

# Cultivate

FALL 2020

NEWSLETTER OF THE NATIONAL FARM MEDICINE CENTER

"Welcome to a special issue of our newsletter. We've all been touched by COVID-19, whether by the virus itself, our work situations, or in our social and family lives. Our Farm Medicine team has been called upon multiple times during the last six months as experts and to leverage our work towards research and solutions, contributing to easing the effects of the pandemic upon rural and farm communities. We're proud to share some highlights with you. Please cultivate safety of all kinds in your lives as we work together through unprecedented circumstances."

- Casper Bendixsen, director,  
National Farm Medicine Center

## Auction goes virtual

The Auction of Champions took flight on a virtual "Auction Around the World," Sept. 14-17, featuring exclusive auction packages and locally-raised meat, and generating more than \$100,000 for the work of the National Farm Medicine Center. We extend our gratitude to Champion Sponsor Miron Construction, and to all the generous businesses and individuals who kept the Auction airborne. Videos showing the impact of this philanthropic support can be seen on the Marshfield Clinic Health System Foundation Facebook page, [www.facebook.com/marshfieldclinichealthsystemfoundation](https://www.facebook.com/marshfieldclinichealthsystemfoundation).

Mark your calendars for the next Auction of Champions, September 16, 2021!

 **Marshfield Clinic**  
Research Institute

 **National Farm Medicine Center**

## FARM MEDICINE AND COVID-19

### Farm Medicine brings rural dimension to national study of children, coronavirus



A national study looking at the role children play in the COVID-19 pandemic is enrolling about 200 families from Wisconsin, including farm families already enrolled in the ongoing Wisconsin Infant Study Cohort (WISC) project led by the National Farm Medicine Center and the University of Wisconsin-Madison.

The study, called Human Epidemiology and Response to SARS-CoV-2 (HEROS), seeks to determine the rate of novel coronavirus infection in children and their family members in the United States. Two of the 11 cities involved are Marshfield and Madison. The others are Nashville; New York; Boston; Baltimore; Washington, D.C.; Cincinnati; Denver; Detroit; and St. Louis.

The research is sponsored by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health. It will help determine what percentage of children infected with SARS-CoV-2, the virus that causes COVID-19, develop symptoms of the disease. In addition, the HEROS study will examine whether rates of SARS-CoV-2 infection differ between children who have asthma or other allergic conditions and children who do not.

Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, told Congress that data being collected in the HEROS study regarding coronavirus incidence and transmissibility among children could

prove to be, "very important ... when you talk about opening schools and the impact that might have."

Casper Bendixsen, Ph.D., director of National Farm Medicine Center, is co-investigator of the WISC study along with Drs. James Gern and Christine Seroogy, University of Wisconsin-Madison School of Medicine and Public Health.

"What I enjoy about this study is that it means rural people and farm families are represented in important research," Bendixsen said. "The kids in the WISC study are in different environments than a lot of other kids who will be part of the HEROS program in the fact they're largely rural."

The Infant Study Cohort project has already been examining how farm environments and exposure to livestock can promote a stronger immune system in children, making them less likely to develop asthma and atopy. WISC is looking specifically for the prevalence of SARS-CoV-2 in farm and non-farm children as well as their households through a series of questionnaires, nasal samples, stool samples and a newly-developed blood sample collection. Nationally, the research is being conducted over a 6-month period and will enroll approximately 2,000 families already participating in NIH-funded pediatric studies.

The study is additionally novel for being conducted entirely remotely with no face-to-face contact.

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# FARM MEDICINE AND COVID-19

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Every two weeks, participating families complete nasal samples and questionnaires. Analysis will help researchers better understand if certain gene expressions related to allergic sensitization correlates with the risk of SARS-CoV-2 infection. A small volume of blood is obtained via a new, nearly painless device through the surface of the skin. The blood will be analyzed for antibodies present against the SARS-COV-2 virus.

The project is among a number of COVID-19 projects taking place within Marshfield Clinic Research Institute.

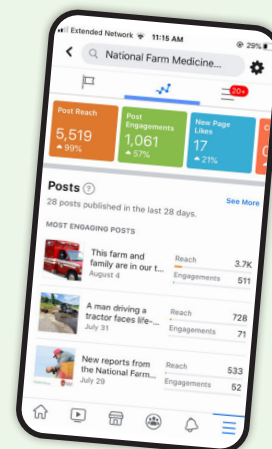
Dr. Bendixsen discussed the project with Wisconsin Public Radio, <https://www.wpr.org/hundreds-wisconsin-families-be-part-study-looking-kids-role-coronavirus-pandemic>

**Farm parents and COVID-19:** In March 2020, at the start of the busy agricultural season, many farm parents with children suddenly found themselves with having to juggle childcare, homeschooling, off-farm work and farm work. To understand how farm parents have been navigating the COVID-19-related changes, Dr. Florence Becot launched a national level survey in early August. Becot will use survey results to identify programs, resources and policies that could help farm families in case of subsequent waves of the pandemic.

