



Purdue University

Agricultural Safety and Health Program

2001 Indiana Farm Fatality Summary

Compiled by the Purdue University Agricultural Safety and Health Program

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The 2001 farm fatality report was compiled by Purdue's Agricultural Safety and Health Program through a variety of sources, including two separate news clipping services, voluntary reporting from extension education, county coroners, individuals, and personal interviews. In 2001 no cases were identified with the assistance of the Indiana Fatality Assessment and Control Evaluation (FACE) Program at the Indiana State Department of Health, which documents occupational fatalities identified through coroners' reports, as well as news articles and on-site investigations. No cases were identified using official death certificates due to the lack of access to these records at the Department of Health.

The report includes a summary of 22 farm work-related fatalities¹ that occurred in 2001. This is a decrease from the 27 fatalities reported in 2000, but is equal to the number of fatalities in 1999. For over 30 years there has been a downward trend in the number of fatalities. With a 18.5% decrease in the number of documented fatalities as compared to last year, the trend in the frequency of deaths continues to go down.

The average age for farm fatality victims in 2001 was about 56 (Table 1). All but one known case involved males. One (about 4.5%) of the fatalities identified involved an adolescent under the age of 18 which is approximately 8% lower than the average of 12.5% over the past five years, excluding 1998 when none were reported. There continues to be a downward trend in the number of child-related fatalities on Indiana farms, while the porportion of victims over 60 continues to increase.

¹ A **farm work-related fatality** is defined as any fatal injury to a farm or ranch worker (or bystander) occurring in the course of performing an agricultural work-related task, or as a result of exposure to hazards in the agricultural workplace. Motor vehicle incidents not clearly involving agricultural equipment are excluded.



Approximately 59% percent of the recorded fatalities resulted from incidents involving tractors (Figure 1). This is the same as the 59% recorded in 2000 but lower than some years in the past when over 75% involved tractors. (Roll-overs continue to be the leading cause of farm work-related fatalities nationally accounting for approximately 25% of all fatalities.) Tractor overturns and runovers were the two leading types of fatal farm-related incidents in the state. When tractor and machinery-related cases are combined, they account for over 72% of all reported fatalities.

	Age Distribution						
Gender	1-17	18-35	36-59	60+	Unkown	Total	%
Males	1	4	6	10	-	21	95.5
Females	-	-	-	1	-	1	4.5
Total	1	4	6	11	-	22	100
%	4.5	18.2	27.3	50	-	100	
Average Age	13	22	49	76	-	56	

Table 1. Age distribution of fatal incidents in 2001.

