COVID-19 Strategies for OB & Neonatal Units

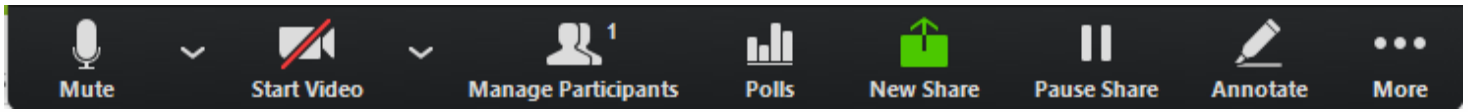
November 6, 2020

12:00 – 1:15pm

Welcome

Please be certain you are on *"mute"* when not speaking to avoid background noise.

Whether you have joined by phone or computer audio, you can mute and unmute yourself by clicking on the microphone icon.



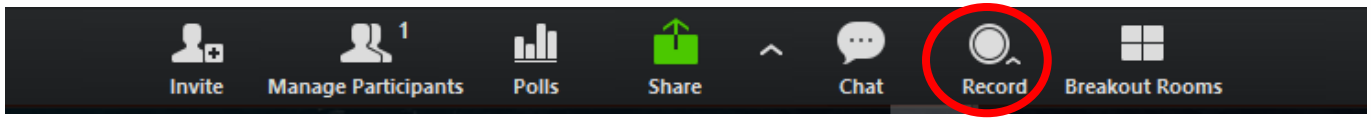
The following shortcuts can also be used

For PC: Alt + A : Mute or Unmute

For Mac: Shift + Command + A: Mute or Unmute

For telephone: *6 : Mute or Unmute

Housekeeping:
We Are Recording Now



ILPQC Covid 19 webinars

- The strategies shared today are examples from individual institutions not IDPH or ILPQC recommendations.

- This is our 14th COVID-19 strategies for OB/Neonatal Units webinars in coordination with IDPH, since April 3rd. Please see https://ilpqc.org/covid-19-information/ for future webinar registration, prior recorded webinars and written out Q/A's from those webinars.

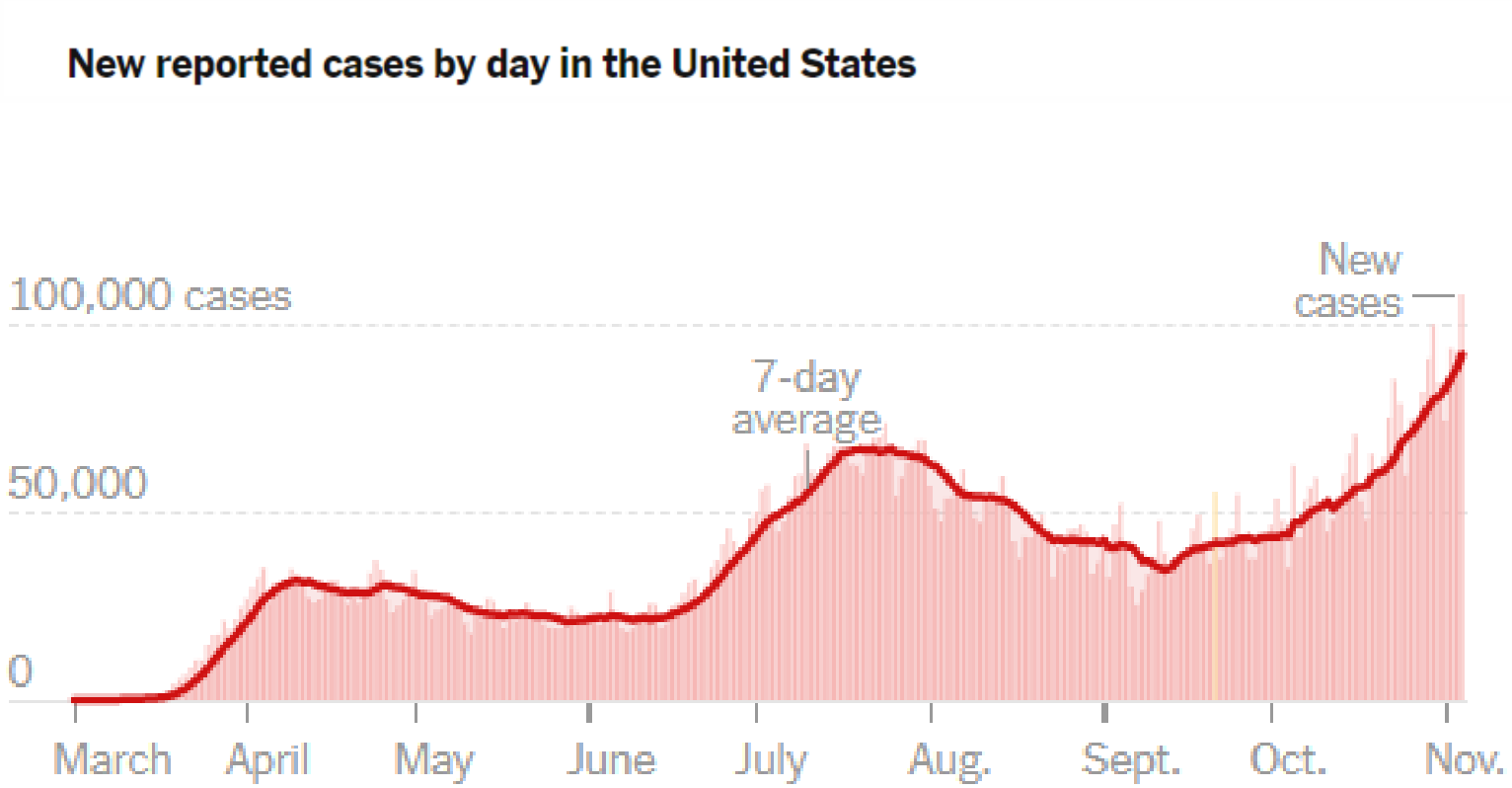
- The next webinar will be **Friday, December 4, noon to 1:15pm**. We are continuing monthly webinars for now.

- Please let us know if your hospital would like to share on an upcoming webinar, please put questions/comments into the chatbox or email directly to info@ilpqc.org

Overview

- **Introduction**
- **Discussion of OB Unit Strategies**
  - **Emily Miller, MD** – Maternal-Fetal Medicine, Northwestern University
  - **Thaddeus Waters, MD** – Director Maternal Fetal Medicine, Rush University, Chicago
  - **Jean Goodman, MD –** Director Maternal Fetal Medicine, Loyola University Medical Center, Maywood
  - **Peggy Farrell MSN RN -** Perinatal Educator, Amita Alexian Brothers Medical Center, Elk Grove Village
- **Discussion of Neonatal Unit Strategies**
  - **Shelly Shallat MD FAAP** - Medical Director of Newborn Nursery, Newborn Hospitalist, OSF Healthcare Children's Hospital of Illinois, Peoria
  - **Justin Josephsen, MD** - Medical Director, St. Mary's Hospital NICU, Neonatologist Cardinal Glennon Children's Hospital, St. Louis
  - **Leslie Caldarelli, MD -** NICU Director, Prentice Women's Hospital, Chicago

