



News from the Great Plains Center for Agricultural Health (GPCAH)

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Educational opportunities expand at the Great Plains Center

by Kay Mohling, MA, Agricultural Safety and Health Course Coordinator

The Great Plains Center for Agricultural Health (GPCAH) Outreach Core designs, develops, and disseminates agricultural safety and health curriculum and features the Agricultural Safety and Health Core Course. Registration is now open for the 2022 course planned for June 13-17.

Originally designed as classroom-based, the Core Course has been expanded to include educational content in multiple formats (in-person, online training modules, videos, podcasts) including interactive sessions, case studies, and tours of local agricultural operations. Several of the core course topics have been translated into asynchronous online training modules with over 1,000 enrollments since September 2017. The modules are available at no cost and current topics include Biological Risk Management; Hazards Associated with Livestock Handling; Occupational Diseases of the Lung in Agricultural Settings; Occupational Skin Disorders in Agriculture; Overview: Agriculture, Forestry, Fishing; PPE for Agricultural Health; Physical Agents for Agricultural Health; and Transportation Hazards in Agriculture. Modules addressing musculoskeletal disorders, off-road vehicle safety, and pesticide safety are in development.

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The FarmSafe podcast was introduced in 2021 and provides an opportunity

IUWA **GREAT PLAINS** College of Public Healt to discuss agricultural safety and health topics with Center researchers

and partners, while highlighting GPCAH research. Episodes are 15-20 minutes long and include stories, prevention messages, and resources specific to each topic (read more about the podcasts on page 3).

These materials have been widely shared to strengthen existing programs and help introduce new agricultural safety and health educational opportunities. In the fall of 2021, the Core Course was delivered in partnership with Farm Safety Nova Scotia to first-year college students in the Agricultural Farm Management program at Dalhousie University. Dordt University in Sioux Center, Iowa has also adopted the online modules as part of their undergraduate curriculum. For more information on GPCAH outreach activities visit the website. Тне 📖



The core course provides the information and skills needed to enable safety and health professionals to anticipate, recognize, and prevent occupational illness and injury among members of the agricultural community.

Course registration fee waivers are available.

Visit bit.ly/agcorecourse for details and updates.



Director's Message

by Renée Anthony PhD, CIH, CSP

As we emerge from another cold Midwest winter, with high hopes for a waning pandemic, we look forward to a new planting season. Researchers and staff at The Great Plains Center for Agricultural Health spent the winter months preparing a new grant application to fund innovative projects to help reduce injuries and illness across our Midwestern farms.

I want to thank everyone who supported our project ideas and collaborated with us to develop proposals to improve the lives of farmers and their rural communities. And a special thanks goes out to the 87 farmers and organizations who provided written letters supporting the work we hope to do in 2022-2027. While we must await scientific reviews and funding decisions before we begin these new research projects, we have submitted project ideas that should:

- reduce the burden of back pain from a lifetime of tractor use,
- provide resources to help families of *aging farmers transition to safer work* at multiple stages of dementia,
- provide innovative smartphone tools to help farmers identify and *reduce high-risk hazards in their physical environment,*
- reduce injuries from farm vehicles on roadways, and
- *improve the respiratory health of livestock producers* and the animals they raise.

We also intend to expand our educational outreach by integrating lessons learned from research into classroom curriculum and activities for youth, college, and continuing education environments (page 1).

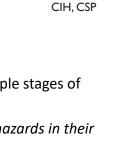
Partnerships between researchers, health care providers, farmers, and agribusinesses are essential to guiding us *to enhance the adoption of tools* being developed and/or tested across our research portfolio. I encourage you to drop us an <u>email</u> if you want to be involved in our research and outreach activities. We will, as always, keep you informed about our activities in *Alive and Well* and through social media (@GPCAH).

We hope you have a safe and healthy spring!

Dr. Renée Anthony directs the GPCAH, housed in the Department of Occupational and Environmental Health of the College of Public Health. She can be reached at 319/335-4429 (renee-anthony@uiowa.edu).

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gpcah.org









Catching up with the FarmSafe podcast

by Kate Crawford PhD, MS, Postdoctoral Research Scholar and Jenn Patterson, MLitt, GPCAH Center Coordinator

Doing chores? Trying to stay warm? Taking a walk? Whatever you are doing, it is a great time to listen to the FarmSafe podcast and catch up on all the stories, safety tips, and current research about farm safety. Our 15-minute episodes are short, entertaining, and full of inspiring information that can help you avoid illness and injuries on the farm.

Our most recent 3-episode series on winter hazards is dedicated to preventing hypothermia, frostbite, and falls on ice. We cover how to build a clothing system based on layering and what materials are best and worst for keeping you warm and dry, and we hear from an Iowa farmer about a fall she had on ice and what steps she takes now to prevent it from happening again. We also hear from a veterinarian and extension dairy specialist who help us better understand how to communicate winter hazards when training immigrant workers who may be new to the Midwestern climate.

To help raise awareness of the dangers of grain bin engulfment, we released a special episode during Grain Bin Safety Week (Feb. 20-26) that includes stories from a young woman whose brother was rescued from a grain bin when he was a child. Years later she started volunteering for grain bin rescue demonstrations to teach firefighters how to rescue people trapped in grain. In addition, a first responder describes the most common calls they

"[Grain] is a very fluid material, so every time you take a deep breath, that grain gets closer to you, and it won't let you exhale. So, now we have someone [who is] suffocating - they can't breathe." Brad Kruse, NECAS

receive for grain bin rescues and why working with grain is so dangerous. We also offer listeners an overview of safety strategies for working with grain. We are working on additional episodes for grain bin safety, so let us know if you have questions or want to share stories. Email us at <u>cph-greatplainscenter@uiowa.edu</u>.

