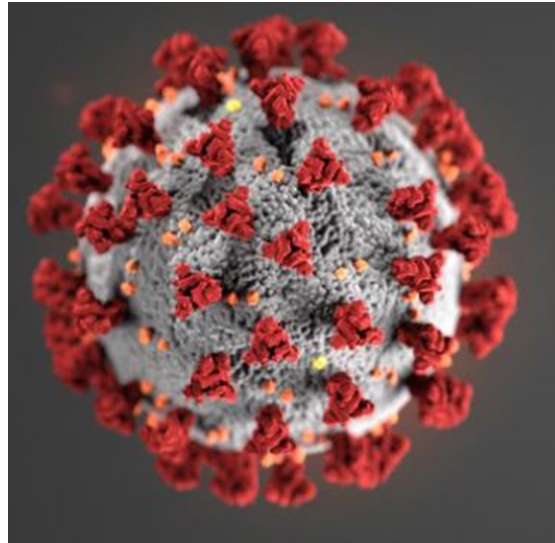


CORONAVIRUS



March 20, 2020 Updates

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COVID-19

- ACOG and CDC Information for care of Obstetric Population
 - <https://health.uconn.edu/covid-provider/provider-toolkits/>
- Information is changing daily!
- Any clinical concern related to COVID-19 should go to UCONN Health COVID-19 Hotline which is available to all staff related to clinical questions regarding the Coronavirus COVID-19.
- To access, please call the page operator and ask to be connected to the hotline.
- Please notify the Nursing Supervisor with any additional concerns
- More information from CDC:
 - <https://www.cdc.gov/coronavirus/2019-ncov/summary.html>

COVID-19

- Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats.
- Rarely, animal coronaviruses can infect people and then spread between people such as with [MERS-CoV](#), [SARS-CoV](#), and now with this new virus (named SARS-CoV-2).
- The SARS-CoV-2 virus is a betacoronavirus, like MERS-CoV and SARS-CoV. All three of these viruses have their origins in bats.
- The sequences from U.S. patients are similar to the one that China initially posted, suggesting a likely single, recent emergence of this virus from an animal reservoir.

COVID-19

- Incubation period—average of 5 days (range of 2- 14 days)
- Sex—males more often reported than females
- Age—49-56 years among hospitalized patients, children are rare
- Underlying illness—seen in third to half of hospitalized patients
- Clinical manifestations—fever, cough, myalgia, headache, diarrhea
- Case fatality rate—1% (preliminary)

COVID-19 Pregnancy

- Two case series (Chen et al., Lancet 2020; Zhu et al, Transl Pediatr 2020)
- 18 pregnancies, 19 infants (1 set of twins)
- All infected in 3rd trimester
- Clinical presentation similar to non-pregnant adults
- Almost all (16/18) were cesarean deliveries
- No evidence of intrauterine transmission

Who Is at Higher Risk

- Early information out of China, where COVID-19 first started, shows that some people are at higher risk of getting very sick from this illness. This includes:
- Older adults
- People who have serious chronic medical conditions like:
 - Heart disease
 - Diabetes
 - Lung disease
- Pregnant patients
- If a COVID-19 outbreak happens in your community, it could last for a long time. (An outbreak is when a large number of people suddenly get sick.)
- If you are at higher risk for serious illness from COVID-19 because of your age or because you have a serious long-term health problem, it is extra important for you to take actions to reduce your risk of getting sick with the disease.

Take everyday precautions

- Avoid close contact with people who are sick
- Take everyday preventive actions
 - Clean your hands often
 - **Wash your hands often with soap and water for at least 20 seconds, especially after blowing your nose, coughing, or sneezing, or having been in a public place.**
 - If soap and water are not available, use a hand sanitizer that
- contains at **least 60% alcohol.**
 - To the extent possible, avoid touching high-touch surfaces in public places – elevator buttons, door handles, handrails, handshaking with people, etc. Use a tissue or your sleeve to cover your hand or finger if you must touch something.

