University Health System

Pediatric Code Blue Enhanced Isolation Guidelines—COVID-19 Pediatric Patients (Confirmed or PUI)
Date: 5/22/2020

Background:
• The safety of the healthcare workers providing cardiopulmonary resuscitation (CPR) should be the top priority. **No healthcare workers should be inside a code blue room without appropriate personal protective equipment (PPE).**
• Unless explicitly stated in the document, patients with suspected or confirmed COVID-19 should be treated by previously established, standard protocols

Institutional Modification
• At the beginning of each shift, the pediatric PCC, PICU/PCCU Charge nurse, supervising pediatric RT, PICU/PCCU and COVID faculty must review the number of admitted pediatric patients with confirmed or suspected COVID, and review who among them may deteriorate clinically
• The goal is to **intubate early and electively, and avoid as many code blues and emergencies as possible**
• Pediatric code blue will be called overhead as standard procedure.

Patient selection
• The following represents a general guideline and all decisions should be made on a case to case basis
• **For unintubated confirmed or suspected COVID pediatric patients** (without significant medical comorbidities and the deterioration is unexpected) – **CPR should be provided**
• **For intubated confirmed or suspected COVID pediatric patients**
  Code status discussion should be carried out soon after intubation with the parents/ caregivers of patients confirmed to have COVID regarding prognosis and the utility of CPR
Equipment to brought to COVID area:

- **COVID Intubation PPE Bag**  
  (In PICU Attending Office or PCCU airway cart; To be brought by PICU Attending):
- **COVID Pediatric Code Cart (IMC code cart with 2 two-way radios)**

  **PEDIATRIC ISOLATION CODE BLUE BAG**
  - 10 face shields
  - 10 N95 masks (7 regular & 3 small)
  - 10 surgical masks
  - 10 gowns
  - 10 regular gloves in each size
  - 10 pairs of size 7.5 surgical gloves
  - ETT (Size 3.0, 4.0, 5.0, 6.0, 7.0)
  - Stylets (Regular, Glidescope)
  - End Tidal CO2 colorimeter
  - KY Jelly x2
  - Bougie x1

- **Pediatric Airway Cart (Brought from Peds RT)**
- **COVID Airway Bag (To be carried by Anesthesia Team):**

  **ISOLATION CODE MED PACK (in Crash Cart Med Tray)**
  - Epinephrine 1 mg Inj X 3
  - Sodium bicarbonate 50 mEq Inj X 2
  - Atropine 1 mg Inj X 1
  - Dextrose 50% 50 mL Inj X 1
  - Calcium chloride 1 g Inj X 1
  - Lidocaine 100 mg Inj X 1
  - Flushes
**Code Team:**

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician 1 - PICU</td>
<td>- Code Leader</td>
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<tr>
<td></td>
<td>- Bring Intubation PPE bag</td>
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<tr>
<td></td>
<td>- Communicator with Recorder*</td>
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<tr>
<td>Physician 2- Anesthesia</td>
<td>- Airway Management</td>
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<tr>
<td></td>
<td>- Bring COVID Airway bag</td>
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<tr>
<td>Respiratory Therapist 1</td>
<td>- Compressions if No airway</td>
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<tr>
<td></td>
<td>- Assist with airway</td>
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<tr>
<td></td>
<td>- Vent setup/ maintenance</td>
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<tr>
<td>Nurse 1 (Bedside Nurse)</td>
<td>- Start compressions</td>
</tr>
<tr>
<td></td>
<td>- IV Access, lab draws, Med Administration</td>
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<tr>
<td>Nurse 2</td>
<td>- Nurse assistance, Compressions;</td>
</tr>
<tr>
<td></td>
<td>- Brings defibrillator, meds, 2-way radio</td>
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<tr>
<td>Nurse 3</td>
<td>- Hands equip/meds to Nurse 2</td>
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<tr>
<td></td>
<td>- Brings Iso code med pack and RSI kit</td>
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<tr>
<td>Nurse 4</td>
<td>- Med drawing</td>
</tr>
<tr>
<td>Nurse 5</td>
<td>- Recorder*</td>
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<tr>
<td>Respiratory Therapist 2</td>
<td>- Equip support/ airway supply</td>
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<tr>
<td></td>
<td>- Bring Glidescope</td>
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<tr>
<td>Pharmacist</td>
<td>- Medication supply</td>
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<tr>
<td>PICU APP/fellow</td>
<td>- Facilitate med orders</td>
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<tr>
<td>UH3 Peds Resident</td>
<td>- Alerting specialists</td>
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<tr>
<td>Tech 1</td>
<td>- Supply runner/ Compressions</td>
</tr>
<tr>
<td>Childlife/Chaplain/SW</td>
<td>- Family/staff support</td>
</tr>
<tr>
<td>Tech 2</td>
<td>- Crowd control</td>
</tr>
</tbody>
</table>

