

Participant Notes Pages

EEE Hazards - Section 1: Stand TALL

Youth & Grain

- Youth under _____.
- Do not work in/around grain storage unless _____.
- Do not work inside grain structures when grain is being _____, _____, or _____.
- Properly trained by experienced & knowledgeable _____ for all tasks.
- Knowledge about ladder/climbing safety
- Employers must comply with _____.

Stand T.A.L.L.

Talk. _____. Learn. _____.

Employee Rights

www.whistleblowers.gov

www.osha.gov

Workers are entitled to:

1. _____ & _____ working conditions which **DO NOT** pose a risk of serious harm.
2. Fair compensation.
3. _____ unsafe or unhealthy working conditions without retaliation.

Major Grain Hazards

- _____ / _____
- _____
- Falls
- Electrical
- Other Hazards
 - Dust
 - Struck By
 - Noise exposure

Participant Notes Pages

EEE Hazards - Section 2: Hazard & Risk

Hazard = Danger; Risk = Action

Hazard: _____

Risk: _____

What you don't know CAN hurt you

Reduce Risk

- Know _____
- Understand _____
- Take proper _____

Take Action to Reduce Risk

- _____ hazard
- _____ hazard
- _____ hazard
 - _____ equipment
- _____
- Use proper PPE

Participant Notes Pages

EEE Hazards - Section 3: Entrapment/Engulfment

Entrapment vs. Engulfment

- Entrapment
 - _____ of body submerged
 - Over _____ – can't rescue self
 - _____ to helplessness
- Engulfment
 - Total submersion _____ seconds
 - Usually _____ recovery
 - Death caused by suffocation

Impact – Entrapments

- Entrapments increased > _____% (2001-2010)
- 36.8 per year - 5 year average
- _____% involve youth 11-20 years
- _____% _____ rate 11- 20 age group
- More common on _____
- Numbers are under reported

Grain Facts

- Normal: sink around _____ inches
- One cubic foot of grain weighs~ _____.
- Grain acts like _____

Hazard – Bad grain condition

Bad Grain Condition

- _____ temperature
- _____ moisture content
- Smell - _____, musty, fermented, _____

Good Grain Condition

- _____ temperature
- _____ moisture content
- _____ movement
- Sweet smell



Hazard – Tower, Cone Up or Cone Down

- Grain towers
- Grain cones up (_____)
- Grain cones down

Entrapment/engulfment – 3 ways

- _____ Grain
- _____ Grain
- _____

Flowing Grain

- Acts like quicksand; pulls worker down
- _____ worker in seconds
- **NEVER** “_____” grain



Bridged Grain

- Crust forms on top; creates cavity _____
- _____ when walked on
- _____ worker



Avalanche Grain

- Worker attempts to dislodge grain
- Falls unexpectedly; buries worker
- Stay above the grain



Ground Piles & Flat Storage

- Moving/flowing grain
- Tower/Pyramid

Lock out/Tag out/Try out – LOTO

Keep others from turning machines on!

- De-energize all energy sources
- Lock out – put on lock
- Tag Out – warn others
- Try Out – ensure no energy is present

Avoid entrapment/engulfment

- Do not _____ bin with grain
 - Law – must be ≥ 16
- Lock entrances

Bin entry – all workers

- MUST be _____
- ALWAYS Lock Out/Tag Out
- NEVER “walk down” grain
- ALWAYS have _____
- Use harness & lifeline

Rescuing a victim

Only trained personnel enter a bin

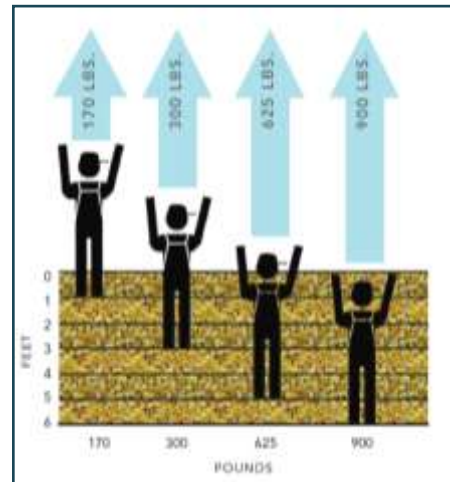
- Stabilize victim
 - grain tube or other means

Lock out/Tag out Requirements



Your lock cannot be opened with another key.

Why can't you help?



Amount of force required to pull a person out of grain depends on _____ of entrapment.

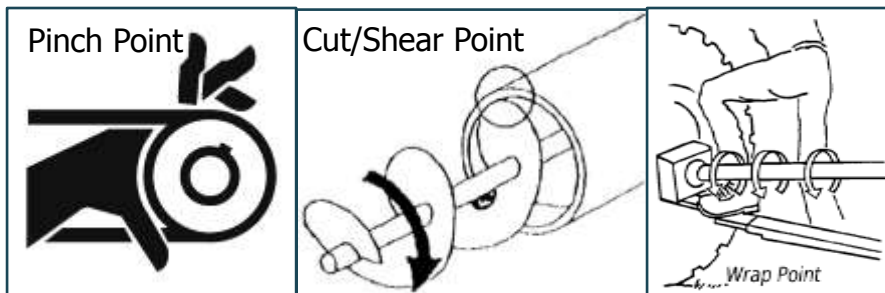
- Remove grain
 - cut bin exterior evenly
- **NEVER** attempt a rescue

Participant Notes Pages

EEE Hazards - Section 4: Entanglement

Common Machine Hazards

- _____/Nip Points
- Shear/Cutting Points
- _____ - _____ Points
- Wrap Points



Guard ALL moving parts to reduce exposure & injury.

Pinch/Nip points

- _____
- Pulley, _____, gears
- Auger drive motor
- Bucket leg drive/belt
- Sliding doors (bin)

Pull-in points

- Crop/forage harvesters
- Combine headers
- Windrow pickups
- _____

Guarding

Guard _____ exposed moving parts.

Cutting/Shear point

- _____
- Sickles
- Mower blades
- Harvesters
- Windrower cutter bar

Wrap Points -

Wraps in direction shaft is turning

- _____ shafts
- Augers
- Motor drive shafts
- Pulley attachments

Rotating Speeds

You do not have time to react!

- _____ second to react
- Equipment rotates >500 rpm
- 3/4 second pull-in person > _____ feet

PTO Demonstration Observations

Human reaction time activity – observations

Entanglement Hazard Prevention

- Review _____ manual
- _____ in place
- Wear _____ fitting clothes
- Remove all ties & drawstrings
- Pull back & secure hair
- No jewelry
- Keep children away

