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COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Northwest Ohio Quality Assurance Training

Paulding County

THE OHIO STATE UNIVERSITY
EXTENSION

What is Quality Assurance?

Let's Define Quality

How good or bad something is

A characteristic that someone or something has

A high level of value or excellence

Let's Define Assurance

The State of being assured: such as a being certain in the mind, confidence of mind or manner, security

Something that inspires or tends to inspire confidence

The act or action of assuring someone or something such as a pledge or guarantee

Now let's put them together

Quality + Assurance

A high level of value or excellence guaranteed

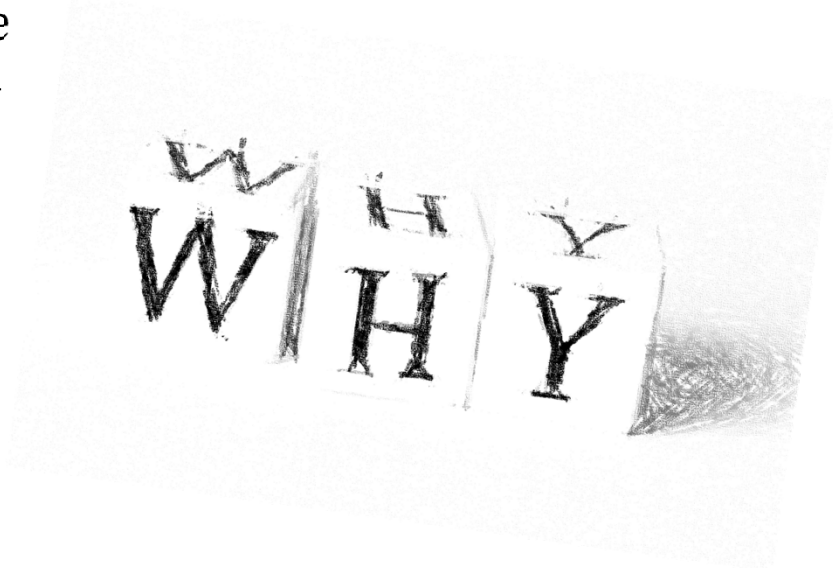

Good
Production
Practices

Why Does it Matter?

Good Production Practices matter because you, as someone raising livestock, is a food animal producer and must follow the same regulations as any adult food animal producer.

The consequences for not following the rules and laws include:

- Prosecution
- Being banned from the fair
- Loss of all award monies
- Fines



Regulatory Agencies

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United States Department of Agriculture (USDA)

Food and Drug Administration (FDA)

Environmental Protection Agency (EPA)

The Food Safety and Inspection Service (FSIS)

Ohio Department of Agriculture (ODA)

Food Safety & the Public

The public takes food safety very seriously.

The public wants to know where their food comes from and how it is raised.

Violations in food animal production cause concern and changes the public perception of youth food animal programs and the animal food industry as a whole.

The most public arena for the food animal industry are our county fairs.

Your actions impact how the public looks at the food animal industry as well as food quality and safety.

You represent your organization, club, county, the industry, your family, and yourself.

Before you act, ask yourself these questions…

- Does what I am about ready to do…
  - Break FDA, State, or Federal laws?
  - Hurt the animal?
  - Falsely represent the animal?
- Will I have to lie to cover up what I am about ready to do?
- Would the public be upset if they knew what I am about ready to do?
- Will what I am about ready to do keep the food products from this animal marketable?
- Would I eat the food that is being produced from this animal?

Who is Responsible for Food Safety?

Everyone is Responsible!

- We, as livestock producers, must be mindful of what we are doing that will affect the safety of the food we are producing.
- We need to remember that others who are helping with the project(s) are also responsible for safe products entering the production chain.

Food Safety Hazards

- Chemical Safety – Residues from drugs and pesticides
- Physical Safety – Bruising, injection site blemishes, stress, and contamination which usually comes from manure
- Microbial – Bacteria that could cause foodborne illness such as Salmonella, E. Coli, and Listeria

What can I do to ensure food safety?

- Supply the packer/processor with animals and/or food products free from drug and chemical residues as well as physical hazards
- Be aware of withdrawal times for all medications that are given to our animals

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Check-In Time

Three questions will now be shown to you. All questions must be answered. Not answering the questions may mean you will have to complete QA training again. If you have more than one person sitting with you right now, work together to answer the questions. You will be given a maximum of three minutes to answer this set of questions.

