DELIVERY LOGISTICS AND INFANT CARE Covid-19 in NICU  4/2/2020

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 roles (particularly nursing) and assure all necessary equipment is ready (see checklist). Note: This is time and resource intensive

- Nurses
  - Need 1-2 RNs for Resuscitation—resource RN will be 1
  - Need 1 runner/PPE Partner
  - 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 judgement/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

**NICU CHARGE RN CHECKLIST:**

OPERATING ROOM DELIVERY OF COVID +/PUI

<table>
<thead>
<tr>
<th>✓</th>
<th>TEAM MANAGEMENT</th>
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<tbody>
<tr>
<td>☐</td>
<td>Attend Perinatal Huddle</td>
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<tr>
<td>☐</td>
<td>Notify on-call attending, request to come in as indicated</td>
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<tr>
<td>☐</td>
<td>Facilitate and attend NICU Resuscitation/Stabilization Team Huddle</td>
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<td>Verify N95 mask types &amp; sizes for team members</td>
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<tr>
<td>☐</td>
<td>Determine number of RN’s, RT’s and providers needed at delivery</td>
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<tr>
<td></td>
<td>3-4 RN’s</td>
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<td>2-3 RCS’s</td>
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<td>1-2 Providers</td>
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<td>Assign team roles and pass out role cards accordingly</td>
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<td>Call PPE Deployment 7-3926</td>
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<td>Submit NICU staff request for PPE at delivery location and in NICU</td>
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<td>☐</td>
<td>Coordinate with PPE Deployment and L&amp;D Charge for available PPE Partners</td>
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<td>Assign spectralink phone to <strong>Resuscitation RN # 1</strong></td>
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<td>Assign spectralink phone to <strong>Admission RN</strong></td>
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<td>☐</td>
<td>Assign NICU room set-up</td>
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<tr>
<td>☐</td>
<td>MAIN OR:</td>
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<td>Coordinate with OR staff to facilitate equipment set-up prior to mother’s arrival in</td>
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</table>
### OR

- **L&D OR 2**
  - Coordinate with L&D Charge to facilitate equipment set-up prior to mother’s arrival in OR
- **Direct Resuscitation RN(s) and Resuscitation RCS** to set-up OR ASAP
- **Coordinate with L&D Charge to anticipate mother’s arrival in OR – keep NICU Team aware**

### PRE-DELIVERY UNIT PREP

- **Assign patient room(s)**
  - Any respiratory support = *Airborne + Enhanced Droplet/Contact Precautions*
    - Negative pressure room 67 (phone 8-9254)
    - Negative pressure room 69 (phone 8-9178)
  - No respiratory support; current/anticipated = *Enhanced Droplet/Contact Precautions*
  - Regular room

### OUTSIDE NICU ROOM SET-UP PRECAUTIONS

- **Refer to UWMC Covid Web Page**
- **Obtain signage for the door:** No Visitors, *Airborne + Enhanced Droplet/Contact* or *Enhanced Droplet/Contact*
- **Appropriate PPE for required precautions—Contact the PPE Deployment RN**
- **PAPR cart (if available)**
- **Disposable gowns**
- **Gloves (multiple sizes)**
- **Hand hygiene gel**
- **Disinfecting wipes**
- **Tape on floor to designate doffing area**
- **1 appropriate trash bin at doffing area**
- **Lab specimen container**
- **Documents Kept Outside The Room:**
  - PPE donning/doffing procedure checklists taped to wall/door (in protective sleeves)**

### INSIDE ROOM SET-UP

- **Assign NICU room set-up, assist as needed**
- **NICU RCS** to prepare any anticipated respiratory equipment (refer to role card)

### INSIDE ROOM SET-UP PRECAUTIONS

- **Refer to UWMC Covid web page Room Set-Up Checklist**
- **Hand hygiene gel**
- **1 each: appropriate trash and linen bins**
- **1 Disinfecting wipe**
- **Documents Kept Inside *Airborne + Enhanced Droplet/Contact* or *Enhanced Droplet/Contact*:**
  - PPE donning/doffing procedure checklists taped to wall/door (in protective sleeves)**
- **Admission RN** EID for POCT (photocopy, written on paper, etc)

### NOTIFICATION OF BIRTH AND INFANT STATUS

- **Admit RN** will call with infant information:

