

Mississippi Livestock Quality Assurance Program for Youth Producers

Livestock quality assurance programs are producer-driven and involve all sectors of the industry, from producers to consumers. These programs are designed to help in the production of a healthy, wholesome, and high-quality product that is free from defects such as injection-site lesions and bruises. Consumers care a great deal about the safety of the food they eat. Youth producers in the 4-H and FFA programs must do all they can to ensure the safety and quality of the animals they take to the show ring.

The purpose of the Mississippi Livestock Quality Assurance Program for Youth Producers is to increase food safety awareness by educating youth producers of their role in this process and the importance of raising their livestock in an appropriate manner. By following a quality assurance program, youth can improve their animal care and management practices in order for their animal to achieve its highest level of performance while providing a safe, wholesome product for consumers.

Good production practices (GPPs) are a set of guidelines for the safe, healthy, efficient, and humane production of livestock. Following these 10 GPPs will be beneficial to youth livestock producers in their 4-H and FFA projects.

GPP1: Identify and track all treated animals.

Proper animal identification is an absolute MUST in order to have good management practices. This is especially true when identifying and treating sick animals. If each animal is clearly identi-

fied, keeping written records of treatments becomes an easy task. There are two ways to identify animals—individually or as a group (such as a pen of animals). However, individual identification will make record keeping more efficient. When an animal is treated, its ear tag or other identification number should be recorded. There are several permanent and non-permanent ways to individually identify an animal.

Non-permanent animal identification methods can include the use of ear tags or neck collars. These are easy to read but are considered non-permanent because the tag or collar can be removed. Permanent animal identification methods can include ear tattooing, branding, and ear notching. These are considered permanent because they cannot be removed or easily altered.

Aside from individual animal identification, animals can be treated as a group or pen. Group identification is acceptable as long as the animals stay in that group or pen until withdrawal times are met. The most obvious limitation to management with group identification is that the animals cannot be commingled with other animals or individually fed and treated if the need arises.

In the swine industry, ear notching is a common way to identify pigs. In this process, the pig's right ear corresponds to its litter number while its left ear reflects the individual pig's identification number. Both ears are divided into sections where a notch corresponds to a different number value. For example, both of the pig's ears can be divided into

five sections. On the bottom of the ear, the section closest to the pig's head, a notch represents a value of 1, while a notch in the outer portion of the pig's ear on the bottom is a value of 3. Similarly, a notch on the outermost section of the top of the ear is a value of 9, while the closest section to the head is a value of 27. Notching the tip of the ear is a value of 81. All areas can be notched one or two times, except for the 81 section.

So, when reading a pig's ear notch number, you first add the numbers together in the right ear (the pig's litter number), then add the numbers together in the left ear (the pig's individual number). When using the pig's individual number, the numbers 27 and 81 are not used because litter sizes are generally smaller than those numbers.

