A Champions Guide to Youth Swine Exhibition:

Biosecurity & Your Pig Project

Introduction:

Did you know that regardless of how many pigs you care for, whether it's a single show pig or thousands of market hogs, you are part of the pork industry? And, just as you are responsible for keeping your show pig(s) healthy, you share the responsibility of keeping all of the pigs in the United States healthy!

In the United States, there are more than 1 million pigs that are born, bred and raised for shows each year.

A healthy swine herd starts with raising healthy pigs at home. And raising a healthy pig starts with biosecurity.

This booklet is intended for youth exhibitors of all ages and levels of experience. In it, you will find recommended biosecurity guidelines to follow on the farm and when taking pigs to fairs and exhibitions.

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What is biosecurity?

Bi - o - se – cu- ri- ty (bahy-oh-si-kyoor-i-tee)

Biosecurity means doing everything you can to reduce the chances of an infectious disease being carried onto your farm by people, animals, equipment or vehicles.

Biosecurity is a combination of management practices designed to prevent the introduction and transmission of diseases and disease-causing agents into a herd. Procedures that are typically associated with a biosecurity plan include barn sanitation, rodent control, worker and visitor entry policies and general farm security measures.

But what does biosecurity mean for me?

- Biosecurity begins when you purchase your pig and is a continuous process for the lifetime of your farm and pig project.
- Biosecurity involves working with experts who…
  - » Can help you understand how to prevent exposure to diseases and keep your pig healthy.
  - » Help you develop a written biosecurity plan specifically for your farm.

Developing and following a biosecurity plan is the best way to prevent and control the spread of swine diseases!

Disease Transmission

In order to develop a biosecurity plan, you need to first understand how diseases can infect your pig.

How do diseases spread?

Pigs are susceptible to many different diseases. Diseases are caused by pathogens, which can be bacterial, viral or parasitic. Common diseases of pigs can spread or transmit in multiple ways. When pigs from different farms are brought to the show and commingled with other pigs with a different health status, the risk of catching a disease can be high. Therefore, a biosecurity plan should take into account how diseases are transmitted and try to minimize exposure as much as possible.

Routes of disease transmission

Direct Transmission: the transfer of disease from one pig to another and is the most common method of disease transmission. Direct transmission can include:

- Contact Transmission – can include nose-to-nose contact that results in an infection
- Aerosol Transmission – exposure to droplets in the air from an infected pig (cough, sneeze, dust)
- Fecal Transmission – ingestion of infected manure/bedding or exposure to a dirty pen
- Venereal Transmission – transmission of disease during the breeding process (i.e. infected semen)

Indirect Transmission: the spread of disease from pig to pig by exposure to dirty object(s) (i.e. scale, sorting panel, trailer or snare).

Vector-borne Transmission: the spread of a disease to a pig by another animal such as a mosquito or a tick.

Diseases can be transmitted from pig to pig in many ways. By understanding how diseases spread, you can create a biosecurity plan to best keep your pigs healthy.

General Swine Health Biosecurity

1. Isolation

Isolation means keeping a new pig or a pig returning from a fair or show separate from animals already on the farm for a set amount of time. Isolation provides a period of time for you to watch your pig for signs of disease before going back into your herd.

- House new or returning pigs in a separate facility
- Work with pigs in isolation last in the day
- Wear separate boots/footwear for isolation chores OR wash boots after finishing chores and allow them to dry before use the next day

Isolation protects pig health by separating new or returning pigs from pigs that have not been at the show.

2. Cleaning and Disinfection

Cleaning and disinfection of your facilities, trailers and equipment should be a top priority in your biosecurity plan. Proper cleaning can greatly reduce the risk of disease spread by removing the dirt and manure that pathogens can live in. Disinfection and drying can further reduce the amount of pathogens on surfaces.

