INTRODUCTION

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

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatalities</td>
<td>26</td>
<td>30</td>
<td>25</td>
<td>41</td>
<td>34</td>
</tr>
</tbody>
</table>

NOTE: From 2017-present, farm fatality reports differ from BLS data summaries due to the inclusion of children, non-farm motorists, bystanders, and public roadway incidents in these more recent reports.

TYPES OF FATALITIES

Thirty-four fatalities were recorded in 2018. The table below categorizes fatalities using the Farm and Agricultural Injury Classification (FAIC)\(^1\). FAIC codes allow us to identify occupational cases and unique exposures, such as non-working children and bystanders in work environments.

<table>
<thead>
<tr>
<th>Injury Classification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Production Work</td>
<td>24</td>
</tr>
<tr>
<td>Agricultural Support (e.g. ag mechanic)</td>
<td>1</td>
</tr>
<tr>
<td>Farm Hazard: Non-workers</td>
<td>1</td>
</tr>
<tr>
<td>Roadway Collision</td>
<td>8</td>
</tr>
</tbody>
</table>

EVENTS THAT LED TO FARM FATALITIES

Even with safe equipment, various events and improper handling can lead to injury. Transportation, such as operating a tractor in a field or on the roadway, led to 16 fatalities. This includes civilians injured in collisions with ag-related vehicles. Six of these fatalities occurred off the roadway, such as in fields or driveways. Machinery hazards can also lead to injury. Machine entanglements on moving parts, such as with PTOs, caused 5 fatalities. Blunt trauma, such as falling equipment or trees, caused 4 fatalities. Three cases were caused by falls, such as from barns or silos. Fires were the cause of two fatalities, both of which were grass fires.

It is important to note how these events caused fatalities. Of transportation cases, 8 (50%) involved tractors and 5 (31.3%) involved passenger vehicles, while 2 (12.5%) involved heavy machinery such as bulldozers.

PUBLIC ROADWAY INCIDENTS

Incidents on WI public roadways involving agricultural equipment led to 10 fatalities in 2018, 29% of all farm fatalities. This includes two victims who were farmers operating equipment and eight other people in passenger vehicles that collided with agricultural equipment or with a farm animal (e.g. cattle or horses).

SOURCE OF INJURY

Farms have multiple hazards that can contribute to injury. Both farm and passenger vehicles can pose a threat to farmers or to non-farm vehicle operators and passengers. Collisions involving passenger vehicles fatally injured 9 victims while tractor incidents fatally injured 5. Falling trees and logs, such as clearing trees from a farm fencerow with a tractor, fatally injured 3 victims. Additionally, animals, such as bulls or horses, fatally injured 2 victims.
INJURY LOCATIONS
This map shows the counties with 2018 farm fatalities.

DEMOGRAPHICS
Twenty-nine of the victims were male and five were female. Persons aged over 65 consisted the bulk of the victims with 17 individuals. Ten victims were aged 45-64 and 5 were aged 18-44. Two victims were children under the age of 18. Twenty of the victims were farmers by primary occupation. Outside farming, victims included four in general manufacturing such as machining and CNC operators, plus a mix of various other professions.

OTHER CASES
We identified 9 additional cases, not verified as farm related, and not included in our total fatality counts. However, the incidents involved tractors and deemed worthy of discussion herein. Compact tractors, a factor in one fatality, are growing in popularity with rural property owners. One of the victims was identified as a mechanic/auxiliary worker who was fatally injured working on a tractor. Another incident involved the victim being pinned under a shed while trying to move it with a tractor. Other incidents included people not considered farmers but were fatally injured by falls and rollovers from tractors. These cases emphasize the need for continued and improved tractor safety initiatives that include populations not traditionally considered part of the agricultural workforce.

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. Farming remains among the most dangerous jobs in the U.S. with an annual death rate of 26.0/100,000 persons compared to 3.3/100,000 persons overall. 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.

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. This is not surprising given the relatively high rate of suicide deaths among farmers as has recently been described by CDC as well as media accounts. Authors are investigating the needs for further analysis of Wisconsin farm suicide events. Suicide is preventable -- If you have concerns for yourself or others including thoughts of suicide, call 1-800-273-8255. Or, consider locating a "QPR" suicide prevention training course in your community.

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. The AgInjuryNews.org system is the largest news article dataset of its kind is available through a web-based system providing an interactive display of publicly available news clippings data involving AgFF-related injuries. This public system allows registered users to search and filter incident data. Incidents are entered and indexed using various elements, including publication year and month, farm type, injury agent, U.S. state, incident year, month and time of day, victim age, gender, and others.

Previous Wisconsin Farm-Related Fatalities reports and other safety materials can be found on the UW Center for Agricultural Safety and Health website at fyi.extension.wisc.edu

REFERENCES
1. Murphy, D J; Purschwitz, B S; Mahoney, 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.

SUGGESTED CITATION