**Farm families and emergencies:** Dr. Andrea Swenson has launched a study that asks whether the National Children's Center is positioned to meet the health and safety needs of farm families during a crisis. To achieve this goal, Swenson is interviewing Farm Medicine scientists and staff to understand how the Children's Center has responded to COVID-19, and is also surveying farm families to identify their needs during emergencies, and increase the Children's Center's capacity to anticipate what will be needed in the future for farms experiencing emergencies.

## Social media and research

Farm Medicine is looking to social media for new research ideas and participant recruitment, as well as dissemination of research findings and community engagement. For instance, as children have spent more time around home the past six months, there appears to have been an increase in the posting and sharing of, "proud-parent moments, some of which are unsafe, like youngsters in the worksite," said Dr. Bryan Weichelt. Social media is ripe for research, with a steady flow of data, and an excellent tool for dissemination of research findings and community engagement.



## Wisconsin Farm Related Fatalities report published

A partnership between the National Farm Medicine Center, the University of Wisconsin-Madison Division of Extension and UW's College of Agricultural and Life Sciences has resulted in the return of the [Wisconsin Farm Related Fatalities report](#), based on data from 2017 (41 fatalities) and 2018 (34 fatalities).



"This report presents a glimpse into fatal Wisconsin farm injuries in hopes to inform the public and various agriculture and public health teams that work hard to prevent these events from ever happening," said Dr. Bryan Weichelt, project leader for [AgInjuryNews.org](#).

UW had compiled similar reports from [1943 through 2006](#) based on newspaper clippings and other sources, but it was discontinued as the university did not have a faculty member conducting ag safety-related research after that time frame. Weichelt suggested to John Shutske, professor and director of the UW Center for Agricultural Safety and Health, that AgInjuryNews.org could be used to help gather content for the report. (AgInjuryNews.org is the largest database of publicly available U.S. agricultural injury and fatality reports.) A partnership resulted using data from both AgInjuryNews.org and Wisconsin Department of Health Services death certificates.

Weichelt hopes stakeholders such as insurance companies, equipment manufacturers and farm educators will gain insight from the report. He wants to reach "anyone who eats food and cares about the people who produce it."

## NIOSH renews funding for National Children's Center

The National Institute for Occupational Safety and Health (NIOSH) announced that it has awarded the National Children's Center for Rural and Agricultural Health and Safety, Marshfield Clinic Research Institute, a five-year competitive grant renewal. "This major award will significantly expand our efforts to integrate proven safety strategies into programs of organizations and businesses that are best-positioned to influence the safety of children living and working on farms," said Barbara Lee, Ph.D., National Children's Center director. "We want to ensure that optimal safety interventions and guidelines are sustained beyond the span of the grant period." The National Children's Center is one of 11 agricultural centers funded by NIOSH, Centers for Disease Control and Prevention, and the only center dedicated to childhood agricultural injury prevention. NIOSH has supported the National Children's Center since 1997. The new NIOSH grant includes six distinct research studies and an outreach program, along with administrative, scientific and evaluation oversight. New studies to be launched address some of the most pressing safety concerns including youth operating ATVs for farm work, adolescent mental health, and the impact of available childcare on safety practices.



**National Children's Center**  
for Rural and Agricultural Health and Safety



## Farm Medicine welcomes rural sociologist



**Dr. Florence Becot**

**Dr. Florence Becot**, a rural sociologist with nine years of agricultural interdisciplinary research experience, has joined Farm Medicine as an associate scientist. Her research program focuses on the health, well-being, safety and economic viability of farm families. Her research first considers the ways in which difficulties meeting social needs such as health care, childcare or aging expand beyond the confines of the personal sphere and can have direct implications on the farm including the adoption of farm safety practices and farm business development. Directly tied to farm households' ability to meet their social needs, her work also explores the availability and types of social supports, including crisis support, as well as the role of these support systems in supporting farm households and their farm business. Dr. Becot earned her Ph.D. from Ohio State University and was previously a researcher at the University of Vermont Center for Rural Studies.



**Marie Fleisner**

## Congratulations Marie Fleisner on 40 years!

Editorial Specialist Marie Fleisner, a key member of the Journal of Agromedicine team, recently celebrated 40 years with Marshfield Clinic Health System. "Sometimes it feels almost like I was 'born' working here, while other times I can't believe it's been 40 years," Fleisner said. Fleisner

spent the first 19 years of her career as a surgical technician in the Department of Urology. She joined the Research Institute in 1998, working in Research Compliance and Office of Scientific Writing, before joining the Farm Medicine team since 2015. "Marie has had a huge impact on the quality and 'heart' of the Journal of Agromedicine," said journal Senior Associate Editor Barbara Lee. "Her skills, combined with knowledge of past and present topics and authors, ensures that solid decisions and clear communications emanate from the editorial team."