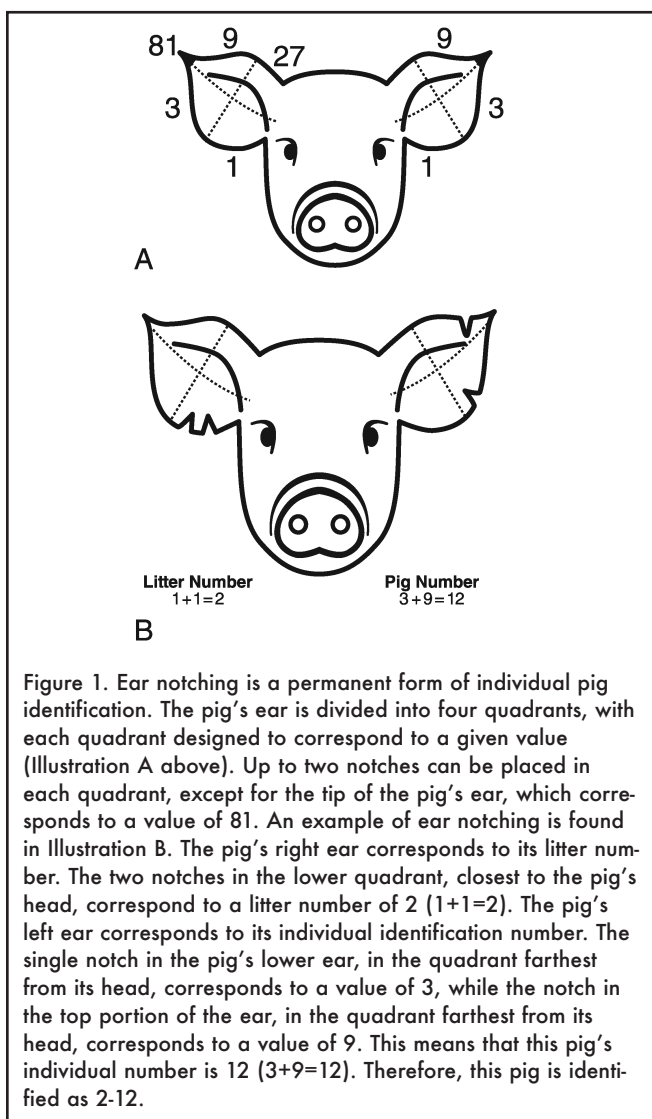


Figure 1. Ear notching is a permanent form of individual pig identification. The pig's ear is divided into four quadrants, with each quadrant designed to correspond to a given value (Illustration A above). Up to two notches can be placed in each quadrant, except for the tip of the pig's ear, which corresponds to a value of 81. An example of ear notching is found in Illustration B. The pig's right ear corresponds to its litter number. The two notches in the lower quadrant, closest to the pig's head, correspond to a litter number of 2 ($1+1=2$). The pig's left ear corresponds to its individual identification number. The single notch in the pig's lower ear, in the quadrant farthest from its head, corresponds to a value of 3, while the notch in the top portion of the ear, in the quadrant farthest from its head, corresponds to a value of 9. This means that this pig's individual number is 12 ($3+9=12$). Therefore, this pig is identified as 2-12.

GPP2: Maintain medication and treatment records.

When a sick animal is treated, it is essential to maintain good medication and treatment records. The

record-keeping system is simple: each time an animal is treated, record the date, the animal's identification number, the product used to treat the animal, the amount of the product administered, the product's lot number, how the product was administered, the person who gave the product, the withdrawal time of the product, and the withdrawal date based on the product administered.

Withdrawal time is the period required for the medication to be metabolized, or broken down, by the animal's body. These times have been determined and set based on research and governmental regulations. Observing withdrawal times that are listed on the drug label helps eliminate drug residues from ending up in the show ring or final product. When an injection is given, it is important to identify those animals as described in GPP 1.

As listed in the Drug Use Rule for the Mississippi State Fair and Dixie National Junior Round-Up, animals treated with any medication within 60 days before or during these shows must have a completed health record form that lists all products and treatments received, including withdrawal times for each product. All products used must be listed, including, but not limited to, over-the-counter medications, medicated feeds, dewormers, prescription medications, and extra-label drug use medications. These forms must be filled out and turned in when that animal is processed or accepted for entry at the Mississippi State Fair or Dixie National Junior Round-Up (see Forms 1061-1065; sample on next page).

GPP3: 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 important to keep an inventory of all drugs used on the farm. Be sure to follow the directions on the drug label. If the directions are to store the medication in a refrigerator, you must store that drug in a refrigerator. "Use entire bottle" means the entire bottle must be used once it is opened and cannot be stored for later use. This is especially important because some drugs rapidly lose their effectiveness after they have been mixed or the seal has been broken.