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- Confirm appropriate room type (negative airflow or regular)
- Notify NICU RCS of respiratory needs
- Assure room is equipped with respiratory/vascular access/ lab specimen supplies
- Follow usual steps for ADT process
- For **Airborne + Enhanced Droplet/Contact or Enhanced Droplet/Contact**:  
  2nd RN assigned to don PPE and assist with admission  
  Assign PPE Partner

**ARRIVAL OF PATIENT ON UNIT**
ADT process as usual

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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 and #2 (if two are needed)**

Attend NICU Team Huddle

Verify N95 size/type with NICU Charge

When OR is ready move essential equipment:
- Atom-i incubator for Covid
- Covid Cart
- Blanket warmer
- Portable ISR (remains outside the OR room)

Don regular OR PPE for set-up (prior to mother’s arrival)
- Leave badges/phone in bin outside OR
- Place Nurse #1 Spectralink in a zip-lock bag for use in speaker mode;
  Secure admit RN phone # inside zip-lock

Move in and set up all resuscitation equipment

Increase the OR room temperature (on wall) to at least 75 degrees

You now either:

(a) Don full Airborne Enhanced Droplet/Contact PPE and remain in OR
(b) Doff regular PPE and return to NICU until notified that patient is transporting to OR

Resus Team arrives and begins donning process, leave phones/badges in bin

Reminder: communication is via RN #1 Spectralink in speaker mode/paper & sharpie

At stabilization, prepare for infant transport:
- Notify Admit RN, specify respiratory support
- Close Atom-i for transport
- Remove 2nd glove layer then wash /gel thoroughly
- Don new 2nd layer
- Wipe outside of Atom-i and secured equipment with disinfecting wipes
- Wipe Spectralink zip-lock with disinfecting wipes and place on top of Atom-i
- Move Atom-i toward door
- Outside team is donned and opens door to receive incubator

Outside team wipes Atom-i & Spectralink bag with disinfecting wipes
- Atom-i is covered with large plastic bag
- Spectralink bag placed in phone bin to dry

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Once outside team is \( \geq 6 \) feet away from door:
- Resus. team begins doffing process by removing gown & gloves
- Perform hand hygiene
- PPE partner will open door, NICU team will exit
- Outside PPE Partner hands new gloves to team, team removes N95’s
- Team doffs gloves, performs hand hygiene, takes badges & phones, returns to unit

**Resuscitation RCS**

- Attend NICU team huddle
- Verify N95 size/type with NICU Charge
- When OR is ready move essential equipment:
  - Atom-I incubator for Covid
  - Covid Cart
  - Blanket warmer
  - Portable ISR (remains outside the OR room)
- Don regular OR PPE for set-up (prior to mother’s arrival)
  - Leave badges/phone in bin outside OR
- Move in and set up all resuscitation equipment
- Increase the OR room temperature (on wall) to at least 75 degrees
- You now either:
  - (a) Don full airborne PPE and remain in OR through resuscitation and stabilization
  - (b) Doff regular PPE and return to NICU until notified that patient is transporting to OR
    - Resus Team arrives and begins donning process, leave phones/badges in bin
    - Reminder: communication is via RN #1 Spectralink in speaker mode/paper & sharpie
- At stabilization, prepare for infant transport:
  - Notify outside team, specify respiratory support
  - Close Atom-I for transport
  - Remove 2\(^{nd}\) glove layer then wash /gel thoroughly
  - Don new 2\(^{nd}\) layer
  - Wipe outside of Atom-I and secured equipment with disinfecting wipes
  - Wipe Spectralink zip-lock with disinfecting wipes and place on top of Atom-I
  - Move Atom-I toward door
  - Outside team is donned and opens door to receive incubator
  - Outside team wipes Atom & phone bag with disinfecting wipes
    - Atom-I is covered with large plastic bag
    - Spectralink bag placed in phone bin to dry
- Once outside team is \( \geq 6 \) feet away from door:
  - Resus. team begins doffing process with PPE Partner by removing gown & gloves
  - Perform hand hygiene
  - PPE partner will open door, NICU team will exit
  - Outside PPE Partner hands new gloves to team, team removes N95’s
  - Team doffs gloves, performs hand hygiene, takes badges & phones, returns to unit

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Provider #1 and #2 (if using 2 providers)

