Keeping Show Pigs Healthy

Bruce Lawhorn
Associate Professor and Extension Swine Veterinarian
The Texas A&M University System
Show pigs can bring many disease organisms into a farm and spread them to other swine. However, you can take several steps to help prevent your show pigs from contracting and spreading diseases. The precautions include:

- Take care that the pigs are healthy when they arrive on the farm.
- Use isolation practices to prevent disease.
- Use good health management practices.
- Provide plenty of fresh, clean water.
- Change rations slowly.
- Provide rations containing medication to prevent specific diseases that kill or cripple pigs.
- Take special care during and after surgeries.
- Vaccinate to prevent serious diseases.
- Deworm the pigs routinely.
- Have sick pigs promptly diagnosed and treated.
- Properly use prescribed drugs.

**Start with healthy pigs**

To prevent disease outbreaks in show pigs, start by preparing before you produce or buy them. If the pigs are farrowed at one location, are never exposed to other swine, and are fed at that location until exhibition, they should be very healthy.

---

**Remember:**

*The greater the exposure, the greater the likelihood of disease problems.*

When buying show pigs, it is best to buy them directly from one farm of origin that has a history of excellent herd health. You may house the pigs together if you bought them all from one farm of origin, unless they are fighting too much (a common cause of lameness) or need to be fed different rations.

Show pigs can be exposed to many disease-causing organisms if:

- They are bought at a sale that is not at the farm of origin.
- They are bought directly from multiple farms.
- They are mixed on a trailer for transportation to a location for distribution to buyers.

**Isolate pigs coming from off the farm**

If you buy show pigs directly from several farms, keep the pigs from each farm isolated in separate pens even while hauling them, and prevent them from contacting each other through the fence for 60 days.

Treat these separate isolation pens as if they were totally different farm locations: Before going from one pen to another, wash and disinfect your boots, equipment and other items. In fact, it could be very practical to continue to keep these pigs isolated from each other for the entire feeding period before exhibition.

If you show the pigs several times during a season, isolate them in their own pen after each return to the farm. Do not expose other swine (such as breeding stock) on the farm to the many disease-causing organisms that these exhibited swine may have picked up.
Follow good health management practices

As a general rule, it is much easier to prevent swine diseases by using good management practices than to successfully treat the pigs after they have become sick. Treating healthy pigs with an injectable antibiotic in an attempt to prevent diseases as a result of poor management usually does not work!

For example, if pigs are purchased from multiple sources, mixed on a trailer and subjected to the stress of hauling, injections of antibiotics during this time may only postpone or delay the development bacterial diseases.

Antibiotics are totally ineffective in preventing common viral diseases such as transmissible gastroenteritis, swine influenza and porcine reproductive and respiratory syndrome. Also, vaccines are not available for all swine diseases, and vaccines must be given long before pigs are exposed to work.

Use good watering, feeding practices

Make sure that the pigs always have access to fresh, clean, cool water. If the pigs do not have water for 2 to 3 days and then gorge themselves with water, they can suffer brain damage or die from salt intoxication (also called water deprivation).

Also, make sure that the pigs find the water and are drinking! Some pigs are accustomed to trough or bowl-type waterers and may not drink from nipple waterers. Temporarily put a kernel of corn in the nipple to allow it to drip into a pan to help the pigs quickly find the water source.

If you use a trough-type waterer, make sure that it is secured to a solid object or that the trough is too heavy for the pigs to overturn it by rooting.

Proper feed management is also important. Do not change rations quickly; sudden ration changes can cause edema disease, which can kill pigs. Change the rations over several days to a week by mixing in the new feed; gradually increase the amount of new feed until all that is fed is the new ration.

You can also buy rations containing medication that help prevent serious show pig diseases. Lincomix® and Denagard® are approved antibiotics commonly used in rations. For more information on them, see Extension fact sheets L-5320, “Diarrheal Disease in Show Swine,” and L-5203, “Swine Pneumonia.”

Take care during and after surgery

If a pig undergoes surgery such as castration, make sure that sanitized instruments are used and that the surgery is conducted under clean conditions. After the surgery, house the recovering pigs in clean areas (such as a clean trailer). If the surgeries are performed by a veterinarian, follow the post-surgical care instructions meticulously.

Many veterinarians try to prevent complications after surgery by administering antibiotics and injecting a tetanus antitoxin. The highest risk for tetanus in pigs is after castration when the incision site is purposely left open for drainage and becomes contaminated with dirt containing tetanus spores (which are in dirt, dust and other materials).

Another possible complication is an abscess or cyst formation that creates an obvious skin enlargement at the castration site after healing; these usually must be removed surgically to allow a barrow to be exhibited. However, lack of healing time before exhibition is always a concern after abscess removal.
To prevent complications such as abscesses, consider using a veterinarian who uses anesthesia for castration, uses an aseptic surgical technique, and closes the castration site.

Veterinarians also commonly perform other surgeries requiring anesthesia, such as removal of retained testicle (cryptorchidism), removal of infected and enlarged urine pocket (preputial diverticulum removal), repair of scrotal or umbilical hernia, and removal of tumors.

Obviously, if you choose a gilt for exhibition, you can avoid many of the potential problems of barrows.

**Recognize risks on the farm**

Even if you use the best management techniques to minimize the exposure of your show pig to disease, you must understand that the pig's dam, or the sow, can pass disease-causing bacteria and viruses to each pig in the litter. The pigs are exposed to these organisms while they are being pushed through the birth canal, when they nurse and when they are exposed to the sow's body secretions and environment before weaning.