Establish and Implement an Efficient and Effective Health Management Plan

The Ohio State University
Extension

Reasons to have an Animal Health Management Plan

- To reduce risk of disease
- To reduce risk of drug residues
- Improve animal health and well-being
- Increase production and efficiency
- It costs less money to prevent than to treat
- Establishes vaccination plans, biosecurity protocols, & emergency preparedness

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An Efficient and Effective Health Management Plan Includes...

- VCPR
- Herd/Flock Health Plan
- Biosecurity Protocols
- Emergency Preparedness

Veterinarian/Client/Patient Relationship (VCPR)

- It is important to establish a VCPR to manage the health of project animal(s) and to prevent drug residues.
- In order to establish a VCPR, the veterinarian must do regular observations of your animal(s). They will also help you create a health plan for your animal(s).

Herd/Flock Health Plan

A herd/flock health plan is created to address potential and current health challenges, and to help prevent diseases from entering your herd/flock.

Work with your veterinarian to develop vaccination and parasite control plans specifically for your animal(s).

A herd/flock health plan can also be beneficial in preventing or controlling a potential disease outbreak.

Create a schedule of regular health checks to review vaccination and treatment records, and to discuss any health concerns with your veterinarian.

Biosecurity Plan

A biosecurity plan is designed to prevent introduction and transmission of diseases into a herd/flock.

A good biosecurity plan should include:

- Barn sanitation
- Rodent control
- Caretaker entry policies
- Visitor entry policies
- General farm security

Diseases can be transmitted in many ways…

- Rodents, wildlife, and birds
- Pets
- Vehicles and equipment
- People
- New animals
- Clothing and shoes
- Air

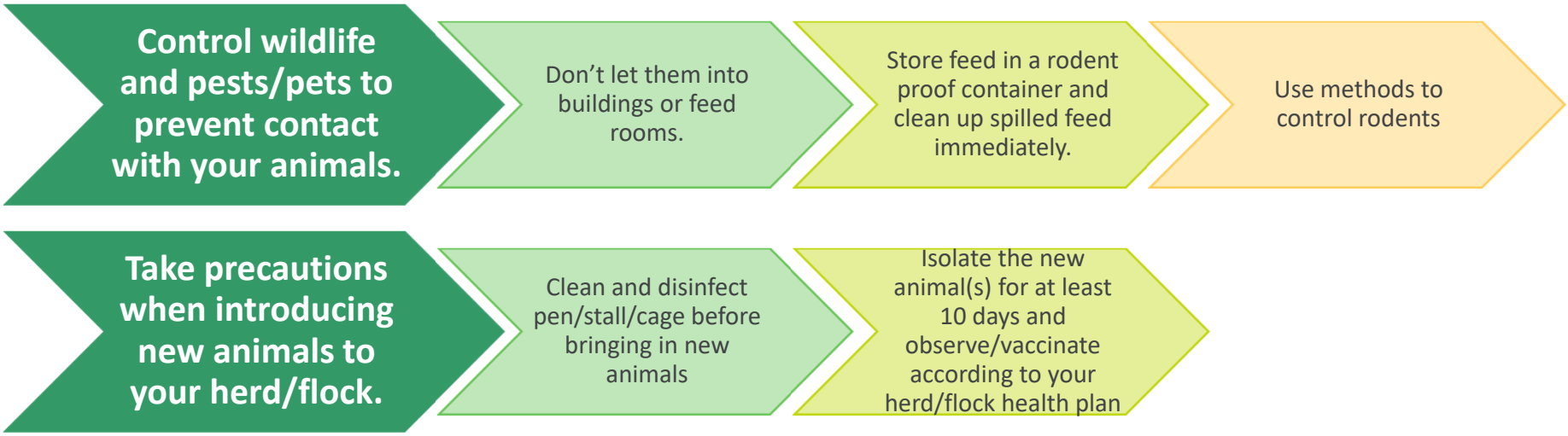
Herd/Flock Health Plan

Vaccination Plan

- Always request health records when purchasing animals! This will help your veterinarian determine what needs to be included in your specific health plan.
- Exhibiting animals at the fair increases their risk of being exposed to diseases due to them being around animals from other sources. A vaccination plan can help lower that risk!

