

**LALLEMAND
ANIMAL NUTRITION**



**SPECIFIC
FOR YOUR
SUCCESS**



Planning for a safe & successful harvest



Becky Arnold & Stephanie Jens
Customer Harvester Meeting
Moline, IL
February, 26-27, 2020

Explore www.QualitySilage.com



Becky Arnold

- I joined Lallemand Animal Nutrition in October 2018, as a Territory Business Manager for Colorado, Kansas and Arizona.
- I have worked with livestock producers and their silage operations throughout CO, KS, NE, NM, OK, TX and AZ
- Previously owned and operated a Customer Harvesting Business in W. Texas.
 - Manure Spreading and some customer farming

Ben, my Office Manager



Fatality Causes

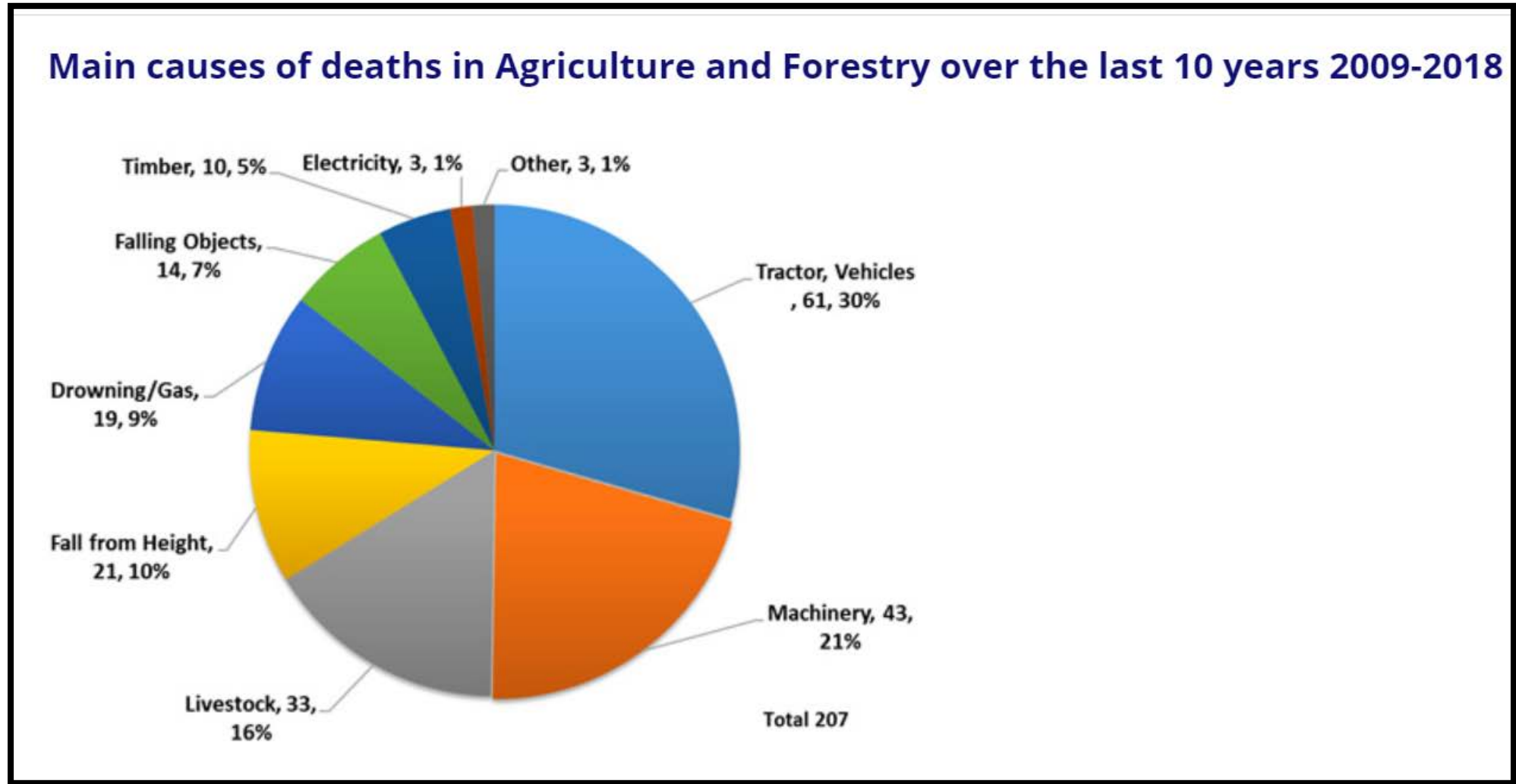


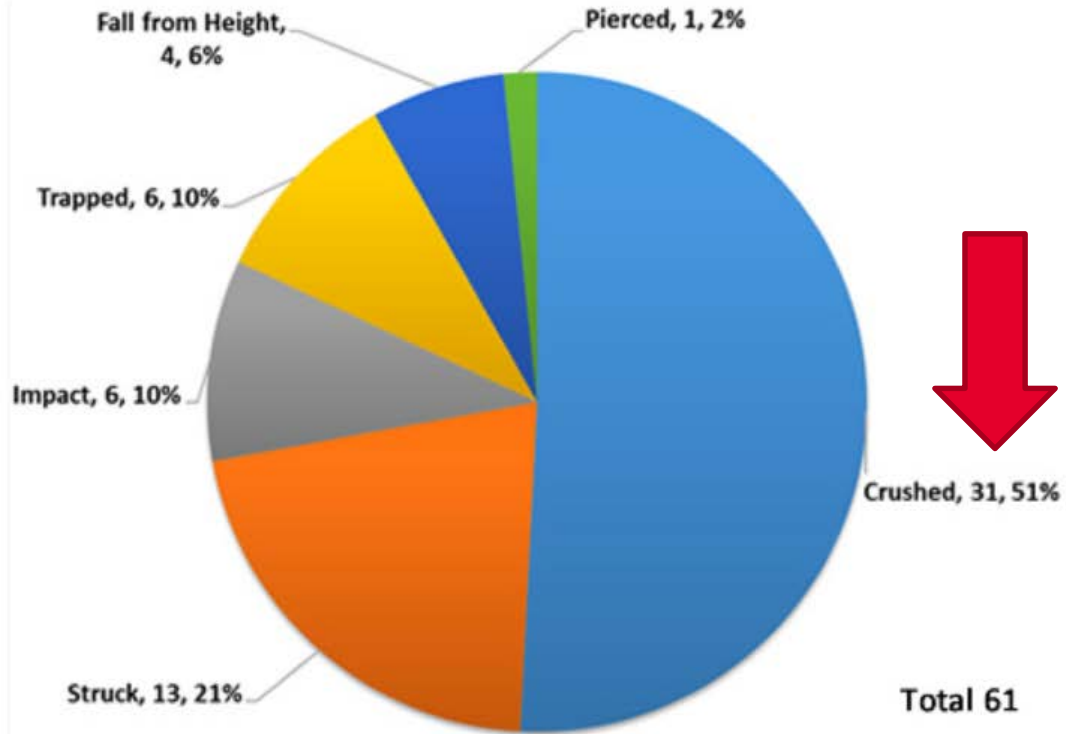
Illustration from HSA Health and Safety Authority of Ireland

These are not USA statistics, but these values are similar across all geographical areas

