Assuring Quality Care for Animals

Youth Food Animal Quality Assurance

GPP #8
Maintain Proper Workplace Safety

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Note – this curriculum alone does NOT certify youth for state-mandated quality assurance training. A County Coordinator or Assistant Instructor must certify youth.

GPP #8

Maintain Proper Workplace Safety

You and your family are obligated to provide a work environment that promotes the health and safety of caretakers, those who are watching after and caring for your animals. Safety is everyone’s responsibility including exhibitors, family members, friends, and so on. If any one person does not take a personal responsibility for working in and maintaining a safe work area, that person puts himself/herself and others at risk.

Learning Objectives
Upon completing this lesson, youth should be able to
1. Use practices that promote health and safety of all caretakers

Key Terms
Safety
Personal protective equipment (PPE)
Hazards
Emergency Action Plan (EAP)
Respiratory health
Electrical safety
Personal hygiene
Safe animal handling

Safety
The safety responsibilities of all people working in the barns include:
1. Know which jobs have high accident and injury risk.
2. Understand safety practices.
3. Know what to do to reduce injury risk.
4. Use safe animal handling practices.
5. Properly use safety equipment, safety devices and personal protective equipment (PPE).
6. Report unsafe acts and housing hazards, accidents, near-accidents, injuries and illnesses immediately.
Youth owners and caretakers are responsible for all aspects of safety including:
1. Assigning responsibility
2. Conducting safety assessments
3. Defining hazard risks for all activities
4. Sourcing and allocating resources to ensure safety in all operational activities
5. Measuring progress and evaluating performance of safety and environmental management.
6. Reviewing all program components and making adjustments.

Youth owners and caretakers will:
1. Ensure appropriate resources are utilized to eliminate/reduce hazards.
2. Ensure that show goals do not alter or suspend proper safety procedures at any time.
3. Encourage and support caretakers to reinforce the importance of their safe actions.
4. Observe the housing area to detect and correct potential problem areas.
5. Initiate corrective action immediately.
6. Stop activities being performed unsafely, and correct the conditions before continuing the work.
7. Ensure all caretakers are trained in proper job procedures, including safety precautions.
8. Actively and promptly investigate all activities to determine the root cause of the incident.
9. Ensure all caretakers follow the instructions and guidelines.

Controlling Hazards
Controlling exposures to hazards is the fundamental method of protecting caretakers. The basic strategies for controlling workplace hazards, in order of preference per OSHA guidelines, include:
1. Eliminating the hazard from the method, material, facility or machine.
2. Lessening the hazard by limiting exposure or controlling it at its source.
3. Training personnel to be aware of the hazard and to follow safe work procedures to avoid it.
4. Prescribing personal protective equipment (PPE) for protecting caretakers against the hazard.

These four controls are crucial to a safe, healthful workplace for all caretakers because they make it more difficult for accidents to occur and for work-related health problems to develop.

Emergency Action Plan (EAP)
An emergency action plan (EAP) will prepare producers to take immediate action when someone is hurt, a fire starts or tornadoes are threatening. In an emergency, time cannot be wasted. It could be the difference between life and death. Each farm should have caretakers trained in first aid who can provide immediate care. Producers and caretakers should be encouraged to take classes in first aid and CPR-AED such as those taught by the American Red Cross and other groups. All caretakers must be familiar with emergency procedures for the operation.
An EAP covers (1) who to notify in case of an emergency, (2) what your need to say to them, and (3) what actions to take. An EAP includes:

1. The Farm Emergency Information Sheet listing who to call, what to say, and what steps to follow in case of an emergency
2. Directions to the facility
3. People at the farm who are trained in first aid
4. Where first aid kits, fire extinguishers and alarms are located
5. The evacuation plan, which indicates how to exit each building, as well as where to meet once you have exited.
6. The emergency farm map, which includes:
   - Building layout
   - Location of emergency exits
   - Location of fire extinguishers
   - Location of tornado shelter areas
   - Hazard locations
   - Animal numbers per barn
7. Emergency contact information outside the building for caretakers or neighbors to use if they notice something is wrong

If someone is injured in an accident and needs immediate help:
1. Make sure the injured individual is cared for immediately by a person trained in first aid.
2. Without putting yourself in danger, stabilize the accident scene if the hazard still exists. By doing this, you can prevent further danger to the injured person or others.
3. Notify the appropriate contact listed on the Farm Emergency Information Sheet.
4. Notify an adult that an accident has occurred. He or she shall judge the extent of the accident scene to be controlled.
5. Follow the farm procedures for accident investigation.

