



Good Production Practices

Ten Good Production Practices (GPPs) that relate to food safety and protection as a part of “Assuring Quality Care for Animals” are listed below. It is every animal owner’s responsibility to assure that proper management and welfare are at the core of animal care. By reviewing and completing the activities and records in the Ohio 4-H resource handbooks and project books for food animals, 4-H members will better understand and implement the Good Production Practices in addition to other aspects of Quality Assurance (ethics, animal welfare, food safety, and government regulations).

| Updated Good Production Practices | | Comparable Outdated GPPs |
|-----------------------------------|---|--|
| GPP 1 | Use an appropriate veterinarian/client/patient relationship (VCPR) as the basis for medication decision-making. | GPP 4 |
| GPP 2 | Establish and implement an efficient and effective health management plan. | GPP 7 |
| GPP 3 | Use antibiotics responsibly. | GPP 6 (also see new GPP 6) |
| GPP 4 | Properly store and administer animal health products. | GPP 3 |
| GPP 5 | Follow proper feed processing protocols. | GPP 9 |
| GPP 6 | Establish effective animal identification, medication records and withdrawal times. | GPP 1, 2, 6 |
| GPP 7 | Practice good environmental stewardship. | New (from QA Ethics and Animal Welfare section) |
| GPP 8 | Maintain proper workplace safety. | New |
| GPP 9 | Provide proper animal handling and care. | GPP 8 |
| GPP 10 | Utilize Tools for continuous improvement. | GPP 10 |



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GPP#1**Use an Appropriate Veterinarian/Client/Patient Relationship (VCPR) as the Basis for Medication Decision-Making**

Responsible medication decision-making is established through a current Veterinarian/Client/Patient Relationship (VCPR). This importance is based on the health of the project animal(s) as well as preventing drug residue violations, thus providing a safe and wholesome food product for consumers.

Veterinarian/Client/Patient Relationship (VCPR): This relationship requires that the veterinarian has seen and has knowledge of the animal and has discussed a health plan or any treatments with the owner. This relationship is required in order for a producer to use prescription drugs or a drug that is not specifically labeled for the animal (extra-label use).

How can leaders help youth exhibitors begin to establish a VCPR?

- ♣ *Have a veterinarian speak at a club or project meeting about health plans*
- ♣ *Bring a veterinarian along on a farm tour for the club or livestock project members*
- ♣ *To verify you have a VCPR you should keep vet bills, have a letter from the vet, and phone records.*

Label Use: Using the drug EXACTLY as stated on the label.

Extra-Label: Extra-label drug use means using an animal drug in a manner not in accordance with the approved drug labeling.

- ♣ When labeled drugs are not available to maintain adequate animal care, a veterinarian has the ability to prescribe extra-label drug use.
- ♣ Only a veterinarian with a valid Veterinarian/Client/Patient Relationship (VCPR) for the operation can direct extra-label drug use.

Prescription (Rx): Drugs that require a veterinarian's written permission for use

Veterinary Feed Directive (VFD): The VFD is a category specifically for new antimicrobial drugs used in the feed to treat disease.

DRUG RESIDUE TEST: A drug residue test can be **conducted by a veterinarian** and sent to the Ohio Department of Agriculture for analysis

*All animals that have been treated should be **identified and documentation kept** reducing the chance of drug residue entering the food chain.

Residue: is the portion of a medication that remains in the animal's tissue.

*If a drug residue is found in meat or milk, the product will **be condemned** (thrown away, unfit for human consumption)

***Identification and documentation** of all treated animals will reduce the chance for a drug residue to enter the food chain.

REGULATORY AGENCIES RESPONSIBLE FOR DRUG RESIDUE LIMITS AND TESTING:

- ♣ **Food and Drug Administration (FDA):** Responsible for regulating medicated animal feed and most animal health products.
- ♣ **United States Department of Agriculture (USDA):** Division of the federal government that enforces regulations related to agriculture.



- ♣ **Food Safety and Inspection Service (FSIS):** Division of USDA and inspects all food products (Meat, Dairy and Poultry) from animals in federally inspected packing plants and food processing facilities and examines plant sanitation.
- ♣ **Ohio Department of Agriculture (ODA):** Division of the state government that enforces Ohio regulations related to agriculture

GPP #2

Establish and Implement an Efficient and Effective Health Management Plan

Animal health is a key to food safety. Healthier animals grow more quickly and efficiently, and generally require less medical care. Developing and implementing an efficient and effective health management plan can have beneficial impacts on animals' health through the use of measures such as vaccination plans, biosecurity protocols, and emergency preparedness.

Herd health plan: A plan that is designed to address potential and current health challenges and to help prevent diseases from entering your herd or flock

Internal biosecurity: Keeping diseases of the herd or flock from spreading to other sections

- Work with your veterinarian to survey your herd or flock
- When possible, operate all-in/all-out when disinfecting between groups of animals.
- Establish a traffic pattern for both animals and people

External biosecurity: Keeping diseases out of a herd, flock, or from an animal.

- Consider supplying disposable plastic boots to all visitors.
- Require everyone to wash hands before entry into animal areas.
- Change clothes and boots after visiting other farms, livestock markets, or exhibitions before entering your facility.

Rodent and pest control: Include controlling rodents and pests as a part of animal, herd, and flock internal and external biosecurity plans.

GPP#3

Use Antibiotics Responsibly

The responsible use of antibiotics assures that food animal producers deliver a safe, wholesome product to the retail case. Understanding what is acceptable and what is not will assure that your herd/flock health program will maintain efficiency of production without over use of antibiotics.

