

MEET OUR INVESTIGATORS:

CHARM INVESTIGATOR OVERSEEING COVID-19 VACCINATION TRIAL.

As the number of people entitled to receive COVID-19 vaccinations has grown, one large segment of the population – infants and young children under 5 – is not yet eligible.

That might change soon, depending on the outcome of a clinical trial in which children ages 6 months to 5 years are receiving small doses of the Moderna vaccine. Researchers in October began vaccinating 204 children in that age group as part of a national clinical trial, said Charles Barone, MD, a principal investigator for the study, a member of the executive committee, and a pediatrician with the Henry Ford Health System in Detroit.

If the vaccine proves safe and effective, as it has for older children and adults, “I would definitely recommend that parents have their younger children vaccinated,” he said. “It would

protect the child, protect the family, protect the community, and get us out of this mess.”

The study originally was designed for children ages 6 months to 12 years, but after the U.S. Centers for Disease Control and Prevention in October approved the Pfizer-BioNTech vaccine for kids between 5 and 12 years old, the researchers allowed them to withdraw from the Moderna clinical trial so they could receive the Pfizer vaccine. Many chose to remain in the Moderna study, Barone said. “Right now, we’re concentrating on the 6-month to 5-year-old kids.”

The children in the Michigan group are part of a national clinical trial with a goal of enrolling 6,750 children. Seventy-five percent of the participants are receiving doses of the Moderna vaccine, and the remaining 25 percent are receiving a saline placebo.

The study is important, Barone said, because “we’re seeing spikes in children under 18 with COVID. That’s disconcerting because it’s driving the pandemic.

“We feel this is an important step in getting COVID under control,” he said.

STUDY UPDATE:

LEARNING ABOUT CANNABIS AND ITS IMPACT ON PREGNANCY.



After years of studying the health effects of cannabis (more commonly known as marijuana), Omayma Alshaarawy turned her attention to a specific group of users: pregnant women.

The study, which began in June 2020, involves 144 anonymous women in the CHARM study, half of them cannabis users and half nonusers. The women provide urine samples three times during their pregnancies to screen for the presence of THC, the active ingredient in cannabis. Those samples that test positive for THC are further analyzed to

determine the level of potency. The researchers also collect blood samples to test for inflammation.

Inflammation is the immune system’s normal reaction in fighting infection, Alshaarawy said, but in the early months of pregnancy, a woman’s immunity typically becomes a little less active to avoid rejecting the fetus. Since earlier studies have shown that cannabis use appears to fight inflammation, she wondered: “What happens to this delicate balance of immunity during pregnancy?”

“I suspect it’s associated with adverse pregnancy outcomes,” she said, although the evidence is still inconclusive.

Some earlier studies have suggested an association between cannabis use during pregnancy and adverse outcomes, including preterm births and low birth weight, Alshaarawy said, but “proving cause and effect is more complicated.”

Other factors, such as a woman’s socio-economic status, could contribute to adverse outcomes, she said.

An immediate goal of her study is to estimate the effects of cannabis use on the immune system during pregnancy. Later research might establish its impact on pregnancy outcomes.

“I suspect cannabis causes some things to happen with the immune system, but I don’t know how it causes them,” Alshaarawy said. “In terms of pregnancy outcomes, there is no solid evidence.”

WHAT IS CHARM?

Child Health Advances through Research with Mothers, or CHARM, is a coalition of researchers and clinicians from Michigan State University, University of Michigan, Wayne State University, Henry Ford Health System, and the Michigan Department of Health and Human Services.

The goal of CHARM is to improve the health of mothers and children in the state of Michigan.

CHARM has produced two study cohorts. The first one began in 2008 primarily in Lansing, MI and is named ARCH (Archive for Research on Child Health). It stopped recruiting in 2016, but continues to follow participating moms and children. The oldest children are approaching 13 years old.

The second study cohort is called MARCH (Michigan Archive for Research on Child Health). It is modeled upon ARCH, but is designed to represent the population of Michigan. MARCH will recruit from different cities including Flint, Traverse City, Ann Arbor, Grand Rapids, Detroit, and others.

Funders for CHARM include the ECHO Program in the National Institutes of Health, Office of the Director and the Michigan Health Endowment Fund.

TIPS FOR MOMS:

BREASTFEEDING DURING THE COVID-19 PANDEMIC.

As a nutritionist and certified lactation specialist, Gayle Shipp was aware that many new mothers found breastfeeding difficult. Then came COVID-19.

“It seemed that many were dealing with breastfeeding challenges even without a pandemic,” said Shipp, a postdoctoral researcher in epidemiology and biostatistics at Michigan State University (MSU).

Backed by a National Institutes of Health grant, she undertook a study to better understand breastfeeding experiences and perceptions during the early months of the COVID-19 pandemic among mothers enrolled in the MARCH study.

The pandemic “could create more opportunities for women to breastfeed,” since more women were staying at home, she thought, “or could it have the opposite effect. We weren’t sure what it would create. This was new to us all.”

Her research, guided by principal investigator Jean Kerver, PhD, MSc, RD, preliminarily found that some women, while still in the hospital, were unable to receive the help they needed from lactation specialists or receive additional support from family members, such as mothers and sisters because of visitor restrictions.

The virtual visits substituted for in-person lactation visits, some women said, were challenging. After returning to work, some were unable to take enough breaks to pump breast milk due to staffing shortages.

“The workplace can always be a factor,” Shipp said. “You want to have an environment where it’s easy for women to breastfeed.”

Improving the health of women and their babies has been Shipp’s long-term goal. After receiving her bachelor’s degree from MSU, Shipp earned a master’s degree in nutritional science at Wayne State University followed by a PhD in human nutrition from MSU. Along the way, she received a Certificate in Public Health Practice and became a Certified Lactation Specialist.

Especially during the pandemic, women wanted to breastfeed to give their babies sufficient immunity, Shipp said. “Women obviously want to do what’s best for their children,” she said.



Are you an ARCH, MARCH, or CHARM participant whose contact information has changed? Please send your new information to:

Email: charmstudy@epi.msu.edu Telephone: 1-866-925-8758



CHARM | PI: Nigel Paneth, MD MPH Department of Epidemiology & Biostatistics Michigan State University
909 Fee Hall, Room 218, East Lansing, MI 48824

Email: charmstudy@epi.msu.edu Telephone: 1-866-925-8758

Web: charmstudy.org Facebook: <https://www.facebook.com/CHARMSTUDYHEALTH/>



Pediatric Cohort