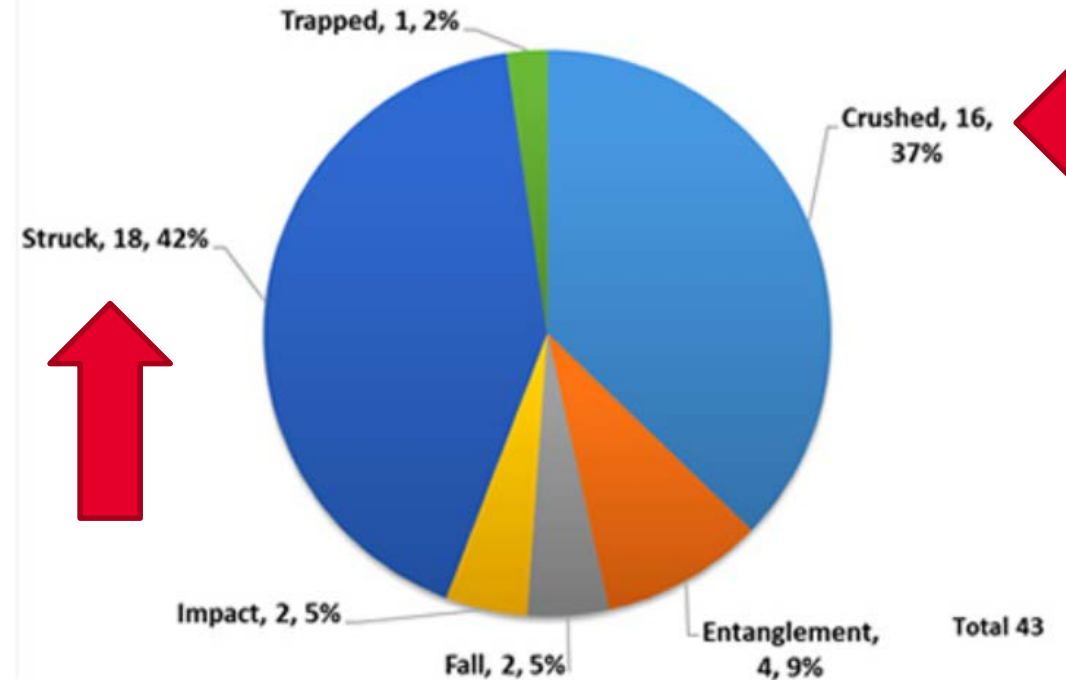
...Equipment

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Deaths due to Tractors and Farm Vehicles 2009-2018 (30% of total Fatalis)



Deaths due to Machinery 2009-2018 (21% of total Fatalis)