Food animal producers use antibiotics for the following three purposes:

- ♣ To treat animals for clinical illness administered through:
 - Injections (IM, SubQ or IV)
 - Orally in feed or in water
- ♣ Antibiotics are used as sub-therapeutic doses, administered in the feed or water, as a preventative in animals that:
 - Have been or are currently exposed to infections (bacterial), or;
 - If there is a clinical outbreak pattern of disease in operations at a given time of year or a given production stage
- ♣ Some antibiotics can be used as a feed ration supplement to improve feed efficiency, accelerating growth and muscle development.

A result of **overcrowding animals** is unsanitary conditions could **increase** the need for antibiotic use that we would like to avoid.



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GPP #4**Properly Store and Administer Animal Health Products**

Freedom from drug residue violations is a component of food safety. Everyone responsible for the care of animals must be instructed on methods used to follow label directions, identify treated animals, and record treated animals. Accurate recordkeeping will allow anyone to quickly determine the correct withdrawal time has elapsed before animals leave a location.

Methods of Administering Medication

- ♣ **Oral:** Medications given through the mouth. Medication can also be administered through the water and/or feed, which is a more common method for poultry.
- ♣ **Topical:** Medications administered by applying them to the skin or on the mucous membranes of the eyes, ears, or nasal passages
- ♣ **Injectable medication:** A medication that is given using an infusion method, typically via a syringe and hollow needle
 - **Intramuscular (IM):** Injections given in the muscle
 - **Subcutaneous (SQ):** Injections given under the skin
 - **Intraperitoneal (IP):** Injections given in the abdominal cavity
 - **Intravenous (IV):** Injections given in the vein
 - **Intranasal (IN):** Injections given in the nasal passages
 - **Intramammary Infusion:** In the udder through the teat canal

Needle Size and Selection

| Species | Subcutaneous | | Intramuscular | |
|--------------------------|--------------|------------------|---------------|------------------|
| | Gauge | Length | Gauge | Length |
| Baby Pigs | | | 18 or 20 | 5/8" or 1/2" |
| Nursery Pigs | 16 or 18 | 1/2 in | 16 or 18 | 3/4 in or 5/8 in |
| Finisher Pigs | 16 | 1 in | 16 | 1 in |
| Sows or Boars | 14 or 16 | 1/2 in to 3/4 in | 14 or 16 | 1 in or 1-1/2 in |
| Calves (<300lbs) | 18-20 | 1/2 in to 3/4 in | 18 | 1 in or 1-1/2 in |
| Calves (300-700lbs) | 16-18 | 1/2 in to 3/4 in | 16-18 | 1 in or 1-1/2 in |
| Calves & Dairy (>700lbs) | 16-18 | 1/2 in to 3/4 in | 16 | 1 in or 1-1/2 in |
| Sheep & Goats | 18-20 | 1/2 in to 3/4 in | 18-20 | 1 in |
| Small Animals (Any Age) | 20-22 | 1/2 in | 20-22 | 3/4 in or 5/8 in |


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Drug Storage

- ❖ Follow proper drug storage instructions indicated on the label.
 - Always check the drug label for proper storage instructions.
- ❖ Temperature extremes or exposure to sunlight may decrease the strength of a stored drug.
 - Most vaccines and some antibiotics should be refrigerated at 40° F – 45° F.

Dosage: Measured portion of medication to be administered at a given time

Withdrawal times: Amount of time that must pass after the medication is administered before harvest. The time should be found on a Medication or Medicated Feed label.

Expiration date: Date the medication should be discarded.

Sharps: Used needles, knife blades and syringes are disposed in container called a Sharps.

For Veterinary Use Only: a drug can only be used for animals

Administering Medications

When drugs are administered properly and recorded, exhibitors will avoid drug residues. Record any medication give to exhibition animals on your **Drug Use Notification Form (DUNF)**.

GPP #5**Follow Proper Feed Processing Protocols**

What an animal eats will affect growth, health, economic return and food safety. Accidental contamination or mistakes made while mixing feeds can cause health problems in animals. These contaminants could also be found in the meat, milk, or egg products.

To produce a high quality product and prevent contamination, proper feed processing and feeding practices should be followed.

Reading Feed Tags are very important to both the animals and the care takers. Note the parts of the feed tag:

- | | |
|---|---|
| ❖ Brand and/or Product Name | ❖ Ingredients – |
| ❖ Intended Species and Production Phase (Never Feed to a Species if it's not listed) | ❖ Feeding Directions or Mixing Directions |
| ❖ Medicated Statement | ❖ Warning or Caution Statement |
| ❖ Guaranteed Analysis | ❖ Manufacturer's Name and Address |
| | ❖ Net Weight |

Read the feed label before feeding your animals! Know the age and type of animal being fed and its nutrient needs, which may change throughout its life cycle. Look closely to see if there is an active drug ingredient and what the withdrawal time is.

Feed Storage

- ❖ Design workspaces and storage areas to avoid accidental contamination of feed.
- ❖ If mixing medicated and non-medicated feeds at the same location, ensure that non-medicated feed work areas, equipment and storage areas are physically separated from medicated feed work areas.



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GPP#6**Establish Effective Animal Identification, Medication Records and Withdrawal Times**

Record keeping is a management tool that has become increasingly important. It is the first and most reliable method of disease surveillance for the food animal industry. Consumers gain confidence in their food supply when food animal producers document management practices that provide a safe and wholesome food supply. **This process begins with identifying all animals.** An identification system allows an animal to be tracked from **Birth through Harvest.** Youth exhibitors who show sheep and goats are required by law to identify their animals. Pending laws will require all food animals and poultry flocks to have identification.