If a fire starts:
1. Rescue or remove everyone in immediate danger.
2. Sound the fire alarm.
3. If the fire is small, confine fire and smoke by closing all windows and doors in the area. Extinguish small fires with a portable fire extinguisher. Never use water on an electrical fire.
4. If the fire is too large, call the fire department, then evacuate the building.
5. Once outside the building, go immediately to the designated meeting place. Do not go back in!

If a tornado warning is sounded:
1. Go to the designated tornado shelter, which will be an interior area of the building that is structurally sound without outside windows or skylights. Examples are showers and utility rooms.
2. Stay away from windows, but stay inside the building. A diagram with shelter assignments should be posted so people will know where they should go to seek shelter.
There is a potential when mixing and removing manure from pits that a hazardous gas called hydrogen sulfide could be released into the building above the pit. Hydrogen sulfide is very dangerous. Do not enter buildings while manure is being agitated and removed.

If people or animals are unconscious when manure is being agitated or removed, you must not enter the room. You can lose consciousness quickly! If people or animals are down, contact emergency medical services as outlined in the EAP, and start emergency ventilation.

Every county in the United States has an emergency coordinator who is responsible for responding to all emergencies at the county level. Sharing your emergency plan with the county coordinator and including them in your plan will be helpful when responding to emergencies in the future. The EAP templates include (1) Operation Information; (2) Site Contacts Plan; (3) Hazard Plan; and (4) Maintenance/Training Center. These templates are included in this document. They can also be downloaded from http://eap.pork.org.

Fire Prevention and Safety
Good housekeeping helps prevent fires. Remove weeds and brush from all sides of the buildings. Keep work areas clean and clutter free. Make sure all stairs, aisles and exits are free of obstructions. Keep flammable liquids in labeled fireproof containers.

Report any observed fire hazards to an adult immediately. Electrical motors and appliances are a significant source of fire hazards. Check each regularly for exposed wiring, broken insulation, improper grounding and improper installation.

If caretakers smoke, they should do so only in designated areas. Never smoke in areas where flammable and combustible materials are stored. Make sure flammable substances are kept in fireproof containers, properly labeled and stored in safety cabinets approved for flammable materials.

Hearing Health and Safety
Working on farms will be noisy at times. When people are exposed to high noise levels for a number of years without taking precautions, they can suffer hearing loss. This type of hearing loss is irreversible and cannot be restored.

Noise levels in swine barns, especially, can reach damaging levels. Noise levels in poultry barns may also be high. Wear hearing protection while conducting these tasks if you are in any of these working environments:
1. Feeding animals in breeding, gestation and farrowing barns
2. Power washing
3. Processing piglets
4. Treating and vaccinating animals
5. Bleeding animals
6. Sorting animals
7. Moving animals
8. Loading animals
9. Pregnancy checking in breeding barns
10. Artificially inseminating sows and gilts in breeding barns
11. Working around aeration fans for grain bins
12. Feed processing
Personal Protective Safety Equipment (PPE)
Personal protective safety equipment (PPE) can help you do your job safely. PPE is designed to protect you from loud noises, dust, chemicals, and other substances that can harm your health. When using PPE, you should wear the equipment for the entire time you are working on the task requiring it. If you remove PPE while performing a task, you will not be adequately protected. Know how to correctly wear the PPE and make sure it fits properly to prevent injuries. Keep you PPE clean and in good shape, and check it for damage each time you wear it.

Store your PPE in proper storage location when you are done using it. Never store PPE in areas with chemicals that are being used or stored. Always wear the correct protective clothing and equipment for the job.

Respiratory Health and Safety
Varying levels of dust are commonly found buildings where animals are housed. Short-term inhalation of very small amounts of dust alone is not necessarily harmful. Long-term, continuous exposure to dust may result in respiratory problems.

Inhalation of the fungus *Hisoplasma capsulatum*, a fungus thriving in damp soil rich in organic material, and particularly common in poultry coops and old barns (and where bats live), can cause Histoplasmosis. This is a non-contagious disease. The chance of developing symptoms increases with the number of spores inhaled. The mildest forms of Histoplasmosis produce no signs or symptoms; however the severe form, Disseminated Histoplasmosis, is usually fatal if untreated.

Dust masks help block the entry of dust and spores into the lungs and may reduce your risk of respiratory problems or exposure to the fungus causing Histoplasmosis.

Electrical Safety
Accidental contact with electrical currents can cause injury, fire, extensive damage and even death. Do not perform any electrical work unless you have been trained and authorized to do electrical work.

