

GENERAL PREVENTION PRACTICES FOR SWINE PRODUCERS

Minimizing or preventing disease entry and spread on farms is the goal of an effective Biological Risk Management plan. To accomplish this, there are several general management practices that every farm could implement with minimal cost. If done properly, they can help prevent and control a variety of diseases. It is important to consult your veterinarian and seek his/her input while implementing disease control strategies. By working together, you will be able to identify and implement steps to “fit” your operation.

The following management recommendations address disease prevention and control without requiring you to know details about specific diseases. Simple and basic considerations include knowing what is in the area of your farm perimeter (e.g. farms, visitors, neighboring livestock and wildlife), people, vehicles, animal health protocols, recognizing and dealing with sick animals, isolation/quarantine, supply handling and cleaning and disinfection.

Farm Entrance and Perimeter

- **Limit access to your farm.**
 - The entrance to your farm is a major control point.
 - Have only one gated entrance to the animal areas on your farm to better control and monitor all visitors and vehicles arriving at your farm.
 - Lock gates to prevent unwanted human or animal entry.
- **Limit contact between your animals and others that may present a risk of disease.**
 - Minimize contact between pigs and wildlife, feral pigs, and birds.
 - Keep cats and dogs from roaming between farms.
- **Minimize visitors and traffic on your farm.**
- **Post signs at the farm entrance to inform visitors of procedures to follow on your farm. (See Appendix A)**
 - Stay off this farm unless given permission to enter.
 - Check-in with farm personnel upon arrival (direct visitors to “where” they should check-in).
 - Be accompanied by someone from the farm at all times (to ensure biosecurity measures are being followed).
 - Wear clean farm-specific clothing (coveralls, boots) while on the farm. (Be sure to guide visitors to where protective clothing is located).
 - Avoid contact with animals or animal areas unless absolutely necessary (this includes vehicles and visitors).

- **Delivery vehicles and personnel should follow your established farm biosecurity guidelines regarding parking, driving and animal contact.**
 - Inspect delivery vehicles for cleanliness prior to entering and provide a wheel well, tire and undercarriage wash station in case they are soiled.
 - Require feed deliveries to your farm be the first delivery of the day.
 - Require that all other deliveries be left at the perimeter of the farm.
 - Require delivery personnel to follow farm biosecurity procedures like all other visitors.
- **Place animal delivery and load out facilities on the perimeter of the farm.**

People and Vehicles

- **For the safety of your animals and the people who handle them, require that all individuals wash hands with soap and warm water before AND after animal contact.**

Employees

- **Employees that have contact with swine at other locations (including their own home) should use very strict biosecurity measures while on your farm.**
- **Implement strict biosecurity measures for employees coming onto the farm.**
 - Clean boots, hats and coveralls must be worn while on the farm. These should be provided by your farm.
 - Protective clothing should remain on your farm and be washed and/or disinfected before being worn again.
 - Disinfect footwear before entering AND after leaving any animal housing area.
 - Boot baths should be provided at the entrance/exit of all animal areas. The disinfectant solution should be changed at least daily or when visibly soiled.
- **Educate yourself and train your employees to recognize and report diseases.**
 - When all employees know what to look for regarding sick animals, a reporting system allows those in charge to make treatment decisions or decide if the veterinarian should be contacted.
 - Early identification of serious diseases can help minimize the risk of disease spread on your farm.
 - If unusual illness or signs are noticed, contact your veterinarian immediately.

GENERAL PREVENTION PRACTICES FOR SWINE PRODUCERS (CONT'D)



- **Maintain a written Biological Risk Management Plan and have regularly scheduled meetings to educate and update those involved.**
 - This is critical to make sure everyone is current on your operation's practices and provides the opportunity to make changes if needed.

Neighbors

- **Take steps to prevent disease spread from your neighbors' operation to yours.**
 - Do not share equipment or vehicles between farms.
 - If equipment must be shared, all manure and bedding should be removed, the equipment washed with warm water and soap, rinsed, disinfected and rinsed again before using it with animals from your farm.
 - As discussed under 'Employees', protective clothing and footwear should be farm specific. Always wear clean clothes or coveralls, gloves, hats, boots, etc. when coming in contact with animals.
 - Wash and disinfect boots, change gloves, hats, and clothes or coveralls before returning to your farm.