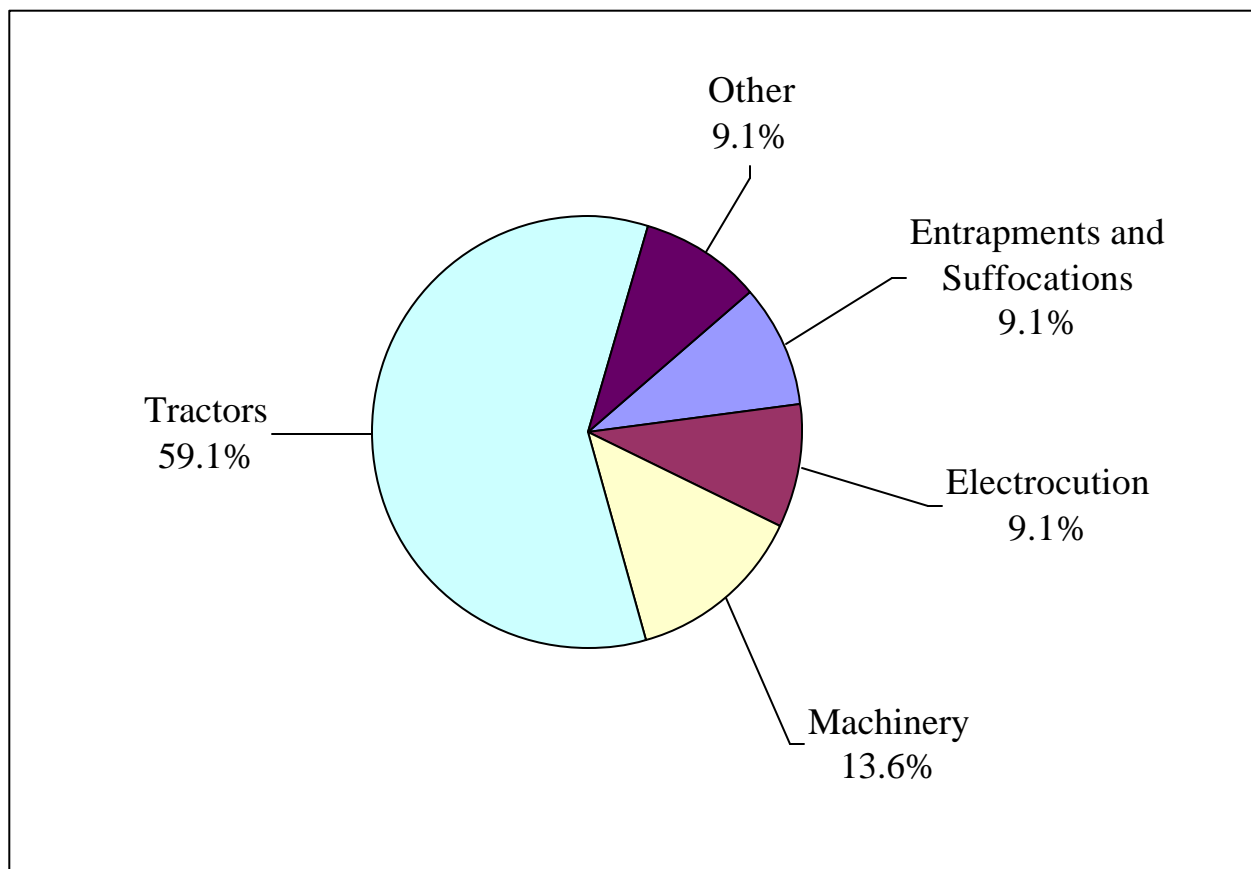


Figure 1. Distribution of 2001 Indiana fatalities by general type of incidents.



Table 2 summarizes the specific types of incidents associated with Indiana’s farm fatalities in 2001. Several types of fatalities that have been historically common to Indiana agriculture did not occur during the year, or none were identified, including PTO entanglements and falls from farm structures.

Type of Incident		Fatalities
Entrapments or suffocations	Grain entrapments	2
Electrocution	Contact with overhead power line	1
	Working on equipment	1
Machinery-related incidents	Entanglements (Non-PTO)	2
	Forklift	1
Tractor-related incidents	Overturns	4
	Roadway collisions	2
	Runovers	3
	Tire Rupture	1
	Falls	2
	Other	1
Other incidents	Farm truck collision	1
	Mauled by cow	1
Total		22

Table 2. 2001 Indiana farm fatalities by specific type of incidents.

Table 3 provides a more detailed listing of fatalities occurring in Indiana counties in 2001. Fatal farm work-related incidents are described here by (1) date of incident, (2) county of report, (3) age of victim, (4) gender of victim, (5) description of circumstances surrounding the incident, and (6) Farm and Agricultural Injury Classification (FAIC) Code. The FAIC code is used to facilitate consistent and accurate classification of farm and agriculturally-related injuries. Additional information on the FAIC code is available from the American Society of Agricultural Engineers.²

The FAIC code system:

- parallels, to the extent appropriate, current nationally established methods for classifying and assigning work-related injury cases to an industry;
- provides a systematic mechanism for separating farm production work cases from non-farm-production cases; and
- permits the identification of cases that uniquely reflect the situational exposures predominate to the agricultural industry.

