

# Making Agriculture Safe

## *An Analysis of the Problem and Its Solution*

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One sure thing about tomorrow's agriculture is that it must be safer than in the past. With other industries proving that accidents can be prevented, agriculture no longer can tolerate a safety record that is one of the poorest among all occupations. But as we anticipate hopefully agriculture's improved safety record, we must remember that its price is eternal vigilance plus effective education. That basic philosophy underlies the efforts and plans that are being made by farm safety groups everywhere to reduce the toll that accidents take among rural residents.

In spite of improvements in recent years, agriculture is staggering under a terrific load resulting from needless accidents. Mishaps to farmers cause enough lost time in a year to produce more than half the average annual wheat crop in the United States. Even more serious is the economic loss to farm people of nearly a billion dollars per year resulting from accidents of all kinds.

But the losses in time and money are only a part of the burden resulting from accidents to farm residents. There are approximately 12,000 accidental deaths annually. Another 1,000,000 rural residents are injured, and many of the victims are permanently crippled. They lose hands, arms, legs, and eyes—thus the accident bill for any one year will continue for many years in the future in the form of reduced productive capacity and in personal sorrow and handicap.

Of these 12,000 fatal accidents to farm residents each year, more than one-fourth occur in farm homes. Falls head the list of home fatalities—falls due principally to insecure footing and poor visibility. Next come burns which result most often from misuse of petroleum products or from improper wiring. Many other fatalities result from poisons, mechanical suffocation, firearms, and drowning.

Farm work fatalities number about 3,500. Farm machinery is associated with a large proportion of these fatal accidents because many farm workers

persist in improper operation of such equipment. Many farmers meet death from tractors which tip over and from motor vehicles that are involved in farm work accidents.

Motor vehicles not associated with farm work take the lives of more than 5,000 rural people. Careless driving, of course, is the principal factor involved, but the country dweller is faced also by two particular hazards—the blind farm driveway and the lack of sidewalks for pedestrians. Farm people are not average when it comes to exposure to the possibility of severe motor vehicle accidents; they are subjected to hazards considerably above those of others. Farmers have to literally sneak onto high speed highways from secondary roads or from farm driveways. Furthermore, by the very nature of their living, farmers are required to make greater and more varied use of the highways. Not only do they transport themselves from place to place but they also use roadways for moving their products and their equipment.

Then there are the so-called public accidents other than motor vehicle such as hunting, boating, and swimming which account for nearly 1,000 deaths annually among farm families.

Farm fires also take the high toll of nearly 800 deaths per year with a monetary loss of more than \$150,000,000.

All this leads to the simple question, "How long will we calmly permit accidents to take such a tremendous toll of lives and property among people engaged in agriculture, not to mention the suffering and other costs involved?" This question becomes even more poignant when it is realized that something *can* be done about it. Those who brush the question off lightly display either an ignorance of the problem or a callousness difficult to understand. The crux of the matter is this: agriculture is far behind most other groups in safety endeavors. Only relatively recently has a beginning been made to reduce farm accidents. If safety education and methods had been applied as intensively on American farms as manufacturers have applied them, the lives of nearly 2,000 farmers might have been saved last year.

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Any worthwhile achievement usually is accomplished only by careful planning, taking into consideration all of the factors involved in the situation. What are some of the factors that concern safety in agriculture?

First of all is the multiple exposure to hazards. The farmer engages in a wide variety of operations so that he does not develop the high degree of proficiency that is acquired by the man on the factory production line who performs the same operation day in and day out, year in and year out. The farmer literally is a jack of all trades doing many different jobs and using many different machines in a single day.

A second factor is uncontrolled power. Today agricultural production is dependent upon the use of vast amounts of power, in units varying from a fractional horsepower motor on his drill press to hundreds of horsepower on his heavy equipment. The control of this wide range of power, under a wide range of situations, is dependent upon the knowledge, training, and skill of the farm operator. Too often the acquisition of such knowledge and skills is left to a haphazard manner.

A third factor as implied above is lack of training. We are all aware of the unwisdom and shortcomings of learning to operate high speed and high powered equipment in a haphazard manner. But the facts are that many of our agricultural workers still learn that way. They learn from others—bad habits as well as good. They learn by experience, and of course experience can be a good teacher, but "You'd better learn from the mistakes of other people—you won't live long enough to make them all yourself." Yes, experience is a good teacher only if you are lucky enough to live through acquiring it.

