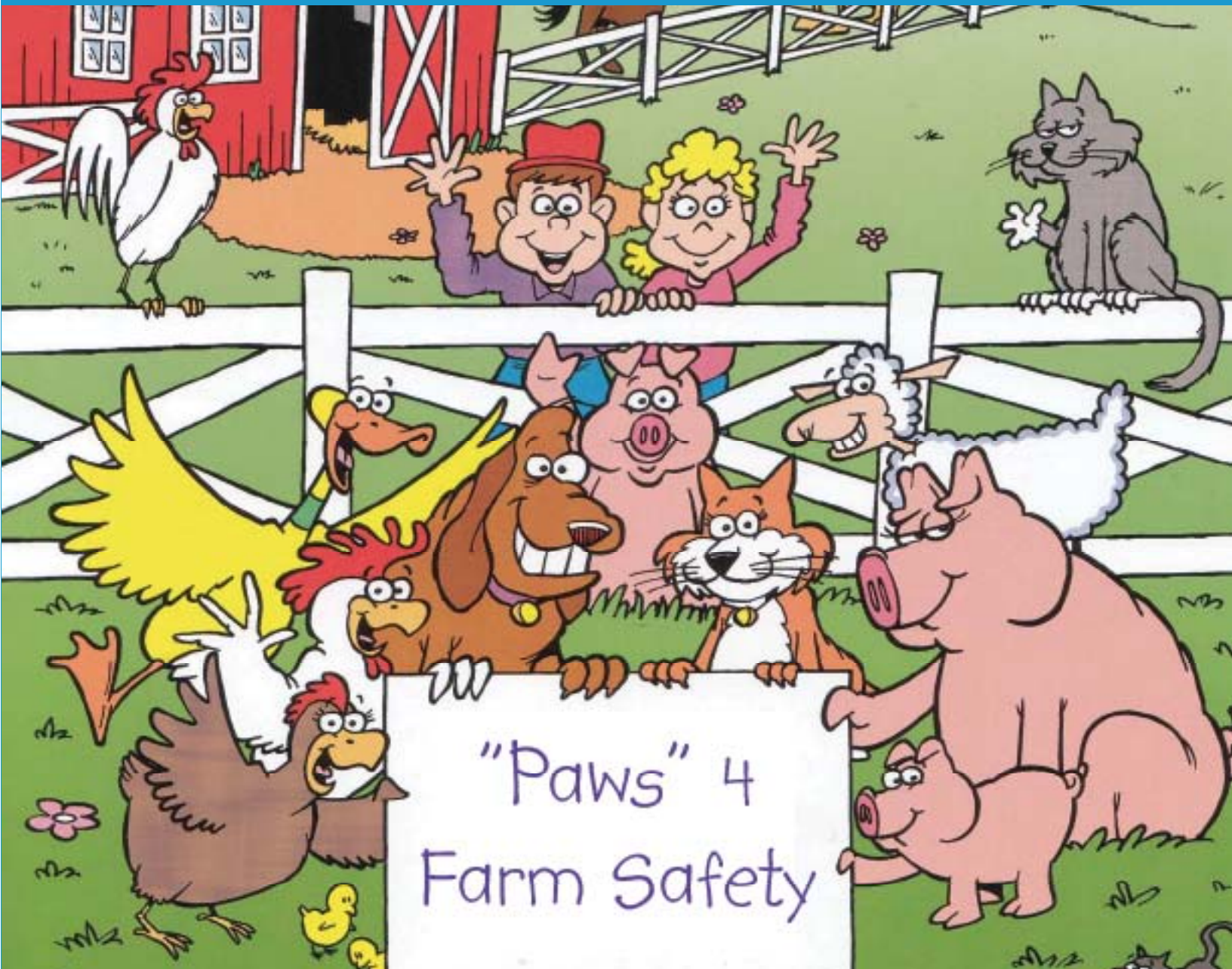


# Paws for Farm Safety: Animal Safety

educational information



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The material developed and disseminated by Farm Safety for Just Kids was peer reviewed and is intended for general information and educational purposes only. It should not be relied upon as medical or legal advice. If legal, medical, or other expert assistance is required, the services of the appropriate professional should be sought.

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# Educational Information

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## Animals and Children

### SAFETY ON THE FARM

A large number of children are involved in completing relatively hazardous tasks on the farm. Children's characteristics, such as: lack of experience, knowledge, training, strength and body size combined with curiosity and feelings of invincibility, put children at great risk. This risk is reflected in the high injury statistics. Children working because of economic necessity; parents wanting to instill a sense of responsibility and work ethic; a lack of available child care; and the cultural tradition of the farmstead as a playground for children can also contribute to the high incidence of injuries and fatalities.

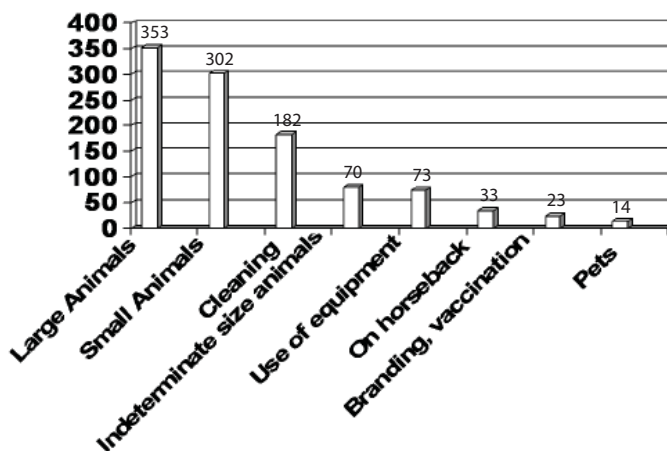
### YOUTH AND FARM ANIMALS

Livestock production is a significant part of American agriculture. Livestock is raised for meat, milk, by-products and leisure activities. In the process of feeding, handling and transporting animals, humans can be injured if safe behavior is not practiced.

Exposure to animals and livestock on the farm accounts for many youth injuries. People often do not view animals and livestock as a source of danger, yet animals cause numerous fatalities and injuries each year. According to the National Safety Council (NSC), 17% of all farm injuries involve animals.

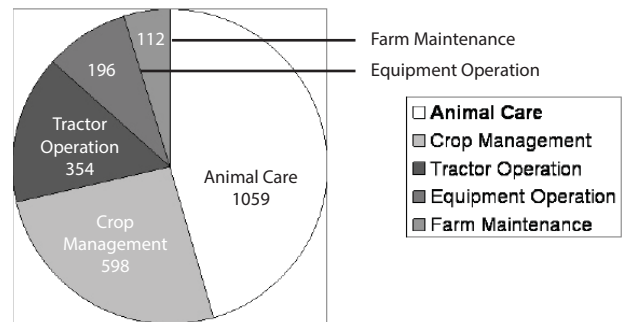
#### Animal Care Chores Done by Farm Youth

Telephone survey of parents of farm youth age 7 - 16



Marlenga, B. et al. Agricultural Work Activities Reported for Children and Youth on Farms on 498 North American Farms

### Farm Jobs Among Youth



### ANIMAL CHORES

Chores related to animal production such as feeding, moving and handling livestock are often some of the first responsibilities given to children on the farm.

At a very young age, children are often put in situations where they are required to make quick and important decisions about working with, being around, and handling animals that can be uncooperative, large, stubborn or frightened.

When comparing farm chores, animal care is the chore most often assigned to youth. A telephone survey given to farm families indicated farm youth were often assigned several chores within each category (above).

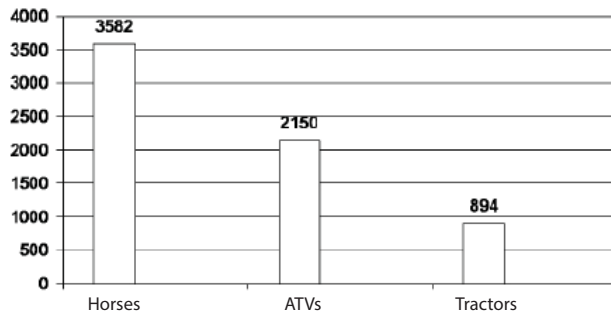
The type of animal-related chores assigned to youth varies depending on the location, type of animals raised on the farm and the youth's maturity. The telephone survey results shown on the chart (left, bottom) indicate that youth most frequently work with large animals.

Children can be taught and encouraged to identify safe practices that can result in a safer farm environment. In the process youth can protect themselves, their family members and everyone that lives on or visits the farm.

## CHILD INJURIES RELATED TO ANIMALS

Most children and youth enjoy being around animals, but not all animals respond favorably toward children. Animals can be very alluring to children, but children may not understand the risks of being in proximity to animals.

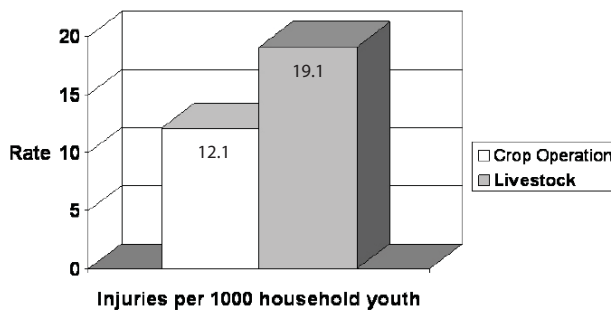
### Most Common Farm Injuries to Youth



Hendricks, KJ., et al. Injuries to Youth on U.S. Farms in 2001 with Comparison to 1998

When compared to other hazards on the farm, working with horses results in more injuries to youth.

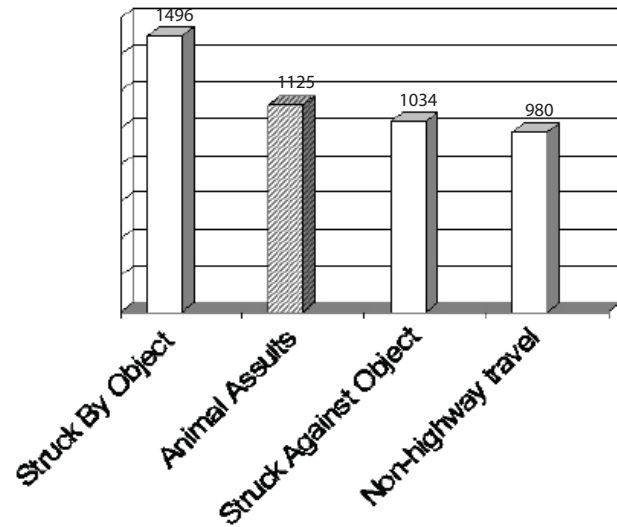
### Injury Rates by Farm Operation



Hendricks, KJ., et al. Injuries to Youth on U.S. Farms in 2001 with Comparison to 1998

When farming operations are compared to livestock operations, livestock shows higher injury rates.

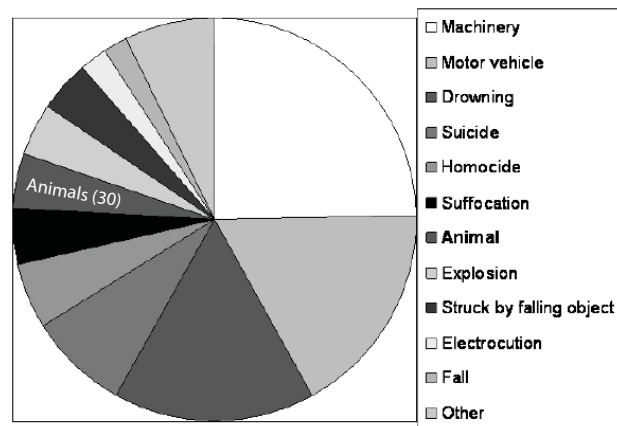
### Farm Injury Events



Hendricks, KJ., et al. Injuries to Youth on U.S. Farms in 2001 with Comparison to 1998

The frequency of animal assaults on the farm are comparable in number to injuries caused by youth being struck by an object, an object striking a youth and non-highway transportation injury causing events.

### Causes of Farm Death to U.S. Youth Under 20

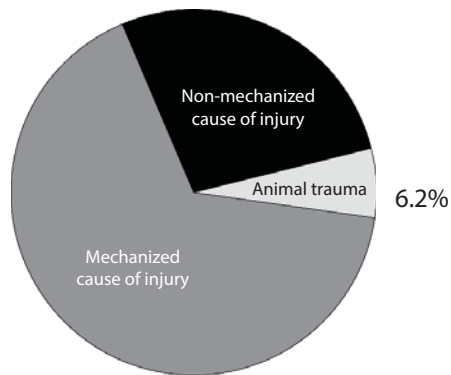


Goldcamp, M., et al. Farm Fatalities to Youth 1995-2000: A comparison by Age Groups

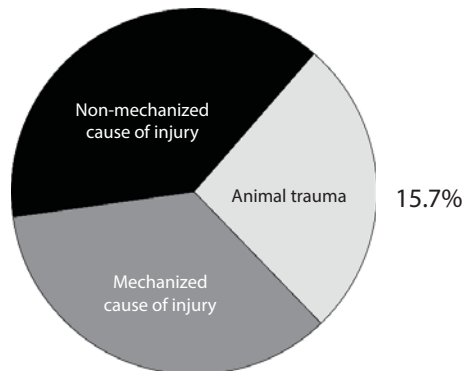
Although most animal-related injuries on the farm do not result in death, the number of deaths should still be noted. Out of 695 youth deaths between 1995-2000, thirty were attributed to animals.

### NON-WORKING FARM INJURIES TO CHILDREN AGES 1-7 IN THE U.S.

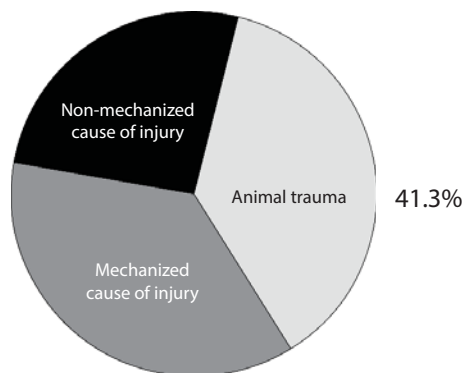
#### Fatalities



#### Hospitalized Injuries



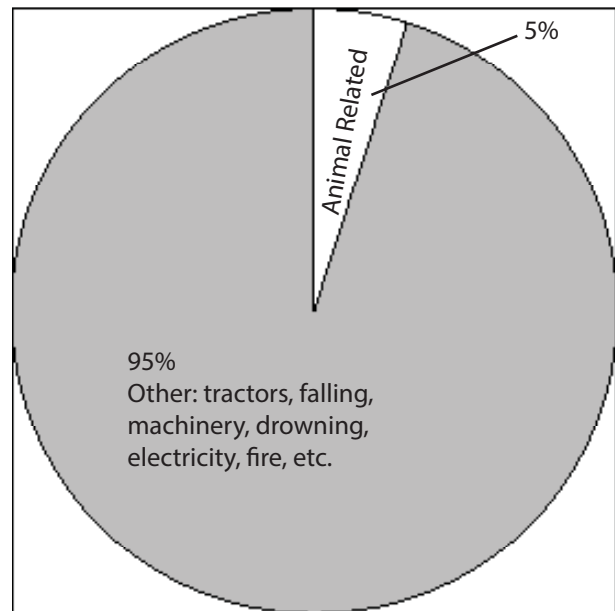
#### Restricted Activity Injuries



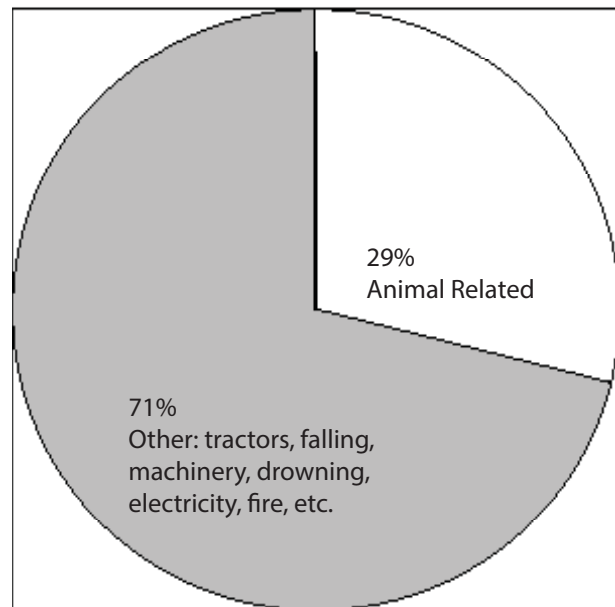
Pickett, et al. (2005) Pediatric Farm Injuries Involving Non-working Children Injured by a Farm Work Hazard: Five Priorities for Primary Prevention.

### NON-WORKING FARM INJURIES TO CHILDREN AGES 1-14 IN CANADA

#### Fatalities



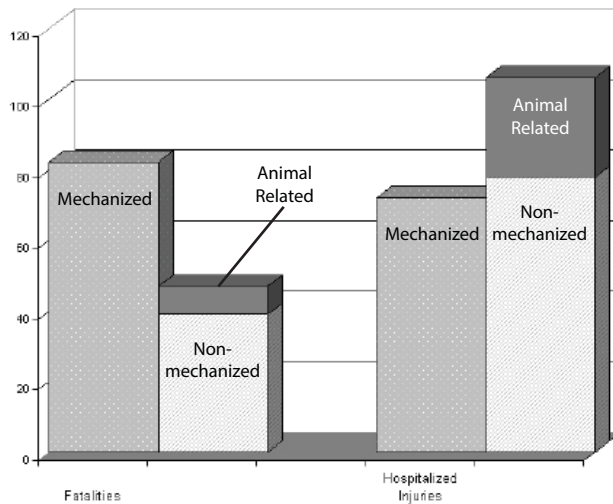
#### Non-fatal, Hospitalized Injuries



Agricultural Injuries in Canada for 1990-2000.

The chart below depicts a comparison among mechanized, non-mechanized and animal trauma fatalities and hospitalized injuries. Notice the large percent increase of animal-related incidents from fatalities to hospitalized injuries.

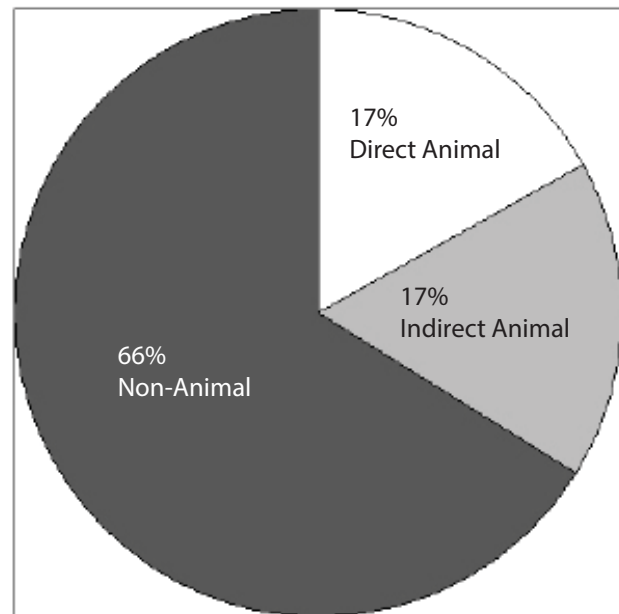
#### Non-working Youth Injuries On the Farm



Pickett, et al. (2005) Pediatric Farm Injuries Involving Non-working Children Injured by a Farm Work Hazard: Five Priorities for Primary Prevention.

booths and any other event where the topic of animal safety is relevant.

Animals are a great aspect of farm life, but they can also be a threat to the safety of those working with them. Protect yourself and others when around livestock.



Jones, P, Field, WE. (2001). Farm Safety Issues in Old Order Anabaptist Communities: Unique Aspects and Innovative Intervention Strategies.

## SPECIAL POPULATIONS

Children within Anabaptist populations are at even greater risk of animal-related injuries on the farm. Animals are used extensively within this population for transportation and work and children perform animal-related tasks at a young age. The graph at the top right shows that 34% of child fatalities are due to direct contact with animals, such as dragging and entanglement or indirectly, such as bolting.

## WHAT CAN YOU DO?

Farm Safety for Just Kids believes that children and youth can and will make wise choices around farm animals and livestock if they know and understand the potential dangers. This packet incorporates a variety of fun, age appropriate and educational ideas for children and their families to use when learning about animal safety on the farm. Use the ideas when presenting school programs, conducting presentations, staffing fair and exhibit

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- Canadian Agricultural Injury Surveillance Program, Fatal Farm Injuries in Canada, 1991-1995, Oct. 1997.
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## Animal Handling

Handling livestock can put children and youth in dangerous situations if safety precautions are not taken. As youth begin to take on the responsibility of handling and transporting livestock, it is important for them to understand livestock characteristics and what things influence their behavior. This knowledge can lead to effective and safe livestock handling.

### ANIMALS' PERCEPTION

The differences in how animals and humans sense their surroundings influence their behavior. Animals perceive only black and white, not color. Many animals also have difficulty judging distances. Swine and cattle have poor depth perception, which results in an extreme sensitivity to contrasts. This sensitivity may cause an animal to balk if a shadow crosses its path. Sheep also have problems with depth perception and have difficulty picking out small details, such as the space created by a partially opened gate.

Several factors explain why animals are skittish or may balk in unfamiliar surroundings. Many animals have extremely sensitive hearing and may hear sounds that people cannot. Loud noises frighten animals and high-frequencies may hurt their ears. Animals that are frightened will attempt to move away from the source of the noise. Their eyesight problems may cause them to crash against or through objects (including humans) that may be in their path of escape. Animals which are blind or deaf on one side will favor that side and may suddenly swing around to get a better view of disturbances on the favored side.

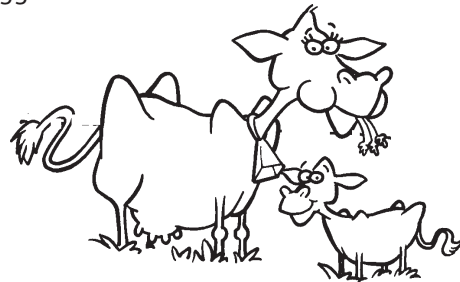
### ANIMALS' SIZE AND INSTINCTS

The size difference between people and large animals is one reason that the smaller of the two (people) can become injured when the two species are occupying the same space. Since children are smaller than adults, they are at an even greater risk.

Animals' maternal instincts may also lead to injuries if youth are in close proximity. The innate protective characteristics that surface after giving birth may cause animals to be unpredictable and aggressive. Often, children observe the cute characteristics of baby animals but do not realize the dangers associated with their protective mothers.

First time mothers are especially dangerous because humans have no way of knowing how they will react to motherhood.

If a mother is overprotective of her baby once, then she will probably react in that way again. When protecting a baby, mothers can be lightning quick if they decide to charge. It is important for anyone working with cow/calf, sheep/lamb, sow/piglet and mare/foal pairs to be aware of the situation and know the difference between concerned and aggressive mothers.



Most animals have a strong territorial instinct and will develop a distinct and comfortable attachment to their pens, corrals, pastures and feeding areas. The well worn paths animals create in pastures, between pastures and buildings, and around water troughs and feed bunks are an example of this trait. Forced removal from these areas can disturb the normal routine and cause animals to become frightened and aggressive.

Similar problems are created when animals are moved away from feed, separated from the herd or approached by an unfamiliar human or dog. Shadows and yelling may further compound the problem.

The offspring of most farm animals have the capacity to form relationships simultaneously with their own species and with human handlers. For instance, newborns raised by a bottle or bucket may develop a very strong affection for the person feeding them. Animals respond to the way they are treated and draw upon past learning experience when reacting to a situation. Thus, animals that are chased, slapped, kicked, hit or frightened early in life will naturally feel fear when a human is near.

Animals are often characterized as being "stubborn" because they have balked or refused to enter an area. Once this has occurred, the

animal is likely to refuse additional attempts and becomes more excited and dangerous with each refusal. Animals have instincts or needs very similar to humans. They experience hunger, thirst, fear, illness, injury and strong maternal instincts. Animals can also develop individual behavior patterns, such as kicking or biting. The handler should be aware of these instincts and traits and take the necessary precautions.

## APPROACHING ANIMALS

When approaching an animal, especially from behind, speak softly to announce your presence. To avoid being in an animal's blind spot, approach it at an angle, near the shoulder. Never approach directly from the rear which can startle the animal. Sudden sounds or movements tend to frighten animals. When you are within reach, touch the animal by first gently stroking the shoulder and move calmly toward its head. Do not walk up from behind an animal and slap its hindquarters or lunge at its head.

In general, always walk a safe distance away from an animal so you avoid being kicked. When you need to handle or groom an animal, walk as close to it as possible, keeping a hand on it at all times. An animal's kick at this distance does not have the chance to gain the full force it would have at arm's reach. When working with an animal in a stall, stay in very close proximity since you do not have space to move clear of a kick. When working with an excited or unfamiliar animal, always stand to the side and maintain a quiet and calm demeanor. Never turn your back on an unfamiliar animal. Never walk between the animal and where it is tied. If the animal is startled, it could crush you against the hitching rail or wall. Never get between fighting animals, always ask an adult for assistance.

## GROOMING ANIMALS

Grooming animals is often a chore given to youth. It is also a time when youth, especially inexperienced ones, can be injured. When grooming livestock, wear hard-toed boots to protect your feet from being stepped on. Do not wear tennis shoes or open-toed sandals. Avoid wearing dangling jewelry and pull long hair back so it does not restrict your vision.

Use grooming equipment gently on animals, particularly on those with sensitive skin. Some horses may nip at you if they anticipate discomfort during grooming. Do not leave equipment where it can be stepped on by an animal.

Stand near the animal and always keep a hand on it so you can anticipate its movement. The animal should know where you are at all times. Never sit on the ground or groom from your knees and always be in a position that allows you to move away quickly. Do not hurry the grooming procedure, especially with a young or excited animal.

Clean stable conditions are essential for proper hoof care. Dirty bedding or extremely wet and muddy conditions can cause several ailments, such as thrush, canker and cracked heels. Stalls should be cleaned every day, taking care to dig beneath the top layer of bedding to expose wet spots. This also helps eliminate respiratory hazards associated with high ammonia levels. In addition, stalls should be stripped periodically and floors disinfected with lime to reduce odors.

## EXHIBITING AND SHOWING LIVESTOCK

Youth often show livestock at county and state fairs and open shows. The same precautions taken for approaching and grooming an animal at home should be practiced at public events. Spectators with little livestock knowledge and experience are often present at public events, which puts them at risk. Take precautions to keep livestock under control at all times and remind the public to approach the animal from the shoulder and speak softly or ask that they not approach the animal at all. Keep walk ways or aisles free of clutter. Eighteen percent of animal-related incidents are the result of falls.

When choosing an animal for the show ring, consider the size and strength of the child; their knowledge and genuine interest in the animal; and their ability to handle



and care for the animal. Younger children may be better suited to show a smaller animal, such as a bottle calf, lamb or hog.

When choosing an animal, such as a horse, it's better to choose an older, more seasoned animal that is safe for small or inexperienced riders. An animal's disposition is important. Animals that are quiet, enjoy human contact and are well mannered are going to give youth a safer and better experience in the show ring. If you are new to the animal show experience and don't know where to find the right animal, ask your local veterinarian or 4-H extension office for assistance.

## HANDLING ANIMALS USED IN REPRODUCTION

Bulls, stallions and rams are involved in a considerable number of farm incidents. Due to a bull's large size, and often times irritable temperament, caution should be taken when handling them. Their care should be left to adults.

In addition to an increased size, mature adult animals can change temperaments and become dangerous to those working with them. The popularity and practicality of artificial insemination has allowed many handlers to eliminate the need for an on-site sire and reduce the chance of injury.



## CONCLUSIONS

The majority of animal injuries occur when people do unsafe things around animals. Lack of judgment or understanding due to inexperience is a major cause of incidents involving animals. Plan ahead when moving animals so you are not rushed. Do not try to work with animals when you or they are angry. The feeling of superiority over animals is foolish when you consider the size of some farm animals.

Other common problems include: prodding an animal which has no place to go; improper lifting of young animals; horseplay; wrapping a lead rope around a hand or body; attempting a task without enough help and not wearing personal protective equipment, such as safety shoes, helmets and gloves.

Many youth have animal projects through 4-H and FFA and need to be taught proper methods of handling livestock. Education and close supervision are needed when children are learning the skills to handle livestock and the potentially dangerous situations that might arise. Fit the temperament of the animal to the ability of the child.

Fearing animals increases the risk of being hurt. Animals can "sense" fear and may be more temperamental than usual. Teach children appropriate ways to handle animals so they feel confident.



## Prevention Tips

While there is certainly no magical formula, common sense is important to staying safe around animals. Understand how animals may respond to various situations, such as a narrow loading chute with shadows. This understanding can help you avoid potentially dangerous situations.

Children should be supervised when working around animals. The kindest animal can accidentally step on a small child. Make children aware of all precautions.

When working around animals, teach children to:

- ▶ Be calm, move slowly and avoid loud noises.
- ▶ Wear hard-toed shoes.
- ▶ Avoid the hind legs of the animal.
- ▶ Approach large animals at the shoulder.
- ▶ Always have an escape route planned when working with animals in close quarters.
- ▶ Avoid animals with newborns.
- ▶ Avoid stallions, bulls, rams and boars.
- ▶ Never wrap a lead rope around their hand or body.