...Falls/Collapse

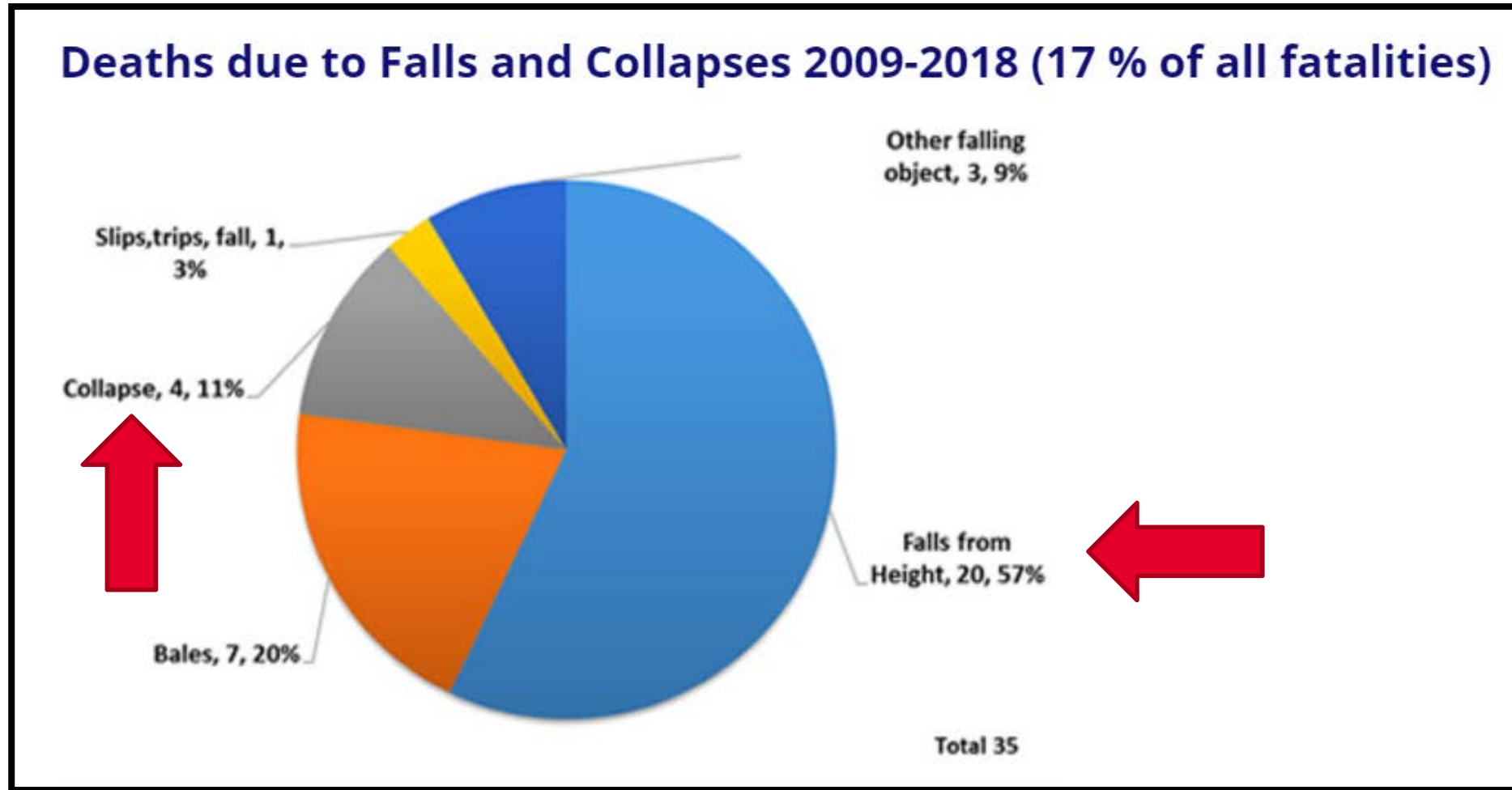


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Who is at RISK?

- 2018: 2,038,000 Full time works in production AG plus @ 1.4 to 2.1 MIL crop workers hired annually
- 2014: 893,000 youths < 20 years old on farms, 454,000 working (not just living on farm)
266,000 of these were JUST hired in the year 2014

2014 was the last year reported. Previous years (1999 to present) parallel these figures.

NIOSH & CDC

Fatalities

1992	730 deaths	23.1/100,000 workers	} Texas A&M Extension
2002	789 deaths	22.7/100,000 workers	
2010	476 deaths	26.2/100,000 workers	} NIOSH/CDC
2017	416 deaths	20.4/100,000 workers	