They can also be exposed to disease-causing organisms when several litters from the same farm are mixed in the nursery. Before and after weaning are also times that pigs can become infected with roundworms, whipworms, mange or lice.

Therefore, even though a show pig is farrowed and raised on one farm (the very best health maintenance situation), it can still carry disease-causing organisms in its mouth, nose, tonsils, respiratory tract and other areas. These organisms may become active later, particularly after a stress such as hauling.

**Vaccinate to prevent serious diseases**

Although vaccines do not exist for all swine diseases, there are effective vaccines against some very important disease-causing organisms prevalent in many swine herds. Vaccinations are recommended for these important diseases because they may kill the pig or make it unfit for exhibition.

Vaccines are often used in combination for two diseases: erysipelas, caused by the bacterium *Erysipelothrix rhusiopathiae*, which can result in sudden death, skin disease and lameness; and actinobacillus pleuropneumonia (APP), caused by the bacterium *Actinobacillus pleuropneumoniae*, which causes pneumonia, sudden death and chronic poor doers.

The vaccines are made of killed bacteria (PleuroGuard 4® or Pneu-Pac®-E®) and are called bacterins. They are administered to the pig during the first week of arrival [only in a healthy pig!] and repeated about 1 month later. About 2 weeks after the second erysipelas/APP combination bacterin is administered, the pigs develop an immunity that should make these diseases less severe if they occur.

Another extremely important disease is porcine reproductive respiratory syndrome (PRRS). The virus that triggers this syndrome can cause pneumonia and death; or it may cause a chronic disease that reduces a pig's weight gain or stops its growth.

A modified-live PRRS vaccine (Ingelvac® PRRS MLV) is available and is effective. However, vaccinated swine can shed vaccine virus that may infect non-vaccinated swine such as gilts; a carrier state may be established in the exposed gilts and result in PRRS virus being introduced by the carrier gilt into a breeding herd. The result may be decreased reproductive performance.

To prevent this shedding, veterinarians often recommend that an inactivated PRRS virus vaccine (PRRomiSe™) be used in show gilts or even show barrows housed near gilts.
The inactivated PRRS vaccine has been approved only for pregnant females, however. To legally use it on show pigs, the vaccine must be recommended by a local veterinarian who is working with your animals. Inactivated PRRS vaccine is given once on arrival and repeated 1 month later (at the same time that combination erysipelas/APP bacterin is used).

Modified-live PRRS vaccine, if used, is administered only once and should be used only in barrows that are isolated from all gilts or other breeding swine.

**Deworm healthy pigs**

Deworming should also be a routine practice in healthy pigs on arrival and 1 month later. Use a dewormer that is effective against whipworms at least once. Approved products such as Safe-Guard® (fenbendazole) administered daily for 3 days or Atgard® C (dichlorvos) are effective against whipworms as well as roundworms.

Pigs sick with diarrheal disease can be especially sensitive to certain deworming products. Safe-Guard® is probably the drug least harmful to whipworm-infected pigs with diarrhea. Ivomec® (ivermectin) and Dectomax® (doramectin) are excellent injectable dewormers and also kill lice and mange. However, their effectiveness against whipworms is variable.

**Have sick pigs diagnosed and treated promptly**

If your show pig becomes ill, promptly consult your veterinarian for diagnosis and treatment. Pigs that are sick for an extended period do not respond to treatment as well as pigs appropriately treated earlier in the disease process.

For more information on this subject, see the following Texas Cooperative Extension fact sheets:

- L-2369, “Plan for Herd Health When Starting a Swine Operation”
- L-2192, “Vaccines for Farrowing Operations”
- L-2263, “Isolation Procedures for Farrowing Operations”
- L-2193, “Atrophic Rhinitis”
- L-5137, “Porcine Reproductive and Respiratory Syndrome”
- L-5230, “Swine Pneumonia”
- L-5320, “Diarrheal Disease in Show Swine”

The publications are available from your county Extension office, from the Veterinary Extension office (979-845-4353) or at the World Wide Web address http://tcebookstore.org.
Use prescribed drugs properly

Carefully read and follow the label instructions when using any approved feed, oral or injectable drug, or product for swine. Strictly follow withdrawal times for all drugs. The Extension fact sheet, L-5203, “Swine Pneumonia,” discusses the proper use of drugs by animal owners and veterinarians.

If you are in doubt about the use of a drug, medication or product on your show animal, do not use it unless you have consulted a veterinarian and absolutely know that it is acceptable. Carelessly using an approved or unapproved product on your show hog may disqualify you from exhibition!

Obtain more information

Youth leaders wanting more information on health for show pigs should consider the Pork Quality Assurance (PQA) Youth Program. It is an educational program that covers 10 good production practices to help prevent possible drug residues, physical hazards (for example, broken needles) and microbial contamination in pork (increases food safety awareness).

The program is available to youth leaders from the National Pork Producers Association. Contact the association at (515) 223-2600 (phone), pork@nppc.org (e-mail) or http://www.nppc.org/ (Web site).

For more information on the PQA Youth Program, contact your county Extension office; Dr. Jodi Sterle, Extension swine specialist, at (979) 845-2714 (phone) or j-sterle@tamu.edu (e-mail); or the veterinary Extension office at (979) 845-4353 (phone) or Blawhorn@cvm.tamu.edu (e-mail).