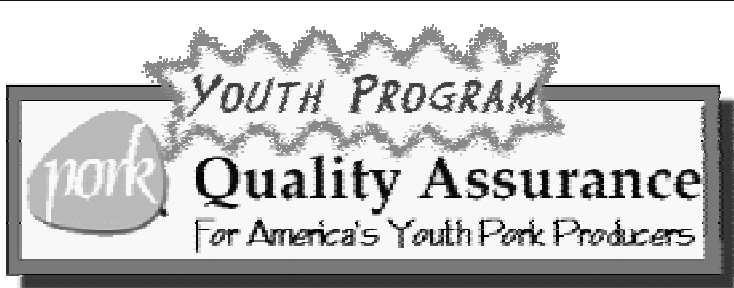




BEGIN Part 1 of the Slide Set:



This script is divided into two 50-minute segments. The first section is completed after the self review. Adding activities appropriate for the age group you are teaching will lengthen the program.

Please refer to program information in the notebook for activities.



YOUTH PROGRAM
Quality Assurance
For America's Youth Pork Producers

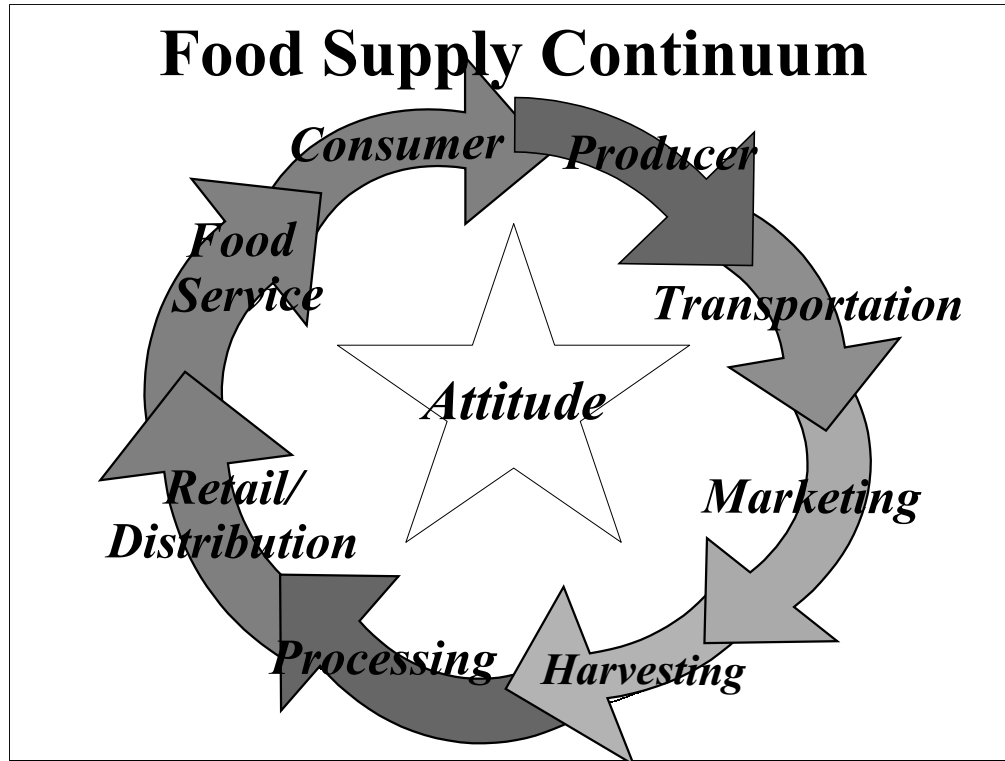
- **Voluntary educational program started in 1989**
- **Prevents violative drug residues**
- **Increases food safety awareness**



PQA stands for Pork Quality Assurance. The PQA Program was started in 1989 by the National Pork Producers Council as a voluntary educational program for producers.

In the mid 1980's meat packers were seeing a problem with unacceptable drug residue levels in animals.

This program is designed to increase food safety awareness by reminding pork producers where they fit into the food supply chain.



In the food supply continuum, everyone is responsible for the safety of the product. Each segment relies on each other to make sure the product remains safe. Pork producers, like yourselves, start the cycle by raising pigs that are free from residues by correctly using animal health products and medicated feeds. They also properly transport and care for the hog until it is marketed. At the packing plant, the packer harvests and processes the product.

Pork then enters the food supply chain through retail and distribution companies like Sysco or Hormel. Pork is also distributed through food service restaurants.

Finally the pork product reaches the consumer, who is also responsible for food safety. Consumers should properly store pork, for example keeping ham lunchmeat in the refrigerator to keep it safe. If a consumer buys a product that should be cooked, such as a pork loin, they should follow correct cooking instructions for temperature and time.

As the chain continues, consumers ultimately affect producers by demanding a high quality product.

Suggested Activity: Food Supply Continuum Puzzle

Why Pork Quality Assurance ?



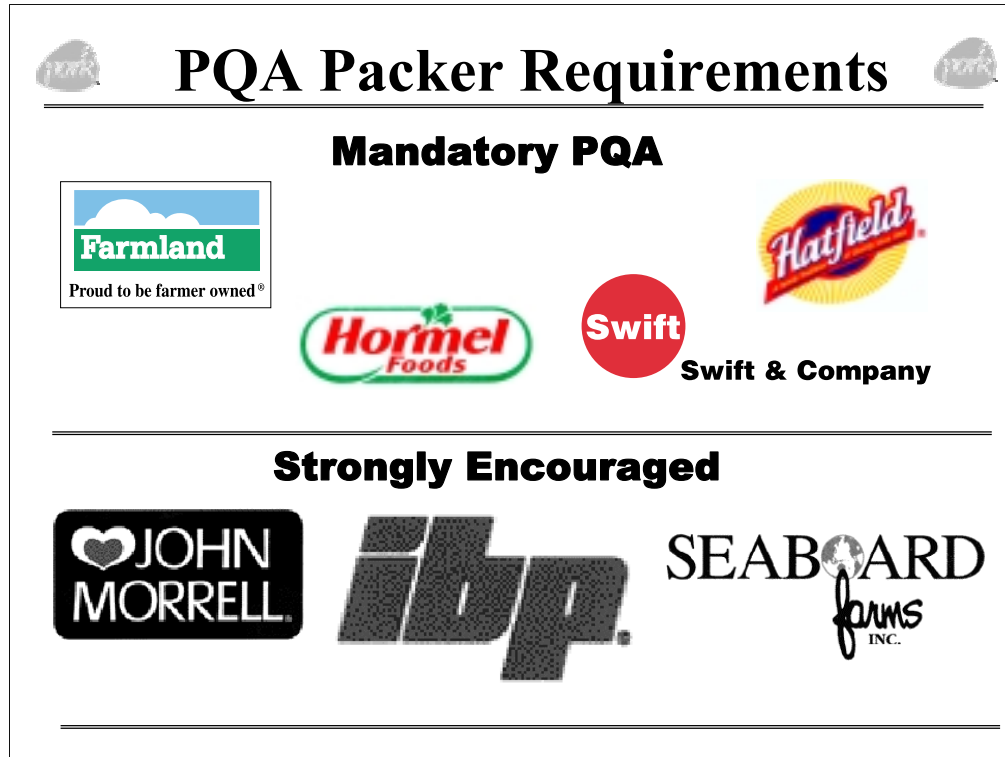
- **Improves swine care and management practices**
- **Avoids violative drug residues**
- **Decreases production costs**
- **Increases awareness of food safety**

You may be asking yourself, “Why should I go through Pork Quality Assurance?” This answer is easy. The PQA program provides many benefits to the youth producer. By following a PQA program, you are improving your swine care and management practices. By following good health, nutrition, and management procedures you can make sure your pigs perform at their highest level, and are a safe, wholesome pork product for consumers.