Visitors and Vehicles

- **Post warning signs telling visitors to only enter your farm with permission. (See Appendix A)**
- **Provide a phone number at the farm entrance for visitors to call and make an appointment.**
 - Biosecurity measures can be explained at that time and posted near the phone number for all to see.
- **All visitors should be accompanied by someone from the farm at all times.**
- **Prevent off-farm vehicles from driving onto your farm unless necessary.**
 - Require visitors and vehicles to park in designated areas at the entrance to your farm away from all animal areas.
 - Use only on-farm vehicles for transporting visitors within your operation.
 - Discuss your biosecurity protocols with delivery personnel regarding access, travel paths, etc.
- **Visitors should avoid livestock areas and be restricted from contacting or handling pigs (unless absolutely necessary).**
- **Strict biosecurity measures must also be implemented by all visitors to the farm.**
 - Clean coveralls, hats and disposable or disinfected rubber boots should be worn while on-farm in animal areas.

- Provide a well-maintained foot bath OR clean disposable boots and a receptacle near the entrance to the animal facility.
- After exiting animal areas, wash and disinfect boots OR remove them and dispose of them properly.
- When leaving your farm, visitors should remove all protective clothing and footwear provided by the farm and leave it in the designated area.

- **Facilities and equipment (pressure washers, brushes, hoses) for cleaning and disinfecting should be provided on the farm.**

Record Keeping

- **Traffic on or off your farm should be closely monitored and recorded. (See Appendix B)**
 - Maintain a log sheet to record all visitors and vehicles that enter your farm.
- **Maintain thorough and accurate records of animal movement.**
 - Document all animal movements, including the dates of introduction, where they came from and movements between separate units.
 - Each farm location must be treated as a separate unit or premises.

Animals

Animal Health

- **Review and update your vaccination and treatment protocols with your veterinarian at least once a year.**
- **Monitor and inspect animals at least daily for signs of illness.**
 - Investigate all animals with unusual signs or those unresponsive to treatment, especially those that die suddenly.
- **Clean equipment, boots and change clothing between animal groups with different health status and age group.**
- **Promptly euthanize animals that are not going to recover.**
 - Chronically infected animals can serve as an ongoing source for many disease causing organisms.
 - Properly dispose of the carcass (e.g. render, compost, bury or burn) according to local and state laws.
- **Have your veterinarian necropsy animals that die from unknown causes.**

GENERAL PREVENTION PRACTICES FOR SWINE PRODUCERS (CONT'D)



- This may help identify a potentially infectious disease before it becomes widespread on your farm.
- **Promptly remove dead animals from your operation as they can serve as a reservoir for many disease organisms.**
 - Render, compost, bury or burn dead animals in a timely manner so predators, wild birds and other animals do not spread disease.

New Introductions

- **An all in/all out policy is the best way to minimize disease introduction and allow for cleaning and disinfection of facilities.**
- **If this policy is not possible, limit the frequency and number of new introductions.**
- **Know the health status and the source of any animal(s) brought onto your farm.**
 - Obtain a complete herd health history prior to introducing new animals.
 - Request copies of vaccination and treatment records for all purchased animals.
- **Quarantine all newly acquired animals or reintroduced animals.**

Isolation and Quarantine

- **Isolation of sick animals is necessary to minimize disease exposure of others in your herd and quarantine is required to prevent exposure of your herd to new or returning animals.**
 - In addition to being removed from all other animal areas, isolation and quarantine facilities should be separate from one another.
 - Equipment (feed, treatment, restraint) should not be shared between isolation and quarantine animals.
 - If equipment must be shared, wash in warm water and soap to remove visible contamination, rinse, disinfect and rinse before removing from one location and moving it to another.
- **Immediately isolate sick animals from the herd to minimize disease spread.**
 - Prevent direct contact between isolated animals and others.
 - Prevent sharing ventilation, feed/water and equipment to minimize the risk of disease spread.
- **Use separate facilities, equipment and staff to handle isolated livestock.**
 - If this is not possible, at a minimum, handle or visit the isolated animals LAST.

