

FARM ACCIDENTS



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Disclosures

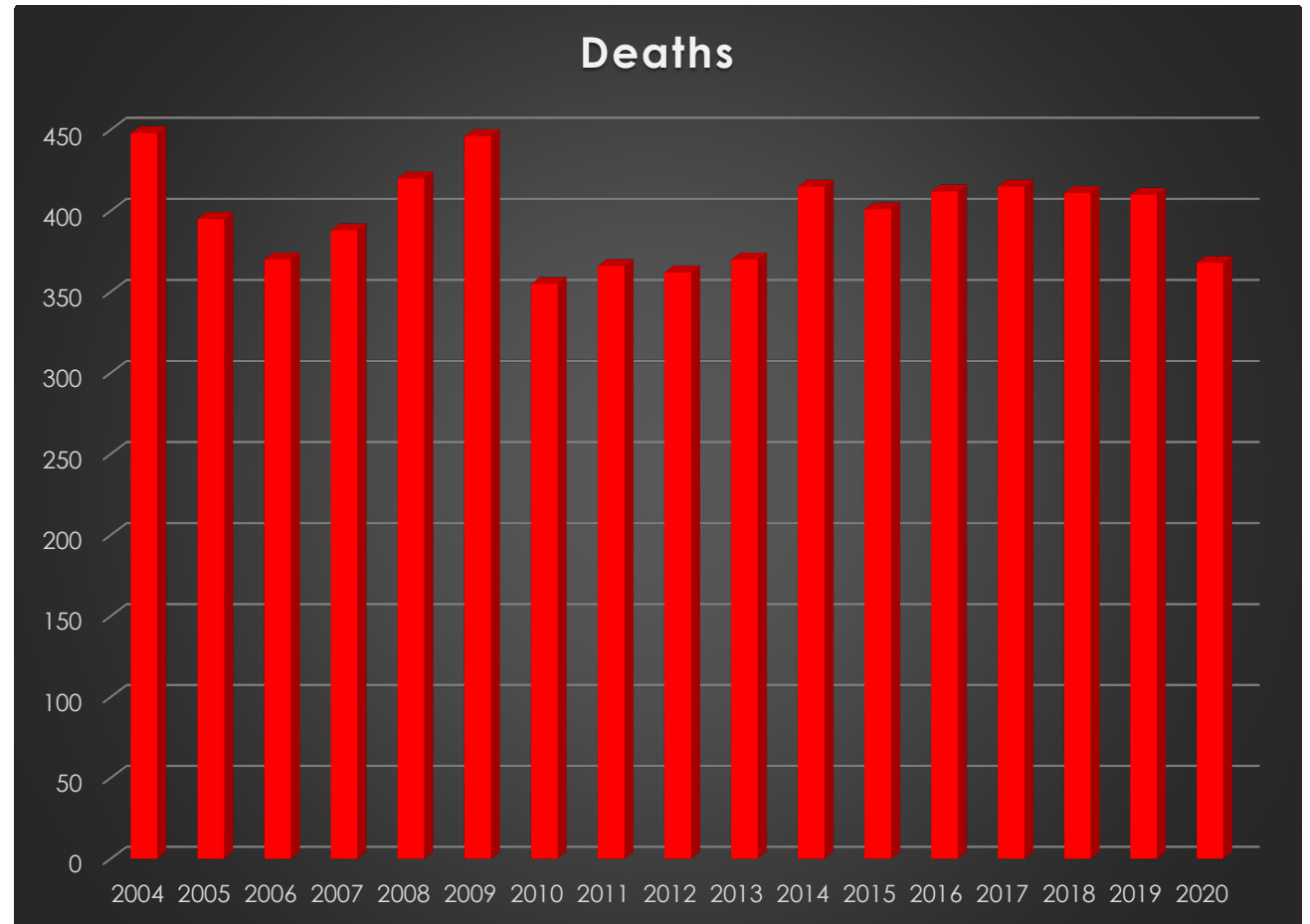
I HAVE NO DISCLOSURES

OTHER THAN I AM A FARMER, AND I AM GUILTY OF
DOING SOME OF THE THINGS WE DISCUSS TODAY

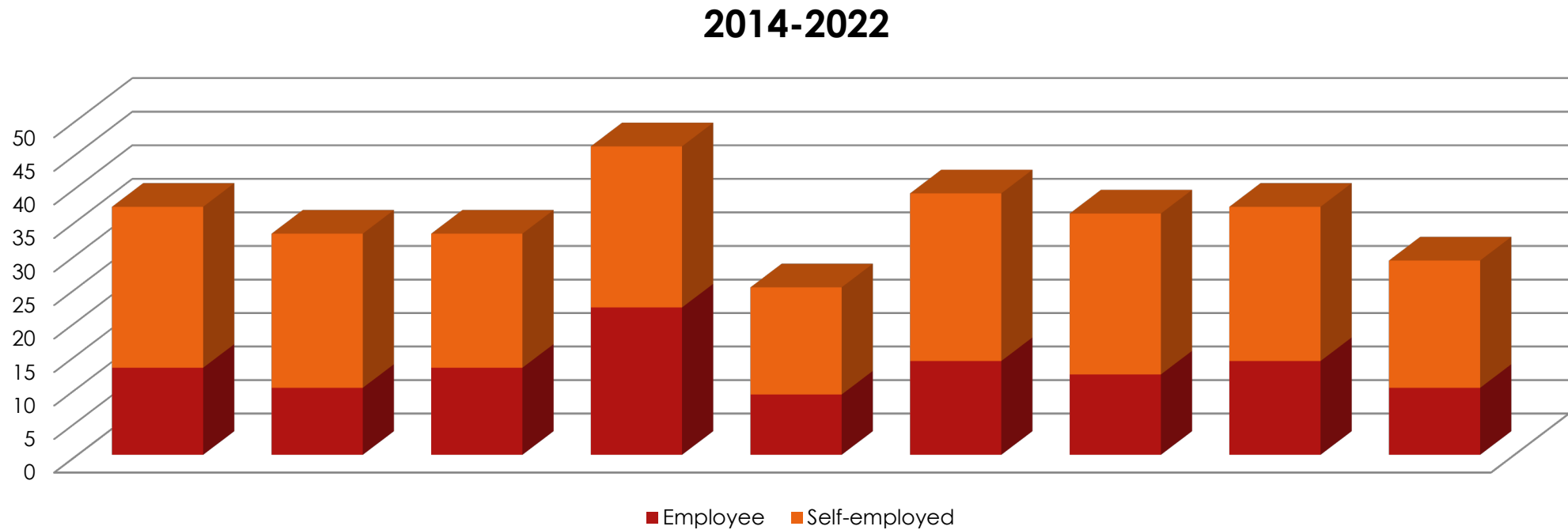
- ▶ The fatal injury incidence rate in Ag is the highest of the main industrial sectors, including construction. In 2020, there were 368 fatalities reported, which is slightly less than agriculture average over the past five years.

- ▶ 18 out of 100,000 agricultural workers in the United States are killed each year, while 140,000 accidents happen during the planting and harvest seasons, according to statistics gathered by the University of Iowa. Augers rank among the most dangerous agricultural equipment, while farm tractors cause the most deaths.