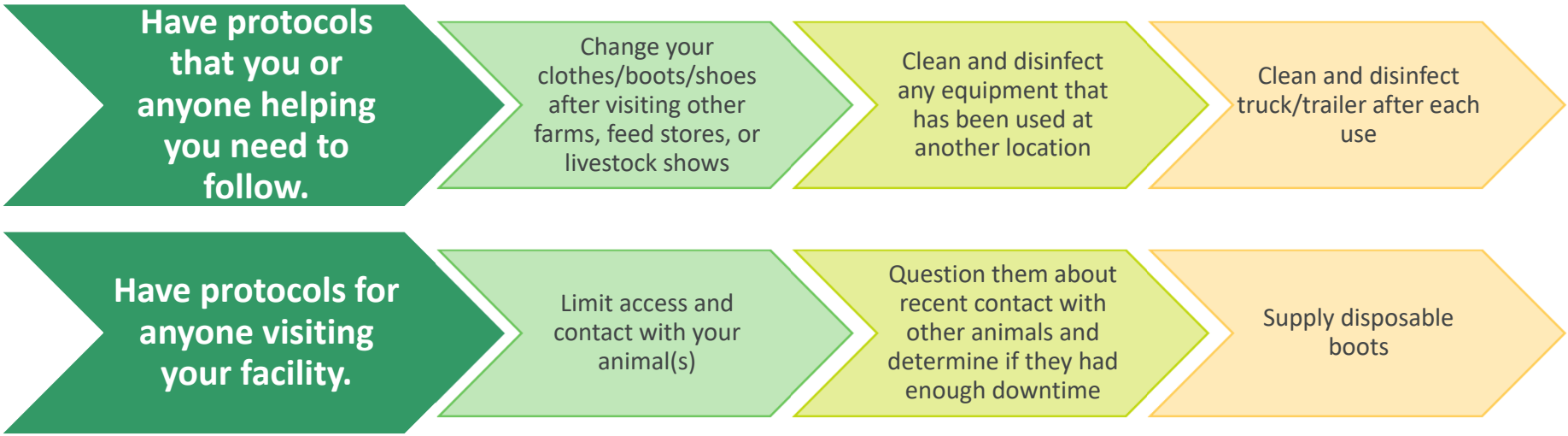
Biosecurity Plan

External Biosecurity – Keeping diseases out of the herd/flock



Biosecurity Plan

External Biosecurity – Keeping disease out of the herd/flock



Biosecurity Plan

Internal Biosecurity – Keeping diseases from spreading

Work with your veterinarian when you have sick animals

Isolate sick animals if possible

Have clothes/shoes/boots that are only worn to the barn

Disinfect equipment after each use to prevent any spread

Establish a traffic pattern to prevent exposure

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Emergency Preparedness

Have a written Emergency Backup Plan in case of the following:

- Natural Disaster
- Fire
- Severe Weather
- Power Outage

Post phone numbers for the fire department, police, your veterinarian, and yourself somewhere in your facility.

Be aware of Foreign Animal Disease(s) (FAD).

Be aware of Zoonotic Disease(s) which are diseases that can be passed between humans and animals.

