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Swine Care and Sanitation



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SWINE CARE AND SANITATION

Most hog diseases are the result of poor sanitation and management. Good sanitation and management cost little and can save the producer many dollars from animal losses, drugs and veterinary service.

PURCHASE OF SWINE

When purchasing hogs, select a reputable breeder as well as good animals. Avoid swine from droves with a history of losses from disease or inherited abnormalities such as scrotal hernias. In most instances, information of the disease and parasite status of the swine can be obtained only from the breeder.

If contemplating the purchase of SPF (specific pathogen free) swine, it is imperative that selections be made from authorized breeders only. Many swine offered as SPF Swine are nothing more than the offspring of swine that have some time in the past originated from SPF paternity.

When new additions are made to an established drove of hogs, isolate the additions from the established drove for at least 30 days, and have them examined by a competent veterinarian before exposure to the hogs already present on the farm. All new additions should be vaccinated for erysipelas and leptospirosis if there are known problems in the immediate area. All purchased swine should be wormed and sprayed for skin or other external parasites during the isolation period or before coming in contact with the established herd.

The seller should be required to provide a recognized health certificate indicating that the hogs have been examined by a licensed veterinarian and found free of any infectious or contagious diseases. All hogs should have a negative blood test for brucellosis (Bang's) and leptospirosis.

The previous statements particularly apply to the purchase of the breeding boar. Purchase boars at least one month before anticipated use. This will allow time for isolation and re-examination for disease and for the boar to become accustomed to the environment. Experimental pre-breeding with new boars will aid in determining if they are capable breeders.

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GESTATION PERIOD

The sows should be vaccinated annually for erysipelas at least several weeks before the breeding season. Vaccination too near breeding time or during the gestation period may result in infertility, malformed pigs, or abortions.

Many hogmen find it a good practice to have all sows blood tested for brucellosis and leptospirosis several weeks before they are to be bred. Sows having positive tests should be isolated or sold. This practice provides a means of combating an acute outbreak of brucellosis in the hog drove.

FARROWING

Before bringing the sow into the farrowing pen, clean the pen thoroughly to remove all manure from the floor and walls. Scrub the entire pen with a lye solution of one pound of lye to six gallons of warm water. Use extreme caution when applying lye solution to provide protection to the worker's eyes, face and hands. Remove excess lye solution from the pen floor, and apply in time so that the pen will be completely dry before the sow enters. This will eliminate the possibility of lye burns to the sow and the baby pigs. (See North Dakota Extension Folder A-319, Disinfection).

All sows should be dewormed before entering the farrowing barn. Spraying sows with Lindane, Toxaphene, Malathion or other currently approved insecticides is helpful in controlling mange, mites, lice or other ectoparasites. (See North Dakota Extension Folder A - 444, Insect Pests of Hogs.)

It is a good procedure to move all hogs from the farrowing barn for at least one week between farrowings to help break any existing disease cycles. If this is not possible, the farrowing unit should be evacuated completely at least once a year or after a disease outbreak. Complete disinfection should be done during the evacuation period.

The use of lye will eliminate most infectious disease organisms that may be present in the pen as well as some internal parasite eggs that may infest newborn pigs. Phenol or cresol (4 per cent) is also effective against most hog diseases.

Before the sow is placed in the farrowing pen, wash the teats and belly with a mild soap and warm water. This will eliminate soil and fecal material that may contain numerous bacteria that are potential diarrhea-producing agents for the nursing pigs. In addition, this procedure will eliminate ascaris (round-

worm) eggs that would serve as a source of infection to the nursing pig.

When the sow approaches farrowing she should be observed constantly to provide immediate aid if necessary. As soon as the pig is delivered, the membranes should be removed from the nostrils. Each pig should be ear-notched to identify it for future evaluation of growth rate and possible inherited abnormalities such as scrotal hernias.

When the sow has completed delivery, remove the afterbirth. Be sure the sow has completely cleaned. Sows that do not clean often will have uterine infection resulting in decreased or complete stoppage of milk flow. Always examine the sow for milk supply and if milk is not available or mastitis is present, veterinary medication should be utilized immediately. The first milk (colostrum) is most valuable for nutrition, stimulating the digestive tract of the new-born, and preventing digestive disturbances such as enteritis.

Be on the alert for diseases that will interfere with the nursing of the baby pigs such as mastitis-metritis-agalactia complex (MMA), ergotism, or deficient milk supply. Many diseases of young swine can be prevented if the sow is healthy and has an adequate milk supply.