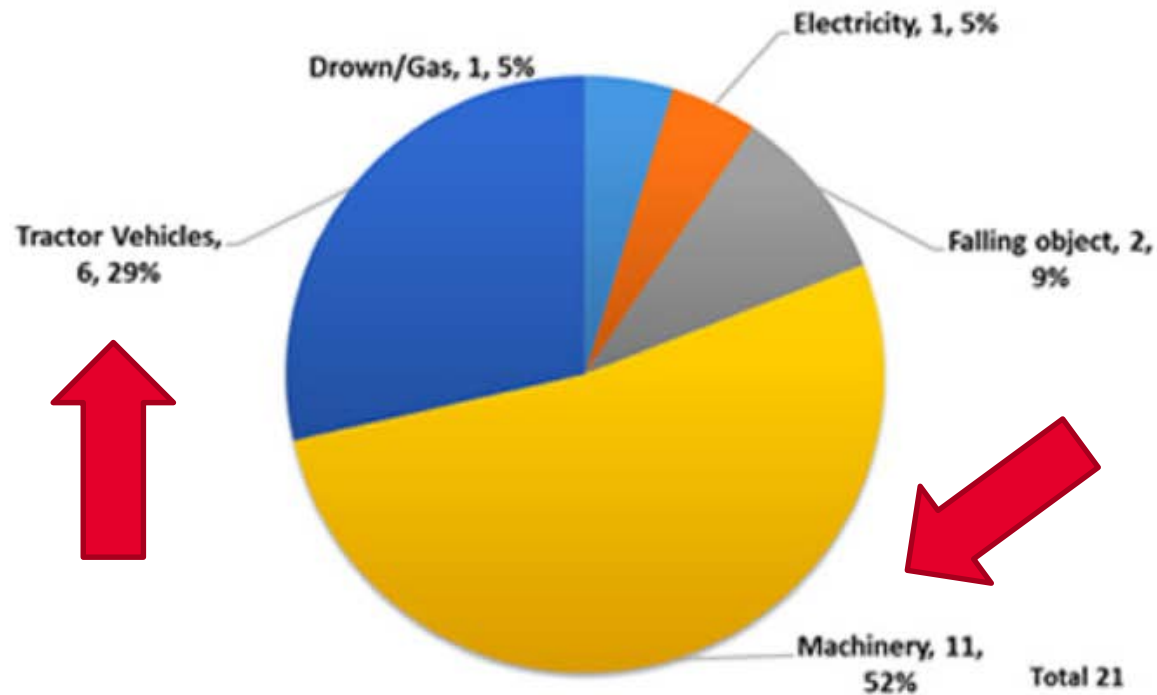
Transportation incidents, including tractor overturns, were the leading cause of deaths to farm workers.

OSU- 2004 to 2013 168 deaths, 75 were Roll Over incidents

ROPS (Roll Over Protection Structure) would have prevented most of the roll over deaths. In 2014 only 62% of tractors were equipped with ROPS.

<20's & Elderly

Deaths of Children on Farms 2009-2018 (10% of all fatalities)



Deaths to Older Farmers (>65 years) 2009-2018 (38% of Total Fatalities)

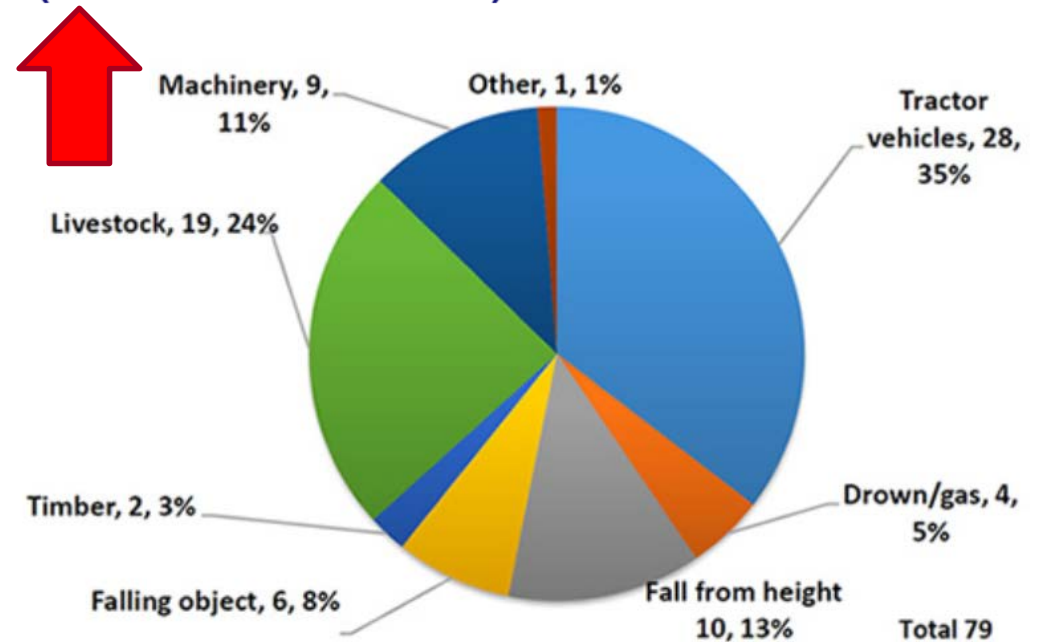


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Injuries

DAILY: 100 farm workers suffer a work loss injury
50% are reported as strain or sprain injuries.