Additional safety precautions include:

- ▶ Clothing such as flapping jackets or plastic raincoats may frighten animals. Remove the coat or give the animal time to acclimate itself to the movement and sound. Respect handlers and riders by approaching with caution.
- ▶ Do not run or play around barns and do not begin work that may frighten animals without first warning handlers or riders. Others may be working with animals in stalls and they could be hurt if the animal is startled. This includes activities such as nailing boards, starting machinery, climbing on stalls or throwing hay down from lofts.
- ▶ Some animals are aggressive at feeding time, so allow them space while they eat. Avoid handfeeding treats, especially sweets. Some horses begin to expect a treat and may develop a habit of biting. Never tease your animal.
- ▶ Keep electrical wires, such as clipper and extension cords, completely out of the reach of animals. They may chew or step on the wires and be electrocuted.
- ▶ Use extra caution when working around young or temperamental animals. These animals are best left to professional trainers until they are safe for amateurs.
- ▶ If helping to transport livestock, take precautions to ensure that both you and the animals stay safe. Check that all brakes, tires and hitches are in good working condition. Be sure all latches are locked after loading.
- ▶ Be aware that animals may be more temperamental and aggressive when they are sick. Most importantly, do not become careless in safety procedures, even around older, familiar animals. The unexpected can always happen. Make safety practices a part of your daily routine until they become a habit.

## Animal Health and Hygiene

If you work and live around livestock, you share things with the animals, such as space, air and even diseases. This may be especially true in rural areas and on farms where increased contact with animals increases the risks. Children who live on farms and who are exposed to the same risks as their parents experience even greater risks due to their smaller size and lower tolerance levels.

All animals, whether domestic or wild, can be a source of human illness and parasitic infestation. Up to 250 diseases that can be shared between humans and animals have been identified, many of which pose significant risks as occupational diseases in an agricultural setting. The diseases and infections common to both animals and humans are known as zoonoses. Not all zoonoses are found in every state. The risk to humans may be great or small depending on the disease and the situation. In most developed countries, infectious animal-related diseases have become less significant than chronic diseases. But zoonotic diseases can still be a major economic drain on the livestock industry.

Many zoonotic diseases are not diagnosed as such and are often hard to detect, but they have been around for a thousands of years. Zoonotic diseases have played a role throughout history. Water pollution, disease spread by gnats and flies, and anthrax, that caused boils and death, could be described as zoonotic. Black Death, or The Plague, which spread through Europe and Asia between the 14th and 17th centuries, was a zoonotic disease that killed one-fourth to one-third of the population, most of who lived on farms or in small communities. This disease was transmitted from rats to humans by fleas.

Better animal and environmental health on the farm translates into better health and safety for the farm operator, employees and family.

Humans are in a much safer position in today's world



because of stricter laws and sanitation systems. Sanitation has improved, as has knowledge about the development of antibiotics, vaccines and other drugs that battle zoonotic diseases. Prevention is still the most important factor in protecting people and animals.

The following are some of the more common animal-related diseases:

**Salmonella:** Salmonella is the single most common cause of food poisoning in the United States. Organisms that cause this disease are found in poultry and in wild and domestic animals. Salmonella can be transmitted to people through contaminated food or water and can cause severe gastrointestinal distress and fever. The disease is often associated with poorly cooked poultry, raw eggs and egg products, raw milk and milk products, and meat and meat products. Personal hygiene and cooking food at 160 degrees or higher helps reduce the risk of catching this disease from food.

**Toxoplasmosis:** In sheep, this virus often causes fetuses to be aborted. Other carriers include cattle, swine, goats and chickens. However, cats are the main carriers and pose a real threat for some women. A pregnant woman who has never had toxoplasmosis is at a greater risk of miscarrying or having a baby afflicted with a birth defect if she becomes infected during pregnancy. People may be exposed to toxoplasmosis while cleaning a litter box or working in the garden where a cat has deposited urine or fecal material. To avoid possible infection, rubber gloves should be worn when cleaning a litter box or working in areas where cats deposit waste.

**Tetanus:** People who work around any type of livestock should keep their tetanus vaccinations up to date. The spores that cause tetanus are found in soil contaminated by animal feces. These spores can live in soil for several years. For tetanus to develop in animals and humans, the organism must gain entrance through broken skin, such as a wound. In the past, doctors recommended a tetanus vaccination be given every year, but that is now extended to ten years. However, if you see a doctor because of a severe cut, chances are, he or she will probably recommend you receive another vaccination to be safe.

**West Nile Virus:** West Nile Virus is a disease most commonly spread by mosquito bites. Mosquitoes become infected when they bite an infected bird that has the virus. Most cases occur during the summer and fall. About one in 150 cases cause disorientation, coma, tremors, convulsions, muscle weaknesses, vision loss, numbness and paralysis. Twenty percent of those infected will have a few of these same symptoms. Approximately 80 percent of people that are infected with the virus will show no symptoms. Symptoms appear anywhere from 3 to 14 days after being bitten. More mild cases of fever and aches pass on their own while more severe cases need to receive hospital treatment. People over 50 and pregnant or nursing women are most at risk of the dangers associated with West Nile Virus.

There are several ways to prevent West Nile Virus. Most mosquitoes are active during dawn and dusk so stay inside during these times. Wear long pants and shirt sleeves and apply bug repellent when you must be outside. Use screens on windows and doors to prevent mosquitoes from entering the house. Prevent mosquitoes from breeding by emptying standing water, changing pet water dishes and drilling holes in tire swings.



**Avian Influenza (Bird Flu):** Bird flu is the common name for Avian Influenza. This influenza virus occurs naturally in birds and is carried in the intestines of chickens, ducks, and turkeys. All birds are susceptible, including wild waterfowl and game birds. The virus is very contagious when saliva, nasal secretions and feces are shared among birds. The mortality rate among poultry flocks can reach 90-100%. While bird flu may be transferred to other animals, such as horses, pigs and cats, it does not move between species readily. This is also true of transmission to humans. In outbreaks of the bird flu in Asia, those humans affected had close contact with the affected birds. As of 2006, human-to-human transmission had not been documented.

Precautions for working with poultry:

- ▶ Avoid handling birds that appear to be ill.
- ▶ Wear gloves when handling birds and dressing carcasses.
- ▶ Wash hands with soap and hot water after working with birds.
- ▶ Do not eat or drink when handling birds.
- ▶ Clean all utensils that have come in contact with birds with bleach solution.

The advice for preventing bird flu in the kitchen is the same as for any poultry disease:

- ▶ Wash hands with soap and water before preparing any poultry or egg product.
- ▶ Clean all surfaces and utensils that come in contact with raw poultry to prevent contamination to other foods with hot soap and water.
- ▶ Cook all poultry to 165 degrees Fahrenheit.
- ▶ Cook eggs until firm.

**Mad Cow Disease:** Mad cow disease is the common name for Bovine Spongiform Encephalopathy (BSE). It is a slow, progressive, degenerative and fatal disease affecting the central nervous system of adult cattle. This disease is caused by a type of protein called prions, which is normally found in cattle. This abnormal tissue occurs in the small intestine and tonsils and then moves to the central nervous system (brain and spinal cord).

A similar disease can also infect people who eat meat from the areas of the brain and nervous system of an animal infected with mad cow disease. For this reason there are very tight restrictions on the meat industry to prevent cattle with mad cow disease from entering the food chain. This is also true for dietary supplements and cosmetics that use animal products. There is no scientific research that indicates that mad cow disease can be transmitted in milk and milk products. Mad cow disease is not destroyed by normal cooking procedures.

When raising livestock, especially cattle, do not feed them unprocessed animal feed. Many of the cases of mad cow diseases have been traced back to the use of meat and bone meal as a protein

supplement. The only way to prevent ingestion of mad cow disease-infected meat is to buy only meats from reliable sources.

**Brucellosis (Bangs Disease):** Affects cattle, goats and swine. It can be transmitted to people through unprocessed milk, infected carcasses or by an aborted fetus or afterbirth from an affected animal. The presence of Brucellosis is categorized on a state-by-state basis in the United States. Questions about state classification can be directed to each state's veterinary office.

**Rocky Mountain Spotted Fever:** Despite its name, this disease occurs throughout other areas of the United States more often than in the Rocky Mountains. It is carried on infected ticks that attach to pets and people. The best prevention is to check oneself for ticks once or twice daily when you have been in a heavily wooded or grassy area. The onset of Rocky Mountain Spotted Fever occurs within 10 to 12 days after a tick bite. Early signs include: flu, headache, fever, nausea, lack of appetite, extreme fatigue and possibly a stiff neck. A rash may also occur on palms, soles or the wrist area. Fatalities are most frequently the result of tardiness in seeking medical attention. Increased awareness of ticks and personal protection efforts have recently reduced the number of cases.

**Lyme Disease:** Exposure occurs through bites from the Deer or Lone Star Tick species, most commonly in, or within a mile or so, of wooded streambeds or lake shores. These ticks most commonly bite during fall or springtime. Dogs, horses, cattle, deer, humans and other animals are susceptible to Lyme disease. Early signs of infection usually include a rash that spreads out from the bite site 4 to 14 days after the tick is removed. A small red bump appears near the bite and enlarges into a spreading red ring. This is followed by general sickness, including fever, chills, headaches and backache. Some people may experience palpitations, dizziness and shortness of breath. Headaches, fatigue, muscular pain, swollen joints and nervous system involvement may appear early on or several months later. Although early treatment is crucial for full recovery, early diagnosis is difficult and seldom certain. Lyme Disease responds well to antibiotics in its early stages, but if left untreated, may advance into a chronic stage involving rheumatoid arthritis or cardiac problems.

**Rabies:** A deadly virus that affects the central nervous system. It can be transmitted by saliva from an infected animal through a bite, open wound or sore. Today, over 90% of rabies cases come from wildlife, but before 1960, the majority came from domestic animals. The number of humans who have died from rabies in the United States has declined from more than 100 annual cases at the turn of the century, to only one or two per year in the 1990s.

Although widespread pet inoculation has greatly reduced the threat of rabies, rural people are still at greater risk due to their proximity to wild animals. Call a veterinarian to examine animals that are observed acting abnormally. Seek immediate medical attention if you are bitten by an animal that you suspect is rabid. This disease causes great fear because rabies is fatal once symptoms begin. Increased public awareness, mandatory rabies vaccination of dogs, and control of stray dogs by enforcement of leash laws have significantly reduced the risk of rabies. The greatest risks of rabies today are from carnivorous animals, bat bites, and through oral examination of salivating cattle by farmers and veterinarians.

#### Prevention Tips

Specific recommendations for protection against ticks and lyme disease:

- ▶ Remove ticks that become attached to the body. When in tick-infested areas, remove ticks from yourself and your animals frequently to prevent the infection of Lyme Disease, Colorado Tick Fever and Rocky Mountain Spotted Fever. Wear a long-sleeved shirt and tuck pant legs into socks.
- ▶ Avoid tall grass and brushy areas as much as possible during tick season (April - September).
- ▶ Use repellents. Apply to top area of socks and pant legs.
- ▶ Check yourself for ticks as soon as possible after an activity in tick infested areas. Have someone closely check your scalp and the back of your neck.
- ▶ Immature ticks (larvae and nymphs) may be mistaken for freckles or scabs.

**Trichinosis:** Caused by tiny parasites, it can be painful and sometimes fatal to humans. It is transmitted by consumption of uncooked or partially cooked pork. Trichinosis has nearly been eradicated in North America. Thorough cooking is the best prevention.

**Staphylococcus:** A bacteria that is part of the natural flora in an animal's mouth. It is common for domestic cat bites to lead to staph infections. It is extremely important for children to notify their parents immediately if they are bitten. Staphylococcus can cause blood poisoning within 24 hours.

**Ringworm:** A fungus that is spread by spores. All animals can carry this fungus. The lesions are round with a rough, raised, flaky appearance. If observed on children, seek medical attention for topical medication.

**Lice:** Blood sucking parasites which are white in appearance. They are species specific, meaning they will not migrate between animals or from animals to people.

**Micotil (Tilicosin Phospahate):** An antibiotic used on cattle to control respiratory disease. It is injected subcutaneously in the animal and can be fatal if injected in swine. Although Micotil is not a disease, it is important to note that humans are also at risk if they are accidentally injected with this medication. If humans are injected with more than 1 ml. of the medicine it could be fatal.

To prevent accidental injections to humans: restrain cattle prior to injections; insert the needle subcutaneously at a top-down angle at the shoulder; administer a single dose at 1.5 ml per 100 pounds; keep protective covers on needles; never carry loaded syringes in your pocket; do not use automatic pistol grip syringes; properly dispose of used needles and always wash hands thoroughly with soap and water after administration.



## Prevention Tips

Children and adolescents who work with animals for long periods of time are most at risk to diseases associated with livestock production.

While zoonotic diseases can be a threat to animals and humans, it is important to recognize that these diseases can be prevented by sanitation, personal hygiene and proper animal health care.

The following safe practices can help control health risks associated with zoonotic diseases:

- ▶ Use a safe water supply. Make every effort to provide safe drinking water for humans and animals. Properly construct wells to protect against contamination from livestock, human and wildlife wastes. Consider chlorinating or connecting to a rural water system as a way to ensure safe water supplies.
- ▶ Keep animal facilities clean. Test, immunize and use sanitary practices when handling animals and their products to minimize the danger.
- ▶ Hygiene is vital to good livestock management, particularly in confinement systems where diseases can spread quickly and cause humans and animals to become ill. Maintaining a clean, dry environment is obviously important, but other factors are also crucial. Ventilation should minimize dust. Various molds that can cause respiratory, as well as digestive problems, may be present in feed. Therefore, all feed should be carefully checked before it is fed to livestock. Deal only with reliable feed dealers and have suspect feed tested.
- ▶ Antibiotics are used to prevent the spread of bacteria from animals to humans. The proper use of antibiotics should help keep your livestock healthy. However, antibiotics aren't always the answer. Some bacteria are resistant to antibiotics and antibiotics are not effective against viruses.
- ▶ Dispose of sanitary waste in approved ways. Many diseases can be carried in animal wastes that leak into the water supply or from the bodies of dead animals disposed of improperly.
- ▶ Assure meat safety. People who home-slaughter hogs or make pork sausage with meat from deer and other game animals are advised to cook, smoke, freeze or otherwise cure the meat thoroughly. This will kill trichina larvae that may be present in meat.
- ▶ Reduce contact with diseased animals. Ringworm can be prevented by treating the source of the infection, whether it be in pets, livestock or people. Wear clothing that prevents skin contact with ringworm lesions. Keep stalls, stanchions, cages and housing clean. Ringworm fungi survive and grow in dirt, debris and contaminated bedding.
- ▶ Vaccinate all cats and dogs against rabies. Cattle that salivate excessively should be suspected of having rabies and handled accordingly. Do not keep wild animals as pets and avoid animals that exhibit strange behavior.
- ▶ Nocturnal wild animals that are out during the day and act strangely may have rabies. Avoid these animals and make sure your pets receive rabies vaccinations.
- ▶ Pasteurize milk.



## Safe Animal Housing

Animal related equipment and building structures can influence injuries to both humans and animals. Well maintained housing and handling equipment can accelerate work operations, reduce time and labor requirements, cut costs, and most importantly, decrease the risk of injury to people and animals.

High door sills, cluttered alleyways and uneven walking surfaces are tripping hazards and can cause serious injury and lost work time. Studies have found that falls account for 18 percent of all animal-related accidents. Maintaining floors helps prevent animals and people from stumbling. Floors should be level and allow water to easily drain to prevent slick surfaces. Slatted floors are also used to keep animals dry in a confinement system.

Fences and gates should be strong enough to contain large, crowded livestock. When selecting materials for fences, the key is strength and durability. A protruding piece of lumber, nail or bolt can cause painful and infectious injuries.

A good facility will provide a way to safely control animals, while allowing easy access for feeding and cleaning. Alleys and chutes should be wide enough to allow animals to pass, but not so wide they can turn around. A chute width of 30 inches is recommended for mature beef animals. Using solid wall chutes, instead of fencing, can lower the number of animals that balk in the chute. Walk and work surfaces should be kept as clear as possible and properly lighted to prevent injuries. Pens, chutes, gates, fences and loading ramps should be strong and work properly. Pass throughs should be provided every 20 feet to provide handlers with an emergency outlet.

Keep lighting even and subdued since lighting affects animals' behavior. Bright spots and shadows tend to make animals more skittish, especially near crowded or loading areas. Animals will move from dark areas into light. Avoid layouts that cause animals to look directly into the sun.

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### FENCING

Fencing is used on farms to contain animals in a restricted area and prevent access to areas they should not occupy. Fences also protect humans, especially young children, by providing a barrier

between them and animals.

Set up, follow and implement farm rules that enforce boundaries in regards to fencing. Remind children of the consequences of crossing fences. Older youth can be good role models for young children by showing them how to remain outside fences when feeding livestock.

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### DAIRY OPERATIONS

Milking cows is a critical job on any dairy farm. Many family members assist with milking since cows must be milked several times a day, 365 days per year. Since milking involves close contact with large dairy cows, almost 40 percent of all dairy farm injuries occur during milking. Youth who help with the milking process should learn how to prevent injuries.

Pipeline cleaner is also a concern in dairy operations and can be very dangerous if ingested. Small children who cannot read the label are at special risk. Keep cleaner containers and measuring cups well marked and out of children's reach.

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### MANURE PIT GASES

Gases produced by animal wastes can be dangerous to children and adults. Those unaware of the dangers can become incapacitated before they even know they are in danger. Toxic gases, especially in confined spaces such as manure pits, silos and grain bins, can pose hazards to humans and animals. Four gases of major concern found in manure pits are: hydrogen sulfide (HS), ammonia (NH), carbon dioxide (CO) and methane (CH).

The primary health hazards of these gases are:

- ▶ Toxic or poisonous reactions that can occur in people or animals
- ▶ Oxygen depletion can result in asphyxiation. During agitation of the pit, hydrogen sulfide, ammonia and carbon dioxide gases, which are all heavier than air, will replace the oxygen in the air. This can occur even under good ventilation conditions
- ▶ Explosions can occur when oxygen mixes with the gases. This is primarily a problem with methane

## CHARACTERISTICS OF TOXIC GASES

### Hydrogen Sulfide:

- ▶ Most dangerous gas associated with waste decomposition
- ▶ Distinct rotten egg smell; heavier than air
- ▶ After breathing this gas for a short time, a person's sense of smell becomes fatigued and they may no longer be able to detect any odor. This gives a false sense of security. At low concentrations the gas irritates the eyes and respiratory tract; at moderate levels it causes headaches, nausea and dizziness; at very high concentrations, death will occur

### Ammonia:

- ▶ Distinct, sharp and penetrating odor detectable at very low concentrations
- ▶ Heavier than air
- ▶ At moderate levels of concentration, can irritate eyes and respiratory tract; at high concentrations, can cause ulceration to the eyes and severe irritation to the respiratory tract

### Carbon Dioxide:

- ▶ Odorless, heavier than air and difficult to detect
- ▶ Replaces oxygen in air and acts as an asphyxiate. At moderate concentrations, shortness of breath and dizziness can occur; at high concentrations it can be fatal with prolonged exposure
- ▶ Many animal deaths are attributed to asphyxiation in confinement buildings, which often occur during ventilation failure

### Methane:

- ▶ Odorless and lighter than air; tends to accumulate near the tops of unvented manure pits
- ▶ Considered an asphyxiate at extremely high concentrations
- ▶ Main hazard is its flammable, explosive nature



## CONFINEMENT BUILDINGS

Swine and poultry confinement units are often contaminated with gases and dust in sufficient enough quantities to create an unhealthy work environment. Much of the dust within confinement units can cause harm to humans and it is common for more than one of the gases listed above to be present in excessive levels. A high percentage of swine confinement workers suffer short term, ill effects and adverse upper respiratory symptoms from working in these units.

Noise is also a hazard of working in swine confinement areas. Squealing pigs can have common noise levels of 130 decibels. In comparison, a jet airplane produces a level of 140 decibels and a chain saw rates at 115 decibels. These levels can cause pain and prolonged exposure will affect future hearing.

## DUST AND MOLD

Grain handling, feed handling and processing, in conjunction with livestock confinement units, can be potential sources of dangerous dust particles. The effect of dust on workers' health is dependent upon the concentration, size and composition of dust particles. Dust has been found to cause delayed fever, chills, muscle aches and pain in people exposed to excessive amounts of organic dust.

The following tips will help improve air quality:

- ▶ Increase ventilation airflow to remove particles without wasting heat. In heated buildings for smaller animals, air-to-air heat exchangers may increase the minimum winter ventilation rate without increasing energy costs.
- ▶ Improve air circulation.
- ▶ Use feed additives, such as tallow and soybean oil in swine finishing feed, to decrease dust.
- ▶ Keep facilities clean. Sweep or power wash regularly to remove the buildup of dry material on the floor, ventilation ducts and other surfaces.
- ▶ Isolate your lungs from dust with a NIOSH-compliant mask that is appropriate for the job. Make sure the mask is comfortable and easy to maintain but does not restrict breathing.

## Prevention Tips

Injuries and illnesses occur in connection with buildings, tools and supplies used in the care of livestock.

Specific prevention strategies related to children include:

- ▶ Instruct young children to stay outside animal fences.
- ▶ Protect children by keeping them out of animal facilities.
- ▶ Keep barn chemicals and medications out of children's reach.
- ▶ Plan for and remind children of a safe route away from livestock.
- ▶ Stay clear of animals that are frightened, hurt, sick or have newborn or young offspring.
- ▶ Wear protective clothing, footgear and headgear when working with livestock.
- ▶ Wear ear protection in loud animal confinement areas.

Buildings are the site for nearly 30% of all farm-related injuries. To help reduce injuries to family members, take care to ensure that buildings and the surrounding areas meet safety standards.

Precautions to help ensure safety around livestock areas:

### Buildings

- ▶ Clean up trash or debris lying around or outside of buildings to prevent slips and falls.
- ▶ Mount a 10 lb, ABC-type fire extinguisher at chest height, at least every 50 yards.
- ▶ Have emergency first aid kits and emergency numbers handy.
- ▶ Use approved lighting for maximum visibility of the interior and exterior of the building.
- ▶ Keep doorways and aisles free of obstructions and sharp projections.
- ▶ Design ceiling and door frames with ample height and width.
- ▶ Ground electrical sources when around water to prevent shock.
- ▶ Use flooring that is easy to keep clean and provides traction for animals and people.
- ▶ Clean and drain grooming and wash stalls to prevent wet and/or icy floors.
- ▶ Store hay away from heat and electrical sources.
- ▶ Provide hand rails on stairs to haylofts and keep them free of slippery substances and clutter.
- ▶ Stack hay and bedding so it cannot fall on top of anyone.
- ▶ Keep shovels, pitchforks, wheel barrows and other tools safely away from animals.
- ▶ Use the appropriate respirator when working in confined housing or on dusty jobs.

### Pasture Areas

- ▶ Use sturdy gates in good condition for turnout paddocks and pasture fencing.
- ▶ Place fences around ponds, irrigation and open drainage ditches.

### Waste Storage

- ▶ If possible, avoid entering a manure pit at all times, even if the pit has been emptied.
- ▶ Ventilate the manure pit and building during agitation of the waste.
- ▶ Never enter a pit or building during agitation.
- ▶ When repairing a waste storage area, wear an oxygen mask and tank.

## Pet Safety

Owning and caring for a pet can be a great learning experience for children. While caring for the animal's needs, children learn ownership responsibilities and experience the joys and comforts of being close to a living being.

Many of the skills learned from caring for house pets can also be used when working with farm livestock. Learning to slowly approach a mother cat when she has just had kittens can be transferred to approaching larger animals such as cows, mares and sows. Observing the change in a dog's temperament when it is approached by a stranger can help teach a young livestock handler how to safely approach an unfamiliar horse at the fairgrounds.

### DOGS

Many people believe that it is nice for children to grow up with a dog. Kids and dogs are wonderful, practically an American tradition, but owning a dog can lead to disaster when people do not understand the responsibilities involved.

Walking a dog on a leash is a common chore for youth. As with all animals, a leash should not be wrapped around the hand, especially on a large dog. Keep the dog close to you and under control at all times.



Every 40 seconds someone in the United States seeks medical treatment for a dog bite. Today's statistics show that the majority of dog bites causing serious injury involve medium to large size dogs and small children under the age of five years. The face is most frequently targeted. The dog is usually known to the child or is the family pet. Often, the parents or caretakers of the child report that they did not witness or do not know what caused the incident. If you are thinking about getting a dog for your child or already have one, the following guidelines may help prevent a tragedy or possibly save the life of a child.

Did you know that:

- ▶ Dogs bite nearly 4.7 million Americans per year.
- ▶ Dog bites are more common in spring and summer.
- ▶ 800,000 people require medical attention for dog bites each year.
- ▶ Most bites are inflicted by family pets or dogs known to the victim.
- ▶ An average of 19 people die each year from a dog attack.
- ▶ You can be held liable if your dog bites someone.
- ▶ Dog bites represent approximately 5% of emergency room admissions.

If you own a dog:

- ▶ Neutering or spaying a dog may reduce aggressive tendencies.
- ▶ Never leave infants or young children alone with the dog.
- ▶ Do not play aggressive games, like wrestling, with your dog.
- ▶ Teach children basic safety guidelines around the dog and review them frequently.
- ▶ Keep your dog healthy.
- ▶ Train your dog.
- ▶ Use a leash in public.

To understand how bites occur, what causes them and how to prevent them, education about the nature of dogs and the nature of small children is important. A dog's basic temperament is first inherited, then modified by events in its life and proper training. A dog's temperament, instincts and training have the biggest effects on how that dog reacts to the world around him and his level of tolerance.

Very few bites happen without provocation. Dogs are not people and they do not think in the same way as people. Dogs look at the world around them with a different perspective and most of their actions are dictated by instinct. A dog will react to situations according to what his instincts tell him unless these instincts are overridden by the consistent training and socialization he receives from his owner.

Children are often injured while attempting to pet a dog which does not wish to be approached. The dog's first instinctive reaction is to show displeasure by giving a warning. The type and number of warnings given can vary. Many dogs will just walk away, which can also be considered a warning. If the child continues to try to pet the dog, a stern warning, usually a growl, will follow first. The growl means that something more unpleasant will follow if the warning is not heeded. Some warnings are more subtle - a stiffening of the body, for example. Few dogs bite without giving some kind of indication, beforehand.

Small children (and some adults) do not recognize warning signs. A very young child (under age 6) may not know what a growl means. What may be obvious to an adult may not be understood by a child. An unsupervised child may continue to pet or follow a dog that has made it clear it does not want to be touched.

Other signs of a dog being upset enough to bite may include: snarling with teeth showing, ears laid back, stiff legs, a raised tail or the hair on the back stands up.

Dogs, and other animals, instinctively set up an invisible "fight or flight" boundary around themselves. The size of this area depends on the animal, level of confidence and tolerance. A fearful animal will give itself a wider area than a more stable one. When someone who a dog perceives as threatening or unwelcome enters its area, the dog has two choices - it can run away or it can defend itself. If it feels that it cannot run away, it will fight, no matter how afraid it might be. A small child that is petting or hugging a dog has already intruded well within the dog's fight or flight boundary — the dog's safety zone. If the dog has tried to leave or has issued a warning with no response from the child, the dog has no other recourse but to bite. This is normal, instinctive behavior for the dog. The dog responds to what it perceives as a threat and follows its instincts. A child's seemingly innocent action of petting the dog can be provocation when seen through the eyes of the dog.

Other circumstances can provoke a dog to bite a child. Running, playing and screaming children can trigger an instinctive chasing predator/prey reaction

in some dogs. Children who rough house and wrestle with dogs unknowingly encourage them to use their teeth on humans. Dogs equate this kind of play with littermates or other dogs where the use of teeth is allowed. Startling a sleeping dog or petting a dog when he's eating can also provoke a bite.

When choosing a dog for a child:

- ▶ Consider postponing the purchase of a dog, especially a large one, until your children are at least six years old.
- ▶ Take your time when looking for a dog. Learn the differences in the various breeds and choose one best suited to your lifestyle and experience. Avoid aggressive dog breeds.
- ▶ If you do not have time to raise and train a dog properly, do not get one.
- ▶ Train and socialize your dog properly. Get help if you run into problems.
- ▶ Teach your children how to behave correctly and safely around animals and to respect them.
- ▶ If your children are too young to understand, it will be up to you to physically supervise and protect them from potential harm.
- ▶ Remember that what the dog tolerates from your own children may not be tolerated from someone else. Take extra safety precautions when other children visit.
- ▶ Vaccinate pets against rabies and keep them in healthy condition.
- ▶ Teach children not to tease animals.



Tips for avoiding dog bites. Teach your kids these simple rules:

- ▶ DO stand still and be calm.
  - ▶ DO curl your fingers into a fist. Fingers are easy to bite.
  - ▶ DO be firm. Say “NO” or “GO HOME”
  - ▶ DO let dogs sniff you. That is how they decide if you are OK.
  - ▶ DO walk SLOWLY away sideways.
  - ▶ DO be kind and gentle with animals.
  - ▶ DO have a parent call the local Animal Control if bitten.
- 
- ▶ DON'T scream. Sudden noises can cause a dog to bite.
  - ▶ DON'T approach a stray dog. Dogs protect their things.
  - ▶ DON'T look a dog in the eyes. That is threatening.
  - ▶ DON'T turn your back on a dog.
  - ▶ DON'T disturb a sleeping dog or one with puppies.
  - ▶ DON'T touch an injured dog.
  - ▶ DON'T try to take away a dog's food.
  - ▶ DON'T raise and wave your arms. This encourages dogs to jump up.

## CATS

House cats can be great pets for children, although children can sustain serious wounds if they are bitten or scratched by a cat. One common disease that can result from these scratches is called “cat scratch fever.” A blood infection resulting in high fever can occur. To prevent this from happening instruct children to handle cats properly.

Toxoplasmosis can result from exposure to cat feces. This parasitic disease is transferred when a person touches their hands to their face after cleaning a litter box or working in the garden where a cat has deposited urine or fecal material.

A pregnant woman who has never had toxoplasmosis is at a greater risk of miscarrying or having a baby afflicted with a birth defect if

she becomes infected during pregnancy. To avoid possible infection, rubber gloves should be worn when cleaning a litter box or working in areas where cats deposit waste.