Suggested steps for proper cleaning, disinfection and drying are listed below:

Cleaning:

- Cleaning equipment and trailers should occur away from the pigs that have not been to a show.
- Remove all bedding, dirt and manure.
- Wash your equipment/rooms with the hottest water possible. Detergents, similar to those used for dish washing, may make cleaning much easier.
- Make sure to clean all equipment that has gone to a show including feeders/waterers, hoses and show box items (show equipment, sort panels, brushes, etc.).

Cleaning and disinfection is a critical part of your biosecurity plan. Cleaning, disinfecting and drying your barn, equipment and trailers can keep the level of disease-causing pathogens to a minimum to reduce the risk of your pigs getting sick.

Disinfection:

- Use disinfectants only after cleaning.
- Apply disinfectants according to the label directions. Directions may include how long a disinfectant needs to be on a surface and rinsing procedure.

Drying:

- Allowing equipment to fully dry is important to kill pathogens.
- Drying can be done by direct sunlight, by time or by adding a heat source.

3. Minimize exposure to people and other traffic

People can transfer pathogens on their body and/or clothing to your pigs. Vehicles also can carry unwanted pathogens and expose your pigs.

- Limit visitors to only those who have a reason to be there and only allow visitors when you are present.
- Visitors need to wear clean boots or plastic boot covers and clean clothing.
- Limit off-farm vehicle access to your pig project area.

People and vehicles can carry and transmit pathogens. In order to protect the health of your pigs, limit visitors and vehicle traffic.

4. Control of wildlife, birds and other pests

Wildlife, birds and rodents can readily transmit many diseases.

- Keep the area around your barn free of weeds, debris or feed making the area less desirable for unwanted pests.
- Utilize fencing, bird netting or other materials to keep pests out of the barn or away from the building.
- Use rodent baits according to label directions and keep baits out of reach of your pigs.
- If mortality occurs, dispose of pigs in a timely manner.

Other animals can transmit diseases. Limiting exposure to these animals will protect your pigs' health.

Are You Ready to Start Your Pig Project?

Preparing to bring your pig home involves more than just setting up the pen. Having a biosecurity plan can get your project started in the right direction.

Identify and Involve Experts for Your Project

There are many people with different areas of expertise that can help you including veterinarians, nutritionists, breeders, extension specialists, ag instructors or club leaders.

An expert can …

- Help you to develop a biosecurity plan
- Help you determine the farm health history and potentially pre-identify any issues
- Continue to assist you throughout your project

Putting Your Biosecurity Plan into Action

Now that you have a plan, is your facility ready for your pig?

- Do you have all of the items necessary to carry out your biosecurity plan?
- Are your pen, feeders, waterers and other equipment clean, disinfected and dried?
- Are you prepared to control disease exposure from people, wildlife and vehicles?

Take the time to identify and work with swine experts to plan and prepare for your pig project in order to maximize your pig's health.

Selecting a Pig for Your Swine Project

A successful pig project starts with a healthy pig. To ensure that you acquire the best pig you can, begin your search by not only evaluating a pig's show ring potential, but also the health status of the farm.

If you are raising your own pigs for show:

- Ensure that purchased or delivered semen and/or breeding stock are free of clinical disease or have a "minimal disease" history
- Have facilities separate from the home herd to isolate new and returning animals and allow for testing for targeted diseases
- Review your vaccination protocol

If you are purchasing your pig for show:

- Review current herd health history.
- Inquire if there have been any health challenges in the current group of pigs for sale. If so, have they been treated and with what product?
- Ask about current vaccinations the pig has received. When were those vaccinations given?
- Make sure to get contact information if you have any further questions.

The selection process should include a focus on determining the health and potential performance of pigs that you will purchase and/or for those pigs that you raised at home.

Preparing for a Swine Exhibition

Prior to attending a show, you should take time to review your biosecurity plan to be prepared to protect your pig's health. Some fairs and exhibitions may require health papers which list specific vaccines given (such as influenza) and may require targeted health testing. Make sure to bring a written record of all your pig's treatments and vaccinations. As part of your biosecurity plan, work with your veterinarian to determine the appropriate vaccination schedule and testing needs for your pig.