Animal Identification: The process by which animals are officially identified individually or as part of a group.

Animal Tracing: Animal Disease traceability is knowing where diseased and at-risk animals are located.

Medical and Treatment Records: Are documents that record the health history of an individual animal. *What should be included in a treatment record?*

- ❖ Individual animal ID or ID of groups/pens of animals if all treated
- ❖ Date treated
- ❖ Name of product administered
- ❖ Amount of drug administered (dosage)
- ❖ Route and location of administration
- ❖ Withdrawal period
- ❖ Earliest date the animal(s) will have cleared the withdrawal period
- ❖ Identity of the person who administered the product

IDENTIFICATION AND MEDICATION RECORDS***How long should an exhibitor keep records on his/her animals?***

Youth exhibitors are required by Ohio Law to keep records for 1 year. Sheep/Goat exhibitors are required by federal law to keep records for 5 years.

Recommendations for the different species are:

| Species | Year(s) |
|-------------------------|----------------|
| Swine, Poultry, Rabbits | 1 |
| Beef, Dairy Beef | 2 |
| Sheep, Goats | 5 |
| Dairy Cows and Heifers | 5 |

What is an official USDA Scrapie identification?

The types of identifications permitted for the Scrapie program are:

- USDA provided ear tags
- USDA approved ear tags
- USDA assigned tattoos
- Registration tattoos and microchips when accompanied by a registration certificate
- Scrapie Certification Program approved ID



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TABLE 1: CHART OF IDENTIFICATION METHODS

| Method | Species | Location | Advantages | Disadvantages |
|--|-----------------------------|------------------------------------|---|---|
| Branding | Cattle | Hip, Rib, Shoulder | Permanent; individual Animal ID; freeze brands do NOT affect hide quality | Hot brands damage hide; often is a farm ID instead of individual |
| DNA | All | Hair, Feathers, Blood | Permanent; unique to each individual | Expensive; not a visible ID tool |
| Ear Notch | Sheep, Swine | Ear | Permanent; individual animal ID; easy to read with practice | Not visible from a distance; can be mistaken for rips or tears in the ear |
| Ear Tags | Cattle, Goats, Sheep, Swine | Ear | Easily read from a distance; used for daily management; inexpensive | Easily ripped from the ear leaving no ID in/on the animal |
| Electronic (EID) /Radio Frequency ID (RFID) | Cattle, Goats, Sheep, Swine | Ear, Rumen, Implant | Individual ID; not easily tamperable; computer management friendly | Expensive; requires electronic readers and equipment; not easily read from a distance |
| Neck Chains /Leg Bands | Dairy Cattle, Poultry | Rear Pastern- Dairy, Leg - Poultry | Easily visible; used for daily management; inexpensive; easy to apply | May be lost or ripped away from animal leaving no ID |
| Nose Print | Cattle, Sheep | NA | Unique individual ID; similar to fingerprint; livestock show uses | Not readily available for daily management |
| Paint Brand | Sheep, Swine | Anywhere | Easily visible from a distance; easily applied; short term ID | Not permanent; easily washed or wiped off |
| Photo/ Drawing | Dairy Cattle, Goats | NA | Used for registration on colored breeds; displays exact markings | Not useful with animals without distinct markings |
| Retinal Scanning | All | Eye | Permanent; unique to each animal | Expensive; not readily available; not a visible form of ID |
| Tattoo | All but Poultry | Ear | Permanent; not easily altered | Not visible from a distance; readily depends on application |
| Wing Bands | Poultry | Wing | Relatively permanent | Not easily visible from a distance |



GPP #7**Practice Good Environmental Stewardship**

Good environmental management practices help protect our natural resources. **The goal of environmental stewardship is to protect our natural resources (water, air and land) in all of our production practices.** Good stewardship means good business.

Stewardship: The act of caring for or improving over time
Good Environmental Livestock Production Practices (GELPPs)

Manure Management

***A good sanitation practice is to clean your animal's stall daily to remove waste.**

***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.**

What does it mean to be a Good Neighbor?

A good neighbor:

- | | |
|--|---|
| 1. Follows laws and regulations in their county. | 5. Explains what they do in their operation and why, |
| 2. Minimizes odor, dust, and noise. | 6. Helps consumers appreciate food production. |
| 3. Protects the environment. | 7. Assists neighbors in need and asks for help when they are in need. |
| 4. Takes proper care of livestock. | |

GPP #8**Maintain Proper Workplace Safety**

Safety is everyone's responsibility including exhibitors, family members, friends, and so on.

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.

Emergency Action Plan (EAP): Contains who to notify, what to say, and what actions need to be taken in case of an emergency.

GPP #9**Provide Proper Animal Handling and Care**

Providing proper quality care of your animals can help **reduce production costs, increase performance, improve product quality, and improve safety to humans and animals.**

Animals have three basic needs – **water, food, and shelter.**

Animal Movements and Behaviors

Animal movement and handling: When handling or moving animals **act calmly and avoid sudden movement**, loud noises and other actions that may frighten or excite an animal. When



handling an animal, you must consider your actions to ensure they would appear appropriate to the general public.

Flight Zone: is an imaginary circle around an animal that it considers its individual space. When a handler enters the flight zone, the animal(s) may become **tense** and want to **react**. An animal's two main instincts are **fight or flight**.

