

# Youth Livestock Safety for the Horse Project

**4-H Lifeskills:**  
Personal safety

Making decisions

**Objectives:**  
Horse project members will:  
Describe how you can be  
injured while working with and  
riding horses

Describe appropriate personal  
protection equipment and  
clothing choices for working  
with and riding horses at home  
and at shows

Prepared by: Kerri Ebert, Extension Assistant,  
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## Lesson 1: Take Good Care of Yourself

### Overview

Animals are involved in many youth injury incidents every year. Because of their size and strength compared to the size and strength of the youth who own and work with them, horses can be particularly dangerous. This lesson is designed to teach best practices for personal safety when working with horses raised or purchased for the purpose of showing at livestock exhibitions. It should be used with other Horse Project materials.

### Experience

Watch the video clip entitled "Take Good Care of Yourself" and work through the discussion questions at the end of the video. If you choose not to use the video, take turns reading out loud the following information; then move on to the discussion questions.

Common injuries from working with and showing horses can be divided into two categories – mounted and dismounted. The most common dismounted injuries are typically the result of being kicked or stepped on by a horse and include:

- Head injuries
- Cuts, scrapes, and bruises
- Muscle and/or back strain from heavy lifting or grooming

The most common mounted injuries occur from falling off or being thrown from the horse and include:

- Head injuries
- Cuts, scrapes, bruises, and broken bones

Less common injuries from working with and/or showing horses:

- Breathing problems from inhaling dust, animal dander, or chemicals

The most important safety decision you will make is selecting the right horse for you. Select a horse that matches your horse handling and riding abilities. Once you have the right animal, safe working habits include protecting yourself, your horse, and others.

## Try This!

Practice safe lifting and carrying to protect your back.

Here's how:

Stand close to object to be lifted

Spread your feet wide enough to straddle the object

Squat, bending your knees and hips

Keep your head up and your back straight

Hold in your stomach muscles

Lift using your leg muscles

Keep the load close to your body with a firm grip

Turn your feet, not your back, in the direction you are going

Practice personal safety by using personal protection equipment and developing safe working habits. Protecting your head is very important. The most common injury related to horse activities – mounted or dismounted – is head injury which accounts for more serious injuries and deaths than any other cause. Basic personal protection equipment for riding includes:

- Riding helmet – Certified by the Safety Equipment Institute (SEI) to meet the current standards of the American Society for Testing and Materials (ASTM); must fit snugly, not move around on the head, and have a harness strap that buckles under the chin.
- Boots – Sturdy, leather, hard-toed, designed for riding with ankle support and at least a ½ inch heel to keep foot from slipping through stirrups
- Gloves – Riding gloves protect hands from cuts, and rope burns
- Snugly-fitted clothing that will not get snagged on equipment, well-fitted, not baggy pants and shirts; long hair tied back
- No rings or dangling jewelry that can catch on equipment

When working around and caring for your horse (not riding) your personal protection equipment should include:

- Sturdy, leather, hard-toed boots or shoes; be sure to remove spurs when you are not mounted because they can trip you
- Latex or rubber gloves protect hands from infectious organisms while grooming and washing your horse
- Safety glasses to protect your eyes from hair clippings, dirt, and grooming products. When working in bright sunlight, try tinted safety glasses to protect your eyes from ultraviolet rays.
- Ear plugs protect your ears when using motorized equipment, such as the clippers or blower and when working in an enclosed area where noises are loud.

Frequent hand washing with soap protects your skin when you work with your horse. Animals can easily spread disease to humans. Frequent contact with the animal's hide, dander, and feces – especially from washing, grooming, and cleaning tasks – creates an opportunity for disease to pass from your horse to you. .

Learn first aid and keep a first aid kit in your tack box and in the barn or building where you stall your horse.

## Did You Know?

You are more likely to hurt your back when:

- Lifting more than 15% of your body weight
- Carrying a load more than 10-15 yards

Use wheels to help carry loads; such as a wheeled dolly, a feed cart, a wheel barrow, wheeled utility cart, or tack box with wheels.