A fourth factor is lack of supervision. Here we get one of the widest deviations from the safety problems of other industries. We frequently hear large industries complain because small industries are not doing a good safety job, and as a result the smaller industries keep the total industrial accident rate higher than it would be otherwise. It appears many times that the smaller the unit within an industry the greater the problem of safety. Well, agriculture is made up of many relatively small units so that the job of motivation, training, and supervision is a different one from that found in most other industries. There are no safety supervisors in agriculture, and that is why it is so tremendously important to emphasize education in accomplishing accident prevention for rural people.

A fifth factor is the lack of safety promotion, a lack of safety consciousness. The history of safety

in industry goes back more than 40 years, but it was not until 1944 that agriculture began to receive much attention. During that year a National Farm Safety Committee was set up in the National Safety Council, and attention began to be focused on the farm accident problem. So it is readily recognized that the history of organized safety work in industry goes back more than 40 years, but it is only in the last 15 years that farm safety has received similar attention.

What can be done to overcome the difficulties that exist in preventing accidents in agriculture? These difficulties are not insurmountable. When we think of safety we often think in terms of the three E's—Enforcement, Engineering, and Education.

When we apply these to agriculture we realize that because of the nature of the farm unit there is comparatively little opportunity for enforcement. There have been those who have felt that the best way to prevent farm accidents is to "pass a law." Many have been sincere in this belief, while others appear to be motivated largely by the possibility of personal profit through legislation. Guards for farm machinery can be provided, safe methods for handling livestock can be developed, and safety devices for the home can be offered, but their general use will not be secured through compulsion or legislation. As the farm safety program develops, some legislation may prove desirable, but ordinarily this should relate to such methods or devices as have been thoroughly tested and proved. Public opinion will then support legislation for both manufacturers and users who lag behind.

Engineering has played an important part in agriculture and will continue to play an increasingly important part, not only for the further development of agriculture but for the reduction of accidents among rural people. Equipment manufacturers are continually studying their products and bringing about improvements which reduce hazards in the operation of machines. The basic approach to improved engineering is research. It is obvious that safety research in agriculture must take on an accelerated pace. But to get the farmer to make use of the engineering safeguards and avail himself of better safety devices generally is largely an educational problem.

Thus we come to the third E, education, on which rests the major progress toward safety for the farm family. Safety education will require farm leaders—men and women who are willing to become rural safety engineers in a very real way without undergoing any type of formal safety education. Being alert to farm hazards, urging carefulness in place of carelessness, being an evangelist for safety every day, and

giving support to adequate safety organization—all these will ultimately produce safety consciousness on the part of farm people that will accomplish great results.

In this matter of effective safety education a well defined and successful pattern has been developed, namely the farm safety committee. Forty-two states are now definitely organized with farm safety committees composed of representatives of the major agricultural organizations and agencies within the state. These include representation from the State Grange, State Farm Bureau, Farmers Union, Agricultural Extension Service, College of Agriculture, State Department of Vocational Agriculture, farm equipment people, electric companies, rural women's organizations, young people's groups, and many others. These state farm safety committees have the responsibility of speaking for agriculture in safety matters. They devise plans and programs whereby farm people can do the safety job for themselves and at the same time play a part in the over-all safety movement of the country.

The state farm safety committee does several things such as:

1. Stimulate interest and activity on the part of the cooperating groups so that each of these groups will do the best safety educational job with its own people and through its own channels.

2. Plan and correlate the over-all farm safety program and unify it into one effective statewide program.

3. Represent a strong force to bring about increased or more adequate consideration for the safety needs of agriculture. The committee can take the lead in securing adequate paid leadership to head the safety movement within a state.

Under the leadership of the Farm Division of the National Safety Council, the 42 states now having state farm safety committees constitute a tremendous force for reduction of the toll that accidents take among rural people. The usual experience is that sooner or later after a state committee becomes activated, its members find need for a full time person to carry on the programs outlined by the committee. Fifteen states now employ state farm safety specialists who give their time to the leadership and coordination of safety efforts for agriculture. The time is at hand when many more states should have such a specialist.

A well planned program of farm safety includes many phases such as better statistical information, research and development of better techniques in doing farm jobs, and stimulating cooperation from many organizations and agencies. Bringing about an adequate degree of safety consciousness requires persistent educational and inspirational effort.

