Bacterial/viral filter on the Resuscitation Bag to be changed to a High Efficiency Hydrophobic (HEPA) filter
 - Retrieve from Arrest Cart to bring into room (in addition to items deemed required): Defibrillator, Medication Tray (with syringes etc.), Intubation Tray and relevant "Go Bag" as applicable.
 - BVM bag, videolaryngoscope of choice
 - If response cart/equipment brought into room, will need cleaning and disinfection as per IPAC recommendations

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)
 - 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 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** HEPA 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
 - Connect directly to ventilator (PB980 or equivalent) to avoid multiple circuit disconnect

PLAN TRANSFER (if applicable):

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

REMOVAL OF PPE:

Staff to individually, slowly and methodically doff PPE while observed by safety leader as per doffing guidelines and report any breaches of PPE immediately. Change into new scrubs if required.

INSIDE ROOM (6)	OUTSIDE ROOM (4*)
1 MD (in role of Code Team Leader)	1 Back-up experienced MD to intubate (with PPE donned)
1 Experienced MD to intubate (ED/ICU/or Anesthesia Staff if needed)	1 Experienced RN (with PPE donned)
1 Experienced RN (may be responder 1 or 2)	1 Safety Leader – any staff (no PPE)
1 Experienced RRT	1 Runner – any staff (no PPE)
2 First Responders (#1 and #2)	* additional staff for compression support, if required

*Note: Determination of less or more staff than recommendations above, for inside room, is at the discretion of the team in order to conduct a safe and manageable response. Consider additional RRT outside of room for support, if required.