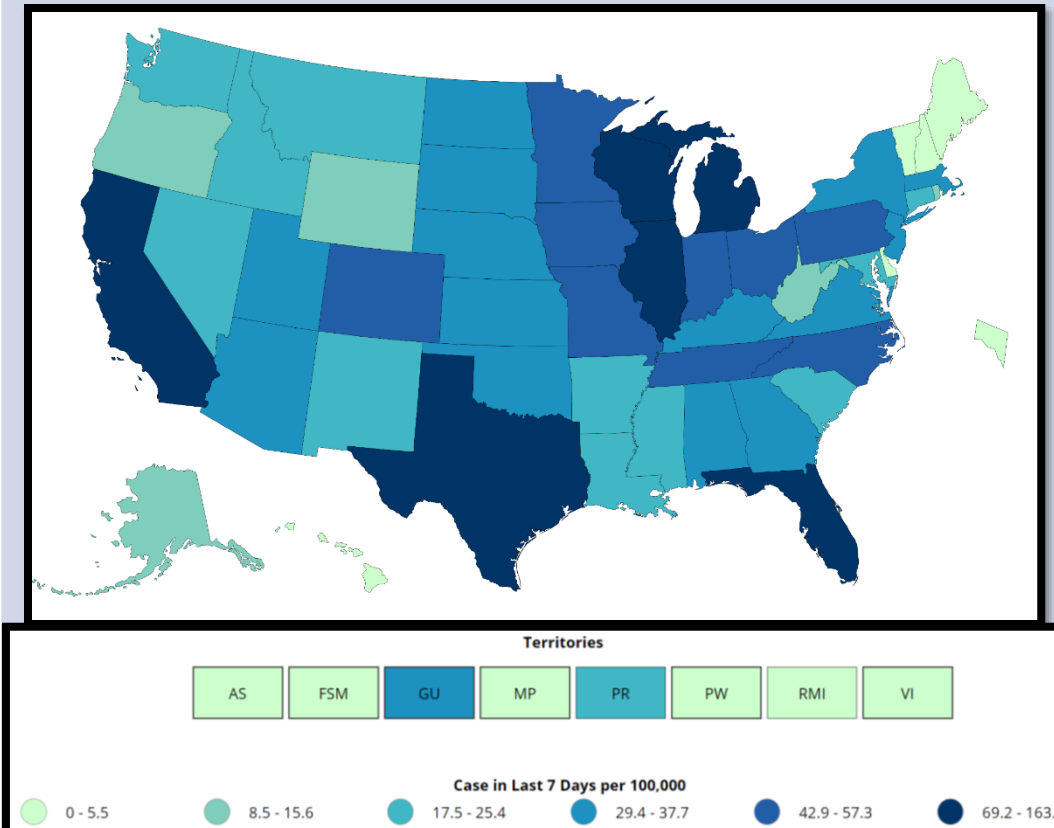
US COVID case trend

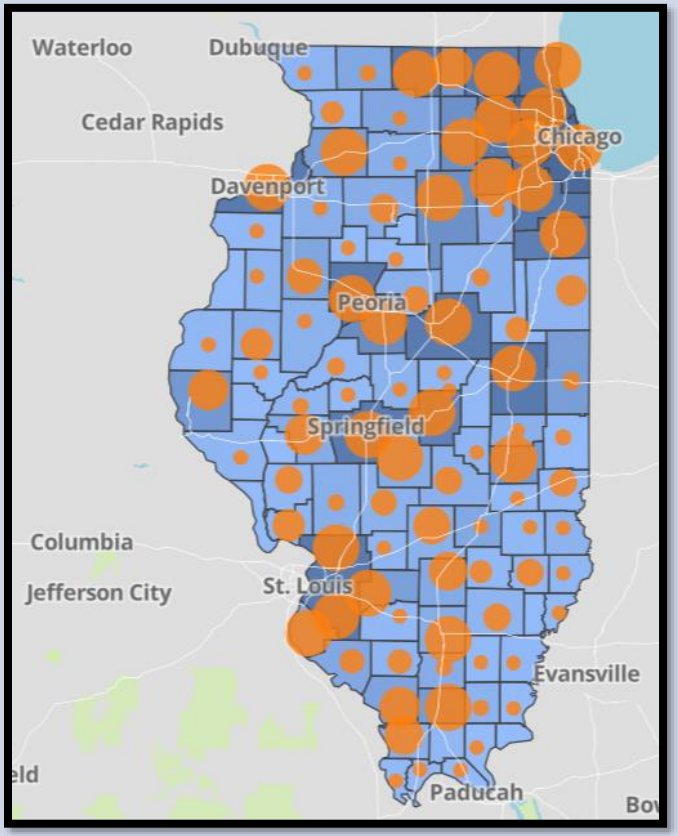


Data Update **November 5, 2020**
CDC/IDPH: COVID-19 Outbreak

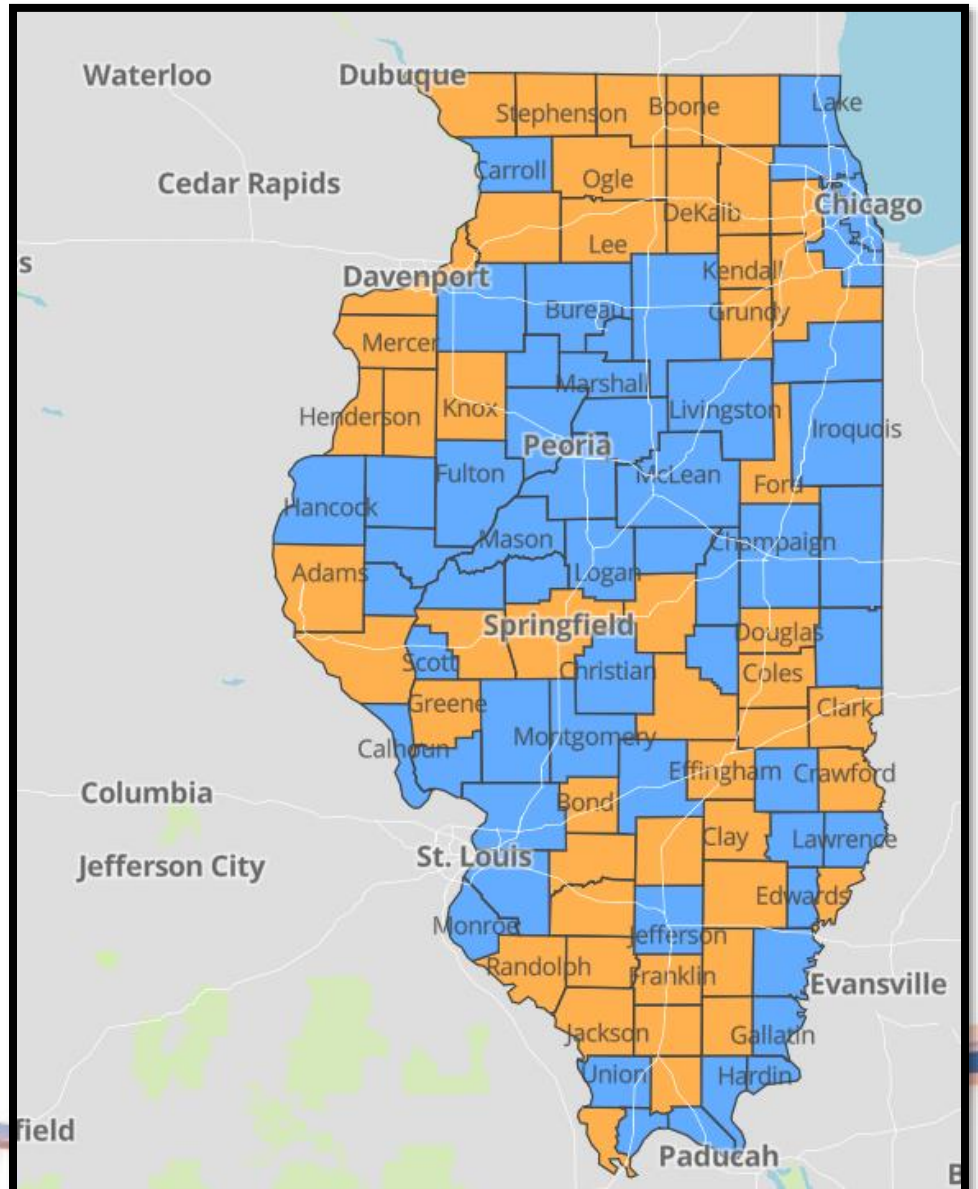
ILPQC Illinois Perinatal Quality Collaborative

CDC https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html	IDPH https://www.dph.illinois.gov/covid19
• Total cases: **9,463,782 confirmed** • Total deaths: **233,129 confirmed**	• **447,491** Confirmed Positive Cases • **10,030** Deaths





IDPH County Level COVID-19 Risk Metrics



Week 43: 10/18/2020 Through 10/24/2020

Blue indicates that the county is experiencing overall stable COVID-19 metrics.

Orange indicates there are warning signs of increased COVID-19 risk in the county.