² ASAE Standard 575, 2000. ASAE, 2950 Niles Road, St. Joseph, MI 49085. Tel: 616-429-0300



	Date	County	Age	Sex	Description of incident	FAIC
1	31-Jan-01	Putnam	64	M	Tractor run-over after starting with a battery charger.	1 ³
2	13-Feb-01	Washington	45	M	Struck by forklift.	1
3	5-April-01	Elkhart	13	M	Fell off tractor that 15-yr. old brother was operating.	1
4	1-April-01	Switzerland	83	M	Mauled by a cow.	1
5	5-April-01	Morgan	83	M	Tractor run-over after it overturned backward down a ditch.	5 ⁴
6	25-April-01	Parke	70	M	Farm truck collision.	10 ⁵
7	3-May-01	Blackford	45	M	Motorcycle hit planter on the back of tractor without rear warning lights.	10
8	14-May-01	Lawrence	80	M	Fell off tractor and struck by mower.	5
9	23-May-01	Lagrange	19	M	Tractor overturn while pulling cement post.	5
10	28-May-01	Randolph	70	M	Grain bin entrapment – suffocation.	1
11	13-June-01	Posey	55	M	Electrocuted while working on irrigation equipment.	5
12	14-June-01	Steuben	22	M	Hay baler entanglement.	1
13	15-June-01	Huntington	20	M	Motorcycle struck tractor	10
14	16-June-01	Knox	25	M	Tractor tire ruptured while victim was working on it.	5
15	11-July-01	Jasper	70	M	Tractor run-over.	Unknown
16	13-July-01	Morgan	81	F	Tractor overturn down embankment.	5
17	9-Aug-01	Bartholomew	87	M	Tractor overturn into a ditch.	5
18	22-Aug-01	Ripley	61	M	Tractor-related fatality.	Unknown
19	6-Sept-01	Miami	53	M	Grain auger entanglement.	1
20	19-Oct-01	Clay	57	M	Grain bin entrapment – suffocation.	1
21	20-Oct-01	Jefferson	41	M	Electrocuted when grain auger contacted a power line.	5
22	7-Nov-01	Elkhart	84	M	Tractor overturned after hitting a stump.	5

Table 3. 2001 Indiana farm fatalities by date.

Figure 2 presents a geographic distribution of Indiana’s identified farm-related fatalities in 2001, and Figure 3 presents a geographic distribution of Indiana’s recorded farm related fatalities in the years 1980 through 2001. The four counties with the most identified fatalities over the past 22 years were Elkhart, LaGrange, Greene, and Dubois.

³ FAIC-1 Farm production work

⁴ FAIC-5 Farm tractors, machines, tools, equipment, products, places, etc, not being used for farm production