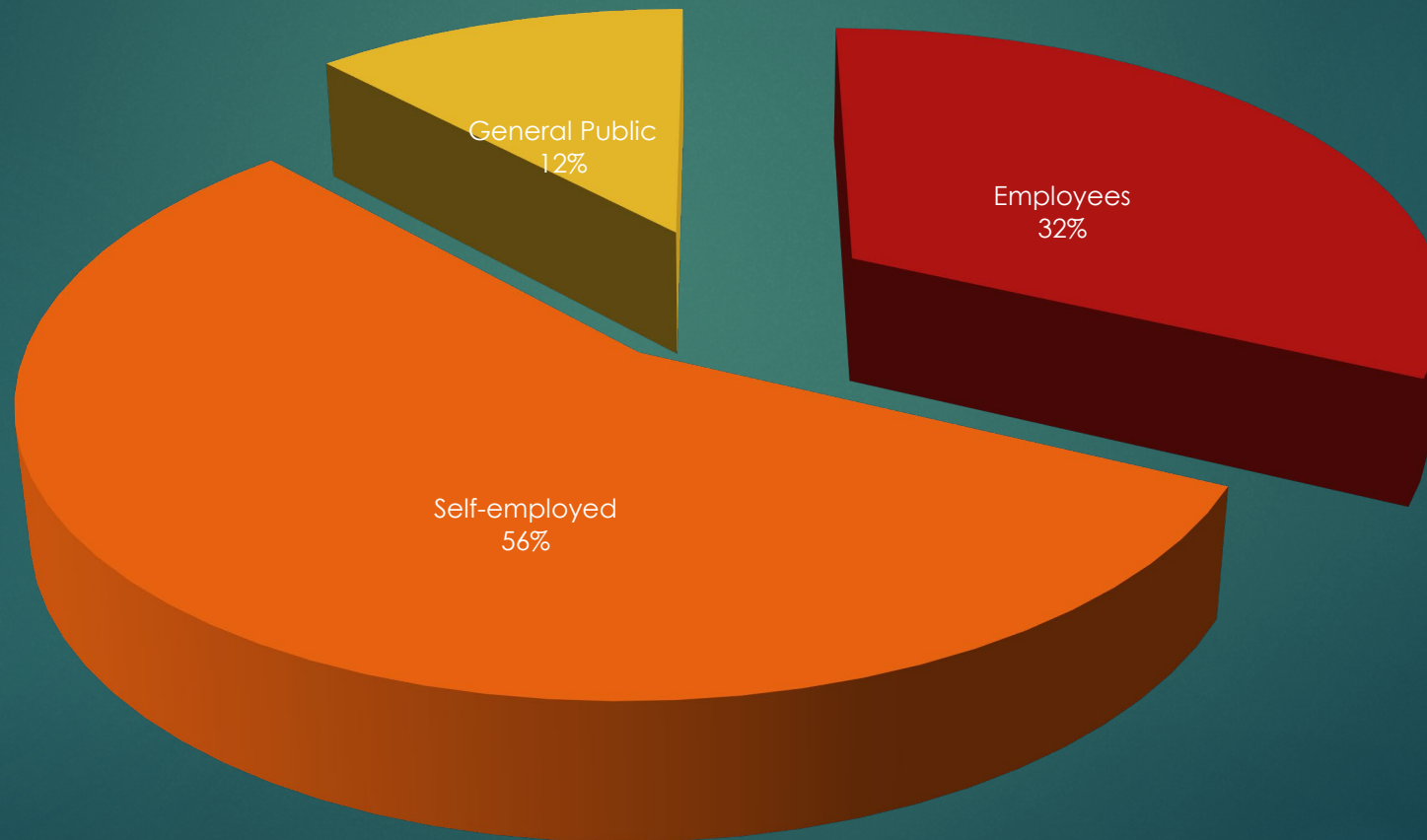
Fatalities in Agriculture



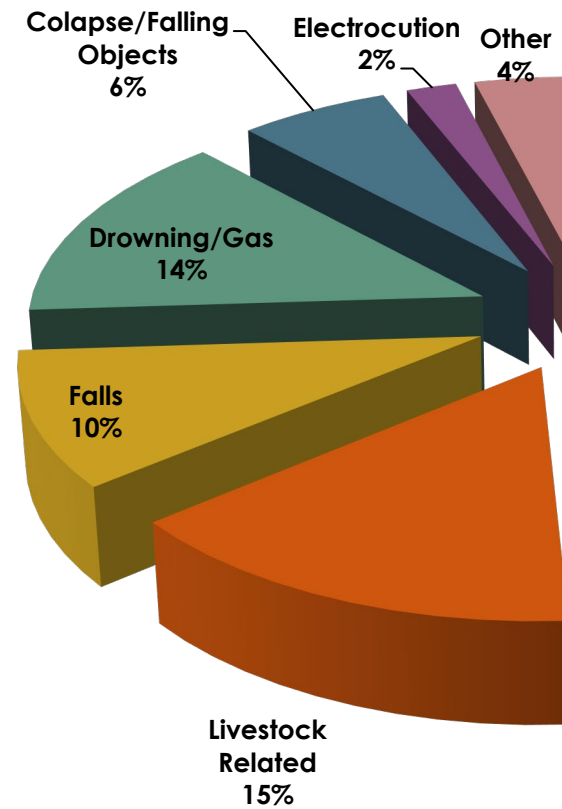
Fatal Injuries in Ag



Fatal Ag Injuries



Fatal Injuries in Ag



Tractor/Machinery
/Vehicle
49%



Occupational Training

1. No Formal Training Program
2. No Regulations
3. Most common learning is from trial and error

An aerial photograph showing a combine harvester and a tractor working in a large, golden-brown field. The combine harvester is in the foreground, moving from left to right, leaving a trail of harvested grain behind it. The tractor is positioned behind the combine, also moving in the same direction. The field is vast and flat, with the golden color of the grain dominating the scene. The sky is not visible, as the field extends to the top of the frame.

Ag Injuries most common MOI

- ▶ Augers (ranked most dangerous)
- ▶ Tractors (ranked most deadly)
- ▶ PTO's
- ▶ Animal Injuries

MOI (Mechanism of Injury)

- ▶ A major failure in patient care is **lack of** or **poor recognition** of MOI
- ▶ The importance of mechanism of injury is to aid your index of suspicion and recognize areas or potential injuries that aren't obvious.



MOI (Mechanism of Injury)

- ▶ EMS is the first and usually only source of this major piece of information.
- ▶ When MOI is not recognized-on scene patient care is delayed or missed early.
 - ▶ Secondary injuries become a priority over primary injury that may be hidden.
