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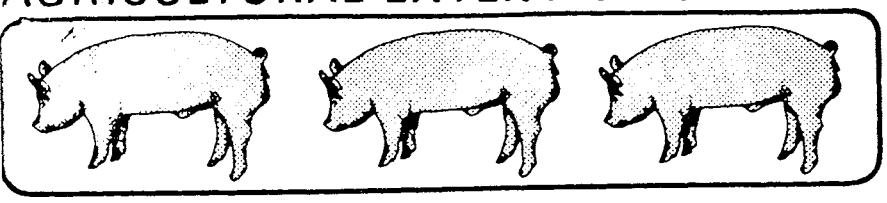

Swine Update

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Should You Attempt to Eradicate Swine Dysentery?

Swine dysentery is a common infectious disease in growing pigs that can be a very costly problem. Recent technological advances have provided an opportunity for eradication of this disease. The following comments are designed to guide you toward making the eradication decision and starting the process.

Disease Description

Swine dysentery is a specific infectious diarrhea of growing pigs commonly called "bloody scours." The disease usually affects growing pigs from 50 to 200 pounds. Occasionally, it occurs in younger pigs and more rarely, in the breeding herd. The disease is characterized by red to mahogany brown stools that have a shiny mucus appearance. It can be confused with similar appearing problems in growing pigs; therefore, the first challenge is to establish an absolute diagnosis. It requires not only a necropsy examination by your veterinarian but confirmation by a diagnostic laboratory. Swine dysentery is usually characterized by a high percentage of animals becoming infected and if untreated, the mortality may become as high as 25%.

The cause of the disease is *Treponema hyodysenteriae* commonly abbreviated as *T. hyo*. The disease is common in large concentrations of pigs. One survey estimated that 40% of all herds in Iowa are infected. There have been no similar studies in Minnesota.

The Disease Transmission

T. hyo infects a farm through the transmission of infected feces. The most common route is by the purchase of infected feeder pigs or breeding stock. Mechanical carriers such as boots, tires, and manure wagons can also transport this infection. Infected fecal material contains a heavy load of organisms. One ounce of fresh manure from an infected pig is enough to infect 28 million additional pigs. *T. hyo* can survive in mice for up to 200 days. In addition to its survival in mice, *T. hyo* can live in manure pits. While the duration of survival is not known, material in manure must be considered as a source of reinfection.

The incubation period for swine dysentery is variable. The most common time is about 2 weeks; however, with a heavy infection load, the disease can occur within one week after exposure.

"Eradicate or Live with the Disease"?

If swine dysentery has been positively identified on your farm, you have several choices:

1. Continue to live with the problem and use the least expensive medications to keep the problem in check.

2. Depopulate and clean up. With proper planning and short down time during the summer, repopulation can begin within 4 weeks.

3. Eradicate the infection from the farm without depopulating.

The choices are based primarily on your economic assessment and the likelihood of eradication success. A reasonable and diligent eradication program has about a 50% chance of success.

The Eradication Program

1. Seek the advice of a veterinarian familiar with swine dysentery eradication. Many veterinarians have now had experience with these procedures and can help you in many ways, especially to avoid unnecessary work and the unnecessary risks of re-occurrence.

2. Plan the eradication process at least several months in advance. It should be attempted in the summer when the heat and drying conditions will facilitate clean up and disinfection. Reduce the herd size. With fewer animals on the premise, your job will be easier.

3. Establish an effective rodent control program. Use professional exterminators or a diligent and extensive baiting and poisoning program.

4. Establish a strict plan of animal and people movement. If swine dysentery has been confined to just the grow-finishing part of production, then you have the following options:

a. Do not keep any replacement gilts from groups exposed to swine dysentery.

b. Initiate a medication program designed to reduce the amount of infection within the pig and reduce shedding into the environment.

c. The time of medication application and withdrawal depend on which medication is selected. You and your veterinarian should establish a specific medication plan. Some of antidysentery medications require prescriptions and some do not.

d. During the medication program clean the floors as thoroughly as possible at least twice so that the T. hyo organisms are unlikely to survive on the floor.

e. The manure pits should be pumped to a low level.

f. Continue the medication across the entire grow-finishing phase of production for a 5-month period. Establish a medication-free withdrawal pen appropriate for the medication chosen. This withdrawal pen must be rigidly monitored so that reinfection does not have time to occur.

g. After a period of 5 months of medication, after all the pigs exposed to outbreak are sold and after the floors are cleaned at least twice, stop the medication program.

5. Some researchers suggest that medication need only be applied for about 5 weeks. I prefer the safer route of the 5 months medication program.

6. If the disease has moved to the breeding herd, you are faced with a much longer eradication program. In these situations complete depopulation and repopulation may be a better choice.

7. After clean up, continue to monitor the disease by having all dead animals necropsied.

8. Adopt a very strict sanitation plan. Discuss with your veterinarian the most likely places where the organism can get back on your farm and reduce the probability that it will do so.

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