

# PHN Grand Rounds:

## Primary Care Management of the Infant Born to a Mother with COVID-19 & Resources to Support Families of Newborns During the Pandemic



Presented by:

Karen Fratantoni, MD, MPH

Lamia Soghier, MD, MEd

Melissa Baiyewu, MHA, CHES

**Pediatric Health Network**



# A few notes about today's Grand Rounds

- All lines are muted throughout the webinar.
- Please use the Chat function to ask questions or make comments.
- To avoid feedback noise, please do not have computer audio and phone audio active at the same time.
- Today's Webinar recording and slides will be posted to the PHN website following the presentation.  
[www.pediatrichealthnetwork.org](http://www.pediatrichealthnetwork.org)

# COVID-19 Response (as of April 7, 2020)

- Children's National Hospital is **open for business**.
- Telehealth is deployed system-wide. Patients can request telehealth during scheduling appointments with the call center.
- Full time specialists available for real time consults – to contact dial Physician Access Line 202-476-4880 (M-F 8a to 5p; hospital operators 202-476-5000 after hours).
- Explore and participate in shared learning opportunities [Childrensnational.org/webinars](https://Childrensnational.org/webinars).
- Drive up/walk up specimen collection site (limited to patients age 22 or under as referred by a primary care physician). [Childrensnational.org/COVID19testforms](https://Childrensnational.org/COVID19testforms).
- Most elective surgeries are postponed.
- Hospital is preparing for a surge in patients and is taking measures to preserve the health of clinical staff in the event of influx.

# Children's National Resources

Stay informed with the latest resources for providers, staff and patients on the Children's National Coronavirus (COVID-19) Resources for Primary Care Practices

<https://childrensnational.org/healthcare-providers/refer-a-patient/covid>

# PCP Town Halls

These town halls are meant to meet the needs of our primary care practices teams during the pandemic.

Topics covered each week will include:

- Update on Children's National response to COVID-19, information on drive-up/walk-up specimen collection site, pediatric COVID-19 news, an infectious disease overview of the COVID pandemic in the region, the country and the world
- Specialty presentation focused on sharing learning relevant to primary care
- Q&A from participants

Please submit topics & questions you'd like experts at Children's to address to [PHN@childrensnational.org](mailto:PHN@childrensnational.org)

**Tuesday, April 28, 2020**  
12-1 p.m.

**Tuesday, May 12, 2020**  
12-1 p.m.

**Tuesday, May 26, 2020**  
12-1 p.m.

# Neuroscience and Behavioral Medicine Lecture Series

**April 29**  
**Home Schooling: Challenges for Children with Learning and Attention Difficulties**  
Laura Kenealy, Ph.D.  
Director, Executive Function Clinic

**May 6**  
**Anxiety in Children in a Pandemic: Diagnosis, Management and Prevention**  
Lilia Mucka, Ph.D.  
Director, Research in Anxiety Disorders Program

**All meetings occurring on Wednesdays, 12pm-1pm**

**View all future Virtual Lunch and Learns at [ChildrensNational.org/Webinars](https://www.childrensnational.org/webinars)**

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# Meet Our Presenters



**Karen Fratantoni, MD, MPH**



**Lamia Soghier, MD, MEd**



**Melissa Baiyewu, MHA, CHES**

## Today's presenters have no conflicts to disclose:

1. No financial or business interest, arrangement or affiliation that could be perceived as a real or apparent conflict of interest in the subject (content) of their presentation.
2. No unapproved or investigational use of any drugs, commercial products or devices



# Learning Objectives

- Incorporate AAP guidance on the care of newborns born to COVID-19+ mothers into practice
- Provide optimal newborn care to infants born to COVID-19+ mothers in the medical home

# Case Study

- Baby girl born at term to a 34 yo G6P4 Spanish speaking mother in mid March
- Prenatal labs negative, mother A+
- During labor, maternal fever  $>38^{\circ}\text{C}$ , 5 day history of cough, tested COVID-19+ on admission
- Baby was delivered by spontaneous vaginal delivery. Apgars 8, 9, transferred to separate isolation room
- Infant COVID-19 testing was sent at 24 and 48 HOL
- DOH notified

# Perinatal Transmission

- No vertical transmission from mother to fetus by testing amniotic fluid or placenta
- Only one report of a positive infant from a positive Mom only hours after delivery

(Murphy S. Newborn baby tests positive for coronavirus in London. The Guardian. 2020: <https://www.theguardian.com/world/2020/mar/14/newborn-baby-tests-positive-for-coronavirus-inlondon>.)