Therein lies the duty and the opportunity of the

farm safety specialist. To provide a better understanding, a unifying influence, and an inspiring leadership is the great mission of such a job. Such leadership is bringing a steady decline in the unnecessary toll that accidents take in agriculture.

The next important unit in farm safety is the county farm safety committee. It is where farm people live and work that the job must be done if lives are to be saved and crippling injuries prevented. It matters not how good a program may be developed at the state or national levels, if it is not operative at the county level. The county committee under the guidance and leadership of a state specialist and the county extension agent can take over in putting these programs into operation.

What are the specific jobs for the immediate future? First of all we must know the situation better than it is now known. There is need for establishment of an accident reporting system that will compare somewhat favorably with the present crop reporting system now operative in agriculture. Families should keep a record of accidents on their farms. It may surprise them to discover that certain members of the family are experiencing more accidents than others, or that certain spots in the farmstead or certain pieces of equipment are involved in accidents more than others. It will be at those points or with such equipment or members of the family that safety education needs emphasizing.

The same sort of record should be kept for the community and for the county. In all probability it would be discovered that a certain point on the highway is involved in a lot of accidents or that farm driveways or field entrances are having more than their share of mishaps. Such knowledge would enable the county or community safety committee to develop an effective program to eliminate those hazards.

But our educational program cannot wait for the development of an accident reporting system, important as that is. There are certain fields of safety that need to be emphasized immediately. Each year, with the help of state farm safety specialists, two areas of safety education are selected for emphasis. For 1959 these include "Safety with the Tractor" and "Electrical Safety." Assistance is being given to the farm family, to the community, and the county to develop safety educational programs in 1959 that will emphasize the importance of the safe use of tractors and safe handling of electricity. Of course other areas of safety are included as well. Materials are available from the Farm Division of the National Safety Council to assist in the two special areas selected and also in other areas that require attention.

There are three major steps to be taken to accomplish this great educational program for safety and

agriculture. The first of these is to learn the hazards, and for this purpose farm safety check lists and hazard hunts are used both by young people and adults to discover dangers that lurk around the farm and in farm work.

The second point is a positive program to eliminate all those hazards that can be eliminated. Industry has discovered that it is worth any amount of expense and time to provide the safest possible conditions for its workers. Agriculture must come to the same realization.

The third point is to learn to live with those hazards that cannot be eliminated. Such knowledge in itself often practically eliminates the hazard. For example the corn picker, which is inherently a dangerous machine, can be operated safely if the operator will follow the instructions that come with the machine. In other words, the operator can learn to live safely with these hazards.

The coordinated effort of various groups in agriculture or those related thereto in attacking this problem cannot be over emphasized, but in the final analysis farming is a family proposition. It is important, therefore, that all members of the farm family be made safety conscious. This includes recognition of the danger spots around the farm, knowledge of what constitutes major hazards, an awareness of dangerous practices in handling machinery and live-

stock, plans for safeguarding children, consideration for risks in use of electricity, efficiency in fire prevention, up-to-date first aid knowledge, and a host of other items. But more than that the farm family must participate in the organized program for the community, the county, and the state. Farm safety organizations must promote programs for young people's groups, for women's organizations as well as for farmers themselves, and they must provide materials to assist in carrying out such programs. Awards and recognitions must be provided for those doing the best job.

There is no doubt that some farm people are alive today, some are not crippled today, because of what has already been done in farm safety. But it is equally true that many farm people are dead and many more are crippled because of what has not yet been done. Agriculture must tackle its own safety problem just as industry has done. Whose job is it? It's the job of everyone worthy of the title of leader.

The issues are so vital and the results so greatly to be desired that it is hoped that agricultural leaders everywhere and others who are related to agriculture and interested in its welfare will enlist in this important educational effort.

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It takes *physical power* to run our industries, operate our farms, create products of commerce, to fashion weapons of defense and offense.

It takes *brain power* to create and control the forms and substance of our economic, political and social existence.

It takes the *power of ideas* to determine and establish our collective ideas and ideals, our dreams, visions and goals for the future.

These are the structures of power which we must build today to determine our existence tomorrow. Whether their foundations are shallow, shifting and fragile, or solid and deep, depends almost completely on the character of our research effort, both basic and applied.

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