



# Keeping Producers/Ag Workers and their Families Safe A Team Approach

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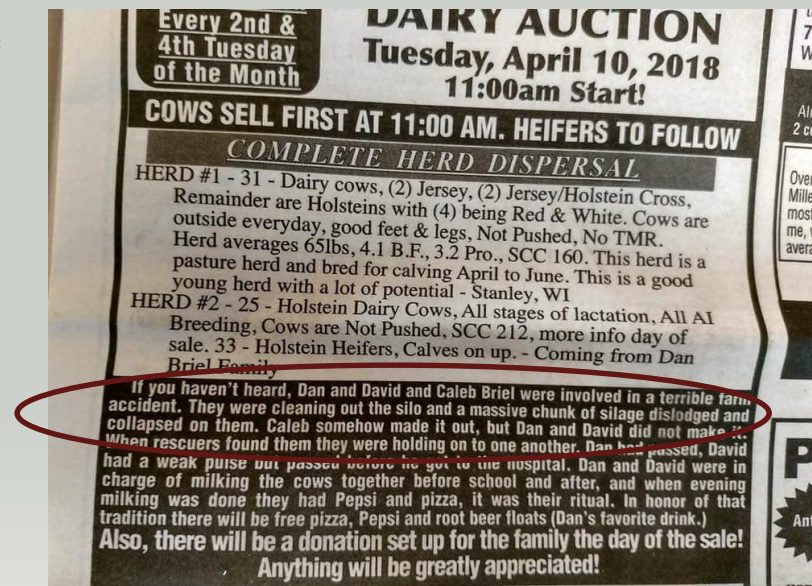
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# Injuries in Agriculture: The Big Picture

- Ag workers ~8 times more likely to die on the job than all other workers\*
- 40% higher rate of non-fatal injuries\*
- **Animal agriculture workers have higher rates of injury than other ag workers 6.7 vs 5.5 injuries/100 workers\***
- Costs of agricultural injuries are enormous;
  - \$7.6 Billion in medical and lost productivity costs<sup>#</sup>



Source: \*Bureau of Labor Statistics  
#Derived from Leigh, et al. 2001

# Silo and Grain Bin Deaths

## Working Towards Farm Safety After 4th Grain Bin Fatality

by Grace Brandt Sep 18, 2019 0



LOCAL

## Authorities: Central Minnesota man dies in fume-filled silo while trying to save brother, nephew

The brother and nephew were hospitalized after being found unconscious.

By Libor Jany Star Tribune | DECEMBER 21, 2019 — 9:37PM

A man died after breathing toxic fumes Saturday in central Minnesota while trying to save his brother and nephew, who had fallen unconscious inside of a silo, according to the Douglas County Sheriff's Office.

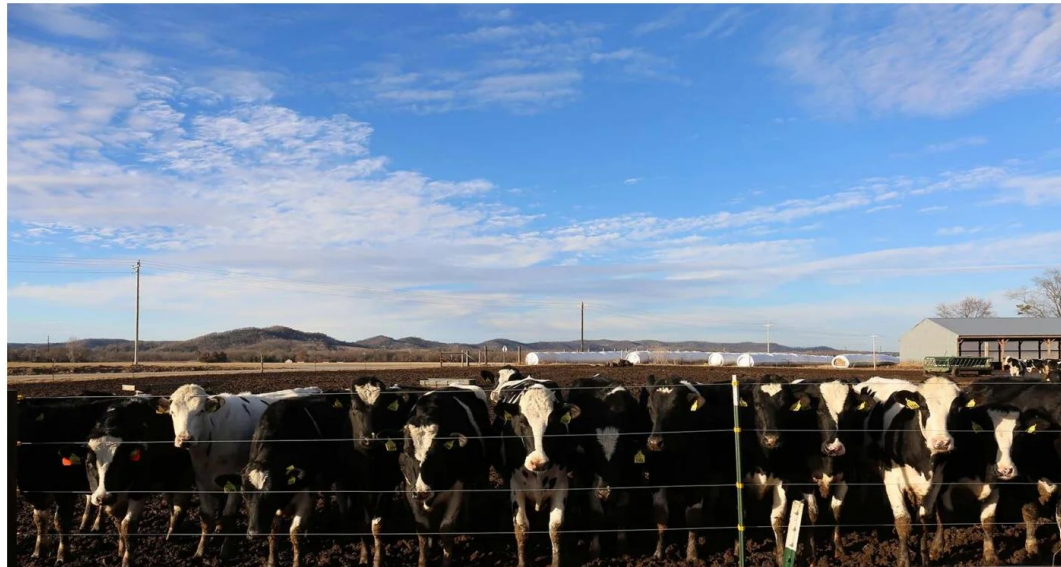


# Bring Me (MN) the News

## Farmer trampled to death by cow in Otter Tail County

The 85 year old was trying to tag a calf.