Point of balance: is located behind the **animal's shoulders**. The animals respond to a handler's approach relative to the point of balance. If a handler enters an animal's flight zone, the animal will move:

- Forward if the handler approaches from behind the point of balance.
- Backward if the handler approaches from in front of the point of balance.

Because the eyes of pigs, sheep, cattle, and goats are on the side of their head, their vision is approximately **310 degrees**, leaving a blind spot directly behind them.

Handling Equipment

Proper animal handling is also important during transportation, as transportation can be stressful for animals.

- Move animals when it is not too hot or too cold. Try early in the morning.
- Transporting when it is hot, ensure its shaded has good air movement throughout the trailer.
- Transporting when it is cold outside, have bedding on the trailer, and holes are plugged.

Animal Feeding and Daily Observation

Water is the most important nutrient requirement and is necessary for normal body function, growth and reproduction. It is important to:

- | | |
|--|---|
| 1. Provide clean, fresh, and cool water daily. | 5. Know that water requirements change depending on weather, maturity of the animal, feed consumption, and stage of production (lactation, egg laying). |
| 2. Ensure the supply of water is sufficient for the number of animals. | |
| 3. Clean watering devices on a regular basis. | |
| 4. Know the water requirements for the animal(s). | |

Average daily gain: The average amount of weight an animal gains each day over a period of time.

Feed Efficiency – Calculated as pounds of weight gained per pound of feed consumed.

Body condition score (BCS): is a tool producers can use to visually evaluate the effectiveness of the nutritional and animal health management programs of their animals. The BCS can change depending upon the breed within each species, how much feed the animal has consumed prior to scoring (fill), or the stage of the production cycle. It is one method of determining if an animal is overweight, underweight or an acceptable weight.

Daily observation record: **Daily observation** and animal care are key factors to addressing animal health and well-being and facility or management issues. Daily observation helps ensure that sick animals do not go unnoticed and that animal caretakers are doing their job. The best way to fully assess the animals' environment and health is to walk the pens daily.

***Clean and dry bedding** is an excellent insulating material and provides the animal with comfort and protection from the cold.

Ventilation: Both **air temperature** control and **air quality** can impact the well-being of your animals. These two factors can be controlled through proper ventilation management.



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Treatment pen: Once an animal has been identified as ill or injured, it may need to be moved to a treatment area.

Euthanasia: is defined as humane death occurring with minimal pain or distress. Animals that are not responding to care or unlikely to recover must be euthanized humanely. Timely euthanasia, as well as using the appropriate methods and equipment, is critical to the well-being of these animals. An animal should be considered **non-ambulatory if it refuses to stand up or if it can stand** without support but refuses to bear weight on two of its legs. Animals that have no prospect for recovery **after two days** of intensive care should be humanely euthanized.

Temperature control:

Thermoregulation is the ability to control body temperature, even when surrounding temperature is different.

Temperature is impacted by:

- Air flow (ventilation)
- Density of animals
- Humidity
- Season
- Supplemental heat or cooling sources

Comfort Zone is the range of temperature where the animal is comfortable.

An animal's body loses heat in four ways:

1. **Evaporative** – moisture lost from the animal's skin or lung surface
2. **Conductive** – transfer of heat from one object to another.
3. **Radiant** – radiation of heat from one surface to another surface not in contact
4. **Convective** – transferred along a temperature gradient between the surface temperatures of the animal and the air.

Willful acts of abuse: acts outside accepted practices that purposely cause pain and suffering including, but not limited to:

- Purposely applying prods to sensitive parts of the animal such as eyes, ears, nose, genitals or anus.
- Hitting or beating an animal
- Failure to provide minimal food, water, shelter, and care that results in significant harm or death to animals.

Shelter (The Animal's Environment)

Shelter is needed to provide animals an escape from harsh environments. Animals at different ages and stages of production **require different** amounts of space.

Stress

Knowing what an **animal's "normal" behavior** is through daily observation will help you know when they become stressed. Stressed animals will have **reduced performance**, are more **susceptible to diseases**, and have a **higher mortality rate**.

Reduce stress in show animals by:

- Handling and training an animal regularly to reduce excitement of the show
- Keeping animals on a regular feeding and exercise schedule
- Getting animals accustomed to strange or flavored water

Stress indicators may include:

- Lack of appetite
- Abnormal posture
- Slower than normal growth
- Rapid breathing
- Restlessness
- Lameness or alteration of gait



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- Trying not to mix animals at shows to avoid fighting
- Avoiding changing feed at the show

- Dull or depressed attitude
- Unusual vocalizations
- Self-isolation from pen mates

Types of Stress

• **Thermal** – factors that lead to thermal stress include temperature (heat or cold), humidity, wind, and solar radiation

- ❖ Results of air temperature, speed of air movement, humidity, insulating effects of facilities

- ❖ Extreme heat/humidity and cold

• **Physical** – caused by the physical component of an animal's environment. This includes objects and other tangible items that could cause the animal injury.

