

## Guidelines for ECMO Cannulation and Candidacy for COVID-19+/PUI Pediatric and Neonatal Patients

### General Procedural Considerations for PUI/COVID+ ECMO Cannulation:

- Cannulation and procedures for PUI/COVID+ ECMO patients should occur in the ICU (exceptions to be approved by ECMO and ICU leadership) to minimize transport of patients within the hospital.
- **MOST IMPORTANTLY**, proper PPE and limitation to ESSENTIAL PERSONNEL ONLY for any ECMO cannulation or event **MUST BE OBSERVED**.
  - Essential Personnel for ECMO cannulation: \*denotes personnel **INSIDE** the room
    - ECMO Surgical Team\*: Primary Surgeon (attending or advanced CT surgery fellow) and **ONE** Surgical Assist and **ONE** Scrub nurse
    - ICU Leader\*: ICU attending and/or fellow
    - ICU Nurse\* x 2
    - Respiratory Therapist\* x 1
    - Perfusionist x 1 – to prepare circuit outside of the room until cannulas in and ready to connect to circuit.
    - OR Circulating Nurse: outside of the room to only pass supplies into the room through the **Relay RN ONLY**
    - Crowd Control: Charge nurse or ICU nurse outside of the room to monitor adherence to **Essential Personnel ONLY** inside and outside of the room.
    - Additional roles during an ECMO cannulation:
      - PPE Monitor RN\*(in the room, near the door) to monitor that ALL personnel entering and exiting the room are observing proper PPE precautions.
      - Relay RN (outside of the room, near the door) – the **ONLY** person to pass things in and out of the room.
- **ONE** Front-line Provider (MD or NP): Should remain outside of the room, at a remote distance, but be readily available to make any phone calls or place any orders needed.
- All carts should remain *outside of the room*. Supplies needed for cannulation should be prepared outside of the room and brought in. Additional supplies needed will be communicated to and handed into the room by the **Relay RN ONLY**.

### ECMO Candidacy for COVID-19+/PUI Patients:

Standard guidelines for ECMO candidacy apply (refer to NYP Infonet Policy)

<https://inonet.nyp.org/Nursing/Standards/PEDSExtraCorporealMembraneOxygenationECMOPediatrics.pdf>

### For PUI Patients:

- Standard ECMO candidacy guidelines applies for respiratory, cardiac and ECPR with special attention to proper PPE use and above procedural considerations.

### For COVID+ Patients:

- For non-ECPR, controlled cardiac or respiratory cannulation:
  - Standard ECMO candidacy guidelines applies with special attention to proper PPE use and above procedural considerations.
- ECPR in COVID+ Pediatric Patients:
  - ECPR is discouraged for COVID+ patients, especially for those with other comorbidities, septic shock or evidence of multisystem organ dysfunction.