Dog and cat bites can both cause pain and damage. When not properly cared for, between 3 to 18 percent of dog bites become infected while up to 80 percent of cat bites lead to infection. Since dogs are usually larger and have duller teeth than cats, their bites produce more structural damage. Cats have small, sharp teeth that puncture the skin and make it difficult to clean a deep wound and wash out bacteria. Cats also carry staphylococcus in their saliva. Their bites can cause blood poisoning within 12-24 hours.

## OTHER SMALL ANIMALS

Although dogs and cats are the most common pets, other animals such as rabbits, hamsters and livestock can be wonderful companions for children. The care of other small animals can teach children the responsibility of caring for livestock.



Family pets should be cared for with love and respect. Make sure they receive all shots, especially rabies, and worm them regularly. Keep litter boxes and the yard clean. Pet food is a tempting snack for small children, so keep them away from food dishes. Remember that children have an increased risk of being bitten on the face, head or neck partly because of their small size.

## Prevention Tips

Help children learn safety and health procedures around small animals by practicing and role modeling safe practices with pets.

- ▶ Neuter pets that are not owned for breeding purposes. Statistics support that neutered animals live longer, healthier lives and are less aggressive. They seem to have greater resistance to disease and suffer less than non-neutered animals.
- ▶ Keep pets healthy, well fed and cared for.
- ▶ Supervise young children when they are around pets.
- ▶ Take pets to a veterinarian on a regular basis and keep vaccinations current.
- ▶ Signs of a healthy pet include: bright eyes, shiny fur, wet nose, good appetite, normal weight, well-formed stools, alertness, playfulness and energy.
- ▶ Young children cannot defend themselves from animals and have an increased risk of being bitten on the face, head or neck, partly because of their small size.
- ▶ Rabies is the most serious disease associated with animal bites and can be found in bats, raccoons, foxes, skunks and dogs and cats that have not been immunized.
- ▶ Wash hands with soap and water after handling animals.
- ▶ Instruct children to drop to the ground, curl up in a ball and cover their head and face with their arms if they are attacked by an animal.

What to do if you are bitten:

- ▶ Tell an adult so they can notify the police or animal control
- ▶ Wash the wound with soap and water
- ▶ See a doctor right away
- ▶ Remember the type, size and color of the animal; if it had a collar or tag and the direction the animal went

Kids and animals are wonderful together... when adults use common sense and put SAFETY first.





## Horse Safety

During the last decade, participation in horse-related activities has continued to grow. The American Medical Equestrian Association estimates that 30 million people in the United States are involved in equine sports and membership in many horse associations is growing steadily. These numbers reflect the importance of teaching safe horse handling at every level. Basic safety practices are essential in every horse operation, and horse sports can be very rewarding when these practices are followed.

As a rider, you should have working knowledge of horse behavior so you can anticipate and prevent potentially hazardous situations. Horses, by nature, are easily startled animals, but most incidents can be prevented by using proper handling methods.

Be sure that the horse and rider are suitable for each other. Beginners should ride only calm, dependable horses - preferably older horses - until they are proficient enough to handle more difficult ones.

Equipment must be adequate for the situation and in good repair. Check the rigging, cinches, latigo straps and billets of your saddle to be sure they are strong and will not break. Check bridles and reins, especially at stress points, and make sure the leather is strong and supple. Leather that is dry and cracked can break easily.

No matter how experienced you are in handling horses or how well you know your horse, when handling a large animal that weighs 1000 or more pounds precaution and safety should be practiced at all times.

Horses tend to be excitable and frightened by the most unexpected circumstances. If you are not prepared for such an emergency you may find yourself dragged, thrown or stepped on; all of which lead to the possibility of serious injury.

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### APPROACHING

Approach a horse from an angle at the shoulder. Speak softly when approaching, especially from behind, to let it know of your presence. Horses have monocular vision, which leaves them with a blind spot in front of their nose, under their head and directly behind them. Sudden sounds

or movements, particularly within these spots, tend to frighten horses. When you are within reach, touch the horse by first gently stroking the shoulder and moving calmly to the head. Don't walk up from behind and slap its rear end or suddenly lunge for its head.

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### CATCHING AND HALTERING

Carry a lead rope attached to the bottom noseband ring of a halter when you attempt to catch a horse. Once beside the horse's shoulder, slip the rope around its neck and secure it by holding both sides in the same hand. This enables you to exert control in the event the horse starts to walk away. Do not tie the rope around its neck. Gently grasp the horse's nose with your right hand, slide the halter up over its nose with your left hand and place the crownpiece behind its ears. Do not drag the halter over its nose. Some horses are tickled by the nosepiece when it bends the large hairs on the nose and face. This can cause them to raise their head or try to move away from the halter.

Make sure the halter is fitted properly. A good guide to remember this is the "2 finger rule":

- ▶ 2 finger distance will allow enough slack between the throat latch strap and the throat.
- ▶ 2 finger distance between the nose and noseband will allow a horse to open its mouth while limiting space for objects to become tangled.
- ▶ 2 finger distance between the cheekstrap and the cheekbone.

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### SADDLING

Before saddling, groom your horse thoroughly. Check that there are no sores on its back or in the cinch area, as this could cause the horse pain. Check your blanket for foreign objects or dirt buildup and be sure the blanket is dry. When placing the blanket, make sure there are no wrinkles and that the blanket offers adequate padding for the horse. Check that the saddle cinch is clean, dirty cinches can cause saddle sores. A horse that is experiencing pain under the tack will often rear or buck to unseat the rider in an attempt to ease the pain.

Pick up the saddle so that the fork is in your left

hand and saddle the horse from its left side. Never approach the horse carrying a saddle with a dragging cinch, as you could step on it and fall under the horse. Saddles fit horses differently, so be sure your saddle properly fits your horse. There should be nothing between you and the horse that could trip you as you carry the saddle. Be sure there is at least three inches of blanket in front of the skirts of the saddle.

After placing the saddle on the horse's back, move to the opposite side by walking behind the horse, keeping a hand on the horse and walk as close as possible. Talk to your horse frequently, especially when changing sides or starting something new. Check the cinch straps to make sure they are accessible from the left side.

Return to the left side and reach under the horse and grasp the cinch. With the left hand under the buckle to prevent pinching, tighten the cinch slowly, an inch or two at a time. Some horses may anticipate discomfort and react negatively when you tighten the cinch. Tighten the cinch until it is snug enough to hold the saddle on the horse. Recheck the front cinch before mounting.

To unsaddle, simply reverse the above process, lifting the saddle slightly before pulling it off. Always unfasten the rear cinch first (and breast collar, if present) to prevent an accident, such as the saddle turning while you are unsaddling. Your horse may panic if the saddle turns with the flank cinch fastened.

## BRIDLING

Working on the horse's left side again, drop the nosepiece of the halter off the nose and refasten the crown strap around the neck. Avoid placing your face too close to the horse's head during bridling and use caution when handling the ears. This helps ensure that you do not get hit in the face should the horse toss its head. Throughout the bridling process, be particularly careful not to wrap any piece of equipment attached to the horse around your hand or arm, as it could tighten around your hand if the animal bolts and cause serious injury.

With the bit pushed lightly against the horse's lips, insert the left thumb in the corner of the

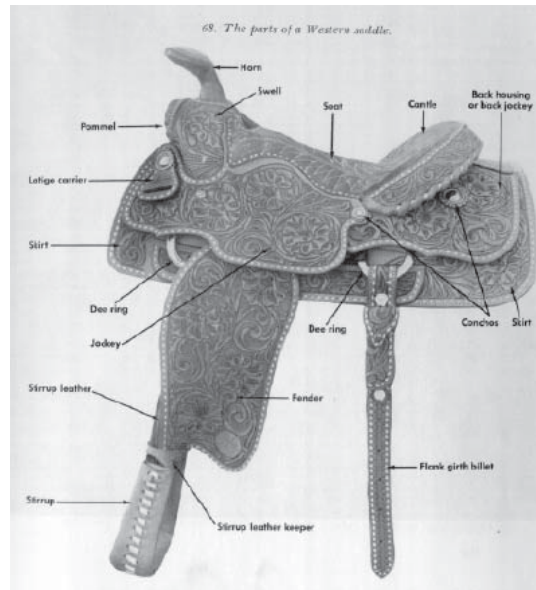


Photo by Charles E. Ball

mouth. There are no teeth here, so if necessary you can put pressure on the bar of the mouth with your thumb to encourage the horse to open its mouth. Many horses will open their mouth as you approach with the bit.

Lift the bridle upward with the right hand as you gently feed the bit over the teeth. Never jerk the bridle and move with the horse if it moves its head. Place the crown of the bridle over one ear and then the other, bending the ears forward gently as you pull the bridle over them.

The bridle should be properly adjusted before you ride. Also check the curb chain or curb strap. You should be able to fit three fingers sideways between the horse's chin and the chain, but the chain should be tight enough that it places pressure on the chin when you pull back on the reins. This ensures that you have enough control of your horse. When removing a bridle from the horse's head be careful not to drop the bit onto the horse's front teeth. Allow the horse enough time to spit the bit out on its own.

## DRESS PROPERLY

Wear hard-toed boots with a heel at all times when handling or riding horses. The heel will help prevent your foot from sliding through the stirrup and the hard boot will protect your toes if the horse steps

on them. Always wear long jeans to protect your legs from saddle sores and trail hazards. Avoid shorts and any type of pant made from slick material, such as nylon.

You may want to wear gloves for hand protection, particularly in the winter when hands are exposed to harsh weather. Gloves will also help in the summer because your hands may sweat and make the reins slippery. Chaps keep you warm in the winter and provide protection for your legs and clothing.

Avoid dangling jewelry. Loose shirts are a hazard because they can catch on the saddle horn when you dismount. Long hair should be pulled back so your vision is not restricted.

Horses can run at speeds of 45 mph. It is important to wear a riding helmet to protect your head in case of a fall (when purchasing a helmet, look for the Safety Equipment Institute (SEI) equestrian label ASTM F-1163). Balance and strength are not as developed in children so they are at greater risk of falling than adults. If the horse is spooked or gets out of control, the rider could fall and be seriously injured or killed.

## HORSE DRIVEN VEHICLES

In areas where horse-drawn buggies are common modes of transportation, special precautions should be taken to prevent incidents to both their passengers and other drivers sharing the road. If you are the buggy driver, make sure the buggy has a slow-moving-vehicle (SMV) sign on the back of the buggy. Battery-operated tail lights and flashing amber lights should be used at dusk and after dark. If you are in a vehicle that is sharing the road with a buggy, allow a safe distance between your vehicle and the buggy. Use caution when passing and do not intentionally startle or hurt the animal. It is important to keep horses calm around roadway traffic.

Any person driving a horse-drawn vehicle on a roadway is subject to the motor vehicle laws of the state. The regulations that are applicable to pedestrians apply to any person riding or leading an animal on a roadway or shoulder.

## CHOOSING THE RIGHT HORSE

When selecting a horse for a child, take into consideration their size and strength; their knowledge about horse care and how to handle them; the child's interest in the horse; and how you plan to use the horse. Don't make the mistake of buying cheap and purchasing a young, unbroken horse so your child and the horse can "grow up together." This situation can lead to injuries and cause the child to quickly lose interest in the animal. If you are new to the horse industry, ask veterinarians who work with horses or 4-H extension agents to refer you to reputable horse people who can help you find the right horse for your child.



Taking riding lessons prior to purchasing a horse gives the child a chance to see if he or she really likes riding, what chores are involved with the care of the animal and helps you decide what level of training the horse will need in order for your child to handle it. Lessons also teach the child the proper way to ride and how to safely work around horses. With young and inexperienced riders, buy a more seasoned horse that has experience in the area you are going to use it in and make sure the horse likes children. When selecting a horse, try it out in the environment it is intended to be used in: trail riding, driving or competition.

## Prevention Tips

Riding horses is an enjoyable experience for many youth. Rural, farm and visiting urban children can gain pleasure from riding horses and form a bond with a special animal. This is a great way to teach responsibility for the care and maintenance of animals.

Special precautions should be taken to ensure that this experience does not turn into a tragedy. Listed below are prevention strategies to ensure horse riding and care is performed safely.

### Special precautions when children are involved with horses

- ▶ Make sure children are physically and mentally mature enough to handle a horse.
- ▶ Provide riding helmets to protect children in case of a fall.
- ▶ Children should learn to ride horses that are calm and dependable.
- ▶ Teach children to ride horses properly and supervise their first riding experiences closely.
- ▶ Role model correct riding practices.
- ▶ Do not wrap the lead rope or reins around your hand or body.

### Safety tips for anyone working with horses

- ▶ Approach a horse from the side, near the shoulder.
- ▶ Speak softly when approaching a horse.
- ▶ Wear hard-toed boots with a heel.
- ▶ Wear long pants when riding.
- ▶ Make sure straps and lead ropes are short enough so they are not stepped on by the horse.
- ▶ Avoid placing your face too close to the horse's head.
- ▶ Wear gloves to protect your hands.
- ▶ Avoid dangling jewelry and long hair that can get caught or restrict your vision.
- ▶ Do not slap the horse's rear.
- ▶ Never walk under a horse's neck when it is tied up.

### Safety tips for arenas and jump courses

- ▶ Rings and courses should have ample, suitable footing; free from ruts, holes and unevenness.
- ▶ Fencing and gates should be a minimum of 4 feet high and of adequate strength.
- ▶ All overhead and protruding branches should be cut back so as not to be a hazard.
- ▶ Jumps, trail obstacles, barrels and poles should be in good condition.

Remember, horse riding is a great sport if safety is a prime concern of both parents and children.

## Wildlife Safety

The rural and farm environment, with its open spaces and exposure to wooded and remote areas, lends itself to wild animals' living spaces. Living in close proximity to wildlife can be a positive attribute for those living in a rural setting if you are a hunter or nature lover. But it can also be a negative factor if exposure to wildlife causes injury.

There are many wildlife species living in rural areas. The specific type of animals that are present is dependant on the terrain and climate of the area. For example, bears live near mountainous areas; small wildlife, such as rabbits, skunks and raccoons inhabit back yards; deer, elk and moose live where they can forage for grain and predator animals like fox, coyote and wolves live where they can find smaller prey. Each wildlife species has its own characteristics, therefore ways to prevent human injury if you come in contact with them may vary. However, many safety tips apply to all wildlife.

### ANIMAL-SPECIFIC PREVENTION TIPS

**Bears:** Bears like to live in forested, hilly and mountainous areas. Most bears are not typically aggressive and rarely pose a threat to humans if left alone. If you should come upon a bear he/she will probably run away to avoid human contact. Bears quickly learn to associate food with humans and can become aggressive for an easy meal.

- ▶ Keep food and garbage in locations where bears can not access. Keep lids on garbage cans securely sealed.
- ▶ Never approach a bear. If you unavoidably approach a bear, back up slowly. Maintain eye contact and do not run. Remain in a standing position and make a loud, sharp noise.
- ▶ A mother bear with cub(s) is especially dangerous. She will defend her young.

**Snakes:** Some snakes are venomous (poisonous), but most are not. Of the 8000 snakebite victims in the United States each year, only about 10 to 15 die. However, if you are bitten by a snake you should seek medical attention.

Ways to prevent snake bites include:

- ▶ Become familiar with the snakes in your area and recognize their unique markings. Learn about the habitats of common snakes and stay away from these locations. If rattle snakes live in gravel pits in your area, don't go there.
- ▶ Always be with someone else while in the field. If someone is bitten, have the other person go for help.
- ▶ Wear boots and loose-fitting pants.
- ▶ Do not reach hands or feet into rock crevices or between logs.



If a snake bites a person:

- ▶ Keep the victim still and calm to keep the venom from spreading through the body.
- ▶ Keep the bitten area below heart level.
- ▶ Seek immediate medical care. Transport the person as soon as possible.
- ▶ If medical care is more than a half hour away, wrap a bandage a few inches above the bite, keeping it loose enough to allow blood flow.
- ▶ If you are alone when bitten, start walking slowly toward help, exert the injured area as little as possible.

**Wild Dogs:** Wild dogs like coyotes, foxes and wolves are predators, which means their primary diet consists of other animals. They guard their own territory just like domesticated dogs. Foxes are small wild dogs that reach about 12 pounds when mature and live in fields and open places. Foxes have the reputation of being secretive and sly. Adult coyotes weigh between 25 and 35 pounds and are strong swimmers. When live prey is hard to find, they feed on fruit and berries. Wolves are much larger than foxes and coyotes. An adult, male wolf usually weighs between 70 to 90 pounds, while females weigh between 55 and 75 pounds. Wolves usually travel in packs and may slaughter other animals simply for the kill.



In order to stay safe:

- ▶ Stay away from all wild dogs.
- ▶ Never allow children to approach wild dogs.
- ▶ Dogs often live in burrows and dens. If you come across a den of baby dogs, leave them alone.

**Wild Cats:** Mountain lions and bobcats are considered wild cats. They are often found in mountainous, timber areas. Although cat attacks are rare, they can take place if the animal is provoked or disturbed.

Follow these precautions if around wild cats:

- ▶ Do not leave pets or pet food outside and unattended, especially at dawn and dusk.
- ▶ Avoid walking alone.
- ▶ Watch children closely and never let them run ahead in areas where wild cats may be present.
- ▶ Never approach a wild cat, especially if one is feeding or with kittens.
- ▶ Always give yourself a way to escape.
- ▶ Stand and appear as large as possible. Back away slowly without running.

**Small Prairie Wildlife:** Smaller wild animals are found in numerous rural areas. Just because they are small does not mean they are not dangerous to humans if their territory is invaded. Rabbits, skunks, raccoons, beavers, gophers, muskrats, rats, etc. fall into this category. Normally, they will run if frightened, but can cause injury if cornered. Along with physical dangers from teeth and claws, many of these animals can carry disease. In many locations, skunks are likely to carry the rabies virus.

The same general precautions listed under “Never Feed Animals” are also true for small wild animals.

In addition:

- ▶ Keep garbage cans closely covered.
- ▶ Don't leave pet food out to attract wildlife.
- ▶ Dispose of trash that could invite rodents to nest.
- ▶ Be especially cautious of mother animals caring for their young.
- ▶ Do not try to raise baby wildlife. Cute babies can grow up to be fierce adults.



## DRIVING IN AREAS WHERE WILDLIFE IS PRESENT

Driving within the rural environment presents more dangers due to the existence of wildlife close to driving vehicles. In Ontario, 90% of wildlife-traffic incidents occur on two-lane roads outside of urban areas. 84% of these incidents occur in good weather, predominately in late spring and fall. Peak times for vehicle-wildlife collisions are from 5 a.m. to 7 a.m. (dawn) and 5 p.m. to 11 p.m. (dusk).

When driving in areas where wildlife may be present, follow these precautions to prevent accidents:

- ▶ Be alert when driving and constantly scan from shoulder to shoulder.
- ▶ Be aware that animals can bolt suddenly.
- ▶ Slow down when yellow wildlife signs are posted.
- ▶ When possible, use high beam lights at night and watch for animals' glowing eyes.
- ▶ Stay in control of your vehicle by slowing down. Never swerve out of your lane to avoid an animal. This can cause you to head into oncoming traffic or roll into a ditch.
- ▶ If an animal is sighted on or near the side of the road, brake firmly. Safely stop and wait for the animal to cross the road or turn around. Often if you see one animal more are present and may follow.
- ▶ Do not get out of your vehicle and attempt to take close-up photos of wildlife and never feed the animals.



### Prevention Tips

- ▶ Never feed or approach wild animals.
- ▶ Feeding wildlife can spread disease. When animals are drawn to a central source and have easy access to food, they come in close contact to other animals that may have disease. Animals can carry and spread disease to people, such as Rabies, Lyme Disease, Brucellosis, Salmonella and Rocky Mountain Spotted Fever. They can also carry transferrable parasites.
- ▶ Wild animals can be dangerous while eating. They can turn on humans, pets and livestock if they are too close.
- ▶ Wildlife will return to areas where they have found food before — causing them to lose their natural instinct to stay away from people.
- ▶ Mother animals of all kinds are protective of their young. Never approach a mother or baby animal even if the mother is not present. She is probably close by and can attack if she feels you are a threat to her baby. Never take wild animal babies away from their homes and try to raise them as pets.
- ▶ Wild animals can be upset by human presence and can unexpectedly become aggressive in an instinctive “fight or flight” behavior. People can be injured simply by being in an animal’s way. Wild animals don’t even have to be teased to cause them to become agitated.
- ▶ Nocturnal animals such as raccoons and possums are more active during night time hours. If they are found during daylight, be especially cautious. They may be sick if they are moving around during a time they would normally sleep.
- ▶ Never play around animal holes or dens. Many animals will attack when they feel threatened by their den. Badgers can be especially aggressive toward humans.

## Evaluation

Conducting surveys of your intended program audience can identify knowledge about animal and livestock safety. If the surveys are done before an educational program takes place, it will give the presenter a basis for where his/her audience is, in relation to animal safety. The educational program can then target issues lacking by the audience.

The surveys can be conducted again after the program has taken place in a pre and posttest format. This will identify change in knowledge. The resulting information could make a great newspaper article when reporting the changes made by your audience.

Listed on page 32 are several questions related to the information in this packet. Take into consideration what topics you plan to cover in your presentation and program. If you will not be covering wild animals, don't use the questions related to this topic. The questions can be combined or rewritten to be specific to your program.

Surveys can be completed and tabulated several ways. They can be copied, distributed, completed, collected, and tabulated by hand if there are only a few surveys. If many surveys will be completed, an easier way to complete the process is using an electronic software package; some of them are free if you want only basic analysis results. Use their suggestions to ensure a good response rate.

ANSWER KEY: 1:b, 2:c, 3:d, 4:c, 5:c, 6:b, 7:d, 8:c, 9:a, 10:d, 11:c, 12:d, 13:b, 14:d

### SELF ASSESSMENT

The self-assessment tool can be used to identify behaviors used by your audience. If used before your presentation and educational session, it can be used to identify areas that need special attention. If used after the program, it can be used to see if your audience has changed their behavior when compared to the assessment done prior to the program. This information is self-reported so there is a chance the information may be slanted.

Student Self-Assessment of Safe Behavior When Around Animals

	Always	Sometimes	Never
I wear a helmet when riding a horse			
I wear hard toed boots when working with large animals			
I approach livestock at the shoulder			
I approach livestock using a calm voice			
I keep my hand on the animal when grooming them			
I wash my hands after working with livestock			
I do not try to break up a fight between two animals			
I take special caution when mother animals are with their young			
I wear long sleeved shirts and pants when walking where insects are abundant			
I dispose of animal waste in approved ways			
I recognize symptoms of toxic gases, leave the area, and contact the appropriate person			
I keep young children from approaching large livestock			
I do not approach unfamiliar pets until getting permission from the owner			



1. Which farm animal is associated with the most farm-related injuries to youth?
  - a. Cattle
  - b. Horses
  - c. Hogs
  - d. Sheep
2. Which of the following statements is true?
  - a. Animals seldom cause injuries to children and youth on the farm
  - b. Animals cause the most fatal injuries to children and youth on the farm
  - c. Animals cause the most non-fatal injuries to children and youth on the farm
3. Which of the following animal related characteristics does NOT impact the safety of children and youth?
  - a. Female animals have maternal instincts
  - b. Farm animals have strong territorial instincts
  - c. Animals are extremely sensitive to loud noises
  - d. Animals are covered with feathers, fur, or hair
4. How should farm animals be approached safely?
  - a. From the rear, slapping its hindquarters
  - b. Loudly
  - c. Touching the animal gently at the shoulder
  - d. Between the animal and where it is tied
5. Which of the following statements would make grooming an animal safer for the groomer?
  - a. Wear sandals
  - b. Wear dangling jewelry
  - c. Use grooming equipment gently
  - d. Sit on the ground when grooming
6. Which of the following statements is a good safety rule when showing livestock?
  - a. Let people speak loudly around animals
  - b. Keep walkways and aisles free of clutter
  - c. Wrap the lead rope around your hand tightly
  - d. Choose a young horse if showing horses
7. Which of the following is NOT classified as a zoonotic disease?
  - a. Salmonella
  - b. West Nile Virus
  - c. Toxoplasmosis
  - d. Pancreatic Cancer
8. Which of the following would help control health risks associated with zoonotic diseases?
  - a. Reduce ventilation in confined animal buildings
  - b. Do not vaccinate pets for rabies
  - c. Dispose of sanitary waste in approved ways
  - d. Maintain a moist environment
9. Which of the following gases is NOT often found where animals are kept?
  - a. Helium
  - b. Methane
  - c. Ammonia
  - d. Hydrogen Sulfide
10. How can children be protected from injuries when around livestock?
  - a. Keep them outside animal fences
  - b. Keep animal-related chemicals and medications out of children's reach
  - c. Remind children to have a safe escape route when around livestock
  - d. All of the above are appropriate for keeping children safe
11. Which of the following will help prevent pet-related injuries?
  - a. Do not neuter or spay a dog
  - b. Play aggressively with your dog
  - c. Take your dog to the vet on a regular basis
  - d. Do not use a leash when in public
12. Which of the following is NOT a sign an animal may be upset and therefore more aggressive?
  - a. Growling sounds
  - b. Stiff legs
  - c. Showing teeth
  - d. Waging tail
13. Which of the following is a way to stay safe while riding horses?
  - a. Use a baseball cap when riding
  - b. Wear hard toed boots
  - c. Slap the horse's rump when approaching
  - d. Walk under the horse's neck when it is tied up
14. Which of the following would reduce the likelihood of getting hurt by a wild animal?
  - a. Wear shorts when hiking in wooded areas
  - b. Reach into crevices if you suspect a snake
  - c. Have lots of food present and available for bears
  - d. Dispose of trash that could invite rodents

## Additional Resources

Contact these organizations for additional information.

American Humane Association  
63 Inverness Drive E  
Englewood, CO 80112  
303-792-9900  
800-227-4645

Colorado State University  
Cooperative Extension  
110 Veterinary Science Building  
Fort Collins, CO 80523  
970-491-6198

Cornell University  
777 Warren Road  
Ithaca, NY 14850  
607-255-5492

Farm Safety Association  
75 Farquhar Street, Suite 101  
Guelph, Ontario N1H 3N4

Farmers Insurance Group  
PO Box 2119  
Warren, MI 48090-2119  
810-558-7026

Horsemanship Safety Association, Inc.  
517 Bear Road  
Lake Placid, FL 33852  
800-798-8106

Iowa State University  
Extension Distribution Center  
119 Printing and Publishing Building  
Ames, IA 50011-3171  
515-294-5247  
[www.extension.iastate.edu/](http://www.extension.iastate.edu/)

Kansas State University  
College of Veterinary Medicine  
101 Trotter Hall  
Manhattan, KS 66506-5601  
[www.vet.ksu.edu](http://www.vet.ksu.edu)

Manitoba 4-H Council  
916-401 York Avenue  
Winnipeg, MB, Canada R3C 0P8  
204-945-4525

Maryland Cooperative Extension  
Caroline County Office  
207 S Third Street  
Denton, MD 21629  
410-479-4030

Michigan State University  
223 Farrall Hall  
Department of Ag Engineering  
East Lansing, MI 48824  
517-353-3737

National Agricultural Safety Database  
[www.cdc.gov/niosh/nasd/nasdhome.html](http://www.cdc.gov/niosh/nasd/nasdhome.html)

National Children's Center for Rural &  
Agricultural Health and Safety  
National Farm Medicine Center  
1000 N. Oak Ave.  
Marshfield, WI 54449  
715-389-4999  
Technical Assistance: 888-924-7233  
[www.marshfieldclinic.org](http://www.marshfieldclinic.org)

National Institute for Animal Agriculture  
1910 Lydia Drive  
Bowling Green, KY 42104-5809  
270-782-9798  
[www.animalagriculture.org/](http://www.animalagriculture.org/)

National Pork Board  
PO Box 10383  
10654 Justin Drive  
Urbandale, IA 50322  
515-278-8012

New York Center for Agricultural  
Medicine and Health  
One Atwell Road  
Cooperstown, NY 13326  
800-343-7527  
[www.nycamh.com](http://www.nycamh.com)

Oklahoma State University  
214 Agricultural Hall  
Stillwater, OK 74078-0469  
405-744-3727  
[www.oklahomastate.org](http://www.oklahomastate.org)

## Additional Resources

Contact these organizations for additional information.

Penn State University  
246 Agricultural Engineering Building  
University Park, PA 16802  
814-865-7685

Purdue University  
615 W. State Street  
West Lafayette, IN 47907  
765-494-8422

Rutgers Cooperative University  
PO Box 231  
New Brunswick, NJ 08903

State Farm Fire and Casualty  
Corporate Headquarters  
One State Farm Plaza  
Bloomington, IL 61710-0001  
309-766-8188

The Ohio State University Extension  
Food, Agricultural, and Biological Engineering  
590 Woody Hayes Drive  
Columbus, OH 43210  
614-292-6008  
[www.ag.ohio-state.edu/~agsafety](http://www.ag.ohio-state.edu/~agsafety)

The Zenith Insurance  
7440 N. Palm Ave., Suite 103  
Fresno, CA 93711  
559-436-8839  
[www.thezenith.com/zenith\\_web/webui/index.jsp](http://www.thezenith.com/zenith_web/webui/index.jsp)

University of Delaware  
16684 County Seat Highway  
Georgetown, DE 19947  
302-856-7303

University of Florida  
Department of Agriculture and  
Biological Engineering  
PO Box 110570  
Gainesville, FL 32611-0570  
352-392-1864

University of Illinois  
1304 W Pennsylvania Ave.  
Urbana, IL 61801  
217-333-9417

University of Maine  
103 Libby Hall  
Orono, ME 04469-5741  
207-581-3872

University of Missouri  
207 Ag Engineering Building  
Columbia, MO 65211  
573-882-2731

University of Wisconsin  
Extension Publications  
30 N. Murray Street, Rm 245  
Madison, WI 53715  
[www.learningstore.uwex.edu](http://www.learningstore.uwex.edu)

Washington State 4-H Foundation  
7612 Pioneer Way  
Puyallup, WA 98371-4998  
253-445-4570

Washington State University  
126 Clark Hall  
Pullman, WA 99164  
509-335-3564

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## Recognize the Dangers

**Objective:** Students will recognize physical characteristics of animals that may warn of impending dangers.

**Concept:** Children love to dress up and pretend. During this activity they will pretend to be animals. Maternal instinct is normal in all animals, including pets. Children should be taught to respect a mother animal when caring for her young.