How much is 15% of your body weight?

Use this simple formula.

Take your weight times 0.15

For example, if you weigh 100 pounds, the most you should lift is 15 pounds.

$$100 \text{ lbs.} \times 0.15 = 15 \text{ lbs.}$$

Do the math for yourself to calculate how many pounds you can safely carry.

Your weight X 0.15 =  
The heaviest load you should carry by yourself

$$\underline{\hspace{2cm}} \times 0.15 = \underline{\hspace{2cm}}$$

## Do I Really Need Protection? - How You Can Be Hurt Working with Horses

- The horse gets frightened and runs, jumps, or kicks – while you are mounted or dismounted.
- You can be thrown or fall from the horse while mounted.
- The horse may bite you.
- You can get kicked, stepped on, or tripped while leading, moving, feeding, or grooming your horse.
- You can slip, trip, or fall over things left laying around, on a slick walkway, in a stall, or on an uneven surface (such as sand in the show ring or uneven surfaces).
- You can get a rope burn from the lead rope.
- Your fingers can get pinched in a gate latch; you can be poked by a wire, the blades on the clippers, or teeth of a grooming comb.
- You can strain muscles in your arms, legs, or back by carrying heavy tack boxes or buckets of feed. Frequent washing and grooming can cause muscle strains from frequently repeated movements, as in the up and down, back and forth of clipping and combing.

## Did You Know?

Ergonomists (scientists who study human body function) say the three worst problems for agriculture are: full body stoop (bending forward and down from the waist, as when picking up feed bags, buckets, or show boxes); lifting/moving heavy objects (greater than 15% of body weight, i.e. feed bags, tack boxes, pulling on a horse's lead rope); and repetitive handwork (as when you are washing and grooming).

## Discussion Questions

With your project group members, discuss how you stay safe when working with your horse.

### Share

- How did you feel the first time you worked with your horse?

### Process

- Describe how you keep yourself and people helping you safe while working with your horse?

### Generalize

- What other activities do you participate in that require you to protect yourself and how do you protect yourself?

### Apply

- How can you use what you've learned in this lesson to help you with other activities?

# Youth Livestock Safety for the Horse Project

**4-H Lifeskills:**  
Solving problems

Making decisions

## **Objectives:**

Horse project members will:  
Understand how horses react  
in a variety of environments

Understand how to keep  
yourself and others safe at  
home and at public shows

## **Experience**

Watch the video clip  
"Behavior Basics" or take  
turns reading aloud the  
information below. When  
you're finished, move on to  
the discussion questions.

## **Lesson 2: Behavior Basics: Getting to Know Your Show Horse**

To work safely with your horse, you should have a basic understanding of horse behavior.

- A horse's behavior is determined by many factors including breeding, upbringing, feeding, health care, training, and gender. Always treat your horse with respect, patience, and understanding.
- A horse learns by repetition so it is important to be consistent with commands and to immediately reward your horse when it responds correctly or to immediately correct it when it responds incorrectly to a command. Discipline the horse firmly, but without anger.
- Watch your horse's ear radar. Its ears will point in the direction its attention is focused. Ears that are flattened back warn you the horse is getting ready to kick or bite.
- Horses detect danger through their senses – vision, smell, and hearing.
- Horses have wide angle vision with blind spots directly in front of and below their nose, and behind their tail.
- A horse will lift its head and prick its ears when focusing on something far away. It will lower its head when focusing on close objects.
- Horses respond to calm deliberate movements with calm behavior. Nervous handlers can make horses nervous, creating unsafe situations.
- Approach your horse carefully, speaking to it to get its attention and waiting until it turns and faces you before entering an enclosed space, like a stall. Quick movements startle a horse, so speak and keep your hands on it when moving around the horse.
- Horses have a well-developed sense of touch. Its eyes, ears, and nose are the most sensitive, followed by withers, flanks, ribs, and legs.
- When approaching a horse from behind, come in at an angle speaking to it. Gently touch the hindquarters as you pass.
- Do not tease, mistreat, or encourage bad behavior. It may become a lifelong habit for the horse.

