COVID-19 in Pregnancy: Preparing your Obstetrical Units

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University of Washington Guidelines

- [https://covid-19.uwmedicine.org/Pages/default.aspx](https://covid-19.uwmedicine.org/Pages/default.aspx)
- Meant to be a starting point for your institution
- Changes frequently, please check date you access the document
- Includes institution protocols (PPE, ED/ICU guide, Newborn, etc)
UW Medicine
Influenza Like Illness (ILI) & COVID-19 Screening Guidelines for PREGNANT patients
Incoming Phone Calls

Version 3/18/20
Maternal Co-Morbidities

- Immuno-compromised/suppressed
  - Transplant
  - Inflammatory Bowel Disease or Rheumatologic Disease
  - Active treatment with biologics
  - Prednisone >20mg/d
- Class III Obesity
- Insulin Dependent or Poorly Controlled Diabetes
- Maternal Cardiac Disease
- Hypertension disease in pregnancy requiring medical therapy
- Renal insufficiency
- Moderate/Severe Respiratory Disease: i.e. Asthma requiring treatment, CF
- Neurologic Disease (Parkinson’s, ALS, spinal cord injury, seizure, CVA)
- Active cancer

This is not an exhaustive list. Use clinical judgment and err on the side of evaluation if uncertain.
Assess Patient’s Symptoms
Symptoms typically include fever ≥38°C (100.4°F) or one or more of the following:
- Cough
- Difficulty breathing or shortness of breath
- Gastrointestinal symptoms

Yes

Conduct Illness Severity Assessment
- Does she have difficulty breathing or shortness of breath?
- Does she have difficulty completing a sentence without gasping for air or needing to stop to catch breath frequently when walking across the room?
- Does patient cough more than 1 teaspoon of blood?
- Does she have new pain or pressure in the chest other than pain with coughing?
- Is she unable to keep liquids down?
- Does she show signs of dehydration such as dizziness when standing?
- Is she less responsive than normal or does she become confused when talking to her?

No Positive Answers

Assess Clinical and Social Risks
- Comorbidities (Hypertension, diabetes, asthma, HIV, chronic heart disease, chronic liver disease, chronic lung disease, chronic kidney disease, blood dyscrasia, and people on immunosuppressive medications)
- Obstetric issues (eg, preterm labor)
- Inability to care for self or arrange follow-up if necessary

No Positive Answers

Low Risk
- Refer patient for symptomatic care at home including hydration and rest
- Monitor for development of any symptoms above and re-start algorithm if new symptoms present
- Routine obstetric precautions

No

Routine Prenatal Care

Any Positive Answers

Elevated Risk
Recommend she immediately seek care in an emergency department or equivalent unit that treats pregnant women. When possible, send patient to a setting where she can be isolated.
Notifying the facility that you are referring a PUI is recommended to minimize the chance of spreading infection to other patients and/or healthcare workers at the facility
Adhere to local infection control practices including personal protective equipment

Moderate Risk
See patient as soon as possible in an ambulatory setting with resources to determine severity of illness.
When possible, send patient to a setting where she can be isolated. Clinical assessment for respiratory compromise includes physical examination and tests such as pulse oximetry, chest X-ray, or ABG as clinically indicated.
Pregnant women (with abdominal shielding) should not be excluded from chest CT if clinically recommended.

If yes to respiratory compromise or complications
Admit patient for further evaluation and treatment.
Review hospital or health system guidance on isolation, negative pressure and other infection control measures to minimize patient and provider exposure

If no respiratory compromise or complications

If no positive answers

No Positive Answers
Management of Obstetric COVID-19 Cases in OR - Cesarean

**Preoperative**
- RN1 Prepare for transport
  - Phone Consult with Anesth
  - Transfer patient to OR Transport Team at door
  - RN1 doff PPE with DOFFICER(S)

**OR Transport Team:** RN2 and RN3
- RN2 & RN3 don PPE outside door with DOFFICER(S)
- Transport pt to destination when OR “Ready” from RN4

**Anesthesia Attending and Assist**
- Phone Consult with RN1
- Review board and delegate
- Assure Instrument/Equipment

**OB Attending and Assist**
- Group ONE
  - Scrub
  - OB Att: PPE Group ONE Scrub
  - OB Assist: PPE Group TWO Scrub

**Scrub**
- PPE Group ONE Then Scrub

**RN4 → PACU Transport Team (with RN1)**
- Prepare OR room
  - RN-4 acts as Dofficer for PPE Group ONE
  - Alert OR Transport Team & OB Assist when Group ONE in OR
  - Dofficer for Group TWO

**Peds/NICU**
- Prepare OR room
- Covered Incubator in OR
- Group TWO
  - Don PPE with RN 4

**Phase One Recovery in OR**
- Coordinated Exits: Teams Doff gown/gloves in OR with OR DOFFICER (RN3)
- Accept Stretcher/Bed during EXIT TWO
- Prepare pt for transport
- PATIENT EXIT to PACU Transport Team

**EXIT TEAM ONE**
- Neonate & NICU Team
  - Transport Incubator to Neonate Transport Team
  - Then Entire NICU Team Exit

**EXIT TEAM TWO**
- OB Att: EXIT TEAM TWO
- EXIT TEAM TWO

**EXIT TEAM THREE**
- OB Assist: EXIT TEAM THREE
- Doff PPE with DOFFICER(S) in hallway
- Exit OR area and consider shower

**Specimen Handling:** Label & Bag ➔ Wipe Bag #1 with bleach cloth ➔ Handoff to RN4 (with gloves and wipe) ➔ Wipe Bag #1 with new bleach cloth ➔ Bag #2

**Pediatric Case**
- Accept Bleached WC/Bed & Move HEPA filter into OR
- Prepare Stretcher/Bed
- Move Stretcher/Bed into OR with EXIT TEAM TWO
- Don PPE for PACU with DOFFICER(S) in hallway

**Postoperative/PACU**
- Don PPE for PACU with DOFFICER(S) in hallway
- Accept pt at OR door & Transport pt to PACU
- Doff PPE at end of shift and consider shower
- Exit OR area and consider shower
What Has Worked Well

• Divide and conquer (inpatient vs outpatient)

• Multidisciplinary approach
  • Inpatient protocol: MFM/OB, Anesthesia, Nursing, NICU, Pediatrics, etc

• Central institution website for updated guidelines/protocols

• Clear, consistent, frequent communication
What Has Worked Well

• Working with institution leadership
  • Ambulatory, drive-through testing for pregnant patients for mild symptoms

• Simulation/dry run/in-person training
  • PPE Donning/Doffing
    • Video (pre-training): Does not substitute in-person training which is recommended
    • NETEC: Personal Protective Equipment for COVID-19
    • https://www.youtube.com/watch?v=bG6zISnenPg
  • Cesarean section
What Has Worked Well

- COVID-19 team?
- Telemedicine for outpatient
- Employee COVID-19 testing
- Institution website for childcare, errands, etc
Challenges

• Information changing constantly
• Challenges to medical decision making and resources (staffing, PPE, blood bank)
• Delivery planning for PUI/confirmed case
• Distributing information (email fatigue, etc.)
• Education (medical students, residents, ABOG)
• Providers/staff illness
• Social stressors
Pearls

- Teamwork essential
- Challenging but humbling experience
- We can all learn from each other

- Want to thank UW MFM division especially Drs. Edith Cheng, Jane Hitti, and Voni Simmons
Questions, please contact:

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