# Work-Related Farm Fatalities in Michigan

#### www.oem.m/v.edv

#### Background

Since January 2001, work-related deaths in the state of Michigan have been tracked by the Occupational and Environmental Medicine Division at Michigan State University. A narrative summary of each work-related fatality and educational materials (such as, on-site Investigation Reports and Hazard Alerts) are located at <u>www.oem.msu.edu</u>.

### **Summary Statistics**



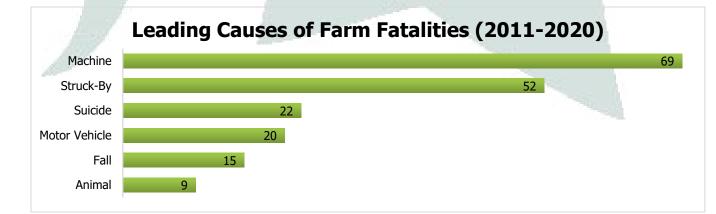
\*Preliminary data as of 8/15/2023. For 2022/2023, the process of determining farm-relatd deaths is in the early stages but 13 deaths have been identified in 2022 and 11 deaths in 2023



Deaths involving farm-related machinery (e.g., tractors and skid steers) are the leading source of work-related farm fatalities in Michigan.

There were 218 work-related farm fatalities in Michigan from 2011 to 2020, which is the second highest number of work-related fatalities after the manufacturing industry (287 deaths). The industry fatality rate (deaths per 100,000 workers) for agriculture averaged 25.7. For comparison, fatality rates for construction, transportation and warehousing, and manufacturing averaged 18.0, 13.8, and 2.2, respectively.

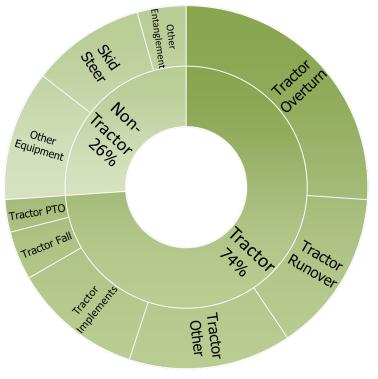
Most often the individual killed on the farm was the owner/operator (69.8%) followed by an employee (25.6%). The age of individuals ranged from 14 to 92 years of age; the average age was 56.3 and the median age was 59. Almost all individuals were male (95%) and white (99%).



### Between 2011 and 2020:

- Three children, ≤17 years old were fatally injured while doing farm work activities.
- Machine related incidences (69 deaths) were the most common cause of death with a tractor involved 74% of the machine-related deaths.
- Struck-by-incidences (52 deaths) were the second most common cause of death with the individual being struck by a tree 63% of the struck-by-deaths.
- Suicides (22 deaths) were the third most common cause of death.
- Crop farms had the highest number of fatalities with 100 deaths followed by livestock farms with 57 deaths.
- The counties of Allegan, Barry, Berrien, Branch, Gratiot, Huron, Kent, Keweenaw, Saginaw, and Sanilac each had 7 to 8 fatalities.

# **Machine related Fatalities**



## **Work-Related Farm Fatality Narratives**

- A farmer in his 80s died after being run over by a tractor. The decedent was repairing a tractor in his barn while it was running. The tractor accidentally shifted into gear and began moving backwards. The decedent attempted to climb onto the tractor to shift it out of gear but became caught between the dual front tires of the tractor.
- A male farmer in his 60s died when he was engulfed by soybeans in a silo while attempting to clear a clogged auger. The decedent entered the bin through the top and was poking at the soybeans while a coworker was hitting the side of the grain bin to loosen them and break them free. The coworker did not turn off the auger that took the soybeans from the bin and into the truck. Once the beans broke free, the decedent was sucked down into the soybeans.
- A male farm laborer in his 40s died while operating a corn picker. After he reached into the hopper, his clothing became entangled at the top to the machine and his arm was pulled down into the picker. The picker pulled his clothing tight, pinned him against the machine, and asphyxiated him.
- A male farmer in his 70s died when he fell approximately 12 feet from a hayloft to packed dirt outside of his barn. The decedent and his wife were in the process of feeding their horses. The decedent climbed the ladder to the hayloft and began to throw hay bales out of the loft door. Unbeknownst to him, his coat sleeve had become tangled in the baling twine on one of the hay bales. The momentum of his throw caused him to fall to the ground with the bale.
- A male farmer in his teens was electrocuted when the 21-foot-long metal pole he was using to knock down grain from the walls of a bin contacted an energized 4,800-volt overhead line. The decedent was using the 21-foot pole to bang the interior sides of the bin to remove the caked grain mixture. As he was removing the pole from the loading hole at the top of the bin, the pole contacted the overhead line.