**Targeted Age:** Preschool

**Materials:**

- ▶ Animal print/colored fabric
- ▶ Head bands
- ▶ Tail material (yarn, pipe cleaners, etc.)

Attach animal ears to plastic headbands. Use small ears for babies and large ears for mothers. Find fabric representing animals. Brown felt or fur can represent a dog. Use pink felt for pigs with a pink, cork screw pipe cleaner for a tail. Black and white Holstein material is available for cattle. Cut a slot for the head and attach a tail to the other end.

Have the students act out what a mother animal might do if her babies are approached by a human. Discuss the typical behavior of mother animals and the corresponding, appropriate and safe human behavior.

Discuss what behaviors farm animals portray to indicate danger warnings.

Have the children act out:

- ▶ Arching backs
- ▶ Growling or snorting
- ▶ Pawing ground
- ▶ Laid back ears

Discuss how people should safely behave when they are near animals showing these warnings:

- ▶ Do not approach large animals
- ▶ Stay outside animal fences
- ▶ Follow rules set up by adults

**Q:** What situations, other than being a new mother, can cause livestock to become agitated?

**A:** Animals that are sick, hungry or deprived can become aggressive, stubborn or can attack. They will usually give visual or audio signals that their behavior is negatively changing. Be alert at all times around animals. Sires or father animals can also become protective of his herd, causing aggressive behavior.

**Q:** When approaching unfamiliar pets, what signals should warn you of danger?

**A:** Barred teeth, growling and a change in the ears are all signs of a change in animals' temperament. Ask the owner's permission before ever touching someone else's pet.

## Instinctive Animals

**Objective:** Students will be able to recognize the difference between instinct and learned behavior in animals.

**Concept:** Just like humans, animals exhibit both instinct and learned behavior. By recognizing the differences between instincts and behaviors, a person can help alter an animal's behavior that can be changed and stay away from instinctual behaviors that cannot be changed and lead to dangers.

**Targeted Age:** Elementary

**Materials:** Paper and pencils

Divide the students into small groups of four or five students. Assign a different animal to each group (horse, cow, ostrich, skunk, etc.). Instruct the students to act like the animals they are assigned. Encourage one student in each group to make noise, walk, eat, play, pass time, etc. like the animal their group is assigned. Have the rest of the group write down what they observe (panting, walking stiff legged, paws ground, tears flesh, jumps, etc.)

**Q:** Which of the exhibited behaviors would be considered an instinct?

**A:** A protective action, such as mothers protecting babies or bulls snorting to protect their territory, is an instinctual trait.

**Q:** Which of the exhibited behaviors could be considered a learned behavior?

**A:** When an animal comes to you when they are called or learns to stay away from electric fences.

**Q:** How does knowing the difference between an instinct and a learned behavior influence your safety around animals?

**A:** A learned behavior can be changed. However, it is more difficult to change a learned behavior than train the animal correctly in the first place. Instincts, such as protecting a baby animal, can lead to attacks on people if the animal feels threatened. By recognizing that the behavior is instinctual instead of learned, you can be more cautious.

## Reading Animal Language

**Objective:** Students will be able to identify visual signals that communicate emotions and possible behavior.

**Concept:** Both humans and animals give constant visual signals that communicate how they are feeling, what they are thinking and how they may respond to situations. By identifying these signs, you can more effectively deal with a potential situation that could lead to danger. In humans, you can usually address the issue by talking. Since animals cannot talk, your own behavior can ward off problems by avoiding the dangers.

**Targeted Age:** Middle School

**Materials:** Paper and pencils

### ACTIVITY 1

Ask each student to observe a group of people in a crowded setting (lunch room, mall or any location where people congregate). Record observed body language (facial expressions, hand gestures, body movements, etc.). Notice any voice pitch or tone change if close enough to hear. When back together as a group, ask the students to interpret their observations. Relate this information to what might be observed in animals.

**Q:** How do you know if body language is positive or negative?

**A:** In humans the most expressive signals usually come from the face, especially the mouth. Other parts of the body (examples: voice level and tone, arm movements) can also give clues. Each animal has a different set of clues to its emotions. A cat may raise his back, a bull may snort, a ram may paw the ground, etc. By recognizing these signs, you are better able to take precautions if the animal is upset.

**Q:** What should you do if you observe that an animal is upset?

**A:** If you identify a sign that an animal may be upset, get away from the animal. Put a fence between yourself and the animal. Always be with an adult when you are around unfamiliar animals.

### ACTIVITY 2

Find video clips of animals. These can be home videos, commercials showing animals, TV shows or do a search on the internet. Mute the sound so you are paying more attention to body signals. Discuss how the animal's body changes to indicate emotion. Interpret the similarities between human and animal behavior.

## Leading Livestock

**Objective:** Students will be able to understand the importance of holding the lead rope correctly when leading livestock. They will also learn the size difference between themselves and the animal.

**Concept:** A person bound to the animal that is being led can be in danger if the animal bolts to get away from the person.

**Targeted Age:** Elementary through high school

### ACTIVITY 1

**Materials:** Cotton rope, approximately 20 to 30 feet in length (cotton lunge line works well)

Ask each student their approximate weight. Place one student on one end of the rope, then place enough students on the other end that they would add up to 1000 lbs. Remind the students that the average weight of a full size horse or show steer is anywhere from 1000 lbs to 1300+ lbs. Do not allow students to wrap the rope around their body or hands.

Discuss a scenario where the student is leading the animal when it decides to go back to the barn or escape. Have the large group of students begin pulling on the rope and see if the single student can keep the others from “returning to the barn.”

### ACTIVITY 2

**Materials:** One or more cattle or horse halters with cotton lead ropes attached

This activity asks the students to pretend to be animals and animal handlers. Have one student hang onto the halter and pretend to be the animal. Another student is the handler and holds onto the lead rope. Have the handler hold the rope coiled like a lyrate (see picture #1). Have the student that is holding the halter “spook” and start pulling hard. If you have enough children, you can have three or four hold onto the halter while the handler tries to hold the coiled lead rope in one hand. With the rope coiled, the lead rope will tighten around the student’s hand, trapping the hand so he cannot let go and could potentially be drug by the frightened animal.

Next, have the student holding the lead rope fold it into a figure 8 shape, hanging onto the center of the remaining lead (see picture #2). Have the other students “spook” again pulling on the halter. This time, the lead rope should slide through the youth’s hand and not tangle around their hand.

### ACTIVITY 3

Make copies of the boy leading the team of work horses (next page). Ask students to draw a picture showing how to safely hold the reins or lead rope when leading horses.

**Q:** How would having the rope around your waist or other parts of your body influence the results?

**A:** The rope, wherever placed, will tighten when the animal bolts, knocking down, tripping or dragging the person. Any large framed animal or pet has a lower center of gravity than a two-legged person who falls down more easily. A person is no match for the large bulk and weight of an animal.



Figure 1



Figure 2

(resource on the next page)



# Leading Livestock (resource)



## Approaching Animals Safely

**Objective:** Students will learn how to approach a horse safely and learn where the safety zones are when working around them. They will also learn body signals that help them identify animals that are approachable.

**Concept:** Every animal has a kicking or striking zone that makes it dangerous. The safest place to be when around a horse is close to its body. Identify body language that indicates the disposition of animals.

**Targeted Age:** Elementary through junior high

### ACTIVITY 1

**Materials:** Red and green paper, standing toy model or stuffed horse

Make several green hand shapes and red stop sign shapes out of paper. Have the students tape or stick the green hands on the shoulders of the toy horse. Put the red stop signs on the face of the horse and around the hind quarters or rear of the large animal. Discuss the consequences of standing directly in front of the animal (may be run over) or directly behind (kicked by the hind legs).

### ACTIVITY 2

**Materials:** Enlarge, color, and laminate the aerial illustration of a large animal and hat (p. 40-41).

Using rubber tacky, have the students come up and place the hat in the areas that are the safety zones (around the shoulders). Have them place the hat in the danger zones (directly in front of the horse and around the hind quarters). Enlarge the aerial drawing to life size. Place the drawing on the floor and have students approach the drawing from a safe location.

### ACTIVITY 3

**Materials:** Copies of the resources on page 42.

Discuss the different body signals a horse gives to indicate whether he is friendly or unfriendly. Discuss what parts of a horse's body might injure you, such as striking front legs, rearing and pawing, kicking with hind legs or biting. Discuss the direction of the ears, look in the eyes and talk about what the horse's legs are doing.

### ACTIVITY 4

**Materials:** Copies of the resources on page 43.

Discuss that the ears are the messengers to what a horse is listening to, how they are feeling and what they might be thinking about doing. Ears that are forward and relaxed tell you that the horse is happy and not fearful. Ears that are directed behind them, but not pinned down to the neck, are listening to what is behind the horse. Ears that are pinned back close to the neck indicate that the horse is very mad and may possibly rebel or fight.

**Q:** What determines the kick or strike zone of an animal?

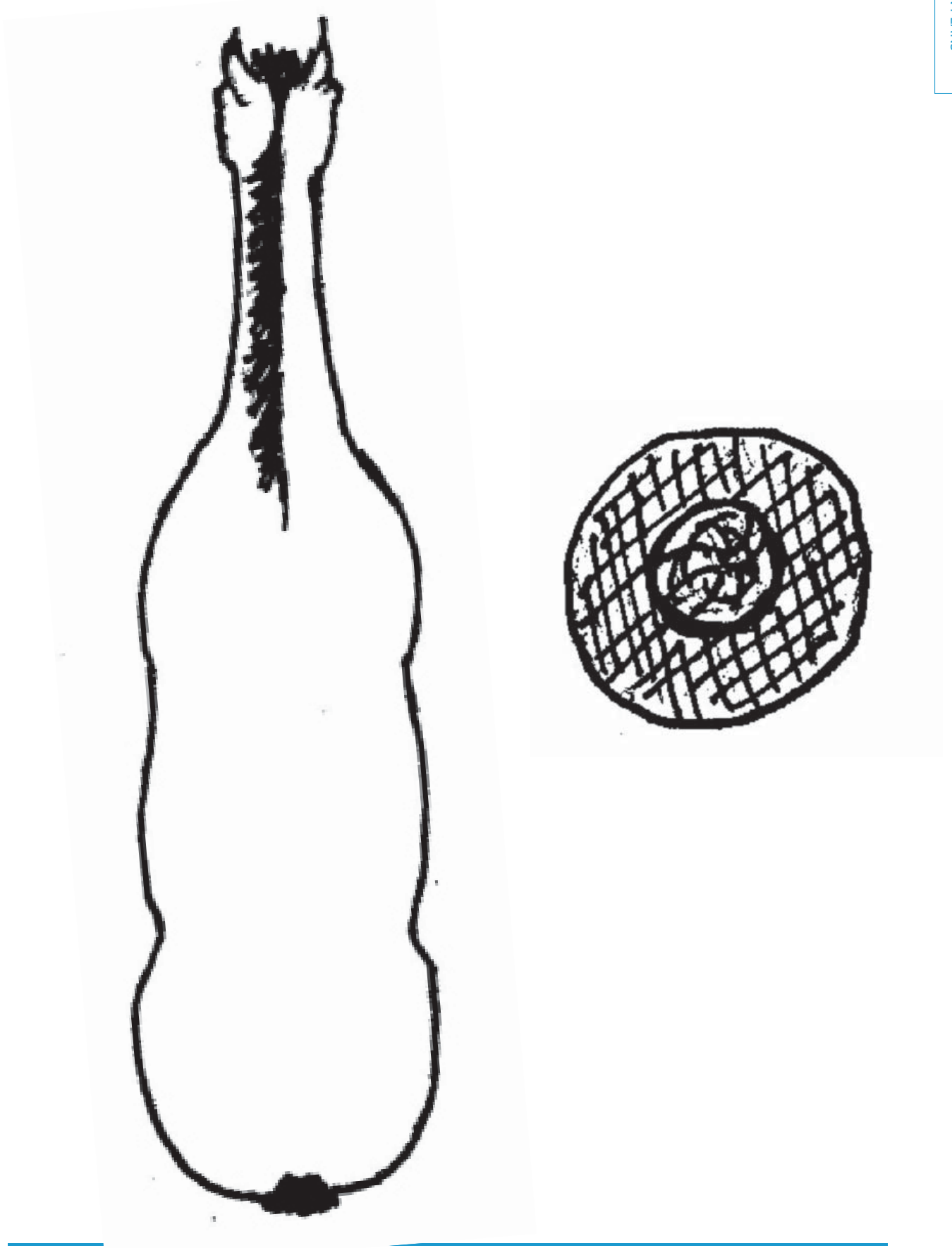
**A:** The size of the animal and her leg length will determine how far it can kick. Always consider the power and size of the animal when working around large animals.

**Q:** What could happen to a person standing in the danger zone of an animal?

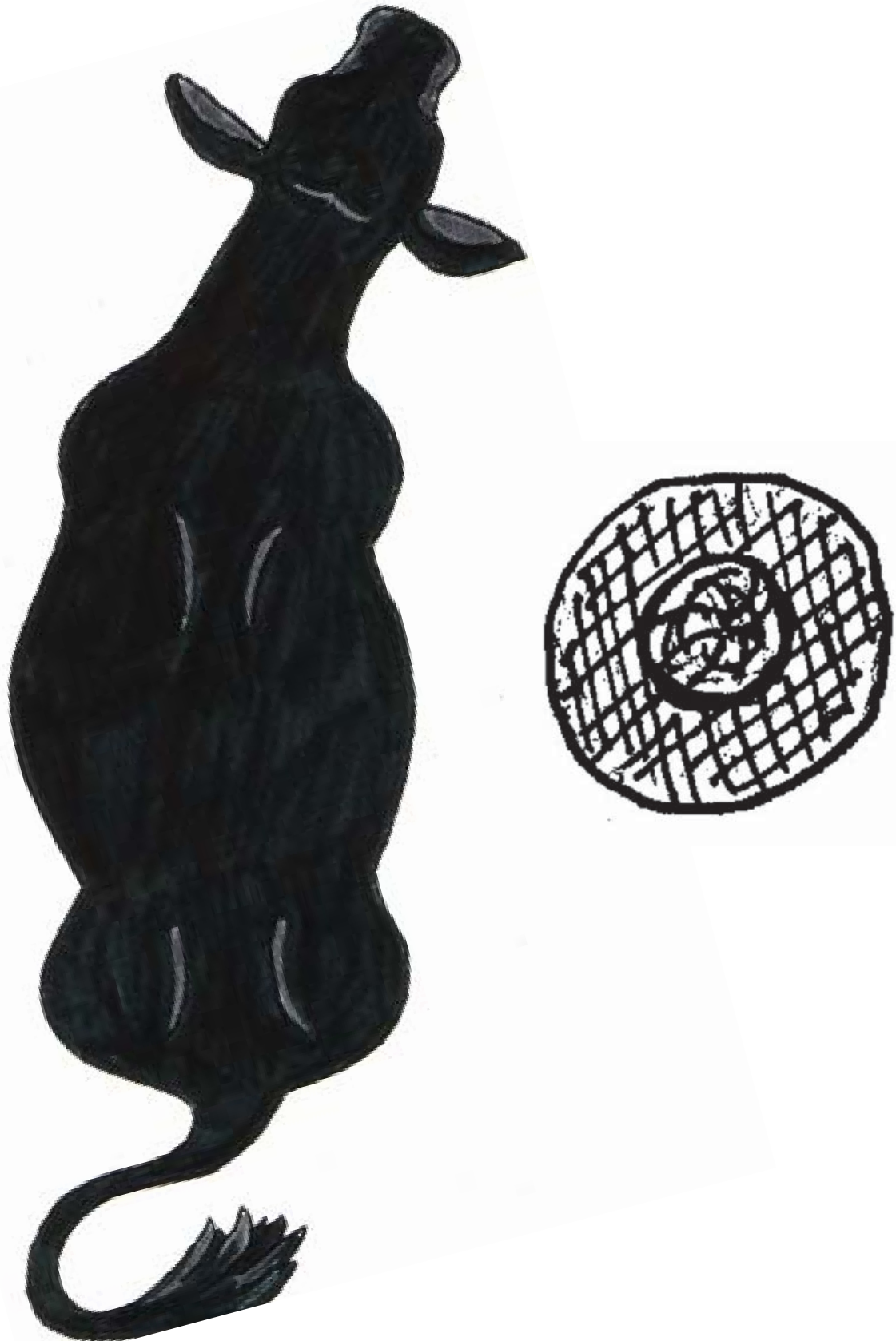
**A:** Horses are a flight animal, so when they feel threatened they will run. If you are standing in front of them, they may run you over or if they are mad, they may strike with their front legs and kick you. If you are standing around the hind quarters and they are startled, they may kick you.

(resources on the next 4 pages)

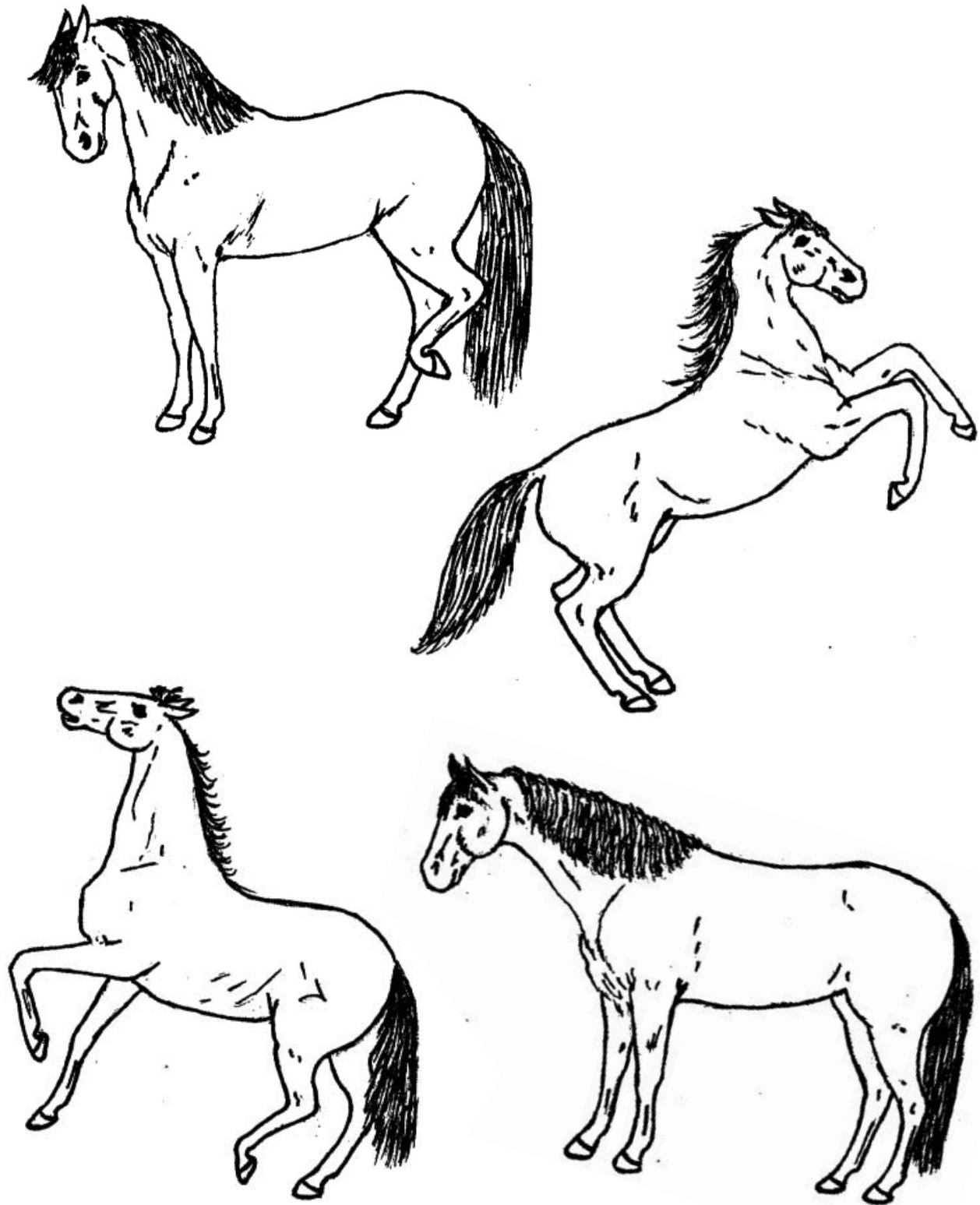
## Approaching Animals Safely (Activity 2 resources)



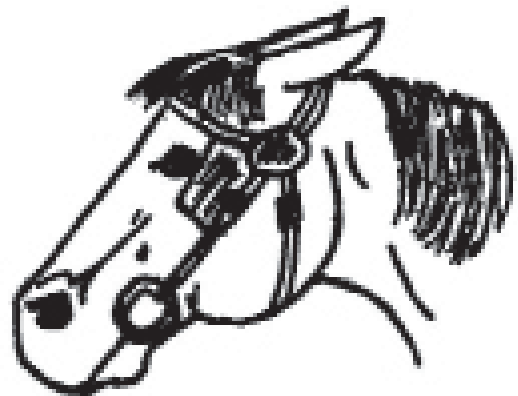
## Approaching Animals Safely (Activity 2 resources)



## Approaching Animals Safely (Activity 3 resources)



## Approaching Animals Safely (Activity 4 resources)



## Approaching Animals Safely (continued)

Objective: Students will approach horses by touching them gently and speaking softly.

Concept: Horses have monocular vision, meaning they have a blind spot in front of their nose, under their head and directly behind them. Understanding how animals see will help students approach them safely.

Targeted Age: Elementary

Materials: Flat box (Approximately 12" x 24")

Have a student pretend he/she is a horse with monocular vision by holding a large cardboard pizza box or shirt box directly under his/her chin. Explain that this is similar to not being able to see under your nose like a horse.

Before starting the activity, prompt one student to sneak up on the volunteer from under the box and grab his/her leg while at the same time, yelling loudly. Determine a key word ahead of time (such as pizza or shirt) to use as a signal. The volunteer will probably jump.

Using the same situation, try the activity again by having another student gently and quietly approach the "horse."

Q: How does the noise level affect the "horse?"

A: A loud noise can startle an animal. When both sight and hearing are compromised, the animal is more likely to bolt.

Q: How does the way the "horse" is touched affect the demonstration?

A: Touching the animal roughly will spook the animal and cause them to jump.

## Approaching Animals Safely (continued)

Objective: Students will learn the importance of staying out of an animal's prime kicking zone.

Targeted Age: Elementary through high school

Materials:

- ▶ Martial Arts Instructor
- ▶ 1" x 12" x 12" boards

### ACTIVITY 1

Ask the Martial Arts instructor to demonstrate how to break a board using his/her leg or hand. Have the instructor explain to the students how the optimal distance for a kick that will break the board is at the fullest extension of the arm or leg. Make an analogy between a human's kick and a cow or horse's kick. When you are kicked at the peak reach of an animal's legs, the kick can easily break bones.

### ACTIVITY 2

You can do a similar activity to the one listed above by just using two people and having one stand very close to the other and try to either punch or kick them using your closest hand or leg (don't do it hard). You will not be able to get much momentum behind the motion.

Have the recipient move about two feet away from the aggressor and then pretend to punch or kick the recipient (again don't actually hit them). Show how much more force the aggressor has behind their motion. Explain why a person can be hurt so much more by standing two or more feet away.

Q: Would it be safer to be up close to an animal or 3 feet away?

A: Up close to an animal is safer. When you are standing a couple feet away the animal's kick can reach its full momentum and be very harmful. If you are close and the animal kicks, the impact is less. Stand very close to the animal when grooming or handling livestock. If you are not grooming or handling, stay far away from the animal's reach.

Stress that when working in close proximity to an animal it's kick cannot gain full momentum which reduces the amount of pressure of impact. It is safest to either stay well beyond the reach of the animal's legs or in very close proximity.



## Size Differences

**Objective:** Students will recognize how the mass of large animals can lead to human injury.

**Concept:** Animals of all sizes are tempting to approach and touch. Large animals are especially dangerous to small children because of the size difference.

**Targeted Age:** Preschool to elementary

**Materials:**

- ▶ Curved board
- ▶ Four marbles (two different sizes)

### ACTIVITY 1

Mass/Force demonstration (actually mass/momentum, but students may have trouble with this term)  
Construct a model of curved, flexible wood or paneling with a plywood base. Construct pieces similar to the picture. The curved piece needs a groove cut in the middle.



Obtain four marbles (two large marbles to represent animals and two small marbles to represent children)

Using the two small marbles, demonstrate what happens when two like-sized objects collide. Explain that this represents two children running into each other. Both marbles should roll up the curved wood at about the same distance. Do the same thing with the two larger marbles. Explain this represents two large animals. Use a marble of each size to show what happens when very different sized objects collide. This represents the results of a large animal colliding with a small child.

Emphasize the direction of each of the marbles and the distance they are thrown when impact takes place. Explain the size relationship and the resulting force when two very different sized objects collide. Also, stress the resulting injuries that could occur from an animal impact or from an animal falling on a person.

**Q:** What precautions should children take when they are around large animals?

**A:** Stay outside the fence. Have an adult present. Keep your eyes on the animals at all times. Approach large livestock at their shoulder area.



(this activity is continued on the next page)

## Size Differences (continued)

### Materials:

5-8 pound object

25-35 pound object

### ACTIVITY 2

Activity 1 shows two different sized objects colliding as they are moving. Large animal's body parts (tails, feet, heads) can also be dangerous when the animal is standing. (Example: a cow, horse, hog, etc. raises its head unexpectedly or steps on a foot).

Show this by comparing the weight of a 5-8 pound melon (bowling ball) with a 25-35 pound watermelon (or other large object). The two melons represent the comparison between human and large animal heads. Have the students pick up each separately and think about the weight of an animal's head hitting them. Discuss how swishing or wagging tails can also hit people and hurt them or knock down a child.

Q: Which animals have appendages (tails, legs, heads) that are large enough to hurt a person.

A: All animals larger than a person hold potential for danger (cattle, horses, pigs, ostriches, etc.). Because dogs are often in close proximity to children, even their wagging tails can cause pain, especially if a child is hit in the face.

Q: Do only large animals cause injury to children?

A: No, smaller animals, such as baby animals and pets can cause injuries, especially when they are scared and try to fight. They can bite and scratch even though they are small.

### ACTIVITY 3

Another way to emphasize this concept is to push a small object against a large one. Have one of the smallest students in the class volunteer. As a larger person/leader, see who can push the hardest. Discuss the differences in size and strength.

Make the analogy of a large animal and a small child in size and strength.

## Animal Habits

Objective: Students will not interfere with an animal's routine that could result in injury to a person.

Concept: Animals become accustomed to routine and will become agitated, and subsequently dangerous, if this routine is broken.

Targeted Age: Upper elementary

Materials: Bean bag

Ask a volunteer group of six students to form a circle. Create a routine of tossing a bean bag in the same pattern, calling each person by name before tossing them the bean bag. Do this several (6-8) times so a pattern is established. After you think the group is following the routine without much thought, suddenly change the order.

Q: What are examples of animal routines?

A: Cows following the same path to the pasture or livestock coming to the feed trough at the same time each day.

Q: What might happen if you got in the way of a dairy cow when she is going to the barn for milking?

A: You could be pushed down and run over.

Q: How does animal behavior change when their routine is disturbed?

A: Animals can be agitated when their routine is broken. They may push and shove humans or be forceful.

## Animal Fences

**Objective:** Students will learn to stay outside animal fences.

**Concept:** Fences on the farm are important barriers for children to stay safe. They need to understand the importance of the rules concerning fences and abide by them.

**Targeted Age:** Early elementary

**Materials:**

- ▶ Farm scene
- ▶ Paper or magnetic animals/objects

Using the magnetic farm scene board (Available through Farm Safety for Just Kids) or the poster farm scene, place fences and animals where they should be in relation to each other. More details are given with the demonstration and poster/activity. (See paper animal activity poster). Laminating the posters and figures will extend the poster's usefulness.

This activity can be conducted using children's toy farm sets or Lego sets.

**Q:** While watching animals from outside the fence, how should you behave?

**A:** Use calm, low voices so you don't startle the animals. Don't tease the animals. It is best to feed animals from outside the fence. Always have an adult close by.

**Q:** How does animal behavior change when their routine is disturbed?

**A:** Animals can be agitated when their routine is broken. They may push and shove humans or be forceful.



## Riding Safely

Objective: Students will understand risks and horse safety by writing about horse-related incidents.

Concept: Making connections between horse-related incidents and repercussions of resulting tragedy will help students make the association between their action and the consequences of unsafe behavior.

Targeted Age: Middle to high school

### ACTIVITY 1

Materials:

- ▶ Newspaper articles
- ▶ Computer with internet access

Find newspaper articles about injuries associated with horse riding, handling, grooming and transporting. The Christopher Reeves story is an easily identifiable case. Local stories about people the students may know will also make a big impact.

Ask students to identify:

- ▶ the age of the involved person
- ▶ situation leading to the incident
- ▶ prevention methods that could have made a difference in the results

Ask students to rewrite the story using a positive ending. Entitle the story something like "Horse-Related Tragedy Avoided by Quick Thinking Youth."

Q: Other than riding, what other ways can people be injured by horses?

A: Crushed while feeding; stepped on while grooming; knocked down while leading.

### ACTIVITY 2

Conduct a contest where students write prevention articles, editorials or public service announcements (PSAs) stressing the importance of wearing proper personal protective equipment and safe techniques when riding. Have a group of local experts such as the veterinarian or horse trainers judge the entries. Submit the winners to the local paper or radio for publication.

