2021 Virtual Forum for Migrant and Community Health
March 22-26, 2021

Immigrant Dairy Worker Health and Safety Trainings
Wisconsin and Minnesota

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Upper Midwest Agricultural Safety and Health Center (UMASH)

Funding from the National Institute for Occupational Safety and Health
Upper Midwest Agricultural Safety and Health Center (UMASH) is one of eleven Centers of Excellence in Agricultural Disease and Injury Research, Education, and Prevention funded by the National Institute for Occupational Safety and Health (NIOSH) throughout the United States.

Mission of NIOSH Ag Centers

To minimize burden of occupational disease and injury to agriculture workers and their families

• Research
• Prevention
• Education
• Communication
Presentation Outline:

- Training curriculum Wi - MN
- Community health worker (CHW) model
- Outcomes
- Producer survey on COVID19
- MN producers vaccine query
Changing dairy industry

• Farms ↑ size and productivity, ↓ in numbers
• Immigrant labor accounts for 51 percent of all dairy labor and dairies that employ immigrant labor produce 79 percent of the U.S. milk supply.
• ~50% of hired workforce are immigrant.
• 87% male
• 16 – 45 years old
• 88.5% from Mexico
• 80% speak no English
• Limited formal education
What injuries happen on dairy farms?

Qué lesiones ocurren en las granjas lecheras?

Please write your answers in the Chat Box

Por favor escriba sus respuestas en la caja de charlas (caja de chateo)
Work Hazards & Injuries

A hazard is anything at work with the potential to make you sick or to injure, hurt or kill you.
Immigrant Workers in WI

- 5 yrs working in dairy
- 67% no previous health and safety training
- 26% injured at work

N = 836, Participants in Seguridad project
Project development included:

- Matthew Keifer, MD, MPH
- Amy K. Liebman, MPA, MA
- Patricia Juárez-Carrillo PhD, MPH
- Iris Reyes, MPH
- Yurany Ninco Sanchez, RN
- Dairy Workers and Producers
- Professional Dairy Producers of Wisconsin
- Mexican Consulate of Saint Paul, MN
- Puentes/Bridges
- UW River Falls
Training curriculum – Context & Culture

- Evidence-based
- Literature review
- Needs assessment
- Audience
  - Spanish
  - Unexperienced
- Picture-based
- 8th grade reading level
- Culture
  - Risk takers
  - machismo
  - Large dairies
Train-the-Trainer Curriculum

- Introduction to Hazards
- Animal Handling
- Machinery and Equipment
- Workers’ Rights and Responsibilities
- Chemical Safety and Confined Spaces
Reinforce Health and Safety Messages
Training curriculum – Sign in sheet

Information includes

• Farm name
• Location
• Date
• Time
• Lesson topic
• Trainer Name
• Worker names

Importance

• Required by OSHA
• Assess training needs
Training curriculum – Assessments

• Pre and post tests
• Read out loud
• Paper
• Anonymous
• 5 questions
• One correct answer
• Reviewed after post test
Promotor de Salud: Community health worker (CHW) model

- **Who?** Locally trusted peers
- **What?** promotor de salud (PdS), lay health worker
- **Why?** Deliver health information to community
- **How?** Non-formal, participatory education using popular media
CHW Activities

• Conduct monthly observations
• Reinforce safety practices
• Serve as liaison between workers and management
• Train new workers
• Participate in monitoring calls and visits
Flipchart used for trainings

The Primary Hazard in Dairy is...

- Cattle

Ask the group with Hazard A – Cattle.
Please share with the group how cattle can cause injuries and illness and what types of injuries and illness can result when working around cattle.

Explain:
Cows and bulls are the cause of most injuries and some illnesses on a dairy farm.

Pregúntele a la equipe del Peligro A – El ganado.
Por favor díganle al grupo los peligros del ganado que puede causar lesiones y transmitir enfermedades, y también qué tipos de lesiones y enfermedades son causadas al trabajar alrededor del ganado.

Explique:
Los vacas y los toros son la causa de la mayoría de las lesiones y algunas enfermedades en una lechería.
PdS activities

- Conduct monthly observation
- Communicate
- Inform management
- Train new Hispanic workers
- Reinforce safety practices
- Participate in monthly calls
- Take part in biannual evaluation
Training assessment results

- Increased change in worker knowledge was significant

<table>
<thead>
<tr>
<th></th>
<th>L2**</th>
<th>L3**</th>
<th>L4**</th>
<th>L5**</th>
<th>All Lessons**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE SCORE</strong></td>
<td>60.9</td>
<td>66.4</td>
<td>60.4</td>
<td>75.3</td>
<td>65.8</td>
</tr>
<tr>
<td><strong>POST SCORE</strong></td>
<td>73.5</td>
<td>86.7</td>
<td>82.3</td>
<td>86.8</td>
<td>82.2</td>
</tr>
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** p<.001
Impact of the Program

- It enhanced the discussion on health and safety on the farm.
- It provided a forum for workers to talk about health and safety.
- It increased health and safety for workers.

The program was a great benefit to our farm in many ways. We became more aware of the numerous different areas we have to work on with safety and how we need to improve our employee training.

"I know that I know about safety but it is good to be reminded of the importance of it."

farmers:

It assisted with opening up communication about how employees feel about their job. We recommend it as an exceptional tool for any dairy or farm!

workers:

After a training I feel like learning more. There is so much to learn

"I've worked on this dairy for 7 years. Until this training, I had no idea how to stay safe."

"It’s good because it has the photos and explanations."

"We have experience milking but we don't know all the hazards that the farm has."

Once it happened to me that I pushed a cow but the cow was pushing me. I didn’t know that cows respond to where the pressure is coming from

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COVID-19
Impact on Participating Farms
9 (24%) of 37 dairy producers reported that someone on their farm tested positive for SARS-CoV-2
## Survey of Dairy Producers in Minnesota and Wisconsin
July 2020 (n=37)

<table>
<thead>
<tr>
<th>Characteristic/Question</th>
<th>Response n (%)</th>
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<tbody>
<tr>
<td>Number of Employees Provided Housing</td>
<td>Median = 22 (range 5 to 120) Yes - 23 (62%)</td>
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| Source of Information about COVID-19                        | News - 21 (57%)
|                                                          | Health Dept. or Hospital – 20 (54%)
<p>|                                                          | CDC – 17 (46%)                                    |
| Are you prepared for COVID-19?                             | Yes - 15 (41%)                                    |
| Do you have a protocol for an ill employee?                | Yes – 25 (68%)                                    |
| Do you ask that employees wear facemasks?* (before the mask mandate) | Yes – 15 (41%)                                    |</p>
<table>
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<th>Characteristic/Question</th>
<th>Responses</th>
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<tbody>
<tr>
<td>A vaccination team comes to the farm to vaccinate all the workers in one day</td>
<td>6 of 10 agree</td>
</tr>
<tr>
<td>Vaccines should be available at a nearby community center on certain dates for workers to go on their own</td>
<td>6 of 10 agree</td>
</tr>
<tr>
<td>Vaccines should be available at a clinic on certain dates for workers to go on their own</td>
<td>6 of 10 agree</td>
</tr>
<tr>
<td>The dairy could take all the workers to a nearby location to be vaccinated</td>
<td>2 of 10 agree</td>
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| Farmers comments                                                                       | • Stagger vaccinations to be able to cover for workers not feeling well after the vaccine.  
• Great, the faster the better.                                                      |
Thank you