# Work-Related farm fatalities in Michigan

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## **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 <a href="https://www.oem.msu.edu">www.oem.msu.edu</a>.

### **Summary Statistics**



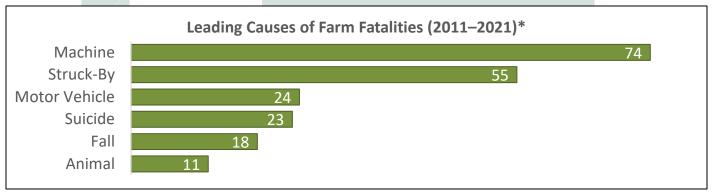
\*Preliminary data as of 2/15/2025. For 2023, the process of determining farm-related deaths is in the early stages but 21 deaths have been identified.



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

There were 238 work-related farm fatalities in Michigan from 2011 to 2021, which is the second highest number of work-related fatalities after the manufacturing industry (304 deaths). The industry fatality rate (deaths per 100,000 workers) for agriculture averaged 25.6. For comparison, fatality rates for construction, transportation and warehousing, and manufacturing averaged 17.9, 14.2, and 2.6, respectively.

Most often the individual killed on the farm was the owner/operator (69.3%) followed by an employee (25.1%). The age of individuals ranged from 10 to 92 years of age; the average age was 56.3 and the median age was 60. Almost all individuals were male (95%) and white (96%).

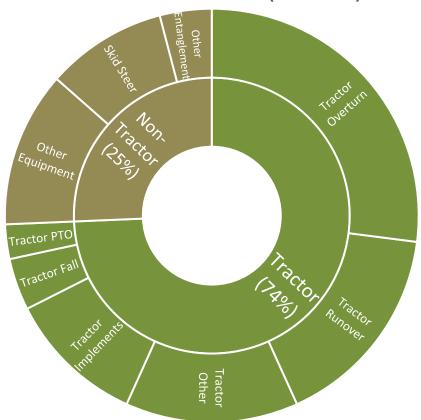


<sup>\*</sup>There were 33 other causes of death not included in the chart: Asphyxiation (7), homicide (7), drowning (5), fire/explosion (4), toxic explosion (4), electrocution (2), heat/cold (1), aircraft (1), other medical (1), and drug overdose (1).

#### Between 2011 and 2021:

- Four children, ≤17 years old were fatally injured while doing farm work activities.
- Machine related events (74 deaths)
   were the most common cause of
   death with a tractor involved in 74%
   of the machine-related deaths.
- Struck-by events (55 deaths) were the second most common cause of death with the individual being struck by a tree in 64% of the struck-by deaths.
- Motor vehicle events (24 deaths) were the third most common cause of death.
- Crop farms had the highest number of fatalities with 108 deaths followed by livestock farms with 63 deaths.
- The counties of Gratiot, Huron, Kent, Lapeer, and Sanilac each had 8 to 10 deaths.

### **Machine related Fatalities (2011-2021)**



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

- A female in her 20s died when the Ford 801 Powermaster tractor she was using overturned to the rear while attempting to pull out a tractor stuck in a farm field. A family member attached a chain to the rear of the Ford tractor to the front of the stuck tractor. The family member saw the front of the Ford tractor rise off the ground and overturn to the rear, pinning her. The tractor was not equipped with rollover protection.
- A male farmer in his mid-40s died after being struck by and pinned underneath a large branch of a
  tree that had fallen. The decedent was using a chainsaw to cut a tree that had blown over that was
  approximately four feet in diameter and 12 feet tall from where the tree was being cut at the stump.
  At some point when he was cutting the trunk of the tree into sections, it rotated back towards him,
  knocked him down and trapped him underneath causing fatal injury.
- A male dairy farmhand in his teens guiding steel trusses for a hoop barn was electrocuted and died when a telehandler and the trusses contacted an energized 7,000-volt overhead power line (<u>MIFACE</u> summary #532).
- A male farmer in his late 60's died when he was crushed underneath a combine. The decedent was in the process of changing the tire on a combine using wooden blocks to hold the combine up. After the tire was removed the combine slid, causing the wooden blocks to break and the combine's header to land on the decedent. The decedent was pronounced dead at the scene.
- A male floriculture production business owner in his late 60's died when he fell from a ladder. The decedent was performing renovations on his greenhouse roof when he fell approximately 12 feet from the ladder. The decedent was transported to a local hospital by EMS where he later died.
- A male laborer in his early 30's died of a self-inflicted hanging and was found in the apple orchard.