Electrical accidents can be prevented by taking the appropriate precautions including:
1. Ensure that electrical outlets and plugs are in good condition.
2. Make sure electrical power cord insulation is not cracked, kinked, broken or the cord ends have loose connections or ground plugs removed.
3. Wear insulated footwear when working with electrical tools or appliances.
4. Do not overload an outlet.
5. Keep all electrical cords away from heat sources.
6. Ensure that the power is turned off and that lockout procedures are used each time that an element of the electrical system is open to physical contact.
7. Immediately inform an adult of any faulty equipment so it can be repaired or replaced.
**Personal Hygiene**

Bacteria, fungi, parasites and viruses that may be present in animals or their manure can cause disease in people. Transmission to people may be prevented with simple procedures:

1. Wash hands before and after working in the barn and with animals. Wash hands before you eat or drink; before and after using the toilet; after cleaning animal housing or animal care areas; and whenever hands are visibly soiled.
2. Wear impermeable gloves when caring for sick animals or when assisting a veterinarian with any type of procedure.
3. Wear facial protection whenever exposure to splashes or sprays is likely to occur such as during power washing.
4. When bites, scratches or lacerations occur while working with animals, wash the injured area with soap and water immediately and consult the designated First Aid person.
5. Establish designated areas for eating, drinking and similar activities. These activities should never be done in animal care areas or in the laboratory area.

**Needle Sticks and Cuts**

Performing procedures, and giving medication and vaccinations to animal can lead to injury if you are not careful. Punctures, cuts, and needle stick injuries are among the most common and can occur when giving injections, castrating, etc. Stay focused and attentive. Fatigue increases your changes of injury so take advantage of scheduled breaks so you do not become too tired and in order to stay focused.

Dispose of all sharps in designated puncture-proof sharps containers.

Needle sticks are not to be taken lightly. Certain antibiotics and other medications designed for animals can result in severe medical reactions, or even death. If a co-worker is accidentally injected with a medication and has a seizure, stops breathing, or has any physical reaction, call 911 immediately to summon professional emergency medical help. Have the medication bottle available for the responders to read.

In case of severe cuts, control the bleeding first and summon the person trained in First Aid at your farm. If the injury is minor, wash the wound with soap and water, cover with a sterile bandage, report the injury, and seek medical attention if necessary.

All accidental injections and cuts should be reported to an adult immediately.

**Guards and shields should be in place on all mechanical equipment.**

**Safe Animal Handling**

Many accidents and injuries occur when handling animals. Many tasks require people to be in close contact with the animals. To avoid accidents or injuries while working with animals, you must understand typical animal behavior, responses to different environments, handling animals of various types and sizes, and how to use handling equipment. These topics are covered in GPP #9: Provide Proper Animal Handling and Care.
Safety is everyone’s responsibility. This includes the youth owner and caretaker. If any person does not take personal responsibility for working in and maintaining a safe work area, that person puts himself/herself and others at risk.

Control hazards. Controlling hazards is the fundamental method of protecting caretakers. The basic strategies for controlling housing hazards, in order of preference, include:
1. Eliminating the hazard from the method, material, facility or machine.
2. Abating the hazard by limiting exposure or controlling it at its source.
3. Training personnel to be aware of the hazard and to follow safe work procedures to avoid it.
4. Prescribing personal protective equipment (PPE) for protecting employees against the hazard.

Develop an emergency action plan. Develop and implement an emergency action plan. This will prepare people to take immediate actions when someone is hurt, a fire starts or tornadoes are threatening. All caretakers must be familiar with emergency procedures for the operation.

Develop safety procedures and plans. Prevention is an important part of keeping individuals safe. Therefore, develop safety procedures for:
- Fire Prevention and Safety
- Electrical Safety
- Hearing Health and Safety
- Slips, Trips, and Falls
- Lockout/Tagout Program
- Safe Lifting
- Personal Protective Equipment
- Personal Hygiene
- Respiratory Health and Safety
- Needle Sticks and Cuts
- Hazard Communication Plan
- Safe Animal Handling
- Machine Guarding
- Grain Bin Safety

Maintain Proper Workplace Safety

Study Questions

1. What are the six safety responsibilities of all people working in the barns?
2. Name three aspects of safety that youth owners and caretakers are responsible.
3. What are four ways to control exposure to hazards?
4. What does EAP stand for?
5. What does PPE stand for?
6. Identify five keys to creating an emergency action plan.
7. What are 10 things, you as a producer, plan to do to promote health and safety?
8. What are three tasks where ear protection should be worn?
9. What are two tasks where dust masks should be worn?
10. Identify four things an EAP should include.

Backyard Poultry PowerPoint, Miller, 2014
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