UAB CODE BLUE Recommendations for PUI or COVID19+

- **Appropriate PPE is essential even in Code Blue settings.** An observer must ensure appropriate donning as staff enters the room. The first staff member donned in appropriate PPE (see below) should relieve anyone already in the room that is not wearing appropriate PPE.
- **Peri-Arrest/Pre-Arrest Period:** Conversation with attending regarding appropriateness of ACLS. Create plan for staffing/identify roles. Bring TeleICU Cart to the outside of the room and log-in/start session so that it can be utilized as a means of communication in and out of room
- Leave Code Cart outside room and take in only the defibrillator with pads and backboard.

**Endotracheal/Tracheal INTUBATED Patient** – Leave on vent until all equipment available for safe disconnection

- **Respiratory Enhanced Precautions PPE:** yellow gown, N95 mask, face shield, gloves

<table>
<thead>
<tr>
<th>Location</th>
<th>Person</th>
<th>Task(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INSIDE Room</strong></td>
<td><strong>Bedside RN</strong></td>
<td>Meds / vascular access if required / Controls defib</td>
</tr>
<tr>
<td></td>
<td><strong>MD</strong></td>
<td>Running ACLS protocol / IO placement if access required</td>
</tr>
<tr>
<td></td>
<td><strong>RT</strong></td>
<td>To disconnect from vent: Push the alarm silence on vent, Clamp ETT tube with hemostats around 4x4 gauze, depressurize vent circuit by disconnecting the inspiratory filter from vent, attach BVM with viral filter between ETT and Bag, unclamp ETT and Bag normally. Cover tubing/face with towel or Chux to minimize spraying if there is inadvertent disconnection</td>
</tr>
<tr>
<td></td>
<td><strong>2 people</strong></td>
<td>CPR alternation</td>
</tr>
<tr>
<td></td>
<td><strong>TeleICU Cart</strong></td>
<td>Positioned so that MD and Documenter outside the room can see/communicate</td>
</tr>
<tr>
<td><strong>OUTSIDE Room</strong></td>
<td><strong>Pharmacist</strong></td>
<td>After handing the bag into the room or preferably, placing on a table just inside the room, draws up more drugs for the rest of code</td>
</tr>
<tr>
<td></td>
<td><strong>Charge RN</strong></td>
<td>Documentation, communicate timing for drugs, defib etc. using TeleICU cart</td>
</tr>
<tr>
<td></td>
<td><strong>Runner</strong></td>
<td>Get tubing, flushes, equipment etc</td>
</tr>
<tr>
<td></td>
<td><strong>Back up MD</strong></td>
<td>Support for code leader MD via TeleICU cart (look up labs/images)</td>
</tr>
<tr>
<td></td>
<td><strong>Observer</strong></td>
<td>Sole job is to ensure appropriate donning and doffing for all people entering the room. Should ask those already in the room with inappropriate PPE or contamination to doff. Must ensure cleaning occurs for everything portable that leaves the room (e.g. CMAC)</td>
</tr>
<tr>
<td></td>
<td><strong>Additional 2 people</strong></td>
<td>Ready to don PPE and substitute for those doing CPR. Once in PPE, people should remain in the room but away from bed if not actively participating in care.</td>
</tr>
</tbody>
</table>

**NOT-INTUBATED Patient**

- **Enhanced PPE for Aerosolizing Procedures:** impermeable gown (blue), N95, bouffant cap, face shield, double gloves

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<td></td>
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</tr>
<tr>
<td></td>
<td><strong>MD</strong></td>
<td>Airway management – Use compression to respiration ratio of 30:2 until LMA or ETT placed then 10 breaths/minute. <strong>Consider endotracheal intubation at earliest feasible opportunity.</strong> May also alternate with CPR once LMA or ETT placed</td>
</tr>
<tr>
<td></td>
<td><strong>KI</strong></td>
<td>Airway with MD as needed. May also alternate with CPR</td>
</tr>
<tr>
<td></td>
<td><strong>2 people</strong></td>
<td>CPR alternation</td>
</tr>
<tr>
<td></td>
<td><strong>TeleICU Cart</strong></td>
<td>Positioned so that MD and Documenter outside the room can see/communicate</td>
</tr>
<tr>
<td><strong>OUTSIDE Room</strong></td>
<td></td>
<td>Same as for Intubated patient</td>
</tr>
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</table>
UAB CODE BLUE Recommendations for PUI or COVID19+

Common Situations/Questions:

1) What is the general sequence of events in a Code Blue for Covid+ or PUI patients
   a. Staff on the floor – bring Code cart and appropriate PPE to the room. Observe the first
      person to don appropriately so that they can enter the room and ask the staff member who
      is not in appropriate PPE to doff and leave.
   b. The second person to enter room will bring in the Defibrillator/pads, backboard and
      assume responsibility of coordinating backboard and pad placement. The code cart will
      remain outside the room.
   c. MD and RT will enter the room, bringing airway bag with them. If meds are ready, these
      should be brought in as staff enters the room.
   d. The additional CPR assistants will enter room and ensure TeleICU cart is appropriately
      placed.
   e. An RN, MD or other documenter outside the room will assist with documentation via
      TeleICU cart when available.
   f. Pharmacist prepares and hands in medications/flushes. If a table is available, these can be
      placed on a table that is rolled inside the room to sit near the doorway.
   g. The observer will monitor from outside for contamination and ask people to leave if they
      are contaminated or noted to be in inappropriate PPE.
   h. The observer and other staff will ensure all equipment leaving the room has been
      appropriately cleaned with purple wipes.
   i. Air scrubber can be placed in the room as soon as it is available, if it is not a negative
      pressure room

2) Do I need to wear all of the PPE before entering the room?
   a. YES. All PPE must be appropriately worn before entering the room.