Data Update **November 5, 2020**

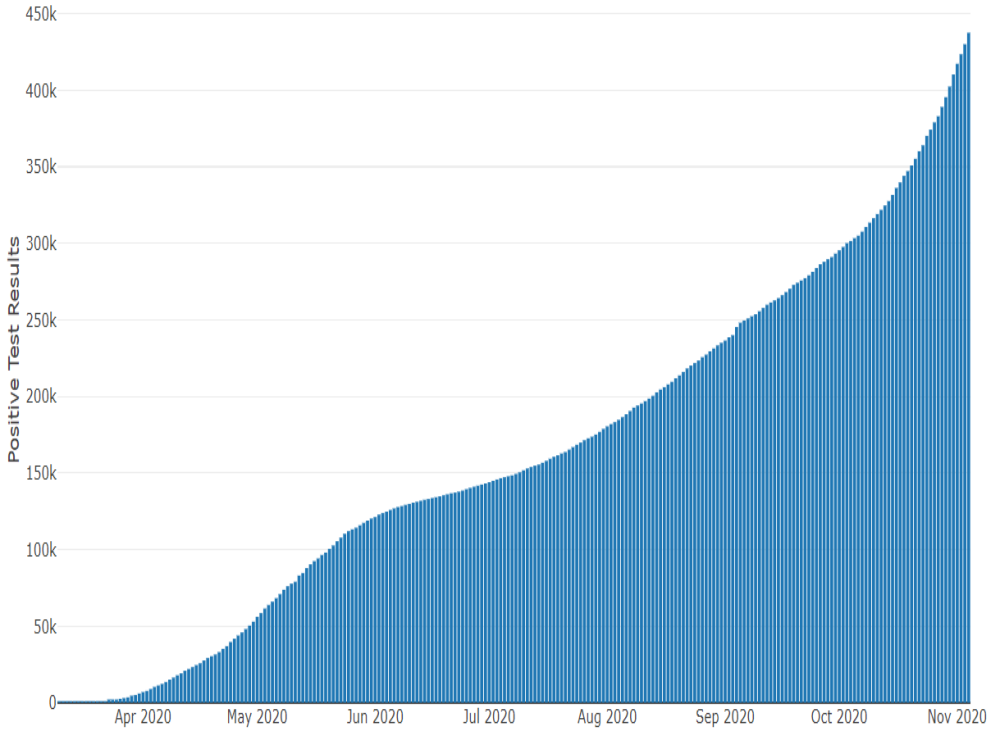
IDPH: COVID-19 Outbreak

https://www.dph.illinois.gov/covid19

IL PQC Illinois Perinatal Quality Collaborative

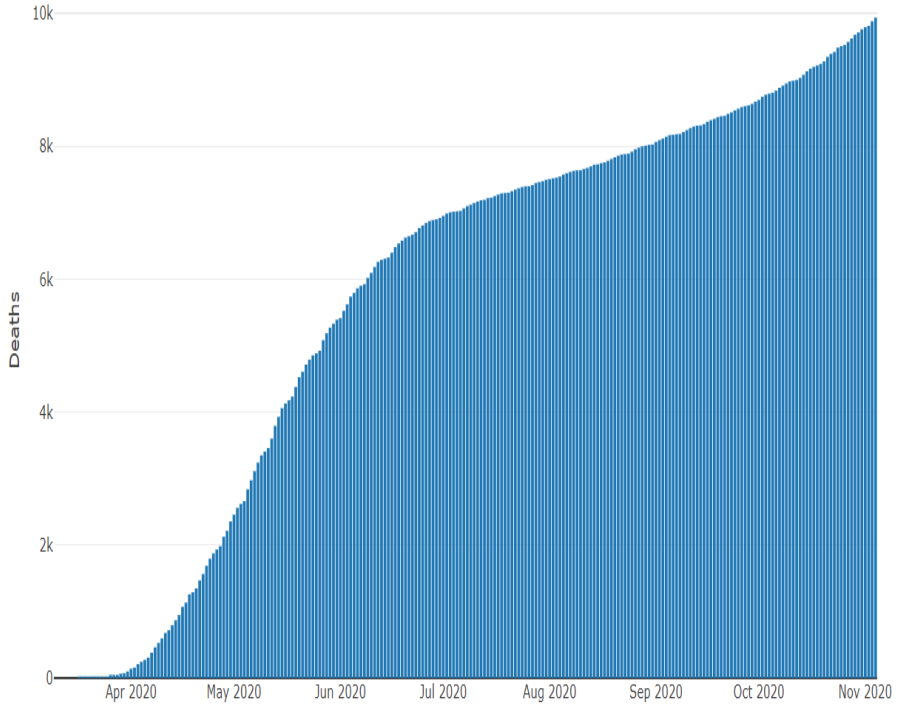
IL Positive Cases Over Time

Total: 447,491 Confirmed Positive Cases



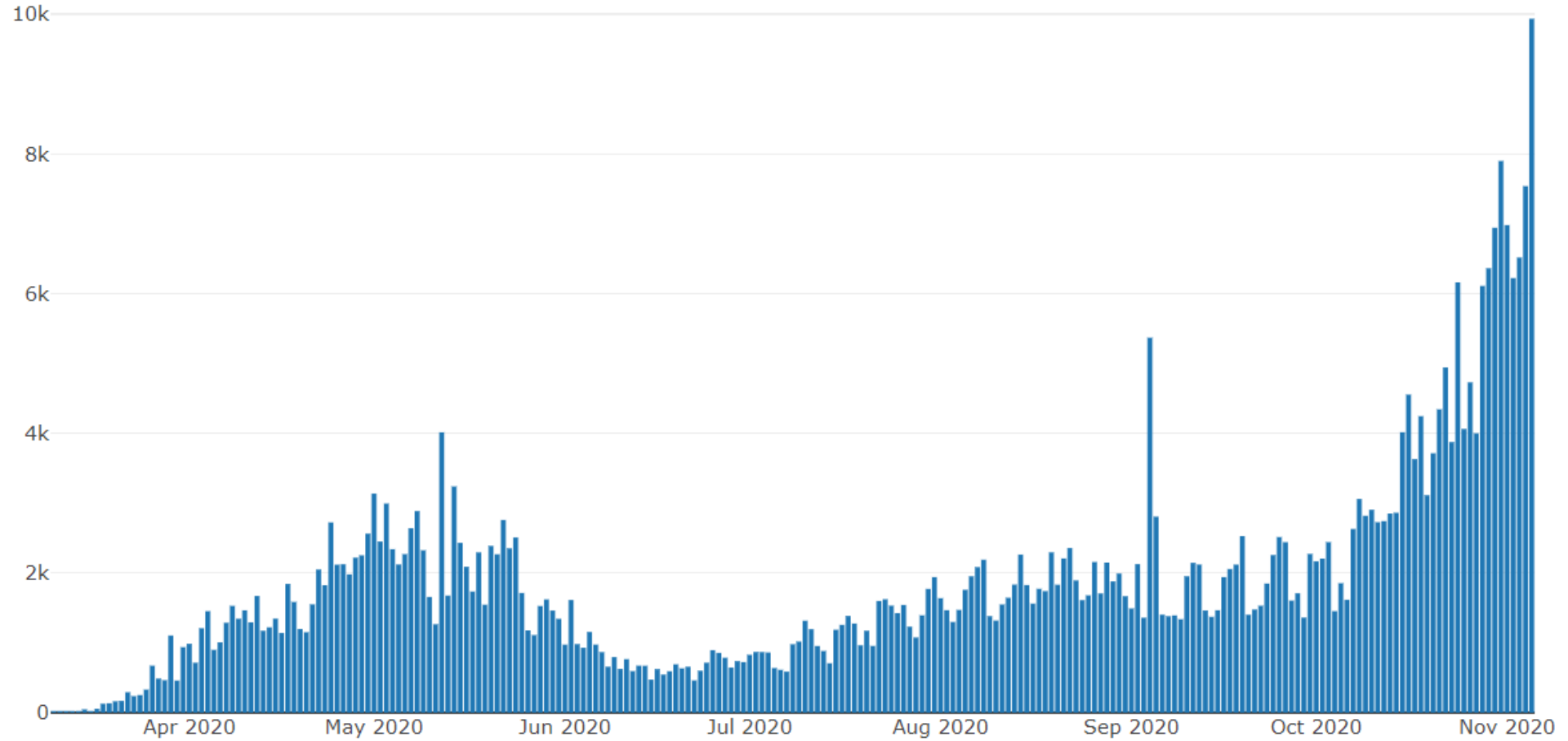
IL Deaths Over Time

Total: 10,030 Deaths



Illinois Daily Incidence

IDPH daily data summary



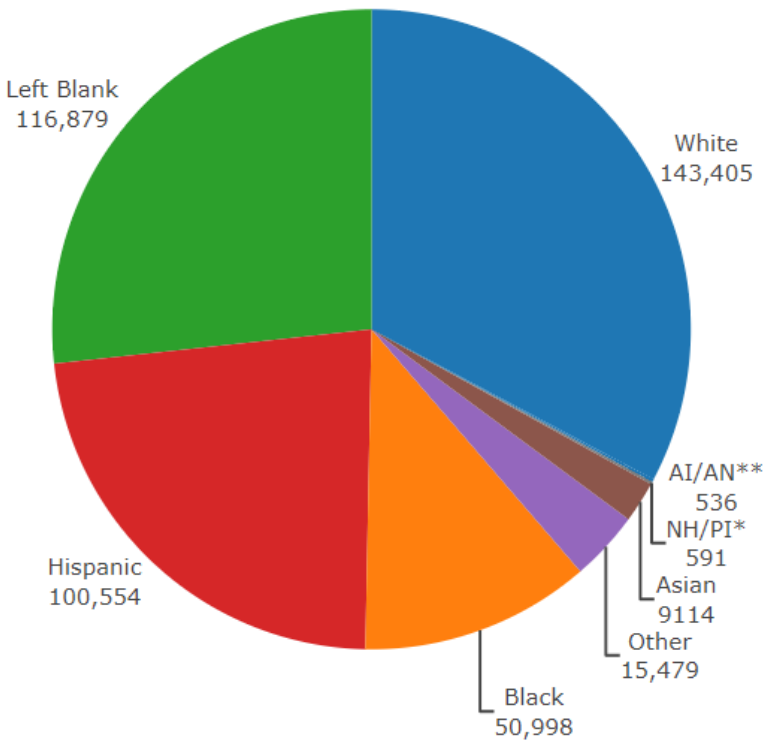
Data Update **November 5, 2020**

IDPH: COVID-19 Outbreak

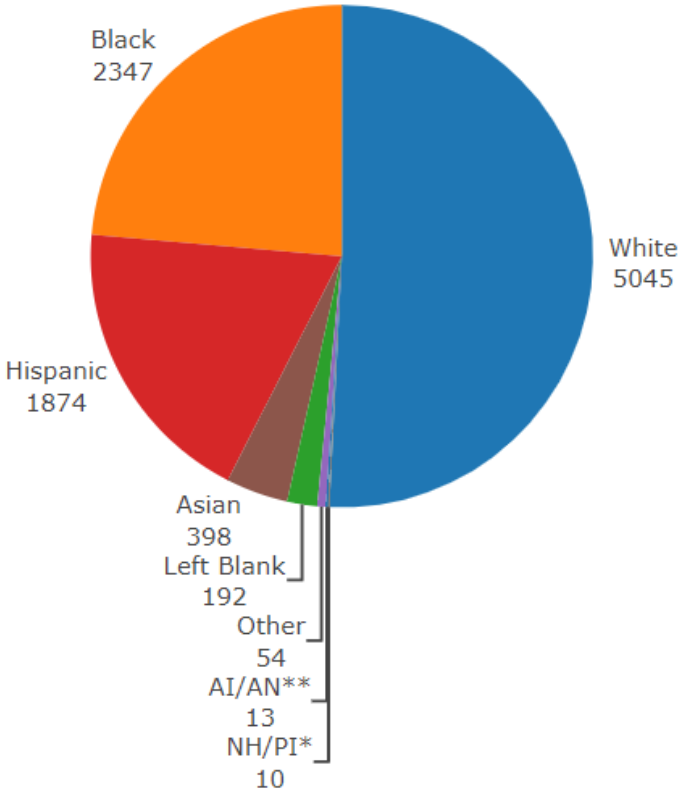
Race Demographics

https://www.dph.illinois.gov/covid19

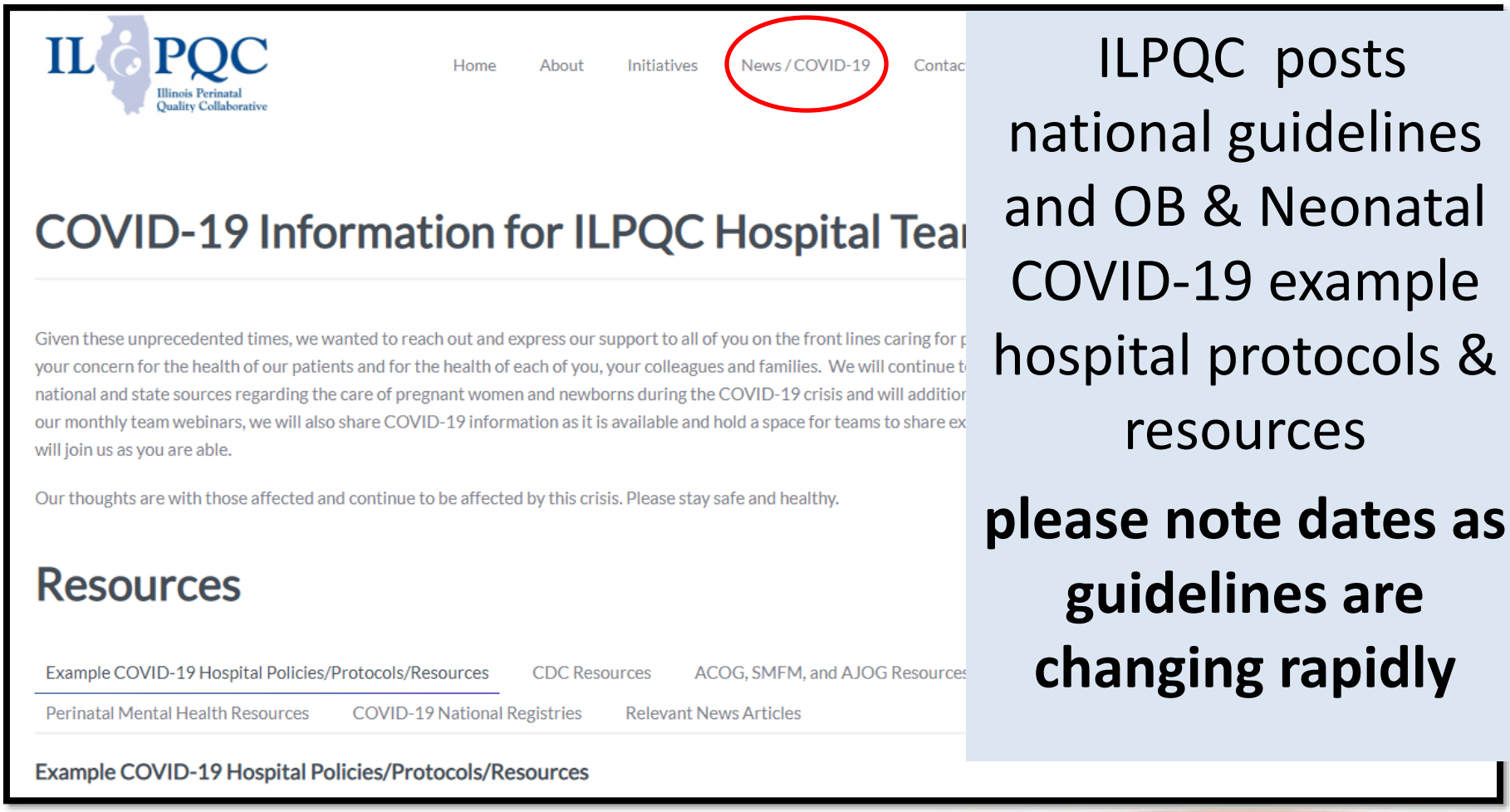
Confirmed Cases



Deaths



ILPQC COVID-19 Webpage www.ilpqc.org



ILPQC posts national guidelines and OB & Neonatal COVID-19 example hospital protocols & resources

please note dates as guidelines are changing rapidly

https://ilpqc.org/covid-19-information/

Updated OB (ACOG/SMFM) Resources

- **ACOG:** Wellness in the Time of COVID-19. (9.2020)
- **ACOG:** COVID-19 Practice Advisory (Updated 9.25.2020)
- **ACOG:** Coronavirus (COVID-19), Pregnancy, and Breastfeeding: A Message for Patients (9.29.2020)
- **ACOG:** Coronavirus (COVID-19) and Women's Health Care: A Message for Patients. (9.29.20)
- **ACOG**: Letter to CDC Advisory Committee on Immunization Practices (ACIP) on Inclusion of Pregnant Patients in COVID-19 Vaccine Allocation Plan. (10.27.2020)
- **ACOG**: Statement About Reporting of COVID-19 Cases. (10.26.2020)
- **ACOG**:COVID-19 FAQs for Obstetrician-Gynecologists, Obstetrics (Updated 11.4.20)
- **SMFM:** Coronavirus (COVID-19) and Pregnancy: What Maternal-Fetal Medicine Subspecialists Need to Know .(Updated 10.26.2020)
- **SMFM:** The Society for Maternal-Fetal Medicine COVID-19 Ultrasound Clinical Practice Suggestions. (10.20.2020)
- **SMFM & SOAP:** Labor and Delivery COVID-19 Considerations. (10.09.2020)

Updated Neonatal /AAP Resources

- **COVID-19 Testing Guidance**: Guidance developed to help pediatric practices determine when to test for severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) infection in their patient population. (9/30/2020)
- **Breastfeeding Guidance Post Hospital Discharge for Mothers or Infants with Suspected or Confirmed SARS-Co V-2 Infection:** Guidance developed to support pediatricians providing direct care for breastfeeding families after discharge from the newborn hospital stay. Post-discharge guidance and education are essential to support families, ensure the health of mothers and infants, and ensure mothers are able to reach their breastfeeding goals. (Updated 9/18/2020)