Be sure to change needles frequently when using injectable animal health products. Always use needles that are clean, sharp, and the correct size for the animal and desired treatment. If the needle is dropped or damaged, dispose of it properly. Always check the needle for burrs. This is when the metal on the needle is chipped or raised off the surface and it is no longer smooth. If used, the chipped metal can cause irritation and increase the chance of infection.

Beef Health Record



Animal Information

Identification #: _____ Other ID #: _____

Breed: _____

Color: _____ Sex: _____

DOB: _____ Reg. Name: _____

Breeder Information

Date Purchased: _____

Purchased From: _____

Name: _____

Address: _____

Phone: _____

Exhibitor Information

Name: _____

Address: _____

County: _____

Agent/VoAg Advisor: _____

"Produce healthy and safe beef products by being a knowledgeable and responsible producer"

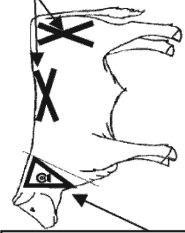
Treatment and Dewormers Remember to document ALL treatments, medications, and dewormers and their withdrawal times.

Date & Times	Condition Being Treated	Estimate Weight	Treatment Administered		Drug's Lot No.	Name (Person giving treatment)	Withdrawal Time (Instructed)	Withdrawal Complete (Date & Time)	For prescription or extra label drug use, list the veterinarian's name, address, and phone.
			Medication - Treatment	Amount Given					

Medicated Feeds Remember to document ALL treatments, medications, and dewormers and their withdrawal times. Extra-label use of feed additives is prohibited.

Dates Fed From To	Feed Information (Manufacturer and Name of Feed Used)	Medication Name (Medication added/included in feed and approximate amount)	Withdrawal Time (Instructed)	Withdrawal Complete (Date & Time)

Give **Subcutaneous (Sub-Q)** injections under loose skin of neck or front flank using tented method. Give **Intramuscular (IM)** injections in the neck. If label indicates a choice, use **Sub-Q** (under the skin) injections.



NEVER Inject into the round or loin area.

I certify that I care for this animal, it was not fed any "prohibited" mammalian protein (i.e., meat & bone meal), per FDA regulation, CFR Title 21, and I have listed ALL products and treatments received while in my care for 60 days prior to the show.

Youth Signature: _____ Date: _____

Parent Signature: _____ Date: _____

White - Youth Show/Fair Copy • Canary - Youth Producer's Copy • Pink - Youth Agent's Copy
Discrimination based upon race, color, religion, sex, national origin, age, disability, or veteran's status is a violation of federal and state law and MSU policy and will not be tolerated. Discrimination based upon sexual orientation or group affiliation is a violation of MSU policy and will not be tolerated.

Form 1064 (5M-11-07)

Figure 2. Sample animal health record form for beef animals. Five health record forms (beef, dairy, swine, sheep, and goat) are used at the Mississippi State Fair and Dixie National Junior Round-Up. Each form asks for information about the exhibitor, the animal, the breeder, and the treatments, medications, and dewormers used on the animal in the past 60 days. These forms are used to encourage youth to take responsibility for the health of their animals.

GPP4: Obtain and use veterinary prescription drugs through a licensed veterinarian based on a valid veterinarian-client-patient relationship.

Having a good working relationship with your veterinarian will allow him or her to advise and guide you in using medications appropriate for your livestock project. Through this relationship, the veterinarian gains a working knowledge of your livestock care and management practices. In such instances, your veterinarian can make medical judgments to assist with withdrawal times and develop a record-keeping system and provide “extra label” drug use when deemed necessary.

There are two classes of drugs: over-the-counter (OTC) and prescription (Rx). Over-the-counter drugs can be purchased at veterinary clinics, feed stores, or animal health supply stores. Prescription drugs are only available from a veterinarian or pharmacist.

Over-the-counter drug labels will have printed instructions on dosage, administration, withdrawal times, and handling/storage of the product. Typically, when a veterinarian prescribes a drug, printed instructions will accompany it to describe usage of the drug, dosage, administration, and withdrawal times for that drug. Only a veterinarian can prescribe an Rx drug to be used on an animal. The labels of prescription drugs have the words “CAUTION” and “Federal law restricts to use by or on the order of a licensed veterinarian.”