Take everyday precautions

- Wash your hands after touching surfaces in public places.
- Avoid touching your face, nose, eyes, etc.
- Clean and disinfect your home to remove germs: practice routine cleaning of frequently touched surfaces (for example: tables, doorknobs, light switches, handles, desks, toilets, faucets, sinks & cell phones)
- Avoid crowds, especially in poorly ventilated spaces. Your risk of exposure to respiratory viruses like COVID-19 may increase in crowded, closed-in settings with little air circulation if there are people in the crowd who are sick.

COVID-19 ACOG Advisory

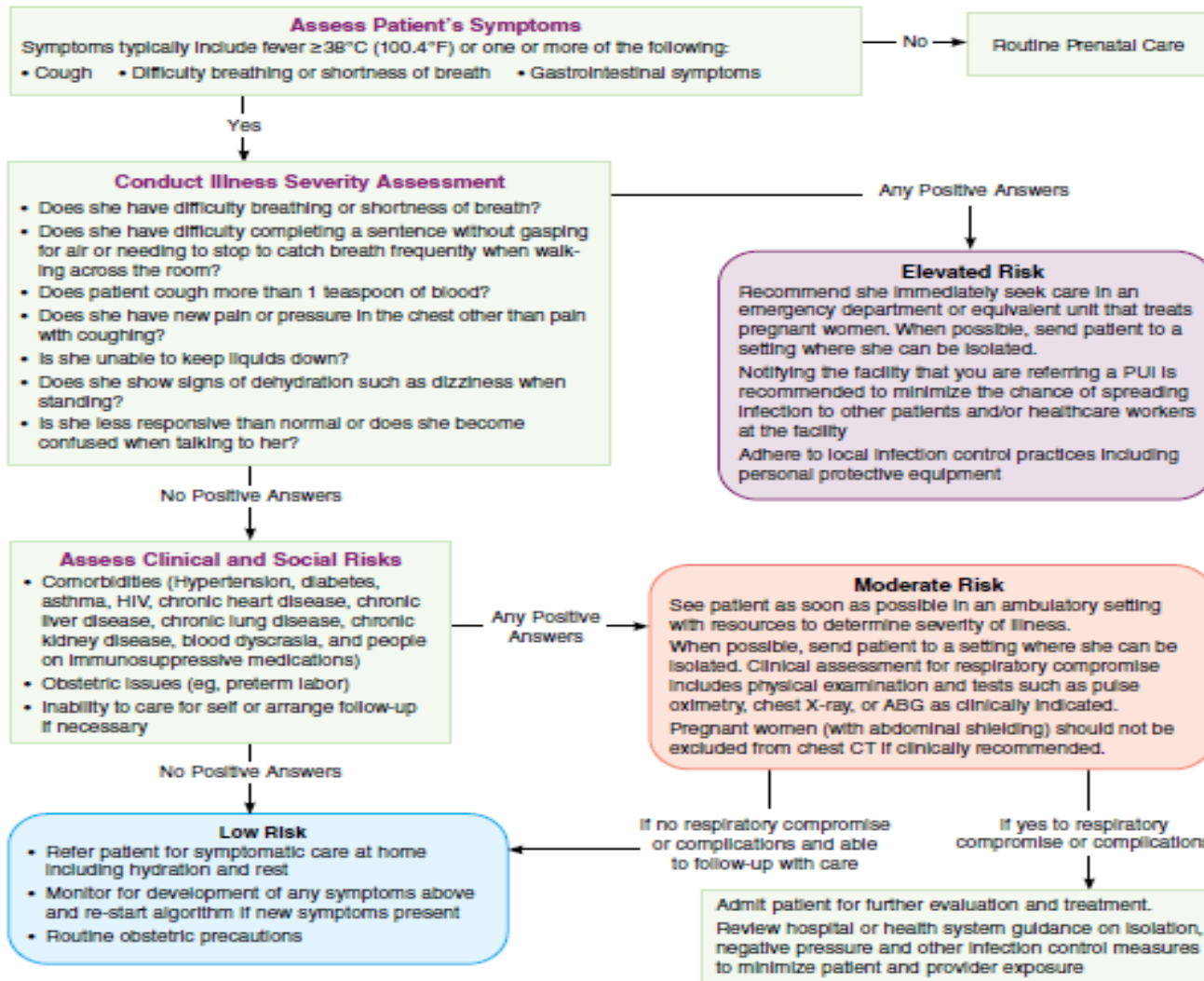
Travel

- Due to the current risk of COVID-19, the CDC recommends that travelers [avoid all nonessential travel](#)

Pregnant Women

- Little is known about COVID-19, particularly related to its effect on pregnant women and infants
- Currently are no recommendations for pregnant women regarding the evaluation or management of COVID-19
- It is believed that pregnant women may be at higher risk of severe illness, morbidity, or mortality compared with the general population
- Adverse infant outcomes (eg, preterm birth) also have been reported among infants born to mothers positive for COVID-19 during pregnancy
- However, this information is based on limited data and it is not clear that these outcomes were related to
- maternal infection
- Currently it is unclear if COVID-19 can cross through the transplacental route to the fetus
- Unsubstantiated reports of infants testing positive for the virus shortly after birth
- In limited recent case series of infants born to mothers infected with COVID-19 published in the peer-reviewed literature, none of the infants have tested positive for COVID-19
- **Obstetrician–gynecologists and other health care practitioners should obtain a detailed travel history** for
- [pregnant patients presenting with fever and acute respiratory illness and should follow the CDC's Interim Clinical Guidance for Management of Patients with Confirmed 2019 Novel Coronavirus \(2019-nCoV\) Infection and](#) guidance for [Evaluating and Reporting Persons Under Investigation \(PUI\)](#)