When you understand how your horse might act in different situations, you can use that understanding to help make horse shows safer for everyone – exhibitors as well as people who are watching the show. Keeping your horse calm is a good start. Other strategies to keep in mind at the show include:

- Be aware of where others are at the show – the general public (in the stands and walking around) and other exhibitors.
- Move slowly to and from the show ring with your horse. When you become excited or in a hurry, your horse will sense the change in your behavior, which might scare it. Remember that fear causes an animal to run away. When a horse cannot run it defends itself by biting or kicking.
- Horses have a strong desire to be with other horses. Sometimes a horse will become agitated when separated from other horses and may not respond to commands.
- Get to know your horse's behavior patterns and help it adjust to its new surroundings.
- Do the best you can to keep away from crowded areas while leading or riding your horse to and from the show arena. Many people do not understand how easy it is to scare an animal, because they usually look so calm.
- Practice, practice, practice show day activities – at home and again when you get to the show. Practice leading and riding to the show ring; leading and riding in the ring; tying and untying at the stall; leading to and from the stall; opening and closing gates; washing and grooming chores. Your horse will be much more comfortable doing activities it has practiced before and it will be less likely to be scared of the show ring if it's been in there before the show.

## Discussion Questions

With your project group members, discuss how you stay safe when working with your horse.

### Share

- What behavior characteristics did you look for when you bought or selected your 4-H horse?
- How did you feel the first time you led it; the first time you rode it?

### Process

- How does your behavior affect the way your horse behaves?

### Generalize

- What can you do to make sure your horse is ready for a show?

### Apply

- List some ways you can show others what you've learned about animal behavior?

# Youth Livestock Safety for the Horse Project

**4-H Lifeskills:**  
Solving problems

Making decisions

## Objectives:

Horse project members will:  
Recognize how maintenance  
of equipment and buildings  
affects personal safety and  
show horse safety

Understand how to keep  
yourself and others safe at  
home and at public shows

## Experience

Watch the video clip  
"Facilities and Equipment" and  
work through the discussion  
questions at the end of the  
video. If you choose not  
to watch the video, take  
turns reading out loud the  
information here; then move  
on to the discussion questions.

## Lesson 3: Facilities and Equipment

Keeping yourself and your horse safe includes making sure buildings, stalls, trailers, and equipment are well maintained and in good working order. The facilities used to stall and work your horse should be well designed, strong, and safe for you and your animals.

- Keep buildings, stalls, alleys, and lots neat and tidy. Remember: Slips, trips, and falls cause many injuries when working with animals. Make sure you have a place to put all supplies, equipment, and feed and keep all of those items in their proper place. Clean up spills as soon as they happen. Don't allow manure, feed, or bedding material to accumulate in alleyways or pens.
- Clean stalls and barns regularly to avoid accumulation of manure and flies. Make sure there aren't any splinters, protruding nails or latches, or sharp edges on the walls of the horse stall.
- Keep mechanical equipment clean and well maintained. Clean and sanitize grooming tools regularly, not only to keep them operating properly, but also to remove any organisms that can spread disease.
- Inspect electrical cords on clippers often. Replace cords that have exposed wires.
- Use only electrical outlets with three-pronged receptacles. When outlets are located outdoors, make sure they are waterproof and have ground fault circuit interrupters to keep you and your horse from getting an electric shock.
- Lighting should be bright and not create shadowy areas in areas (indoors and outdoors) where you work with your horse. A horse can get scared when it goes from a brightly lit area to a dark shadowy area, such as going from sunlight into a trailer or building. Be patient and allow the horse time to adjust to a change in lighting.
- Keep fences, gates, doors, etc. repaired. Replace or repair equipment that doesn't work. Gates that are hard to open can cause muscle strains or can pinch if you have to push hard on them and they open or close unexpectedly. Wire ties or nails poking out of fence boards can cause scrapes or puncture wounds – to you and your horse.

