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Plan for Herd Health When Starting a Swine Operation

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Herd health is a very important consideration for producers starting a swine operation. The health needs of the swine herd vary somewhat depending on the type of operation you choose, but certain disease prevention concepts apply to any swine operation.

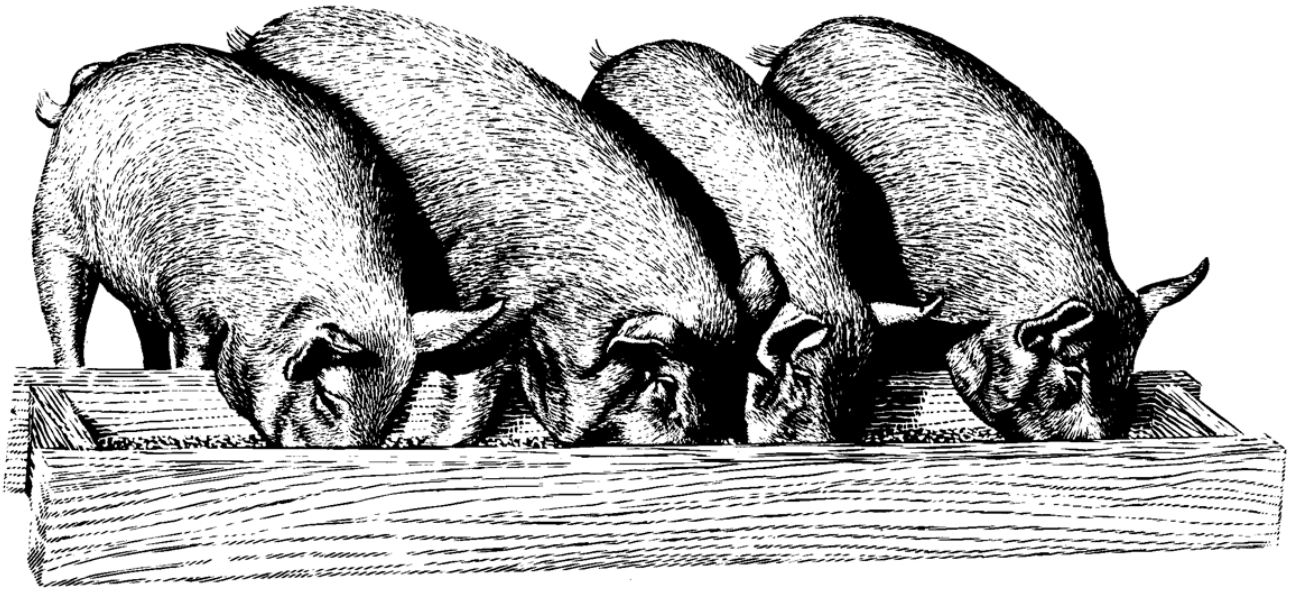
The three basic types of swine operations are:

- Farrow-to-feeder-pig.
- Farrow-to-finish.
- Feeder-pig finisher.

The first two types maintain breeding animals to produce all the pigs that are either grown to feeder-pig size (40 to 50 pounds) or finished to market weight (220 to 280 pounds). Some farrowing operations produce both feeder pigs and market-weight swine. Operations that produce show pigs or breeding stock (boars and gilts) fall into either the farrow-to-feeder-pig or the farrow-to-finish category or both. The third type of operation does not maintain breeding animals; instead, pigs are purchased at feeder weight and finished to market weight for sale. This discussion of herd health concepts applies mainly to farrow-to-feeder-pig and farrow-to-finish operations.

No Herd Is Completely Disease-Free

The first herd health concept that must be understood is that totally disease-free swine are simply not available for commercial production. Economically important swine dis-



eases are present in varying degrees in all herds. Many seed stock producers follow a state blood-testing program in which 25 percent of the herd is tested quarterly for diseases such as pseudorabies (PRV) and brucellosis. (This is faster and easier than testing each animal before it is sold and moved to a new herd.) Producers then will advertise these herds to be "Qualified PRV-free" and "Validated brucellosis-free." However, this designation does **not** mean the animals are free from any other diseases, and it is not even an absolute guarantee that the individual animals you purchase are free from PRV or brucellosis. Tests are not available for all economically important swine diseases.

Many diseases in a herd cannot be detected by visual inspection of the animals. One reason is that individual animals will develop some degree of immunity to the diseases present in the herd. Breeding swine that perform adequately, in spite of the diseases in the herd, should be kept and those that fail to perform should be culled and sent to market. Some diseases produce short-term immunity, and others produce long-lasting or even lifetime immunity. As long as new diseases do not enter a herd, from sources such as new swine, you may experience adequate production with only minor, periodic disease outbreaks. Understanding that no herd is completely disease-free is the basis for the second herd health concept.

