Delivery Logistics and Infant Care Covid-19 in NICU 3/19/2020

Population: Infants born to a mother who is known to be COVID-19 positive or under investigation for COVID-19 and is expected to be admitted to the neonatal intensive care unit (4SA).

NICU Charge RN

Plan for potential Covid-19 situation—at the beginning of each shift identify team rolls (particularly nursing) and where is an available Atom-i. Note: This is time and resource intensive, as well as awkward.

- Nurses
  - Need 1-2 RNs for resuscitation—resource RN will be 1
  - Need 1 runner/dofficer
  - Need admit nurse (also transport RN)
- Nurses and provider numbers are dependent on gestational age and other clinical circumstances
  - Recommendation for 2 of each when < 26 weeks and or concern for acuity
  - Clinical judgment/team preference will influence—need skilled providers; need to consider conservation of PPE
- 2 RCS (respiratory therapist)
  - 1 RCS for resuscitation
  - 1 RCS for NICU room set up
  - Backup RCS is likely to be transport and initial admission steps
  - RCS from resuscitation will take over admission

OB Charge RN notifies NICU Charge RN of Covid + PUI patient
  - will call you to huddle if delivery—attend huddle with primary provider

NICU Charge RN:

- Huddle with NICU Team in Core
  - Get N-95 sizes of all team members for resuscitation and for transport and for unit admission
  - Assign roles—give them each their checklist and deploy to set up
  - Notify on call provider of situation and request to come to the unit as indicated

Day Shift call PPE Deployment Officer 206-597-3926 for PPE
Night Shift call Clinical Leader for PPE support
  - Inform of PPE needs
    - PUI in the NICU set up
    - Delivery personnel—give the N-95 sizes needed

Assign patient room:
  - If infant requires respiratory support, use negative air pressure room. If no respiratory distress and NOT likely to require respiratory support, may place in droplet precautions in a regular NICU room. Negative Air Pressure Rooms are:
    - Room 67 (phone 8-9254)
    - Room 69 (phone 8-9178)

Set room up—see room set up checklist for the details (can delegate)

3/19/2020
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Delivery Logistics for the Main OR, of premature or ill infant (from call for delivery to NICU admission)

Roles In the Main OR—

NICU Resuscitation Nurse 1 Set UP

- Increase the temperature in the room
- Sets up the Atom-1 for resuscitation
- Need a blanket warming source—*(will likely transport one of our warmers on top of the Covid portable ISR)*
- Need a form of communication from inside to the outside—*(still being determined)*; minimally take paper/pen to leave in room
- Additionally:
  - Have a chemical mattress
  - Have an OFC tape measure
  - Have Bleach Wipes for inside OR/outside OR (in Covid portable ISR)
  - Have Covid portable ISR
- Once OR is ready, if anesthesia team and scrub tech are donning PPE, stay and don as well, enter OR with this team. If they are not ready, return to NICU. Wait for OB team to notify that the patient is transporting to OR and return with the other resuscitation team members. Don PPE and enter OR after patient arrives

NICU Resuscitation Nurse 1 and 2 (if 2 RNs)

- Assist with Resuscitation as usual
- Keeping infant warm is critical
- Once infant stable, prepare for transport—
  - Communicate infant respiratory support & readying for transport to outside team
  - Close incubator
  - Remove 2nd glove layer
  - Wash hands
  - Don new gloves
  - Wipe down incubator with Bleach Wipes
  - Transfer Incubator to Outside Team
    - Push incubator toward door
    - Outside team donned and opens door to receive incubator
  - Wait until Outside Team has wiped down incubator with Bleach wipes and moved incubator 6 feet away from doorway
  - Begin doffing process—remove gown and gloves appropriately using dofficer, leave N95 on, perform hand hygiene
  - OB PPE partner opens door and NICU team leaves
  - Outside Dofficer hands new gloves to NICU team, they don gloves and remove N95 appropriately.
  - Return to unit

In the Main OR—NICU RCS 1—resuscitation RCS

- Go with NICU RN1 to set up in the main
- All respiratory support equipment ready to go
  - Plan for every possible scenario
  - Have surf and neo bars (bring in a bag)

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Have transport vent attached to Atom-i in OR

- Once OR is ready, if anesthesia team and scrub tech are donning PPE, stay and don as well, enter OR with this team. If they are not ready, return to NICU. Wait for OB team to notify that the patient is transporting to OR and return with the other resuscitation team members. Don PPE and enter OR after patient arrives
  - Wait until Outside Team has wiped down incubator with Bleach wipes and moved incubator 6 feet away from doorway
  - Begin doffing process—remove gown and gloves appropriately using dofficer, leave N95 on, perform hand hygiene
  - OB PPE partner opens door and NICU team leaves
  - Outside Dofficer hands new gloves to NICU team, they don gloves and remove N95 appropriately.
- Return to unit and plan to be assigned RCS for this infant