 - ▶ The receiving care team is starting to prepare for patient with information that is not accurate.



Augers

- ▶ Different types and how they create different injuries
 - ▶ Sweep auger
 - ▶ Tube auger





Grain bin sweep auger

Patient Report & Improvements

- ▶ Report to critical access hospital RN
 - ▶ Multiple cuts to the leg
 - ▶ Bleeding controlled by tourniquet
 - ▶ Possible broken bones
 - ▶ Extrication time 30 minutes
- ▶ Things missed
 - ▶ Extrication time 30 minutes
 - ▶ But did we add 6-minute response time and 20 minutes to get on scene?
 - ▶ Trauma Activation

Trauma Activation

- ▶ Poll for Trauma Nurses & EMS
 - ▶ What percentage of trauma activation are done prior to EMS arrival at your facility .
 - ▶ Do you PMD's allow your service to call helicopters to the scene?
 - ▶ When do you activate those?



Power Take Off (PTO's)



- ▶ Transfer power from tractor to an accompanying machine
- ▶ PTO Driven equipment include movers, balers, grain augers, choppers, feed mills, etc.
- ▶ PTO's run at 540-1000 RPM / 540 is 9 rotations per second



Power
Take Off
(PTO's)

Primary vs Secondary Injuries

- ▶ Secondary injuries in AG are usually the ones we see.
- ▶ An arm caught in a PTO that is severed and barely hanging on.
- ▶ The primary injury may be the damage to chest or other areas that are injured during the accident but present themselves immediately



PTO

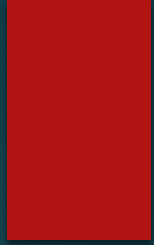
- ▶ This gives you an idea of the power and how it can wrap a body up.