This program focuses on avoiding violative drug residues. When you are knowledgeable about drug usage, withdrawal times, and administration, you can produce a safer product for consumers.

PQA helps decrease product costs because you may be able to eliminate the use of some animal health products, which are quite expensive.

PQA also increases awareness of food safety. Pork producers are an important part of the food supply chain. The care you give your pigs at your farm, during transport, and at the show will affect the products consumers can buy.



Pork Quality Assurance is very important because some packers are demanding that the pigs they receive come from PQA certified producers. Four major pork plants already have mandatory PQA requirements for their pork. This means, they will not purchase a pig unless it comes from a producer who is PQA certified. These plants include Farmland, Hatfield, Hormel, and Swift.

Three other plants “Strongly Encourage” PQA programs, and may move to mandatory PQA requirement in the future. These plants include John Morrell, IBP, and Seaboard Farms.

Stock shows and county fairs are always searching for packers that will purchase your show pigs. Packers have expressed concerns about the safety and wholesomeness of the products from show pigs. If you aren’t PQA certified, where are you going to market your hog? Your show pigs may eventually end up at one of these packing plants. That is why it is crucial for our youth producers to become PQA certified.

Was there a problem???

Violative drug residues in pork have been found

Residues may be caused by:

- **Feed additives not withdrawn at specified times**
- **Medicated feed residues left in feeders**
- **Improper injection techniques**

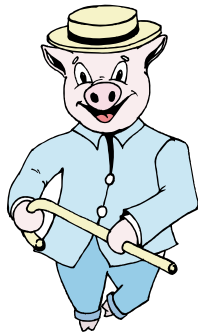
In the mid 1980s, meat packers were finding a problem with drug residues in pork. This was affecting export markets and raising public health concerns.

There are several management practices that could cause drug residues. If you feed medicated feed additives to your pigs, you have to be careful to follow the withdrawal times. Another cause of drug residues that you may overlook is cleaning out your feeders. If you feed a medicated feed and don't clean it out after use, a feed residue will be left in the feeder.

Improper injection techniques can also cause drug residues. If a drug is given in the improper location, or in the wrong dosage, a drug residue may appear. Additionally, you can damage valuable meat cuts if you inject into the ham or loin.

***Today, residue levels are
lower than ever***

PQA provides a way to:



**Educate producers to eliminate
drug residues**

Improve wholesomeness of pork

Way to go Pork Producers!

By educating producers about withdrawal times, proper injection techniques, and avoidance of medicated residues from feeds, chemicals and drugs, violative residue levels found in today's pork are at the lowest levels ever.

The Pork Quality Assurance training has provided producers with an effective education to help eliminate drug residues and to improve the safety and wholesomeness of pork and pork products.

How do I participate???

■Step 1: Introduction

- **Information about food safety, producer attitudes, vaccine administration, withdrawal times**

■Step 2: Review-

- **10 question self review quiz**



■Step 3

- **Review of Ten Good Production Practices**
- **Farm Visit**
- **Verification by ag science teacher, county extension agent, or veterinarian**

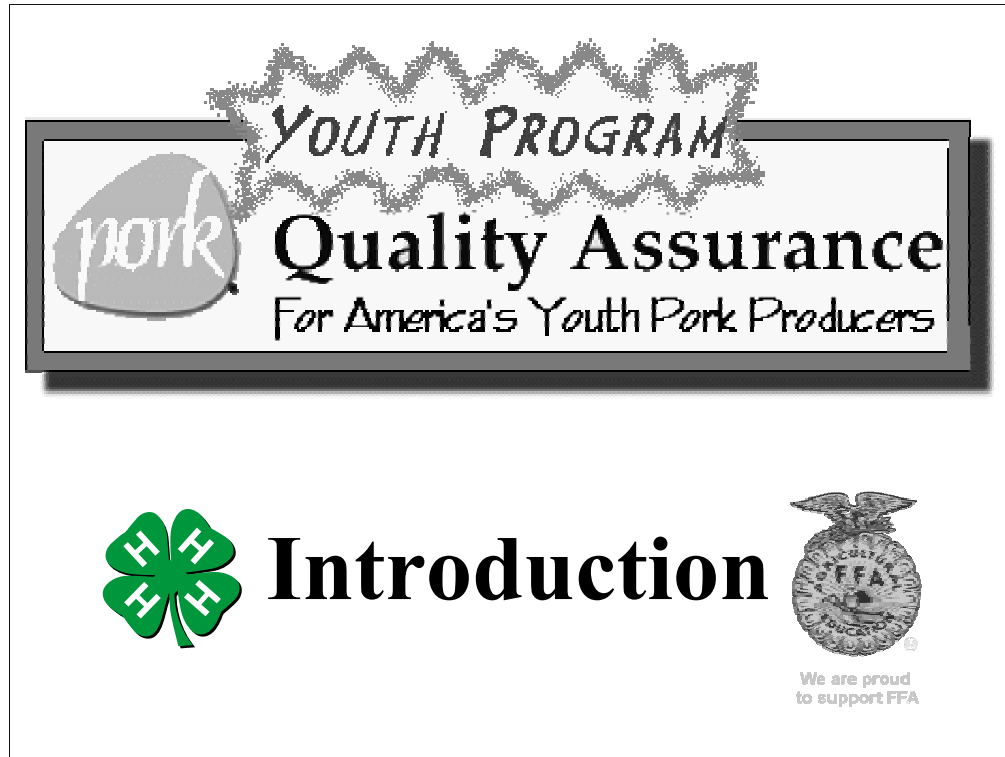
Pork Quality Assurance is a three step process. The first step is the introduction to the program. It includes information about food safety, producer attitudes, vaccine administration, and withdrawal times.

Next is a simple, self-given quiz. It consists of ten questions taken from the PQA introduction.

In the final step of the PQA program, you will learn about the Ten Good Production Practices and become PQA certified by a qualified verifier. Ag science instructors, county extension agents or veterinarians can be registered verifiers.

To become certified, you need to personally visit with your verifier about your management program. You should discuss each of the ten good production practices and how to implement these practices into your swine management program. A farm visit conducted by your verifier is also strongly recommended so that your verifier can become familiar with your production practices and swine care facilities.

After you and your verifier complete this process, you both complete and sign the Youth Producer Verification Form. This form is sent to the National Pork Producers Council (NPPC). They will issue you a PQA Certification card that is valid for two years.



Introduction

The introduction covers information about food safety, the HACCP (*pronounced “Ha-sip”*) program, producer attitudes, regulatory agencies, and objectives for youth producers.

