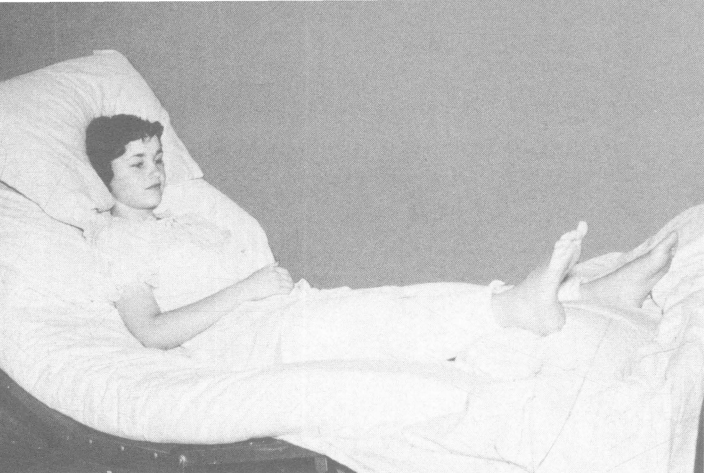




*Accidents to Farm People*  
**29,361 Reasons**  
*for a Safety Program*

Agricultural Extension Service  
Ohio State University

Bulletin 385



*One-fourth of accident victims required hospitalization.*

## **Accidents to Farm People**

# **29,361 Reasons**

## **for a Safety Program**

by

R. H. Baker and W. E. Stuckey \*

A Concern: Accidents to farm people in Ohio.

- ONE-SIXTH OF THE FARM FAMILIES IN OHIO HAD AN ACCIDENT DURING 1957.
- 88 percent of these accidents required a doctor's care while 25 percent required hospitalization.
- 56,052 days labor was hired to replace labor of injured persons.
- 73 percent of the accidents occurred to men and boys.
- 25 percent of the accidents occurred in the home, 44 percent on the farm outside the home, and 31 percent while away from the farm.
- 28 percent of the injuries resulted from a fall.
- Farm machinery, including the tractor, was involved in 21 percent of the accidents while the auto and truck accounted for 8 percent.
- FOR EVERY 68 NON-FATAL ACCIDENTS THERE WAS ONE FATAL ACCIDENT.

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# Accidents to Farm People in Ohio

## A Desire:

These painful, costly, time consuming accidents can be reduced. It is the desire that every farm family in Ohio plan now to have an accident-free year.

## A Suggestion:

The accident situation is one of our greatest social problems. Educational programs are effective in reducing accidents. Some farm groups are carrying on effective programs in safety education. Other groups have less extensive programs, and some groups have not yet started such programs.

It is suggested that the information contained in this publication be studied by the membership of all farm groups. Members should then determine the course of action to reduce accidents. This information could be used as a basis for discussions, demonstrations, displays, talks, news releases, radio and TV programs, and many other types of programs. Many people should be involved in formulating any safety program. People who work on safety projects are less likely to have accidents.

As individuals we should inspect our farms for accident hazards and remove or minimize all hazards found.

## What Type of Injuries?

The most frequent injuries were cuts, fractures, sprains, and bruises. These accounted for 85 percent of the accidents. Cuts were the most common injury.

Fifty-five percent of the accidents were listed as slight, 42 percent as severe, 1-1/2 percent resulted in permanent injuries, and 1-1/2 percent were fatal.

Table 1.  
Accidents to Farm People in Ohio, 1957

	Total	Per Accident
Number of people who had accidents*	29,361	
Days lost due to accidents	418,923	14.3
Days hired to replace lost labor	56,052	1.9
Cost of accidents	\$2,497,339	\$85.06
Doctor bills	\$1,046,401	\$35.64
Drugs and medicine	\$ 44,788	\$ 1.53
Hospital bills	\$1,122,676	\$38.24
Hired help	\$ 283,474	\$ 9.65

\*An accident was defined as any injury to any person living or working on a farm that required professional medical care (doctor, hospital, nurse, x-ray) or loss of 1/2 day or more of time from work or play.