- Elevated SARS-Cov-2 IgM, IgG and IL-16 levels at 2 hours after birth with negative swabs

(Dong L, Tian J, He S, Zhu C, Wang J, Liu C et al. Possible vertical transmission of SARS-COVID-2 from an infected mother to her newborn. JAMA. <https://doi.org/10.1001/jama.2020.46211>. 2020. In press.)

# COVID-19 transmission from mother to baby

- Vertical Transmission from mother to fetus - ????
- Prior published experience with respiratory viruses would suggest this is unlikely.
- Perinatal exposure is possible at the time of vaginal delivery (stool/urine)
- Risk of infection from the symptomatic mother's respiratory secretions after birth, regardless of delivery mode

Management of Infants Born to Mothers with COVID-19, April 2, 2020. Puopolo K, Hudak M, Kimberlin D, Cummings J. American Academy of Pediatrics Committee on Fetus and Newborn, Section on Neonatal Perinatal Medicine, and Committee on Infectious Diseases

**We don't know the effects of COVID-19 on the developing fetus if mom is infected in the 1<sup>st</sup> Trimester.**

# Case Report, preparing for discharge

- Baby formula feeding
- COVID-19 testing negative at 24 HOL
- Bili 12 mg/dl at 42 HOL, received phototherapy
- Warm handoff from birthing hospital to pediatrician
- DOH monitoring
- No alternate caregiver identified, baby discharged home with mom DOL 3
- Father symptomatic, COVID-19 status unknown at time of mother/infant hospital discharge
- Mother provided with PPE, isolation instructions. Hand hygiene before and after feeds and with all baby care, mask while caring for baby until discontinued by DOH monitors

# Breastfeeding for COVID-19 POSITIVE mothers

## Benefits of breastmilk

- Provide the infant with maternal COVID-19 protective factors.
- Establish maternal milk supply
- COVID-19 not found in breastmilk– cumulative report from 9 infants most separated at birth from mom

## *Scenario 1: Expressed Breast Milk*

- Give instructions regarding breast and hand hygiene and infant fed by designated care giver
- Breast pumps should be thoroughly cleaned in between pumping sessions

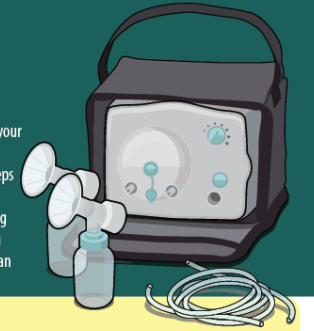
## *Scenario 2: Mom would like to breastfeed*

- CDC Guideline : Ask mothers to:
  - **Wash their hands before touching your baby**
  - **Wear a face mask, if possible, while feeding at the breast**
  - **Wash your hands before touching pump or bottle parts and clean all parts after each use**

<https://www.cdc.gov/healthywater/pdf/hygiene/breast-pump-fact-sheet-p.pdf>  
(also available in Spanish)

## How to Keep Your Breast Pump Kit Clean

Providing breast milk is one of the best things you can do for your baby's health and development. Pumping your milk is one way to provide breast milk to your baby. Keeping the parts of your pump clean is critical, because germs can grow quickly in breast milk or breast milk residue that remains on pump parts. Following these steps can keep your breast pump clean and help protect your baby from germs. If your baby was born prematurely or has other health concerns, your baby's health care providers may have more recommendations for pumping breast milk safely. The steps outlined below are based on the available scientific literature and expert opinion on breast pump hygiene. However, more research is needed to answer some questions about how to best clean breast pump equipment.