ADAM UREN · APR 10, 2018



# Most Commonly Reported Injuries/Fatalities Minnesota, 2017 - 2019

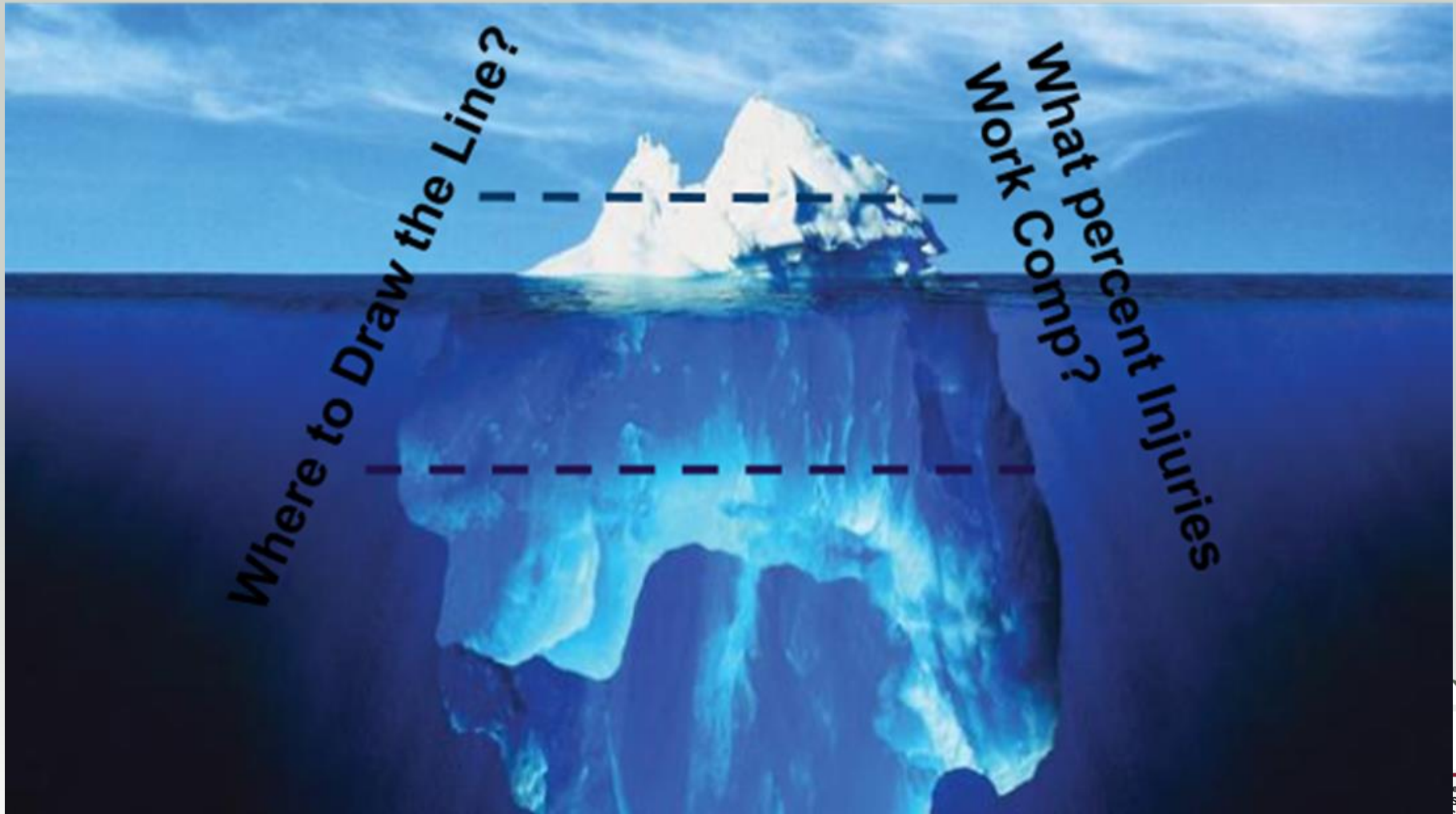
2017	2018	2019
Equipment related (11)	Equipment related (13)	Grain bin/Silo (11)
ATV/Skid steer (7)	Tractor (9)	Car/Tractor (9)
Tractor (6)	Car/Tractor Incident (6)	Equipment related (8)
Car/Tractor incidents (6)	ATV/Skid steer (5)	Tractor (4)
Grain bin (1)	Grain bin (4)	ATV/Skid steer (2)

Ag Injury News - <https://www.aginjurynews.org/>





# Work Injury and Illness



# Upper Midwest Agricultural Safety and Health Center



Funding from the National Institute for Occupational Safety and Health

[umash.umn.edu](http://umash.umn.edu)



# Evolving Challenges

- Farmers face multifaceted challenges
- Need to be responsive to the evolving conditions of farming
  - Changing climatic conditions
  - Economics
  - Diseases