- Clean and disinfect all equipment, clothing, boots, etc. that come into contact with ill and isolated animals.
- **Any animals that have recently been purchased or returned to the farm should be quarantined.**
 - New or returning animals (e.g., shows, breeding) can be infected with a disease without showing signs right away.
 - Quarantine allows time for a disease to develop in the animal, without exposing your entire herd to the disease agent.
 - Do not allow new additions and animals returning to share water, feed or facilities with your other animals.
 - Ideally animals should be quarantined at a separate location (premises).
- **Time spent in isolation and quarantine varies depending on the disease risk so this should be determined together with your veterinarian.**
 - It is a good risk management plan to test for key diseases before taking animals out of isolation or quarantine to make sure they are not carrying diseases that could be introduced into your herd.
 - Work with your veterinarian to establish what tests are appropriate for your animals.

Wildlife and Other Animals

- **Prevent contact with free roaming animals (e.g. wildlife, feral swine, cats, dogs, etc.).**
- **Control of wildlife may be difficult, but should be attempted.**
 - Keep farm access routes, parking areas, yards and storage areas clean and tidy to avoid attraction of birds or rodents.
- **Minimize bird contact and nesting in your operation.**
 - Birds are disease carriers and while it is nearly impossible to eliminate them from animal housing areas, steps should be taken to discourage their nesting and roosting.
 - Contact your local extension office or veterinarian for approved control methods in your area.
- **Maintain a rodent control program.**
 - Rodents harbor diseases that can affect pigs and can also readily contaminate feed.
 - Contact your local extension office or veterinarian for approved control methods in your area.
- **Secure all feed storage areas and clean up spilled feed to minimize access by pests.**

GENERAL PREVENTION PRACTICES FOR SWINE PRODUCERS (CONT'D)



- These steps will help minimize the number of pests by limiting available food sources.

Supply Handling

- **Always read and follow label directions for proper storage of vaccines and medications.**
 - Sunlight deactivates some vaccines and can render antibiotics worthless, causing poor protection or response to treatment when used in your animals.
 - Vaccines and medicines that need to be refrigerated are susceptible to changes in temperature and may not work if they get too warm (greater than 46°F) or too cold/frozen (less than 36°F).
 - Products that do not require refrigeration should be properly stored in a cabinet or other enclosure to restrict access by unauthorized individuals and minimize environmental exposure (e.g. sunlight and temperature extremes).
- **Monitor your supply refrigerator at least monthly to help ensure the products are adequately stored (36-46°F).**
- **Work with your veterinarian to teach proper procedures to all people who handle vaccines and medicines.**
 - Restrict access to only trained personnel.
 - Training should include proper handling and administration of these products plus when to use them.
 - Improper handling and storage can cause contamination which could cause disease.
 - Improper use of vaccines and medicines can make them ineffective and some can even be harmful to the person.
 - Prudent antibiotic use helps maintain effectiveness in treating disease.
 - Improper use of antibiotics can lead to the development of resistance and illegal residues.

- These materials prevent the chemicals in the disinfectant from contacting and killing the disease causing agents.

- **For pigs housed on dirt flooring, turn over the top layer of soil to reduce the build up of pathogens and parasites.**
- **Use the proper concentration of any disinfectant (always mix according to the product label).**
- **Always allow a disinfection solution contact time to “sit” and work.**
 - To be effective, disinfectants need time to kill the microorganisms present.
 - Refer to the product label to determine the amount of time recommended (usually at least 5 minutes).

Cleaning and Disinfection

General Recommendations

- **Wear personal protective equipment—gloves, coveralls, rubber boots (or disposable boots) and a mask when cleaning out swine housing areas.**
- **Thoroughly clean all objects to remove any visible debris (manure, dirt, bedding) before applying a disinfectant.**
 - Most disinfectants are ineffective when dirt, manure and other debris are present.

GENERAL PREVENTION PRACTICES APPENDIX A



Sample signs to post at the farm entrance.

(Available from your state livestock extension specialist or the CFSPH web site at www.cfsph.iastate.edu)



Additional signage available from private companies (Those listed below are available from Gempler's).