Buy Animals from a Single Source

To minimize economic losses from disease, purchase the initial swine in your herd and all replacement animals from only one source. This applies to any type of swine operation. Many economically important swine diseases are much easier to prevent (by never allowing them to enter the herd) than to treat or control. Furthermore, when pigs are exposed to new diseases, they must go through the process of developing immunity. While they do, your operation may experience economic losses varying from growth retardation to the death of some animals. In a herd continually exposed to new diseases, production costs are higher because intensive treatment and prevention practices must be used.

When using the one-source concept, you should consider several factors. First, the source you choose should be able to provide a continuous supply of quality breeding stock. The source's obligations or contracts to other producers will affect his or her ability to supply your operation. Second, make sure that all the animals you purchase from that source come from one farm. Even though breeding stock may be sold under one name, this does not always mean that all animals originate from the same farm. The larger the breeding stock operation, the more likely it is that swine sold under that one name actually come from different herds. Herds in different locations have different levels of immunity to the same and/or different disease-causing organisms. When swine originating from different farms are brought together at the purchaser's farm, the animals will go through the process of developing immunity to all the disease-causing organisms represented in the mixed herd. As this occurs, there may be economic losses.

Since one-source purchases may not always be possible, the next-best disease prevention practice is to purchase swine from as few sources as possible. As the number of sources increases, so do the disease risks.

Identify Diseases Present in the Source Herd. After you choose a source for your breeding stock, determine the diseases present in the supplier's herd(s). Qualified PRV-free and Validated brucellosis-free status indicates that a herd is probably free of these diseases. But you should also discuss with the supplier any other economically important diseases that may be present. Examine and evaluate performance records for the source herd, since poor performance may mean disease problems. Consult a veterinarian with swine expertise for help in interpreting this information. Gather swine health and performance information from the supplier's previous customers as well, since a breeding stock producer relies on satisfied customers for repeat business.

Manage Replacement Animals to Prevent Disease. After your swine herd is established, the management of incoming replacement animals is important. If you take no precautions to prevent disease introduction with incoming swine, you are essentially depending on the health practices used by the supplier. Even if the supplier's animals are healthy at the time you purchase them, they may be exposed to disease during shipment. Ways to minimize disease introduction with purchased breeding swine are discussed in the Texas Agricultural Extension Service publication L-2263, "Isolation Procedures for Farrowing Operations."

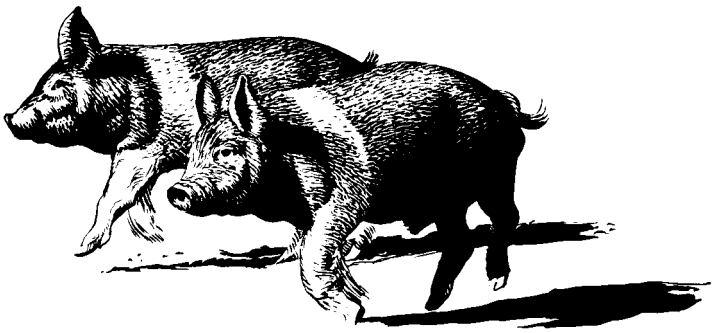
Vaccinate to Prevent Diseases Present in Most Herds

A third important concept in managing herd health is that some swine diseases are so common it is impractical to prevent their entry into a herd. Cost-effective vaccines are available to prevent economic losses from many of these diseases. A veterinarian can provide an individualized herd health program for your operation which includes specific vaccination procedures. Texas Agricultural Extension Service publications L-2192, "Vaccines for Farrowing Operations"; L-2193, "Atrophic Rhinitis;" and L-5137, "Porcine Reproductive and Respiratory Syndrome," provide more information.

A Word on Feeder-Pig Finishing Operations

This discussion has centered on health concepts important to farrow-to-feeder pig and farrow-to-finish operations, both of which purchase breeding swine. The same concepts apply to feeder-pig finishing operations, with some exceptions. You should be aware that feeder pigs will usually not be tested for any disease before purchase unless they originate from out-of-state. It is not as economically feasible to test feeder pigs, since they have less profit potential than breeding swine. Single-source purchases are desirable, but may be less practical than when buying breeding swine. To prevent disease problems, treat feeder pigs purchased from different sources as separate groups; do not mix them together as they are fed out to market weight. Vaccination programs are especially important to prevent disease losses in feeder-pig finishing operations. Texas Agricultural Extension Service publication L-5137, "Porcine Reproductive and Respiratory Syndrome," and information sheet "Health Program for Purchased Feeder Pigs" discuss these techniques.

Any producer planning to start a swine operation should consider the matter of herd health very carefully. Consult a veterinarian with swine expertise before starting your operation and retain his or her services throughout production. The publications and information sheet mentioned in the text are available through your county Extension agent, the Veterinary Extension office (409)845-4353, or the College of Veterinary Medicine, Veterinary Extension Web Site (http://www.cvm.tamu.edu/).



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