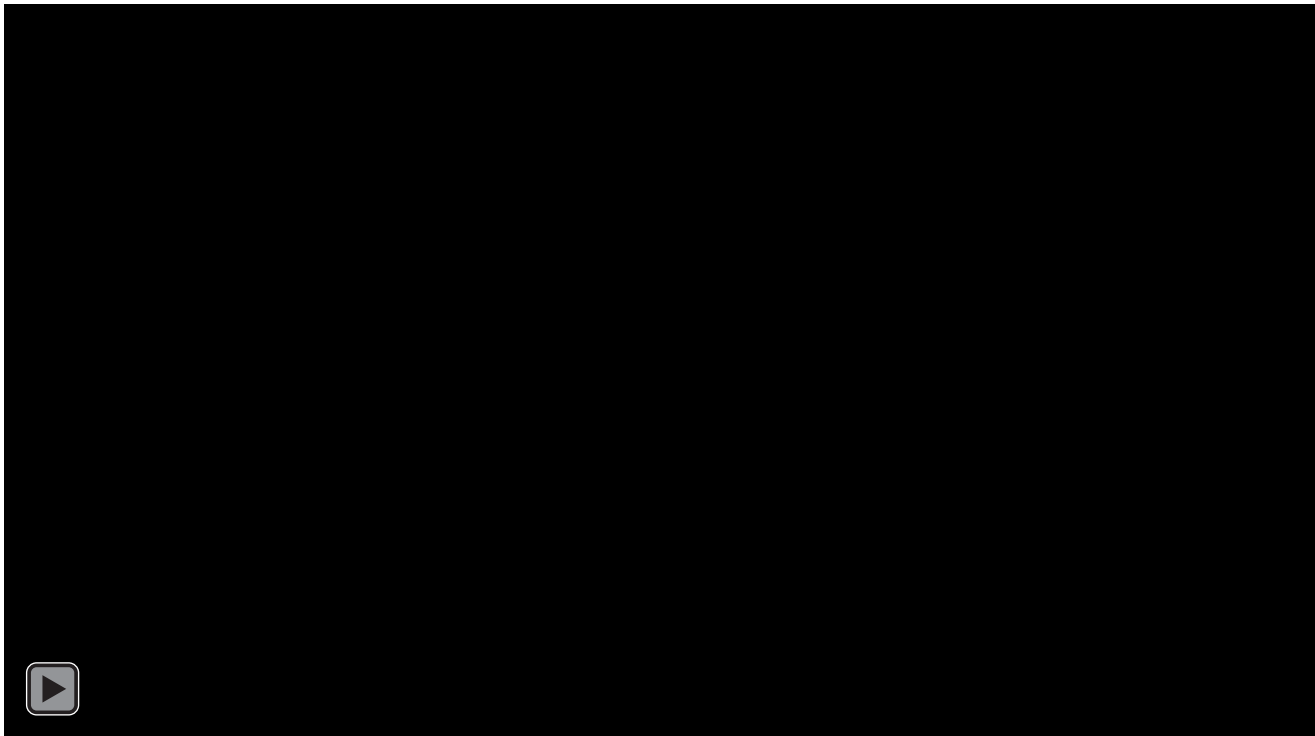
Animal injuries

- ▶ EMS paged out for 60-year-old male with laceration to the head from a bull.
- ▶ Additional information
 - ▶ Pt. is alert and breathing





Understanding MOI



Injuries

- ▶ Head & Face Lacerations
- ▶ Concussion
- ▶ Collapsed Lung
- ▶ Broken Ribs 8-12
- ▶ Lacerated Liver