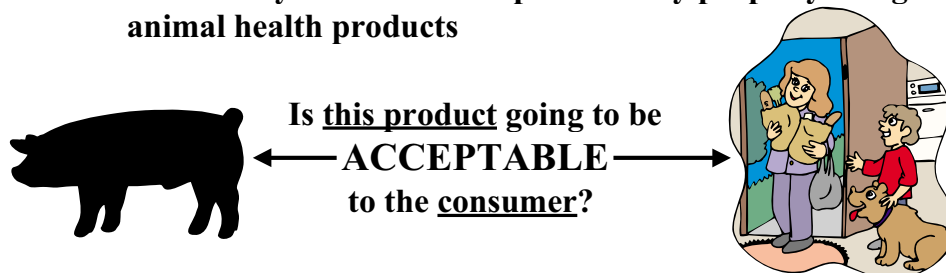
Food Safety and the Pork Industry

■ Pork Nutritional changes since 1990~

- 31% Leaner
- 14% Lower in Calories
- 10% Lower in cholesterol

■ Consumers are concerned with Food Safety

- Pork is a safe and wholesome product
- Food safety starts with the producer by properly using animal health products



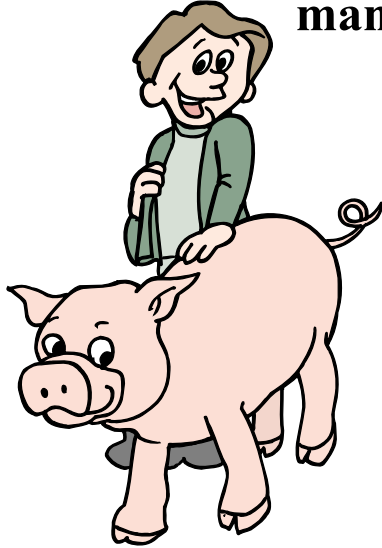
The pork industry is changing rapidly to meet the demands of consumers. Today's consumer wants a product that is lean, low in cholesterol and healthy. They also want to buy a product that they trust to be safe to eat. As consumers, it is their right to demand a product that is safe and wholesome. Therefore, it is up to us as pork producers to give them the product that they want. (***Teachers note: This will be a quiz question. T/F: Consumers have a right to expect a safe, wholesome food supply and producers have a responsibility to meet consumer expectations. "TRUE"***)

To respond to these demands, pork producers have changed the product that they produce. Today's pork is 31% leaner than it was just ten years ago. It also has 14% fewer calories and 10% less cholesterol.

Food safety is a term that helps describe the wholesomeness of a food product. If consumers' image of pork is compromised, pork producers will suffer the economic and personal consequences. All producers are affected if negative publicity about residues decreases consumer demand of pork. (***Teachers note: This will be a quiz question. T/F: All producers are affected if negative publicity about residues decreases consumer demand of pork. "TRUE"***)

To address the food safety issue, pork producers have to use proper management to ensure their product is safe for consumers. This includes properly using animal health products. It is okay to use animal health products if needed, but when used, producers must follow the drug labels to make sure the product is given at the correct dosage and that withdrawal times are met.

**Remember....animal health
products are here to assist good
management...**



**...NOT cover up
poor management**

Animal health products are certainly acceptable to use on 4-H and FFA swine projects. They can be administered to prevent disease or to treat an unexpected illness. However, these products are not designed to cover up poor management. In other words, you can't neglect your pig until it gets sick then give a "miracle drug" to get it healthy again. Animal health products work best in a good management program when used on animals that have received proper care.

Anytime you use an animal health product, you take on a big responsibility. For example you must follow the drug's label or your veterinarians directions specifically. This means administering the drug in the proper location, with the proper needle, and in the correct amount. You must also record all the information in your record-keeping system.

Withdrawal Time



Withdrawal time is the amount of time required for the medication to be metabolized, or broken down, by the animal's body.

- **Determined and set by research and governmental regulations**
- **Printed on the medication label**



It is extremely important to keep good records on drug administration to meet proper withdrawal times, as listed on drug labels. Withdrawal time is the amount of time required for the medication to be metabolized, or broken down, by the animal's body. These times have been determined and set through research and governmental regulations. Observing withdrawal times helps eliminate drug residues. When you give an injection, identify treated animals in some way, such as recording their ear notch or separating them in a special pen. By doing this, it will help you remember to follow withdrawal times on your pigs. (***Teachers note:** This will be a quiz question. T/F: It is important to identify treated animals in some way to make sure withdrawal times will be practiced. "TRUE"*)

If you have questions about drug usage, the Food and Drug Administration (FDA) offers a Compliance Policy Guide that explains the rules for producers who use animal health products. This compliance guide can be found on the web at www.fda.gov. (***Teachers note:** This will be a quiz question. T/F: A FDA Compliance Policy Guide outlines the producer's responsibility when using animal health products. "TRUE"*)

Suggested Activity: Medication Label / Treatment Record Worksheet

HACCP and Food Safety

Hazard Analysis *and* Critical Control Points



**WHAT IS
HACCP?**

- A system used in meat packing plants to prevent food safety problems
- Regulated by the USDA Food Safety and Inspection Service (FSIS)

The USDA has adopted a program designed to prevent food safety problems in meat packing plants. This program is called Hazard Analysis and Critical Control Points or HACCP (*pronounced “Ha-sip”*) for short. HACCP is regulated by the USDA Food Safety and Inspection Service. It is designed to prevent problems *before* they happen. Government regulations require that all packing plants must use a HACCP plan. (***Teachers note: This will be a quiz question. T/F: The U.S. government requires packing plants to implement the HACCP systems into their plant operation. “TRUE”***)

The pork producer’s responsibility under the HACCP program is to supply the packer with animals that are free from drug and chemical residues and physical hazards such as broken needles.

HACCP and Food Safety

Hazards can be identified as:

Microbial contamination

Chemical hazards

- Antimicrobial and chemical tissue residues

Physical hazards

- Broken needles or metal



Hazards in meat products can be classified into three categories: microbial contamination, chemical hazards, and physical hazards. (***Teachers note: This will be a quiz question. List the three types of potential food safety hazards in meat products: Answer: Microbial, Chemical, and Physical***)

Microbial contamination means the presence of pathogens such as *E.coli* or *salmonella*. Chemical hazards refer to the residues left from antibiotics and medicated feeds. Physical hazards describes broken needles, metal, or other foreign objects in the meat.

If unacceptable levels of these hazards were found in pork, consumers may be afraid to purchase pork and pork products. It is up to you as a pork producer to be responsible with the products you use.

HACCP and Food Safety

- Identify hazards
- Find critical points in the process
- Establish critical limits for each critical control point
- Monitor
- Take corrective action if monitoring shows there are deviations outside the limits of a critical control point
- Keep records on each critical control point
- Verify that the HACCP plan is working correctly.

The HACCP program is a seven-step program. It is a checklist for the packing plants to follow to make sure they are doing everything they can to avoid food safety problems.

The steps of HACCP are:

1. Identify Hazards
2. Find critical points in the process
3. Establish critical limits for each critical control point
4. Monitor
5. Take corrective action if monitoring shows there are deviations outside the limits of the critical control point
6. Keep records on each critical control point
7. Verify that the HACCP plan is working correctly

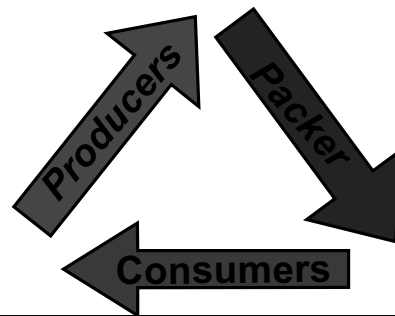
(Teachers note: This is a very technical subject matter. The worksheet will help explain the steps of HACCP on a level the students may more easily understand.)

Suggested Activity: Creating your own HACCP Plan Worksheet

Where do I fit into HACCP ?

- **The pork producer's responsibility is to supply the packer with animals that are free from drug and chemical residues and physical hazards such as broken needles.**

We must also be aware of withdrawal times because a packer can't hold a pig once delivered to the plant.



Packers are addressing hazards through in-plant processes. They ask pork producers to help control microbial contamination, chemical residues, and physical hazards on the farm. Pork producers are responsible for properly observing withdrawal times.