## Suggested Activities for Project Meetings

Set up a practice show at a project meeting to practice show ring safety.

Take the Horse Safety Assessment Quiz at [www.ylsp.bae.ksu.edu](http://www.ylsp.bae.ksu.edu)

Evaluate the safety of your livestock facilities using the Safety Audit Checklist. Make note of potential dangers and work with your parents to correct the dangers.

Visit and evaluate project members' facilities with an eye on safety preparedness.

Suggested guest speakers: veterinarian, horse producer, horse trainer, therapeutic riding specialist, EMT, doctor, or nurse

- Inspect all tack before saddling the horse. Check the stitching on each piece of tack. Check for signs of wear on stirrup leathers, billet straps, and girth buckles. Use only clean blankets and pads.
- Check the cinch at least three times before riding. 1) After saddling; 2) After walking the horse and before mounting; 3) After riding a short distance.

### Discussion Questions

#### Share

- What do you do in your buildings and stalls to help you stay safe when working with your horse?
- How do you care for equipment to help you and your horse stay safe?

#### Process

- How can facilities contribute to a safer environment for you and your horse?
- How does properly maintaining equipment contribute to keeping you and your horse safe?

#### Generalize

- Why are good housekeeping and proper maintenance necessary for personal safety?

#### Apply

- List some of the safety practices you do each day – in your home, at work or school?

### Suggested Activities:

Set up a practice show at a project meeting to practice show ring safety.

Take the Horse Safety Assessment Quiz at [www.oznet.ksu.edu/agsafety/livestocksafety](http://www.oznet.ksu.edu/agsafety/livestocksafety)

Evaluate the safety of your livestock facilities using the Safety Audit Checklist. Make note of potential dangers and work with your parents to correct the dangers.

Visit and evaluate project members' facilities with an eye on safety preparedness.

**Sources:** SDSU 4-H Horse Safety Training Manual; University of Kentucky Basic Horse Safety Manual; Pennsylvania 4-H Horse Safety Standards; American Youth Horse Council Horse Safety Guidelines



# Additional Safety Information

## For Leaders and Parents

### North American Guidelines for Childrens Agricultural Tasks (NAGCAT) Guidance

**Ages 12-13 years** – Youth should be constantly supervised by an adult when working with their beef project animal(s);

**Ages 14-15 years** – Nearly constant adult supervision progressing to intermittent (every few minutes) based on the individual's ability and successful demonstration that the youth understands his or her own limitations and animal behavior;

**Ages 16+ years** – Intermittent adult supervision progressing to periodic (check every 15-30 minutes) based on youth's ability to handle animal and successful demonstration of safe working habits and an understanding of animal behavior.

### Tips For Including Youth With Disabilities: Making the Best Better

Learn all you can about the child's disability. Discuss with the child's parents the nature of the disability and how best to work with his or her limitations. You may also want to talk with other professionals who work with the child.

Involve the child in project meetings and events just as you would a child without special needs. Provide the same opportunities to develop life skills to all youth enrolled in the project. Everyone grows from the experience of "mainstreaming" a child with a disability. The 4-Her with a disability develops self-reliance and self-confidence by interacting as an equal with other project members. Project members learn that youth with disabilities are not much different than themselves – each has strengths, weaknesses, and unique abilities. Adult leaders and volunteers learn life skills for working with people with limitations. Everyone learns how to be more comfortable with people who are different than themselves.

When necessary, modify project activities to match the ability of the child. Modifications should be designed to meet the child's abilities, yet challenging enough for to improve his or her knowledge and skills. Not all activities need to be adapted.