- ❖ Lack of food and water

- ❖ Lack of shelter

- ❖ Facilities that can cause injury to the animal

• **Disease** – results from the onset and spread of disease

• **Behavioral** – factors that affect normal behavior of the animal

- ❖ Being moved to a new area

- ❖ Being placed in a new group of animals

- ❖ Exposed to new environments or people (i.e., at the fair)

Animal Space and Water Requirements

| Species | Space | Comfort Zone | Water Requirements | Normal Body Temperature °F |
|---------|--|---|--|----------------------------|
| Cattle | 40-50 Ft Confinement and 400-600Ft Exercise Area | 40-65°F | 10-20 Gallons/Day | 101.5°F |
| Goat | 15 Sq Ft per animal and Exercise Area | 45-70°F | 1.5-2 Gallons/ day | 102°F |
| Chicken | 2 Sq Ft | 95°F first week, Lower 5°F each week to 70°F | 1 Pint-1 Gallon/ for 10 Birds (Increase w/ growth) | 107.4°F |
| Turkey | 5-10 Sq Ft | 100°F first week, Lower 5°F each week to 70°F | 1 Pint- 2 Gallons a day | 106°F |
| Rabbit | .75 Sq Ft per pound of Body Weight | 68-70°F | 1/4- 2 Ounces per pound | 101.3-104°F |
| Sheep | 15 Sq Ft and Exercise Area | 45-70°F | 1.5-2 Gallons per Day | 101.5-103°F |
| Swine | 12 Sq Ft | 60-75° F 90-95° F for piglet under 2 weeks old | 3-4 Gallons per Day | 102°F |

GPP #10

Utilize Tools for Continuous Improvement

The foundation of the Youth Quality Assurance program is continuous improvement. All new animal caretakers must be trained in their duties, whether caring for one or 100+ animals.

Conducting site assessments on a regular basis is an excellent way to benchmark how the animal care practices are implemented and measure the animals' well-being. There are three core areas that should be evaluated when measuring and benchmarking the well-being of your animals: (1) records; (2) facilities, and (3) animal observations. Using only one of these alone to evaluate well-being can be misleading.



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**2015 Food Animal Quality Assurance
Large Animal 12-14 Test 1 Answer Key**

1. All animals require the same amount of space throughout their lifetime.
 - a. True
 - b. **False**
2. Extra-label use is allowed for medicated feed.
 - a. True
 - b. **False**
3. Providing proper care for animals can help:
 - a. Increase production costs
 - b. **Decrease production costs**
 - c. Lower performance
 - d. Decrease product quality
4. A Veterinary /Client /Patient Relationship is important to:
 - a. Be able to attend a 4-H club meeting
 - b. **Ensure the health and well-being of your animal**
 - c. Complete your project records
 - d. Exhibit your animal at the fair
5. Medical and treatment records:
 - a. **Document the health history of an individual animal**
 - b. Should be kept for 10 years following the sale of an animal
 - c. Are not necessary for only one project animal
 - d. Are required by law to be kept for non-food producing animals
6. The ingredients listed on a feed label are listed in the following order of concentration:
 - a. All have the same levels of concentration
 - b. **From highest to lowest**
 - c. From lowest to highest
 - d. The last ingredient has the highest concentration
7. One of the best ways to assess if an animal is comfortable in its environment is by observing:
 - a. Its pen area
 - b. The outside weather
 - c. The surrounding animals
 - d. **Its behavior**

**2015 Food Animal Quality Assurance
Large Animal 12-14 Test 1 Answer Key**

8. People who visit a farm operation should:
 - a. **Wear plastic boots provided by the producer**
 - b. Roam freely from barn to barn without permission
 - c. Not be concerned about spreading disease
 - d. Wear their usual boots when visiting various farm locations

9. Animal stress can be reduced by:
 - a. Separating animals from the group
 - b. Moving them in the heat of the day
 - c. **Understanding how to handle animals**
 - d. Keeping the aisle ways dark during movement

10. Your animal's water should be:
 - a. Clean
 - b. Cool
 - c. Fresh
 - d. **All of the above**

11. To reduce the chance for a drug residue entering the food chain:
 - a. All animals should be fed a balanced ration
 - b. It is important to reduce any stress to your animal
 - c. Animal behavior should be monitored
 - d. **All treated animals should be identified, with documentation kept**

12. An animal's two main instincts when being approached in an unfamiliar situation are:
 - a. Eat or sleep
 - b. **Fight or flight**
 - c. Drink or eat
 - d. Play or fight

13. The most accurate way to identify which steer you have treated for an injury is by its:
 - a. Name
 - b. **Ear tag**
 - c. Color
 - d. Age

14. Providing proper care for animals can:
 - a. **Improve product quality**
 - b. Lower the animal's performance
 - c. Cause concern for safety to humans and animals
 - d. Lower product quality

**2015 Food Animal Quality Assurance
Large Animal 12-14 Test 1 Answer Key**

15. Proper animal handling techniques include:
 - a. Rough physical contact
 - b. Overcrowding animals in alleyways, chutes and ramps
 - c. **Acting calmly and avoiding sudden movement**
 - d. Moving animals too fast

16. Using a drug exactly as stated on the label is called:
 - a. Off Label
 - b. **Label Use**
 - c. Extra-Label
 - d. None of the Above

17. What does the symbol Rx stand for?
 - a. Restricted
 - b. **Prescription**
 - c. Over-the-counter
 - d. Extra-label

18. What relationship must a producer have to be able to use prescription drugs or extra-label use drugs?
 - a. **Veterinary/Client/Patient Relationship**
 - b. Veterinary Feed Directive Relationship
 - c. 4-H Advisor/County Educator/Fair Board Member Relationship
 - d. Nothing is required

19. What type of injection is given in the muscle of the animal?
 - a. Intravenous
 - b. Intranasal
 - c. Subcutaneous
 - d. **Intramuscular**

20. You should assess your animal's well-being:
 - a. **Every day**
 - b. Every other day
 - c. Weekly
 - d. Whenever you feel like it