Q: How can your writing influence others to safely work, ride and be around animals?

A: Identify the facts about animal injuries. Tell others about the risks associated with animals. Be persuasive when writing and speaking. Write PSAs that are concise, to the point and informative and will help others understand the importance of safety. Write to grab the reader's attention.

## Safe Animal Handling

**Objective:** Students will take care when approaching livestock by identifying where and how an animal's vision is different.

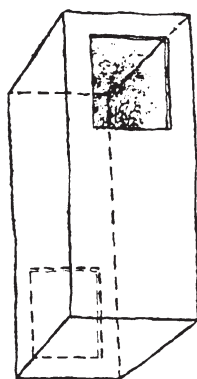
**Concept:** Cattle have what is called a panoramic field of vision. This means they can see close to 360 degrees around, leaving only a small blind area directly behind themselves. Due to eye locations, all animals see differently.

**Targeted Age:** Adolescents beginning to handle and show livestock

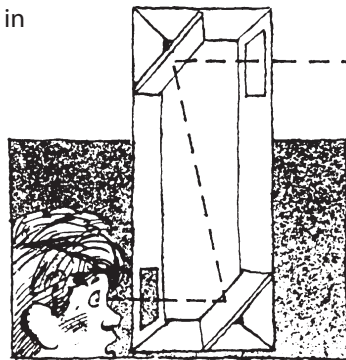
**Materials:**

- ▶ Box (shoe box or milk carton works well)
- ▶ Mirrors
- ▶ Glue or tape

Purchase or make a periscope out of cardboard and mirrors like the one shown below. Have a student hold the periscope up to one eye. Tell the student to keep both eyes open and walk around the room. Ask the student his/her perceptions after the experiment.



Step 1: Cut two windows in a long box, as shown.



Step 2: Glue mirrors inside as shown in illustration. When you look through the bottom window you can see out the top.

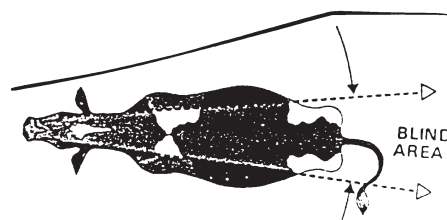
Refer back to pages 39-41 for additional activities. Alter the instructions to reflect other animals.

**Q:** How was your perception altered?

**A:** By seeing in many directions, you (or the animal) has many images to view at the same time. This can be confusing.

**Q:** Were you startled when other people approached you?

**A:** The numerous images distort normal vision and cause sensory overload.



## Animal Health Tic-Tac-Toe/Hollywood Squares

**Objective:** Students will increase their knowledge of concepts related to animal related health issues.

**Concept:** Working with animals can cause health related problems that affect humans. Knowledge of the potential results of exposure to animal diseases can help children understand why they need to stay away from risks.

**Targeted Age:** Middle school and high school

**Materials:** Nine cards marked with an X on one side and an O on the other.

The game is played similar to the TV version of Hollywood Squares or tic-tac-toe. Place nine chairs in a square. Have nine students sit in the chairs. Give each student a card, one side marked with an O and one side marked with an X.

Select two additional students as contestants to compete against each other. Assign O to one person and X to the other. After determining who will go first, one contestant chooses a person in one of the chairs.

The "Host" will ask a question of the person in the selected chair.

That person can either:

- ▶ Give the correct answer
- ▶ Bluff with a made up answer if she doesn't know the correct answer

The first contestant must agree or disagree with the response. If he gives the correct response he "wins" the square. The person in that square holds up an X or O. If he misses, the other person "wins" the square. The only exception to this is if there are already two marks in a row he can not win by default. The other person has to get the answer correct to have a winning row.

The object is to get three marks in a row just like tic-tac-toe.

Questions for this activity can be found on the next page. Create additional questions using information from the educational information section of this packet.

**Q:** What are ways to prevent getting sick when around livestock?

**A:** Sanitation is essential for prevention of disease. Wash hands after handling any animal. Keep animals healthy by keeping vaccinations current and seek medical assistance if animals are ill.

**Q:** What should you do if scratched or bitten by an animal?

**A:** Report any break in the skin to an adult. All wounds should be cleaned with soap and water. If the animal is wild or unknown, go to the doctor for additional testing.

(questions for this activity are on the next page)

## Tic-Tac-Toe/Hollywood Squares (Q&A)

Diseases that can be transmitted from animals to humans are called? Zoonoses.

This disease can be transmitted by the saliva from an infected animal. Rabies

If an animal contracts this disease, it is almost always fatal. Rabies

This disease is contracted through the bite of a tick. Lyme Disease or Rocky Mountain Spotted Fever

A fungus which causes round-shaped lesions that are rough, raised and flaky is called? Ringworm.

When do early symptoms of lyme disease appear? 4 to 14 days after being bit

Give one symptom of lyme disease. Fever, chills, headaches or backache

This disease often comes from wild animals. Rabies

If you get a small red bump and it enlarges into a spreading red ring you may suspect you have? Lyme Disease.

Cattle can contract this disease by eating dead animal matter. Mad Cow Disease

This disease can be transmitted to humans through undercooked pork. Trichinosis

What animal most commonly transmits Toxoplasmosis? Cat

This disease is most commonly found in poultry products. Salmonella

What household animal is most likely to cause serious blood infections from bites or scratches? Cat

What are measures to prevent zoonoses? Clean animal facilities, immunizations, sanitary practices

Name a gas produced in swine confinement facilities that can be harmful to humans and animals. Carbon monoxide, carbon dioxide, ammonia, hydrogen sulfide

What happened in central Europe during the 14th to 17th century related to zoonoses? Black Death or Plague

How was Black Death/Plague transmitted to humans? Flea bites

You can get this infection from stepping on a nail, especially if you are in a livestock area. Tetanus

What must a dog receive to prevent them from contracting rabies? Vaccination.

Lice will not migrate between animals or from animals to people. What is this called? Species-specific

What temperature do you need to cook food in order to kill Salmonella? 160° F

Mosquitoes transmit this disease. West Nile Virus



## Manure Jeopardy

**Objective:** The students will increase comprehension of concepts related to manure handling and storage issues.

**Concept:** Livestock manure storage and handling can be dangerous to the health of people and animals exposed to high levels of the resulting gases.

**Targeted Age:** Middle school to high school

**Materials:**

- ▶ Answer chart
- ▶ Post-it notes
- ▶ Question sheet
- ▶ Play money (provided on next page)

This game is played like the Jeopardy Game show. Contestants ask for a specific category and dollar level. The answer is uncovered and he/she must give the correct corresponding question within 30 seconds to win the money.

Cover the responses on the answer chart with sticky notes that can easily be removed. If you are using this game with a large crowd you may want to enlarge the board so it can be seen from across the room and use larger cover sheets instead of sticky notes. Additional questions and answers can be developed to address numerous topics.

Two teams can play against each other or each individual can play by themselves by raising their hands when they think they know the correct answer. Contestants for teams can be an individual representing a group or the total group working together to come up with a consensus answer.

Contestants ask for a specific topic and a dollar level (denominations of \$100). The Master of Ceremonies (MC) pulls off the sticky note to reveal an answer. The contestant gives an appropriate question to the answer. The MC can be the judge or you can have a group of student judges determine if the response is correct. A score keeper keeps track of the money won or you can run off funny money on the copier or use play money from another game. The player with the most money at the end wins the game. It could be fun to auction off prizes with the "money" won. Prizes could include safety items such as dust masks, ear plugs, flash lights, fire extinguishers, emergency first aid kits, etc.

Q: What animals are often raised in confinement buildings?

A: Hogs, chickens and turkeys.

(resources on the next 3 pages)



# Manure Jeopardy (resource)

	RAISING FUMES	IT GETS TO US ALL	STEP IN THE YUCK	FUNGUS AMONG US
\$100	What is manure gas?	What is hydrogen sulfide?	What is a hog confinement unit?	What is a dust mask?
\$200	Who are animals and humans?	What is hydrogen sulfide or carbon dioxide?	What is a manure pit cover?	What is a single strap dust mask?
\$300	What is carbon dioxide or methane?	What are carbon dioxide and methane?	What is a dug out?	What is animal waste dust?
\$400	What is ammonia?	What is asphyxiation?	What is agitation time?	What is increased ventilation?
\$500	What is methane gas?	What may happen when you can no longer detect manure odor?	What is explosion?	What is adding tallow or soybean oil to swine feed?

# Manure Jeopardy (resource)

	<b>RAISING FUMES</b>	<b>IT GETS TO US ALL</b>	<b>STEP IN THE YUCK</b>	<b>FUNGUS AMONG US</b>
\$100	A dangerous and smelly by-product of animal wastes.	Gas found in manure storage units that has a distinctive rotten egg smell.	A large building where many hogs are raised.	Protective equipment used over the nose that prevents dust from getting into the lungs.
\$200	The ones affected by dangerous animal waste products.	Gas found in manure storage that is most deadly.	This prevents people, especially children, from falling into a manure pit.	Type of dust mask not recommended for protection against swine dust due to poor face contact.
\$300	Another word for poisonous gas.	Manure gases that are odorless and therefore hard to detect.	The slang term for a manure lagoon in Canada.	A concentration of air particles in animal confinement units that can cause fever, chills, and muscle aches.
\$400	A manure gas heavier than air and irritating to the eyes.	A depletion of oxygen from carbon dioxide exposure can cause this to happen in humans.	Time when manure fumes are the most dangerous.	Air moving procedure that removes dust particles without wasting heat.
\$500	A gas that tends to accumulate near the top of manure pits.	A time when a false sense of security takes place around manure storage.	Results of oxygen mixing with methane.	Addition of these substances that reduces dustiness in swine confinement areas.

# Animal Telephone

Objective: Students will stay away from animal situations where noise levels are high.

Concept: Noise levels from animals, especially in highly populated areas, can be very loud and damaging to the ears if prolonged exposure occurs. There are also times when animals are excessively loud, such as during loading and unloading. Children need to understand the importance of staying away from these situations so hearing is not damaged.

Targeted Age: Preschool and elementary

## ACTIVITY 1

Materials: Cotton balls

This activity is played like the old telephone game. First, form a circle. As the leader, start a saying or slogan at the beginning of the circle. Say the message only once to each person.

Use slogans that are appropriate to the lesson like:

- ▶ Animals can be very large, so stay outside the animal fence.
- ▶ Stay outside the animal's fence if you are feeding livestock.
- ▶ Approach an animal quietly and put your hand on the animal so he knows you're there.

As the message is passed from student to student, try to be as concise as possible without letting anyone else hear. Have the last student tell what she thinks the message was.

Now have everyone put cotton in their ears and repeat the activity, using a different message. Have the last student tell what he thinks the message was.

Discuss the difference between the two times the activity was done. How is loss of hearing effected by exposure to loud noises even while you are young.

Q: What causes hearing loss?

A: Most hearing loss takes place when the outer hair cells are damaged. Hearing loss is caused by two factors, the loudness and the time spent in loud surroundings. A younger person can begin to lose their hearing and not realize it until they are older.

Q: What would you miss if you could not hear well.

A: Ability to communicate. Ability to enjoy music. Hearing warning signals, which impacts your safety.

## ACTIVITY 2

Materials:

- ▶ 35mm film container
- ▶ Ear plugs
- ▶ Paper
- ▶ Markers
- ▶ Tape
- ▶ Cord

To emphasize prevention of hearing loss, have students make ear plug containers for someone in their family. Collect 35mm film containers. Purchase or ask for donations of ear plugs. Have the students write a slogan, such as "please wear these in loud places so you can hear me say "I love you." Place the ear plugs in the film containers and attach a cord. Suggest the students take them home and ask their father/mother/grandfather to place them in the barn or hog confinement building.

## Emergency Preparedness

**Objective:** Students will identify and post a listing of emergency numbers and directions to the farm by all telephones.

**Concept:** It is important to have everyone in the family be prepared in case an injury occurs on the farm. One potential location where dangers lurk is in the livestock barn. Placing a phone and a list of emergency phone numbers in the barn could prevent an incident from becoming a tragedy. Carrying a cell phone is also an option.

**Targeted Age:** Elementary

**Materials:**

- ▶ Emergency telephone number form
- ▶ Permanent markers
- ▶ Plastic (clear contact paper)
- ▶ Cell phone

Have emergency numbers available for the children to identify which are appropriate for them. Cover the forms with clear adhesive plastic to make them weatherproof. Discuss ways to quickly find emergency numbers on a cell phone.

The farm directions will require more adult supervision. Help the children come up with clear, concise and accurate directions to their farms.

**Q:** Why are emergency numbers important on the farm?

**A:** People living on farms are often a long way away from medical assistance when accidents happen. The sooner help arrives the better the chances of survival. Farm injuries are often severe, seconds count if an injury involves a lot of bleeding. Having emergency numbers and directions to the farm can be the difference between life and death.

HOME PHONE	_____
ADDRESS	_____
911/RESCUE	_____
FIRE/POLICE	_____
DOCTOR	_____
HOSPITAL	_____
POISON CONTROL	_____
PARENT'S WORK PHONE	_____
NEIGHBOR'S PHONE	_____
DIRECTIONS TO YOUR FARM	_____
	_____
	_____

## Owning Animals

Objective: Students will identify the importance of properly caring for a pet.

Concept: Owning and caring for a pet is a great way to teach responsibility to children. Children can also have fun in the process. This experience can help youth become better caregivers of livestock.

Targeted Age: Elementary

Have students brainstorm what responsibility means.

List all the duties or responsibilities that accompany pet ownership, such as cost factors:

Purchase	Maintenance	Health
Pound fees	Food	Neutering/Spaying
Registration fees	Collar	Immunizations
	License fees	Unexpected problems
	Dog house	Pest/parasite problems
	Yard fencing	Veterinary fees

Role play the scenario of an animal rescue adoption. Have one student be the adoption counselor and another be the person adopting a cat or dog.

The adoption counselor should ask questions, such as:

- ▶ Who will feed your pet?
- ▶ Who will clean up after the pet?
- ▶ Who will take care of your pet if you go on vacation?
- ▶ How will you pay for the upkeep of your pet?
- ▶ What will you do if your pet bites you or one of your family members?
- ▶ What precautions will you take to ensure the safety of others around this pet?
- ▶ Who will exercise the pet?
- ▶ Will your pet live in the house or outside? If outside, how will it stay warm in the winter?

Have the students perform their discussion in front of the group. Have the audience discuss the answers given and other possible options.

Students could be encouraged to bring their own pets and discuss their time commitment and associated costs with caring for animals.

Q: What are the differences and similarities of pet ownership and owning a whole herd of animals?

A: In both cases, the owner is responsible for the health and well-being of the animals. When a farmer owns a whole herd of animals (cattle, hogs, poultry, etc.) his livelihood depends on the health of the livestock. If livestock become ill, are not fed properly, not vaccinated, or mistreated, they will not provide income when sold.

Q: Where could you find additional information about specific animals?

A: Veterinary offices, pet stores and animal rescue shelters can give you additional information about the characteristics of specific breeds of animals.

## Animals and Noise

Objective: Students will be able to recognize an animal's physical response to sudden noise.

Concept: All living things have different physiological responses to sound and light. This could affect any of the senses (hearing, touch, sight, smell, taste). Many animals are very sensitive to sound (example: a dog hears a car in the driveway before humans). Sudden or loud noises can frighten an animal, causing a "fight or flight" response.

Targeted Age: Elementary

Materials:

- ▶ Inflated balloon
- ▶ Sharp object

While discussing the key concepts about animals' senses, have someone else pop the inflated balloon, startling the students while they are speaking.

Q: How did each person involuntarily respond to the loud noise? Point out the differences among the group.

A: Yelling, jumping, increased heart rate, dilated eyes, release of endorphins

Q: How do animals react to similar situations?

A: Animals are similar to humans when they hear loud noises, except they are much larger and can hurt people around them when they move suddenly.

Q: Give examples of how farm animals are affected by other senses.

A: A horse slapped on the back side is more likely to be startled than one touched firmly. A carnivorous animal (dog) can become tense when blood is present. A flapping or brightly colored cloth or flag may startle a bull.



# Protective Equipment

Objective: Students will wear a helmet when riding a horse.

Concept: The human brain is a fragile organ and must be protected.

## ACTIVITY 1

Materials:

- ▶ Brain gelatin mold (1/2 gallon ice cream or whipped topping container or an old riding helmet)
- ▶ Macaroni
- ▶ Packaged peach-flavored gelatin mix
- ▶ Tape

The human brain weighs approximately three pounds. Prepare 7 ounces of macaroni by cooking twice as long as suggested to soften the starch. Drain the macaroni but do not rinse. Place in the brain gelatin mold. Prepare a 6 ounce package of peach gelatin using 3 cups hot water. Pour over macaroni and chill in refrigerator for several hours.

Discuss the size, shape and fragile condition of the brain without its mold, making the correlation between the skull and the plastic gelatin mold. Unmold the gelatin and drop on a plastic lined floor. Explain the force of the fall is much less than what would be experienced if a person fell from a galloping horse. You may want to do two demonstrations, one with the gelatin mixture inside the plastic container with the cover taped shut and one without the container. Talk about the skull's importance, then discuss the importance of protecting the skull.

Q: How fast might you travel when riding a horse?

A: A galloping horse travels about 15-20 mph. A running horse travels about 40-45 mph. Imagine what would happen if you fell out of a car traveling that fast.

Q: What protection should be used when traveling on a horse or in a moving vehicle?

A: We use seat belts and air bags in cars. We use helmets for protection when riding horses.

## ACTIVITY 2

Materials:

- ▶ Eggs
- ▶ Ziploc plastic bags
- ▶ Bubble wrap
- ▶ Styrofoam-lined cardboard box
- ▶ Packing tape

Place a raw egg in a plastic bag and close securely. Throw the egg in the air. The egg will break when dropped to the ground. Compare the dropped egg to a rider who falls off a spooked horse.

Wrap another raw egg in several layers of bubble wrap and securely tape inside a padded box. Drop from the same distance as the first egg. Compare the dropped egg to a rider that falls from a bucking horse. Practice before conducting the experiment in front of your audience. The box and padding represent a horse helmet. Show an actual helmet and its construction. Explain the difference in the two experiments and the protection a helmet gives a rider on a horse.

Q: How are helmets different for different types of travel (horse, bike, ATV, etc)

A: Each helmet has its own requirements dependent upon speed and the size of the traveling object.

Q: Why are there different styles of horse riding helmets?

A: Some helmets are different in appearance, such as English and Western riding helmets. Other helmets used for jumping and riding events provide more protection due to the speed and height of different events.

(this activity is continued on the next page)

## Protective Equipment (continued)

### ACTIVITY 3

Materials:

- ▶ Melon
- ▶ Plastic container
- ▶ Bricks

Purchase a ripe canteloupe or honeydew melon. Draw a face on the melon with a marker. Drop the melon from a distance of 6-8 feet into a plastic container lined with bricks in the bottom. Explain that the split melon represents a child's head hitting the ground.

Q: What other parts of the body can be injured by falling off an animal?

A: Arms, shoulders, legs, hands and other body parts can be broken by falling from an animal.

Q: What type of clothing should be worn when riding?

A: Hard toed shoes, long pants and shirt sleeves and gloves should be worn to protect the body.

### HORSE HELMET FIT

Measure the head using a cloth measuring tape, or a piece of string that you can measure with a ruler afterwards. Place the measuring tape approximately one inch above the eyebrows around the full circumference of the head. Use this measurement, along with the manufacturer's sizing guide, to identify the appropriate size.

Fit: The helmet should feel snug around the entire head without pressure points. Always wear a helmet low in the front to protect the forehead.

Position: The helmet should sit level on the head and the forehead is covered within two fingers width of the eyebrows.

Side Straps: The side straps should form a "V" shape under and slightly in front of the ears.

Chin Strap: Buckle the chin strap. No more than one or two fingers should fit under the tightened chin strap.

### HELMET FIT TESTS

Open your mouth in a big yawn. The helmet should pull down on the head. If it does not, tighten the chin strap. Does your helmet rock back more than two fingers above the eyebrows, or does your helmet rock forward into you eyes? If so, the helmet is too loose and may not fit.

Information taken from Toxel and International Riding Helmets.

## Wearing the Right Shoes

**Objective:** Students will be able to identify the characteristics of shoes needed for working around livestock.

**Concept:** Farm animals are often large and can weigh over a ton (2000 lbs.). If stepped on by a large animal, your feet could be badly hurt. The connection between having your feet unprotected and the resulting injury will help students make better decisions about the footwear they wear when doing chores.

**Targeted Age:** Elementary through high school

**Materials:**

1 open toed sandal

1 hard soled boot

1 tennis shoe

1 steel toed boot

4 hot dogs

4 wooden dowels 3/16" x 6"

4 plastic Ziploc bags

Gentle horse or other large animal that will allow you to pick up and handle their legs

Insert a wooden dowel into the center of each hot dog. Slip each hot dog into a plastic bag. Place each plastic bag into the big toe area of each shoe.

Discuss the fact that the average adult horse or cow weighs 1000 lbs to 1500 lbs. When leading, an animal can easily step on your feet. Using a horse that is gentle and an adult who is experienced in working with horses, pick up the horse's front hoof. Place the shoe with the hot dog in it on the ground and allow the horse to place the hoof on top of the shoe. Repeat this with each shoe type.

Discuss the analogy of the hot dog and wood dowel to your own foot and bones and how the thicker the shoe the less damage to the hot dog.

**Caution:** Anytime large animals are in close proximity to children and youth, take extra precautions to keep them away from the animal. Draw a line or provide a fence between the animal and students. Do not allow students to walk within kicking distance of the horse. Adult leaders that are very familiar with horses should be the only ones doing this activity.

**Note to Instructor:** Be sure the chosen animal is gentle. This demonstration works well once, but caution should be taken not to frustrate the animal with repeated demonstrations, such as during a day camp where the same demonstration is done over and over for different groups of students.

**Q:** What farm animals are large?

**A:** Horses, cattle, sheep and hogs can all weigh many times more than children.

**Q:** What shoe characteristics would make them safe to wear around large animals?

**A:** Covering the toe with leather is a top priority. Steel toes are preferable, but not always available.

# Healthy Animal Medications

**Objective:** Students will safely handle animal medications and injecting needles.

**Concept:** Animals require medication when they are ill. Vaccinations are administered to prevent disease. Medication can be administered orally in the form of pills and feed supplements; topically by spraying, pouring or rubbing on the skin; or by injecting into the animal's tissue. Whatever the administration method, care should be taken to follow procedures and recommendations in order to protect animals and humans.

- ▶ **Intravenous:** to inject or administer directly into the vein or blood stream. This method requires a veterinarian and brings the fastest results.
- ▶ **Subcutaneous:** to inject under loose skin. It causes the least amount of damage to the meat so it is the preferred method of injection.
- ▶ **Intermuscular:** to inject directly into the muscle of the animal. This type of injection may cause tissue damage or lesions.

**Targeted Age:** Middle to high school (youth who are new to administering medication and injections need close supervision by adults)

**Materials:**

**Middle School**

- ▶ Syringes without needles
- ▶ Oranges

**High School**

- ▶ Syringes with needles of various sizes
- ▶ Stuffed animals with loose fitting fur

## ACTIVITY 1

Show students the proper way to give a subcutaneous injection by lifting the skin (tenting) with one hand and inserting a needleless syringe into the base of the tented area with the other hand. This technique is referred to as a subcutaneous injection - see the following page for visuals. Have each student demonstrate the procedure with a stuffed animal. With older, more responsible students, you may want to try syringes with needles and oranges. This gives students practice in handling a syringe and needle and feeling what it is like to inject body tissues. Use special caution that students are not horse-playing with the needles.

## ACTIVITY 2

Make copies of the activity on page 69 and hand out to students. Have students indicate where you would give intramuscular injections (IM) with a triangle. Indicate the subcutaneous injection (SQ) sites with a circle.

Answer key is provided on page 70.

(this activity is contuned on the next page)

## Healthy Animal Medications (continued)

Q: What precautions should be taken when administering any medications?

A: Restrain all animals so you are not kicked, butted or bumped. This will help to safely and properly inject the medications. When carrying needles, make sure they are capped.

Q: What complications can occur if medication injections are incorrectly administered?

A: Damage to the animal tissue can cause bruising. This bruising can impact the quality of the meat; cause adverse reactions to the medication; or even kill the animal. If the person injecting the animal is stuck with the needle themselves, they could have strong reactions to the medication or even die. This can occur when animals move and bolt when they are confined for the injection.

Q: What considerations should you take into account when selecting animal injection needles?

A: Choose the smallest needle possible to complete the injection, but large enough so it will not break. Short (5/8 or 3/4 inch) needles are best for subcutaneous shots, while longer (1 to 1 1/2 inch) needles work best for intramuscular shots. Purchase high quality needles, changing them often, and dispose of them properly. Animal species hide toughness and medication type will determine the gauge of needle used.

Q: How do you know how much medication to give an animal?

A: The medication instructions give amounts based on species and size. The cc or ml are marked on syringes.

Q: Where on the animal should injections take place?

A: See pictures on following page.

Q: When selecting needles for animal injections, what considerations should be taken into account?

A: Needles are measured in two ways (1) gauge and (2) thickness and length. Consider the animal species, type of medication and the animal's size and age when determining which needle to use. See the following pages for reference.

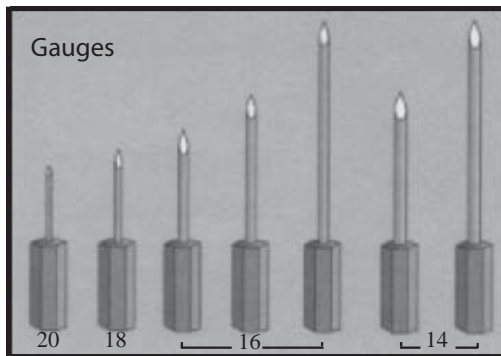
Note to instructors: This material is applicable for a limited audience. Due to the dangers associated with demonstrations, extra precautions should be taken to secure the safety of the participants.

(resources on the next 2 pages)

# Healthy Animal Medications (resource)

## MEDICATION GUIDELINES

Type of Injection	Placement	Placement Tips
Subcutaneous (SQ)	Under the skin	Inject only into dry, clean areas. Slide needle under the skin away from the site of skin puncture before injecting treatment.
Intramuscular (IM)	Into the muscle	Use proper needle size to ensure medication is placed into the muscle. Avoid IM injections to the shoulder or hip area as it can cause damage to muscle tissue. Injections into the neck area are best.