2014: 12,000 youths were injured on farm
4000 of these reported injuries were farm work related

Are all of these Statistics directly HARVEST related?

50%

Of @ 500 incidents (not just fatality) reported to Iowa Dept of Public Health per year **HALF** are during Aug, Sept Oct & Nov

“Safety is our #1 Priority”

The most dangerous jobs in the US

- | | |
|---|---|
| 1 Fishers and related fishing workers | 6 Structural iron and steel workers |
| 2 Logging workers | 7 Driver/sales workers and truck drivers |
| 3 Aircraft pilots and flight engineers | 8 Farmers, ranchers and other agricultural managers |
| 4 Roofers | 9 First-line supervisors of landscaping, lawn service and grounds-keeping workers |
| 5 Refuse and recyclable material collectors | 10 Electrical power-line installers and repairers |

SOURCE 24/7 Wall Street

● USA TODAY MONEY

Safety is everyone’s Highest Priority, yet our industry remains in the Top 10!

Over the past 20 years, we have placed between #6 and #8 on this list.

From: Bureau of Labor and Statistics

The Custom Harvester

Feel like you carry the weight of the world
on your shoulders?

**THE
PRESSURE
IS ON!**

The Custom Harvester

- You have **ONE** to **SEVERAL** machines worth **3/4M** that gotta **EAT**
- These machines are **SEASONAL** and must earn their keep
- You may have a large geography to cover in fractional time
- Everyone's crop is ready at the same time
- Your customer's are putting on the pressure
- Its fixin to **RAIN**
- You really do want to do a great job
- Half your crew are **Greenhorns**
- You hope all your trucks are gonna show up
- Do you have enough **PACK TRACTORS?**
- Do you have to hustle your air compressor and fuel trailer between locations?
-**\$\$\$**..... **ETC**





Plus sometimes stuff just happens



Defoliating Hail



Severe Drought Stress



Flooding

Prepare for the Best and Manage the Rest

The 7 P's is a British Army adage for

Proper
Prior
Preparation
Prevents
Piss
Poor
Performance



Fatigue and inattentiveness set in quickly



One of my employees catching a nap in the bed of my pick-up



Nothing good happens after dark.....but we still try

It happens SO FAST

The intake of a baler going 3 mph is 4.4 ft/second.

Snapping rolls on a corn head pull in stalks at rate of 12 ft/second

If a guy thought he could free a stalk in this time, he would be SOARLY mistaken. **By the time his brain told his hand to let go, it would be TOO LATE!**



Human Factor

Fatigue, drowsiness, and illness frequently lead to mishaps in the field. Recognizing your limitations, and being responsible enough to “call it” or hand it over to someone else is critical.

Drug use, legal or otherwise have become common place.

Young workers may not have the cognitive and/or physical ability to perform some of the tasks we’ve charged them with.

Distractions are abundant. People of all ages have their faces stuck in their phones no matter what they are doing.

Getting in a hurry and rushing through tasks could prove catastrophic.



General Equipment Factors

Equipment should be “Harvest Ready” several weeks prior to harvest. Examine-Repair-Replace.

Safety guards and shields protect workers from moving parts. Keep them on, even if they are annoying.

Hydraulically raised equipment should be securely blocked before anyone works around or under the machine.

TURN OFF THE IGNITION and put the **KEY IN YOUR POCKET** before attempting to clear any plugged equipment. It’s a good habit for operators to do so every time they leave the drivers seat (plus it will save you engine hours).

Fire is a hazard in the harvest field, especially during cereal grain harvest. Every machine should be equipped with a well maintained fire extinguisher. You want it to work!

Kiddos do not belong around machinery. It stinks, but be firm on this!