Report any known outbreaks to your veterinarian and/or ODA

Properly Store and Administer Animal Health Products

Good Production Practice #4

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Proper Drug Administration

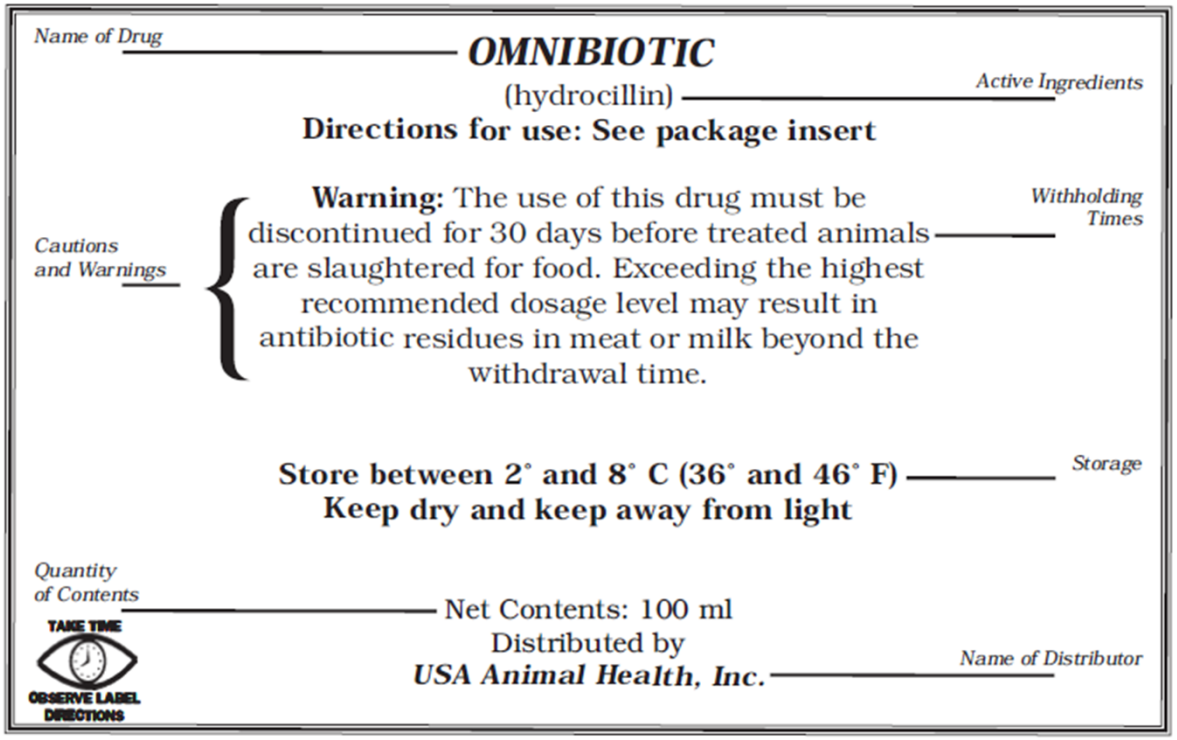
- A primary responsibility of all food animal producers is to produce safe food which includes being free from drug residue.
- You, as a food animal producer, need to know where to find a withdrawal time on a medication label, how to calculate when the withdrawal is complete and when it is safe to market an animal.
- All food animal producers are responsible for following medication label directions or directions provided by a veterinarian under a VCPR.

Responsible Drug Use

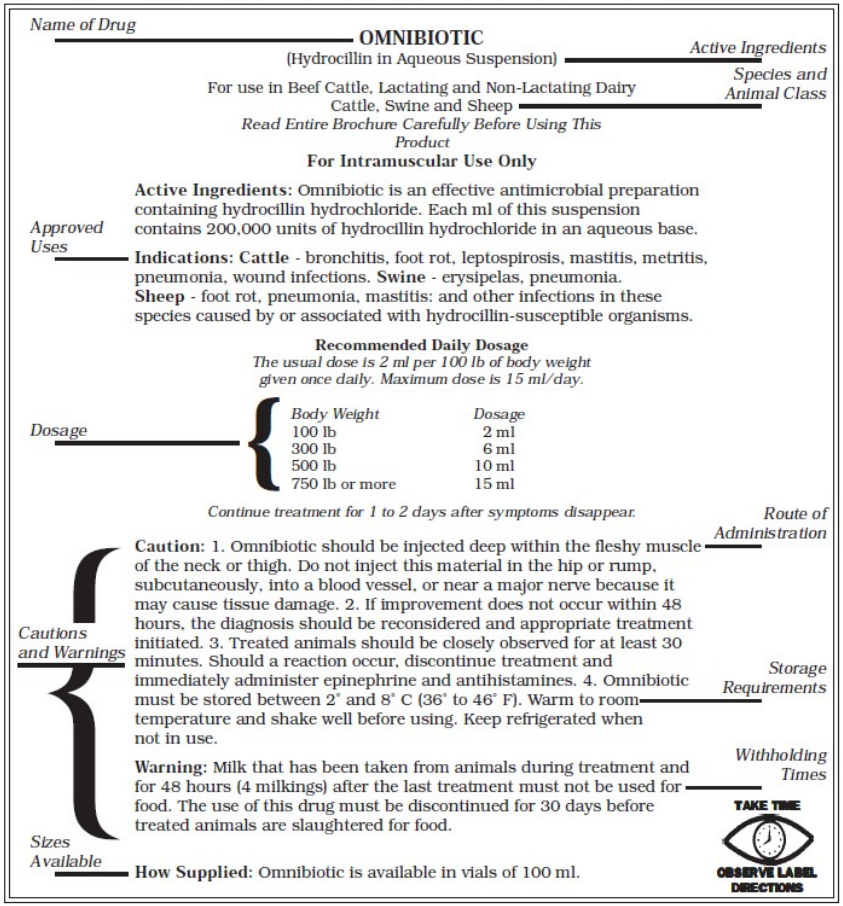
It is your responsibility to:

- Read, understand, and follow medication label directions
- Keep and know medication records and animal ID treatment status of ALL animals
- Identify ALL treated animals (refer to GPP #6)
- Keep records to assure proper withdrawal times for an animal

Medication Label



Medication Insert



Name of Drug

OMNIBIOTIC

(Hydrocillin in Aqueous Suspension) — Active Ingredients

For use in Beef Cattle, Lactating and Non-Lactating Dairy Cattle, Swine and Sheep — Species and Animal Class

Read Entire Brochure Carefully Before Using This Product

For Intramuscular Use Only

Active Ingredients: Omnibiotic is an effective antimicrobial preparation containing hydrocillin hydrochloride. Each ml of this suspension contains 200,000 units of hydrocillin hydrochloride in an aqueous base.

Approved Uses

Indications: Cattle - bronchitis, foot rot, leptospirosis, mastitis, metritis, pneumonia, wound infections. **Swine** - erysipelas, pneumonia. **Sheep** - foot rot, pneumonia, mastitis: and other infections in these species caused by or associated with hydrocillin-susceptible organisms.

Recommended Daily Dosage

The usual dose is 2 ml per 100 lb of body weight given once daily. Maximum dose is 15 ml/day.

Dosage

Body Weight	*Dosage*
100 lb	2 ml
300 lb	6 ml
500 lb	10 ml
750 lb or more	15 ml

Continue treatment for 1 to 2 days after symptoms disappear.

Route of Administration

Cautions and Warnings

Caution: 1. Omnibiotic should be injected deep within the fleshy muscle of the neck or thigh. Do not inject this material in the hip or rump, subcutaneously, into a blood vessel, or near a major nerve because it may cause tissue damage. 2. If improvement does not occur within 48 hours, the diagnosis should be reconsidered and appropriate treatment initiated. 3. Treated animals should be closely observed for at least 30 minutes. Should a reaction occur, discontinue treatment and immediately administer epinephrine and antihistamines. 4. Omnibiotic must be stored between 2° and 8° C (36° to 46° F). Warm to room temperature and shake well before using. Keep refrigerated when not in use.

Storage Requirements

Warning: Milk that has been taken from animals during treatment and for 48 hours (4 milkings) after the last treatment must not be used for food. The use of this drug must be discontinued for 30 days before treated animals are slaughtered for food.

Withholding Times

TAKE TIME

OBSERVE LABEL DIRECTIONS

Sizes Available

How Supplied: Omnibiotic is available in vials of 100 ml.

Proper Drug Storage

Always read the label!

Proper storage is important because:

- It reduces the chances of contamination
- It reduces the risk to health for people and animals
- It ensures they remain effective

Proper Drug Storage

Improper Drug Storage

Neglecting to read and follow storage instructions could be hazardous to you and your animals!

Improper storage could result in:

- Poor treatment response
- Mistakes in determining withdrawal times
- Contamination of medication
- Risking the health of your animal by using a medication not meant for that stage of production or for that species

Administering Medication

- Exhibitors, parents, guardians, and producers are all responsible and should work together as a team for proper administration of medications to animals.
- When drugs are administered properly and recorded, exhibitors will avoid drug residues.
- Record any medication given to exhibition animals on your Drug Use Notification Form (DUNF) if their withdrawal time has not elapsed.