- Of note, health care practitioners should **immediately** notify infection control personnel at their health care facility and their local or state health department in the event of a PUI for COVID-19

COVID-19 ACOG Outpatient Advisory



ACOG: Infection Prevention and Control in Inpatient Obstetric Care Settings

- [The CDC has published Interim Considerations for Infection Prevention and Control of Coronavirus Disease 2019 \(COVID-19\) in Inpatient Obstetric Healthcare Settings. These considerations apply to health care facilities providing obstetric care for pregnant patients with confirmed COVID-19 or pregnant persons under investigation \(PUI\) in inpatient obstetric health care settings including obstetrical triage, labor and delivery, recovery and inpatient postpartum settings.](#)

Key highlights from the recommendations include:

- Health care practitioners should promptly notify infection control personnel at their facility of the anticipated arrival of a pregnant patient who has confirmed COVID-19 or is a PUI.
- **Place a patient with known or suspected COVID-19 (ie, PUI) in an Airborne Infection Isolation Room (AIIR). If an AIIR is not available place patient in a HEPA filtered room. Always have mask on patient and proper PPE on HCP**
- Infants born to mothers with confirmed COVID-19 should be considered PUIs. As such, these infants should be isolated according to the [Infection Prevention and Control Guidance for PUIs](#).
- To reduce the risk of transmission of the virus that causes COVID-19 from the mother to the newborn, facilities **should consider temporarily separating** (eg, separate rooms) the mother who has confirmed COVID-19 or is a PUI from her baby until the mother's transmission-based precautions are discontinued.
- [Discharge for postpartum women should follow recommendations described in the Interim Considerations for Disposition of Hospitalized Patients with COVID-19.](#)
- Due to the limited data on COVID-19, these recommendations are largely based on infection prevention and control considerations for other respiratory viruses such as influenza, SARS-CoV and MERS-CoV and are intentionally cautious as experts learn more about this new virus.

Is there a vaccine?

