



Experts provide update on COVID studies, vaccines at town hall

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Editor's note: For the latest news on COVID-19, visit <http://bit.ly/AAPNewsCOVID19>.

Experts at an AAP virtual [town hall](#) Thursday covered a wide range of topics related to COVID-19, including how the virus affects newborns, when a vaccine might be available for children under 5 years and preliminary results of studies in the pediatric population.

The panel included James D. Campbell, M.D., M.S., FAAP, a member of the AAP Committee on Infectious Diseases; Karen M. Puopolo, M.D., Ph.D., FAAP, a member of the AAP Section on Neonatal-Perinatal Medicine; and Robert F. Tamburro Jr., M.D., M.Sc., FAAP, senior adviser for clinical research in the Division of Extramural Research, Eunice Kennedy Shriver National Institute of Child Health and Human Development.

Pediatric studies

Dr. Tamburro summarized several COVID-related projects conducted by the National Institutes of Health and partners. They include studies looking at multisystem inflammatory syndrome in children, how to predict the severity of viral-associated inflammatory disease, treatments in children, measures that can help children stay in school safely and post-acute sequelae of COVID.

The studies that seek to build evidence on safely returning students, teachers and support staff to school are of particular interest to pediatricians, he said. The NIH provided \$48 million to fund projects in diverse areas

of the country with vulnerable and underserved populations. Settings include charter schools, tribal early education and special education schools.

“The goal of this initiative is to provide evidence for the effectiveness, sustainability and scalability of COVID-19 testing and mitigation strategies in school settings,” Dr. Tamburro said. “Additionally, it is to provide information to understand the social, behavioral and ethical implications of implementation of COVID-19 testing within identified communities.”

Preliminary results suggest COVID-19 testing is feasible and acceptable in school settings. Implementation of a testing program for students and staff after exposure to SARS-CoV-2 increased access to testing by 37% and decreased the number of days in quarantine for students and staff. In addition, COVID-19 testing and mitigation strategies, such as masking and social distancing, resulted in low rates of within-school transmission. Dr. Tamburro noted that data were gathered before the delta variant was dominant.

Early findings from the projects are available online in [Pediatrics](#) and will be published in a January supplement titled “Navigating a Pandemic in the K–12 Setting: Keeping Our School Communities Safe.”

“They (the studies) provide the initial evidence-based strategies to prevent infection, contain outbreaks, reduce quarantine duration, track variant transmission and safely return children to in-person school,” Dr. Tamburro said.

Another project he discussed is the Researching COVID to Enhance Recovery ([RECOVER](#)) initiative to learn why some people have prolonged symptoms (long COVID) or develop new or returning symptoms after the acute phase of infection from SARS-CoV-2. To be notified when studies in pediatric populations open for enrollment, visit <https://bit.ly/3HFkOf>.

Impact of COVID on newborns

Dr. Puopolo reviewed what has been learned about the impact of COVID-19 on pregnant women and newborns.

One source of data is the [National Registry for Surveillance and Epidemiology of Perinatal COVID-19 Infection](#) established by the AAP Section on Neonatal-Perinatal Medicine, the Vermont-Oxford Network and MedNAX (an organization of private neonatologists). It now has more than 10,000 entries on women who had SARS-CoV-2 infection during pregnancy.

“... we have found that transmission of maternal COVID to newborns occurs very infrequently,” Dr. Puopolo said, adding that the highest risk to newborns is when women are acutely ill at the time of delivery.

Follow-up studies have been done on about 200 cases in Philadelphia where mothers had SARS-CoV-2 and their infants tested negative at the time of delivery. “We did not find a significant impact on the newborns, at least in the first six months after birth,” said Dr. Puopolo, chief of the Section on Newborn Medicine, Pennsylvania Hospital, and associate professor of pediatrics, University of Pennsylvania Perelman School of Medicine.

Other studies in pregnant women have shown that they develop an antibody response to infection relatively rapidly, she said. “And if that infection occurs at least a couple of weeks prior to delivery, there is good transplacental transfer of antibodies.”

Studies of vaccine-derived antibodies also have found that responses in pregnant women are robust, and transplacental transfer of vaccine-derived antibody is rapid and efficient. “The magnitude of the antibody

induced by vaccine is a little higher than natural infection in most cases,” she added.

While there are reports of newborns becoming very ill from SARS-CoV-2, “the primary impact of COVID on newborns comes from how damaging it can be to their mothers,” Dr. Puopolo said.

Studies also have looked at whether the virus is in breast milk.

“Viral DNA can be found in breast milk in some cases, but infectious virus has not been found in breast milk. So that’s good news,” she said.

In addition, women who have been vaccinated will have antibody in their breast milk, but it is not known yet whether it will offer any protection to babies.

“So bottom line, there is no reason not to breastfeed if you have had COVID or the vaccine or both,” Dr. Puopolo said.

Vaccines

Dr. Campbell provided an update on vaccine trials for children under 5 and the rollout for those ages 5-11.

Pfizer-BioNTech and Moderna are conducting vaccine studies in children ages 6 months to 5 years. It is difficult to predict when data will be submitted to the Food and Drug Administration, but it most likely will be early next year, said Dr. Campbell, professor, Center for Vaccine Development and Global Health, University of Maryland School of Medicine. He also noted that Pfizer’s trials have been slightly ahead of Moderna’s for every age group.

He also discussed reports of 5- to 11-year-olds receiving the wrong vaccine dose. If children do get an adult dose, they may be more likely to have minor side effects like fever and sore arms, but it’s unlikely they will have serious problems.

“I think that’s what most of the parents are worried about, and it’s really important to talk them through that,” he said. “... you just need to symptomatically treat those minor side effects that might occur.”

Resources

- The next AAP COVID-19 town hall will be held at 7 p.m. CT on Dec. 2. To register, visit <http://bit.ly/covid19townhallseries>.
- [AAP resources on becoming a vaccinator, preparing a pediatric practice for COVID-19 vaccination and getting paid](#)