

# IOWA STATE UNIVERSITY

## University Extension

### Farm Safety for Young Children<sup>1</sup>

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Accidents kill more children than disease, kidnapping, and drugs combined. Each year, an estimated 300 people under age 19 die and approximately 24,000 (65 every day) are seriously hurt on our nation's farms. The rate of death is higher in agriculture than in mining, construction, or the timber industry, and children who live on farms may be exposed to dangers 24 hours a day. In Iowa, at least one out of every five farm injuries is to a child. The most common causes of these injuries are from slips and falls, animals, farm machinery, and all-terrain vehicles.

Children are vulnerable to many of the same hazards as adults who live or work on farms, but they are far less capable of understanding those hazards. Although parents cannot completely child-proof a farm, they need to make it as safe as possible. Here are ways to minimize exposure to common farm hazards for children under age eight, and several good safety practices that will provide back-up protection for them.

Table 1 is a summary of a child's growth and development as it relates to farm hazards, so families can provide supervision that's right for each child.

#### TRACTORS AND MACHINERY

Tractors and machinery are involved in three out of four farm injuries to children.

- Never allow children to drive a tractor. They do not have skills or judgment to operate a tractor until about age 14.

- Post "No Rider" decals on tractors and do not allow passengers, even in a cab or back of pick-up truck.
- Never allow children in work areas, or allow them to play on idle machinery. When not in use, remove keys and keep out of reach.
- Make sure master shields are secure on power take-off units and augers.
- Always know where children are when backing up, and double-check blind spots.
- Store properly; keep hydraulic equipment (front-end loaders) in down position, and lock brakes on self-propelled machinery.
- Keep reflectors and rear lights in good condition, and make sure brakes work properly.

#### LIVESTOCK

Livestock are unpredictable. They are linked to one of every five injuries on the farm.

- Always supervise children under age eight around livestock, even when outside a fence. Do not count on them to be calm or not tease animals.
- Never allow children independent access to animals.
- Always wear hard shoes.

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- Beginning about age five, teach children simple rules about livestock such as how to treat them, where to stand, and which animals to avoid. But do not count on them to abide by rules until at least age eight.

### **GRAIN ENTRAPMENTS**

One-third of all entrapments and suffocations in flowing grain involve children under age 14.

- Never allow children to play in grain, ride in grain wagons, or get into bins or hoppers. Grain may fascinate children, but it acts like quicksand.
- Never allow children in areas where grain is loaded or unloaded.
- Never leave an auger or wagon unattended. Grain accidents happen quickly and few adults are strong enough to rescue even a young child.
- Post warning decals on wagons, bins.

### **PESTICIDES**

At least half of the U.S. deaths from pesticides are to children under age 10.

- Understand why children are poisoned. They're naturally curious, can be attracted to containers and bright colors, want to imitate parents, and tend to put things into their mouths.
- Know what's dangerous: pesticides and fertilizers; soaps, bleaches, starch, stain remover, and other cleaning products; drain cleaner; dairy pipeline cleaner; paints and related products; fuels; treated seed, and vegetation that is toxic (certain garden and household plants) or items that have been sprayed or treated.
- Teach children at age two not to eat or drink anything unless given to them by a familiar adult. Don't expect them to abide by rules until at least age eight.
- Teach children at age five to get permission before eating home-grown fruits and vegetables.
- Do not allow children to be on recently treated grass or ground. Check label for safe re-entry time.
- Use safety closures, although child-resistant caps are only 35 percent effective even when used correctly.

- If children accompany adults who bring meals to field workers during pesticide application season, make sure workers remove coveralls and wash hands with soap and water before touching family members, and that children stay in vehicle or on a clean blanket.
- Keep toxic substances in original containers with label about first-aid procedures and chemicals involved.
- Keep gas and fuel in proper containers.
- Keep all toxic substances (including spigots, hoses, pumps, and rags) on high shelves in either a locked building or inaccessible area.
- Never leave toxic products unattended during use, and avoid using poisons in front of children.
- Do not mix poisons in containers once used for food or drink. Mark with poison decals. Rinse immediately and return to locked storage.
- Discard dangerous substances properly in a way that children have no access to them.
- Post danger signs around locked chemical storage areas.

### **FALLS**

Falls from farm machinery and in buildings are a major cause of injuries under age nine.

- Never allow children to enter a farm building alone. Lock silos and bins.
- Make fixed ladders inaccessible; store portable ladders out of reach.
- Fence farm ponds and manure pits.
- Cap wells with cement.
- Store tools out of reach; lock sheds.
- Lock unloaded guns in separate location, away from locked ammunition.
- Place unused dual tires flat on ground; do not prop against building or tree.

## ELECTRICITY

Electricity is always a danger for children, especially on farms.