Sows or gilts should not be fed for 12 to 15 hours before or after farrowing. If the sow is unusually restless, a double handful of wheat bran or linseed meal fed as a wet mash may have a quieting effect. Additional benefit may accrue from such a practice in that this slightly laxative feed will protect the sow and pigs from constipation. Further, it is not a good practice to put the sow on full feed too soon after farrowing because the milk flow may start before the new-born pigs are ready to take the increased milk flow. The sow should be on full feed 7 to 10 days after farrowing.

When each pig is born, clip the needle teeth immediately with a sharp, well disinfected clipper. The navel cord should also be cut approximately 1-2 inches from the abdomen. Always leave the scissors used for clipping the cord in a good disinfectant when not in use to prevent navel infection. A good disinfectant is one of the phenol disinfectants, (Lysol), that will not destroy the cutting edges of the scissors. Dip the navel in a 4 per cent solution of iodine immediately following cutting to prevent navel infection.

Provide additional heat for the baby pigs. Heat lamps correctly placed will be very helpful in prevent-

ing chills which often cause diarrhea and pneumonia. Floor heat is another excellent source of heat.

The farrowing house should be screened to keep out flies, insects and birds that transmit infectious diseases.

Baby pigs raised on cement or wood floors without access to soil require anemia preventives. The injectable iron preparations (100 milligrams maximum) should be administered not before 5 to 7 days of age and may be repeated at 3 weeks. If parasite-free soil or oral preparations are used, give at weekly intervals beginning at one week of age. Soil is usually equally as effective as the injectable preparations.

Castration is frequently carried out at the same time as weaning. This should be avoided if at all possible. Castrate and vaccinate separately, at least a week before or a week following weaning, to avoid placing undue stress on the little pig.

Castrate with a sharp knife that is well sterilized before being used on each animal. Have a large incision located as near as possible to the underside of the pig to provide good drainage. When drainage is not provided, swelling, infection and stiff or dead pigs often result. Clean surroundings with plenty of clean straw bedding should always be provided for the castrated animal as a means of preventing infection. The entrance of manure and soil loaded with bacteria into the castrate wound is an ideal means of causing wound infection.

At the first sign of disease, isolate the suspected animal or animals from the rest of the drove. Obtain veterinary service immediately — remember, an ounce of prevention is worth many dollars worth of cure.

MOST FREQUENT DISEASED PROBLEMS OF YOUNG SWINE

MASTITIS-METRITIS-AGALACTIA COMPLEX (MMA)

The cause of this problem is not specifically recognized but is thought to be the co-existence of more than one disease entity. The suggested causes include infectious agents, feeding practices, ergotism, and endocrine imbalances.

The most successful means of prevention and treatment is obtained if post-observation is maintained and treatment initiated immediately upon observation of the problem. Infectious agents can be controlled by the administration of antibiotics or other chemotherapeutic agents. The problem often can be alleviated by the administration of the milk let-down hormone (oxytocin). Preventive measures

that may be helpful include exercise, massaging the involved udder and prevention of constipation at the time of farrowing.

ANEMIA

One of the most frequently discussed problems of young swine is anemia. Anemia is a deficiency in quantity or quality of blood. Iron deficiency anemia is usually the problem associated with young swine and results in decreased transportation of oxygen to the body tissues.

Many preventives are available, all of which consist of providing the sow and/or baby pig with useable iron. The oldest and still most applicable is the use of parasite-free soil. Various injectable iron preparations are available for the baby pig. Specific precautions for other uses should be adhered to. These include strict asepsis to avoid infection at the site of administration. Regardless of the preparation used, never administer more than 100 milligrams at any one time and never before the piglet is at least 5 to 7 days of age. If anemia exists in the piglet before 7 to 10 days of age, it is either not due to iron deficiency or because the sow has been on a very iron deficient ration during pregnancy. More detailed information is available in North Dakota Extension Fold, A- 456, "Anemia in baby pigs". Do not reinject with iron preparations after pig weighs 25 lbs. because of possible damage to the ham, which will not be observed until time of slaughter.

GASTRO-INTESTINAL DISEASES

ENTERITIS

Dysentery or diarrhea of young swine is a frequent problem, particularly where poor sanitation exists, when piglets do not obtain colostrum or because they are chilled. Any of many bacteria may cause enteric disturbances.

Two bacteria usually associated with enteric problems are the Escherichia coli and Salmonella organisms. Internal parasites may also provide severe stress resulting in diarrhea.

The only method of prevention is maximum sanitation and good feeding practices. Specific medication can be determined only after laboratory examination to determine the specific organism causing the problem and its susceptibility of that organism to antibiotics or sulfonamides.

A frequent enteric problem of nursing piglets is transmissible gastroenteritis (TGE). This is a virus disease and infection may be caused by contact with infected swine, dogs or contaminated footwear. Sows that have immunity to TGE will provide the piglets with protection through the milk. There is no vaccine available for TGE.