2020 Wisconsin Farm Related Fatalities

A COLLABORATION OF UW DIVISON OF EXTENSION AND THE NATIONAL FARM MEDICINE CENTER

INTRODUCTION

Annual summaries of farm fatalities help identify the hazards and risks associated with production agriculture. This report includes fatalities resulting from encounters with agriculture-related hazards. Fatalities resulting from naturally occurring health events or underlying conditions (e.g. heart attack, stroke), recreational activities, or homerelated activities are not included in this summary. Due to time and resource limitations, this report had been discontinued from 2007-16.

Year	2017	2018	2019	2020
Fatalities	41	34	40	28

NOTE: Since 2017, farm fatality reports differ from BLS data summaries due to the inclusion of children, bystanders, non-farm motorists, and other public roadway incidents involving agricultural operations.

TYPES OF FATALITIES

Twenty-eight fatalities were recorded in 2020. The table below categorizes fatalities using the **Farm and Agricultural Injury Classification (FAIC).** FAIC codes allow researchers and others to identify and categorize occupational cases and unique exposures, such as non-working children and other bystanders injured while in work environments.

Injury Classification	Number
Farm Production Work	17
Farm Hazard: Non-workers	2
Roadway Collision	4
Undeterminable	5

EVENTS THAT LED TO FARM FATALITIES

Farm equipment conditions and the presence of safety devices can vary greatly, but even with seemingly "safe" equipment, unexpected events and improper operation can lead to injury. Transportation activities, such as operating a tractor in a field or on a public roadway, led to 15 fatalities in 2020. This includes civilians injured in collisions with ag-related vehicles. Nine of these fatalities occurred off the roadway, such as in fields or driveways. Machinery hazards can also lead to injury. Blunt trauma, such as falling equipment/trees or equipment run-overs, caused 4 fatalities. Crushing injuries, such as between the arms of a skid loader, caused 7 fatalities.

Injury Event	Number
Off-road Transportation	9
On-road Transportation	6
Crushing Injuries	7
Blunt Trauma	4

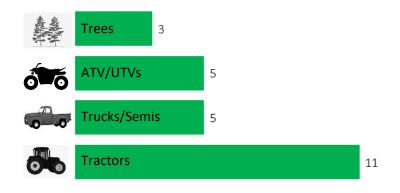
It is also important to note how these transportation events caused fatalities. Within these cases, 8 (53%) involved tractors while 5 (33%) involved ATVs/UTVs. Crushing injuries mainly included being pinned under vehicles.

AREAS OF INTEREST

Historically, tractor-related fatalities account for a high percentage of all farm work fatalities, especially when roadway collisions are included, as began in 2017. Tractors are one of the most commonly used machines on Wisconsin farms, utilized in tasks that involve field operations, farmstead activities (including stationary use such as powering a PTO-driven auger) and in the transportation and trailering of agricultural products from field to farm or market. Tractor safety education is important for both adult workers (including hired employees) as well as for youth. Research-based guidelines recommend waiting until youth are 14-15 years old before operating any farm tractor, and even then, intermittent supervision is required. Youth employed off of their family's farm at age 14-15 are required by federal law to hold a training certificate that must be verified by the employer. Skid steer operation is also highly complex and it is not legal for hired farm youth to operate skid steers under age of 16, even if they are trained and certified.

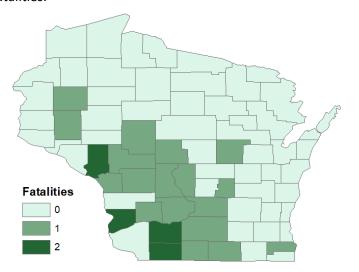
SOURCE OF INJURY

Farms have many hazards that contribute to injury, as do public roadways. Roadway collisions pose a threat to farmers as well as to non-farm motor vehicle operators and passengers. Tractors, including collisions and rollovers, fatally injured 11 victims. ATVs and UTVs were also a major source of fatalities with 5 victims. Trucks, including semi-trucks such as milk and vegetable trucks, fatally injured another 5 victims. Falling trees and logs, such as clearing trees from a farm fencerow with a tractor, fatally injured 3 victims.