Steps to consider prior to going to a show:

- Complete all necessary training and paperwork needed for the show in a timely manner (i.e. Youth PQA Plus®)
- Make sure that your pig meets the specific show requirements for your local, county, state or national show (identification, vaccinations, health papers, etc.)
- Take only clean and disinfected equipment to the show (prevent any potential pathogen transfer from your pig to another)
- Have adequate supplies so you will not have to borrow or share equipment in order to prevent getting an unwanted disease from other pigs.
- Never bring an animal to a show, fair or exhibition that is not healthy.
- Evaluate your pig's health on a daily basis prior to the show:
  - ✓ Is your pig eating normally?
  - ✓ Is your pig coughing, "thumping" or having trouble breathing?
  - ✓ Does your pig have a fever? Does it appear depressed?
  - ✓ Does your pig have loose stools?

Protect the health of all pigs at the show by working with your veterinarian for specific vaccination needs and testing requirements and by adhering to your biosecurity plan to reduce disease exposure and transmission.

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At the Show

Remember direct contact between pigs is the most common way diseases are spread. Using the principles of biosecurity and disease prevention can help to minimize unnecessary contact with unrelated swine or equipment during the exhibition.

What key biosecurity steps should I take at the show?

- Do not borrow or share equipment with other exhibitors.
- Monitor your pig daily for signs of illness.
  - ✓ Is your pig eating normally?
  - ✓ Is your pig coughing, "thumping" or having trouble breathing?
  - ✓ Does your pig have a fever or is it depressed?
  - ✓ Does your pig have loose stools?
- If you suspect that your pig is sick, inform the show veterinarian or another show official immediately.
- Keep your area and equipment clean.
- Wash your hands frequently with warm soapy water after contact with pigs or equipment.

Daily use of your biosecurity plan while at the show can keep you and your pigs healthy!

Other health concerns to consider while at the show:

There are certain diseases that are considered to be *zoonotic,* meaning that they have the ability to spread from people to pigs, and from pigs to people, such as influenza. Having a biosecurity plan in place at the show can help to minimize this potential for pathogen transfer and protect both human and animal health.

Consider the following:

- No eating or drinking in animal areas
- Wash hands frequently
- Do not sleep in animal areas
- If you feel ill, seek medical attention

Returning Home

The implementation of a biosecurity plan does not stop at the end of a show. Taking biosecurity precautions when you return home is just as important as those you take before and during the show.

Biosecurity steps to consider when you return home:

- Clean, disinfect and dry all equipment that was taken to the show including trailers, even if the show was terminal
- Isolate any returning pigs from your home herd
- Work with your veterinarian to determine the length of time for isolation and for any health testing requirements
- Monitor returning pigs daily for signs of illness and alert your veterinarian if you have concerns about your herd's health
- If your pigs do get ill, it is very important to allow those pigs to fully recover before going to another show

As you become involved in showing swine, it is important to understand the impact that you can have on the health of all pigs. By incorporating a biosecurity plan, you are helping to ensure the health of your pig throughout your project.

If you notice any health problems in your pigs, be sure to contact your veterinarian as soon as possible. Your veterinarian will work with you to develop a treatment schedule.

Glossary:

Biosecurity: a combination of management practices designed to prevent the introduction and transmission of diseases and disease-causing agents into a herd

Commingle: to combine or bring together unrelated pigs into direct contact with each other in one location (by pen, arena or barn)

Disinfection: the use of a chemical product on equipment/surfaces that can inactivate or kill disease-causing pathogens

Pathogen: an organism that can cause a disease; can be bacteria, a virus or a parasite

Transmission: the spread of a pathogen from one animal to another

Zoonotic: a pathogen that can transmit from animal to human and cause a disease

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Notes:

American Association of Swine Veterinarians
830 26th St., Perry, IA 50220-1703
aasv.org | 515-465-5255

National Pork Board
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