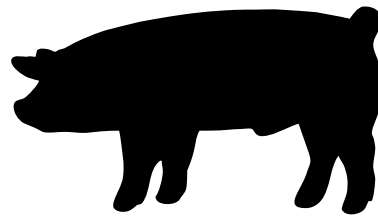
As producers, pork quality starts with you. It is important that producers understand food safety and consumer concerns. Even though you are a pork producer....you are a consumer too! Thinking strictly as a consumer, you would not want to eat a product that you think might make you sick. When making decisions about giving your pig animal health products or medicated feed, put yourself in the place of the consumer. Then decide what you would do if you knew you had to consume your pork product yourself. Understanding consumer attitudes is the beginning of understanding your role in food safety. (***Teachers note: This will be a quiz question. T/F: Production of residue-safe pork starts with an understanding of consumer concern about food safety. "TRUE"***)

Producer Attitudes

**POSITIVE
ATTITUDE!**

Why do producers use animal health products on the farm?

- **Provide for the welfare of the animal**
- **Treat disease or parasites**
- **Prevent disease or parasites**
- **Improve rate of gain**
- **Improve feed efficiency**
- **Minimize production costs**



The Pork Quality Assurance program relies on the positive attitudes of producer and students. By participating in the PQA program youth producers show they are committed to producing top quality pork and making responsible decisions while raising their project.

One way to avoid the chemical residues would be to completely stop using products that contain these chemicals. However, this is not necessary if we follow the guidelines when using these products. Pork producers use animal health products for several reasons, including providing for the animal's welfare and minimizing production costs. Animal health products prevent or treat diseases, and can improve rate of gain and feed efficiency.

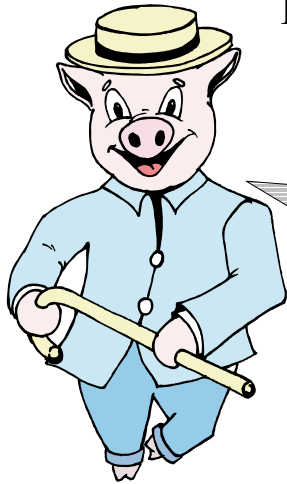
(Teachers note: This will be a quiz question. List four main reasons why producers use animal health products.)

Producer Attitudes

What about imported pork??

Does it follow the same rules??

**POSITIVE
ATTITUDE!**



YOU BET IT DOES!

**All pork supplied to the U.S.
MUST meet U.S. tissue drug
residue standards regardless of
where it is produced.**

Another question some pork producers ask is whether or not the meat we import from other countries is subject to the same rules and regulations as U.S. pork. This is a concern because some countries have access to different drugs and don't have the same regulations as the U.S.

All pork supplied to the U.S. MUST meet U.S. tissue drug residue standards...regardless of where it was produced.

Producer Attitudes

■ How can I help as a producer??

- Use drugs under veterinarian guidance
- Read and follow label directions carefully
- Better animal identification
- On-farm testing procedures for drugs when appropriate



As a youth producer, you can strengthen the pork industry by implementing the following practices:

Use drugs under veterinarian guidance: Always check with your veterinarian before using drugs, even if they are available over the counter. Establishing a veterinarian-patient-client relationship will allow your veterinarian to guide and advise you on proper drug use for your animals.

Read and follow label directions carefully: Whenever you give a drug to your pig, it should be given *exactly* like the label or veterinarian says.

Better Animal Identification: Each treated animal should be clearly identified so you don't mistake it for another pig. If you have a certain pen for pigs that are being treated, or pigs that are still in the withdrawal period, these pens should be clearly identified.

Use on-farm testing procedures for drug residues when appropriate: More tests are being made that are simpler and cheaper than older tests. Once these new tests are available, they will be an important step in testing for drug residues.

Current Regulatory Agencies



Food and Drug Administration

- *Regulates medicated animal feed and most health products*
- *Approves products and sets tolerance levels for antimicrobials*



- *Sets tolerance levels for pesticides used in pork production*



Food Safety and Inspection Service

- *Inspects hogs in packing plants*
- *Examines plant sanitation*
- *Approves plant sanitation*

There are three government agencies that have regulations that affect meat production. The pork producer is ultimately responsible for providing a violative residue-free product. These agencies work to ensure the safety of our product for consumers.

The **FDA** is part of the Department of Health and Human Services. FDA stands for Food and Drug Administration. FDA personnel regulate animal health products and medicated animal feeds. The FDA approves products, sets tolerance levels, and approves how to give each drug. (***Teachers note: This will be a quiz question. The regulatory agency responsible for determining tissue tolerance for most animals health products is the : _____***)

The **EPA** is the Environmental Protection Agency. EPA personnel approve pesticides that can be used in pork production.

The **FSIS** is part of the US Department of Agriculture. FSIS stands for Food Safety and Inspection Service. FSIS personnel inspect all hogs at a packing plant before they are slaughtered. They also oversee the plants HACCP plans. (***Teachers note: This will be a quiz question. The regulatory agency responsible for inspecting pigs at the packing plant is the : _____***)

Objectives for youth producers



Acknowledge that it is your job to provide a safe, wholesome product for consumers.



Understand how to follow labels carefully for every feed additive, drug, or chemical used.



Develop a close working relationship with your veterinarian.

The pork industry, including youth producers, must produce a product that exceeds the quality expectations of the consumer.

To summarize, here are the objectives for youth producers....

1. Acknowledge that it is your job to provide a safe product for consumers.
2. You have to read and understand how to follow label instructions on all feed additives, drugs, and chemicals that you use on your farm.
3. It is extremely important to develop a close relationship with your veterinarian so he or she can advise and guide you with your pig project.

(Teachers note: We understand that in some areas veterinarians that work with the pork industry on a daily basis are not always available. Many land grant universities have swine veterinarians who are available to work with producers and other veterinarians to help them with swine issues.)



(Teacher's note: Read this before continuing. At this time, pass out the Self-Review Quiz and allow time for the students to complete it individually. After completed, go over the answers with the students using the next few slides.)

Self Review

1. Consumers have the right to expect a safe, wholesome food supply, and producers have the responsibility to meet consumer expectations. TRUE

2. All producers are affected if negative publicity about residues decreases consumer demand of pork. TRUE

3. The U.S. government requires packing plants to implement the HACCP System into their plant operation. TRUE

Self Review

4. List the three types of potential HACCP food safety hazards in meat products.

Chemical

Microbial

Physical

5. Production of violative residue-free pork starts with an understanding of consumer concern about food safety.

TRUE

Self Review

6. List four main reasons why producers use animal health products:

- **Provide for welfare of animal**
- **Treat disease or parasites**
- **Prevent disease or parasites**
- **Improve rate of gain**
- **Improve feed efficiency**
- **Minimize production costs**

