

# Farm Safety For Children: What Job is Right for My Child? Child Development Awareness for Farm Parents and Grandparents<sup>1</sup>

Thomas L. Bean, Jennifer Wojtowicz<sup>2</sup>

Studies have shown that at least 300 children die each year because of injuries on the farm. An additional 23,500 children are injured on the farm each year. Many of these injuries are permanently disabling.

Research has shown that children of all ages are involved in farm accidents. Figure 1 shows the typical distribution of fatal farm injuries by age. As children grow and develop, both their play and work habits change. As a result, they are more prone to certain types of accidents. (See Figure 2.) Each age group is discussed in detail below.

## TODDLERS & PRESCHOOLERS (UNDER AGE 5)

Injuries to toddlers and preschoolers tend to occur when playing on the farm or when riding on farm equipment.

Toddlers and preschoolers can climb, walk and run. This age group has a very short memory and likes to test reality. They learn by trial and error. Preschoolers have a fascination with moving parts, for example PTO'S, belts and moving corn in an auger.

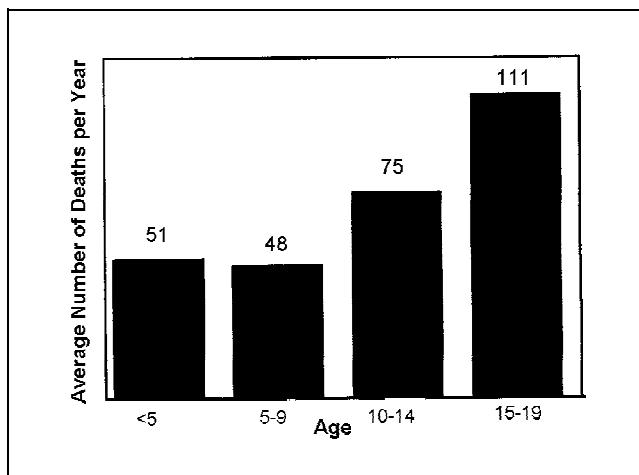
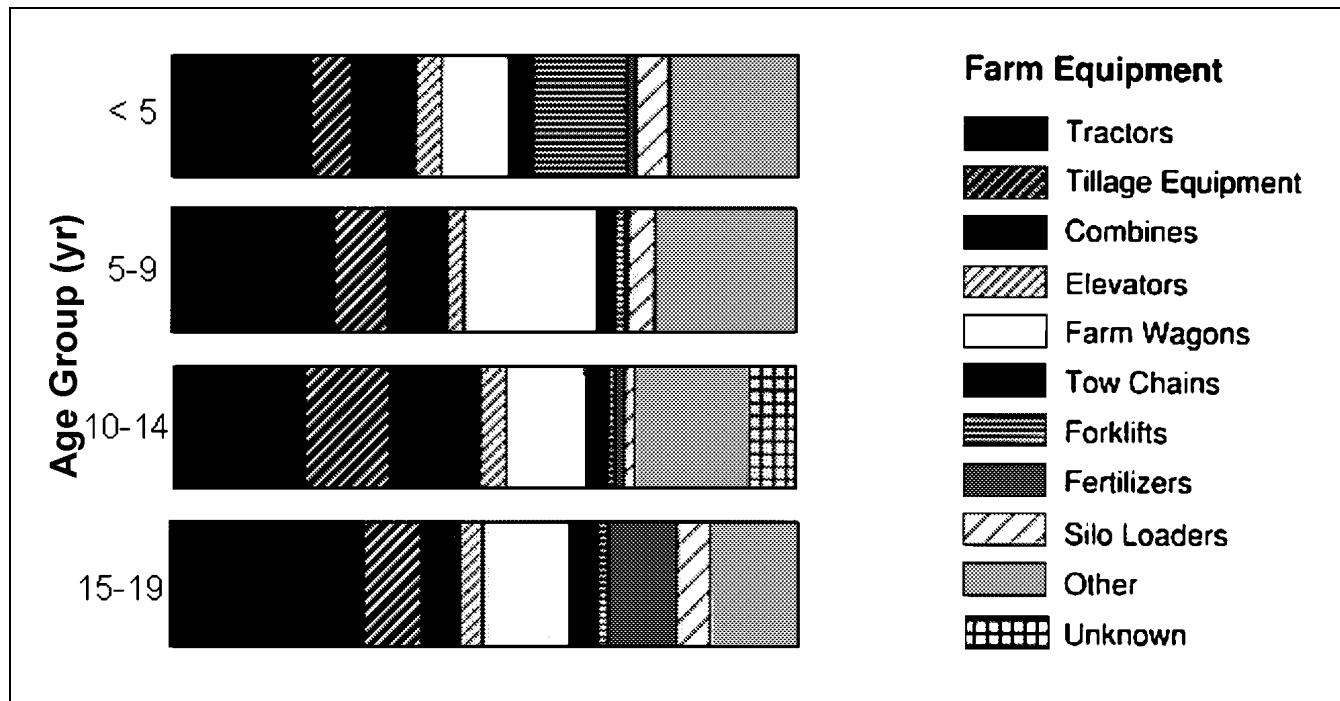


Figure 1. Distribution of farm fatalities by age.