⁵ FAIC-10 Rural traffic – farm hazards



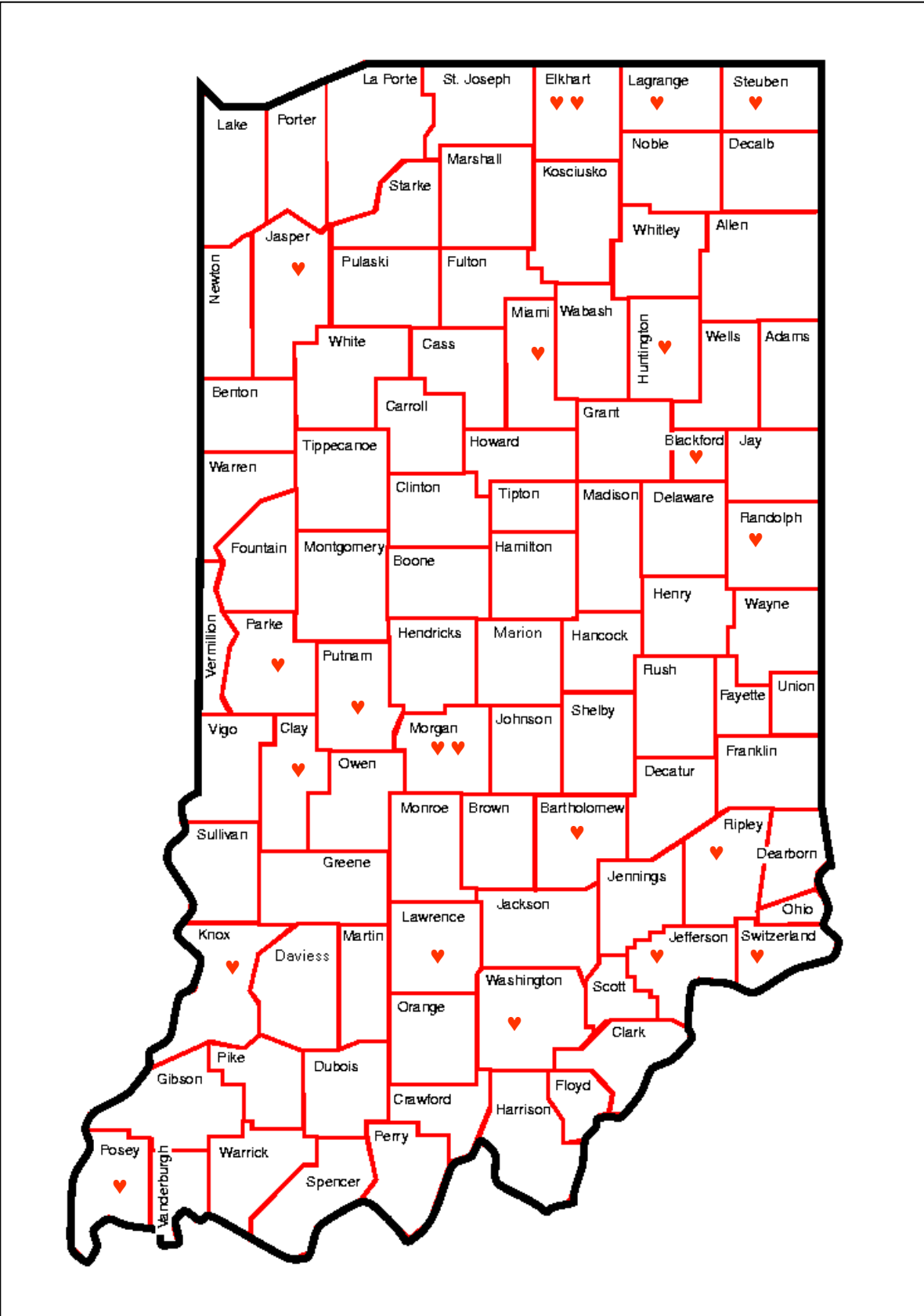


Figure 2. Geographic Distribution of 2011 Indiana Farm Fatalities.