Attend Perinatal huddle
Facilitate NICU Team huddle
Verify N95 size/type with NICU Charge
OB notifies NICU that patient is transporting to OR
Coordinate group donning of PPE with PPE Partner outside OR once patient is inside OR
Don N95 mask and face shield
Enter OR, resuscitate/stabilize infant
Be prepared to assist the NICU resus team with any necessary tasks
Once Atom-i is wiped and passed through the door begin doffing process
   with PPE Partner: remove gown & gloves then sanitize hands
Do not leave OR until: Atom-i has been wiped again by outside team
   and outside team is > 6 feet away from OR door
OB PPE partner will open OR door allowing you to exit OR
Outside PPE Partner hands resus team new gloves, gloves are donned and face masks removed
Perform hand hygiene and return to NICU

Roles outside the OR
Transport and Admit RN

Attend NICU Team huddle
Verify N95 size/type with NICU Charge
Assist with NICU room set-up, OR set-up as needed
Copy ID badge barcode for admit room scanning
Go to the OR with Admit RCS
   Place badges/phones in bin
   Place Admit RN phone in zip-lock bag to use in speaker mode
      secure RN #1 phone number inside bag with phone
Don appropriate PPE dependent on respiratory support needs of infant
   Enhanced Droplet/Contact Precautions for no respiratory support
   Airborne + Enhanced Droplet/Contact Precautions for Ventilator, CPAP, or High Flow support
Remain outside the OR
Be prepared to open the Portable ISR and pass supplies through door
At stabilization, resus team will notify of respiratory support & readiness
   to transfer infant outside
Following inside team wipe-down of Atom-i & RN #1 Spectralink bag,
   open the OR door and pull Atom-i out of OR
Assure infant stability
Wipe down Atom and RN #1 Spectralink bag with disinfecting wipes
Place RN #1 Spectralink bag in phone bin to dry
Remove gloves, sanitize hands, re-glove
Cover Atom in plastic bag
PPE Partner will place Admit RN phone bag on top of Atom
Phone NICU Charge with infant information, verify NICU admit room
Transport to NICU with Admit RCS
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**Transport and Admit RCS**

Attend NICU Team huddle
Verify N95 size/type with NICU Charge
Go to OR with Admit RN
Don all PPE except for mask
When notified of infant respiratory support needs, don appropriate mask
(Droplet or Airborne)
After inside team wipe-down of Atom & RN #1 phone bag,
   open the OR door and pull Atom out of OR
Assure infant stability
Wipe down Atom-i and RN #1 Spectralink bag with disinfecting wipes
Place RN #1 Spectralink bag in phone bin to dry
Remove gloves, sanitize hands, re-glove
Cover Atom-i in plastic bag
PPE Partner will place Admit RN Spectralink bag on top of Atom-i
Admit RN phones NICU Charge with information, verifies NICU admit room
Transport to NICU with Admit RN

**On Unit Activity**

**Room set up**— Negative Air Flow + Airborne Enhanced Droplet/Contact Precautions is indicated when infant requires ventilation, CPAP, NIV-NAVA or High Flow for respiratory support. Otherwise, use regular rooms and place in Enhanced Droplet/Contact Precautions. See Covid + PUI Room Set Up Checklist—NICU Charge RN completes or delegates

**NICU RCS**

Attend NICU Team huddle
Verify N95 size/type with NICU Charge
Anticipate what the infant might need for respiratory support
Have equipment available near the admit room
NICU Charge will call with infant status prior to transport:
   Set up appropriate airway support in admit room
   Consider donning PPE if set-up prolonged
Plan on monitoring NICU babies while Resus & Admit RT’s are off unit

**Delivery Logistics for Premature or Late Preterm PCN, Known NICU Admission—Variations from the OR**

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

**NICU Charge RN**

Refer to Charge RN Checklist
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)

Transport Team
   ❖ NICU RN Admit Nurse
   ❖ Backup RCS

Team members go to L&D, don appropriate PPE dependent on infant respiratory support
Receive incubator, Spectralink bag, wipe down with bleach; cover incubator 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:
   ○ Airborne Enhanced Droplet/Contact Precautions required for all infants with ventilator CPAP, High Flow or NAVA respiratory support.
   ○ Enhanced Droplet/Contact 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 Pediatric Infectious Disease 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

In the case of an unstable infant who was born to a mother with a pending COVID-19 test and was admitted to a standard NICU room AND mother’s Covid test comes back positive
   • Consult with Infection Prevention to request placement of a HEPPA tower in the room

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