- For children under three, cover outlets; keep cords out of reach to prevent burns by chewing on cord, pulling down appliances, and strangulation; and keep children out of areas where heaters or fans are in use.
- For all young children, shield all electrical boxes and wiring.
- Unplug tools and appliances after use.

## KEEP YOUR CHILDREN SAFE ON THE FARM

Supervision of young children presents unique challenges to farm families. No longer do we have family members close by or neighbors able to watch children.

### Could I take them along when I work?

You may think it's safe, and that your child is old enough to be responsible, but don't expect more of children than they can deliver. Farm injuries happen when a child does something beyond the child's ability.

### Couldn't they play on their own?

This may seem OK, especially if you or an older sibling is close by. But there are other factors to consider. Children under age eight often put themselves in danger. Children may not know how to handle unexpected situations (a sink overflowing, or a sudden storm). They may feel lonely, bored, insecure, or afraid (and not talk about) it because they want to seem mature). They may get a premature sense of independence, and pay less attention to you. Guilt or worry about their children also may cause parents to hurry and put their own safety in jeopardy.

## CONSIDER CHILDCARE...

Farm families may not consider getting childcare because of the expense, availability, extra time required for transportation, or feelings of guilt about leaving children in a strange place. Regardless of the hassles and hardships, arranged childcare should be seriously considered for children under age eight when both parents are involved in farm work.

### What are some choices?

- Hire a baby-sitter or childcare provider to come to your home.
- Take children to a family daycare home.
- Set up a babysitting exchange with a friend during busy times.
- Form a babysitting cooperative with other farm families.

### Is it worth it?

The stigma, expense, and trouble of arranging for childcare become trivial when compared to the stress, guilt, and expense when a child is injured or killed on the farm.

## LEARN MORE ABOUT FARM SAFETY

Iowa State University Extension has 36 free publications in the Safe Farm series (Pm-1265, Pm-1518, and Pm-1563). Each fact sheet deals with a different type of hazard, ways to improve safety, and additional resources. Farm Safety 4 Just Kids(1-800-423-5437) also offers materials to teach children about safety.

It also helps to understand when injuries are most likely to happen. A young child's newly developing skills may catch parents unprepared. A change from the familiar - new furniture, guests, or routines - may present new dangers or distractions. Injuries often happen when we're busy, tired, in a hurry, or when children are hungry or tired. On the farm, most injuries occur in summer and fall, and in late afternoon, early evening, or on Saturdays. Childcare is needed most during these times.

Prevention includes preparation. Teach children what to do in an emergency. Even a three-year-old can press a button on a programmed telephone. Since most children under age eight are not good readers of unfamiliar words, use symbols on your emergency telephone list.

A safe outdoor play area away from livestock, traffic, and machinery is essential for children growing up on a farm. A fence helps separate play from work environments, however, young children still need close supervision.

No matter how much you learn about farm dangers, do not expect children to understand them. The best solution is for parents to understand the development of their children and to provide a safe environment for them.

Table 1.

	<b>** Age characteristics</b>	<b>Key farm dangers</b>	<b>Appropriate rules</b>	<b>Supervision</b>
<b>Infants</b> (about 3 - 12 months)	<p>Able to move away from supervision</p> <p>Picks up, mouths objects</p> <p>Explores environment</p> <p>Attracted by noise/movement</p> <p>Opens doors, cabinets, drawers</p> <p>Searches for things</p>	<p>Being taken into dangerous situations</p> <p>Poisonous substances, treated areas</p> <p>Suffocation, choking, strangulation</p> <p>Drowning, pulling things over on self</p> <p>Finding dangerous substances, items</p> <p>Electrical appliance cords, heater, fans</p>	<p>Cannot understand rules</p>	<p>Never leave alone, even for a few minutes in playpen, high chair or when sleeping in crib</p> <p>Protect stairways and railings; put safety latches on cabinets, drawers; guards on outlets; secure cords</p> <p>Avoid carrying infant in a sling or back carrier in a vehicle, or when doing chores</p>
<b>Young Toddlers</b> (about 12 - 24 months)	<p>Able to walk; climbs stairs, get out of crib</p> <p>Uses stair/chair to reach objects</p> <p>Uses a sick as tool to reach</p> <p>Twists knobs, works latches</p> <p>Good at finding hidden objects</p> <p>Pretends, imitates parents' actions</p> <p>Waits until adult isn't looking</p> <p>Likes to "help"</p>	<p>Can get away from adults quickly</p> <p>Able to get poisonous substances</p> <p>Imitating adult behavior</p> <p>Choking or strangling on small items such as cords</p> <p>Drowning, falling into buckets of water</p>	<p>Cannot understand rules</p>	<p>Closely supervise at all times</p> <p>Never leave in the house alone, even for a few minutes sleeping in crib</p> <p>Protect stairways and railings; put safety latches on cabinets, drawers; guards on outlets; secure cords</p> <p>Avoid carrying toddler in sling or back carrier when doing chores, such as mowing</p> <p>Don't take toddlers around operating machinery</p>
<b>Older Toddlers</b> (about 2 - 3 months)	<p>Enjoys challenges to moving</p> <p>Runs headlong, has trouble stopping</p> <p>Doesn't understand personal property and that some things are not to be touched</p> <p>Wants to do things by self</p> <p>May put small things in mouth, ears, nose</p> <p>Looks for interesting activities</p> <p>Doesn't understand distance, that when a vehicle gets bigger it's moving closer.</p>	<p>Playing with tools, electricity, fire</p> <p>Poisonous substances and containers</p> <p>Going near livestock, grain, machinery</p> <p>Choking or strangling on small items such as cords</p> <p>Getting hit by moving machinery, vehicles</p> <p>Drowning, falling into buckets of water</p>	<p>Introduce rules and sign but don't rely on children to remember or heed them until after age seven.</p> <p>Good rules to start with:</p> <ul style="list-style-type: none"> <li>Don't open door with a danger sign</li> <li>Don't touch anything with a Mr. Ugh sticker</li> <li>Don't eat or drink anything unless a familiar adult gives it to you</li> </ul>	<p>Closely supervise at all times</p> <p>Never leave alone, even for a few minutes</p> <p>Protect stairways and railings; put safety latches on cabinets, drawers; guards on outlets; secure cords</p> <p>Avoid taking toddler around machinery or when doing any chores, such as mowing</p>