7. It is important to identify treated animals in some manner to assure proper withdrawal times will be practiced. TRUE

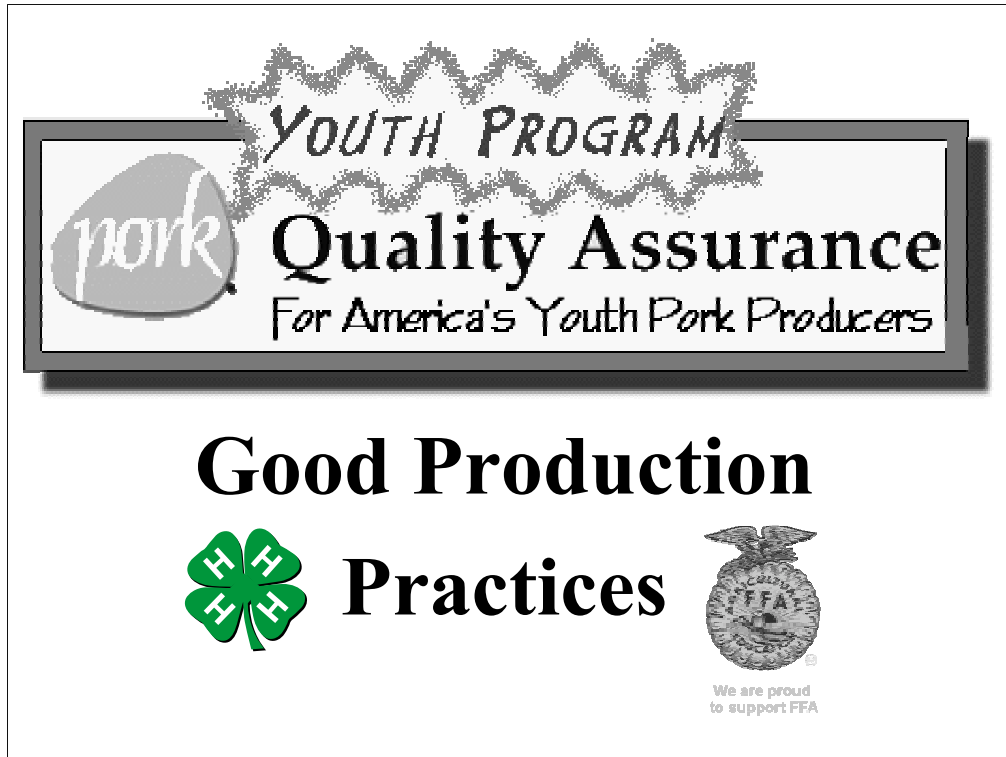
8. A FDA Compliance Policy Guide outlines the producers responsibilities when using animal health products. TRUE

Self Review

9. The regulatory agency responsible for determining tissue tolerance for most animal health products is the: FDA

10. The regulatory agency responsible for inspecting pigs at the packing plant is the: FSIS

(Teacher's Note: This is the end of Part 1. If the program is being presented in one day, at this time it is recommended to take a 15 minute break before beginning Part 2.)



BEGIN Part 2 of the Presentation:

This portion of the program covers the Ten Good Production Practices.



Good Production Practice #1



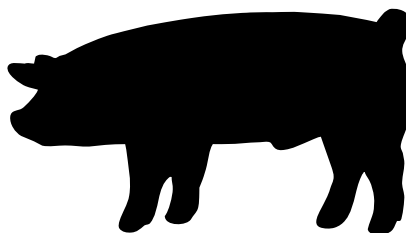
Identify and track all animals to which drugs were administered.

Identify medicated animals by:

✓ **Individual**

✓ **Pen**

✓ **Lot**



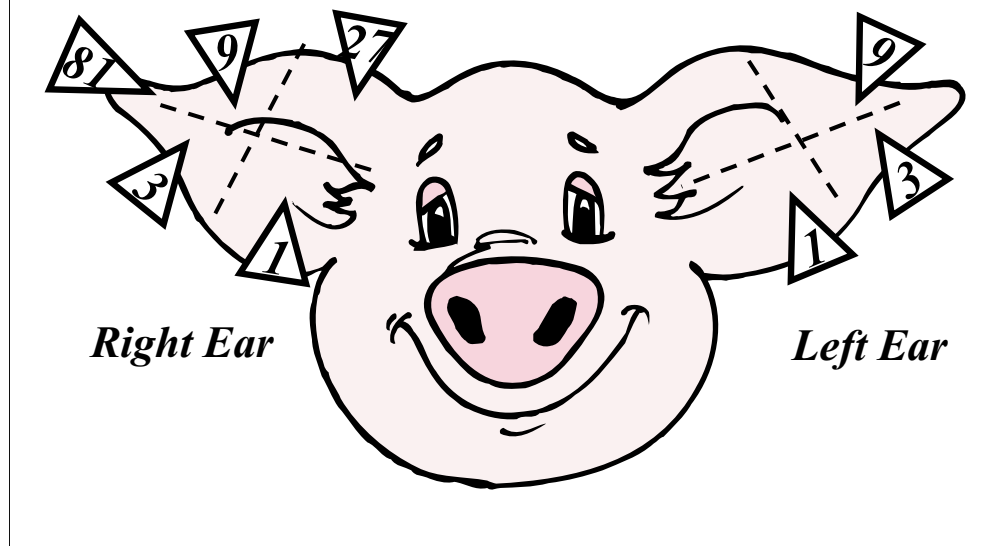
Proper identification is a key to good management. If each animal is clearly identified, keeping written records on treatments becomes a lot easier! You can identify animals that you have treated by individual, by pen, or by lot.

Individual identification is important when keeping records. When you treat an animal, you should write down its ear notch, ear tag, or ID number.

Pen identification is used by some producers. They have a special pen for treated animals. When they give an animal an injection, they move it from its original pen into a new pen, called the “sick pen” or “hospital pen.”

Suggested Activity: Ear Notching Worksheet

Ear Notching Identification



The pig's right ear denotes the litter number and the left ear identifies the pig number. The notches, symbolizing specific numbers, are added together for each ear and then read starting with the litter number. For instance, pig 23-4 was born in the 23rd litter, and was the fourth pig identified. Some producers notch all males with even numbers or odd numbers and the females the opposite. Some producers notch in birth order (this is rare) but most assign pig number in random order.

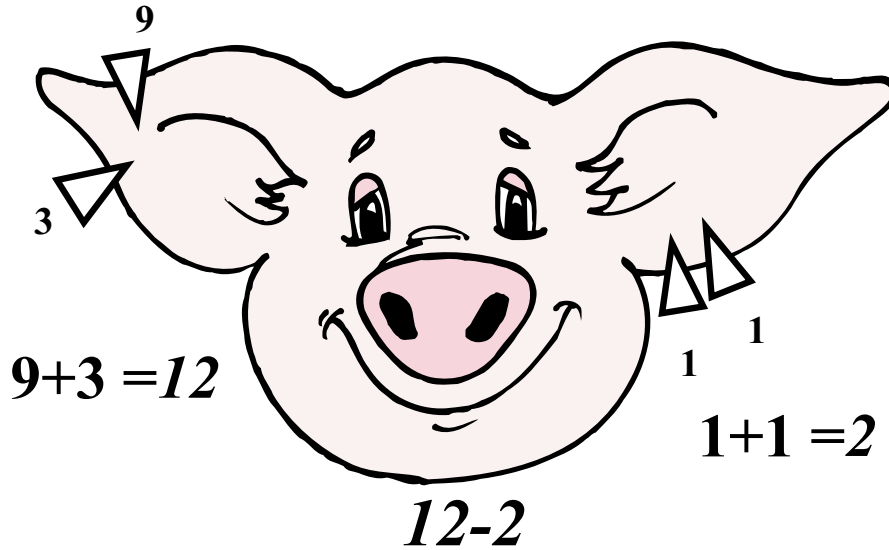
The ear can basically be drawn in half from the tip of the ear down the middle to the base. Imagine another line going from the top of the ear to the bottom of the ear halfway from the tip, and you have the ear divided into quarters.

With the exception of the number 1, the notch numbers are in multiples of three (1, 3, 9, 27, 81). With the exception of the number 81 at the very tip of the ear, up to two notches may be placed in each quadrant. By adding the notches together, producers can identify up to 161 litters with this system. Some producers have made modifications to include the number 100 so that more litters can be identified.

The lower quarter of the ear closest to the head identifies the number 1. The lower quarter of the ear farthest from the head is the number 3. The top quarter of the ear farthest away from the head is the number 9. The top quarter of the ear closest to the head is the number 27.

Taking a notch out of the tip of the ear denotes the number 81. Obviously, only one notch is permitted here. The pig's left ear identifies the pig number and follows the same basic structure, except that the numbers 27 and 81 are not used because litter sizes tend to be smaller.