## Journal of Agromedicine COVID-19 issue

Farm Medicine has finished editing the October issue of the peer-reviewed *Journal of Agromedicine*, which will be dedicated to the impact of COVID-19 on the agricultural community, including farmers, farm workers, farm families and the farm economy. Farm Medicine Director Casper Bendixsen served as guest editor. Farm Medicine put out a call in May for manuscripts related to agriculture (e.g., occupational health, training, PPE shortages, mental health, worker housing, child care issues). Authors are addressing the problems created or exacerbated by COVID-19, and recommending next steps and strategies.



## Children's Center contributes to CDC interim guidance document

The Centers for Disease Control and Prevention (CDC) and U.S. Department of Labor have introduced joint [guidelines](#) and accompanying [checklists](#) to help agricultural employers keep workers safe and healthy while continuing to work during the COVID-19 outbreak. The diverse nature of agriculture means that older teens and young children can also be found in ag work sites, some of which are family-owned and not subject to labor laws. Outreach Specialist Melissa Ploeckelman represented the National Children's Center and worked with colleagues at CDC/National Institute for Occupational Safety and Health to ensure that special conditions for children were addressed in the new guidance document.

"Taking children to a work site not only exposes them to the hazards in the environment, but also distracts adults from their tasks, increasing the risk of injury for children and adults," said Dr. Barbara Lee, director of the National Children's Center. Child supervision challenges have been further exacerbated by the COVID-19 pandemic, with many child care centers and schools closed, and activities canceled.



## Farm Medicine helps conferences move online

Farm Medicine scientists and staff helped several organizations adapt to online-only conferences, enabling safety and health professionals to share, learn and reconnect virtually. Notable examples:

- International Society for Agricultural Safety and Health – ISASH President Scott Heiberger and Board Member Marsha Salzwedel helped the world's largest annual gathering of safety and health professionals take place over the course of five action-packed days. Events contained a mix of live and pre-recorded content.
- Agricultural Safety and Health Council of America – National Children's Center Director Barbara Lee, Assistant Manager Kathie Smith and Administrative Secretary Amy Marg led a Farm Medicine team that successfully moved an in-person conference scheduled for March in Las Vegas to an online format packaged into three sessions.



## Skin cancer screening

The National Farm Medicine Center helped organize skin cancer screenings at the 2020 Marshfield Farm Show and the Wisconsin Potato and Vegetable Growers Association annual conference. Working with Marshfield Clinic Health System Dermatology physicians and staff, we provided this potentially life-saving screening to 245 people. Seventy-one individuals were referred for additional examination of suspicious moles or patches of skin. Each person screened was also educated on how to keep their skin safe while working outside. The screenings were supported with funding from 2018 Wood County Farm Technology Days and the Auction of Champions.



## World Dairy Expo gift shop to support National Children's Center

World Dairy Expo announced that it is pledging 10 percent of profits generated from its online Purple Cow Gift Shop to the National Children's Center for Rural and Agricultural Health and Safety. "As a family-focused organization, we saw this as a unique opportunity to support a non-profit focused on serving farm families," shares Scott Bentley, World Dairy Expo General Manager. "The Children's Center does just that through their nationwide outreach programs focused on keeping kids safe on the farm." The Purple Cow Gift Shop's online store will remain open through the end of the year at [www.worlddairyexpo.com](http://www.worlddairyexpo.com).



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## 2020 Childhood Agricultural Injuries Fact Sheet

About every three days, a child dies in an agriculture-related incident, and each day, at least 33 children are seriously injured according to the [2020 Childhood Agricultural Injuries Fact Sheet](#) compiled by the National Children's Center. The leading sources of fatalities involved transportation (47%), which includes tractors and all-terrain vehicles (ATVs), and contact with machinery (20 percent). Other notable statistics on occupational injuries among youth:

- From 2001 to 2015, 48 percent of all fatal occupational injuries to young workers occurred in agriculture.
- Since 2009, youth worker fatalities in agriculture have exceeded all other industries combined.
- Young workers are nearly 8 times more likely to be fatally injured in agriculture compared to all other industries combined.

"There is no central database on childhood agricultural injuries," said Bryan Weichelt, Ph.D., who led the fact sheet initiative. "In putting together this fact sheet we drew upon the best available data from a variety of sources."

To monitor, explore, or subscribe to the latest injury reports, go to [www.aginjurynews.org](http://www.aginjurynews.org).

## Keeping children engaged (and safe) on the farm

Farming is always challenging, and never more so than now. This is especially true for parents with children living and/or working on the farm. "We hear from parents who are juggling farm work, off-farm work and home-schooling," said Dr. Barbara Lee. "And yet, children are still depending on us adults to keep them safe." No matter how difficult it is to be a farm parent during COVID-19, think how much harder it would be if a child suffered a serious injury. The National Children's Center compiled a [list of resources](#) on topics ranging from appropriate farm tasks for children to fun, virtual adventures.

## Our Mission

"The National Farm Medicine Center will be a national resource, conducting high quality research, developing and delivering health and safety information, exploring innovative service models and effecting broad change to improve human health and safety associated with rural and agricultural work, life and environments."

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