Forage Wagons

TURN OFF THE MACHINE and put the KEY IN YOUR POCKET before trying to clear anything!

Emergency shut off devices must be maintained and in perfect condition.

Shafts, belts, pulleys, beaters, etc., must be properly guarded to be safety effective.

Stay away from exposed moving parts- loose clothing, hoodie strings, pony tails... and do not step over the live PTO shaft to reach the controls (true story).

Don't enter the wagon while the machine is running.



Self Unloading Grain Wagons & Forage Blowers

Grain wagons are OFF LIMITS to the kiddos!

Don't leave a wagon load of grain if there is ANY chance a child could climb in to become entrapped.

Unload wagons on a level surface, and don't drive up on blocks to make it unload faster. Patience!

Fasten the PTO blower securely to the tractor. Vibrations could draw the equipment off-kilter allowing the telescoping PTO shaft to separate and rotate dangerously, or cause the blower pipe to come down on you.

Never climb into the hopper or use hands/feet to force material into a blower

My Hit List

- ✓ COMMUNICATION **Talk about safety DAILY**
- ✓ Early field staging – Pesticide injury
- ✓ Electric shock from faulty wires on equipment, especially pivot boxes
- ✓ Wildlife- rattle snakes, bears, mtn lions
- ✓ Roading equipment- SMV, escort, culverts
- ✓ Power lines
- ✓ Traffic VS Silage trucks
- ✓ Proper lighting on equipment
- ✓ Poor Visibility on dirt roads, around pile & trucks



My Hit List continued

- ✓ Proper lighting around pile
- ✓ Sample pullers
- ✓ Pulling trucks- drivers get b/t truck and tractor
- ✓ Pull ropes VS chains
- ✓ 3 point contact on/off equipment
- ✓ Slips/Falls – keep debris clear as much as possible
- ✓ Jewelry
- ✓ Weather
- ✓ Load limitations



