

Safe Farming, Safe Living: Outreach to Hutterites in South Dakota

by Jenna Gibbs, PhD, Research Coordinator, *Great Plains Center for Agricultural Health (GPCAH)*
and Melissa Gale, LPC-MH, *Avera St. Benedict Health Center*

In Eastern South Dakota, the residents of more than 50 Hutterite colonies manage farm land, operate large gardens, and raise livestock - including cattle, hogs, chickens, and turkeys. Although the Hutterites are Anabaptists, they are uniquely different from the Amish and Mennonites in the way that they use modern agricultural technology, cell phones, and vehicles for transportation.

Despite the secluded location of some colonies, the Avera St. Benedict Health Center in Parkston, SD has been providing primary care, pediatric, emergency/trauma, and women's health services to the Hutterites for many years. About two years ago, the St. Benedict medical staff noticed that the members of eight nearby colonies were receiving emergency/trauma care with increasing frequency. In fact, there were 131 total emergency care incidents (among only 541 individuals over the age of 14) during a sixth month period in 2014-15. This was a surprise, given that the colonies are located in very rural areas, visits to town are infrequent, and emergency care is often sought only for more serious injuries. Most of the incidents for which care was given were related to agriculture and



Photo by Kelly Hoffer, www.hutterites.org

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Director's Message

by Renée Anthony, PhD, CIH, CSP

The Great Plains Center has spent our winter months getting ready for educational, outreach and demonstration events throughout 2016. In addition to the annual Agricultural Medicine Course (June) and Midwest Rural Agricultural Safety & Health (November) events, the "On-the-go" team will again be attending regional farm shows to demonstrate important new equipment and techniques to help farmers and ranchers be safe and healthy on the farm. A calendar of events is available on the GPCAH web site (www.public-health.uiowa.edu/gpcab).

As you are getting ready for the 2016 planting season, we urge everyone to think about specific risks you may be facing this spring.

Ammonia: Eye, skin and respiratory burns from ammonia have sent many farmers to the emergency room. Make sure you are adequately protected when working with this chemical, including having water on board to flush eyes and skin and an ammonia respirator in the cab of your tractor if you have a leak while you are in the field. Wear eye protection (goggles) when inspecting connections, because ammonia leaks from valves and hoses can quickly blind you, preventing you from getting to water to rinse your eyes.

Guarding: You may have removed important guards on equipment while preparing tractors and implements for planting. Make sure to replace guards before putting equipment into service. It is a good time to also see if manufacturers have improved these or other safety devices before the season begins, particularly for older equipment.



Renée Anthony PhD,
CIH, CSP

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The **Agricultural Medicine: Occupational & Environmental Health for Rural Health Professionals** course will be held **June 13-17, 2016** at the University of Iowa College of Public Health. The course provides information and skills to enable safety and health professionals to anticipate, recognize, and prevent occupational illnesses and injuries among members of the agricultural community. Farm tours, a site visit to the National Education Center for Agricultural Safety and interactive safety demonstrations are included in the course. A **Reception and Poster Session** will be held on Monday, June 13 from 4:00-6:00 pm. Participants will have the opportunity to meet with agricultural safety and health specialists and learn about research and outreach activities at the University of Iowa. For additional information visit www.public-health.uiowa.edu/gpcab.

The **GPCAH on the Go** campaign is gearing up for another busy year. Check out their schedule of upcoming events at www.public-health.uiowa.edu/gpcab.

Abstracts are currently being accepted for the **2016 Midwest Rural Agricultural Safety & Health Conference**. This year's conference theme is **Safeguarding Farm Livelihoods**, which can cover a broad spectrum of topics in agricultural safety and health, especially related to risk management, stewardship of environmental and human health, and engineered solutions. The conference will be held **November 15-16 in Sioux Center, Iowa**. Abstracts for breakout session presentations, roundtables and posters will be accepted through May 2nd. Conference information is available at www.public-health.uiowa.edu/icash/2016-mmrash/2016-call-for-abstracts or contact Gayle Olson at gayle-olson@uiowa.edu.

The redesigned *Integrating Safety into Agritourism* website at www.safeagritourism.org was officially unveiled at the Wisconsin Agricultural Tourism Association Summit in Marshfield, WI. The website features virtual walkthroughs covering 15 key areas of agritourism. Contact Scott Heiberger (heiberger.scott@mcrf.mfldclin.edu) for more information.

Mud: Wet weather makes everyone's jobs more difficult, but it also affects safety. When the ground is wet, equipment is less stable, putting you at increased risk of getting trapped under equipment. Think about whether raised equipment might move and trap you if you decide to work under it. Remember that working under vehicles supported by jacks are insufficient: cribbing that has a larger surface area to support a vehicle is more stable in all kinds of ground conditions.

Think these injuries won't happen to you? Neither did many farmers who have been injured during previous planting seasons. Links to fatality investigation reports (www.public-health.uiowa.edu/face) and Safety Watch articles (in Iowa Farmer Today, also at www.public-health.uiowa.edu/gpcab/safety-watch/) are available on line to illustrate how farmers have been injured and what to do to prevent injuries from these and other agricultural hazards.

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).