## Types of Injuries

- falls from tractors
- falls from heights, for example, silos, ladders and hay holes
- kicked and stepped on by animals
- ingestion of chemicals

1. This document is AEX-991.1, a series of the Agricultural Engineering Department and Department of Preventive Medicine, Ohio State University Extension, Columbus, Ohio 43210. Supported in part by project #MCH394001-02-1 from the Emergency Medical Services for Children program, HEalth Resources and Services Administration Department of Health and Human Services. Funded in whole or in part from Grant Number U05/CCU506070-02, "Cooperative Agreement Program for Agricultural Health Promotion Systems," National Institute for Occupational Safety and Health. Publication date: October 1992.
2. Thomas L. Bean, Safety Leader; Jennifer Wojtowicz, Graduate Assistant, Ohio State University Extension, Columbus, Ohio 43210. Reviewed by Dr. Randall Wood, Dr. Sue Nokes and Mr. Ron Clason, Department of Agricultural Engineering.



**Figure 2.** Proportion of childhood farm injuries in the United States, 1978-83, by age.

### Prevention

- Never have a child as an extra rider.
- Keep ladders out of reach.
- Keep chemicals in locked storage.
- Oversee the activity of preschoolers.
- Provide a fenced play area away from farming activities.

### SCHOOL AGE CHILDREN (AGES 6-11)

Injuries to school-age children occur at both work and play. This age group likes to explore and be creative. Parental attention and praise are very important. School-age children generally try to complete any assigned task to please their parents, even though the task may not be appropriate for them. They do not feel they can tell their parents "No," even if the children know the task is beyond their capability. This attitude results in many accidents. For example, a tired or weak child is more likely to become entangled in farm machinery.

### Types of Injuries

- falls from barns
- auger amputations and entanglements
- tractor roll-over
- suffocation in grain

### Prevention

- Restrict play areas.
- Evaluate child's physical and mental maturity for a given task.
- Have proper protective devices on equipment, such as ROPS and shields.
- Warning decals on hazardous equipment or locations.
- Set aside time to discuss farm dangers with children.

### ADOLESCENT (AGES 12-16)

Most adolescents participate in farm labor. Therefore, their injuries are commonly work-related. This age group is greatly influenced by peer pressure. Adolescents do not like to look like failures; they want to impress others and tend to believe they are immortal. Many risky behaviors, intended to impress, result in accidents.

Age should not be used as the sole measure of maturity. Some other variables that distinguish individual adolescents are judgment and body size. Experience and observation help to improve judgment. A parent who takes proper safety precautions is the best teacher. Improper behaviors that parents perform automatically, for example stepping over a moving PTO, will likely be copied by a child. (For precautionary safety measures, see fact sheet AEX 991, Farm Safety

for Children: What Parents and Grandparents Should Know.)

There is a tremendous difference in the size of adolescents. Growth occurs in spurts and varies between siblings. A task that was appropriate for one son or daughter at age 12, may not be appropriate for his/her brother or sister at the same age.

### **Types of Injuries**

- tractor roll-overs
- amputations from PTO's
- MVA (motor vehicle accidents) with farm equipment on roads
- suffocation in grain bins

### **Prevention**

- Evaluate the child's physical and mental maturity for a given task.
- Install the proper protective devices on equipment.
- Have children complete the necessary safety courses for operating farm machinery.
- Teach children to use personal protective equipment.
- Set aside time to discuss farm safety with children.
- Be a good role model.

Parents and grandparents should be sensitive to the development and needs of children. When assigning tasks to children, they need to consider a child's age, maturity level, attention span and physical size. If children are not physically ready for a task (for example, if they are too short), they should not be asked to perform the task. Do not alter machinery by using blocks on tractor brakes, for example.

Parents and grandparents also need to assess the level of alertness of children. If children have been in school all day, they may be tired. Fatigue will increase the likelihood of an accident. A little time spent evaluating children before assigning tasks may end up saving their lives.

### **SOURCES**

Rivara, F.P. Fatal and Nonfatal Farm Injuries to Children and Adolescents in the United States. *Pediatrics*. 1985; 76(4):567-573.

Pollack, Susan H. & Pratt, David S. A Pediatric Perspective on Agricultural Injury in Children and Adolescent. Draft. Childhood Agricultural Injury Prevention Symposium. 1992.