There are three types of drug use: labeled use, off-label use, and extra-label use. Labeled drug use involves using the drug exactly as it is specified on the label. Off-label drug use is when the producer uses drugs in a manner other than what is stated on the label, without veterinary guidance. This is illegal! Extra-label drug use is when the veterinarian prescribes a drug to be used in a manner other than what is on the label. This is legal and is often used when a good veterinarian-client-patient relationship exists. For some species, such as goats, there are not many approved animal health products, and often a veterinarian may prescribe an extra-label use of a drug given the goat’s condition. Medicated feed may only be used as directed on the label—extra-label use of medicated feed is illegal.

Remember, for a drug to be used “extra label,” it must be prescribed by a veterinarian. A drug may become “extra label” for several reasons:

1. Your veterinarian may tell you to give your animal more medicine than the label requirements.
2. Your veterinarian may tell you to give your animal medicine more frequently than the label requirements.
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 those stated on the label.
5. Your veterinarian may prescribe a drug for your animal that is not labeled for use in that species. This is only done if it is a logical choice and if label use of an approved drug is not available.

GPP5: Educate all family members about treating animals, proper administration of products, and general care of livestock.

Many people have a role in helping youth with their livestock projects. It is important that those involved with the projects have an understanding of how to properly handle animals, treat them, record what was done to them, and carry out routine procedures for feeding and caring for them. While these may seem to be simple concepts, it is critical that those assisting with the livestock project have a clear understanding of these expectations.

A routine technique that should be mastered is the administration of injections. (See Figure 3, next page.) The route of administration for most drugs will be either intramuscular (into the muscle) or subcutaneous (under the skin) injections. Injection sites should be clean and dry.

Intramuscular injections should be given into the muscle in front of the shoulder. They should never be given in the loin, top butt, or top of the round where the more valuable cuts of meat are found.

Subcutaneous injections should be given ahead of the point of the shoulder using the tenting technique. This technique involves using one hand to lift the skin and the other hand to inject the product under the lifted skin. For this type of injection, a shorter needle should be used. It is important to keep injection sites at least 4 inches apart. Do not administer more than 10cc of a product into any one site. If a product must be given several times over a period of a few days, vary the injection sites.

GPP6: Establish an efficient and effective herd health management plan.

A herd health plan can be detailed or simple. Some farms may have a standard operating procedure (SOP) so that the farm has a plan and guidelines to follow when problems arise. Youth producers should consult with a veterinarian about herd health disease problems and record-keeping systems. If you or your veterinarian recognizes specific disease problems, they can be addressed in the plan. Prevention and control of potential disease outbreaks is often cheaper than treating sick animals. Plus, livestock are healthier and more robust when on a health program.

Being committed to maintaining biosecurity is important in youth livestock production. Biosecurity

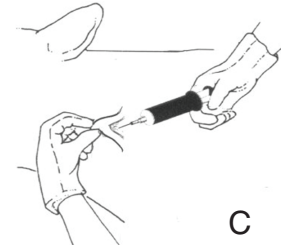
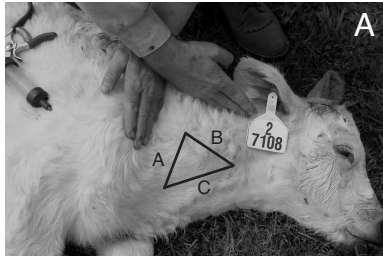


Figure 3. Give injections in the injection zone triangle in the neck (Figure 3A). The corners of the triangle correspond to the A) slope of shoulder; B) nuchal ligament (or about 3 inches below top of neck); and C) vertebrae. All subcutaneous and intramuscular injections must be given in the triangle area in front of the slope of the shoulder (Figure 3B). Tent skin for all subcutaneous injections (Figure 3C). Be sure to space injections at least 4 inches apart, if multiple injections are given to an animal.

is the practice of preventing the spread of infectious disease among your animals or from other herds to yours. A biosecurity program protects animal welfare and costs less than treating sick animals.

