

Disease Aspects of Swine Management

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Many outbreaks of disease in swine herds can be avoided by use of management practices directed at disease prevention. Disease control is only one facet of a successful management program.

New disease problems confront the swine industry where none previously existed. Recent changes in management and nutrition pose new problems. Larger numbers of swine are being raised in smaller areas, rations are designed to attain maximum growth, and it is possible to transport diseased and diseased animals great distances in a short time.

Treatment of disease is not as effective or as economical as prevention. Prevention can be attained through management, which should include strict sanitation and immunization programs.

National mortality rates indicate that 40% of the pigs farrowed are not marketed, and one-third of those farrowed are not weaned. This indicates where the greatest death loss occurs and where the greatest effort should be directed. It is difficult to measure losses other than deaths, but they do occur—abortions, poor conception rates, and lack of maximum growth and efficiency.

SANITATION

Sanitation means more than cleanliness. It includes the entire management program directed toward prevention and control of disease.

DISINFECTION

Attempt disinfection only after thorough cleaning. Both cold temperatures and organic material reduce the effectiveness of most disinfectants. The chemical agents commonly used require several minutes in contact with disease producing agents to be effective. A list of USDA recommended disinfectants is available through extension offices, local veterinarians, or from the office of the state veterinarian.

Disinfection procedures should include:

1. Removal of bedding, manure, and feed.
2. Thorough cleaning with hot soapy water and/or 2% lye solution
3. Rinse with clear water to remove all caustic residues.
4. Correct use of an approved disinfectant.
5. Adequate rest period for the area before the introduction of new animals. Consult a veterinarian

for the specific recommendations applying to your situation.

SEGREGATION

Segregating age groups is very important. Newborn pigs, weanlings, feeders, and breeding animals should be kept separate. Some diseases which may cause few or no clinical signs in one group may be highly infectious and even fatal to another group. TGE is a good example. In older animals it may cause only a mild transient diarrhea, while in baby pigs the symptoms are severe and the disease is fatal.

Segregation and isolation procedures should include:

1. Complete separation of age groups.
2. Isolation of new additions to the herd at least 30 days before exposing them to the existing herd.
3. Discourage visitors, especially to areas containing young and breeding animals.
4. Use of foot pans containing disinfectants at all entrances especially of farrowing quarters.
5. Clean and disinfect equipment to be used in pens containing older animals.
6. Prompt disposal of carcasses.
7. Maintaining loading areas separate from all swine operations.

No one set of rules can be devised to cover all farms. Each operator must adapt his own procedures to fit his particular operation.

SELECTION OF BREEDING STOCK

Besides selecting breeders for type, a swineman must also select for health. Many diseases are spread by breeding animals that are introduced to the herd, and many diseases may also be propagated by breeders selected from the herd. Recovery from certain diseases result in "carriers". These are animals which are capable of transmitting the disease to other susceptible animals, but show no clinical signs of the disease themselves.

Some disease conditions which produce "carrier" animals are:

1. Swine Dysentery (Bloody Scours)
2. Atrophic Rhinitis (AR)
3. Mycoplasma Pneumonia (formerly Virus Pig Pneumonia)
4. Leptospirosis

5. Brucellosis

6. Certain Diarrheal Conditions

Undesirable heredity factors should also be considered in the selection of breeding animals. Some of these factors are:

1. Hernias (Ruptures)—These can be "bred out" by avoiding the selection of gilts (or boars) from litters containing ruptured males.
2. Inverted nipples—Cause difficulty in suckling a litter.
3. Swirls

Newly purchased breeding stock should be held separate from the herd and retested for Brucellosis and Leptospirosis at least 30 days after purchase. Some men expose one or two native pigs to check for carriers of diseases such as dysentery, diarrhea, and virus pig pneumonia.

CARE OF SOWS

BEFORE FARROWING

Worm sows with a safe (non-toxic) wormer after they are bred.

Provide exercise. This will improve ease of farrowing and eliminate many maternal dystocias (difficult births).

Provide laxative diets the last few days before farrowing to prevent constipation at and immediately after farrowing.

Wash udders and vulvas at the time the sow is placed in the farrowing pen.

DURING FARROWING

Keep sow quiet and comfortable.

Assist her whenever necessary. Be extremely clean and careful when assisting sows to give birth. Always wash hands and clean fingernails with clean soapy water. If a pig is presented, gentle traction may be applied backwards at an angle of approximately 45 degrees to a line drawn through the long axis of the sow and toward her heels. No one should enter the birth canal with his hand or with any instrument unless he knows what he is doing. Most operators are much further ahead if they call their veterinarian whenever they have doubts.

If labor continues too long without birth, call a veterinarian.

AFTER FARROWING

Remove all afterbirth and any stillborn pigs from the pen.

Provide only fresh water for 24 hours after farrowing.

Examine udder periodically for mastitis and also for agalactae (lack of milk).

Examine vulva for a few days after farrowing for abnor-

mal discharges. If they occur, call a veterinarian.

Depend upon professional service and consultation whenever abnormalities appear.

CARE OF PIGS

AT TIME OF FARROWING

Remove fetal membranes from nostrils to prevent suffocation.

Do not break umbilical (navel) cords unless it appears necessary. If it is necessary, a weak spot 2-3 inches from the body is the most desirable spot. Fatal hemorrhage may occur if the cord is broken too close to the body.

Dip the navels in tincture of iodine.

Make sure the pigs receive the first milk soon after birth.

Clip the needle teeth to prevent injuries to the sow and pigs.

Castration is easier and causes less shock when pigs are young.

ANEMIA PREVENTION AND CONTROL

Iron deficiency anemia can be prevented by the administration of iron. The *method* of administration is not as important as the *necessity* of administration. Methods of administration are: Supplying sod; oral liquids; application to sow's udder; iron compounds spread on sills, in pans or in water; injectable iron compounds; combinations of the methods.

CREEPS

Provide creeps to supplement sow's milk. Creeps also encourage pigs to eat and reduce the shock associated with weaning.

IMMUNIZATION

Depend upon local veterinarians for advice before entering any vaccination program.

Successful immunizing agents are available for erysipelas and leptospirosis. Acute erysipelas is prevented by vaccination, but some arthritis may appear.

Variable effects result with the use of other vaccines and bacterins which are available. Follow the advice of local veterinarians. They are best qualified to evaluate their effectiveness in their practice areas, and can best evaluate the problem on each farm.

