

# **WHAT'S NEW IN NEONATAL/PERINATAL COVID-19?**

**Research digest  
from 5/17 –  
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# ABOUT NEOCLEAR:

The following summary was compiled by the NeoCLEAR (Neonatal COVID-19 Literature Evaluated and Aggregated in Real-time) workgroup, based at the University of Colorado, on behalf of the AAP.

Literature included is published within the past 2 weeks.

[Click here](#) to access the NeoCLEAR:COVID-19 Resource in full. This spreadsheet is updated frequently by neonatologists conducting structured searches of the major journal publishers' libraries.

# TOPIC EXPERTS:

Topic	Topic Experts
<b>Transmission:</b> <i>Perinatal &amp; neonatal viral acquisition &amp; general epidemiology</i>	Rob Dietz, MD, PhD Susan Niermeyer, MD
<b>Clinical Features:</b> <i>Characterizing COVID-19 in pregnant women and neonates</i>	Clyde Wright, MD Meg Kirkley, MD, MPH
<b>Diagnosis and Treatment:</b> <i>Serologic testing, viral PCR, antivirals and novel therapies</i>	Laurie Sherlock, MD Stephanie Bourque, MD, MSCS Jane Stremming, MD
<b>Neonatal/Perinatal Care Practices:</b> <i>PPE, visitors, transport considerations, delivery room and NICU guidelines</i>	Satya Houin, MD Stephanie Chassen, MD
<b>Consensus Statements:</b> <i>Reviews from governing bodies (AAP, WHO, etc.)</i>	Susan Hwang, MD, PhD

# WHAT'S NEW IN: *PERINATAL/NEONATAL TRANSMISSION*

Both asymptomatic and symptomatic patients show prolonged viral shedding based on +RT-PCR, but transmissibility late in the course of illness is unclear. Criteria that require negative RT-PCR for hospital discharge, NICU visitation, or quarantine release may be excessively conservative. [[Noh JY, \*Journal of Infection\*](#)] [Wu J, [JAMA Network](#)]

Breast milk from an infected mother tested positive for SARS-CoV-2 on 4 consecutive days. The infant also tested positive and was mildly symptomatic. The mother was directly breastfeeding with assiduous breast hygiene and PPE use. [[Gross R, \*Lancet\*](#)]

This article reviewing household transmission in Switzerland suggests that in most cases of pediatric infection, an adult was ill first and infected the child. [[Posfay-Barbe KM, \*Pediatrics\*](#)]

# WHAT'S NEW IN: *CLINICAL FEATURES OF NEONATAL INFECTION*

Symptomatic infants have higher viral loads than symptomatic older children, despite having less-severe symptoms.

[\[Zachariah P., \*Clinical Infectious Diseases\*\]](#)

In a single UK hospital, minority ethnicity and comorbidities were associated with more severe COVID-19 in hospitalized children. [\[Harman K., \*Lancet\*\]](#)

A case report from Stanford/LPCH described a 6-month old female with classic Kawasaki Disease who also had confirmed COVID-19. She was treated with IVIG with good response. She had been quarantining at home with her family for the 1 weeks prior to admission; an older sibling had a viral illness 3 weeks prior. [\[Jones V., \*Hospital Pediatrics\*\]](#)



# WHAT'S NEW IN: *DIAGNOSIS AND TREATMENT*

A community seroprevalence study in LA County showed 4.65% with antibodies to SARS-CoV-2. Of those tested, 13% reported fever with cough, 9% shortness of breath, and 6% loss of smell or taste. [[Sood N. JAMA Network](#)]

A critically ill pregnant woman (periviable gestation) was successfully treated for COVID-19 with convalescent plasma and remdesivir; she remains pregnant with no adverse fetal effects noted. [[Anderson J., Case Reports in Women's Health](#)]

In a Phase II study, the Ad5 vectored SARS-CoV-2 vaccine is tolerable and immunogenic at 28 days post-vaccination. Humoral response peaked at day 28 in 108 healthy adults, and rapid specific T-cell responses were noted by day 14. [[Zhu F., Lancet](#)]

# WHAT'S NEW IN: *NICU-SPECIFIC PRACTICES & POLICIES*

The AAP's updated recommendations for management of pregnant women with COVID-19 at delivery support mothers holding their infants during delayed cord clamping, and suggest that separation after birth can be optional. [[AAP website](#)]

This review summarizes the experience of Penn State Hospital (Hershey, PA) labor and delivery unit with COVID-19, including discharge practices for infants born to COVID+ mothers. [[Amatya S., Journal of Perinatology](#)]