

# RURAL

# Safety and Health

## SAFER FARM ENVIRONMENTS FOR CHILDREN

by Ellen Abend and Eric Hallman  
Cornell Agricultural Health & Safety Program  
<http://www.diaglab.vet.cornell.edu/aghealth/>



### THIS FACT SHEET COVERS

- Stages of child development
- Basic tenets of child safety
- Protection from hazards
- Education of children



**T**he family farm has always been a place where work, play and life's other activities intertwine at a single location. Generations passed on their beliefs, values, and work ethics to succeeding generations through shared activities on the farm. Today, however, the pastoral farming lifestyle is becoming a high-tech industry. Although the farm has always had its share of hazards, modern agriculture has become one of the nation's most perilous industries. Because farm

children live and play on the work site, they are exposed to potentially dangerous situations every day.

It is not technically feasible to eliminate all hazards from a farm- stead. Farm families, therefore, must be able to identify hazards, know their children's capabilities, and develop appropriate responses to protect children.

---

## Children-What Makes Them Tick?

Each child is unique, with his or her own level of development, judgment, and maturity. A child's perspective is different from an adult's, and trying to predict how children will react to a situation on any given day is next to impossible. Nevertheless, psychologists have identified some general childhood characteristics based on age groups.

### Infant/Toddler (Birth to Two Years):

Within a short 24-month period, a totally dependent baby develops into a very active, mobile explorer, experiencing the environment, at first, through taste and touch. Newly discovered mobility motivates toddlers to climb onto and into things that were not designed for them. Because of rapid physical changes, their mastery of skills is inconsistent, and falls are a common cause of injury. Toddlers cannot judge what is safe, so parents need to be aware of what the child is doing at all times.

### Preschool (Three to Five Years):

Preschoolers love to climb, and they tend to gravitate toward water, interesting noises, and moving parts. They also imitate the behavior of others, especially that of people who are important to them. Preschoolers think "magically" rather than logically. They believe that if they want to do something, they can, with no regard for risks and consequences. Because preschoolers are strong-willed negotiators, they increase the risk of being injured by insisting on, for example, having "just one ride" on the tractor or hay wagon.

### Early School Age (Six to Eight Years):

Youngsters can understand danger at this age, but because they have short attention spans and are easily distracted, they may still get into trouble without realizing it. Children this age are very curious and work hard to master physical skills. In striving to be competent and accepted by peers and adults, they attempt tasks that may not be appropriate for their abilities.

### Middle Years (Nine to Eleven Years):

During these years, children are group oriented, but they also are striving to develop a sense of self and to experience achievement. They exhibit logical thinking, but not consistently. One minute they appear to understand cause and effect, the next minute they don't. Children in this age group have a "hands-on" orientation, and in their desire to be a part of the farm family, they may overestimate their capabilities. Size variations are great during this developmental stage. Parents may think that taller children are more able to do adult tasks, but this may not be the case.

### Adolescence (Twelve and Older):

Early teens are often awkward and clumsy. During this growth period, their hands and feet grow more rapidly than the rest of their bodies and lack of coordination is common. Adolescents may have a keen interest in experimenting, a resistance to supervision and authority, and a perception of being immortal. These traits create added risks for youths in this age group when they participate in a farm's daily operations.

## Child Safety: Back to the Basics

Injuries are the leading cause of death for children past the age of one. It is estimated that 23,500 farm children are injured annually while working or playing on the farm. Tractors and equipment contribute to most of those injuries. Falls and encounters with animals are the next two most common causes.

Accidents do not "just happen"; they usually involve an error in judgment. Because the ability to perceive danger and react safely is a learned behavior, children need regular, consistent training and appropriate examples to follow.

Ultimately, it is the *adult's responsibility* to ensure the safety of a child. That responsibility includes supervision, the making and enforcement of rules, protection against hazards, and education.

## Supervision

Supervision is vital to the safety of children of all ages and should never be viewed as an intrusion. Guidelines for supervision include:

- Know where children are at all times.
- Explore play groups, day care, or other adult supervision for children when both parents are working. Concentrating on work and watching a child at the same time puts both the parent and the child at risk.
- Provide safety training for young people working on the farm. Experience has shown that they often receive little, if any, safety training. When youths begin helping with chores and tasks, it is essential that they be trained and familiarized with a job's procedures and equipment. Explain, observe, and correct as needed. Positive comments from adults encourage desired behavior.
- Keep young children from playing in areas with high levels of noise or dust. Exposure to loud machinery, grain processing areas, or similar environments can lead to cumulative hearing loss and permanent damage to respiratory systems. Older children working in those areas should be required to use dust masks and hearing protection.
- Don't allow children to move containers, hay bales, or other objects that are too heavy for them.

