

# Biosecurity for Pork Production

Alabama has a diverse swine industry. Farms range from small pastures or open lots to larger environmentally controlled barns. All farms, however, confine animals to a space: a pasture, a lot, or a pen. Animals confined to a space will develop immunity to strains of organisms in their group. They are also susceptible to organisms or strains of organisms not present in their space. Biosecurity procedures are required to prevent or reduce exposure to organisms or strains of organisms not present on your farm.

Biosecurity in its simplest form is complete isolation from all forms of exposure. Although some have tried it, it is rarely if ever practical. Any effective biosecurity plan will provide steps for minimizing contact with “outside” organisms by controlling contact with humans and animals.

There is no “one-size-fits-all” biosecurity plan. Every farm is different and will require a different plan. Developing a plan for your farm requires input from your veterinarian or other herd health professional. This publication will give you an idea of what your plan should contain and how to make your plan work.

## Controlling Animal Contact

The first part of a biosecurity plan must identify appropriate areas for isolation and segregation. Isolation is keeping different animals apart. Segregation is keeping similar animals together. Applying these two points is essential for preventing a disease outbreak or a catastrophic herd health event. Applying isolation and segregation requires some thought and will vary with each farm.

The plan begins with controlling access to your farm by wildlife, vermin, and stray animals (dogs and cats.) All can be carriers for pathogens that may affect swine. Security fences will take care of most wildlife and stray animal problems, and securing buildings will help. A thorough, daily vermin control program can keep rats, mice, and other pests under control.

For some farms, replacement animals are delivered to maintain the breeding herd. Introducing new animals to a farm can be devastating for your existing herd as well as for the new animals. Isolating new breeding animals gives you 30 to 60 days to acclimate the new stock to your farm and to evaluate their health status. The level of isolation needed depends on the health status of your herd and the status of the herd of origin. Details of a new stock isolation program should be developed by

a veterinarian or other herd health professional familiar with each herd.

Most farms have animals of different ages. Keeping similar animals together and isolating them from other groups is the idea behind all-in-all-out (AIAO) production. A group of pigs farrowed within 7 to 14 days is normally considered a group. They may be farrowed on your farm, or you may take them as nursery or feeder pigs. Regardless of how you receive them, keeping them together is critical for on-farm biosecurity. More information on AIAO production is available from Extension publication ANR-847, “Scheduling All-In-All-Out Swine Production.”

## Controlling Human Contact

Humans can cause considerable damage to an animal operation if their movements are not controlled and coordinated. Allowing visitors unlimited access to a farm can be devastating. Well-meaning friends can bring pathogens on their clothes. Unwelcome visitors may resort to vandalism or personal injury. There is a growing concern over environmental vandalism and attacks by animal rights activists. Biosecurity problems resulting from contact with humans can be reduced or eliminated by controlling access to visitors.

You and your veterinarian or other herd health professional should identify the people you will allow on the farm. It is best to keep this list small. The best way of controlling access is preventing access. For people who must come on your farm, decide which control measures work best. Farms with sows and young pigs typically have the most stringent controls. Many require visitors to shower and wear clothes provided by the farm. They will also require all visitors to stay away from other pigs for 48 to 72 hours. Furthermore, no direct contact with “outside” vehicles or equipment is allowed.

While these measures are extreme, so are the consequences of a catastrophic disease outbreak. You may not consider showering essential. You should, however, have coveralls and boots (disposal or washable) for visitors whether you require showers or not. Requiring visitors to stay away from swine prior to entering your site is always a good idea. This will reduce the chances of exposure, especially if you do not require showers. Again, the details should be worked out by you and your veterinarian or other herd health professional.

The way that visitors are allowed to tour the farm is critical to herd health. Since an animal’s resistance to

disease increases with age, take visitors to the youngest animals first. One possible exception is newly weaned pigs. For the first week after weaning, pigs often have a reduced immune response. You may want to take visitors to that area before visiting nursing pigs. If you have a group of pigs that are sick, keep visitors away if at all possible.

## Putting a Plan to Use

No plan will be effective unless it is used. Biosecurity plans are dynamic: constantly changing. Developing a plan will help you see what is important in maintaining a healthy herd. Implementing and maintaining the plan will keep you up-to-date with the health status of the herd.

The first step in your biosecurity plan should be making sure everyone on the farm knows the details of your plan. Keep a copy of the plan on the farm and in a place where everyone on site can find it. Everyone working with your animals must understand the parts of the plan they are responsible for. Words on paper mean nothing if they are not understood.

Another critical point of a biosecurity plan is informing potential visitors. A Stop sign on the gate is not enough. Potential visitors must be aware of your plan or the parts that affect visitors when they come on the site. If you have confinement facilities, post a summary of the plan, or the parts of the plan that affects visitors and employees, on or beside the door of buildings and/or office. If someone enters your site and is aware of your procedures, they are consenting to abide by your plan. This implied consent may also make them liable for a problem you can trace to their visit. Ask a lawyer to review your gate and building signs to make sure they are suitable for implied consent. You should also keep in mind that anyone visiting your farm who disrupts operations in a way that jeopardizes animal health and well-being are violating state and federal laws. Having a biosecurity plan in place makes both these cases easier to prosecute when necessary.

## Summary

1. All farms with swine need a biosecurity plan.
2. The farmer, working with a veterinarian or other herd health professional, should develop a plan specific for a farm.
3. Control exposure to wildlife and stray animals.
4. Vermin (rodent and insect) control must be a daily routine.
5. Keep similar animals together and isolate them from others whenever necessary (AIAO) and isolate new animals.
6. Do not allow visitors uncontrolled access to the farm.
7. Make sure all visitors have had no contact with other swine for at least 48 hours prior to visiting your farm.
8. When shower-in and shower-out is not practical, make sure visitors are wearing disposable or washable clothes and footwear you provide.
9. Take visitors to the most disease susceptible animals first.
10. Everyone working on the farm must be familiar with the farm plan.
11. A copy of the plan summary should be posted on the entrance to all buildings.
12. Restrict access to only those visitors essential to farm operation.
13. Make all visitors aware of the parts of your plan affecting them.

## Conclusion

A carefully prepared, fully implemented biosecurity plan is an important part of the standard operating procedures for all farms with swine. Following a plan will reduce the chances of a catastrophic disease outbreak.



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**For more information**, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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