- **FAQs: Management of Infants Born to Mothers with Suspected or Confirmed COVID-19:** Includes precautions for birth attendants, rooming-in, breastfeeding, testing, neonatal intensive care, visitation and hospital discharge. (Updated 9/9/2020)
- **Family Presence Policies for Pediatric Inpatient Settings During the COVID-19 Pandemic:** Guidance on family presence policies developed to support family-centered care for all children and particularly for children with special health care needs, including those with disabilities, medical complexity, and serious illness. (10/12/2020)
- **Frequently Asked Questions: Interfacility Transport of the Critically Ill Neonatal or Pediatric Patient with Suspected or Confirmed COVID-19:** Guidance for both ground and air patient movements that balances infection control with transport safety to reduce risks for medical staff and patients. (10/06/2020)
- **Multisystem Inflammatory Syndrome in Children (MIS-C) Interim Guidance:** Clinical guidance for pediatricians including signs, symptoms, diagnosis and management of this rare but serious complication associated with COVID-19. (9/1/2020)

Updated OB/Neo Covid Publications

- NEJM: False Negative Tests for SARS-CoV-2 Infection — Challenges and Implications (6.5.2020)
- **OBGYN**: Prone Positioning for Pregnant Women With Hypoxemia Due to Coronavirus Disease 2019 (COVID-19) (6.9.2020)
- JAHA: Extracorporeal Life Support in Pregnancy: A Systematic Review. (9.2020)
- AJOG: Pre-procedural asymptomatic COVID-19 in obstetric and surgical units. (9.21.2020)
- AJOG: Epidemiology of COVID-19 in Pregnancy: Risk Factors and Associations with Adverse Maternal and Neonatal Outcomes. (9.24.2020)
- AJOG: Risk factors for severe acute respiratory syndrome coronavirus 2 infection in pregnant women. (9.2020)
- ACOG: Clinical Implications of Universal Severe Acute Respiratory Syndrome Coronavirus. (8.2020)
- JAMA: Association of SARS-CoV-2 Test Status and Pregnancy Outcomes. (9.23.2020)
- PHOA: Public Health Agency of Sweden's Brief Report: Pregnant and postpartum women with severe acute respiratory syndrome. (9.2020)
- AJOG-MFM: Decreased incidence of preterm birth during coronavirus disease 2019 pandemic. (11.2020)
- NEJM: SARS-CoV-2 Neutralizing Antibody LY-CoV555 in Outpatients with Covid-19. (10.28.2020)
- JAMA: Outcomes of Neonates Born to Mothers With Severe Acute Respiratory. (10.16.2020)
- AJOG: A marked decrease in preterm deliveries during the coronavirus disease 2019 pandemic. (10.15.2020)
- Ultrasound in Obstetrics & Gynecology: Perinatal outcomes of pregnancies affected by COVID-19:a multinational study. (10.15.2020)
- Archives of Women's Mental Health: Risk for probable post-partum depression among women during the COVID-19 pandemic. (10.12.2020)
- PRIORITY Study Published: Pregnancy Coronavirus Outcomes Registry. (10.9.2020)