## Rules

Rules are made to protect lives, not "to be broken," as the old proverb states. Be firm in your convictions. Start by enforcing these simple rules:

- NO PASSENGERS are allowed on any tractor or piece of equipment. One seat means one rider.
  - Children are not allowed to play on farm equipment, especially tractors. Machinery may look like fun, but it is not play equipment. A proper play area can be built using a commercial kit or with some creative effort. A child's safety is worth the expense.
-

- Work areas are off-limits for playing. Tour the farm and set limits as to where children can play. Silos, grain bins, and hay mows look inviting but may produce deadly results.
- Children and adults must always tell each other where they are and what they are doing. Make this a standard practice for everyone on the farm.

## Protection from Hazards

Eliminating all potential hazards may be impossible, but removing some of the more common ones can save lives and prevent injuries. A few practical suggestions:

- Keep pesticides, veterinary medicines, and milk house chemicals out of the reach of young children. Store them in their original containers in a locked cabinet or shed. Rinse out empty containers and dispose of them properly.
- Remove junk piles, and store raw materials safely. To young children these look like great areas to play and explore.

- Unplug power tools when they are not in use.
- Empty pails of water, waste oil, and other liquids that can attract curious toddlers. Drowning can occur in just a few inches of water.
- Do not leave heavy objects like tractor tires leaning against walls. Children may pull them over on top of themselves while playing. Store heavy or large objects securely in low-traffic areas.
- Keep guns in locked storage cabinets out of the reach of children. Store ammunition separately.
- Provide a fenced play area for young children to keep them away from potentially hazardous areas.
- Elevate ladders leading to structures, like silos, at least 7 feet off the ground to prevent children from climbing them.

### Install and Maintain Guards and Shields

Mechanical shields and barriers are meant to protect people from dangerous equipment and situations. Make certain that

- All moving parts on equipment and tractors are properly guarded. Install and maintain complete PTO master shields and guards on all tractors and equipment. Removing guards to save a few minutes while hooking up or repairing equipment is not worth risking injury.
- Farm ponds and liquid manure storage facilities have fencing that children cannot climb over or squeeze through. These are potential drowning sites.
- Livestock gates and fences are sturdy and secure to prevent unwanted contact between children and animals.
- Electrical boxes are covered and no bare wires are exposed to minimize the possibility of electrocution.
- Fan installations are equipped with guards to prevent curious little hands and fingers from getting too close to the blades.

## Educate-Don't Assume

Adults often assume that the safe way of doing something is obvious, but acting safely is a learned behavior that takes time and practice. Parents and supervising adults can educate children about farm safety in the following ways:

- Teach young children to stay away from containers that look unfamiliar or are marked "poison."
- Post emergency phone numbers (including Poison Control) on every phone, along with clearly written directions about how to get to your farm. Teach children as soon as possible how to report an emergency.
- Teach children how to act safely around animals. Their eagerness to be near an animal may place them in danger. (See the Farm Safety Fact Sheet "Safe Animal Handling")
- Explain to children why they are not allowed to ride on tractors and other equipment. Make them aware that children their age can fall from moving equipment and discuss what may happen.





- Tell children, even the very young, where off-limit areas are.
- As children grow older, explain why certain activities, areas, and equipment are dangerous, so they will better understand the rules.
- As older children and teens become workers, take time to train them. Ask them to explain in their own words how they are going to perform the task at hand and make sure they fully understand the job.
- Realize that children occasionally forget to act or work in a safe manner. Check on them frequently, and correct unsafe behaviors immediately.
- Remember that education most often takes place when children watch others; be a safety conscious role model. Remind older siblings that they are also role models and their behavior will be imitated.

## Summary

Farms can be a great place to raise children and continue a valued way of life, but they can also be full of hazards, especially for youngsters. By providing attentive supervision, making and enforcing rules, taking appropriate precautions with equipment and work areas, and educating children, farm environments can be

made healthy and safe for the entire family. When there are children on the farmstead, it is important to keep in mind several key points:

- Children are unpredictable and prone to forget safety lessons.
- Children live for today, with little thought of the risks and consequences of their actions.
- Each child is an individual with his or her own temperament, abilities, and level of maturity.
- Children, no matter how well they have been taught, are still going to behave like children.

Finally, it is critical to remember that safety on the farm is always an adult responsibility.

## OTHER RURAL HEALTH AND SAFETY FACT SHEETS INCLUDE:

- Power Take-Off Safety
- Lightning Protection for Farms
- Slow Moving Vehicle Emblems
- Electrical Safety on the Farm
- Safe Animal Handling



**Cornell  
Cooperative  
Extension**

*Helping You  
Put Knowledge  
to Work*

This publication is issued to further Cooperative Extension work mandated by acts of Congress of May 8 and June 30, 1914. It was produced with the cooperation of the U.S. Department of Agriculture; Cornell Cooperative Extension; the New York State College of Agriculture and Life Sciences, New York State College of Human Ecology, and New York State College of Veterinary Medicine, at Cornell University.

Designer: Dennis R Kulis  
Editor: David A. Poland  
Illustrations by Jim Houghton

For additional information: call 1-877-257-9777  
Cornell Agricultural Health & Safety Program