Test Your Ear Notching Skills



This pig would be identified as 12-2. In the right ear, which is the litter number, the pig has been notched in the 3 position and the 9 position. By adding 3 plus 9, we get the notch of 12.

In the pig identification ear, the left ear, the pig has been notched twice in the 1 location. By adding 1 plus 1, we get the pig identification number of 2.



Good Production Practice #2



Maintain medication and treatment records.



- ✓ Date of treatment
- ✓ Animal treated
- ✓ Product used
- ✓ Amount administered
- ✓ Route of administration
- ✓ Who gave the drug
- ✓ Withdrawal time
- ✓ Completed withdrawal date

Maintaining good records is a way to keep organized. The record-keeping plan is simple. Each time you treat an animal, write down the following information:

1. Date treated
2. Animal or Pen ID (ear notch or other identification)
3. Product Used for treatment
4. Amount given
5. Route of administration
6. Who gave the drug (yourself, a parent, teacher, etc.)
7. Withdrawal time
8. Date withdrawal time is complete

Record keeping sheets are provided in this packet in the activities section.

Suggested Activity: Pass out Medication, Treatment, and Inventory Sheets
Suggested Activity: Record Keeping Exercise



Good Production Practice #3



Properly store, label, and account for all drug products and medicated feeds.



All drugs will have their use and storage directions printed on the label. It is very important to keep track of all drugs being used on your farm. If a label says to store the medicine in a refrigerator, then you have to keep it in a refrigerator. If it says “Use Entire Bottle” this means you have to use the entire bottle once it’s opened....it cannot be stored and used later. If you use a medicine like this and you only use one dose...you still have to throw away the rest of the bottle because it will rapidly lose its effectiveness.

Suggested Activity: Medication Label Worksheet



Good Production Practice #3



Here are some tips when using needles....

- Disposable needles and syringes are sanitized and easy to use.
- Clean reusable syringes and needles properly.
- Always check for burrs on needles.



Here are some quick tips when using animal health products that use needles...

1. If you purchase disposable needles, you don't have to worry about sanitizing them or re-using them. Change needles frequently or regularly or if the needle is dropped or damaged. After use, dispose of them properly.
2. If you use reusable needles, make sure you clean them properly. Keep needles sharp to avoid excessive irritation.
3. Always check for burrs on the needles. A "burr" is when the metal on the needle is chipped or raised off the surface of the needle and is not smooth. This can happen if a needle is dropped or used too much. The chipped metal causes more irritation when inserted and also increases the chance of infection. If a burred needle is used, the pig will experience excessive discomfort and injection pain.

(Teacher's note: Proper disposal of needles includes storing used needles in a puncture proof container. When the container is half full, it should be filled with cement, mixed, and sealed.)

Suggested Activity: Have examples of disposable needles, and have visual example of a burr.



Good Production Practice #3



Look at the Labels.....

- All drug labels should contain this information

Expiration Date
Lot Number
Dosage
Warnings
Cautions
Application Method
Precautions
Active Ingredient
Trade Name

Reading the labels on drugs is extremely important. If you read the label carefully, you can find all the information about storage and approved use of the drug.

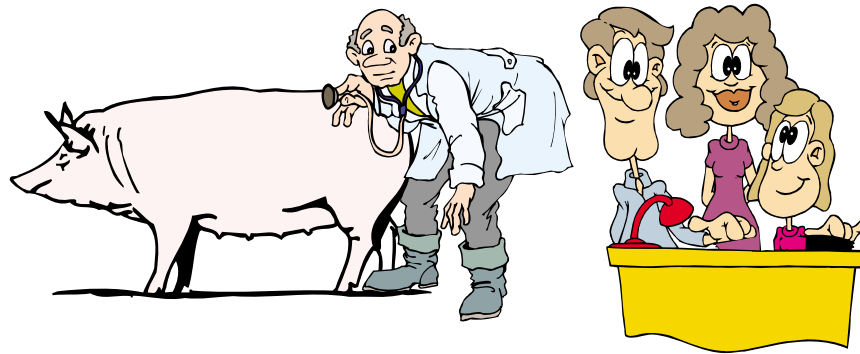
Suggested Activity: Medication Insert Worksheet
Suggested Activity: Reading a Feed Tag Worksheet



Good Production Practice #4



Obtain and use veterinary prescription drugs through a licensed veterinarian based on a valid veterinarian/client/patient relationship.



If you have a good relationship with your veterinarian, he or she will be able to help advise and guide you with using medications when appropriate for your pig project. By establishing this relationship the veterinarian also gains a working knowledge of your management practices. Therefore, your veterinarian can help you make medical judgements, assist you with withdrawal times, your record keeping system, and can provide “extra label” drug use when deemed necessary under special circumstances.

Types of Animal Health Products

■ Over The Counter Drugs (OTC)

■ Prescription Drugs (Rx)

■ Factors determining whether a drug is OTC or Rx:

- Margin of safety to animal**
- Effects of accidental overdose**
- Difficulty of identifying disease being treated**
- Safety for the administrator**

There are two classes of drugs: Over the Counter and Prescription.

Over the counter drugs can be purchased at places like veterinary clinics, feed stores, and from animal health salespersons. Prescription drugs are only available from a veterinarian or pharmacist. Any time you use animal health products, even if it is OTC, it is recommended that you first talk with your veterinarian. The margin of safety for the animal, especially if an accidental overdose should occur, the difficulty in correctly diagnosing the disease and the level of safety for the person administering the drug are all factors which determine whether a drug is available over the counter or by prescription.

Every drug approved for use in swine has labeled instructions. OTC drug labels will have exact printed instructions on dosage, administration, withdrawal times and handling. Use of prescription (Rx) drugs are harder to understand, so it is a little trickier. If your veterinarian prescribes a drug for use on your pig, he or she will give you a form describing uses, dosage, administration, and withdrawal times for the drug. Only a veterinarian may prescribe an Rx drug to be used on an animal. The label of Rx drugs always says "CAUTION" and "Federal law restricts use by or on the order of a licensed veterinarian."

Types of Drug Use

- **Labeled Use:** Using the drug **EXACTLY** as it is specified on this label. Medicated feed may only be used as directed by the label. Labeled use is legal and the type of use most producers use!
- **Off Label:** The **PRODUCER** uses drugs on their own in a manner other than what is stated on the label without veterinarian guidance. This is **ILLEGAL!!**
- **Extra Label:** The **VETERINARIAN** prescribes a drug to be used in a manner other than what's on the label. This is legal and is used when a good veterinarian-client-patient relationship exists.

There are “Right” and “Wrong” ways to use OTC and Rx drugs. **Label use** is when you use the animal health product exactly like it says on the label. This is the acceptable and legal way producers use most drugs. **Off Label** drug use is when producers, on their own, use a drug in a manner other than what is on the label. This is **ILLEGAL**. **Extra Label** drug use is when a veterinarian prescribes a drug to be used by a producer in a manner other than the directions on the label. A veterinarian-client-patient relationship **MUST** exist before extra-label drug use is legal.

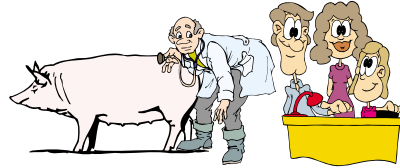
Feed medication can only be used as directed by the label. It is illegal for a producer or veterinarian to feed medication other than according to the label.



Good Production Practice #4



Obtain and use veterinary prescription drugs through a licensed veterinarian based on a valid veterinarian/client/patient relationship.