Birth Equity Links

- **Please see the following links and publications for information that may help your organization consider next steps to take action to address birth equity and reduction of perinatal racial and ethnic disparities.**
- AIM: Reduction of Peripartum Racial/Ethnic Disparities Patient Safety Bundle (2018)
- ACOG: Reduction of Peripartum Racial and Ethnic Disparities: a conceptual framework and maternal safety consensus bundle (May 2018)
- ACOG Committee Opinion No. 729: Importance of Social Determinants of Health and Cultural Awareness in the Delivery of Reproductive Health Care (January 2018)
- SMFM: Strategies to overcome racism's impact on pregnancy outcomes (May 2020)
- SMFM: Strategies to provide equitable care during COVID-19 (May 2020)
- ACOG: Addressing Health Equity During the COVID-19 Pandemic (May 2020)
- AAP Policy Statement: The impact of racism on child and adolescent health (Aug 2019)
- Today: Black. Pregnant. And COVID-19 positive. (7.8.2020)
- CDC: COVID-19 Response Promising Practices in Health Equity II (7.31.2020)
- CDC: HEAR HER Campaign (8.4.2020)strategies promote birth equity and reduce preventable maternal mortality
- The NY Times: Protecting your Birth: a Guide for Black Mothers. (10.22.2020) How racism can impact your pre- and postnatal care — and advice for speaking to your Ob-Gyn about it.

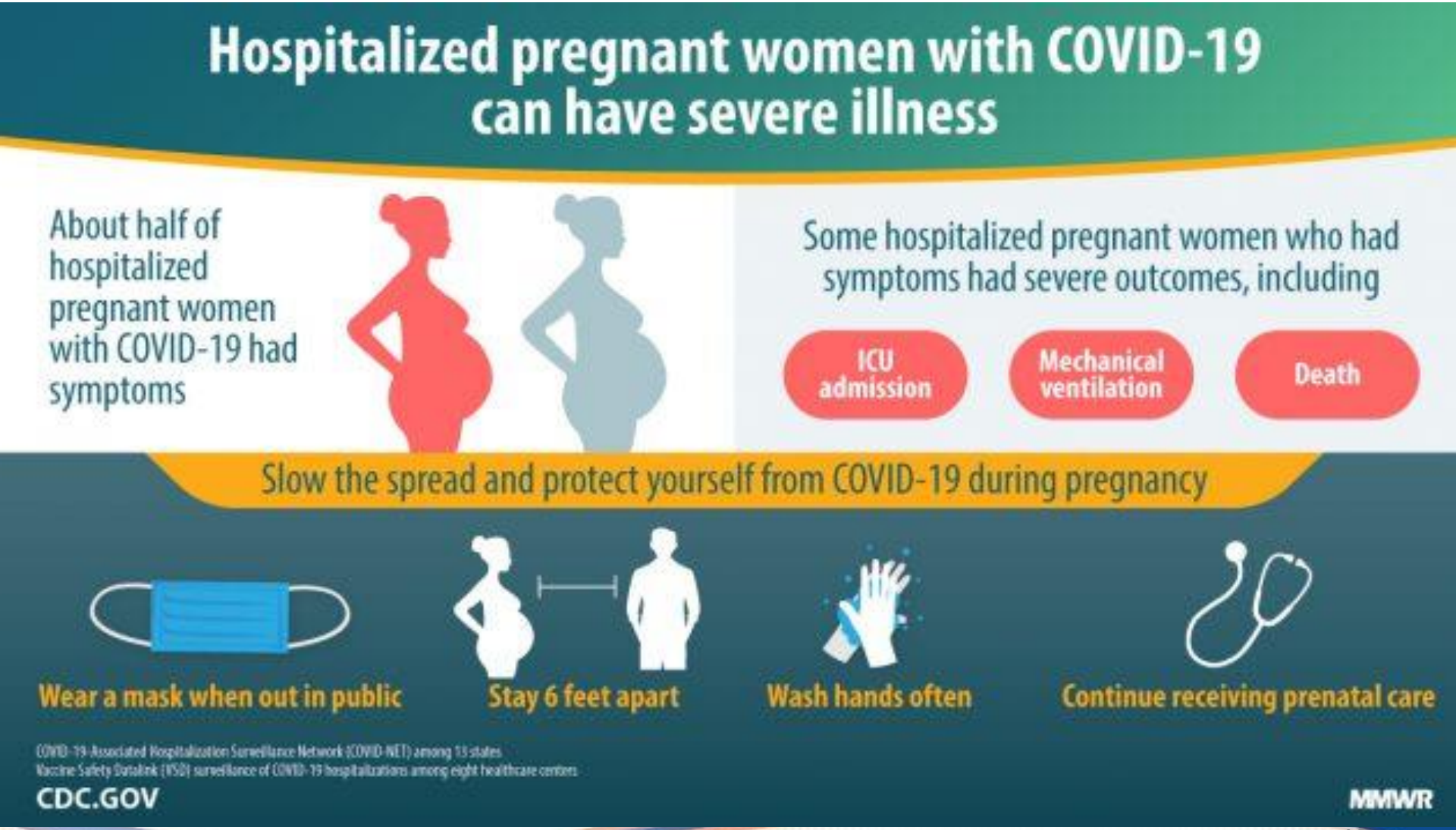
IDPH / HFS / CDC Communications

- HFS: Provider Notice Issued Blood Pressure Monitoring Kit (7.2.2020) - Medicaid now covers home BP cuffs for all pregnant / postpartum patients
- CDC MMR: SARS-CoV-2 Infection Among Hospitalized Pregnant Women: Reasons for Admission and Pregnancy Characteristics. (9.25.2020)
- CDC MMR: Characteristics and Maternal and Birth Outcomes of Hospitalized Pregnant Women with Laboratory-Confirmed COVID-19. (9.25.2020)
- CDC: Birth and Infant Outcomes Following Laboratory-Confirmed SARS-CoV-2 Infection in Pregnancy. (11.6.2020)
- CDC: Characteristics of Symptomatic Women of Reproductive Age with Laboratory-Confirmed SARS-CoV-2 Infection. (11.2.2020)
- CDC: COVID-19 and pregnancy. (11.5.2020)
- CDC: Data on COVID-19 during Pregnancy. (11.5.2020)

CDC MMWR Nov 2 2020
Covid and Pregnancy Data 1/22 – 10/03

- 461,825 women with laboratory-confirmed infection with SARS-CoV-2, the virus that causes COVID-19
- 88.7% were symptomatic and of those patients 23,434 (5.7%) were pregnant
- After adjusting for age, race/ethnicity, and underlying medical conditions found that intensive care unit admission, invasive ventilation, extracorporeal membrane oxygenation, and death were more likely in pregnant women than in nonpregnant women.
- Pregnant women should be counseled about the risk for severe COVID-19–associated illness including death; measures to prevent infection with SARS-CoV-2 should be emphasized for pregnant women and their families.
- Limitations to the data and the overall risk remains low, however these are important messages to discuss with patients

CDC patient education



COVID Mental Health Support Resources for Physicians & Healthcare Workers

- Project Parachute: offers pro-bono teletherapy (video or phone) to frontline workers
  - https://project-parachute.org/
- Physician Support Line
  - staffed by volunteer psychiatrists
  - offers free and confidential peer support to physicians in the U.S.
  - available daily by calling **1 (888) 409-0141** from 8 a.m. to 3 a.m. EST.
- For the Frontlines: 24/7 help line provides free crisis counseling for frontline workers. **Text FRONTLINE to 741741**

COVID-19 Support for Patients

- The Wingspan Project
  - https://www.thewingspanproject.org/community-response-program.html
  - Pro bono psychotherapy for individuals from underserved and/or underrepresented communities, with emphasis on those impacted by recent protests and/or COVID-19
  - Marcy Lichterman LCSW & Solveig Roverud LCSW are participating therapists with perinatal expertise

Masks for MOMS

- Masks for MOMS Illinois launched on April 21, 2020 to help meet the need for cloth masks among pregnant and postpartum persons in the Chicagoland area in response to the COVID-19 Pandemic.
- **If your Chicagoland site needs masks for labor/delivery or postpartum patients, please email coemch@uic.edu**
  - To date:
    - 13,700 masks have been donated
    - Over 140 donors and volunteers have contributed
    - Masks have been donated to the following sites and hospitals:

Healthcare Sites	Hospitals
• Access Community Health Network • Chicago Family Health Center • Christian Community Health Center • Erie Family Health Centers • Esperanza Health Centers • Family Christian Health Center • Friend Family Health Center • Near North Health Service Corp • PCC Community Wellness Centers • PrimeCare Health Centers • UI Health Mile Square South Shore Health Center	• Advocate Trinity Hospital • Cook County Hospital • Lawndale Christian Hospital • Norwegian American Hospital • Roseland Hospital • Rush University Medical System • South Suburban Hospital • UChicago Medicine- Bernard Mitchell • UChicago Medicine- Ingalls Memorial Hospital • University of Illinois Hospital

Perinatal Sentinel Surveillance Reminder

- **IDPH has a sentinel surveillance system for hospitals conducting universal COVID-19 testing at labor & delivery**
  - Invitation email and materials sent from IDPH on 8/17 (to hospitals that indicated on state survey that they are doing universal testing)
  - Hospitals report aggregate data to REDCap each week
    - Daily counts for five data points
    - Brief questions about testing and specimen types in use at hospital
  - Voluntary hospital participation is needed – if interested, contact:
    - Amanda.C.Bennett@Illinois.gov
    - Sonal.Goyal@Illinois.gov

IDPH
Illinois Department of Public Health

DISCUSSION OF OB UNIT STRATEGIES

Alexian Brothers Medical Center
Elk Grove Village, IL

AMITA Health Alexian Brothers Medical Center is a facility of 1,249 healthcare providers representing over 88 specialties with 22 obstetrical physicians delivering nearly 1800 babies . Overall 401 licensed beds.