One area to consider in a biosecurity plan is isolation of sick animals. You know that everyone gets sick from time to time. What do you do if a child gets sick at school? Often they are taken to a doctor for treatment and are told to stay away from school for a day or so. The same situation applies to your animals: they should be isolated from other animals to prevent the spread of illness.

Traffic control is another biosecurity matter. Disease may be introduced into your animals by vehicles, visitors, or other animals (including pets). That is why people traveling from foreign countries are not allowed to visit farms in the United States for a certain period of time. Another biosecurity concern could be veterinarians or animal health-care salespersons. If these people visit a farm to look at animals, they must use a disinfectant wash to clean their boots and shoes before they visit another farm.

Sanitation is another component of a biosecurity program. When working animals, always tend to the healthy before the sick and avoid using common equipment between healthy and sick animals. Take appropriate measures to secure feed and health-care products away from rodents and other animals that may contaminate these supplies.

Remember that your overall management practices influence biosecurity issues. Prevent cross-contamination of water, manure, feed, or equipment between healthy and sick animals. Routinely clean and disinfect equipment. Carefully inspect new animals and isolate them when they arrive on your farm. Make sure they have been through an animal health-care plan and meet your standards before introducing them into your herd. Frequently observe your animals for signs of not feeling well and possible sickness. Know what normal behavior in your animals is so you will be able to recognize

problems. These practices will help prevent introduction and spread of disease among your livestock project animals.

GPP7: Provide proper animal care to improve animal well-being.

In the 4-H/FFA Livestock Project, you are responsible for living animals that are dependent on you for everything. This means that you must do the following things for the well-being of your animals.

1. Keep water tubs and feed pans clean, and provide your animals with fresh feed and water.
2. Give your animals adequate shelter from the elements. Eliminate drafts and damp areas. You must provide shade access for the hot summer months and a place for them to get out of the weather when it turns cold.
3. Observe the animals daily for signs of illness. Look for snotty noses, not finishing feed, not drinking water, or other indications that they do not feel well. Know what is normal!
4. Always handle animals calmly and humanely. Do not use electric prods, buzzers, or other items to move your animals. This helps prevent bruising, which will ultimately lower the value of the animal.
5. Minimize animal stress during handling and transport. If it is hot, try to work with or transport your animal in the cooler times of the day. Also, you can rinse your animals off to keep them cooler.

GPP8: Follow appropriate on-farm feeding procedures.

Practice good housekeeping with feed equipment and storage facilities so that they stay clean to help prevent contamination. Make sure all of your feeding equipment is safe to use. Dirty equipment (feed buckets or troughs, scoops, storage bins, etc.) can cause contamination of the next batch of feed.

Keep your work and storage areas clean and organized. If you use a medicated feed, separate it from other feeds to prevent the chance of medicated feeds being fed to the wrong animals. Also keep animal health products away from feed and store them as indicated on the product label.

Use a good labeling system to easily distinguish between various types of feedstuffs, drugs, pesticides, or other products you may use on a regular basis. This simply helps avoid confusion and prevents feeding restricted products to the wrong animals.

If you use medicated feeds, this information needs to be kept for each animal. Add feed and animal health supplies to your inventory as they arrive. Keep up with the lot number of each product and other vital information. It is recommended that you keep these records for a year, even after that feed or product has been used.

GPP9: Regularly review and update the youth quality assurance program.

It is important to keep up with new practices adopted by the sector of the livestock industry with which you are involved. Evaluate your GPPs to ensure that they are being met on a consistent basis, and make needed adjustments. Make sure that all animals and individuals involved with the youth livestock project go through this process. Be confident that you are producing quality livestock. It takes a lot of time, dedication, responsibility, and hard work to be successful in livestock projects. You should be proud of the achievements you make. Keep working hard!