21. This type of drug requires a veterinarian's written permission for use.
 - a. Over-the-Counter Drugs
 - b. Veterinary Feed Directive
 - c. Prescription Drugs
 - d. **Both b and c**

**2015 Food Animal Quality Assurance
Large Animal 12-14 Test 1 Answer Key**

22. A herd health plan is designed to:
- a. Address potential and current health challenges
 - b. Help prevent diseases from entering your heard or flock
 - c. Meet requirements of county Quality Assurance requirements
 - d. **Both a and b**
23. Non-farm animals such as rodents, wildlife, and birds can transmit diseases or disease agents.
- a. **True**
 - b. False
24. When transporting livestock, transport in a tight, closed space.
- a. True
 - b. **False**
25. What date determines when medications should be discarded or no longer used?
- a. Withdrawal date
 - b. **Expiration date**
 - c. Prescription date
 - d. Breeding date
26. A drug label contains each of the following, except:
- a. Trade Name
 - b. Dosage
 - c. Expiration Date
 - d. **Off-Label Instructions**
27. Use medication records to determine:
- a. Dam and sire of treated animal
 - b. Date of exhibition
 - c. Rate of gain
 - d. **When withdrawal times are completed**
28. Who is responsible for providing the consumer with a safe, wholesome food product?
- a. Parents/guardians
 - b. Youth exhibitors
 - c. Livestock producers
 - d. **All of the above**
29. All pre-mixed feeds should have a label that includes the following:
- a. Content of bag
 - b. Directions for proper use
 - c. Name of animal for which it is intended
 - d. **Both a and b**

**2015 Food Animal Quality Assurance
Large Animal 12-14 Test 1 Answer Key**

30. A feed product label includes all of the following, except:
- a. Product Name
 - b. **Breed of Animal**
 - c. Ingredients
 - d. Manufacturer's Name
31. Options for disease control include each of the following except:
- a. Elimination of disease
 - b. Control or manage disease
 - c. **Expose animals early**
 - d. Develop treatment plan
32. Who is responsible for proper drug administration?
- a. Exhibitors
 - b. Parents / Guardians
 - c. Producers
 - d. **All of the above**
33. Using an animal drug in a manner not in accordance with the approved drug labeling, but with the guidance of a veterinarian is called:
- a. Over-the-Counter drug use
 - b. Off Label drug use
 - c. Label Use
 - d. **Extra-Label drug use**
34. The amount of medication to be given at one time as indicated by the label is called:
- a. **Dosage**
 - b. Withdrawal time
 - c. Approved usage
 - d. Active ingredients
35. It is illegal to use an Over-the-Counter drug for anything other than labeled unless directed by a licensed veterinarian.
- a. **True**
 - b. False
36. A medication label is located:
- a. On the syringe
 - b. Inside project record book
 - c. **On the outside of the medication container**
 - d. Animal health certification forms

**2015 Food Animal Quality Assurance
Large Animal 12-14 Test 1 Answer Key**

37. What part of an animal is used as a reference point when moving animals?
- a. **Point of shoulder**
 - b. Point of hip
 - c. The animal's blind spot
 - d. The animal's head position
38. When purchasing medications:
- a. Obtain instructions from 4-H advisor
 - b. **Purchase only amount needed**
 - c. Store in a sunny, warm area
 - d. Purchase in large amounts
39. Oral administration of medications may take place through each of the following ways, except:
- a. Through the mouth
 - b. **Through the nasal passage**
 - c. By drenching guns
 - d. In feed or water
40. Water requirements of animals change depending on:
- a. Age of the animal
 - b. Stage of production, such as lactation
 - c. Weather conditions
 - d. **Both b and c**
41. Proper storage for all animal health products and medicated feeds:
- a. Causes cross-contamination
 - b. **Reduces contamination**
 - c. Increases animal and human health risks
 - d. Compromises feed quality
42. Subcutaneous injections allow for the lowest risk of damage to meat.
- a. **True**
 - b. False
43. What must you know to calculate how much to feed your animal according to the feed tag?
- a. Your animal's name and color
 - b. What class you plan to show in at the county fair
 - c. **Your animal's age and stage of production**
 - d. Your animal's breed

**2015 Food Animal Quality Assurance
Large Animal 12-14 Test 1 Answer Key**

44. After putting feed down for the animals, you should:
- a. Leave the barn
 - b. **Observe the animal's eating habits**
 - c. Hold them, so they get used to it
 - d. Start clipping their hair
45. Feed products are regulated by United States Department of Agriculture, unless medications are added, then it is regulated by the Ohio Department of Agriculture.
- a. True
 - b. **False**
46. Which of the following is true about needle sizes?
- a. The larger the number size, the larger the diameter of the needle
 - b. The smaller the number size, the smaller the diameter of the needle
 - c. **The larger the number size, the smaller the diameter of the needle**
 - d. None of the above
47. When storing feed:
- a. **Keep medicated feed separate from non-medicated feeds**
 - b. Store in open containers for easy access
 - c. Store with chemicals to keep feedstuff from spoiling
 - d. It is not necessary to consider types of containers, areas for storing, etc.
48. Medicated feeds:
- a. Should never be used
 - b. Can be used off-label with veterinarian instructions
 - c. Can be used extra-label with permission from my 4-H/FFA Advisor
 - d. **Must be fed exactly as labeled**
49. A herd health plan may also be helpful in preventing or controlling potential disease outbreaks.
- a. **True**
 - b. False
50. Drug residues could be found in milk or meat as a result of:
- a. Feeding medicated feed
 - b. Extra-label drug use
 - c. Not recording treatment
 - d. **All of the above**