Consult with specialists at a therapeutic riding facility to learn

## Horse Safety References

National 4-H Cooperative Curriculum System, Inc. Horse Series, 2004

Working Safely With Horses, Clover Safe Notes #6, 2006, University of California ANR and 4-H Youth Development, [http://safety.ucanr.org/4-H\\_Resources/Clover\\_Safe\\_Notes\\_by\\_Project\\_Area/](http://safety.ucanr.org/4-H_Resources/Clover_Safe_Notes_by_Project_Area/)

Safe Horseback Riding Practices, Clover Safe Notes #7, 2006, University of California ANR and 4-H Youth Development, [http://safety.ucanr.org/4-H\\_Resources/Clover\\_Safe\\_Notes\\_by\\_Project\\_Area/](http://safety.ucanr.org/4-H_Resources/Clover_Safe_Notes_by_Project_Area/)

Pennsylvania 4-H Horse Safety Standards, P.M. Comerford, extension horse specialist, B Egan, D. Webb. The Pennsylvania State University College of Agricultural Sciences. 2001

American Youth Horse Council, Start with Safety: Horse Safety Guidelines: Second Edition, P.M. Comerford, J.T. Potter, and the AYHC Education Committee, with revisions from previous AYHC Horse Safety Guidelines

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about how to include youth with disabilities into horse project activities.

Promote participation instead of exclusion. Never allow modified activities to isolate the child who has a disability. The goal is meaningful inclusion.

Organize a field trip to a therapeutic riding facility.

Provide an opportunity for all youth to learn from experience. In some cases, livestock show requirements may need to be modified. For example, a 4-Her in a wheelchair may need assistance from a fellow 4-Her to wash, groom, or feed an animal or assistance mounting the horse to participate in the show ring.

Pair abled 4-Hers (junior leaders or ambassadors), rather than adults, with the special needs 4-Her .Promote cooperation instead of competition. Practice at project meetings so all project members will know how to be of assistance.

Help each 4-Her set realistic, attainable project goals. Always include the 4-Her in goal setting and project activities.

Be prepared to devote extra attention, time, and flexibility to the project. Value each project member as an individual with unique and special talents.

## Resources

National 4-H Curriculum Horse Series materials, 4-HCCS BU-08053, BU-08054, BU-08055, BU-08056, BU-08057, BU-08058

Kansas 4-H Horse Project Curriculum

Online Youth Horse Project Safety Assessment, [www.ylsp.bae.ksu.edu](http://www.ylsp.bae.ksu.edu)

NAGCAT Reference Sheets: Lifting; Working with large animals; Leading/grooming animals; Feeding hay to horses; [www.nagcat.org/nagcat/pages/default.aspx](http://www.nagcat.org/nagcat/pages/default.aspx)

National Ag Safety Database (NASD); <http://nasdonline.org>

Accommodating Youth with Disabilities in 4-H Horse Programs, C.M. Brady, Katie E. McKee, Journal of Extension, Vol. 43 No. 2, Article 21AW6, April 2005

A Perfect Fit: 4-H Involvement for Youth with Disabilities, Purdue University

Making 4-H More Accessible: Youth With Special Needs Leaders' Handbook, California 4-H Youth Development Program; [www.ca4h.org/leadership/ambassador/03-04/CASA-Book.pdf](http://www.ca4h.org/leadership/ambassador/03-04/CASA-Book.pdf)

Inclusive 4-H, University of Wyoming, <https://uwadmnweb.uwyo.edu/wyo4h/Inclusive/intro.pdf>

## SAFETY AUDIT CHECKLIST

This checklist will help identify potential hazards with your livestock handling equipment and facilities. Conduct the audit with your parents or project leader. Answer the questions by checking YES or NO. If the answer is YES, no further action is necessary. If the answer is NO, then a hazard may exist that should be corrected. Prioritize the level of risk represented by the hazard using the ranking terms of: Major, Serious, or Minor. Record the date the hazard is corrected and keep the checklist with your project records.