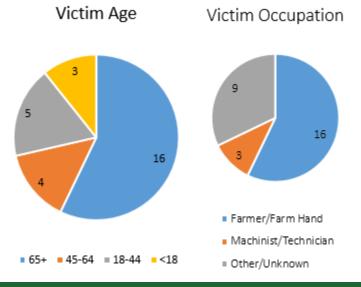
INJURY LOCATIONS

This map shows the county location for the 2020 farm fatalities.



DEMOGRAPHICS

Twenty-five of the victims (89%) were male and three were female. Persons aged 65 and over constituted the largest number of victims with 16 individuals (64%) while 3 were under 18 (11%). Of the victims with known occupations, 16 were primarily farmers. Outside of farming occupations, victims included three general laborers plus a mix of other professions.



OTHER CASES

In addition to roadway collisions and transportation incidents, off-road transportation remains a concern. In 2020, we observed a rollover incident involving two youth on a single UTV, ejecting both occupants and fatally injuring one. Neither were wearing seatbelts, which would have likely prevented the ejections and allowing the rollover protection system, or ROPS, to prevent fatal injury. In tractor operations, the combination of seatbelt usage with a ROPS is nearly 100% effective at preventing rollover fatalities. Most tractors can be retrofitted with a ROPS and rebate programs are often available to help offset the cost of purchase and installation.

Note: The authors of this factsheet documented several suicide events involving those reported as farmers. These events are not included in the data described here, but have been recently summarized in a separate report.² If you have concerns for yourself or others including thoughts of suicide, call 1-800-273-8255, and also consider locating a "QPR" suicide prevention training course in your community.

IMPACT OF FARM FATALITIES

Nationally, workers in agriculture, forestry, and fishing (AgFF) are up to 8 times more likely to die on the job than workers in other industries.³ Farming remains among the most dangerous jobs in the U.S. with an annual fatality rate of 26.0/100,000 persons compared to 3.3/100,000 persons overall.³ When last examined by Leigh et al. in 2001, the cost of farm-related injuries nationally averaged an estimated \$4.57 billion/year. This represents a contribution of 30% more than the national average to occupational injury costs.⁴

ABOUT OUR DATA

Data sources included Wisconsin Department of Health Services, Bureau of Health Information death certificate registry; clippings from Wisconsin daily and weekly newspapers collected and collated via AgInjuryNews.org.

Previous Wisconsin Farm-Related Fatalities reports and other safety materials can be found at: agsafety.wisc.edu/topics/fatality-reports/

REFERENCES

- 1. D J Murphy, M Purschwitz, B S Mahoney, and A F Hoskin Department of Agricultural and Biological Engineering, Pennsylvania State University, University Park 16802. "A proposed classification code for farm and agricultural injuries.", *American Journal of Public Health* 83, no. 5 (May 1, 1993): pp. 736-738.

 2. Weichelt, B.; Burke, R.; Redmond, E.; Shutske, J. Farm Suicides in Wisconsin, 2017–2018: Preliminary Findings and a Call for Future Research. Safety 2021, 7, 51. https://doi.org/10.3390/safety7030051
- Occupational Safety and Health (OSHA): Quick Facts. https://www.osha.gov/dsg/ topics/agriculturaloperations (accessed 1 Feb 2017).
 Leigh JP, McCurdy SA, Schenker MB. Costs of occupational injuries in agriculture. Public Health Rep. 2001;116(3):235-248. doi:10.1093/phr/116.3.235

SUGGESTED CITATION

Weichelt B., Burke R., Shutske J. 2020 Wisconsin Farm Related Fatalities. Marshfield, WI. Marshfield Clinic Research Institute; 2022.