- Many experts are saying the vaccine for the new coronavirus is at least a year away, if not longer.
- In the meantime, make sure you get the flu vaccine.
- While a flu shot will not protect you from coronavirus, it *will* help protect you from the flu. Flu season generally peaks between December and February, but flu viruses are still circulating and they can make pregnant women severely ill.

FIRST OPINION

In the race for coronavirus vaccines, don't leave pregnant women behind

By CARLEIGH KRUBINER, RUTH B. FADEN, and RUTH A. KARRON / FEBRUARY 25, 2020



ADORE

Several thousand people become infected each day with the novel coronavirus. Covid-19, and some die of it, there are accelerated efforts to develop new coronavirus vaccines. The World Health Organization has activated its R&D blueprint, new investments are in the pipeline, and multiple vaccine candidates are expected to advance to clinical trials.

But as the world rushes to develop new vaccines against Covid-19, there are real risks that pregnant women and their babies will not be among those who are able to

UCONN Guidelines for COVID-19 infected pregnant patients

- **Pregnancy should be considered a potentially increased risk condition and monitored closely including fetal heart rate and contraction monitoring.**
- **Consider early oxygen therapy (target O2 saturations $\geq 95\%$ and/or $pO_2 \geq 70\text{mmHg}$).**
- **Consider early mechanical ventilation with evidence of advancing respiratory failure.**
- **Use intravenous fluids conservatively unless cardiovascular instability is present.**
- **Screen for other viral respiratory infections and bacterial infections (due to risk of coinfections).**
- **Consider empiric antimicrobial therapy (because of risk for superimposed bacterial infections).**

UCONN Guidelines for COVID-19 infected pregnant patients

- **Use of steroids to promote fetal maturity with anticipated preterm delivery can be considered on individual basis.**
- **If septic shock is suspected, institute prompt, targeted management.**
- **Consult with specialists in obstetrics, maternal-fetal medicine, neonatology, intensive care, anesthesia, and nursing.**
- **Communicate with patients and families regarding diagnosis, clinical status and management wishes.**
- **All guidance should be considered subject to revision as additional data on pregnant women with COVID-19 become available.**

UCONN Guidelines for COVID-19 delivered patient per CDC recommendations

Temporary separation of ill mother and infant

Length of separation will need to be decided on case- by-case basis

Newborn in isolation

- Unknown COVID-19 transmission in breastmilk
 - Breastfeeding

- During temporary separation, mothers who intend to breastfeed should be encouraged to express their breast milk to establish and maintain milk supply. If possible, a dedicated breast pump should be provided. Prior to expressing breast milk, mothers should practice hand hygiene.¹ After each pumping session, all parts that come into contact with breast milk should be thoroughly washed and the entire pump should be appropriately disinfected per the manufacturer's instructions. This expressed breast milk should be fed to the newborn by a healthy caregiver.
- If a mother and newborn do room-in and the mother wishes to feed at the breast, she should put on a facemask and practice hand hygiene before each feeding.

Footnote

¹Hand hygiene includes use of alcohol-based hand sanitizer that contains 60% to 95% alcohol before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of PPE, including gloves. Hand hygiene can also be performed by washing with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to alcohol-based hand sanitizer.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html#anchor_1582067978854

Emergency Department Arrivals

- Patients are screened at portal of entry-if the patient has met all risk factors per CDC guidelines then the ED staff will follow protocol, call the page operator and call the COVID-19 Hotline and notify Infection Control (IC) and then immediately notify L&D (and Carrie Ferrindino)
 - **If patient is in labor and needs isolation, as recommended by JDH IC**
 - » Patient will be brought to **L&D** and placed in a labor room, preferably LD2, with a HEPA Filter on (placed between the patient and the door) with the door closed.
 - If patient is not in labor but needs inpatient obstetric care, further discussion between JDH IC, ED provider, and OB provider about the best location for the patient.
 - » If off the unit, L&D will need to bring a monitoring cart and all supplies and provide a L&D nurse to care for the patient.