# Support Collaborative and Novel Approaches



## GRAIN HANDLING SAFETY CHECKLIST

Potential Hazard	Yes	Needs Correction	Date Corrected or Notes
Has equipment been powered off at main disconnect and locked and tagged?	<input type="checkbox"/>	<input type="checkbox"/>	
If there is potential for combustible gas, vapors or toxic agents, has the oxygen level been tested with a gas monitor?	<input type="checkbox"/>	<input type="checkbox"/>	
Is a rope and harness available for anyone entering a grain bin?	<input type="checkbox"/>	<input type="checkbox"/>	
If a worker enters, is an observer present and in communication?	<input type="checkbox"/>	<input type="checkbox"/>	
Is the observer trained and able to initiate rescue?	<input type="checkbox"/>	<input type="checkbox"/>	
Is rescue equipment provided and specifically suited for entry?	<input type="checkbox"/>	<input type="checkbox"/>	
Are there NIOSH approved masks or respirators available?	<input type="checkbox"/>	<input type="checkbox"/>	
Are grain and feed bins clearly labeled to warn of the hazards of flowing grain or feed?	<input type="checkbox"/>	<input type="checkbox"/>	
Do all bins have permanent ladders inside and outside?	<input type="checkbox"/>	<input type="checkbox"/>	
Are hearing protectors available for wearing around noisy equipment?	<input type="checkbox"/>	<input type="checkbox"/>	
Are equipment guards and shields in place and in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	

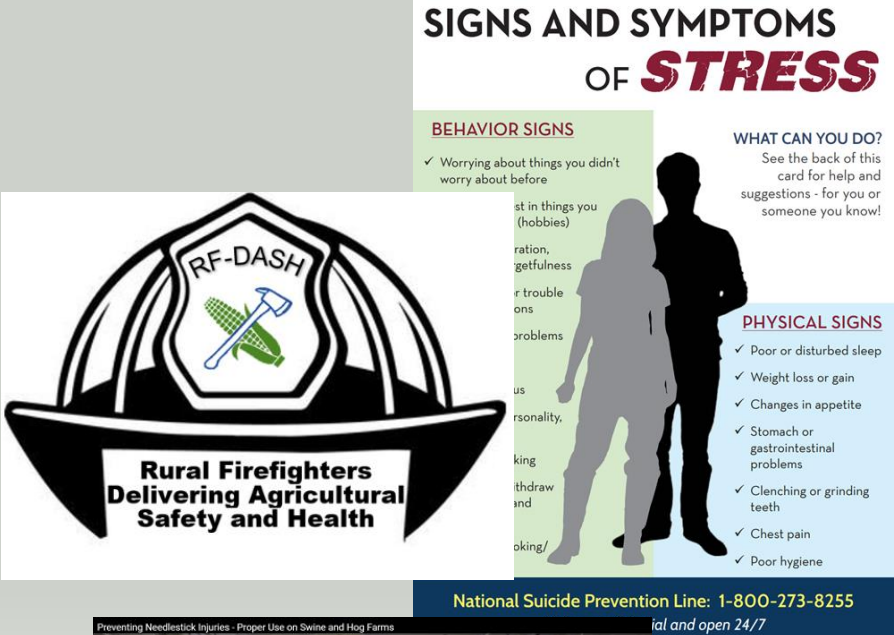


Name of person completing safety check: \_\_\_\_\_ Date completed: \_\_\_\_/\_\_\_\_/\_\_\_\_



# Other Collaborative Projects

- Stress and Mental Health
- Volunteer Fire Department Training
- Animal Handling Education
- Transmission of airborne viruses
- Immigrant worker training



**SIGNS AND SYMPTOMS OF *STRESS***

**BEHAVIOR SIGNS**

- ✓ Worrying about things you didn't worry about before
- ✓ Distress in things you (hobbies)
- ✓ Irritation, forgetfulness
- ✓ Problems or trouble
- ✓ Problems
- ✓ Personality
- ✓ Drinking
- ✓ Withdrawal
- ✓ Smoking/

**WHAT CAN YOU DO?**  
See the back of this card for help and suggestions - for you or someone you know!

**PHYSICAL SIGNS**

- ✓ Poor or disturbed sleep
- ✓ Weight loss or gain
- ✓ Changes in appetite
- ✓ Stomach or gastrointestinal problems
- ✓ Clenching or grinding teeth
- ✓ Chest pain
- ✓ Poor hygiene

**Rural Firefighters Delivering Agricultural Safety and Health**

**National Suicide Prevention Line: 1-800-273-8255**  
Available 24/7



# Create Responsive Team for the Emerging Issues

- Educators
- Community leaders
- Extension
- Health care providers
- Veterinarians
- Nutritionists
- Industrial hygienist
- Others?



# Summary Thoughts

- Support broad initiatives (i.e. training, education, outreach) with the varied challenges impacting farmers
- Create multidisciplinary teams to:
  - Understand farming/community
  - Identify hazards
  - Provide appropriate prevention/control measures



# Questions?



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