### Priority Levels for Identified Hazards:

**Major:** Potentially life-threatening or serious injury potential; requires immediate action.

**Serious:** Injury or property damage possible; requires prompt action.

**Minor:** Not likely to cause serious injury or property loss; correct the hazard during the off-season or during down time.

| ANIMAL HANDLING SAFETY   | Yes | No | Level of Priority | Date Corrected |
|--|-----|----|-------------------|----------------|
| Are steps and walkways roughened to prevent slips and falls?                         |     |    |                   |                |
| Are walkways and aisles kept free of debris, manure, and feed?                       |     |    |                   |                |
| Are animal drugs and barn chemicals kept in a secure area in original containers?    |     |    |                   |                |
| Are pens, gates, and fences in good condition, without protrusions?                  |     |    |                   |                |
| Do doors and gates open smoothly?  |     |    |                   |                |
| Are there at least two exits from buildings?   |     |    |                   |                |
| Do you make animals aware of your approach so as not to frighten them?               |     |    |                   |                |
| Do you leave yourself an "out" when working in close quarters with animals?          |     |    |                   |                |
| Are animals immunized as required?   |     |    |                   |                |
| Is the grooming chute in good repair with a non-slip mat?                            |     |    |                   |                |
| Are electrical cords in good repair, no exposed wires?                               |     |    |                   |                |
| Is there adequate lighting in work and walking areas?                                |     |    |                   |                |
| Are all electrical outlets properly grounded with ground fault circuit interrupters? |     |    |                   |                |
| Are portable tools unplugged when not in use?  |     |    |                   |                |
| Are faulty wiring and electrical equipment repaired or replaced immediately?         |     |    |                   |                |
| Are extension cords used only for temporary work?                                    |     |    |                   |                |

| <b>ANIMAL HANDLING SAFETY (continued)</b>  | <b>Yes</b> | <b>No</b> | <b>Level of Priority</b> | <b>Date Corrected</b> |
|--|------------|-----------|--------------------------|-----------------------|
| Is personal protective equipment available? (safety glasses, leather and rubber/latex gloves, and ear plugs) |            |           |                          |                       |
| Do you wear sturdy leather boots, long sleeves, long pants, and gloves when handling animals?                |            |           |                          |                       |
| Are appropriate fire extinguishers located strategically for easy access in case of fire?                    |            |           |                          |                       |
| Are fire extinguishers inspected regularly?  |            |           |                          |                       |
| Do you know how to operate a fire extinguisher?  |            |           |                          |                       |

| <b>SAFE LIFTING AND MATERIALS HANDLING</b>  | <b>Yes</b> | <b>No</b> | <b>Level of Priority</b> | <b>Date Corrected</b> |
|---|------------|-----------|--------------------------|-----------------------|
| Has everyone in the family received instruction on safe lifting techniques?   |            |           |                          |                       |
| Is the "bend your knees" rule always followed?  |            |           |                          |                       |
| Do you use assistance, such as a wheelbarrow, dolly, or wheeled cart, to move loads more than 10 yards or loads weighing more than 15% of your body weight? |            |           |                          |                       |
| Do you check for a clear pathway before lifting and moving objects?   |            |           |                          |                       |

| <b>FIRST AID / EMERGENCY ACTION</b>   | <b>Yes</b> | <b>No</b> | <b>Level of Priority</b> | <b>Date Corrected</b> |
|---|------------|-----------|--------------------------|-----------------------|
| Do you maintain first-aid kits in the following locations:                          |            |           |                          |                       |
| ◆ Home?   |            |           |                          |                       |
| ◆ Barn?   |            |           |                          |                       |
| ◆ Pick-up?  |            |           |                          |                       |
| ◆ Show box?   |            |           |                          |                       |
| Are first-aid kits periodically checked and replenished?                            |            |           |                          |                       |
| Has anyone in your family received first-aid training in the last 3 years?          |            |           |                          |                       |
| Has anyone in your family received training in CPR (cardiopulmonary resuscitation)? |            |           |                          |                       |

| <b>LIST YOUR OWN SAFETY CONCERNS</b> | <b>Yes</b> | <b>No</b> | <b>Level of Priority</b> | <b>Date Corrected</b> |
|--------------------------------------|------------|-----------|--------------------------|-----------------------|
|                                      |            |           |                          |                       |
|                                      |            |           |                          |                       |
|                                      |            |           |                          |                       |
|                                      |            |           |                          |                       |
|                                      |            |           |                          |                       |