AMITA Health Alexian Brothers Medical Center has provided Perinatal Services since 1994. Level IIe services are provided.

Administrative Perinatal Center (APC) is Loyola University Medical Center

10 LDR Beds / 3 Triage / 2 C/S Prep / 2 OR's / 3 Recovery Beds

24 Mother Baby Beds

6 SCN Level 2IIe

Neonatology and Obstetrics Coverage 24/7

AMITA Health Perinatal Mood Disorder Intensive Outpatient Program

Baby Friendly December 2019

Director: Karen Moore Manager: Susan Fulara Educators: Kristin Yates and Peggy Farrell

CASE STUDY：Covid-19 OB Patient/Newborn

- Hospital Encounters:
  - 32 yo Hispanic (Spanish speaking only) female G5P2, 39.4 weeks gestation
  - 10/22/2020 Biophysical profile done 10/22/20 20 8/8 Questionable TB with 2nd pregnancy. Had TB test done recently- never read. Stated looked red. Did chest x-ray this encounter and no findings of TB
  - 10/22/2020 discharged home . Before discharge COVID PCR obtained for planned IOL on 10/24/2020
  - 10/24/2020 admitted at 0726 for IOL (PCR results not resulted at this time.)
  - No past medical history 82.2kg Lives at home with 2 other children and father of baby.
- Admission Process –
  - Pt admitted to L&D for IOL. Placed in labor room using standard precautions. Oxytocin started 0845.
- VS 98.6 75 17 119/78 on admission.
- Patient nauseous and vomited on nurse during labor.
- Epidural placed at 1400
- 10/24 NSVD at 1739 Full PPE utilized for delivery as standard of care
- 1825 Covid results +PCR called to unit. Patient asymptomatic, no recent covid exposures
- 2000 transfer to M/B Unit. Isolation in place. Mom and baby together.
- VS 99.5 83 16 120/70 pulse ox 97%
- 10/25 1st Newborn PCR test - NEGATIVE 10/26 2nd Newborn PCR test – POSITIVE (results received after discharge – 10/28)
- 10/26 at 2015 discharged home
- 10/29 Notified parents and pediatrician of test results.
- **10/27 L&D nurse who was vomited on & assisted pt. now has cough. PCR done 10/30 – COVID +
- 11/4 Call to family. All asymptomatic at this time. Checking all children's temps and symptoms daily. Baby to be re-tested next week. Telehealth call with pediatrician done. OB Provider visit planned in 2 weeks. Mom stated wearing mask at home.

Maternal Lab Results

10/22 Biophysical done 8/8

+ TB skin test last year.

10/22 X-Ray

no findings of TB

10/22/20 COVID PCR +

(collected 10/22 at 1555 resulted 10/24 at 1432, in chart at & notified at 1825)

CBC

10/24/2020- 6.3 WBC

10/25/2020- 9.3 WBC

Blood Type A+

COVID+ Patient Blood Types

A+: 8 (5 patients from 10/22 – 11/3 A+)

B+: 4

O+: 7

O-: 2

Alexian Brothers
Elk Grove Village Il

- **What is current for us:**
- Since March 2020 - Tier 3 PPE for all patients deliveries.
- All planned inductions and C-sections are tested with COVID PCR 72 hours before scheduled procedure.
- For L&D admissions if symptomatic a rapid test is performed. Beginning in Oct. patients that present in labor without a previously obtained COVID test are tested with a PCR on their admission to L&D.
- 10/20 to 10/29 there have been 6 cases of asymptomatic Covid + patients. And one covid + newborn (This is our first positive newborn)
- Visitor restrictions remain the same: Patients are allowed one constant support person who may leave the hospital and return (not encouraged to do so). Covid + patients may have a support person, however if that person leaves they cannot come back.
- We continue to provide an education folder with a mask for families to take home as a resource.

LESSONS LEARNED

- COVID test results must be available for non-medically necessary inductions.
- Remind staff that the number of asymptomatic carriers is increasing therefore we must always use the proper PPE.
- Notify all departments that may have been impacted by potential exposure- i.e. US X-Ray
- Eye protection is required every time staff enter a patient room.
- Continual communication among staff regarding recommendations and processes is imperative
- Create a staff “pull” list of whose turn it is to have the COVID assignment and take into consideration staff members who are unable to care for COVID + patients.
- Be prepared for increasing numbers of Covid + patients.

Loyola University Medical Center (LUMC) & COVID19 in Pregnancy

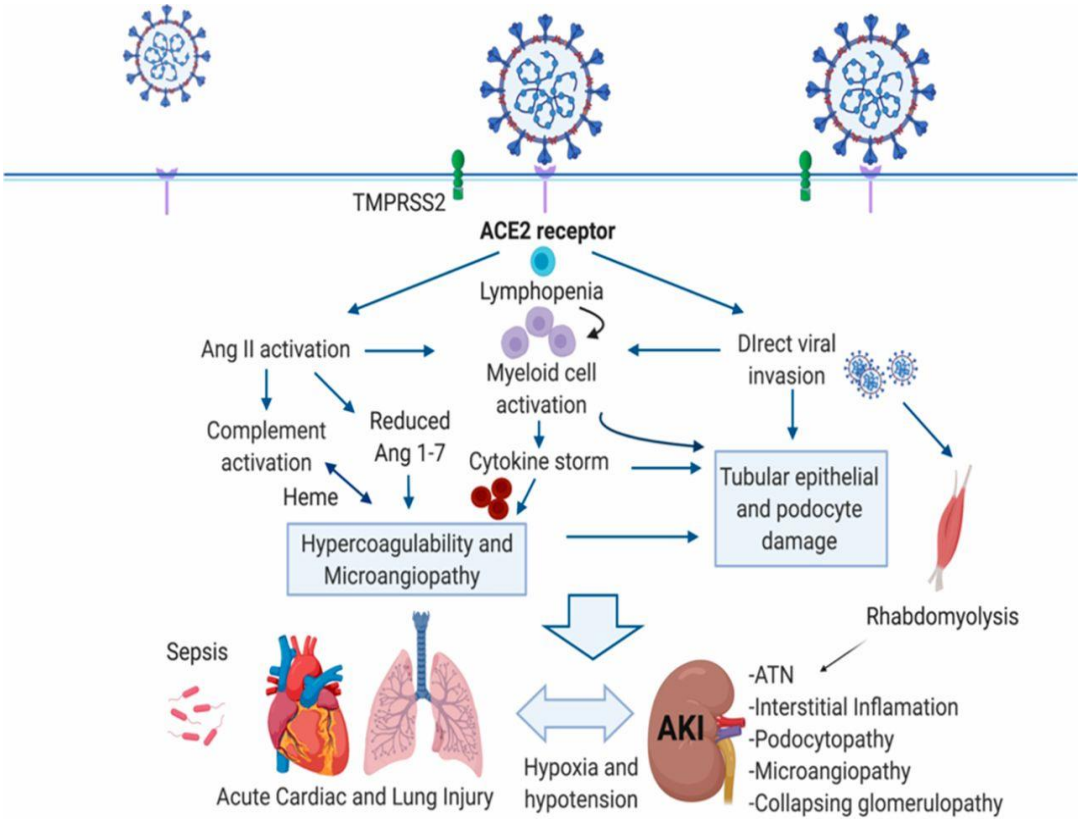
LUMC

- Maywood, Illinois Level III + RPC/Level 1 Trauma Center
- Highest AS in Illinois
- Obstetrics: 1400+ per year 80% with at least 1 comorbidity
- L&D Unit: 6 LDR, 6 sub-ICU rooms (no vent), 1 small two bed triage

Case

- 20 yo G1P0 25w3d no significant past medical history until OSH ED on 4/14/20 with complaints of dyspnea. Multiple family members with CoVID-19 (father hospitalized and sister is ASX positive/quarantined at home. CXR with LUL infiltrate. COVID negative. CT PE infiltrate, no PE. Amoxicillin RX and home.
- OSH ED 4/16/20 due to continued dyspnea, +cough, pleuritic chest pain. O2 requirement to ~2-4L. elevated d-dimer 2200. CR 0.72. CoVID negative. Ceftriaxone and azithromycin, admit.
- 4/19/20 26w2d transfer to LUMC for increasing O2 requirements. RRT on arrival, tachycardia to 120s and tachypnea to 30s, 02 sat100% on 5L, BP normal. Ddimer 4800. CR 1.02. CXR patchy alveolar opacities left lung, left pleural effusion. To MICU. Antibiotics broadened to Vanc/Zosyn/Azithromycin. HOD2 CR 1.7. HOD3 CR 2.7 oliguria. Renal US normal, urine studies c/w ATN felt due to infection. HOD 7 CR peak at 3.69, oliguria resolves. Urine legionella, urine strep ag neg. COVID negative. DC HOD 9.
- 5/8 28wk CR 0.88
- 7/28 40wk0d term labor, NSVD3030g apgar 9/9/9.