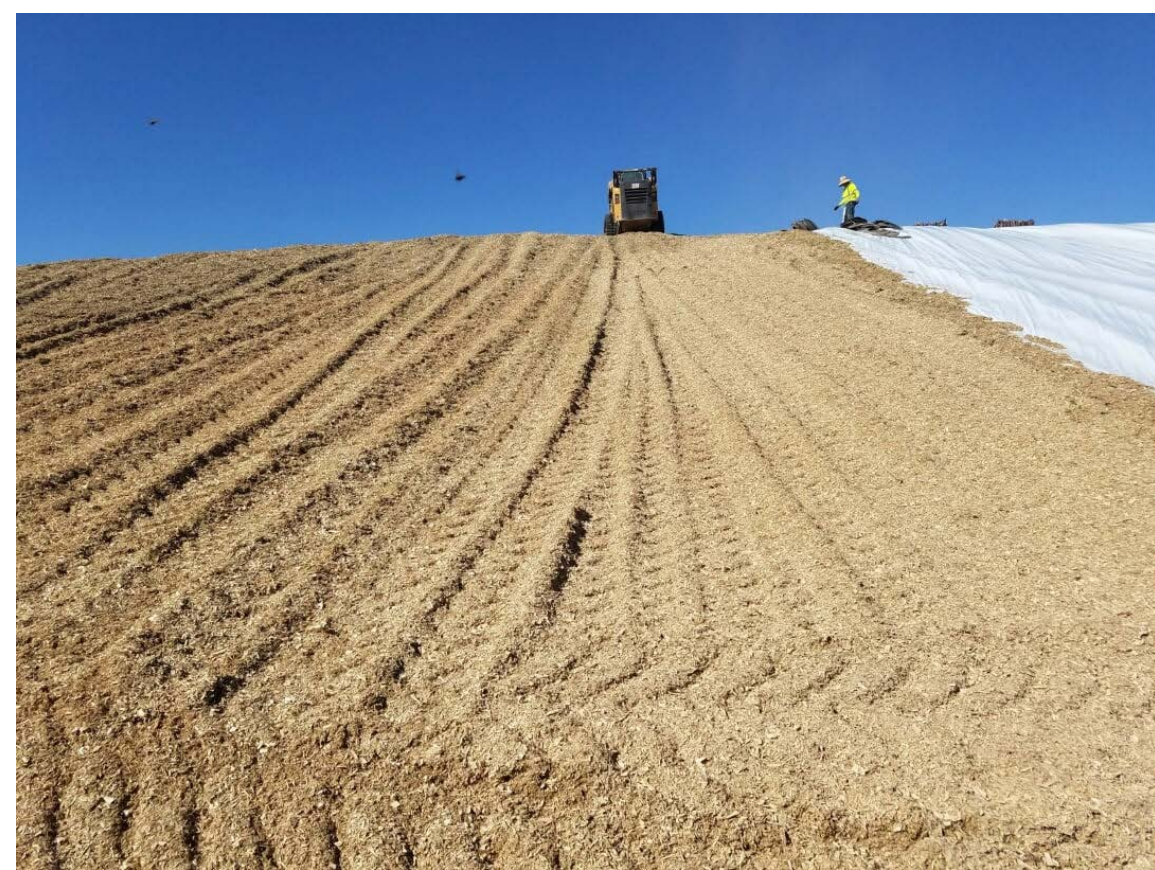
My Hit List continued

- ✓ Flying projectiles
- ✓ The force from the spout
- ✓ Unforeseen objects in the field
- ✓ Don't get off pack tractor while on the pile
- ✓ Pack tractor collision
- ✓ Microbreaks throughout the day
- ✓ Proper (comfortable) clothing & shoes, PPE
- ✓ Take your meal on the ground
- ✓ Neighbors stopping by to “help”



My Hit List continued

- ✓ Heavy lifting
- ✓ Ear protection noise and debris
- ✓ Eye Protection
- ✓ Taking a leak in the corn
- ✓ Know where every BODY is before moving
- ✓ SILO GAS
- ✓ ROLL OVER (Worthy of a second mention)
- ✓ Pile Safety- Be visible
- ✓ Feed out- Avalanche risk & Fall Risk



Prevention is the key to safety

- The goal of Lallemand's Silage Safety program is to ensure that all employees are aware of how to keep themselves and others safe while working around silage.
- The biggest risk around silage is complacency – the more we work around silage the more comfortable we become and it's easy to forget the hidden dangers.
- What are easy steps to take before harvest season to help ensure a safe harvest for everyone

Team Communications – Pre-Harvest Huddle

- Communication: It all begins with here
 - Talk about your safety expectations and adhere to them- ALWAYS
 - Who do they call for what
 - Lead person for questions
 - Equipment
 - Crop monitoring
 - How to communicate safely
 - If with smartphone, what are the rules?
 - Hands-free or stopping vehicle before use

Team Communications – Pre-Harvest Huddle

- Equipment Safety
 - On the road
 - Routes and speed limits
 - First aid kits/ fire extinguishers available
 - What to do in the event of a break-down
 - On the pile
 - Aware of other pack tractors
 - Packing routes
 - First aid kits/ fire extinguishers available
- Annual safety meetings
- Post-harvest review to identify wins/challenges

Safety Steps: Education

Basics of Silage Safety on Youtube



Safety Steps: High-vis clothing



- Hats, Vest, T-shirts, etc.
- All employees should be required to wear high-vis clothing to improve visibility when working at or near silage storage facilities or around equipment
- A simple step to help keep everyone **VISIBLE**



Final take home messages

- Always pay attention to your surroundings .
- Be VISIBLE!
- Over- communicate: Don't assume anything!
- Create a culture that allows for questions/concerns.
- The **most important goal** in every harvest season is to send all employees home to their families safe everyday!
- Remember, if a harvest program isn't safe, then nothing else really matters.



**A Safety Culture requires COMMITMENT
from each of us**

**Keep spreading the word, no matter
how small it may seem at the time.**