Administering Medication

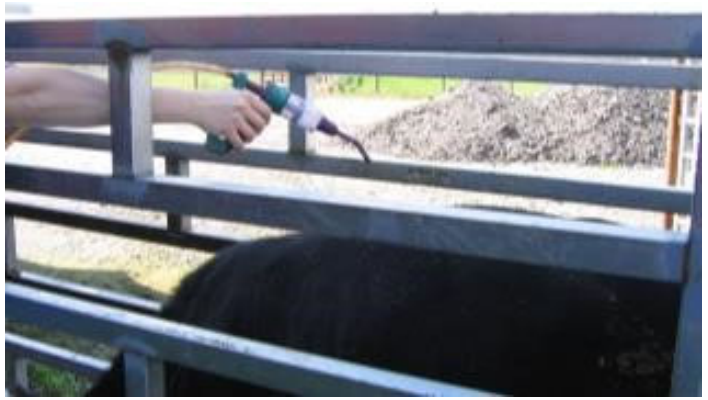
Oral – Medication given through the mouth

- Oral medication can be administered by drenching tubes, balling guns, or oral dose syringes.
- They can also be administered through the feed and/or water, especially when medicating a large group.

Administering Medication

Topical – Applied on the skin or the mucous membranes of the eyes, ears, or nasal passages

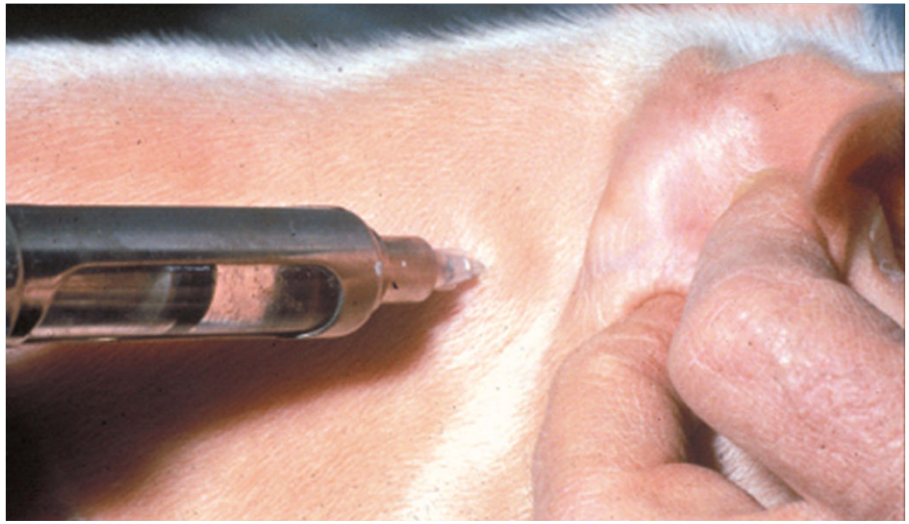
- Topical medication can be an ointment, spray, dusts, pour-on, or dip.
- Most topical medications are used for parasite control.
- Check if product is approved by the FDA for use on food animals.

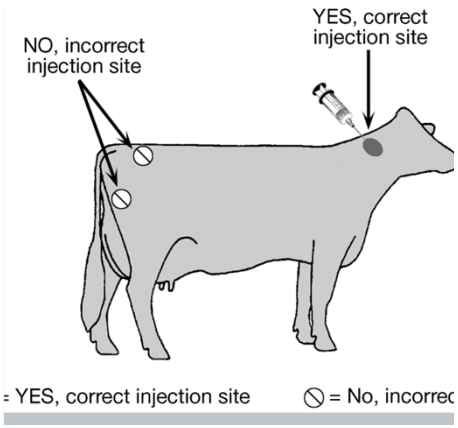


Administering Medication

Injection – An infusion method to deliver medication

- Injections are useful when treating individual animals.
- If an animal is too sick to eat or drink, an injection may be the only way to treat them.
- Proper restraint may be necessary when giving injections.
- Injections present a risk of broken needles and injection-site reactions.
- Select the proper injection site!





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Proper Injection Sites

Make sure you select the proper injection site based on species, animal age, and medication label guidelines

Administering Medication

Types of Injections

Intramuscular (IM)	In the muscle
	Use IM injections when indicated as the best route of delivering the medication according to the label
Subcutaneous (SQ)	Under the skin
	Tent the skin and inject into a pocket created under the skin
	Implants – given in the ear of cattle
Intraperitoneal (IP)	In the abdominal cavity
	Should ONLY be used upon veterinary instruction and guidance

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Administering Medication

Types of Injections

Intravenous (IV)	In the vein
	Should ONLY be used upon veterinary instruction and guidance
Intranasal (IN)	In the nasal passages
	Does not use a needle
Intramammary Infusion	In the udder through the teat canal
	Does not use a needle

Needle Usage Guidelines

- Evaluate the quality of the needle you are using including the hub, shaft, and bevel.
- The needle should be free of chips, cracks, or burrs.
- Change needles frequently, preferably after each animal.
- The needle should NOT be bent. Change bent needles immediately, do NOT attempt to straighten them.
- Retrieve dropped needles and immediately dispose of them properly.