Save the Date

Midwest Rural Agricultural Safety & Health Conference

Safeguarding Farm Livelihoods

November 15-16, 2016

**Terrace View Event Center
Sioux Center, Iowa**

www.public-health.uiowa.edu/icash



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GREAT PLAINS
Center for Agricultural Health

Farm Families Alive & Well is published 4 times per year
Kay Mohling, Editor kay-mohling@uiowa.edu 319/335-4219

<http://cph.uiowa.edu/gpcab>

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Great Plains Announces Pilot Program

by Jenna Gibbs, PhD, Research Coordinator, GPCAH

Are you an academic institution, health care provider, or non-profit organization interested in funding an agricultural health pilot project?

Each year, the Great Plains Center offers grant funding up to \$15,000 to researchers and community groups engaged in agricultural safety and health practices. Community grants are awarded to enhance capacity to deliver evidence-based agricultural health programs. Academic grants generate new safety and health knowledge to promote best practices. High priority is given to projects addressing new and emerging issues, vulnerable populations, and aging of the agricultural workforce. **The deadline for pilot grant proposals is April 3rd, 2016.**

For more information on how to apply for a pilot grant, contact Jenna Gibbs, GPCAH Center Coordinator, at CPH-GreatPlainsCenter@uiowa.edu or visit the GPCAH website, at www.gpcab.org



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included eye injuries, bone fractures, skin wounds, crushed fingers, burns, and concussions.

Staff at Avera St. Benedict designed a unique outreach program, *Safe Farming, Safe Living*, to increase the awareness of farm hazards and to promote safe work practices among the members of eight Hutterite colonies. Financial support was provided from a grant at the University of Iowa and organizational support was from local agribusiness representatives and the South Dakota Department of Game, Fish, and Parks. This program coordinated events throughout the colonies — in schools, dining halls, a machine shed, and even in the local colony butcher shop. Special emphasis was placed on developing and delivering culturally appropriate agricultural safety and health training that would be accessible to all colony members, regardless of age or spoken language. Agricultural health topics included cancer prevention and screening, zoonotic diseases, eye protection, heat/cold stress, and sun safety. Safety topics included livestock handling, All Terrain Vehicle operations, grain handling, firearm safety, and prevention of tractor-related injuries.

Overall, the initial *Safe Farming, Safe Living* outreach program was a success — with more than 450 Hutterite participants. After the program, 88% of participants stated they were confident in identifying farm safety hazards. Most participants (92%) thought the tractor safety activities were especially helpful. The colony women were particularly eager to learn more about farm safety and how they can reinforce its importance in their homes and with younger generations. No major life-threatening agricultural injuries have treated at the health center since the program began in 2015.

To learn more about the *Safe Farming, Safe Living* outreach project, contact Melissa Gale at Melissa-gale@avera.org.

calendar

April 11-14

2016 AgrAbility National Training Workshop
Fort Collins, CO
<http://agrability.org/ntw>

May 10-13

National Rural Health Association Meeting
Minneapolis, MN
www.ruralhealthweb.org/annual

May 21-26

American Industrial Hygiene Association (AIHce) Conference
Baltimore, MD
<http://aihce2016.org>

June 13-17

Agricultural Medicine Training
Iowa City, IA
www.public-health.uiowa.edu/gpcab

June 26-29

International Society for Agricultural Safety and Health (ISASH)
Lexington, KY
<http://isash.org>

July 17-20

American Society of Agricultural and Biological Engineers Annual Meeting
Orlando, FL
www.asabemeetings.org

July 23-27

18th Annual Agricultural Media Summit
St. Louis, MO
<http://agmediasummit.com>

July 24-28

National Association County Agricultural Agents Conference
Little Rock, AR
www.nacaa.com

November 15-16

Midwest Rural Agricultural Safety & Health Conference
Sioux Center, IA
www.public-health.uiowa.edu/icash/2016-mrash

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Research to Practice

Rapid Response to Protect Poultry Workers

by Matt Nonnenmann, MS, PhD, CIH, Assistant Professor
and Kate O'Brien, PhD, Postdoctoral Scholar

In 2015, 49.7 million birds were euthanized as a result of the highly pathogenic avian influenza (HPAI).¹ Clear procedures for health protection were needed to protect nearly 40,000 poultry workers throughout the U.S. Poultry workers were exposed to avian influenza virus, dust, hazardous gases, chemicals associated with depopulation, composting and cleaning during the outbreak.

A rapid response to assess hazards and collaborative efforts of four NIOSH-funded AgFF Centers and the Agri-Safe Network resulted in an educational flyer designed to communicate exposure risks and recommend personal protective equipment. The guide was posted on USDA and CDC websites (www.cdc.gov/niosh/agforfish). Over 900 poultry producers received this information during the height of the outbreak. This rapid response to an emerging issue illustrates the ability of NIOSH AgFF Centers to quickly mobilize experts to protect workers from hazardous conditions resulting from disasters.

The next steps involve further characterization of occupational hazards during depopulation and composting of birds infected with HPAI. A pilot study funded by the GPCAH is underway to determine concentrations of hazardous airborne contaminants during work on farms infected with HPAI. Additional exposure information will allow the optimization of exposure control strategies.

1. HPAI 2014/15 Confirmed Detections. (2015, June 17). https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian-influenza-disease/sa_detections_by_states/hpai-2014-2015-confirmed-detections