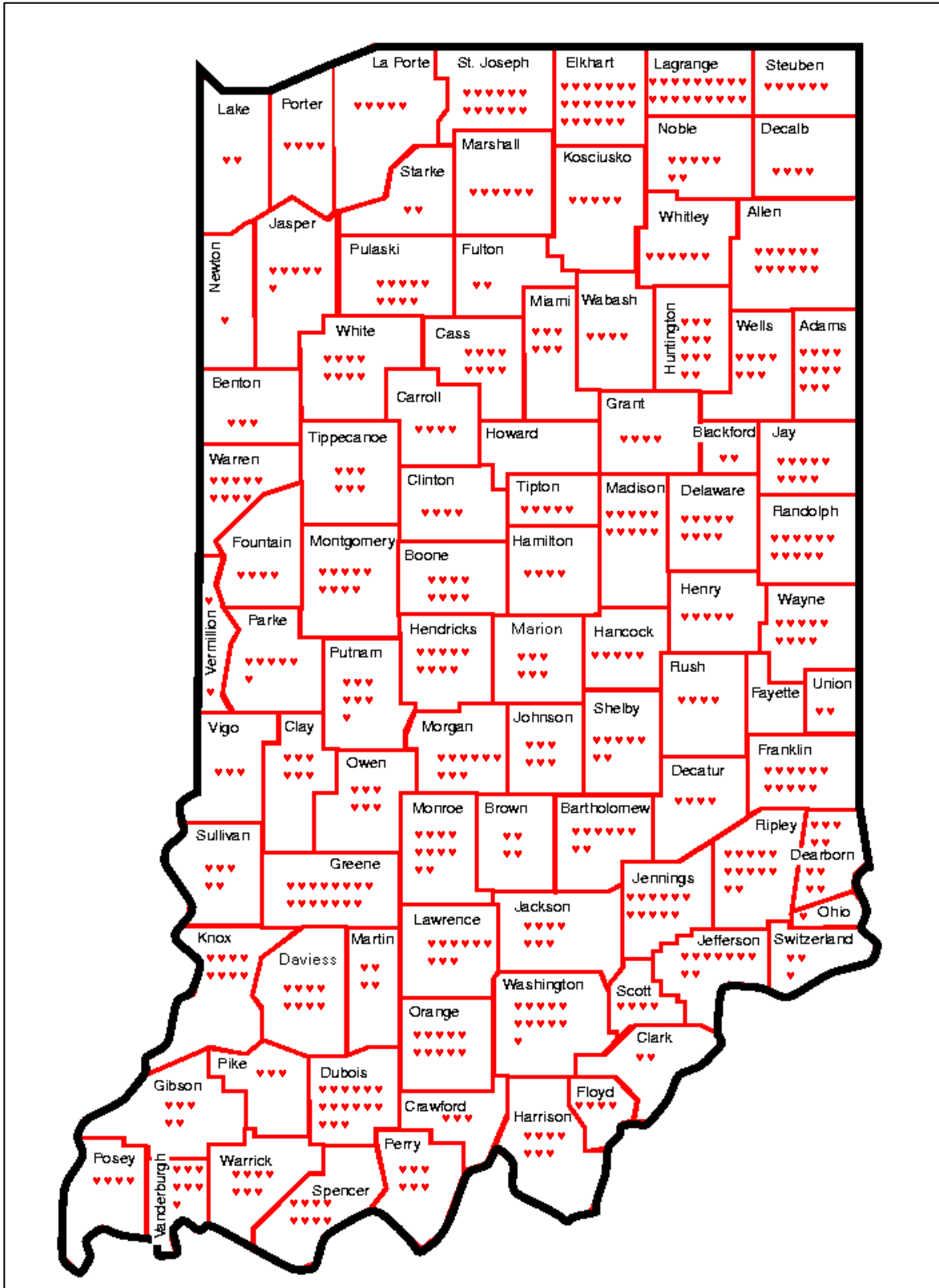


Figure 3. Geographic distribution of Indiana’s farm related fatalities from 1980 through 2001.



Figure 4 presents a trend of identified farm-related fatalities over the past 32 years. It is believed that 1998 recorded the lowest number of fatalities of any year since Purdue’s Agricultural Safety and Health Program has been keeping records. Through 1999 and 2000, identified fatalities increased but the trend continue to be decreasing. Fatalities again decreased in 2001.

