WHAT’S NEW IN NEONATAL/PERINATAL COVID-19?
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 was 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.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Topic Experts</th>
</tr>
</thead>
</table>
| Transmission: **Perinatal & neonatal viral acquisition & general epidemiology** | Rob Dietz, MD, PhD  
Susan Niermeyer, MD |
| Clinical Features: **Characterizing COVID-19 in pregnant women and neonates** | Clyde Wright, MD  
Meg Kirkley, MD, MPH |
| Diagnosis and Treatment: **Serologic testing, viral PCR, antivirals and novel therapies** | Laurie Sherlock, MD  
Stephanie Bourque, MD, MSCS  
Jane Stremming, MD |
| Neonatal/Perinatal Care Practices: **PPE, visitors, transport considerations, delivery room and NICU guidelines** | Satya Houin, MD  
Stephanie Chassen, MD |
| Consensus Statements: **Reviews from governing bodies (AAP, WHO, etc.)** | Susan Hwang, MD, PhD |
The WHO commissioned this systematic review and meta-analysis summarizing the effects of PPE to prevent transmission of SARS-CoV-2. The findings support that all three of these interventions reduce risk of infection:

- **Physical Distancing of at least 1 meter** – aOR of 0.18, (95% CI 0.09-0.38)
- **Face mask use** – aOR 0.15 (95% CI 0.07-0.34)
- **Eye protection** – aOR 0.22 (95% CI 0.2-0.39)

A compilation of videos by the WHO, designed for the lay public, may help your patients’ parents understand how to safely wear a fabric or medical mask.
In a cohort of 15 children in Wuhan hospitalized for COVID-19, who were subsequently discharged home after symptom improvement and 2 negative tests, 7 had a subsequent positive nasopharyngeal PCR. Children with “reactivation” tended to be older and none had respiratory symptoms; only 1 had fever. [Zhao W. Clinical Pediatrics]

Pediatric COVID-19 has been associated with myocarditis; distinct from KD-associated coronary artery disease. In this case series of 9 PICU admissions for COVID-19, 5 children had myocarditis, (one was 2 months old); all 5 presented with fever and gastrointestinal symptoms. [Wolfle A., Lancet]

A UK cohort of pregnant women had a 5% SARS-CoV-2 prevalence at admission. 56% of positives were black or other ethnic minorities. There was a 5% subsequent infection rate among infants born to COVID+ mothers. [Knight M., BMJ]
The results of lung ultrasound prompted the medical team to start treatment or initiate ICU transfer in 7 of 8 pregnant COVID+ women. Lung ultrasound may be a useful diagnostic tool in COVID+ pregnant women who are minimally symptomatic, as it avoids chest CT. [Yassa M., J. Ultrasound Med]

This short commentary reviews drugs under investigation for children with COVID-19 [Deniz M., Acta Pediatrica], framed in context of experiences with pediatric antiviral use in SARS, MERS, Ebola and influenza.
Based on a survey of labor and delivery practices in 4 high-volume NYC hospitals during the COVID-19 pandemic: [Pena J. J. Perinatology]

- All sites reported adequate PPE availability and most reported consistent use, with N95 use in intubation and during the second stage of labor.
- By the conclusion of the study period, all sites reported universal screening for COVID-19 using nasopharyngeal PCR.
- Most sites continued to perform delayed cord clamping.
- All centers allowed rooming in of newborns.
- No sites tested newborns and the majority of sites continued to perform circumcisions. All sites continued to make lactation consultation available.
- All sites encouraged early discharge if appropriate (at 24 hours for vaginal deliveries or 48 hours for cesarean deliveries) and performed a phone follow-up shortly after discharge.