**2015 Food Animal Quality Assurance
Large Animal 15-18 Test 1 Answer Key**

1. A herd health plan is designed to:
 - a. Be utilized only by your veterinarian
 - b. Address potential and current health challenges
 - c. To help prevent diseases from entering into your herd or flock
 - d. **Both b and c**

2. Animal disease traceability is:
 - a. A way to prevent diseases in animals
 - b. Not important to producers and youth exhibitors
 - c. **Knowing where diseased and at-risk animals are**
 - d. Increased economic strain on producers

3. As a part of your biosecurity plan:
 - a. You should not be concerned about spreading disease among your animals
 - b. Standard Operating Procedures are not important
 - c. It is not important to quarantine new animals brought to the farm
 - d. **Standard Operating Procedures should be in place and posted**

4. What is internal biosecurity?
 - a. Keeping disease out of your herd or flock
 - b. **Keeping disease already in one or more sections of your herd or flock from spreading**
 - c. Addressing potential internal health challenges
 - d. Addressing external health issues

5. Who is responsible for properly administering animal health products?
 - a. Exhibitors
 - b. Parents
 - c. **Exhibitors, parents, guardians, caretakers**
 - d. No one

6. 4-H advisors or FFA instructors can help you begin to establish a VCPR by:
 - a. Asking a veterinarian to speak about animal health plans at a club meeting
 - b. Bringing a veterinarian along on a livestock project farm tour
 - c. Contacting an Ohio Department of Agriculture representative to speak
 - d. **Both a and b**

**2015 Food Animal Quality Assurance
Large Animal 15-18 Test 1 Answer Key**

7. What does cGMP stand for?
 - a. Current Good Management Practices
 - b. Current Good Maintenance Practices
 - c. Current Good Medicated Practices
 - d. **Current Good Manufacturing Practices**

8. The first step in documenting the use and safety of food products is to:
 - a. Feed animals a balanced ration
 - b. **Identify animals**
 - c. Provide shelter for animals
 - d. Keep accurate records

9. It is legal for a veterinarian to use a medication in a way other than directed by the label.
 - a. **True**
 - b. False

10. Protecting the health of an animal and the quality of consumer products starts with:
 - a. Feeding the most expensive feed
 - b. Buying premixed feeds
 - c. **Selecting and feeding high quality feeds**
 - d. Never mixing your own feed

11. Using an animal drug in a manner not in accordance with the approved drug labeling, but with the guidance of a veterinarian is called:
 - a. Over-the-Counter drug use
 - b. Off Label drug use
 - c. Label Use
 - d. **Extra-Label drug use**

12. A biosecurity plan includes barn sanitation practices, rodent control, caretaker entry policies, visitor entry policies and general farm security measures.
 - a. **True**
 - b. False

13. Administering medication means:
 - a. **The route the medication is given**
 - b. How much medication should be given
 - c. Where the medication should be given
 - d. Who should give the medication

**2015 Food Animal Quality Assurance
Large Animal 15-18 Test 1 Answer Key**

14. Drug compounding:
- a. Is permitted by producers as well as veterinarians
 - b. Makes it easier to set drug withdrawal times
 - c. **Is the mixing of two or more FDA-approved drugs to make a different medication for the needs of a specific animal**
 - d. Both b and c
15. Administering medication in the abdominal cavity of animals:
- a. **Should be done only upon veterinary instruction and guidance**
 - b. Is prohibited
 - c. Can be done by anyone without the guidance of a veterinarian
 - d. Can only be given by a veterinarian
16. Unmedicated feeds:
- a. Do not need a label
 - b. Will have the same label as a medicated feed
 - c. **Should have a different label than a medicated feed**
 - d. Will have storage directions on the label
17. Extra-label use of medicated feeds:
- a. Can be done under the direction of a veterinarian
 - b. Can be done as long as you follow the label directions
 - c. **Is illegal**
 - d. Can be done at anytime
18. Medicated feed labels are regulated by:
- a. Ohio Department of Agriculture (ODA)
 - b. United States Department of Agriculture (USDA)
 - c. Food Safety and Inspection Service (FSIS)
 - d. **Food and Drug Administration (FDA)**
19. Animals should have enough space to:
- a. Stand up
 - b. **Stand up, lie down and turn around**
 - c. Lie down
 - d. Turn around
20. Some antibiotics can be used as a feed ration supplement to improve feed efficiency.
- a. **True**
 - b. False

**2015 Food Animal Quality Assurance
Large Animal 15-18 Test 1 Answer Key**

21. A combination of management practices designed to prevent the introduction and transmission of disease-causing agents into your herd or flock is:
- Biosecurity**
 - Herd health plan
 - Internal biosecurity
 - External biosecurity
22. A drug label will have all of the following on it:
- Name of the drug, species and class of animal, and color of product
 - Withdrawal time and diameter of the bottle
 - Name of the drug, cautions and warnings, lot number, and expiration date**
 - Veterinarian signature and the birth date of the animal for which the drug is prescribed
23. When deciding whether or not to use an antibiotic, the first contact should be:
- 4-H advisor
 - Veterinarian**
 - Producer
 - Parent/guardian
24. You should store medications:
- In a different container than what it came in and not labeled
 - In a syringe
 - In the original container with the product label**
 - On dash of your truck
25. To reduce the chance for a drug residue entering the food chain:
- All animals should be fed a balanced ration
 - It is important to reduce any stress to your animal
 - Animal behavior should be monitored
 - All treated animals should be identified, with documentation kept**
26. After animal health products have been administered, you should keep your records for:
- At least five years
 - At least one year**
 - You don't have to keep the records once the withdrawal time is complete
 - At least 6 months
27. What document does ODA require youth exhibitors to complete before exhibiting a food animal at the fair?
- Drug Use Notification Form**
 - Certificate of Veterinary Inspection
 - Farm Medication Plan
 - ~~d. Animal Identification Records~~