3) A staff member is in the room of a PUI or Covid+ patient on the floors in standard respiratory
   enhanced precautions PPE when patient is noted to be pulseless. The staff member may start BLS
   until assistance arrives. What next?
   a. As soon as a second person is available and donned appropriately, they should relieve the
      person doing compressions and ask them to doff and leave.

4)Confirming ETT placement:
   a. End tidal CO2 detector
   b. If you must use the stethoscope, do so over top of the bouffant cap to decrease
      contamination risk

5) Code in a prone patient?
   a. Supine the patient at earliest feasible opportunity. Until help arrives, provide compressions in the
      prone position. Use two-handed technique for chest compressions over the mid-thoracic spine
      between the two scapula. Counter-pressure may be applied using a second person. Second person
      may also place pads on the patient.

6) Residents will not be involved in Code Blues on PUI or Covid+ patients.

7) Minimize the number of people entering the room and whenever possible, keep the door closed.
   Place the air scrubber into the room once available, if not already a negative pressure room

8) We encourage early evaluation/transfer to ICU for decompensating patients to minimize floor MET calls for
   intubation and codes on floor PUIs and Covid patients.
**CODE Algorithm**
- Activate call light, recorder listens over speaker (or telehealth)
- Don PPE
- Initiate chest compressions
- Ensure access (PIV or IO)
- Nurse 2 Compressions
- Nurse 1 sets monitor/Lifepack/Med Administration
- Places supraglottic device *(if credentialed)*
- MD performs intubation
- Door remains closed

**Caveats**
- In peri-arrest state, discretion for PIV vs IO place patient on monitor
- If no Lucas (chest compression machine)
  - Continue manual chest compressions

**Code Roles Protocol**
- Places Supraglottic device with **viral filter** *(if credentialed)*
- Consider endotracheal intubation at earliest feasible opportunity
- BVM
- ETCO2, if available
- Suction
- Keep Pulse Count/Time

**Monitor**
- Nurse 2
- Nurse 1
- compression duties with Nurse 1
- Lucas Device *(if applicable)*
- Initially May/After ROSC

**Vent**
- RT/MD
- Med Administration
- -C-mac with ETT
- -bougie
- -Chucks pad for tube exchange
- -CVL
- -A-line

**Medication Administration**
- Recorder
- Observer
- Pharmacist
- Additional Staff
  - Charge RN
  - Runner
  - Backup MD
  - Additional CPR support
Adult Advanced Life Support
for COVID-19 patients

During CPR
- Ensure high quality chest compressions
- Minimize interruptions to compressions
- Consider endotracheal intubation at earliest feasible opportunity
- Consider reversible causes Hs and Ts
- Use waveform capnography
- Continuous compressions when advanced airway in place
- Vascular access (IV or IO)
- Give epinephrine every 3-5 min
- Give amiodarone after 3 shocks

Recommended PPE
Respiratory Enhanced PPE
- Disposable gloves
- Disposable yellow gown
- N95
- Face shield
AGP (aerosol generating procedures) PPE
- Disposable gloves (2 pair)
- Disposable blue surgical gown
- Bouffant cap
- N95 respirator mask
- Face shield

Consider
- Ultrasound imaging
- Coronary angiography and percutaneous coronary intervention
- Extracorporeal CPR
- TeleICU cart when available
- Air scrubber if available in rooms without negative pressure

Phases:

Phase 1
Conversations and decisions on emergency treatment completed and documented

End of life care
- Patient unresponsive and not breathing normally
- Call resuscitation team
- State COVID-19

Chest compressions for 2 min
- Minimize interruptions

Attach AED/Defibrillator and Assess rhythm

Return of spontaneous circulation

Shockable (VF/Pulseless VT)
- Up to 3 shocks

Non-shockable (PEA/Asystole)
- Don AGP PPE
- CPR for 2 min
- Backboard and Stool
- Minimize interruptions

Immediate post cardiac arrest treatment
- Use ABCDE approach
- Aim for SpO2 of 94-98%
- Aim for PaCO2 35-40 mm Hg
- 12-lead ECG
- Treat precipitating cause
- Targeted temperature management
- AGP PPE if AGP interventions, i.e. intubation

Don AGP PPE
CPR for 2 min
- Backboard and Stool
- Minimize interruptions

Recommended PPE
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