We are also excited about upcoming episodes, so be sure to keep tuning in. In March we will talk to Dan Neenan, the director for the National Education Center for Agricultural Safety (NECAS), about the dangers associated with anhydrous ammonia. Dan has also worked as a firefighter and paramedic and is a great resource for information. He said, *"I've been a paramedic coming up on 30 years now, and I don't think I've seen anybody in more pain than the gentleman that I had that was sprayed in the face and on the eyes with anhydrous ammonia."*



Future episodes will cover roadway safety, manure pits, confined space entry, and emergency pre-planning. Tell us how we are doing and share your stories with us by taking <u>our</u> <u>survey</u>.

Listen to the FarmSafe podcast – anytime and anywhere – <u>here</u> or download it from your favorite podcast directory (Apple Podcasts, Spotify, etc.). Please also rate and review the podcast if you listen on a directory, so we can reach additional listeners.

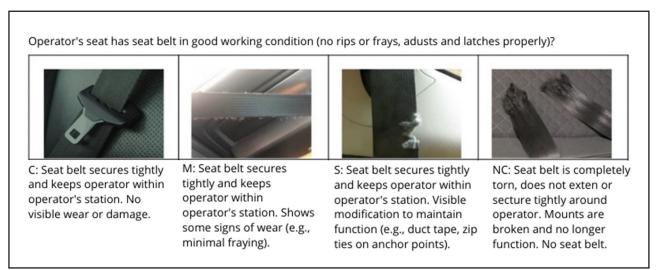
Do you know how safe your farm is? We are developing an app for that.

Carri Casteel, PhD, Director, UI Injury Prevention Research Center and Jenn Patterson, MLitt, GPCAH Center Coordinator

The surveillance team at the GPCAH has developed and piloted a new agricultural hazard assessment checklist app for smartphones and tablets. App users collect data on hazardous exposures that have been known to cause injuries on the farm and ultimately learn where changes should be made to make the farm a safer place to work.

The app user identifies how compliant farm equipment and buildings are (to widely-accepted safety guidelines). For example, the app asks about the presence and working condition of a tractor seat belt (see figure below), lighting and marking on farm vehicles, emergency-off switches in grain bins, electrical panels inside barns, and handrails in lofts, among other things. The hazard assessment checklist was developed with input from several experts within the fields of occupational safety, industrial hygiene, occupational medicine, ergonomics, and more.

At this time, we have tested the app and have trained 18 individuals on how to use it. Those trained have represented various occupations, including farmers/ranchers, agribusiness professionals, researchers, safety and health professionals (including regulators), and healthcare providers. After training, most participants indicated feeling very confident using the app (e.g., logging in, submitting the data) and scoring compliance to safety features using recommended guidelines and professional standards. We plan to develop the app for multiple users, including insurance companies.



Example of Hazard Assessment Checklist question about the condition of seat belts with C being the safest (compliant) and NC being the least safe (non-compliant).

The Midwest Rural Agricultural Safety and Health (MRASH) Conference has survived two years of virtual conferences and plans are underway for a face-to-face conference in November 2022. The planning group is looking at creative ways to continue participant involvement from around the globe. If you have input for the 2022 planning committee, or would like to join the group, contact Gayle Olson at gayle-olson@uiowa.edu.



One of the advantages of the virtual conferences is that many of the sessions were recorded and are now available on the MRASH YouTube channel, use this <u>link</u> or go to YouTube and search for MRASH. Click on the "Playlists" tab and it will sort the videos by year; each year has its own playlist. The MRASH channel includes most of the 2021 sessions and many from 2020.

NEWS AND UPDATES



2022 Agricultural Youth Grant applications are now available on the I-CASH website. Each year I-CASH provides funds for community grants to youth groups aimed at the prevention of farm-related injury. In addition, I-CASH awards

an Outstanding Youth Grant and the winners are invited to present their project at the annual MRASH Conference. Past projects have included distributing safety supplies such as ear plugs and sunscreen, building farm safety hazard displays, and developing agricultural safety and health materials and presentations. Grants are only available for youth groups and organizations in Iowa. Visit <u>www.i-cash.org</u> for details. **Applications are due April 15th**.

The **2022** International Society for Agricultural Safety & Health (ISASH) Conference will be held June 12-16 in Fort Collins, Colorado. Abstracts are now being accepted, oral presentation, symposium, and workshop abstracts are due March 5th; poster abstracts are due March 15th. Visit the website for conference details.

Agricultural Safety and Health: The Core Course University of Iowa, Iowa City, IA



Upcoming Events

March 14-17 AgrAbility National Training Workshop Madison, WI

March 28-30 Agricultural Safety and Health Council of America (ASHCA) North American Agricultural Safety Summit Las Vegas, NV

<u>March 31-April 1</u> Occupational Health Symposium Coralville, IA

April 15 I-CASH Youth Grant Deadline

May 3-5 2022 Public Health Conference of Iowa Hybrid Event / Ames, IA

<u>May 10-13</u> National Rural Health Conference Albuquerque, NM

<u>May 23-25</u> **American Industrial Hygiene Conference & Expo** Nashville, TN

June 12-16 International Society for Agricultural Safety and Health (ISASH) Conference Fort Collins, CO

June 13-17 Agricultural Safety and Health: The Core Course Iowa City, IA

<u>July 12-15</u> Central States Center for Agricultural Safety and Health (CS-CASH) Agricultural Health and Safety Course Omaha, NE



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