SARS-CoV-2 Infection and the Neonate

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Clinical Care – Pregnant Women

- Asymptomatic infected individuals and transmission common
- Routine testing of all pregnant women admissions now widespread
- 14% of asymptomatic pregnant women admitted in NY were positive*
- Categories
 - Known covid-19 negative
 - Known covid-19 positive
 - Test results pending
 - With clinical features / epidemiologic risk factors (PUI)
 - Surveillance
 - Not tested

What PPE should staff wear?

Clinical Care - Neonates

- Vertical transmission rare, if at all
- Risk of horizontal transmission
 - In hospital exposure to healthcare workers, adult family members, siblings
 - At home after discharge
 - Munoz et al. NEJM case report
 - Iran case report
- Ensuring safe hospital discharge
 - Identify appropriate care givers who are not infected
 - Logistics e.g., car seat, testing
 - Education hand hygiene, social distancing, breast feeding
 - Pediatric office follow-up
 - Avoid face shields for infants

Neonates - Categories

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Assessment and Decision for Outborn Infants

- Methodical approach to assessment and decision-making (checklist):
 - Patient location
 - Timing of covid-19 testing
 - Transmission-based precautions
 - Visitation
 - Breastfeeding
 - Ancillary service limitations
 - Infection control notification
- EMR dot phrase

NICU COVID-19 CHECKLIST

NAME:	DATE:	DATE:	
MRN:	LOCATION / BEDSPACE:	LOCATION / BEDSPACE:	
ASSESSMENT			
Why is the patient suspected or confirmed to have COVID-19 infection? (circle all that apply)			
Exposure to confirmed Exposure to suspected COVID-19 person COVID-19 person	Symptomatic Positive test	Other, specify:	
Does the patient currently have any aerosol-generating conditions**? (circle one)			
Yes No			
DECISION-MAKING			
Assign COVID status (circle one):			
COVID-positive COVID-PUI	COVID-Surveillance Nor	n-COVID	
Does this patient need to be moved or admitted to a COVID designated area? (circle one)			
Leave in same location Move to E-Pod	Move to PFW Oth	er, specify:	
Should a COVID-19 test be sent now in this patient? (circle one)			
Yes No			
What precautions should staff follow? (circle all that apply)			
Standard Contact Droplet	Enhanced Respiratory		
When should staff use an N95 respirator? (circle one)			
For all patient care For aerosol-ger at all times conditions**			
Should the parents or other family members be allowed to visit? (circle one)			
Yes No Yes with the follo	wing precautions		
Is direct breast feeding allowed? (circle one)			
Yes No N/A			
Can Ancillary Services (PT/OT) continue seeing the patient? (circle one)			
Yes No Yes with the follo	wing precautions		
Has Infection Control been informed? (circle one)			
Yes No Not necessary at	this time		

**Aerosol-generating conditions:

<u>Populations:</u> Tracheostomy, Intubated, NIPPV, CPAP, HFNC <u>Procedures:</u> Intubation, Extubation, Nebulized medications, Airway suction, Bag-mask ventilation, CPT, CPR, Bronchoscopy, Lower respiratory tract sampling (trach aspirate)

Responding to Exposure / Infection

- Patient / family members
- Healthcare workers
- Confusion and variation in recommendations from different sources

Responding to Exposure / Infection

- Patient / family members
- Healthcare workers
- Confusion and variation in recommendations
- Structured, systematic approach to disclosure Checklist useful
 - Review facts and advice to be given
 - Interpreters
 - Advice about monitoring, precautions, symptoms
 - Advice to protect other family members
 - Psychologic support
 - Risk management

Healthcare Workers – Physical Wellness

- Universal masking in hospital
- Contact tracing and isolation
- Masks outside of hospital
- Hand hygiene, surface hygiene, social distancing
- Regular exercise, sleep

Healthcare Workers – Mental Wellness Addressing the 'Panicdemic'

- Hear me
- Protect me
- Prepare me
- Support me
- Care for me (and my family)

Healthcare Workers – Mental Wellness Addressing the 'Panicdemic'

- Daily Neonatal Section Calls
 - Connection, cohesion
 - Poetry
 - Optimism corner
- Individual check-ins with faculty
- Hospital program for psychologic support
- Regular review of data, evidence, PPE numbers
- Meditation sessions