L&D Arrivals

- **USE the HEPPA FILTER** on L&D to help prevent airborne transmission* (preferably in LD2 between patient and door)
- Patients are screened at **portal of entry**-if the patient has met all risk factors per the CDC guidelines then the L&D staff will follow protocol- **Call the page operator ask to be connected to the COVID hotline.** *PLACE MASK ON PATIENT IMMEDIATELY* (Call Carrie Ferrindino)
 - If patient is in **labor** and needs isolation as recommended by **JDH IC**
 - » Patient will be placed in a labor room, preferably LD2, with HEPA Filter on (placed between the patient and the door) with the door closed.
 - If patient arrives to L&D and is not in labor but needs inpatient obstetric care and needs isolation, as recommended by **JDH IC**
 - » IC and the OB Attending will make a decision where patients should be bedded (L&D or UT).
 - If in the UT then you will need to bring a monitoring cart and all supplies, and provide an L&D nurse to care for the patient.

Postpartum Care

- After delivery the mother will stay on L&D/OB or moved to a designated area in the UT (this should be discussed with IC and the Attending).
- The **baby** should be isolated from the mother in another HEPA Filtered room*. (all movement through the hospital needs to be in an isolette)
- This should be discussed with the pediatrician on call, IC, and the family before delivery, if possible.
 - The baby is a PUI and should be on droplet precautions and isolated.
 - If the mother does not agree with separation outside of her room a discussion should occur with the Pediatric provider and documented in the EMR.
 - Recommendations are:
 - » Keep newborn > 6 feet away from ill mom and in a covered isolette.
 - » **Breastfeeding**
 - During temporary separation, mothers who intend to breastfeed should be encouraged to express their breast milk to establish and maintain milk supply. If possible, a dedicated breast pump should be provided. Prior to expressing breast milk, mothers should practice hand hygiene.¹ After each pumping session, all parts that come into contact with breast milk should be thoroughly washed and the entire pump should be appropriately disinfected per the manufacturer's instructions. This expressed breast milk should be fed to the newborn by a healthy caregiver.
 - If a mother and newborn do room-in and the mother wishes to feed at the breast, she should put on a facemask and practice hand hygiene before each feeding.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html#anchor_1582067978854

NICU Level Care

- ***NEW*** If baby needs NICU care- CCMC at UConn will accept all of JDH babies born to moms suspicious of or positive COVID-19 needing NICU level of care.

Limited Visitor Access Band



Support People: Labor and Deliver/OBGYN

Changes to current Support person for L&D/OBGYN

- All patients arriving to L&D for inpatient Cesarean Sections, Labor, or Induction of Labor will be allowed one* support person.
 - All support people will continued to be screened *prior* to entry to the unit and banded with the yellow bands.
 - Support person will not be allowed to leave the unit until the patient is discharged home. This will included going off the unit to the café.
 - We will be giving the support person access to order off the menu, at no charge to them.
 - Parking passes will be provided to support person *upon discharge*.
- All antepartum patients will not be allowed visitors beginning 8pm 3/20/2020 until further notice.
- Triage/Outpatients
 - No visitors allowed for any triage/outpatient patients.
 - Our waiting room is closed (visitors may wait in their cars)
 - If patient admitted for labor/cesarean section then they will be allowed in after they are screened and banded.

* If a patient has a *certified* Doula (nurse can ask for certification) then that is an exception. The Doula should be screened and banded and would be allowed in with the patients significant other. Other exceptions such as IUFD still stand.

References

- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html>
- <https://portal.ct.gov/coronavirus>
- <https://www.acog.org/Clinical-Guidance-and-Publications/Practice-Advisories/Practice-Advisory-Novel-Coronavirus2019>
- [https://www.ajog.org/article/S0002-9378\(20\)30197-6/fulltext](https://www.ajog.org/article/S0002-9378(20)30197-6/fulltext)
- <https://informationisbeautiful.net/visualizations/covid-19-coronavirus-infographic-datapack/>