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Needle Size and Selection

	Subcutaneous		Intramuscular	
	Gauge	Length	Gauge	Length
Baby Pigs			18 or 20	5/8 in or 1/2 in
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 (<300 lbs)	18-20	1/2 in to 3/4 in	18	1 in or 1-1/2 in
Calves (300-700 lbs)	16-18	1/2 in to 3/4 in	16-18	1 in or 1-1/2 in
Calves & Dairy Cattle (<700 lbs)	16-18	1/2 in to 3/4 in	16	1 in or 1-1/2 in
Sheep and Goats	18-20	1/2 in to 3/4 in	18-20	1 in
Small Animals (all ages)	20-22	1/2 in	20-22	3/4 in or 5/8 in

Needle Usage Guidelines

- Shorter needles are used for SQ injections
- Longer needles are used for IM injections
- Smaller needles are used for younger and smaller animals
- Select the smallest needle size possible for an injection because it causes less damage

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Proper Disposal of Sharps

- Used needles, knife blades, and syringes are called sharps.
- Sharps must be disposed of properly to prevent environmental contamination and injury to fellow workers, children, waste handlers, and livestock.
- Dispose sharps in a rigid puncture-resistant container immediately after use.
- Sharps containers must be clearly labeled as a biohazard waste container.
- Securely tighten and seal the cap or lid with heavy tape once the container is full.

Proper Disposal of Animal Health Products

- All animal products must be properly handled and disposed of to minimize environmental exposure.
- Do NOT put unused antibiotics in sewage systems.
- Regulations for disposal of unusable antibiotics vary from state to state.

Follow Proper Feed Product Protocols

Good Production Practice #5

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Feed Quality

Protecting the health of an animal **and** the quality of consumer products starts with selecting and feeding high quality feeds.

Only purchase feed with a Guaranteed Analysis listed on the feed tag.

It is important for youth to have an awareness of proper hygiene when handling feed, techniques for missing and using both medicated and non-medicated feeds, proper labeling, and recordkeeping practices.

Medicated Feed and Current Good Manufacturing Practices (cGMPs)

- cGMPs are a set of guidelines for processing medicated feed
- cGMPs are designed to:
  - Prevent feed contamination
  - Provide reasonable assurance the medicated feed is manufactured accurately
- cGMPs must be followed to help ensure safe, wholesome meat for human consumption
- cGMPs provide standards for:
  - Buildings and grounds
  - Equipment
  - Workspace and storage areas
  - Product quality assurance
  - Labeling
  - Recordkeeping

Medicated Feeds

Special Requirements

Consult veterinarian or nutritionist with questions to calculate feeding rate per label instructions

Extra-label use of medicated feeds is ILLEGAL

Must comply with federal residue levels for feed

Identify animals receiving medicated feeds

Record any medicated feeds given to exhibition animals on your Drug Use Notification Form (DUNF)

A Veterinarian Feed Directive (VFD) is required for any feeds with antibiotics or for adding it to animal's drinking water

Guidelines for Good Feeding Practices

Good Housekeeping

- Facilities should be kept clean and maintained
- Any feed spills should be cleaned up immediately

Feed Storage and Handling

- Store medicated and non-medicated feed separately
- All medicated feeds should be labeled
- Protect feed from moisture
- Control rodents, birds, wildlife, and pests