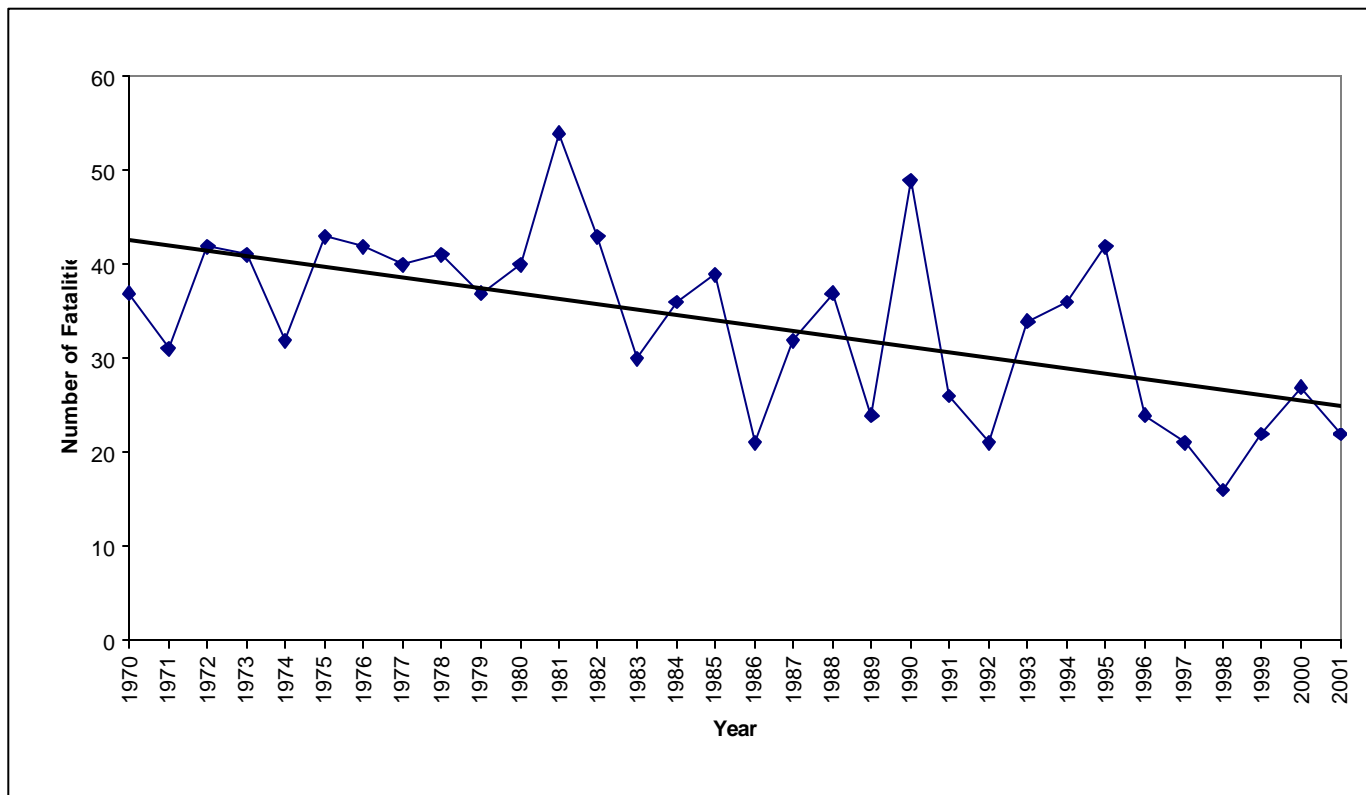


Figure 4. Annual Summary of Farm-related Fatalities.

Using the estimate of 63,000 productive farms in the state with a sales of over \$1,000 and the estimated population of 80,400 who operate or earn a wage employed on a farm, it was estimated for 2001 that 1 out of every 2860 farms experienced a farm-related fatality and the death rate was approximately 27 per 100,000 farm residents. The rate compares to an estimated national death rate of 3.8 per 100,000 for workers in all industries and 22.1 per 100,000 for those engaged in agricultural production.⁶ It is believed, however, that the Indiana rate would be lower if unpaid family labor was included in the population of those exposed to farm hazards on a regular basis.

⁶ The **estimated death rates** of 3.8 per 100,000 workers in all industries and 22.1 per 100,000 workers in agricultural production come from the National Safety Council Injury Facts, 1999 ed.



Summary of Indiana's Farm-related Injuries and their Economic Impact

Farm-related injuries are not comprehensively documented by any source in the state. Therefore, there are little data on the number and frequency of injuries occurring during farm work. However, of Indiana's farm-related injuries that were identified through clipping services in 2001, many were tractor related. Some of these recorded incidences included being hit by a tractor, rollovers, run-overs, and being pinned. Farm implement entrapments were another source of injury. Other sources of identified injury included PTO entanglement, falls from bins and other farm structures, and burn and smoke inhalation from fires. Many of these accidents resulted in serious injury where victims had to be rushed to hospitals and had extended stays. All of the identified injuries involved males. Of the recorded ages, all were over 35 except for one incident involving a man in his mid 20s.

It is estimated, bases upon prior research, that approximately 1 out of every 9 farms annually experience a farm-related injury requiring medical attention. Based upon the estimated 63,000 farms in the state, it can be projected that in 2001 there were approximately 7,000 treated injuries. Prior research suggests that 2% of reported farm injuries result in permanent disabilities which indicates that approximately 130-150 such cases occurred in the state in 2001.

To gain a perspective of the potential economic impact of farm injuries to the state, an estimated medical cost of \$1,000 per injury would result in an economic loss of over \$6.5 million excluding the costs of transportation to receive medical services, replacement labor, property damage, emergency services, and long-term rehabilitation services. This estimated total, however, would be substantially increased if the cost associated with the 22 fatalities and the 130-150 permanent disabilities were included.

In addition to the cost of human injuries, the ongoing monitoring of farm-related accidents and injuries reveals that fires result in significant losses to Indiana farm families. Property damage due to unintentional fires are the leading type of incident reported through the statewide media clipping service.

For additional information on agricultural safety and health resources, check out the www.farmsafety.org website or call 765-494-1191.