Table 1.

	<b>** Age characteristics</b>	<b>Key farm dangers</b>	<b>Appropriate rules</b>	<b>Supervision</b>
<b>Preschoolers</b> (about 3 - 5 years)	Active climber, runner Adventurous, likes challenges and things to explore, investigate Seeks privacy Interested in seeds, plants, animals Able to pay attention, observe closely Vague understanding of descriptive terms (some, under, behind, close, far)	Playing near animals, grain, machinery Being an "extra rider": Exploring farm buildings Eating poisonous, treated plants/grain Imitating: doing chores, using toxic substances, feeding animals Misunderstanding directions Drowning, playing with fire	Cannot be relied upon to remember rules Play only in house or outside play area Never play close to livestock, machinery, roads Avoid grain, regardless of where it is Never be an "extra rider" on any vehicle Obey poison, other danger signs Don't eat any part of plant without permission	Supervise where you can hear and see them Avoid taking child around machinery or when doing any chores, such as mowing Never leave alone with access to livestock, machinery, farm buildings Keep safety latches on places containing dangerous items (knives, matches)
<b>Kindergartners</b> (about 5 years)	Overconfident, feels able to do anything Likes to do adult tasks, act like an adult Wants to know how things are used Listening skills not well developed Has difficulty following rules, directions Relies on perceptions, how things seem makes judgement intuitively	Doing chores with or without permission Doing things their own way, even after told otherwise Getting too close to machinery, livestock Firing, using firearms Exploring farm buildings, ladders, tires Drowning, playing with fire	Cannot be relied upon to follow rules Don't go near livestock, machinery, farm buildings, or roads alone Avoid grain, regardless of where it is Never be an "extra rider" on any vehicle Obey poison, other danger signs Don't eat any part of plant without permission	Monitor from a close distance: check every 10 to 15 minutes Don't let child operate or play on machinery Supervise when in farm buildings, near livestock Don't take child along when using toxic substances, or areas with fumes
<b>Young Schoolagers</b> (about 6 - 8 years)	Imperfect judge of distance, speed Not able to anticipate danger Sill confuses left and right Thoughtful, inward, preoccupied Worries frequently, sulks, is pensive Wants to be independent, strong, brave Will accept small responsibilities Often doesn't hear what's said to him/her Questions authority, refuses cooperation	Making poor judgments; is careless Trying to operate machinery, caring for animals on his/her own Playing on grain, helping with grain handling Accepting responsibilities not ready for Playing in farm buildings Firing, using firearms Disobeying or ignoring rules Drowning, playing with fire	Should not be allowed to do chores alone Never operate any machinery Don't go near livestock, machinery, or farm buildings alone Never go close to grain, to help or play Never be an "extra rider" on any vehicle Determine "off limit" areas and enforce them Never touch electrical wires	Monitor from a close distance; check every 10 to 15 minutes Don't let child operate or play on machinery Supervise when in farm buildings, near livestock Don't take child along when using toxic substances, or in areas with fumes Don't take responsibilities that require judgment, independent access to livestock, grain
<b>** Note to parents:</b> Ages are approximations only. Children develop at different rates and have different personalities. Most children overestimate their abilities and want parent to believe they are more competent and responsible than they really are (and many parents would like to believe their children are right). Until age eight, children have many limitations and cannot be depended upon to follow rules or make good judgments.				