

News Article

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Farming is Dangerous: Be Safe

This week's article is a grim reminder for all: farming is dangerous, so don't cut corners with safety.

Dr. Bill Field, Extension Safety Specialist, recently released the *2017 Indiana Farm Fatality Summary with Historical Overview*, by Purdue University's Agricultural Safety and Health Program in the Agricultural and Biological Engineering Department. The program has been monitoring farm-related fatalities in Indiana for nearly 60 years. The report concedes that the database, though recognized as not being comprehensive of all farm-related deaths, provides a unique capacity to explore trends that have occurred over several decades during which agricultural production has experienced considerable transformation in technology and practices. What follows are some highlighted excerpts of the report.

A total of 36 farm-related fatalities were documented in Indiana during 2017. This is 20% higher than the average number of fatalities documented annually since 1970 (30.1). The total reflects an approximately 18% decrease from the 2016 total of 44. The lowest number ever documented in the last 48 years was 8 in 2006. The highest numbers documented in the last 48 years were 54 in 1981, 49 in 1990 and 44 in 2016. The increases in 2016 and 2017 represented an upward spike in the downward trend that has occurred over the last two decades.

Though there has been a continued decrease in the average number of fatal incidents, the increase in 2017 resulted in a 3-year average of 36 fatalities per year and a 10-year average of 26.4 fatalities per year. The historical data also show an overall decline in the frequency of farm-related fatalities involving children and youth under the age of 18, which have accounted for a disproportionate share of total farm deaths including some early years in which nearly one third of fatalities were children and youth. In 2017, there were 4 child-related fatalities that represented an unexpected upturn.

The age of the victims in 2017 ranged from 11 to 88 and averaged 60, which is higher than the average age of Indiana farmers, currently at 55.8. Historically, farmers over the age of 60 have accounted for a disproportionate number of farm-related injuries, including many who work only part time. Overall, the average age of victims continues to increase slightly, reflecting the increasing average age of farmers and fewer fatalities involving children and youth.

With approximately 57,500 productive farms in Indiana with sales of over \$11 billion it was estimated for 2017 that one out of every 1,597 farms experienced a farm-related fatality. Using a population of 143,000 operators and hired workers on farms in Indiana, the death rate was approximately 25.2 per 100,000 farm workers which is generally consistent with rates published from other states. Indiana is often referred to as an agricultural state, although less than 1% of the workforce is employed in production agriculture. However, the agriculture industry has traditionally been responsible for one of the highest number of work-related

fatalities (Indiana Department of Labor, 2016). The estimated fatality rate of 25.2 per 100,000 Indiana farm workers in 2017 compares to an estimated national death rate of 3.4 per 100,000 for workers in all industries and 22.8 per 100,000 for those engaged in agricultural production nationwide.

Elkhart and LaGrange counties are home to the state's largest Amish/Old Order population that have historically accounted for a disproportionate share of farm-related fatalities. In one recent annual summary, this population accounted for approximately one-third of all documented fatalities.

11 documented incidents in 2017 involving collisions between Amish buggies and motor vehicles. These incidents resulted in no fewer than two fatalities and 15 injuries, several of which were life threatening. There were two incidents involving four injuries each. The documented ages involved in these incidents range from 4 to 82 years old. It should be noted that this type of incident is under reported or access to incident reports is difficult to achieve.

It is estimated, based upon prior research, approximately one out of every nine Indiana farms experiences annually a farm-work-related injury requiring medical attention. Based upon the estimated 57,500 farms in the state, it can be extrapolated that in 2017 there were approximately 6,389 treated injuries. Prior research by the National Safety Council indicated that 2% of reported farm injuries result in permanent disability. Applying the 2% estimate to Indiana's estimated 6,389 injuries, approximately 128 such cases occurred in the state in 2017. Many of these incidents, however, are not reported in the media, and there is no requirement to report such incidents, including severe injuries, to any official agency.

The increasing number of small farms is another important change occurring in rural communities. These audiences of part-time "hobby," or small, highly diversified farmers have very different educational needs as compared to larger commercial operations. A review of fatality data over the last few years suggests that these smaller operations account for a disproportionate share of all documented fatalities, as much as 25% of current incidents. A significant contributing factor is the use of older, less safe machinery on these smaller operations, especially older tractors without Roll-Over Protective Structures (ROPS).

Indiana ranks number one historically in the number of documented grain entrapments. In 2017 there were no documented fatalities and only two incidents requiring extrication from grain by emergency personnel. It is believed that the high national ranking for this type of fatality has more to do with the aggressive nature of Purdue's surveillance efforts in Indiana over the past 40 years rather than the actual number of incidents that occur in other states.

No fewer than 1447 Indiana farm families have experienced the loss of a family member since 1970, including the 36 in 2017, and they know personally the long-lasting effects these events can have. Take time for safety!

Find the full 2017 report at www.farmsafety.org, and additional resources at <https://engineering.purdue.edu/~agsafety/ASH/>.