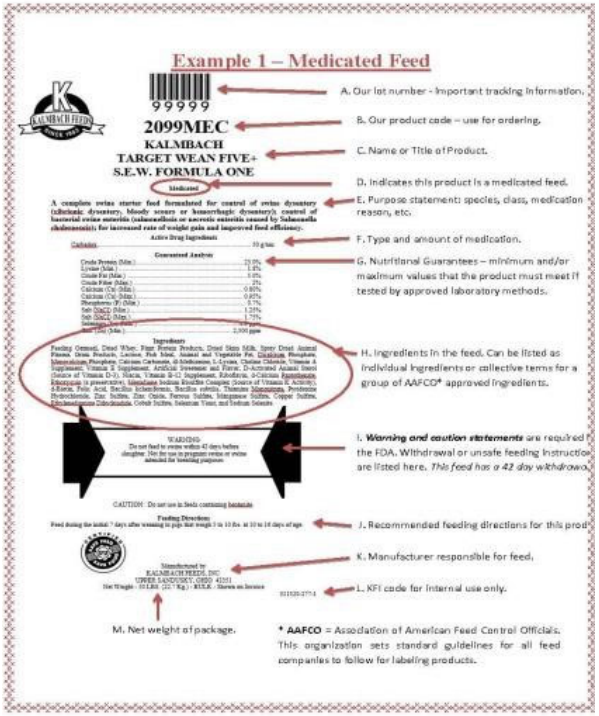
Clean and Safe Environment

- Clean mixing equipment between each batch if you mix your own feed
- Use different feed scoops and other equipment for medicated feed
- Clean feeders following the use of medicated feed

Guidelines for Good Feeding Practices

Labels

- Always read the label!
- Labels are regulated by the USDA unless medications are added
- Medicated feed labels are regulated by the FDA
- Labels must appear on all commercial feeds and include an ingredients list



Recordkeeping

- Record use of medicated feeds
- Keep written records of feed formulation, delivery date, method, carrier, and any observations made about the feed
- Keep records for 1 year for swine, sheep, goats, and poultry
- Keep records for 2 years for beef and dairy

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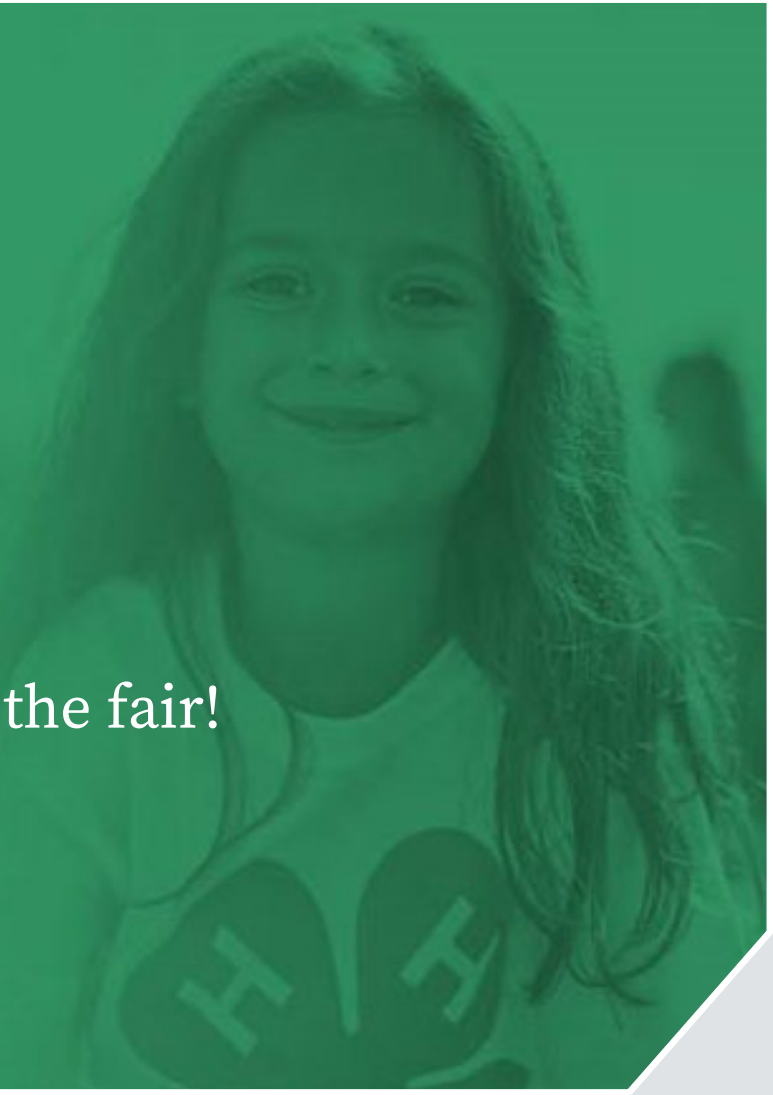
Good Luck With Your Project This Year!

We can't wait to see all your hard work at the fair!



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