■ Extra Label Drug Use

- Veterinarian increase dosage beyond label
- Changes frequency of administration beyond label
- Changes duration of treatment
- Changes disease to be treated
- Changes species to be treated
- Prescribes any other non-label use of OTC or Rx drug

Extra label drug use can only be recommended by veterinarians. A producer cannot legally use a drug in a manner other than what is written on its label. If a producer does this without a veterinarian's involvement, it is called "off label" drug use and is ILLEGAL.

"Extra Label" is the term used for drugs that are being used in a manner besides their specific use as given on the label

.

A drug may become "extra label" for several reasons....

1. Your veterinarian may tell you to give your pig more medicine than the label states.
2. Your veterinarian may tell you to give your pig medicine more frequently than the label states.
3. Your veterinarian may tell you to stop giving the drug after a certain period of time.
4. Your veterinarian may prescribe a treatment for a disease other than stated on the label.
5. Your veterinarian may prescribe a drug for your pig that is not labeled for use in pigs. (This is only done if it is a logical choice and if label use of an approved swine drug is not available.)

Extra label basically refers to any use of the drug besides what is printed on its label and again, can only be prescribed by a veterinarian.



Good Production Practice #4



Extra Label, Off Label ...or Okay?

**The label says to give 10cc of the drug....
your veterinarian says give 20cc.**

EXTRA LABEL

**You decide on your own to use a drug for
pneumonia to treat your pigs ringworm.**

**OFF LABEL and
ILLEGAL**

**Your veterinarian suggests using a drug
approved for chickens on your pig.**

EXTRA LABEL

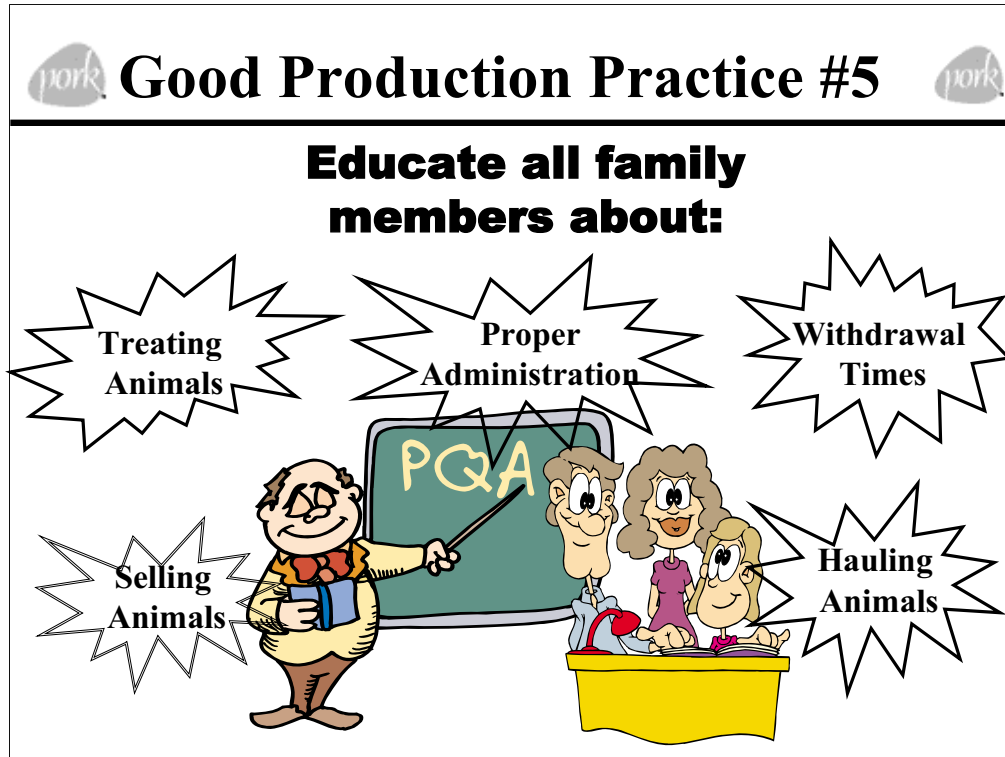
**The label says treat your pig twice a day
and you treat it at 8 am and 8 pm.**

OKAY

This exercise will help us understand more about what is extra label drug use, off label drug use, and what is okay.

1. The label says to give 10cc of the drug and your veterinarian says give 20cc. This is extra label because the veterinarian has changed the dosage beyond the label instructions.
2. You decide on your own to use a drug for pneumonia to treat your pigs ringworm. This is off label because a veterinarian did not prescribe this drug to be used. This is also ILLEGAL.
3. You use a drug approved for chickens on your pig. This is extra label because your veterinarian changed the species to which that the drug was originally intended.
4. The label says treat your pig twice a day and you treat it at 8 am and 8 pm. Is this extra label? NO. This is exactly what the drug label instructs you to do and this is perfectly correct.

Suggested Activity: Extra Label Drug Use Worksheet



Having a pig project takes cooperation from everyone in your family, even your friends. It is important to teach everyone involved with your project about how to handle your pig.

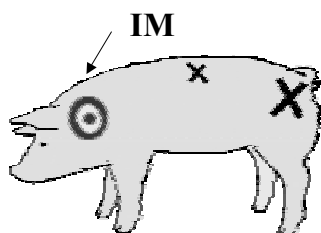
Teach them how to handle pigs, how to give an injection correctly, how to identify the animals that have been treated, which pigs go in which pens, and anything else that you think is important for them to know about your project. This will avoid any confusion and help make sure your pig gets the best treatment possible.



Good Production Practice #5

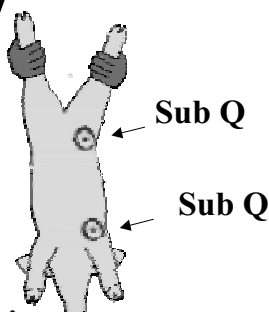


Educate all family members about:



- **In the muscle
(Intramuscular - IM)**
 - Apply just behind and below the ear but in front of the shoulder
 - NEVER inject in the ham or loin

Proper Administration



- **Under the skin
(Subcutaneous - Sub-Q)**
 - Inject only into clean, dry areas
 - Use the loose flaps of skin in the flank or behind the elbow

This slide shows the proper administration techniques to use when giving injections to your pigs. There are five ways to administer drugs to a pig. The slides show the two most common ways.

Intramuscular (called IM) is an injection that is given directly into the muscle. IM injections should be given just behind and below the ear, as shown by the bullseye. You should NEVER inject into the ham or loin. These areas include the most valuable cuts of pork and the meat can be damaged by injections.

The other common drug administration route is called **Subcutaneous (Sub-Q)**, meaning under the skin. Sub-Q injections should be given into the loose flaps of skin in the flank or elbow. Make sure the area you inject is clean and dry to prevent infection.

The other ways to give drugs are in the abdominal cavity (called Interperitoneal or IP), in the vein (IV) or through the nasal passages (intranasal). IP and IV should both be given by a veterinarian only.

Suggested Activity: Pass out Injection Reference Chart and have students practice injecting into a banana with food coloring.



Good Production Practice #6



Use drug residue tests when appropriate.

- When sows are culled directly from the farrowing house.
- When animals receive extra label drug use treatment.
- When feeder pigs are sold as roaster pigs.
- When exhibiting at stock shows and fairs.



As we said in the producer attitudes section, drug residue tests are becoming cheaper and easier to use. There are tests that you can use conveniently on your farm to make sure your pig project doesn't have any drug residues.

You can use these tests in several situations:

- When sows are culled
- When you need to test animals for extra label withdrawal times
- When feeder pigs are sold as roasters

Some stock shows or fairs require testing of random animals and champions for illegal drug use.