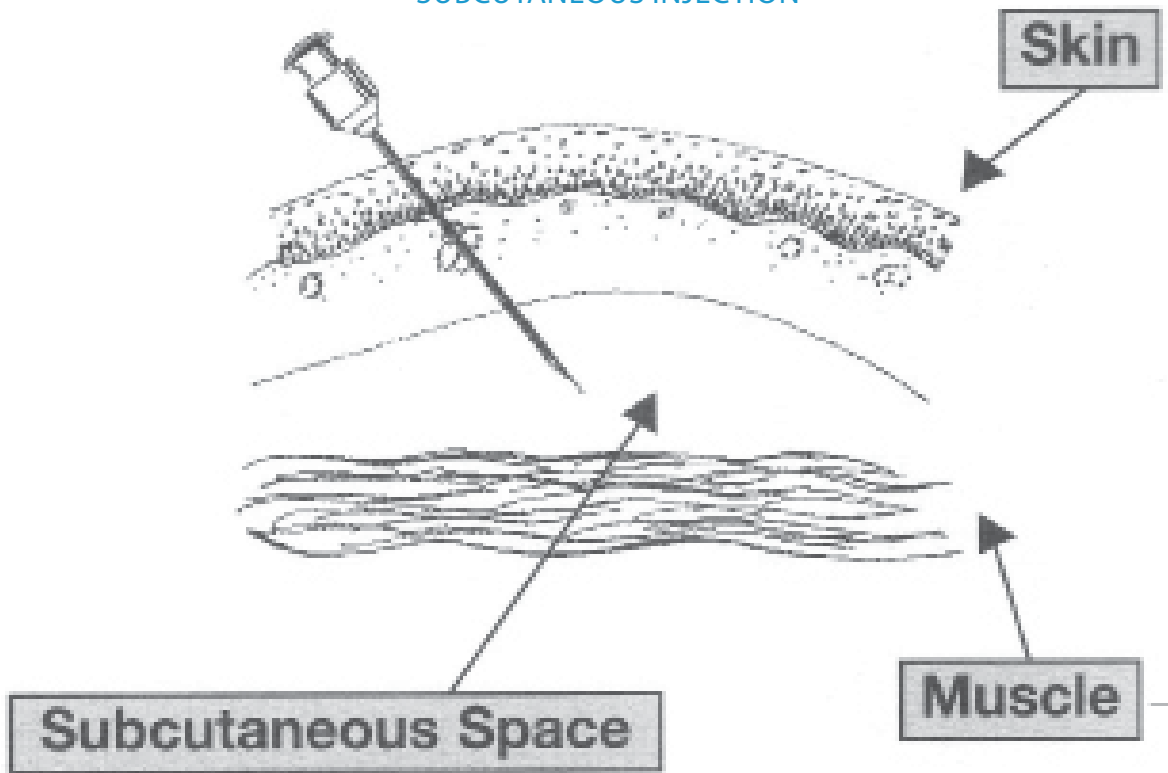


## SUGGESTED NEEDLE SIZES

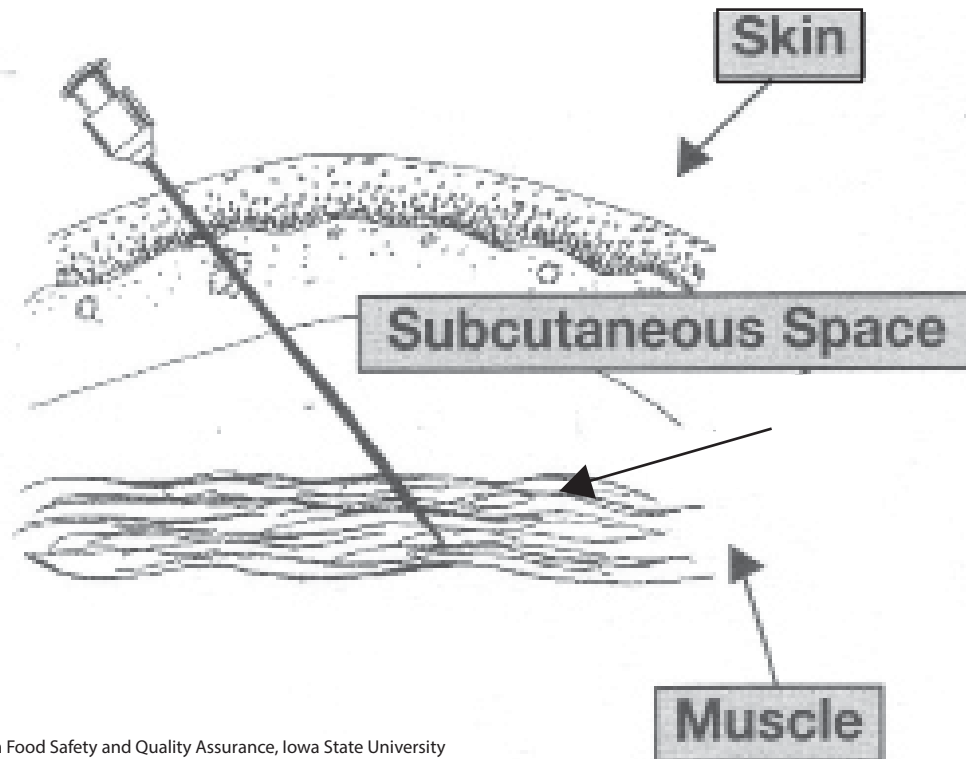
Species - Injection Type	Gauge	Length
Swine - IM		
Baby pigs	18 or 20	5/8" or 1/2"
Nursery pigs	16 or 18	5/8" or 3/4"
Finisher	16	1"
Sows or Boars	14 or 16	1 1/2" or 1"
Swine - SQ		
Nursery	16 or 18	1/2"
Finisher	16	3/4"
Sows or Boars	14 or 16	1"
Cattle - IM		
Calves (under 300 lbs)	18	1" to 1 1/2"
Calves (300 - 700 lbs)	16 to 18	1" to 1 1/2"
Cattle (over 700 lbs)	16	1" to 1 1/2"
Cattle - SQ		
Calves (under 300 lbs)	18 to 20	1/2" to 3/4"
Calves (300 - 700 lbs)	16 to 18	1/2" to 3/4"
Cattle (over 700 lbs)	16 to 18	1/2" to 3/4"
Sheep - SQ		
All Sheep	18	1/2" to 5/8"
Horses - IM		
All Horses	18 to 20	1" to 1 1/2"

# Healthy Animal Medications (resource)

## SUBCUTANEOUS INJECTION



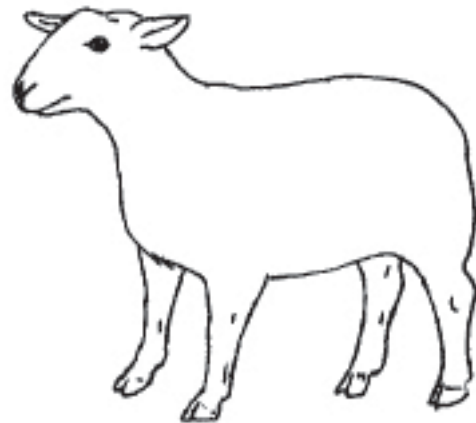
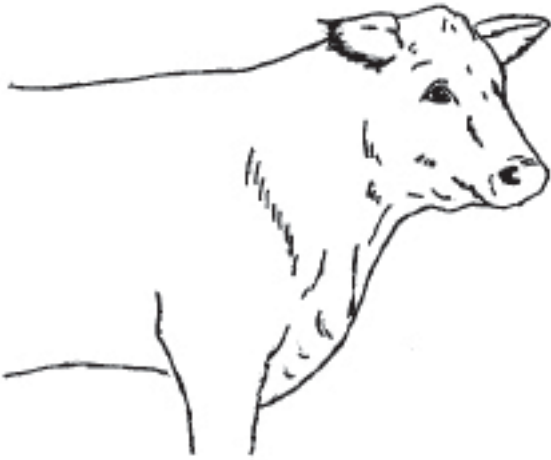
## INTRAMUSCULAR INJECTION



Pictures taken from Food Safety and Quality Assurance, Iowa State University

## Healthy Animal Medications (resource)

Indicate where you would give intramuscular injections with a triangle. Indicate the subcutaneous injection sights with a circle.



intramuscular injections (IM)



subcutaneous injection (SQ)



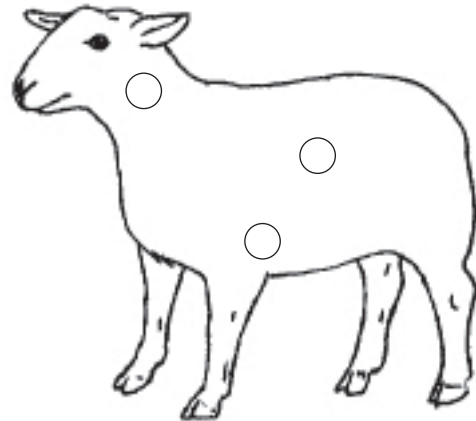
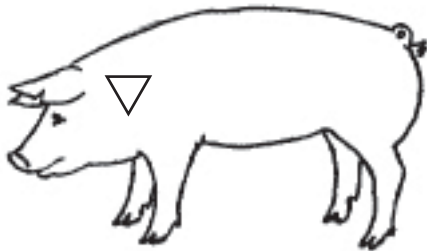
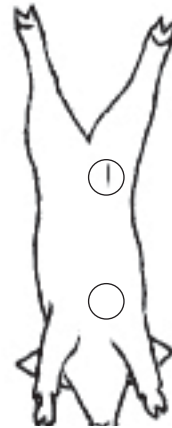
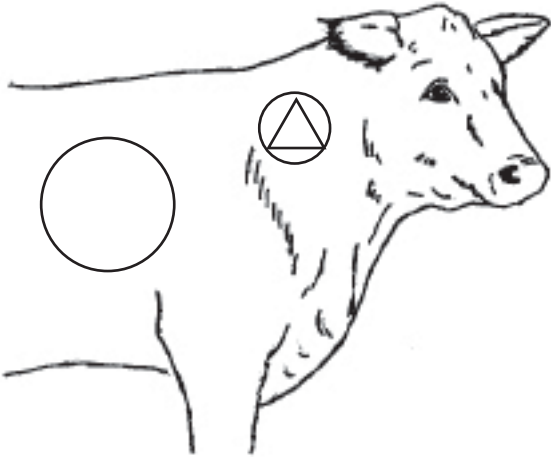
# Healthy Animal Medications (answer key)



intramuscular injections (IM)



subcutaneous injection (SQ)



## Wild Animal Safety

**Objective:** Students will learn a location where dangerous animals may be in close proximity.

**Concept:** Wild animals are often found within the rural environment. Most of these animals are easily scared away by noises and movement. However, if the tracks of aggressive and dangerous animals are identified, it is wise to leave the area.

**Targeted Age:** Middle school

**Materials:** Paw Identification Sheet (page 79)

(A variety of websites offer more detailed information about each species. Some sites also feature audio of the animals, helping students identify the animal by sound.)

Match up the animals with the correct paw print. Discuss the actual size of the print and how close to reality the sizes represent.

More ideas! Find additional information (sound, manure, foot pattern, etc.) on the internet to further help identify each animal. Classify the animals into pets and wild animals.

Take a trip to a rural location and look for animal tracks. Using an animal guide, try to identify the specific species.

**Q:** What should you do if you find a nest of baby rabbits when mowing the yard?

**A:** Leave the nest alone and do not touch the babies. This is true of all animals. The mother is probably close by and will return when you leave. Rabbits are usually not aggressive so they will probably not attack you, but in the case of more aggressive animals, you may be in a dangerous situation.

**Q:** What characteristics help you identify animal tracks?

**A:** Shape of the paw print is the first clue. Number of toes and in what direction they face. Size of the toes in relation to the total paw print. Overall size of the print. Animals walking foot pattern.

## Animal Attitude Continuum

Objective: Identify attitudes in relation to safety while around animals.

Concept: This activity investigates and clarifies individual attitudes concerning children when they are around animals found within the rural environment. It also helps others see different views to sensitive issues in a non-threatening format. Statements are designed to be progressively more controversial to foster discussion. This activity is appropriate for adults, families and youth. If children participate with their families, parents may need to help them understand the concept of "level of agreement" and translate their answers into numerical values.

Targeted Age: Middle School and above (this activity works especially well with family groups where various age groups learn from each other)

Ask each participant to number from 1 to 8 on a piece of paper. Read the following statements. After each statement have each person place a numerical value from 1 to 10 as to their level of agreement. Ten equals 100% agreement and one equals 0% agreement.

Statements:

1. I like cats.
2. Pet ownership is a good way for children to learn responsibility.
3. Horse back riding is enjoyable.
4. Sheep are dumb animals.
5. Injections should be given only by a veterinarian.
6. Close proximity to wild animals is a positive factor for living in a rural area.
7. Riding helmets are useless in protecting a rider if they fall from a horse.
8. Hog confinement buildings should be banned.

Explain that one wall of the room is a continuum with 1 at the far left and 10 at the far right. All other numbers fall in between (taped numbers on the wall will help). With answers in hand, have participants walk to the number they answered for number 1. Do not read the statement until everyone is positioned. Encourage people to be honest and not go with the crowd. Move to the number for the second statement. Discuss after each statement.

This activity will spur good interaction and discussion about attitudes toward animal safety. Explain that no answer is right or wrong.

Ideas to be brought out during discussion

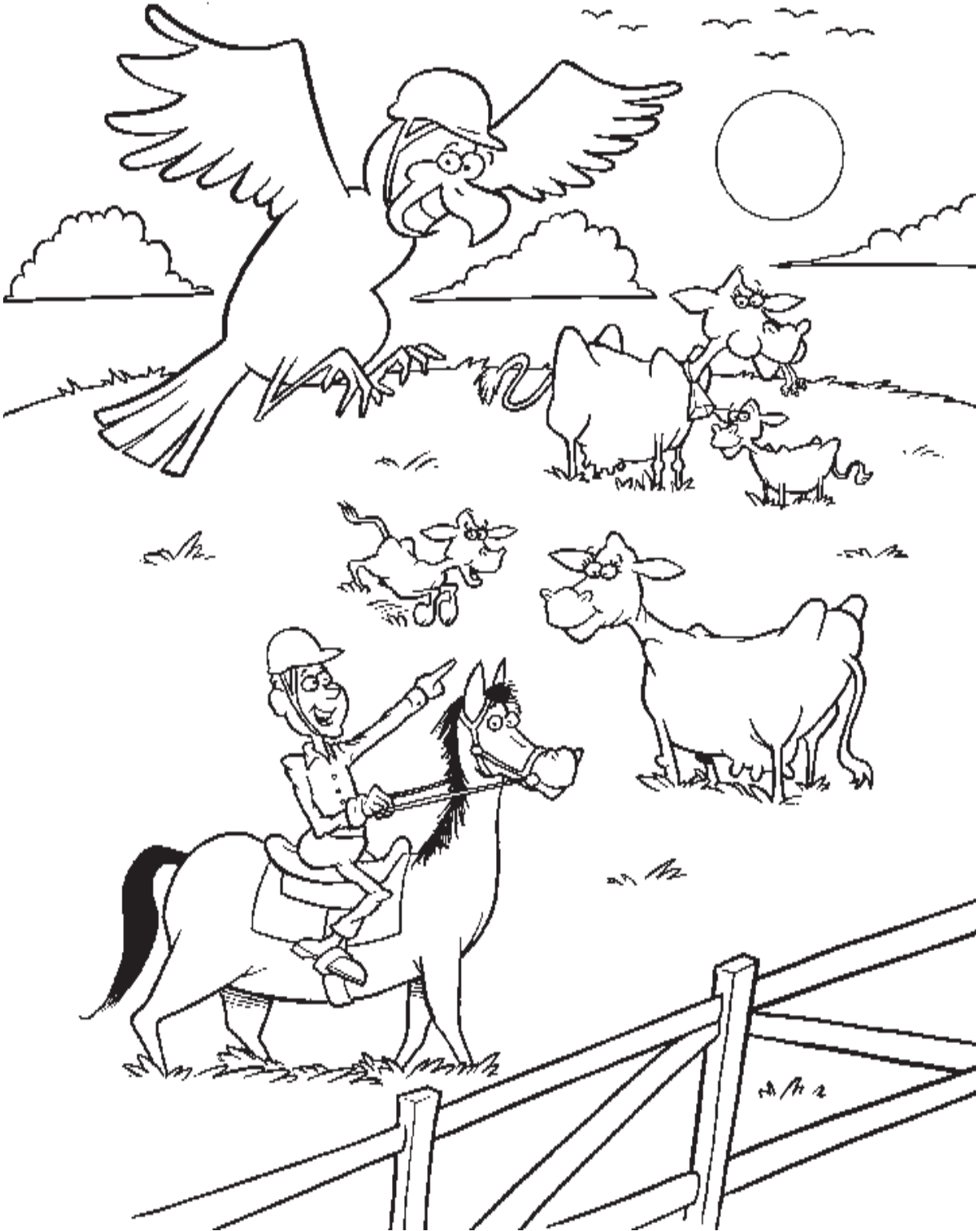
- ▶ Differences about ordinary things are less likely to be controversial.
- ▶ Interpretation of a statement can be diverse.
- ▶ Individual backgrounds and attitudes influence behavior.
- ▶ People may have different opinions and still have common goals.
- ▶ Openness can lead to change.

# Puzzles

Know It — Show It	Page 74
Riding Off Into the Sunset	Page 75
Animal Safety	Page 76
Animal Detectives	Page 78
Paw Identification Sheet	Page 79
Animal Bingo	Page 80
Crossword Puzzles	Page 81
Answer Key	Page 95

## Know It — Show It

Color the picture and remember to always wear your riding helmet!



## Riding Off Into the Sunset

Jessie, Paul and Nathan plan to ride out to the back pasture to check on the cattle. They have a choice of three horses to ride and each of them also chooses something to wear on their head. Using the following clues, see if you can determine who rode each horse and who made the safest choice of head protection.

- Clue 1 The person who rode the black horse used the cowboy hat.
- Clue 2 The person who rode the white horse did not use the protective helmet.
- Clue 3 Paul rode the paint horse.
- Clue 4 Nathan did not use the cowboy hat.

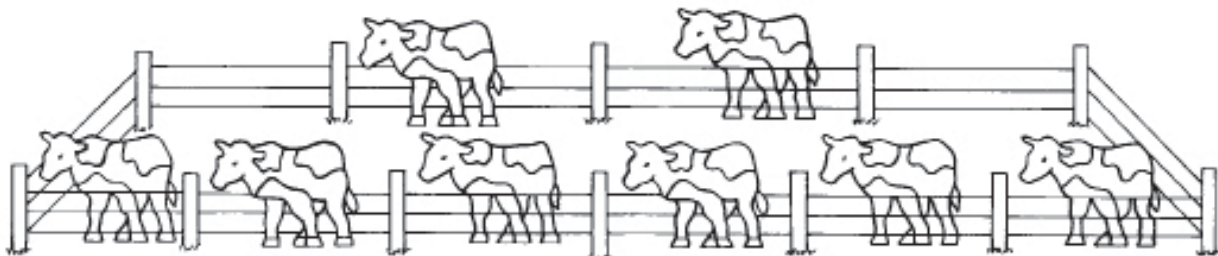
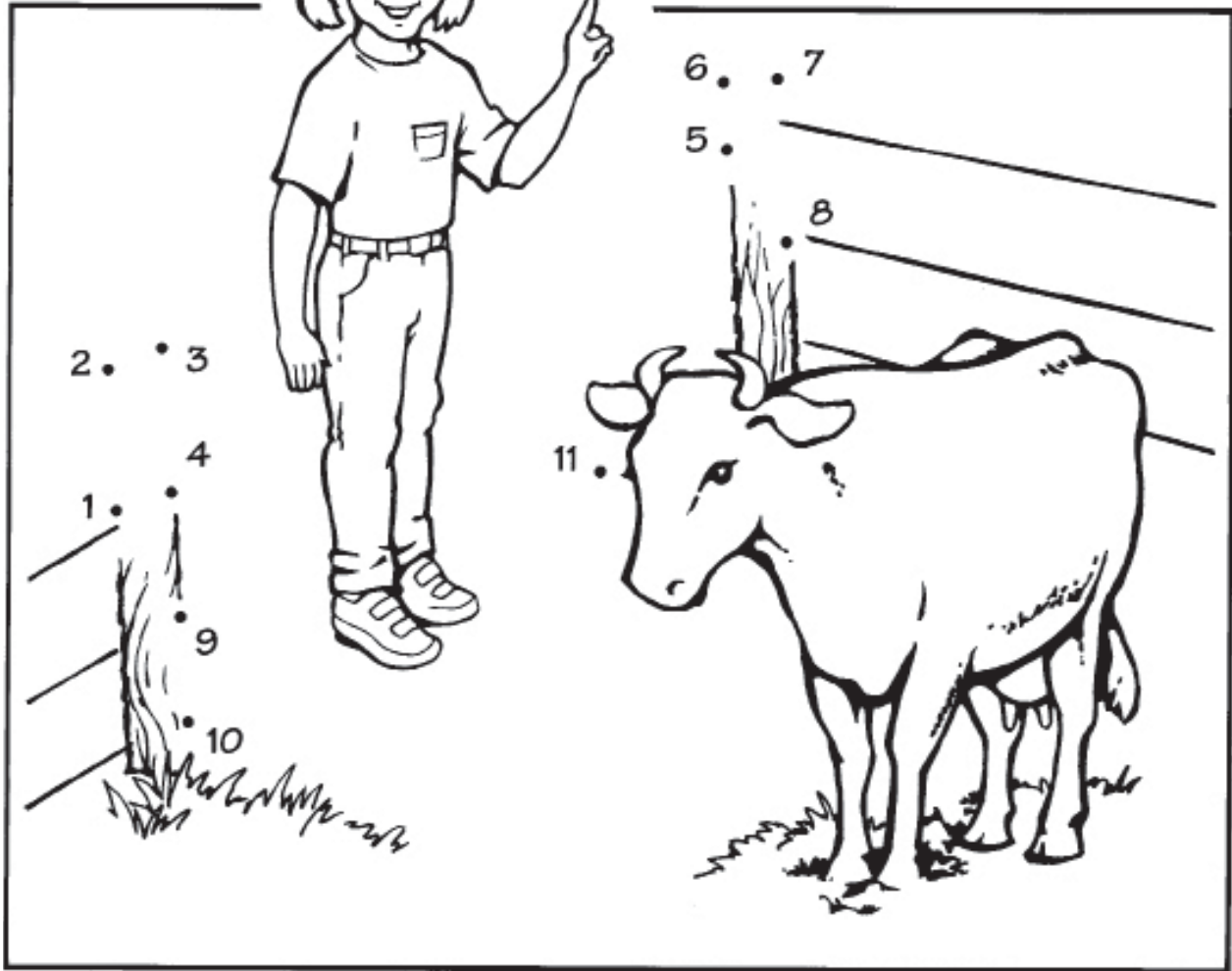
	Horse Color			Headwear		
	Paint	Black	White	Cowboy Hat	Protective Helmet	Baseball Cap
Jessie						
Paul						
Nathan						

The protective helmet is the only headwear to give protection to the rider. Who wore it?



# Animal Safety

Connect the dots and...  
**Stay safe around  
large animals!**



**Play away from animals - use good sense!**

Circle three cattle on the outside of the fence.

## Animal Safety

Look at the animals on this page. Close the book and see how many you can remember. Which animals show signs that you should stay away from? Cross out the animals you should stay away from.





# Animal Detectives

Mother animals can be protective of their young. This is called maternal instinct. Be careful around mother animals in this state. One of the following mother animals is looking for her baby. Find out which one.

Here's how...

- ▶ Draw a line between two words that rhyme.
- ▶ Draw a line between two letters that rhyme.
- ▶ Draw a line between the same types of farm animals.

The mother animal that has lost her baby is the one where all the lines meet.

The puzzle consists of the following items:

- Animals:** A sheep, a turkey, a pig, a dog, a cat, a cow, a chicken, a piglet, a horse, a rabbit, a pig, a chicken, a cat, and a dog.
- Words and Letters:** BABY, PEN, X, B, ANGRY, G, FENCE, L, HEN, W.

# Paw Identification Sheet

Draw a line from the animal to its matching paw print.



Opossum



Beaver



Coyote



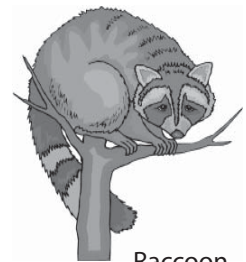
Squirrel



Bear



Rabbit



Raccoon



Porcupine



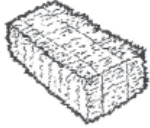











Deer



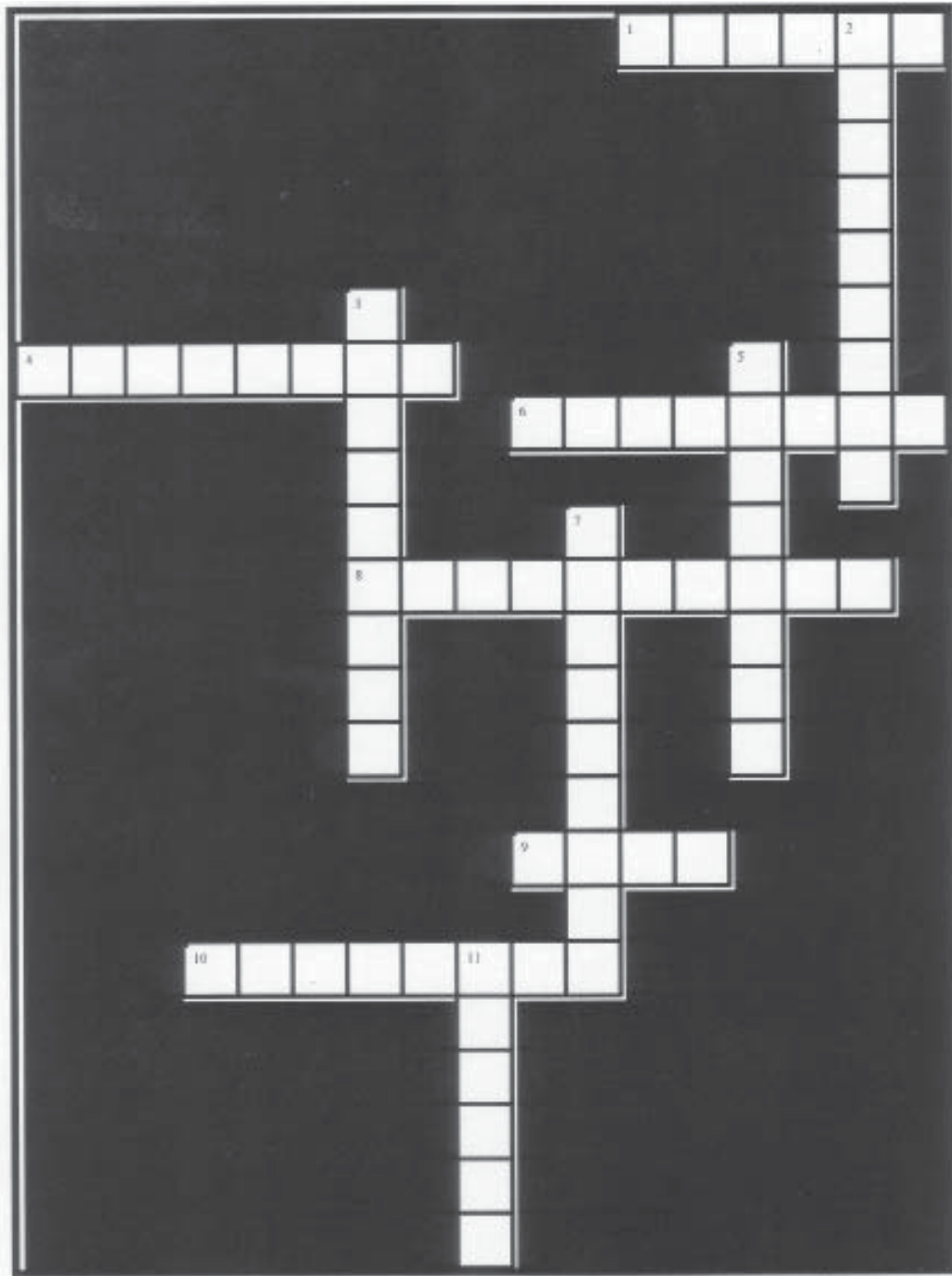
Cat

# Animal Bingo

Find people in the room that can say yes to each statement. Have them write their name in the square. No person can fill in more than one square. Call out BINGO when a line is completely filled in across, vertically or diagonally.

<p>Started riding a horse before the age of three</p>	<p>Jumped out of a hay loft</p> 	<p>Ridden barrow races</p> 	<p>Been scratched by a cat</p>	 <p>Seen a bear in the wild</p>
<p>Walked a dog on a leash</p> 	<p>Bitten by a mosquito</p>	<p>Always washes hands before eating</p>	<p>Castrated hogs</p> 	<p>Wears a helmet when riding a horse</p>
<p>Injected an animal</p>	<p>Cleaned a livestock pen</p> 	 <p>FREE SPACE</p>	<p>Wears ear plugs when working in a hog confinement building</p>	<p>Fallen from a horse</p> 
<p>Shown cattle in a 4-H livestock show</p>	<p>Had a skunk in your back yard</p>	<p>Contracted a zoonotic disease</p>	<p>Groomed sheep for a livestock show</p> 	<p>Received a blue ribbon for showing any animal</p>
<p>Bitten by a dog</p> 	<p>Saddled a horse</p>	<p>Gathered eggs</p> 	<p>Petted an animal</p>	<p>Performed animal chores</p> 

# Crossword Puzzle: Animals and Children 1



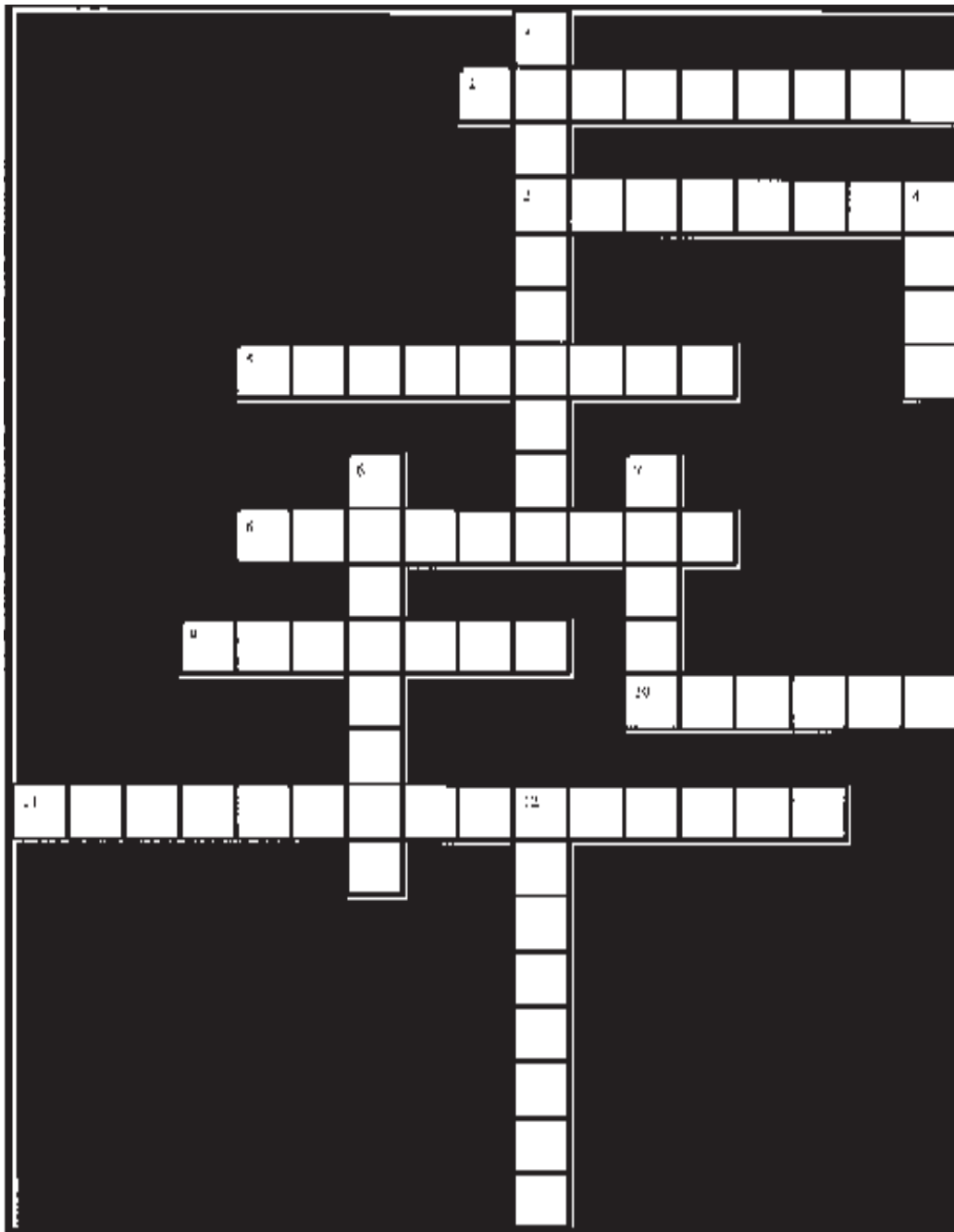
Across

- 1. Moral values
- 4. Burning a mark in the hide of an animal
- 6. Full growth or development
- 8. Skill gained from practice
- 9. Possibility of harm
- 10. Death