GPP10: Make ethical decisions regarding your livestock projects.

The six pillars of character for youth producers are designed to promote ethics and improve the welfare of animals. These characteristics instill traits in youth that will serve them throughout their lives. These six pillars of character are trustworthiness, respect, responsibility, fairness, caring, and citizenship.

Characteristic 1: Trustworthiness

Trustworthiness means that you are loyal and honest, and you keep your promises. With specific regard to your livestock project, trustworthiness means that you feed, water, and care for your animals daily; read labels and adhere to withdrawal times on drugs or other animal health-care products; use only approved drugs as a GPP and consult with your veterinarian about proper medical care and treatment options; and abide by show rules and regulations.

Characteristic 2: Respect

Being respectful of your animals means that you always handle and treat them humanely. You must recognize that your animals depend on you. This means you must provide fresh feed and water to them daily, provide adequate shelter and housing, clean pens and stalls, and observe them for general health. You should also be respectful of people, learning to tolerate differences and being considerate of their opinions and actions.

Characteristic 3: Responsibility

Being a responsible youth producer involves dedicating time to your livestock project. You will inevitably encounter some hardships along the road with your animal, so you should persevere through those times. You are also accountable for what is done to your animal and the decisions that are made.

Being a responsible person means that you will do what you are supposed to do. You should always do your best and keep on trying to work with your animal, even when you become frustrated. You are responsible for the daily care of your animal, even when things are busy with school and other activities. This does not mean that you cannot have help from, and depend on, family members or others who are familiar with your operation and understand the GPPs of your livestock projects.

Another characteristic of a responsible youth producer is that he or she only uses approved feeds and health products in the care of his or her animals.

Characteristic 4: Fairness

Fairness in the youth livestock project includes applying and following appropriate rules and standards when caring for your animals. This means that you should use only approved feeds and drugs to care for and treat your animals. Also, when preparing your animals for a show, be sure to follow the fitting and grooming practices that are outlined in the rules and regulations for that show.

Characteristic 5: Caring

As a youth producer, you should promote the well-being of the people you interact with on a daily basis, as well as the health and well-being of your animals. This means you must provide for the daily nutrition, housing, and health of your animals. You should care for and treat your animals humanely at all times.

Characteristic 6: Citizenship

Citizenship means that you work to make your home, your community, and your country better. You should take an active role in helping others in your school, church, and neighborhood who are less fortunate.

nate than you. Consider helping the elderly who are in a nursing home. This has a big impact on these people, and they appreciate efforts that you make on their behalf.

Citizenship also means that you accept instruction from your elders. It is likely they have been in situations similar to the ones that you are facing or will face with your animal projects and in your everyday life. Their wisdom and advice may help you. It is also important to teach younger exhibitors lessons that you have learned with your animal projects. This can be accomplished by reaching out to the younger people or those new to the livestock project that need some help and direction.

Now that you have read through this publication, you should have a better understanding of the purpose of this training: to increase food safety awareness by educating youth producers about where they fit in this process and the importance of raising their livestock in an appropriate manner. By following a quality assurance program, youth can improve their animal care and management practices to allow their animal to achieve its highest level of performance while providing a safe, wholesome product for consumers.

Copyright 2008 by Mississippi State University. All rights reserved. This publication may be copied and distributed without alteration for nonprofit educational purposes provided that credit is given to the Mississippi State University Extension Service.

By **Dr. Dean Jousan**, Assistant Extension Professor, Animal and Dairy Sciences

Discrimination based upon race, color, religion, sex, national origin, age, disability, or veteran's status is a violation of federal and state law and MSU policy and will not be tolerated. Discrimination based upon sexual orientation or group affiliation is a violation of MSU policy and will not be tolerated.

Publication 2526

Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. MELISSA J. MIXON, Interim Director (POD-12-08)