Table 2.  
Type of Injuries Occurring to Ohio  
Farm People, 1957

Type of Injury	Number	Percent
Cut	9,274	31.6
Fracture	6,515	22.2
Sprain	4,841	16.5
Bruise	4,388	15.0
Burn	588	2.0
Infection	588	2.0
Eye injury	588	2.0
Bite	452	1.5
Poison	272	.9
Miscellaneous	1,855	6.3
Total	29,361	100.0

## What Were the People Doing?

Approximately 70 percent of the accidents occurred while the people were working. Surprising as it may seem, nearly one-fourth of the work accidents happened off the farm. Another one-fourth of them were in the farm home.

Farming is considered one of our most hazardous occupations. This concept can be supported by insurance rates and studies in other states. However, it should be noted that in Ohio 84 percent as many farm people were hurt while off the farm as were hurt while performing farm work.



*Use a stepladder open and locked for reaching.*

Table 3.  
Where Accident Victims Were and What They Were Doing, Ohio Farm People, 1957

What doing	Number	Where accident occurred		
		On farm outside home	In farm home	While away from farm
Working	20, 675	10, 903	5, 067	4, 705
Playing	7, 238	1, 764	2, 126	3, 348
Other	1, 448	91	271	1, 086
Total	29, 361	12, 758	7, 464	9, 139

## How Did the Accident Occur?

Victims were thrown against objects, were caught in or between various things, were struck by falling or flying objects. Many fell either on the same level or from a different level, and some slipped. A smaller number were burned, had collisions, were shot with firearms or were stepped on by animals. The relative frequency of how these accidents occurred is shown in Table 4.

Table 4. - How Accidents Occurred to Ohio Farm People, 1957

How	Number	Percent	How	Number	Percent
Struck against	5, 519	18. 8	Lifting	633	2. 2
Caught in or between	4, 614	15. 7	Collision	543	1. 8
Struck by falling or flying object	4, 253	14. 5	Inhalation	181	. 6
Fall, from different level	4, 298	14. 6	Firearm	181	. 6
Fall, on same level	4, 072	13. 9	Stepped on by farm animal	136	. 5
Slip	2, 850	9. 7	Other	1, 448	4. 9
Fire	633	2. 2	Total	29, 361	100. 0

The misuse of farm machinery is costly in time, suffering and expense.



## What Things Were Involved?

There was a time when livestock, especially the horse, was a major contributing factor to accidents to farm people in Ohio. In 1957 more people were hurt with the automobile and farm truck than with all livestock combined, including the dog.

Misuse of the 200,000 farm tractors, with all the machines that go with them, accounted for more than one-fifth of the total accidents. More than one-half as many injuries occurred with the wagon as with tractors. Injuries with wagons occurred as a result of falling from, or being run over by them or by being caught between the wagon and a building or tool.

Hand tools including the saw, knife, shovel, fork, ax, and drill were involved in another 12 percent of the accidents.

As insignificant as they might seem, the lowly nail, icy walks, rickety ladders, dark stairs, and children's toys cannot be overlooked. These accounted for more than 3700 accidents.

Table 5 indicates that a large number of "other" things were involved in accidents to farm people. These include such things as broken glass, power lawn mowers, gates, stones, playground equipment, and holes in the ground.

Table 5.  
Things Involved in Accidents to  
Ohio Farm People, 1957

Things involved in accident	No.	%
<b>Farm Machinery</b>		<b>21.4</b>
Tractor . . . . .	1,538	5.2
Wagon . . . . .	814	2.8
Elevator . . . . .	498	1.7
Mower . . . . .	407	1.4
Picker . . . . .	271	.9
Combine . . . . .	226	.8
Baler . . . . .	226	.8
Other machinery . . . . .	2,307	7.8
<b>Tools</b>		<b>12.0</b>
Saw . . . . .	498	1.7
Knife . . . . .	452	1.5
Fork, shovel or spade . . . . .	317	1.1
Ax . . . . .	181	.6
Drill . . . . .	181	.6
Other tools . . . . .	1,900	6.5
<b>Farm Animal</b>		<b>7.8</b>
Cow . . . . .	724	2.5
Dog . . . . .	543	1.8
Hog . . . . .	317	1.1
Horse . . . . .	271	.9
Other animals . . . . .	452	1.5
<b>Building</b> -----	<b>1,402</b>	<b>4.8</b>
Nail -----	995	3.4
Ice -----	905	3.1
Ladder -----	724	2.5
Stairs -----	724	2.5
Auto -----	1,674	5.7
Truck -----	769	2.6
Tree -----	679	2.3
Toys -----	407	1.4
Other -----	8,959	30.5
<b>TOTAL</b>	<b>29,361</b>	<b>100.0</b>