**When a Code Blue is Called**

- Call code blue while OUTSIDE the room whenever possible
- All members must wear appropriate PPE, supplies available in the PEDIATRIC ISOLATION CODE BLUE BAG
- Don appropriate PPE before entering the room - NO PPE, NO RESCUTATION

  - **If patient has no pulse:**
    - Begin Chest Compressions
    - If bag mask ventilated, ensure tight seal with HEPA filter applied
    - After ensuring O2 supplementation in place, cover the patient’s face with a mask or towel to minimize droplets aerosolization and secretions contamination while performing chest compressions
    - Wait for code team to arrive

  - **If patient has a pulse:**
    - Provide up to 15L via Oxy-mask
    - Wait for code team to arrive
When the Code Team Arrives and During the Code

- Physician team leader should don PPE and enter the room first
- **Code cart remains outside the room**
- Bring defibrillator, pads and backboard into the room
- Chest compressions may be paused while intubating to allow for increased first-pass success
- **If intubation is unsuccessful, convert to LMA early instead of multiple attempts**
- For further details on intubating a COVID patient, refer to the “UHS COVID PCCM intubation procedure”
  - If the patient is already intubated, consider leaving the patient on the ventilator to maintain a closed circuit if there is no evidence of airway obstruction; if patient is on volume control, consider changing to pressure control due to chest compressions
- Any staff member who is unwell, has had equipment failure, or likely self-contaminated should be first to doff and exit the patient room
- **Weight based code sheets copies will lie in patient room and in green folder outside of room**

Intubation Procedure

- **Bag Valve Mask (BVM) Ventilation with HEPA Filter and ensuring a tight seal**
- PICU faculty will be the designated person to intubate to maximize first-pass success
- Rapid sequence intubation must be used to minimize chance of coughing
- **Videolaryngoscope (Glidescope) would be preferred 1st choice**
  - Place clear, sterile drape/ plastic bag in preparation for intubation
  - Provide appropriate preoxygenation via BVM
  - Inflate cuff of endotracheal tube(ETT) prior to placing CO2 Colorimetry or End-Tidal
  - Connect ETT directly to ventilator after intubation if possible

After the Code

- All non-disposable equipment (e.g. videolaryngoscope) must be wiped with hospital approved disinfectant wipes at least TWICE THOROUGHLY.
- All equipment should be cleaned in the room, and again once leaving the room
- As a general rule, **ALL EXPOSED DISPOSABLE EQUIPMENT inside the code blue room must be DISCARDED EVEN IF UNOPENED**
- Due to potential aerosolization, wait for 20 min before performing post-intubation chest radiography.
  - Any staff member who is unwell, has had equipment failure, or likely self-contaminated should be first to doff and exit the patient room
- Doff PPE ONE AT A TIME...
• Doff PPE slowly and carefully according to pre-existing protocol- Coached and monitored by designated hall monitor

UHS guidelines references in this document can be found at https://www.universityhealthsystem.com/coronavirus-covid19/healthcare-protocols-and-guidelines?web=1