Provider one and two (if using 2 providers)

- OB team notifies NICU that patient is transporting to OR
- Coordinate donning of PPE to occur right after patient brought into the Main OR (need a dofficer)
- Don N-95 with mask with face shield on top
- Enter OR
- Resuscitate infant
- Be prepared to assist infant team with any necessary tasks
- Can leave OR once infant has been transferred out of the OR, incubator wiped down and moved at least 6 feet away from OR door
  - Begin doffing process with a dofficer—remove gown and gloves appropriately, leave masks on, perform hand hygiene
  - OB PPE partner opens door and NICU team leaves
  - Outside dofficer hands new gloves to NICU team, they don gloves and remove surgical mask/face shield and/or N95 appropriately.
  - Return to unit

Roles outside the OR

NICU Outside Nurse 1—admit RN

- Standby for potential needs—hopefully prepared enough, we won’t need this role too long
- Resuscitation team communicates infant ready for transport and type of respiratory support being used:
  - Communicate infant respiratory needs to RCS on unit
  - Communicate ready for RCS transport support
- Don appropriate PPE dependent on respiratory support of the infant
- Receive infant in incubator
- Assure infant stable
- Wipe down incubator with Bleach Wipes
- Cover incubator with large plastic bag
- Transport to NICU with RCS
- Assist with Admission

Backup RCS—transport RCS and initial admission

- Go to OR to be transport RCS with NICU Nurse
If on CPAP, High Flow or Ventilated, don N-95 and other PPE for Airborne
If doesn’t have respiratory support—plan to help transport using droplet PPE

On Unit Activity

Room set up— Negative Air Flow is indicated when infant is intubated or requires CPAP, NIV-NAVA or High Flow for respiratory support. Otherwise, use regular rooms and place in droplet precautions. See Covid + PUI Room Set Up Checklist—NICU Charge RN completes or delegates

NICU RCS 2—2nd NICU RCS

- Anticipate as best you can what the infant might need and have outside NICU room ready to go
- As soon as you are notified of infant respiratory support needs, set up the patient room

Delivery Logistics for Labor and Delivery, of premature or ill infant—Variations from the OR

OB Charge RN notifies NICU Charge RN of Covid + PUI patient in preterm labor

NICU Charge RN

If possible, place Atom-i and Covid Portable ISR in LDR, before patient arrives

Huddle with NICU Team in Core

- Get N-95 sizes of all team members for resuscitation and for transport and for unit admission
- Assign roles—team deploys together to don appropriate PPE, set up equipment—timing to be determined
  - If able to place Atom-i/Covid ISR in LDR pre patient arrival, may need less time
  - If taking Atom-i/Covid ISR to LDR after arrival, will need more time
- Notify on call provider of situation and request to come to unit as indicated

Day Shift call PPE Deployment Officer 206-597-3926 for PPE
Night Shift call Clinical Leader for PPE support

- Inform of PPE needs
  - PUI in the NICU set up
  - Delivery personnel—give the N-95 sizes needed

Assign patient room:
  If infant requires respiratory support, use negative air pressure room. If no respiratory distress and NOT likely to require respiratory support, may place in droplet precautions in a regular NICU room. Negative Air Pressure Rooms are:
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  - Room 69 (phone 8-9178)

Set room up—see room set up checklist for the details (can delegate)

NICU Resuscitation Team

- Nurse 1 & 2 (if 2 RNs)
- Provider 1 & 2 (if 2 RNs)
- RCS 1

All team members go to L&D together when notified by OB team (accounting for enough time to prepare equipment)

- Don appropriate PPE

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- Enter Room
- Increase room temperature
- Set up Incubator
- Resuscitate Infant
- Prepare for Transport to NICU—notify team and follow the same steps when moving the incubator out of the OR
- Once incubator has left either the hallway or the anteroom, NICU team may doff PPE appropriately and return to NICU

**Transport Team**
- NICU RN Admit Nurse
- Backup RCS

Team members go to L&D, don appropriate PPE dependent on infant respiratory support

Receive incubator, wipe down with bleach, cover with plastic, and transport to NICU

**On Unit activity—no variations**

**INFANT CARE VARIATIONS:**

Negative Air Pressure Room (if in no respiratory distress and NOT likely to require respiratory support may place in a regular NICU room)

PPE Requirements dependent on infant respiratory support needs:
  - N95 required for all infants with ventilator support, CPAP, High Flow or NAVA
  - Droplet precautions for all infants with no respiratory support

Nasal-pharyngeal Swab test for COVID-19 at 14 day of age or if symptoms of COVID-19 infection develop
  - Consult with infection control regarding management of all exposed infants
  - If a mother who was under investigation for COVID-19 is shown to be negative discontinue isolation and no testing is required
  - If asymptomatic and COVID-19 test is negative may discontinue isolation
  - Should an infant be ready for discharge prior to the 14th day no testing will be performed