Down

- 2. Eager to know or learn
- 3. Understanding gained through learning
- 5. Instructing
- 7. Physical closeness
- 11. Result of wound

## Crossword Puzzle: Animals and Children 2



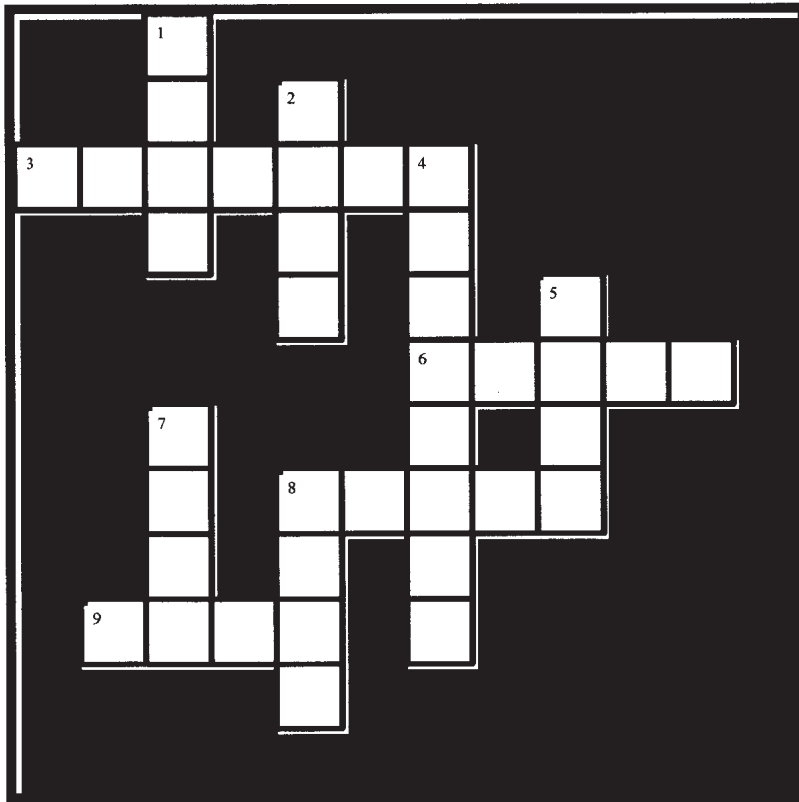
## Across

2. Informed how to do something
3. Conduct or actions
5. Farm animals
8. A custom that is handed down
9. Dangers or risks
10. Livestock operations show a \_\_\_\_\_ injury rate than crop operations
11. Distinct qualities

## Down

1. Children within \_\_\_\_\_ populations are at a greater risk of animal-related injuries on the farm
4. Children's lack of certain characteristics put them at a great \_\_\_\_\_ of injury
6. Death
7. Animal care is a chore often assigned to \_\_\_\_\_
12. Damages to the body

# Crossword Puzzle: Animal Handling 1

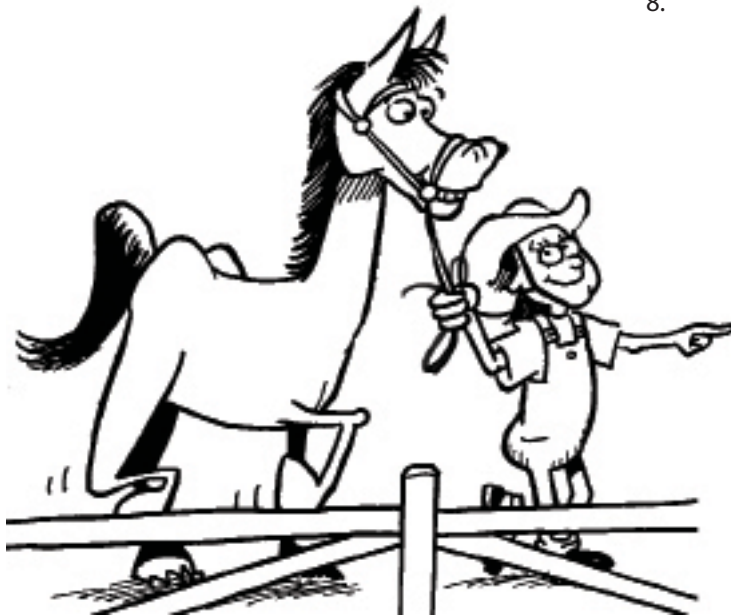


Across

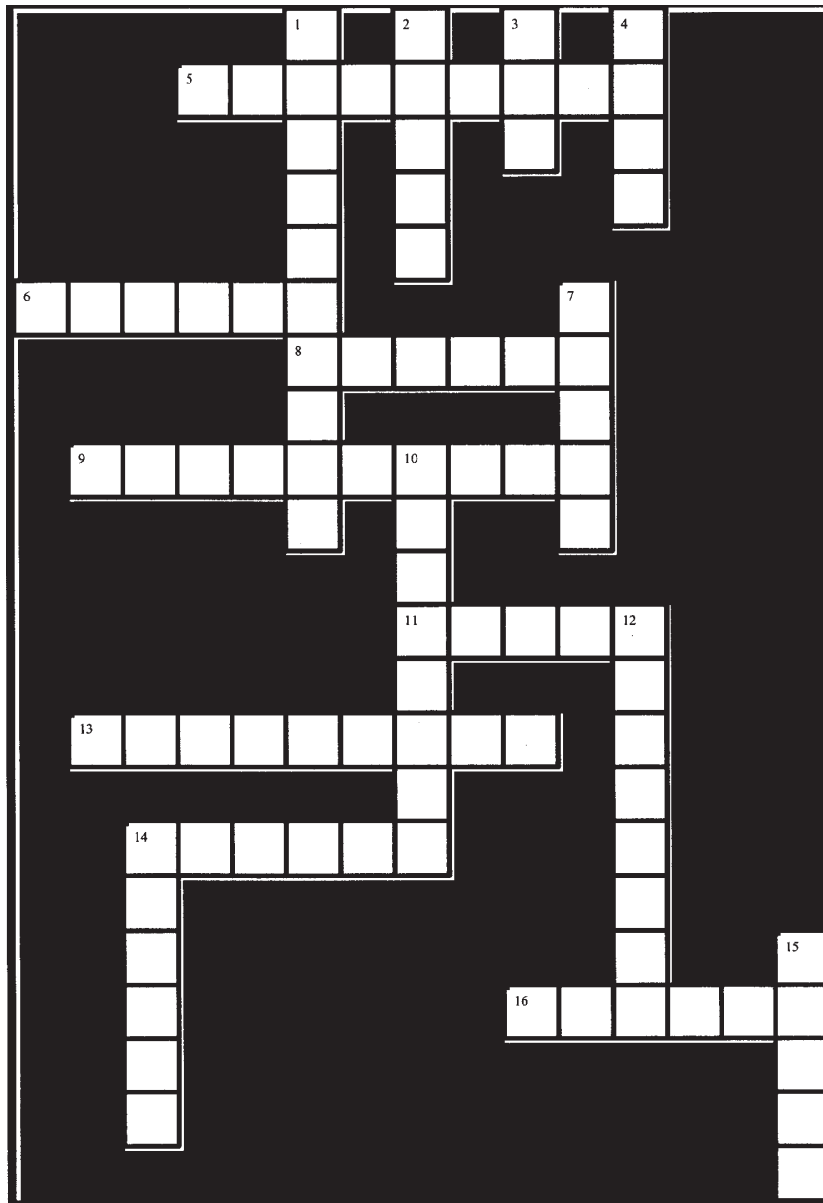
- 3. Protective head coverings
- 6. Unable to see
- 8. A daily or routine task
- 9. To shout

Down

- 1. Adult male cattle
- 2. Unable to hear
- 4. Obstinate
- 5. How big or small something is
- 7. A female horse
- 8. Young male horse



## Crossword Puzzle: Animal Handling 2



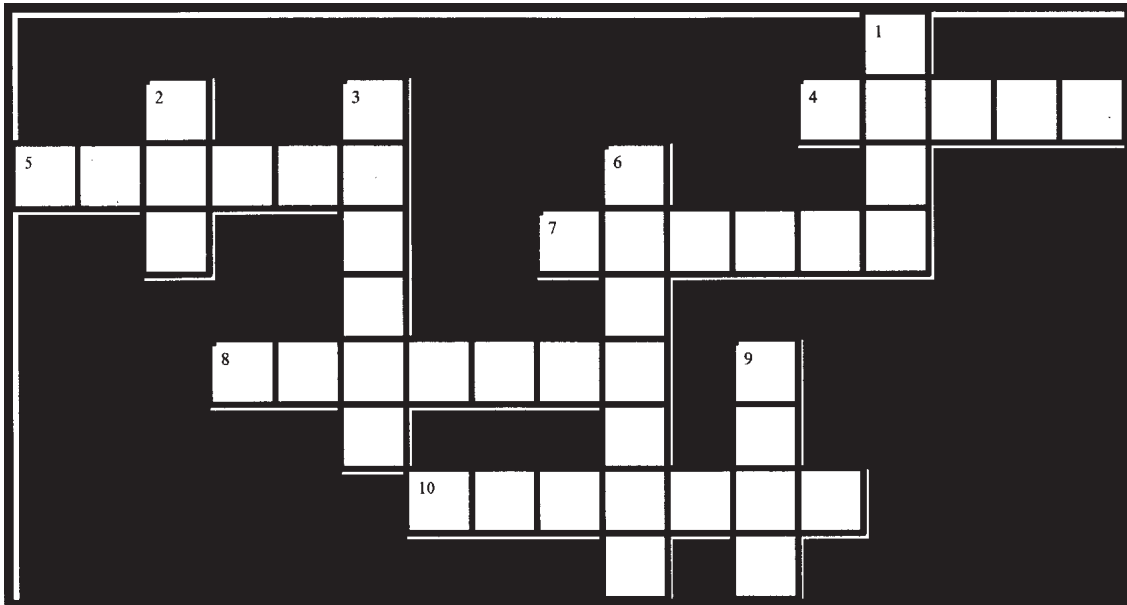
### Across

5. Many animals have \_\_\_\_\_ hearing
6. Animals that have problems with depth perception
8. Use \_\_\_\_\_ sense to stay safe around animals
9. Disturbing an animal's normal routine may cause them to become \_\_\_\_\_
11. Male bovine animal
13. Male horses
14. \_\_\_\_\_ movements can frighten animals
16. An ailment caused from dirty bedding or wet and muddy conditions

### Down

1. Not anticipated
2. This type of bedding can cause several ailments
3. Horses can do this to you with their teeth
4. This instinctive emotion can cause an animal to act defensively when they are afraid
7. Hostile feeling
10. Obstinate
12. Approach large animals at the \_\_\_\_\_
14. Individual places for animals
15. Grooming animals is a \_\_\_\_\_ given to youth

# Crossword Puzzle: Animal Health and Hygiene 1



Across

- 4. A flesh injury
- 5. Another name for spit
- 7. Animals that wear saddles
- 8. To keep something from happening
- 10. In the winder, birds often \_\_\_\_\_ south

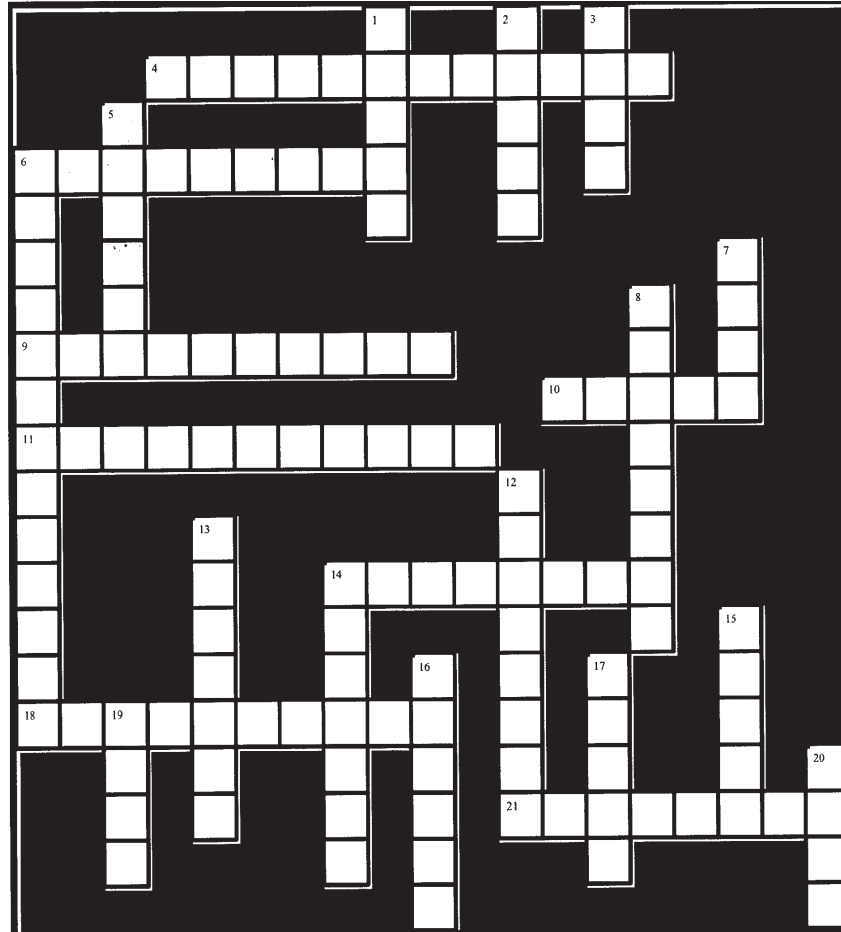
Down

- 1. Animals that bark
- 2. This is also called influenza
- 3. Disease from wild animals
- 6. Professionals that take care of you when you are sick
- 9. Animals that meow





## Crossword Puzzle: Animal Health and Hygiene 2



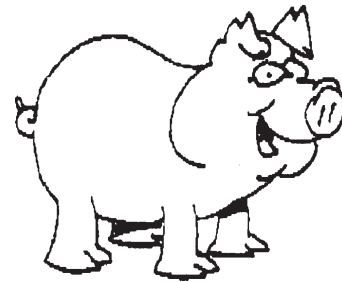
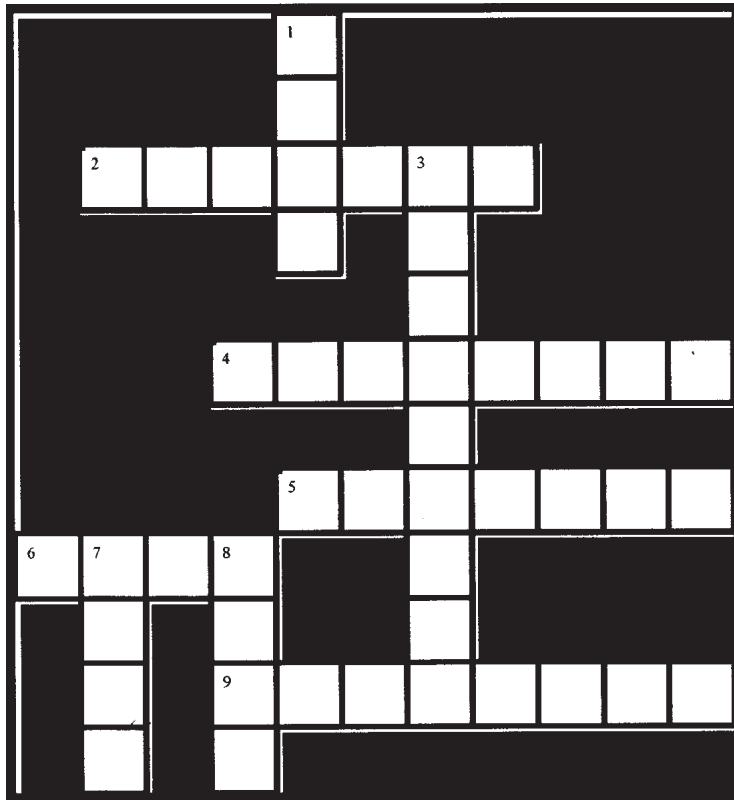
### Across

- |     |   |     |   |
|-----|---|-----|---|
| 4.  | Disease that affects cattle, goats, and swine                                   | 5.  | This disease was transmitted from rats to humans by fleas                           |
| 6.  | Children with lower _____ levels are at a greater risk of diseases              | 6.  | Cats are the main carriers of this disease  |
| 9.  | This is the most important factor in protecting people and animals from disease | 7.  | Pet that could get rabies   |
| 10. | Animal by-product   | 8.  | Chemical given in shot to prevent zoonotic diseases                                 |
| 11. | One of the things that battles zoonotic diseases                                | 12. | Illnesses   |
| 14. | Organism that lives on another organism   | 13. | Professionals that recommend a tetanus vaccination be given every year              |
| 18. | Single most common cause of food poisoning                                      | 14. | Chicken meat  |
| 21. | Clean or hygienic   | 15. | Staphylococcus is a bacteria that is part of the natural _____ in an animal's mouth |
|     |   | 16. | Deadly virus usually transmitted by wild animals                                    |
|     |   | 17. | Cut in the body where bacteria can enter  |
|     |   | 19. | Blood-sucking parasites   |
|     |   | 20. | Disease that occurs from bites of the Deer or Lone Star tick.                       |

### Down

1. One of the early signs of Rocky Mountain Spotted Fever
2. Animal susceptible to Lyme Disease
3. Rocky Mountain Spotted Fever is carried by this insect

## Crossword Puzzle: Safe Animal Housing 1



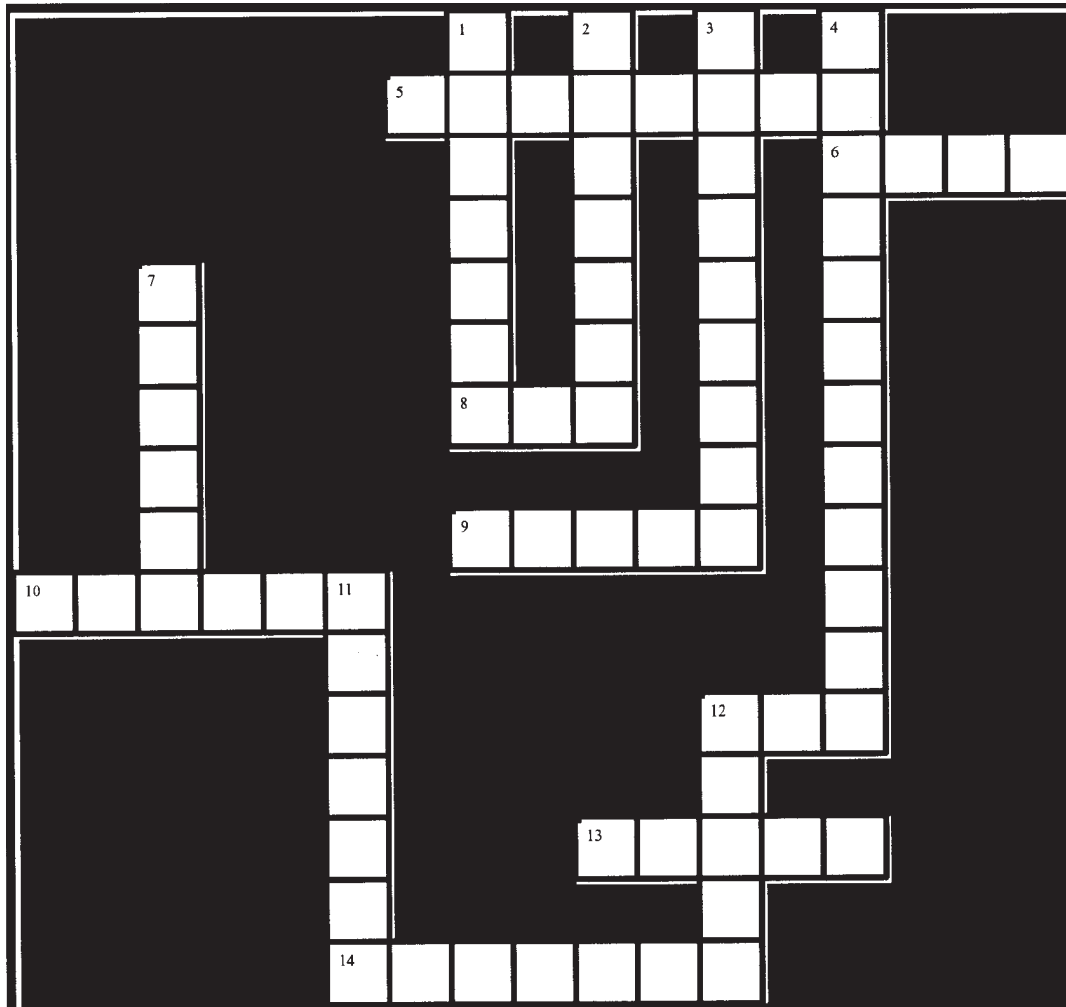
### Across

2. A place for storing hay
4. A substance used to produce results
5. The sun casts many \_\_\_\_\_
6. High volume of sound
9. The quality of being strong

### Down

1. A fungus
3. Able to catch fire easily
7. Strong smell
8. Airborne dirt

## Crossword Puzzle: Safe Animal Housing 2



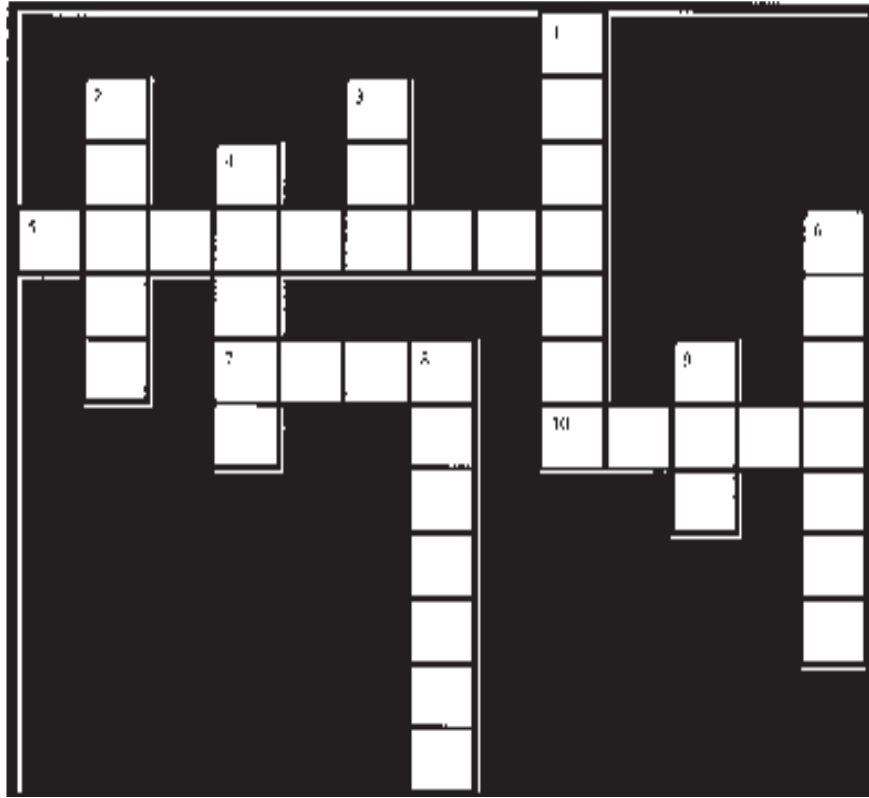
### Across

5. Measurement of noise
6. Swine
8. Hydrogen sulfide smells like a rotten \_\_\_\_\_
9. Loud, unpleasant sound
10. Gases produced by animal \_\_\_\_\_ that can be dangerous to children and adults
12. Bright light source
13. Result of slippery surfaces
14. Floors with spaces that allow animals to stay dry

### Down

1. This toxic gas is odorless and lighter than air
2. \_\_\_\_\_ is a critical job on any dairy farm
3. The main hazard of methane
4. Oxygen depletion can result in \_\_\_\_\_
7. These items should be strong enough to contain large, crowded livestock
11. These outlines on the wall tend to make animals more skittish
12. This one color chute wall will help prevent animals from being spooked

# Crossword Puzzle: Pet Safety 1



Across

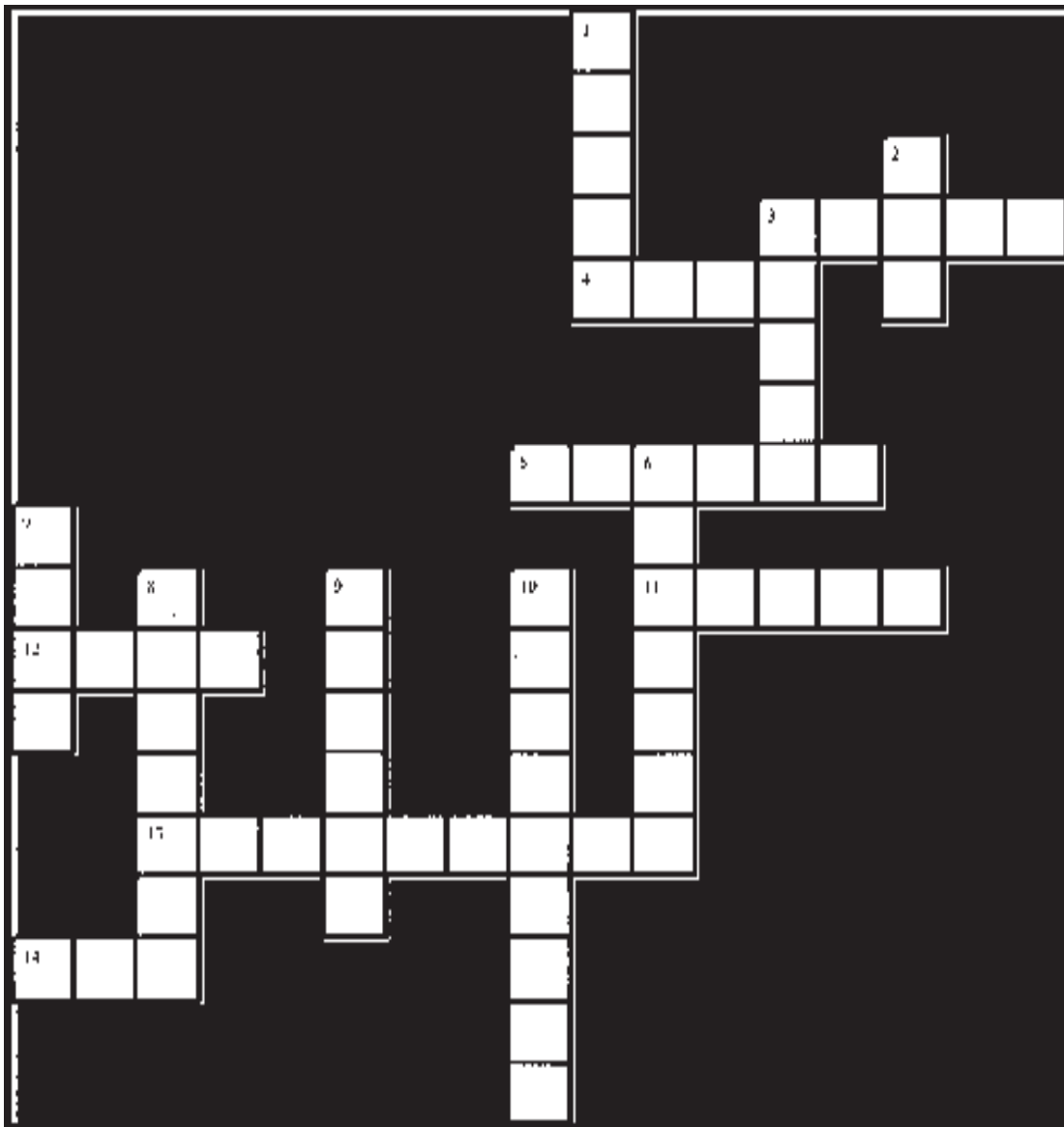
- 5. Untreated bites can lead to an \_\_\_\_\_
- 7. If bitten, wash wound with \_\_\_\_\_ and water
- 10. Angry sound a dog makes

Down

- 1. Before biting, a dog will show a \_\_\_\_\_ sign such as growling or stiffening of the body
- 2. Wash \_\_\_\_\_ after touch an animal
- 3. Animal that meows
- 4. Make sure your dog is on a \_\_\_\_\_ in public
- 6. To be in good health
- 8. To initiate or bring on an attack
- 9. Animal that barks