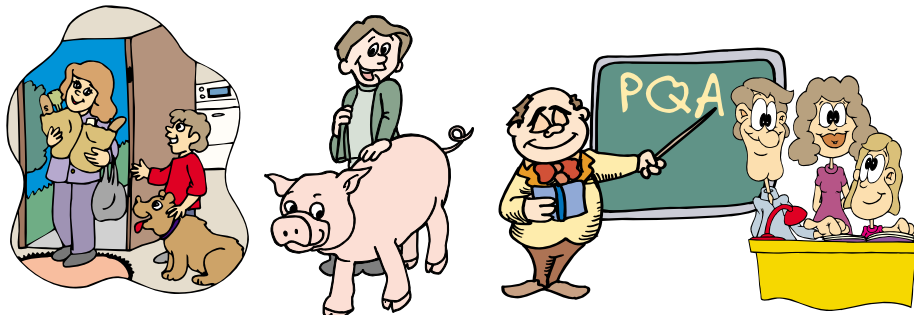
Suggested Activity: Drug Residue Testing Demonstration



Good Production Practice #7



Establish an efficient and effective herd health management plan.



Involving the whole family makes it fun!!

Establishing a herd health plan can be really in-depth and detailed or relatively simple. When making this plan, you can consult with your veterinarian about your herd on disease problems and review your record keeping system.

If you notice that you are having a problem with a certain disease, you can find out what is causing your problems and make a plan to prevent this disease.

Maybe your pig is being exposed to diseases or parasites by other pigs. Maybe your soil has parasite eggs present and your pig is becoming infected. Maybe your pig's pen housed a sick animal and the germs are still present.

By developing an effective herd health management program, you prevent or control any potential disease outbreaks and also learn how to incorporate vaccine use to keep your pigs healthy.

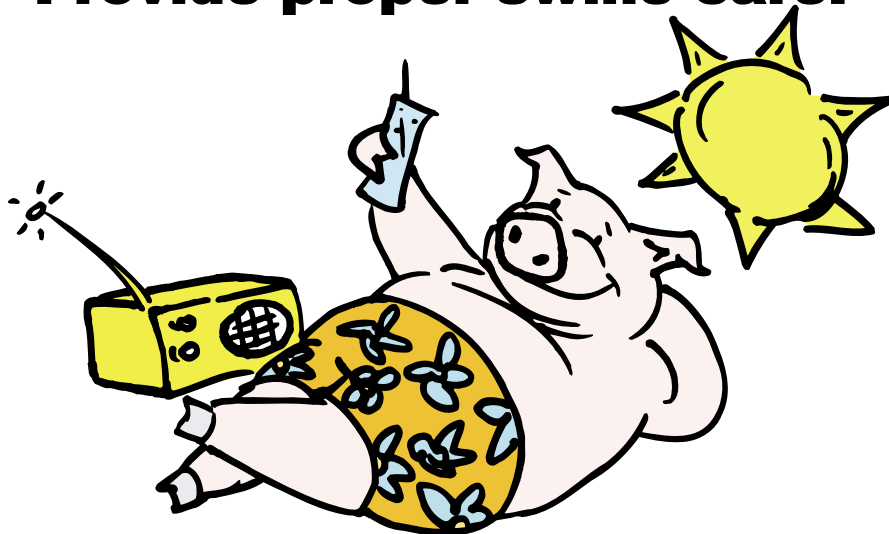
Suggested Activity: Swine Care Worksheet



Good Production Practice #8



Provide proper swine care.



When you took on the responsibility of a swine project, you became responsible for another living creature. It is your job to provide your pig with the best possible care.

Always handle pigs humanely. Look at your pig every day to make sure it is doing okay. Never use prods, buzzers, or slappers to move your pig. Instead, use sorting panels to guide your pig. Handling your project improperly will cause bruises on the meat that will lower its value. If you treat your pigs badly, they could become stressed, which will affect their meat. The meat will lose quality and become either PSE (pale, soft, and exudative) or DFD (dark, firm and dry.) Both of these characteristics may make pork tougher and less desirable when eaten.

Loading and Hauling can be a problem if you are not careful about how you handle your pig. If it is really hot, try to haul your animals early in the morning to avoid the heat. Bed your pigs on wet shavings to help keep them cool. In cold weather, add some hay to the bottom of your trailer to keep your pigs warm. Always move in a slow and calm manner to prevent undue stress on your pig.

(Teacher's Note: NPPC offers education videos on proper swine handling and care. If time allows, these videos can be incorporated into the slide presentation at this time.)

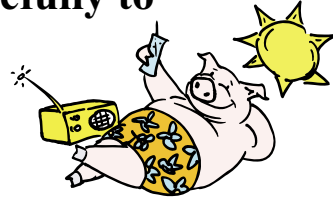


Good Production Practice #8



*****Provide proper swine care *****

- Provide quality water and feed to swine
- Provide good shelter
- Observe herd for signs of illness
- Handle pigs calmly
- Load and transport pigs carefully to minimize stress



Here are some basic guidelines to provide the best care for your pig. By following these instructions, your pig will be healthier and happier, which results in more fun for you with your project.

- Provide quality water and feed to swine
- Provide good shelter
- Observe your herd for signs of illness
- Handle pigs calmly
- Load and transport pigs carefully to minimize stress

Basically, use common sense when caring for your swine. The welfare of your pig directly impacts their health and productivity.



Good Production Practice #9



Follow appropriate on-farm feed and commercial feed processor procedures.



- Good housekeeping
- Clean and safe equipment

- Organized work areas
- Labeling
- Record keeping

If you use medicated feeds, be careful to follow labeled withdrawal times to prevent violative residues.

-Keep all of your facilities and equipment clean. Good housekeeping helps you to prevent accidents that could contaminate feeds.

-Make sure your equipment is cleaned and safe. Leftover feed in equipment can contaminate your next batch of feed.

-Keep your work and storage areas organized. If you have a storage room, keep your medicated feeds separate from other feeds. This reduces the chance of feeding a medicated feed by mistake. In addition, keep your animal health products in a separate area.

-Use a good labeling system to identify different feeds, drugs, pesticides, or other products. This will help make sure you don't get products confused with each other.

-Keep good records of when you mix or use feed with any medications, when you get new feed, or when anything new comes into your barn or storage area. Keep your records for at least one year after the feed is fed.

Suggested Activity: Feed Mixing Example

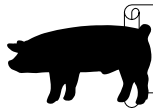


Good Production Practice #10



Complete Youth Quality Assurance checklist annually, then re-certify every two years.

Keep up to date with new industry practices.



Evaluate production to ensure GPP's are being met.

Be confident that you are producing top notch pork!

After you are certified in the Pork Quality Assurance program, you have to re-certify every two years. By doing this, you are able to keep up to date with new industry practices and technology. This also means each year you will evaluate your own project to make sure you are following good management practices. This will make you confident that you are producing the best product that you possibly can.



Pork Quality Assurance Certification

Student and Verifier:

Review Record Keeping System

Review 10 Good Production Practices

Conduct Farm Visit

Complete and Sign Producer Certification Form

Now that you have completed the Pork Quality Assurance training, you need to meet with your verifier to complete the following items:

1. Review the Ten Good Production Practices including evaluating your record keeping system.
2. Set a time for your verifier to conduct a farm visit, unless your verifier is thoroughly familiar with your facilities or a volunteer adult leader who is extremely familiar with your facilities meets with you and your verifier.
3. You and your verifier both need to complete and sign the Producer Verification Form.

Your verifier will then submit the materials for certification to the National Pork Producers Council. NPPC will then send you a PQA Certification Card that will be valid for two years.