## Who Were Involved in Accidents?

Men and boys, only 53 percent of our farm population, accounted for about three-fourths of the accidents. One-third of all persons injured were husbands between the ages of 25 and 64 years. (See Fig. 1.)

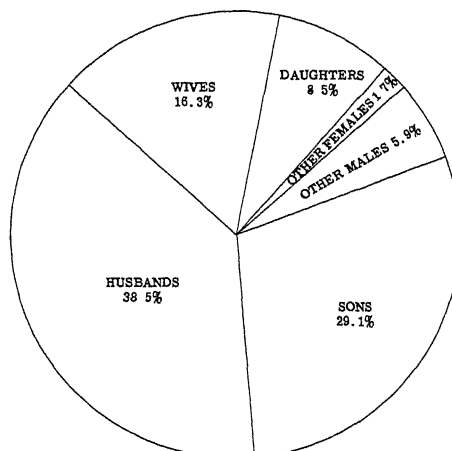


Fig. 1. Who Met With Accidents,  
Ohio Farm People, 1957?

Many people are of the opinion that children and oldsters are the most frequent accident victims. Fig. 2 indicates that those under 15 years of age account for about 30 percent of the farm population, and they had only 23 percent of the accidents. On the average, the farm people of Ohio had 34 accidents per thousand people. Those under 5 years of age had only 14 accidents per thousand while those between 45 and 64 years experienced 50 accidents per thousand. The rate over 65 years was 38 accidents.

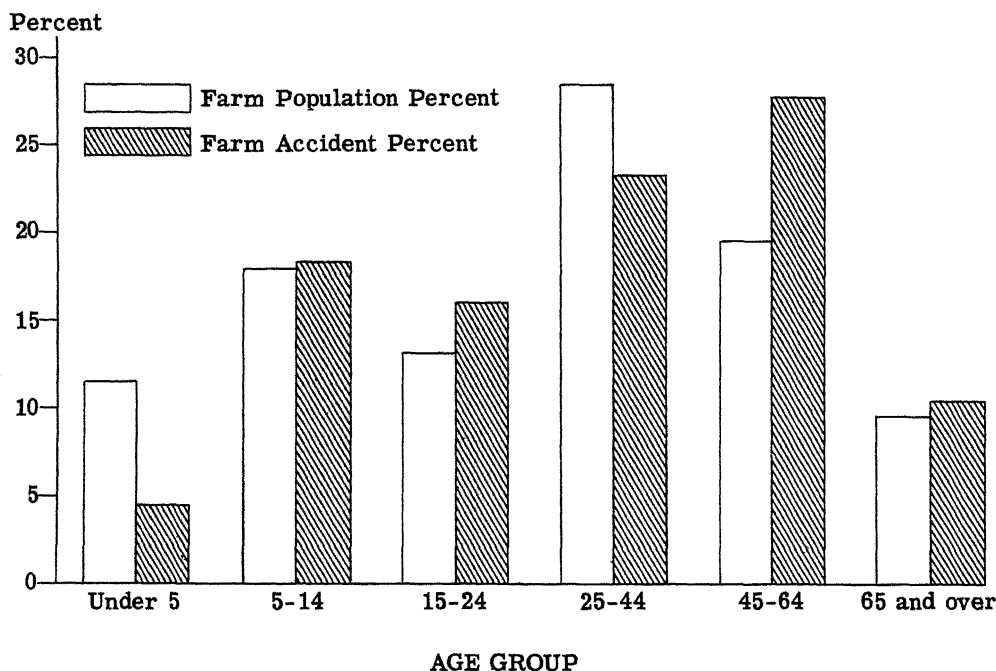


Fig. 2. Percent of Farm Population and Farm People Having Accidents,  
by Age Groups, Ohio, 1957

## When Did the Accident Occur?

About 60 percent of the accidents occurred in the afternoon and evening. This raises the question as to what effect fatigue has on frequency of accidents. As might be expected, the summer months produced the most accidents. Long hours, pressure to get work done and working under all types of conditions—all seem to have an influence on the frequency of accidents.