## Crossword Puzzle: Pet Safety 2



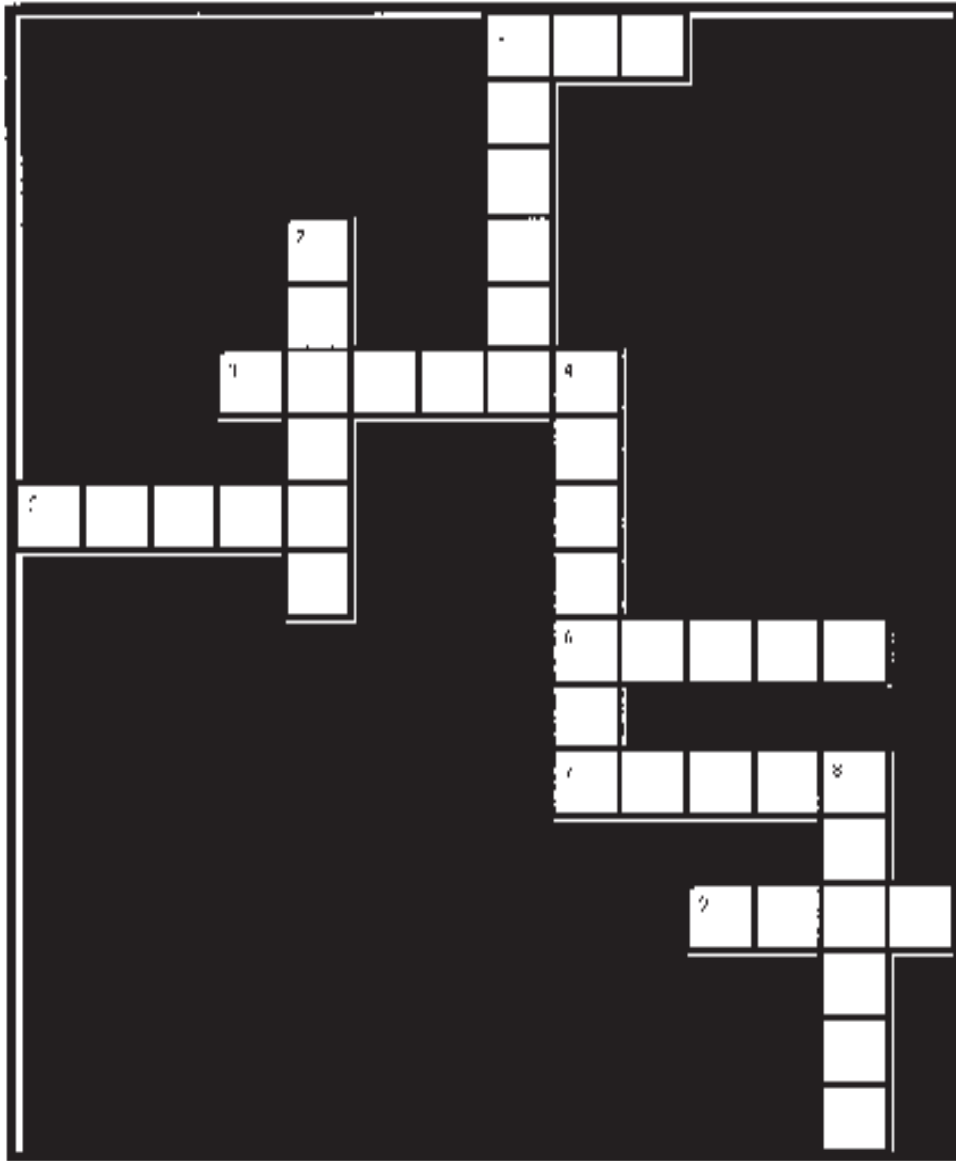
### Across

3. To coach
4. Treat animals with \_\_\_\_\_ and respect
5. Dog bites are more common in the spring and \_\_\_\_\_
11. Make sure your dog is on a \_\_\_\_\_ in public
12. If bitten, wash wound with \_\_\_\_\_ and water
13. Untreated dog and cat bites can lead to \_\_\_\_\_
14. An animal that barks

### Down

1. A stern warning sign
2. An animal that meows
3. Never \_\_\_\_\_ an animal
6. Dogs bite 1.7 \_\_\_\_\_ Americans each year
7. Avoid a dog bite by curling your fingers into a \_\_\_\_\_
8. Dogs show displeasure by giving a \_\_\_\_\_
9. Most serious disease associated with animal bites
10. \_\_\_\_\_ pets for specific diseases

## Crossword Puzzle: Horse Safety 1



### Across

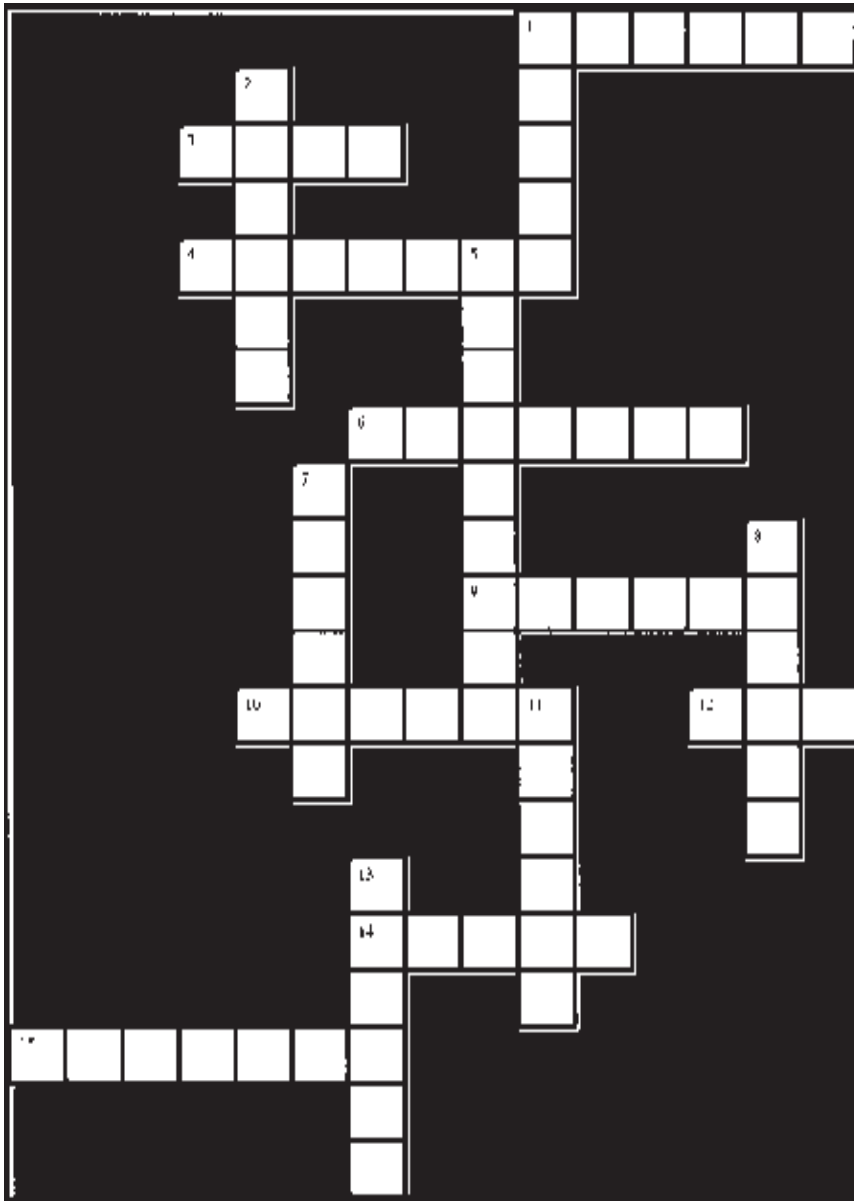
1. Slow-moving vehicle
3. Worn to protect your hands
5. Approach a horse from an \_\_\_\_\_ at the shoulder
6. Used to control a horse
7. Always wear long \_\_\_\_\_ when riding a horse
9. Saddle a horse on this side

### Down

1. A leather seat for a rider
2. Worn to protect the rider's head
4. Loop for rider to place foot
8. Speak \_\_\_\_\_ when around horses



## Crossword Puzzle: Horse Safety 2



### Across

1. The upper-front part of a saddle
3. Always saddle a horse from the \_\_\_\_\_ side
4. These hold packs and saddles in place
6. Loop hung from a horse's saddle to support the rider's foot
9. Harness fitted on a horse's head to restrain or guide
10. Worn to protect your hands
12. Slow-moving vehicle
14. Approach a horse from an \_\_\_\_\_ at the shoulder
15. Rgw offers padding for the horse

### Down

1. Always wear long \_\_\_\_\_ when riding
2. Move to the opposite side of a horse by walking a long ways \_\_\_\_\_
5. Horses tend to be \_\_\_\_\_
7. A leather seat for a rider
8. Worn to protect the rider's head
11. Speak \_\_\_\_\_ when approaching a horse
13. The rear part of the saddle

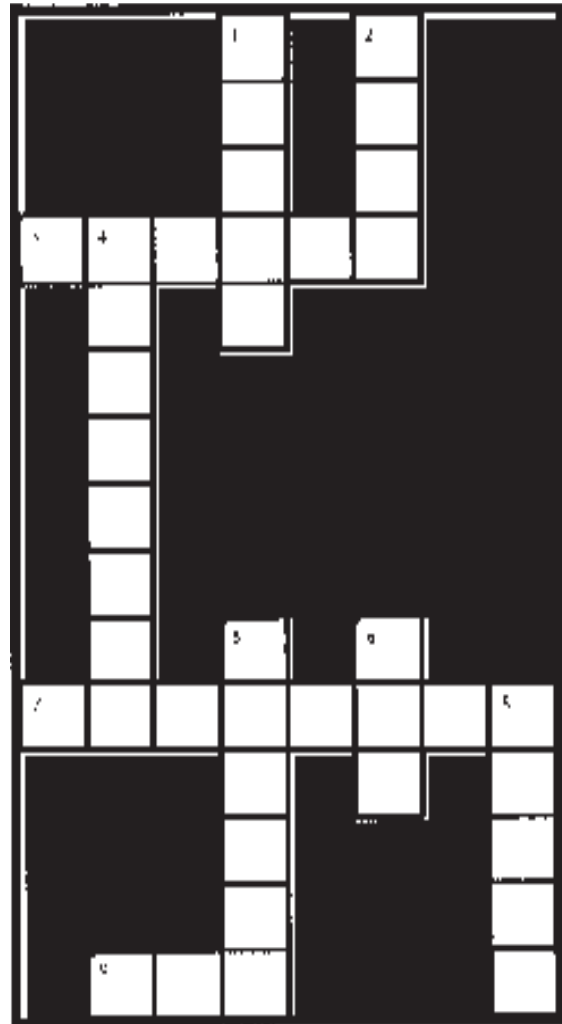
## Crossword Puzzle: Wild Animal Safety 1

### Across

3. To veer or turn sharply  
 7. Poisonous  
 9. Never raise a baby wild animal as a  
 \_\_\_\_\_

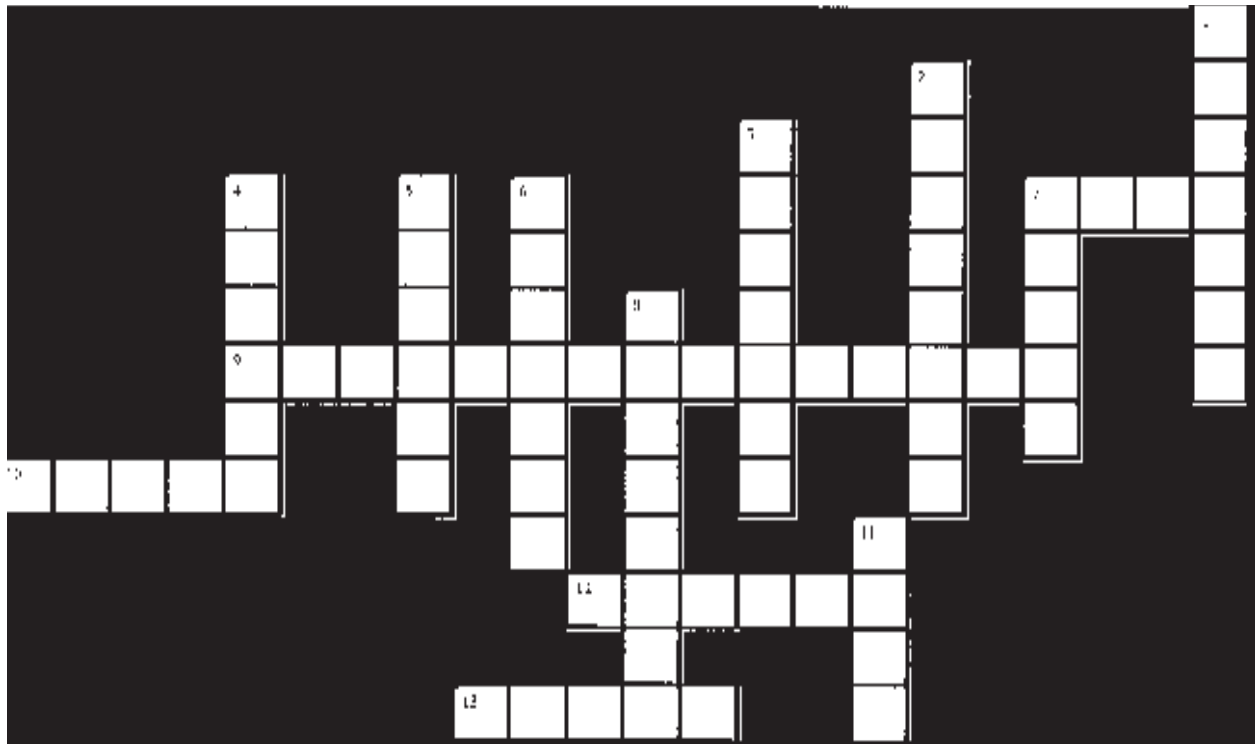
### Down

1. Keep a snake bite below \_\_\_\_\_ level  
 2. Where there is one animal, there is usually  
 \_\_\_\_\_  
 4. Undomesticated animals  
 5. A wild cat with tufted ears and short tails  
 6. A small wild dog  
 8. A scaly, legless reptile





## Crossword Puzzle: Wild Animal Safety 2



### Across

7. Where there is one animal, there is usually \_\_\_\_\_
9. Each wildlife species has its own \_\_\_\_\_
10. If bitten by a snake, keep bitten area below \_\_\_\_\_ level
12. A wolf-like animal
13. Never try to \_\_\_\_\_ baby wildlife as pets

### Down

1. Feeding wildlife can cause the spread of \_\_\_\_\_
2. Undomesticated animals
3. When driving at night, look for \_\_\_\_\_ eyes of animals
4. A wild cat
5. To veer off or turn sharply
6. Mammal with a black-ringed tail
7. A large animal with broad, flattened antlers
8. Poisonous
11. Large mammal with a shaggy coat, large claws, and short tail



# Answer Key

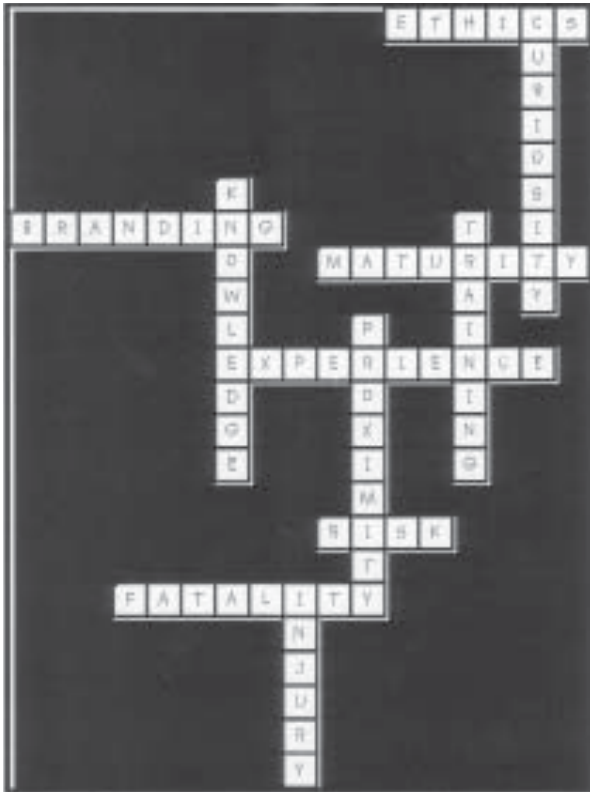
## Paw Identification Sheet

This diagram shows the correct pairings between animal paw prints and the animals they belong to. Lines connect each paw print to its corresponding animal illustration. The animals and their paw prints are as follows:

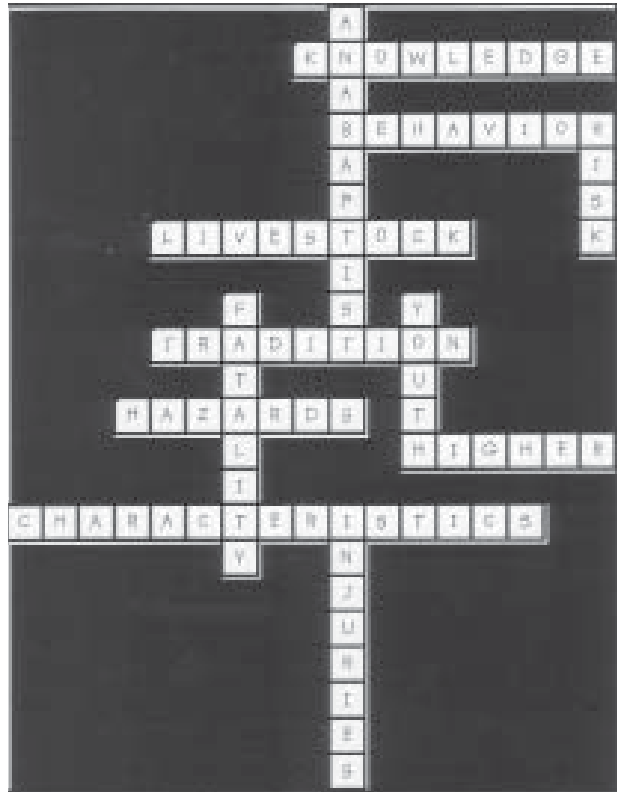
- Opossum:** A large, five-toed paw print with a central pad and four smaller pads.
- Beaver:** A large, oval-shaped paw print with a central pad and two smaller pads on either side.
- Coyote:** A large, five-toed paw print with a central pad and four smaller pads.
- Squirrel:** A large, five-toed paw print with a central pad and four smaller pads.
- Bear:** A large, five-toed paw print with a central pad and four smaller pads.
- Rabbit:** A large, five-toed paw print with a central pad and four smaller pads.
- Raccoon:** A large, five-toed paw print with a central pad and four smaller pads.
- Porcupine:** A large, five-toed paw print with a central pad and four smaller pads.
- Deer:** A large, five-toed paw print with a central pad and four smaller pads.
- Cat:** A large, five-toed paw print with a central pad and four smaller pads.

# Answer Key

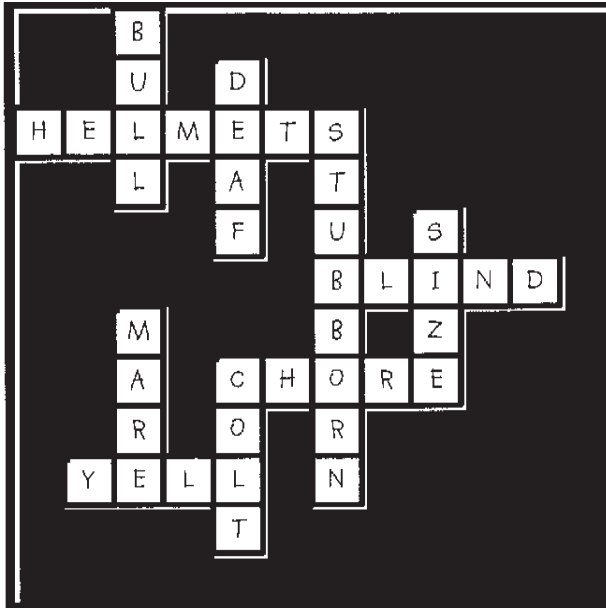
## Puzzles



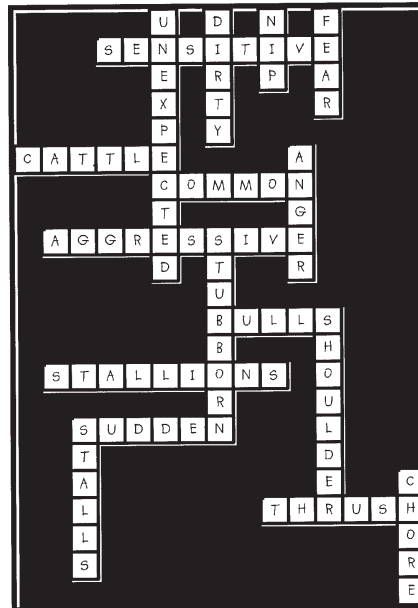
Animals and Children 1



Animals and Children 2



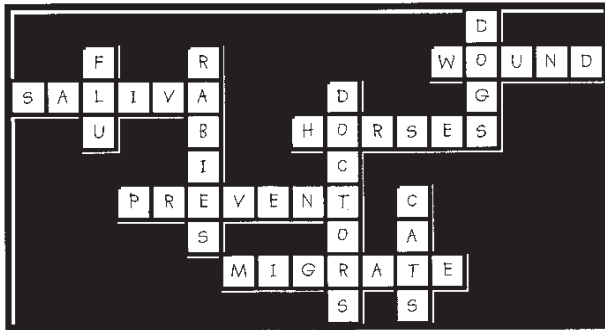
Animal Handling 1



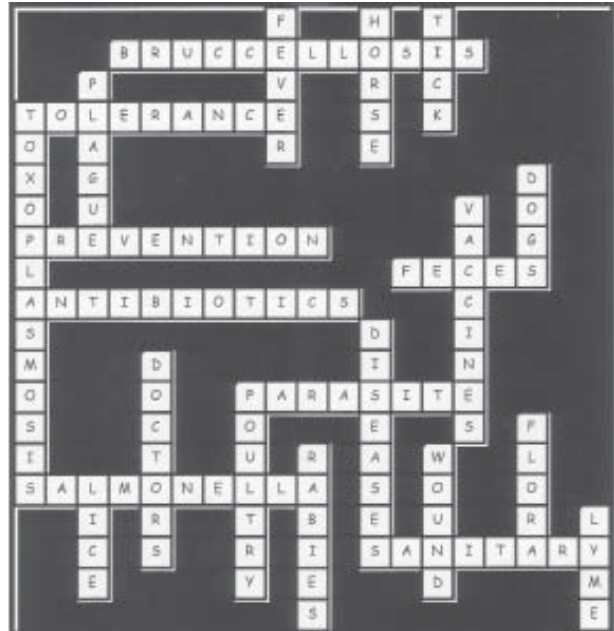
Animal Handling 2

# Answer Key

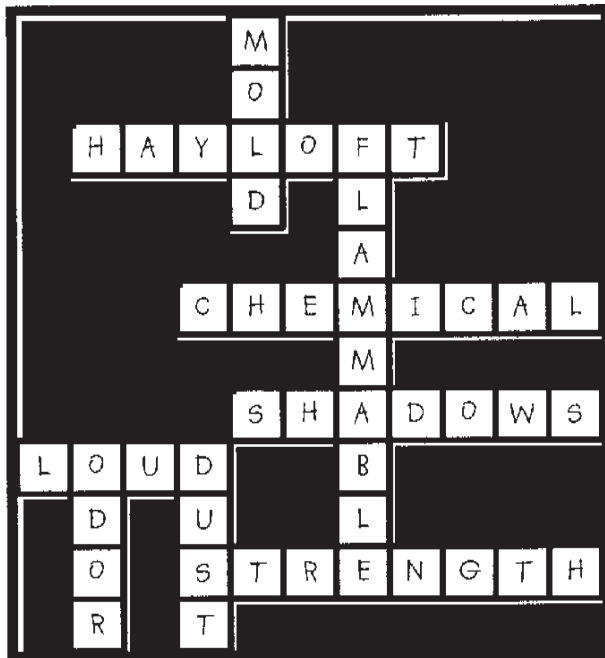
## Puzzles



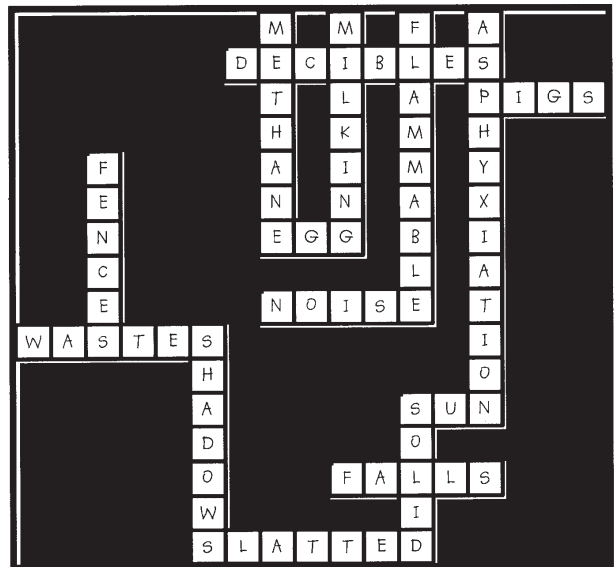
Animals Health and Hygiene 1



Animal Health and Hygiene 2



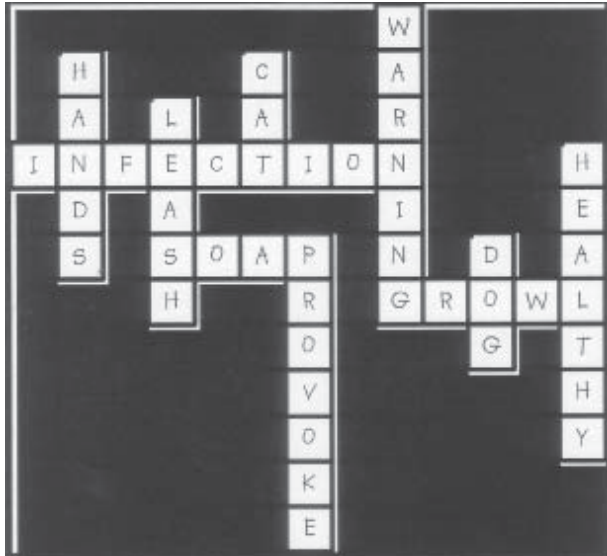
Safe Animal Housing 1



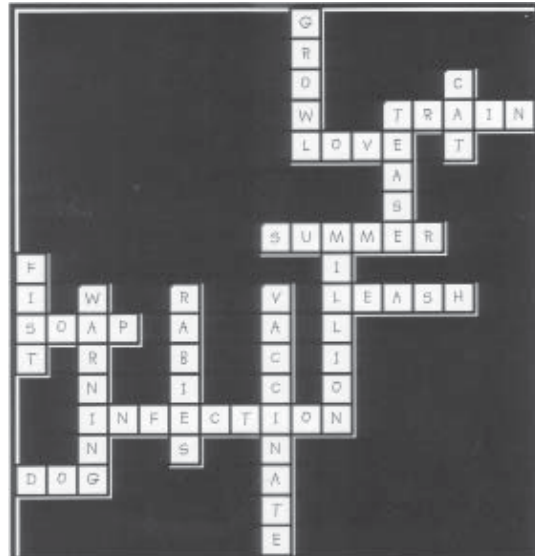
Safe Animal Housing 2

# Answer Key

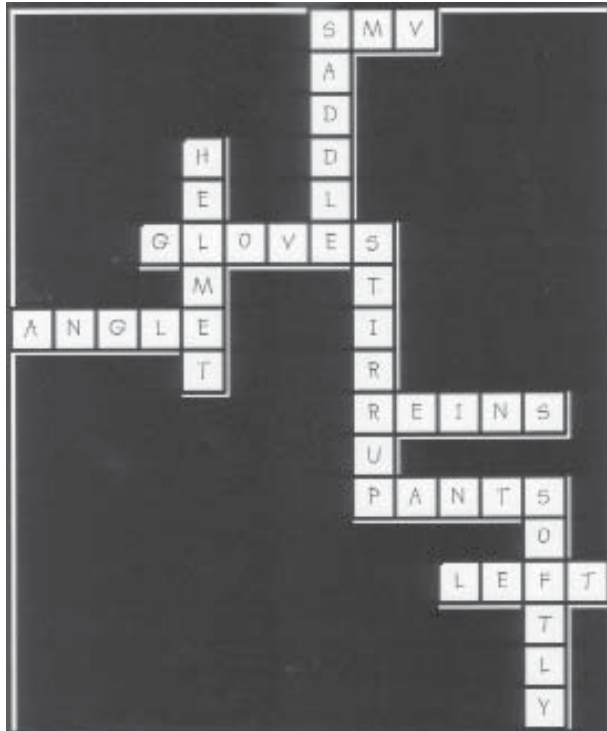
## Puzzles



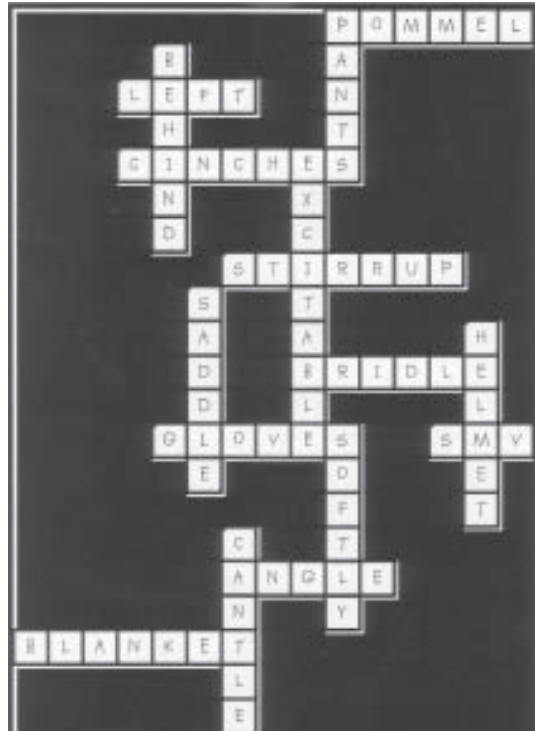
Pet Safety 1



Pet Safety 2



Horse Safety 1



Horse Safety 2

# Answer Key

## Puzzles



Wild Animal Safety 1

## Riding Off Into the Sunset

- ▶ Jessie rode the black horse using the cowboy hat.
- ▶ Paul rode the paint horse using the protective helmet.
- ▶ Nathan rode the white horse using the baseball cap.

## Animal Detectives

The cow

## Wild Animal Safety 2