**2015 Food Animal Quality Assurance
Large Animal 15-18 Test 1 Answer Key**

28. When moving animals you should:
- a. Make sure pathways are clear of obstructions
 - b. Be aware of and use the flight zone of your animal(s)
 - c. Not be yelling, poking, hitting or shocking your animal.
 - d. **All of the above**
29. Oral medications are always in a liquid form.
- a. True
 - b. **False**
30. Drugs for lactating and non-lactating animals:
- a. Can be stored together
 - b. There are no such drugs
 - c. **Should not be stored together**
 - d. Can be stored in syringes
31. Sick animals should:
- a. Stay penned with other animals to reduce any stress
 - b. **Be separated from other animals and placed in confinement**
 - c. Be allowed to mingle with healthy animals
 - d. Be treated only if unable to stand or move
32. The method used to determine if an animal is overweight, underweight or at an acceptable weight is called:
- a. Feed Condition Scoring
 - b. Body Evaluation
 - c. Daily Observation
 - d. **Body Condition Scoring**
33. What is a feed additive?
- a. **A substance added to feed rations to improve feed efficiency, promote growth or to prevent or treat disease**
 - b. The amount of feed to be given at one time as indicated by the feed tag
 - c. A commercial name, given by the manufacturer, for a medication added to the feed
 - d. A feedstuff that never has a withdrawal time
34. External biosecurity is:
- a. **Keeping disease out of your herd or flock**
 - b. Keeping disease already in one or more sections of your herd or flock from spreading
 - c. Addressing potential internal health challenges
 - d. Addressing external health issues

**2015 Food Animal Quality Assurance
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35. To reconstitute vaccines, you should:
- a. Use the needle that you would use to administer the product
 - b. Pour the vaccine in a bowl
 - c. You should not have to reconstitute vaccines
 - d. **Use a transfer needle**
36. Intramuscular injections allows for the lowest risk of damage to meat.
- a. True
 - b. **False**
37. Acts outside normal accepted production practices that intentionally cause pain and suffering are called:
- a. Humane treatment of animals
 - b. **Willful acts of abuse**
 - c. Euthanasia
 - d. Acts of violence
38. Which needle would you pick to administer an intramuscular injection into a feeder pig?
- a. 20 x ½"
 - b. **16 x 1"**
 - c. 14 x ½"
 - d. 14 x 1"
39. Needle use guidelines include:
- a. Disposing of the needles in the trash can
 - b. Allowance of using needles once they are dropped on the floor
 - c. **Never straightening a bent needle**
 - d. Only changing needles after they become bent, burred or cracked
40. Proper storage of medicated and non-medicated feeds:
- a. Do not have to be stored separate
 - b. Are not affected by moisture
 - c. **Should be kept separate with separate feeding instruments**
 - d. Are not affected by temperature
41. To handle animals properly when they are being moved, you should:
- a. Keep objects in your animals' path
 - b. **Know your animals' flight zones**
 - c. Only work with them when you want to move them
 - d. Keep the area dark so your animals won't see daylight and run

**2015 Food Animal Quality Assurance
Large Animal 15-18 Test 1 Answer Key**

42. The Veterinary Feed Directive is a category specifically for new antimicrobial drugs used in the feed to treat disease.
- a. **True**
 - b. False
43. When giving a subcutaneous injection as opposed to an intramuscular injection, you should use:
- a. A longer needle, 2 inches or more
 - b. A slightly bent needle to facilitate better angle for penetration of the skin
 - c. A larger diameter needle to assure fast delivery
 - d. **A shorter needle, 1 inch or less**
44. Euthanasia of a food-producing animal may need to be considered when:
- a. There is no prospect for recovery after two days of intensive care and treatment
 - b. An animal is severely injured or non-ambulatory with the inability to recover
 - c. An animal is showing signs of full recovery
 - d. **Both a and b**
45. Which type of injection does not require a needle?
- a. **Intramammary Infusion**
 - b. Intravenous
 - c. Intraperitoneal
 - d. Subcutaneous
46. What can you do to reduce the risk of cross contamination?
- a. Properly clean feed mixing equipment
 - b. Store medicated and non-medicated feeds separate
 - c. **Both a and b**
 - d. None of the above
47. Important transportation guidelines include:
- a. Length of transportation doesn't matter
 - b. **Transporting early or late to avoid extreme heat during the summer months**
 - c. Transportation in extreme cold is acceptable
 - d. The more animals you can fit on the trailer in the cold weather is better for more heat transfer among the animals
48. When introducing new animals into your herd or flock, you should:
- a. Mix them right away with your other animals to get them used to each other
 - b. Isolate new stock for one day
 - c. **Isolate the new stock for at least 10 days**
 - d. Keep them separate for one month

**2015 Food Animal Quality Assurance
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49. FAD stands for:
- a. Food and Animal District
 - b. **Foreign Animal Disease**
 - c. Food and Animal Disease
 - d. Food and Agriculture District
50. cGMP's are designed to:
- a. Prevent feed contamination
 - b. Provide reasonable assurance of proper medicated feed manufacturing
 - c. Ensure safe, wholesome meat for human consumption
 - d. **All of the above**