



Upper Midwest Agricultural Safety and Health Center

February 2018

What are our priorities?

The **Upper Midwest Agricultural Safety and Health Center (UMASH)** is one of 11 agricultural research, education, and prevention centers funded by the National Institute for Occupational Safety and Health (NIOSH). UMASH brings a multidisciplinary approach guided by **One Health** principles to improve the health and safety of agricultural workers and their families in the Upper Midwest region. Our priority is to understand, through stakeholder networks, the ever-changing agricultural industry, especially livestock and poultry production throughout the Upper Midwest, to ensure the health and well being of the workers and their families.

What do we do?

- Conduct research to:
 - Understand health and injury risk in dairy and swine production and develop tools for prevention and safe return to work.
 - Understand the health risks of infectious zoonotic disease (disease that can spread between animals and people) in producers, workers and others exposed in agricultural settings.
 - Understand and address the health and safety needs of the immigrant workforce in the Upper Midwest.
- Provide outreach and education to:
 - Develop and share health and safety resources and evidence-based recommendations for best practices.
 - Engage the agricultural community to ensure training and educational resources reach producers, workers and their families.
 - Build partnerships with industry and others to identify and address gaps and emerging or re-emerging issues.

What have we accomplished?

- Produced training videos and factsheets on **needlestick prevention**, in English and Spanish, for dairy and swine producers. OSHA incorporated these factsheets as OSHA guidance documents for the Dairy Local Emphasis Program in Wisconsin.
- Produced a 5-part video series, in English and Spanish, on **safe animal handling** that has been adopted as required training by a large Minnesota dairy producer to meet the National Dairy FARM Program 3.0 ethics requirements.
- Produced 20 agricultural health and safety videos, which have garnered 24,000 views on the **UMASH YouTube** and **US AgCenters YouTube** channels as of Nov 2017.
- Partnered with state officials to produce and disseminate educational resources promoting **safe agritourism**.
- Determined that **air contaminants in swine production** are higher in gestation pens vs stalls and dry vs wet feed. Also determined that power washing may cause exposure peaks for some contaminants, including hydrogen sulfide.
- Established that certain **zoonotic pathogens** occur more frequently in agricultural workers and families than previously estimated.
- Developed an OSHA approved **health and safety curriculum**, in English and Spanish, that trained over 800 immigrant workers on 70 farms; Over 50 organizations across the US have requested the curriculum (See quote and graph to the right).

What's next?

- Develop prevention tools for costly and severe injuries in swine and dairy production.
- Design and test better methods to measure risk of exposure to zoonotic diseases.
- Develop a train-the-trainer program for rural firefighters to deliver agricultural safety and health information to farmers.
- Engage community health and producer networks to deliver bilingual safety curriculum to immigrant dairy workers in Minnesota.
- Engage health departments in surrounding states regarding zoonotic disease surveillance.
- Provide timely workshops that promote worker safety and health resources.
- Respond to more producers and workers in the Upper Midwest region to deliver relevant education and training resources.
- Reach out to our stakeholders to understand emerging trends and needs of our regional agricultural workforce.

At-A-Glance

The Upper Midwest Agricultural Safety and Health Center brings together experts from five leading research organizations to address occupational health and safety issues in agriculture in the Upper Midwest.

- U of MN – School of Public Health
- U of MN – College of Veterinary Medicine
- National Farm Medicine Center
- Minnesota Department of Health
- Migrant Clinicians Network

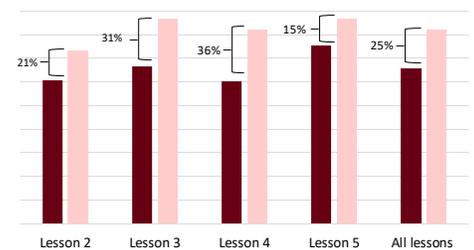
This snapshot shows recent accomplishments and upcoming work.

UMASH, located in Minneapolis, MN serves five Upper Midwest U.S. states.



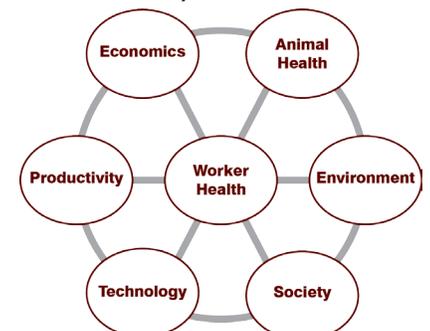
"Safety is the elephant in the room and it's overwhelming for someone in my position. [This program]...breaks it down so that we can tackle it one thing at a time."
-Dairy Producer, Seguridad Project

Percent improvement by Lesson in Worker Safety Knowledge



Source: Juarez-Carrillo, P et al.
<https://doi.org/10.1177/1524839916683668>

The One Health Approach to Worker Safety and Health.



Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