Tractors

- ▶ The most deadly



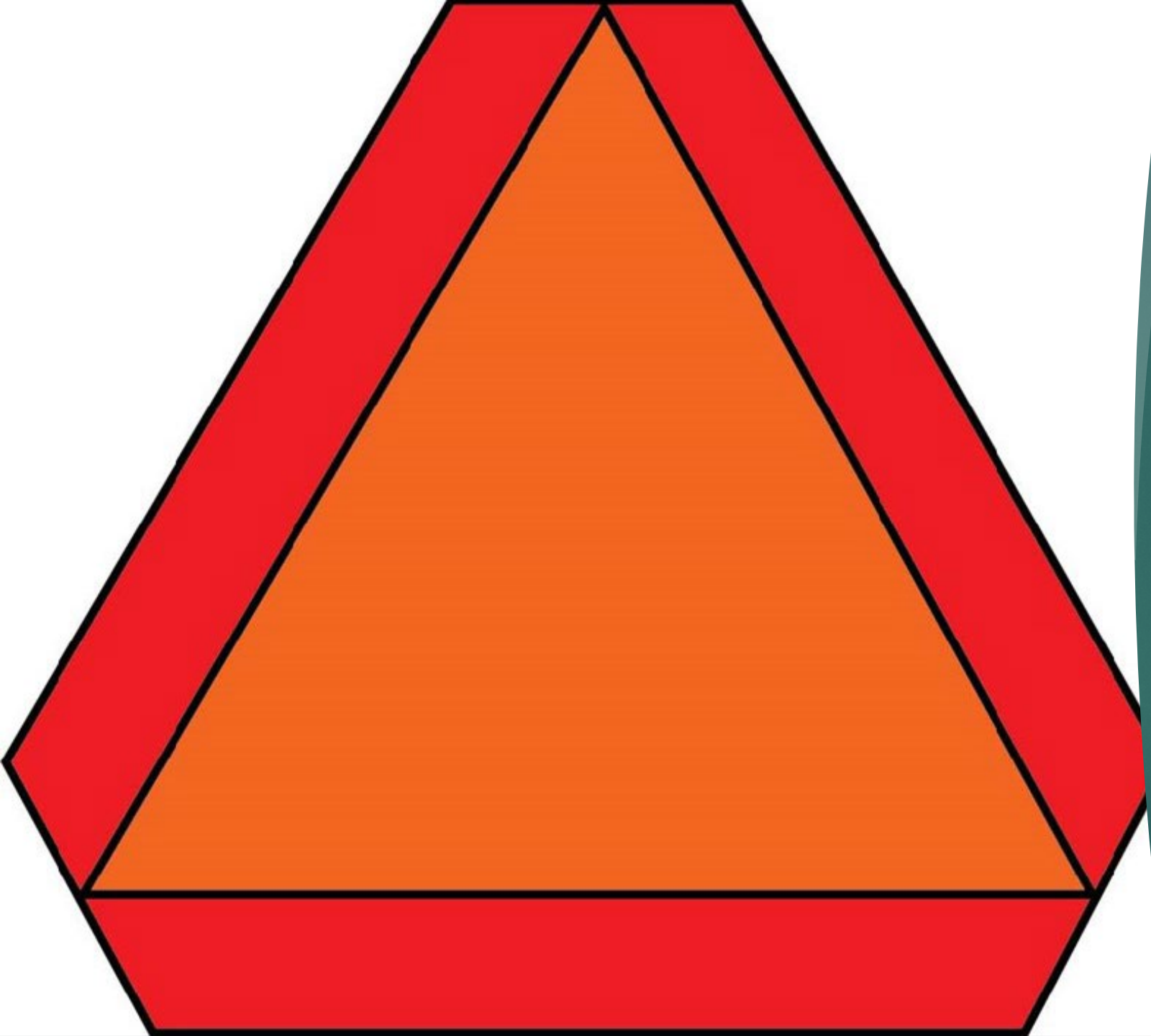


ROPS – Roll over protection system

ROPS

- ▶ 1 in 10 farmers will be involved In a tractor rollover in their lifetime.
- ▶ 1 out of 7 tractor rolloever will result in operator becoming permanently disabled.
- ▶ 7-10 farms that have a fatality from a tractor roll over will be out of business in 5 years.





Educate
the Public

Thanks!!

Thank you for servicing and helping your communities.

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