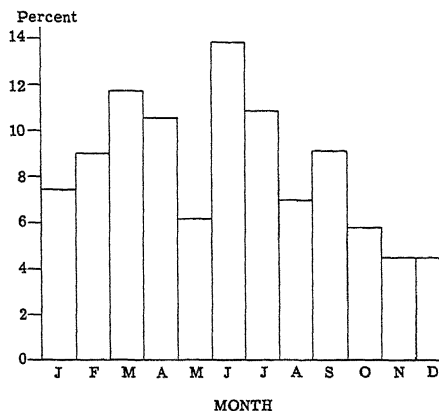


Fig. 3. Months Accidents Occurred  
Ohio Farm People, 1957

## What Did These Accidents Cost?

If we look at it only from a dollar and cent viewpoint, we see an annual accident cost of about \$2,500,000. Eighty-eight percent of the persons who had accidents required the services of a doctor. The average doctor bill for those going to a doctor was \$40.65 (average all accidents \$35.64).

Twenty-five percent required some hospitalization. One-third of those going to a hospital required only x-ray or emergency room attention. The remaining two-thirds spent an average of 8.7 days in the hospital (average all accidents 1.5 days). The average hospital bill for those requiring hospitalization was \$150.40 (average all accidents \$38.24).

In about 9 percent of the cases, labor had to be hired to replace the injured person. An average of three weeks of hired labor was necessary. This hired labor added an additional cost of \$104. per accident requiring replacement labor (average all accidents \$9.65).

In addition to the financial loss, these accidents caused pain, worry, and inconvenience as well as loss of time from work or play. In 76 percent of the cases some time was lost. It averaged 18.7 days per loss-time accident (average all accidents 14.3 days). Eighty-nine percent of the lost time was spent at home.

Some people fail to appreciate the seriousness of the accident problem. They believe that accidents occur only to other people. Our studies have shown that in 1957 one of every six farm families, in Ohio, had an accident which required the care of a doctor or caused loss of a half day or more time from work or play.

The accident situation is even more serious when we realize that one of 68 of these accidents was a fatal. In a lifetime of 60 years, a farm person in Ohio has one chance of 33 of meeting with a fatal accident.



## How Was This Study Conducted?

This study of accidents to farm people was made in Ohio in 1957. One sample county was chosen at random from each of eight groups of counties having similar topographic and climatic conditions and following the same general type of farming.

The eight counties chosen are shown on the map. Random groups of samples of ten farms<sup>#</sup>/in a block were selected in each county. About 29 percent of the farms in the eight counties were contacted four times, once every three months, by volunteer enumerators.



Eight Sample Counties In Which  
State-Wide Farm Accident Study  
Was Conducted, 1957

These enumerators were furnished complete instructions at special training meetings. The first visits were made by 440 enumerators to 4125 farm families. A few of these enumerators, due to poor health or being called into the service, did not complete the study. But 405 enumerators completed four visits to 3914 farm families and secured all information about their accidents for the year.

This sample constituted 2.21 percent of the farms in the state of Ohio. The figures presented in this discussion are the results of the data from this sample being expanded to the state as a whole.

**Acknowledgments:** This study was made possible by the cooperation of the county Extension Service agents and the voluntary enumerators in the eight sample counties. Other cooperating groups included The Department of Agricultural Economics, The Ohio State University, and The Ohio Farm and Home Safety committee. Cover photo courtesy The National Safety Council.

<sup>#</sup>/ Same definition of farm as used by U. S. Census.

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