Acute Kidney Injury in CoVID-19



Batlle D, et al, JASN ly 2020, 31 (7) 1380-1383; DOI: https://doi.org/10.1681/ASN.2020040409

OB Discussion Panel

- **Emily Miller, MD** – Maternal-Fetal Medicine, Northwestern University
- **Thaddeus Waters, MD** – Director, Maternal Fetal Medicine, Rush University, Chicago
- **Jean Goodman, MD -** Director, Maternal Fetal Medicine, Loyola University Medical Center, Maywood
- **Peggy Farrell MSN RN -** Perinatal Educator, Amita Alexian Brothers Medical Center, Elk Grove Village

DISCUSSION OF NEONATAL UNIT STRATEGIES

OSF St. Francis Medical Center Newborn Care

Peoria, Il

Newborn nursery

37 bed private-room unit
Central Nursery for Level 2 Care
Approximately 2200 Admissions per year
Newborn Care is provided by newborn hospitalists (85% of admissions), outpatient pediatricians, and neonatologists

NICU

64-bed private-room unit
Level III NICU and a Level II Intermediate Care Unit
Approximately 800 Admissions per year
Newborn Care is provided by neonatologists and nurse practitioners

U of I College of Medicine Peoria

Pediatric residents and medical students
Neonatology and Pediatric Hospitalist Fellowships - Fall 2021

Children's Hospital of Illinois
at OSF Saint Francis Medical Center

Newborn Case August 2020

Prenatal Consult: Newborn Hospitalist consulted to perform prenatal COVID consult with SARS-CoV2 positive laboring mom to discuss postnatal care/options for rooming in or separately. Telephone consult performed with parents. Consult documented in mother's chart.

Boy A is 39w3d male born via Vaginal, Spontaneous to 24 yr old G2 now P2 mother

Maternal history: significant for Abdominal Aortic Aneurysm from prior car accident requiring MFM care and delivery at a tertiary care center.

Pregnancy: Uncomplicated overall. Mom tested positive for SARS-CoV2 3 days before delivery. She is an employee of a long term care facility. Testing performed due to exposure. Asymptomatic.

Delivery: GBS + - adequately treated. Pitocin. Morphine for pain control, epidural not an option due to prior back surgery. Apgars 7 and 8. Received Blow by O2. No NICU present

Initial Evaluation: VSS normal. Exam unremarkable with the exception of hypotonia. Baby bathed.

Labs: Glucose 88. Cord gas normal.

A/P Term AGA infant with SARS-CoV2 positive mom. Doing well, mild hypotonia thought to be due to morphine.
Mom elected to room in with newborn, directly breastfeed with mask and hand hygiene. Newborn placed in isolette when not receiving direct care. Father roomed in with mask and gown.

Hospital Course: No complications with newborn. Breastfed well. Hypotonia resolved over first 24 hours. Baby tested negative for COVID at 24 hours. All cares including circumcision were performed in postpartum room. Accepting PCP called to coordinate discharge. PCP's current office policy was to NOT see exposed babies in the office. PCP recommended home health nurse. Kept baby until 48 hours, repeated COVID test (resulted negative), rechecked weight and bili, reexamined baby. Baby was discharged home with home health nurse visit in 2 days and telehealth visit with pediatrician.

SFMC Birthing Center Workflow for COVID -19 or Suspected COVID -19

Triage/Admission to Labor and Delivery C/S or Vaginal Delivery *Revision 9-3-20*

- Screen patient and support person per EPIC COVID Screening Questions including temperature documentation
- **Positive Screen Support Person** is NOT allowed in Unit. Mask person and direct to leave SFMC Medical Center
- Negative patient screen ➡ while hospitalized, complete **EPIC COVID Screening Questions** with first patient assessment of every shift until discharge
- If at **ANY** point during hospital stay, **Patient screens Positive**. Notify OB/Peds – Proceed with appropriate work flow

Positive Screen Patient ➡ Initiate appropriate PPE, Notify ATTENDING OB or LABORIST, Infection Control, House Supervisor. OB to utilize COVID Isolation and Infection Order Set

Utilize Triage rooms 5319, 5311, or 5312* Test Mother for Respiratory Pathogens and COVID – 19 as directed by ID team

See COVID Portal for up to date room location, PPE and precaution types, definition of Suspected Covid-19

(Infection Control M-F 309-655-6873: After Hours – Page House Supervisor)

- Vaginal Delivery Admit to Labor Room 1,2,3 then 4*
- Scheduled C/S Admit to LDR 1, or 5319* for Pre-op
- Limit Staff, Mother to wear standard Ear loop mask
- PPE per current Ministry Policy. Located in L and D "Me[illegible]'s Locker Room", Respiratory PPE Tackle Box at Charge Desk
  - For Emergency Use if unable to obtain N-95/PAPR PPE in a timely manner

*Room assignment subject to change based on census

- Support person per Ministry Policy
  - Support person stays in room, wears Ear Loop mask/gown/gloves
- Telehealth Consult with Newborn Hospitalist Attending
  - **Mothers and newborns may room-in post delivery according to usual center practice and breastfeed with mask and hand hygeine**

Newborn Resuscitation – Normal Newborn *See COVID-19 C/S Workflow *C/Sections*

- Initiate appropriate PPE - **Baby Suspected Covid-19**
- Notify NICU team of COVID status when calling
- Baby to be dried, stimulated, resuscitated as indicated on a warmer over 6 feet away from Mother - then wrapped in clean blankets

- Transfer baby through door to receiving staff wearing appropriate PPE
- Place newborn in clean Isolette located in hallway to transfer to postpartum room via identified route

Post Delivery Care *See COVID-19 NICU Workflow *NICUAdmission*

Mom Baby Post-Partum Admission

- Shared Decision Making re: Rooming in and Feeding Plan
- Cohort isolation rooms - 5300 wing
- Baby cannot enter Level 2 nursery
- Mothers and newborns may room-in according to usual center practice
  - With newborn cares, mother to wear a mask and perform hand hygiene
  - Mother to maintain reasonable distance from infant when feasible, consider using an Isolette
  - Non-infected partners should wear masks and use hand hygiene with hands-on care to the infant
- Dyads may room separately per maternal preference and/or medical condition
- **Breastfeeding recommended** (maternal Respiratory and Hand Hygiene); Expressed Breast Milk (appropriate Pump and Hand Hygiene); Formula *See COVID-19 *Ministry Breastfeeding Plan*
- Continue precautions until mother and baby are no longer COVID-19 positive or Suspected Covid-19

Admit to NICU

- Baby does not medically meet criteria for Level I General Nursery care
- Babies Gestational Age/Weight would prevent timely discharge from Newborn Nursery
- Isolation on newborn on Post-partum is not feasible

ALL babies Suspected of COVID-19

- Utilize **COVID Isolation and Infection Order Set** as **Baby is Suspected Covid**
- Bathe immediately after birth (warmer in room)
- Test for Covid-19 prior to discharge per current Ministry & ID recommendations
- Feeding Plan: **Breastfeeding recommended** (maternal Respiratory and Hand Hygiene); Expressed Breast Milk (appropriate Pump and Hand Hygiene); or Formula
- Case Management consult
  - Babies can be discharged when clinically stable. Early hospital discharge due to COVID exposure is not recommended.

*See COVID-19 *Ministry Discharge Plan*

Newborn Discharge Process for the Suspected or Confirmed COVID-19 Mother

Rates of SARS-CoV-2 infection in neonates do not appear to be affected by mode of delivery, method of infant feeding, or contact with a mother with suspected or confirmed SARS-CoV-2 infection.

Advocate for testing Suspected COVID-19 mothers at the earliest opportunity to facilitate confirmation of COVID status. COVID status significantly impacts intrapartum and postpartum care recommendations.

Newborn infection during birth hospitalization is low with recommended respiratory precautions

DISCHARGE PLANNING DURING ADMISSION

Obtain maternal test result. If unavailable prior to discharge – Consider mother presumptively positive

Order Case Management Consultation

- Evaluation of Resources and Home Environment
- Facilitation of supplies needed, home masks as necessary
- Case Manager to perform consultation remotely via telephone or IPAD

Per availability, Home Health Referral prn for COVID-19 support equipment

- Consider Home scale for weights, Masks
- Phototherapy blanket prn, Home bilirubin check per Provider request

TESTING OF NEWBORN FOR COVID-19

Maternal COVID-19 status pending at time of discharge

- If newborn is asymptomatic, obtain COVID-19 testing once directly prior to discharge
- If newborn tests negative and mother subsequently positive, Accepting provider order second test

Maternal COVID-19 status positive

- Obtain COVID test on newborn at 24 hours. If negative result– test again at 48 hours. For asymptomatic infants, may perform one test may be performed between 24-48 hours to facilitate discharge.