### BEFORE EVERY USE

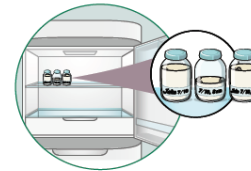


**Wash your hands** well with soap and water for 20 seconds.

**Inspect and assemble** clean pump kit. If your tubing is moldy, discard and replace immediately.

**Clean** pump dials, power switch, and countertop with disinfectant wipes, especially if using a shared pump.

### AFTER EVERY USE



**Store milk safely.** Cap milk collection bottle or seal milk collection bag, label with date and time, and immediately place in a refrigerator, freezer, or cooler bag with ice packs.

**Clean pumping area,** especially if using a shared pump. Clean the dials, power switch, and countertop with disinfectant wipes.

**Take apart** breast pump tubing and separate all parts that come in contact with breast/breast milk.



**Rinse** breast pump parts that come into contact with breast/breast milk by holding under running water to remove remaining milk. Do not place parts in sink to rinse.



**Clean pump parts** that come into contact with breast/breast milk as soon as possible after pumping. You can clean your pump parts **in a dishwasher** or **by hand** in a wash basin used only for cleaning the pump kit and infant feeding items.

Follow the cleaning steps given on the next page.





# Case report, newborn follow up

- Father advised to isolate and maintain 6 ft separation from mother/baby
- Asymptomatic siblings staying with relatives
- Last recorded maternal temperature elevation was morning of delivery
- Infant COVID-19 testing at 48 HOL pending at discharge
- Newborn office visit was scheduled for DOL 6
  - 11 days past initial maternal symptoms
  - 6 days since last fever with improving/resolving respiratory symptoms and 7 days after positive test.
- In the interim, dad tested COVID-19 +, in temporary quarantine housing
- Baby was scheduled at the end of the morning clinic session, would bypass registration, be weighed in the bay designated for sick visits, and be roomed quickly. Mother would be masked. Provider would be in full PPE.

# Case report, follow up plans modified

- On evening prior to the scheduled newborn office visit, mom not cleared from isolation due to antipyretics post partum
- The visit was converted to telemedicine on DOL 6
- A telemedicine visit was done with a Spanish interpreter. Mom was wearing a face mask. Baby was BF well, with good UOP and frequent yellow stools.
- Limitations of telemed: jaundice determination, full physical exam
- Office visit scheduled for DOL 12. Provider and mother masked. Baby with good weight gain, examination within normal limits, tcbili reassuring
- Follow up at 1 month well visit

# How can pediatric practices provide optimal newborn care for infants born to COVID-19+ mothers?

- Prioritize in-person newborn care
- For COVID+ infants, close outpatient follow up in person, via telemedicine or phone
- Warm handoff from birthing hospital to practice
- Pre-screen for COVID-19
- Cohort office visits for COVID-19 positive mothers/infants
- Determine testing protocol of mothers and infants at your primary birthing hospitals
  - Is your practice able to perform 48 HOL infant COVID-19 testing (NP) , if needed?
- Consider telemedicine while understanding limitations and benefits

Outside nursery provider/staff or family calls for a newborn discharge appointment

COVID-19 screen \* positive

Consider telemedicine visit or phone triage to gather history within 24 hours

Schedule in person newborn visit

COVID-19 screen\* negative

In-person newborn appointment scheduled per protocol

\*Have **you or your family** had fever, cough, shortness of breath, sore throat, runny nose, or altered sense of taste or smell in the last 14 days? Y/N

In the last 14 days, have **you or your baby** been told you are positive for COVID-19 or been tested for COVID-19 with no results yet? Y/N

In the last 14 days, has **anyone in your home** tested positive for COVID-19 or had close contact (within 6 feet) with a person with suspected or confirmed to have COVID -19? Y/N

# Q&A



For more information, visit our website:

<http://pediatrichealthnetwork.org>

Email us at:

[phn@childrensnational.org](mailto:phn@childrensnational.org)