If testing unavailable for mother and infant, discharge home as medically indicated

DISCHARGE CRITERIA

Baby to be discharged home when clinically stable

- Discharge ideally to occur at time of maternal discharge as per routine postpartum care
- If mother is medically compromised due to COVID-19 status or other etiology, baby to be discharged before mother with non-suspected COVID-19 caregiver when newborn is clinically stable

Minimal length of stay for healthy term newborn is 24 hours

Early hospital discharge due to COVID exposure is not recommended.

FACILITATE FOLLOW-UP WITH ACCEPTING PHYSICIAN

Inpatient physician to place a direct provider to provider call to discuss discharge plan

Office Follow up appointment to be scheduled prior to newborn discharge

RECOMMENDATIONS FOR TRANSITIONAL MEDICAL CARE

Ideally, Newborn evaluation with physical exam 1-3 days post discharge

Frequent outpatient follow-up contact through 14 days of life via telehealth

- Coordinate home bilirubin checks with home health
- Caregiver to obtain weights at home and report at intervals recommended by Outpatient Provider

Newborn evaluation with physical exam approximately 14 days post discharge

PRECAUTIONS FOR HOME

With newborn cares, mother and any COVID or suspect COVID caregivers to wear a mask and perform hand hygiene

When mother or other COVID + or Suspected + person is in close proximity to the neonate, they should use a mask and hand- hygiene until they have been

- Afebrile for 24 hours without use of antipyretics, and At least 10 days have passed since symptoms first appeared AND symptoms have improved. For asymptomatic women, 10 days have passed since the positive test

Prenatal Maternal Positive COVID Consult
In person or telephone consult?: *
GA: *
Maternal COVID symptoms: *
Anticipated NICU presence at resuscitation: *
Anticipated admission to NICU or Nursery?: *
NICU Notified? *
Additional pertinent Medical History: *
Desired Feeding Plan:*
Shared Decision Making regarding rooming in or rooming separately:*
Discharge Planning: *

Per July 22 AAP recommendation,Families can now be informed that evidence to date suggests that the risk of the newborn acquiring infection during the birth hospitalization is low when precautions are taken to protect newborns from maternal infectious respiratory secretions. This risk appears to be no greater if mother and infant room-in together using infection control measures compared to physical separation of the infant in a room separate from the mother.

AAP Recommendations as of 7/22/20 - FAQ
Based on current limited evidence, the Frequently Asked Questions below provide initial guidance for the management of infants born to mothers with confirmed and suspected COVID-19.

COVID19NEWBABYCOPING	Tips for Coping with a New Baby During COVID-19 By: Robert Sege, MD, PhD All babies cry. Most babies cry a lot from two weeks to two months of age. Some cry more than others, and some cry longer than others. For many new parents, crying is one	749327	CRAWFORD, KELLI M SHALLAT, SHELLY S
COVIDPRENATALCONSULT	Prenatal Maternal Positive COVID Consult In person or telephone consult?: *** GA: *** COVID symptoms: *** Anticipated NICU presence at resuscitation: *** Anticipated admission to NICU or Nursery?: *** Additional pertinent Medical History: **...	776368	SHALLAT, SHELLY S
COVIDSFMCWORKFLOW	Covid SFMC workflow 9-4-20	778042	SHALLAT, SHELLY S

Lessons learned

1. Multidisciplinary team to discuss workflows is productive
    MFM, OB, NICU, Newborn Nursery physicians and unit leadership

2. Prenatal Consultations with documentation are VERY helpful
    Outpatient - Preadmission
    Inpatient - L an D

3. Support Breastfeeding

4. Discharge Planning can be difficult due to varying processes of accepting physicians
    Warm Handoff
    Often, more practical for discharge to do one SARS-CoV2 test between 24 and 48 hours instead of 2 tests
    Home nursing visit
    Home scale

Neonatal Discussion Panel

- **Shelly Shallat MD FAAP** - Medical Director of Newborn Nursery, Newborn Hospitalist, OSF Healthcare Children's Hospital of Illinois, Peoria
- **Justin Josephsen, MD** - Medical Director, St. Mary's Hospital NICU, Neonatologist Cardinal Glennon Children's Hospital, St. Louis
- **Leslie Caldarelli, MD -** NICU Director, Prentice Women's Hospital, Chicago

Thank You

- We continue to give thanks to the nurses, doctors, health care workers, public health teams and others across our state at work confronting the COVID-19 pandemic.
- Please send questions, comments and recommendations, cases / willingness to share for future COVID-19 OB/Neo discussion webinars to info@ilpqc.org
- Recording of this webinar, Q/A and registration for the **next webinar on Friday, 12/4/20** will be available at www.ilpqc.org

THANKS TO OUR

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Illinois Department of Human Services

JB & MK PRITZKER
Family Foundation

Email info@ilpqc.org or visit us at www.ilpqc.org

Outpatient Monitoring for pregnant patients with mild or no symptoms

- Outpatient monitoring with a 14-day self-quarantine can be considered for **pregnant patients with COVID-19 who have mild symptoms or are asymptomatic**. Recommendations for outpatient monitoring is outlined.
- **Check on outpatient Covid positive patients regularly and review signs/symptoms to call, recognize can worsen around day 7-10**
- For 3rd trimester patients who need outpatient fetal or maternal monitoring establish protocol: schedule at the end of the day with limited staff with appropriate PPE
- After 14 days from positive test or symptom onset, if symptoms improved and no fever >72 hours then can be considered recovered.

SMFM: Management Considerations for Pregnant Patients with COVID-19 (7.2.2020) updated

The severity scale for COVID-19

- **Asymptomatic or presymptomatic disease** or presumptive infection is defined as a positive COVID-19 test result with no symptoms.
- **Mild disease** is defined as flu-like symptoms, such as fever, cough, myalgias, and anosmia without dyspnea, shortness of breath, or abnormal chest imaging.
- **Moderate disease** is defined by evidence of lower respiratory tract disease with clinical assessment (dyspnea, pneumonia on imaging, abnormal blood gas results, refractory fever of 39.0 ° C /102.2 ° F or greater, while maintaining an oxygen saturation of greater than 93% on room air at sea level.
- **Severe disease** is defined by a respiratory rate greater than 30 breaths per minute (bpm), hypoxia with oxygen saturation less than or equal to 93%, a ratio of arterial partial pressure of oxygen to fraction of inspired oxygen of less than 300, or greater than 50% lung involvement on imaging.
- **Critical disease** is defined as multi-organ failure or dysfunction, shock, or respiratory failure requiring mechanical ventilation or high-flow nasal cannula.

SMFM: Management Considerations for Pregnant Patients with COVID-19 (7.2.2020) updated

Inpatient monitoring may be needed for the following categories of patients:

- **Pregnant COVID-19 patients with moderate to severe signs and symptoms or oxygen saturation less than 95%. (incudes dyspnea)**
- **Pregnant COVID-19 patients with comorbid conditions**, eg, uncontrolled hypertension, inadequately controlled gestational or pregestational diabetes, chronic renal disease, chronic cardiopulmonary disease, or immunosuppressive states (intrinsic or medication-related)
- **Pregnant COVID-19 patients with fevers greater than 39 ° C** despite acetaminophen, raising concern for secondary hemophagocytic lymphohistiocytosis (sHLH) or "cytokine storm syndrome." sHLH is a fulminant and often fatal hypercytokinemia associated with multi-organ failure. The disease is defined by unremitting fever, cytopenia, and high ferritin levels. If a patient has an Hscore (see Table 1) indicating a high probability for sHLH, inpatient observation is warranted.

SMFM: Management Considerations for Pregnant Patients with COVID-19 (7.2.2020) updated

Timing of Delivery: mild symptoms

- In an **asymptomatic or mildly symptomatic** woman positive for COVID-19 at **37 to 38 6/7 weeks of gestation** without other indications for delivery, **expectant management can be considered until 14 days** after the polymerase chain reaction (PCR) result was noted to be positive OR until 7 days after onset of symptoms and 3 days after resolution of symptoms. This option allows for decreased exposure of health care workers and the neonate to SARS-CoV-2.
- In an **asymptomatic or mildly symptomatic woman positive for COVID-19 at 39 weeks of gestation or later, delivery can be considered to decrease the risk of worsening maternal status.**

SMFM: Management Considerations for Pregnant Patients with COVID-19 (7.2.2020) updated

Timing of Delivery: critical illness

- The **timing of delivery requires carefully weighing the benefits and risks for the patient and fetus**, and the decision to deliver requires close communication between the maternal-fetal medicine and critical care teams. **Improvement in lung mechanics gained by early delivery is theoretical. In the third trimester, the pressure of the uterus can decrease expiratory reserve volume, inspiratory reserve volume, and functional residual capacity, which can increase the risk of severe hypoxemia in pregnant patients, especially those who are critically ill.**
- Although data regarding delivery timing and acute respiratory distress syndrome are limited, **it is reasonable to consider delivery in the setting of worsening critical illness.**

SMFM: Management Considerations for Pregnant Patients with COVID-19 (7.2.2020) updated