

SOME DISEASES AND PARASITES OF SWINE

Symptoms of some of the more common hog diseases and parasites are outline here. If there is any doubt about what disease is causing the trouble in a swine herd, consult a veterinarian at once. Though the problems discussed here are the ones most common in North Dakota, they are not the only diseases that may give trouble, and if there is ANY DOUBT AS TO WHAT MAY BE AFFECTING THE SICK ANIMALS HAVE A CARCASS, OR DISEASED SPECIMENS OR ORGANS, SENT TO A DIAGNOSTIC LABORATORY.

Mastitis

Caking, congestion and edema of the udder may be caused by improper feeding or lack of exercise, but should not be confused with infectious mastitis.

If the udder trouble is not infectious and immediate treatment is given, the problem often can be handled by administration of oxytocin, a hormone which causes the sow to let down her milk. Preventive measures such as massaging the udder with an ointment like woolfat, exercise, prevention of constipation, and feeding the sow for several days on a light feed like bran, in limited amounts, may alleviate the condition.

Chronic or infectious mastitis may involve one or more udder sections. The milk flow is reduced or entirely absent. The gland may become atrophied and fail to function for future farrowing. The sow or gilt having extreme toxemia seldom gets up, and her temperature may go up to 106 to 107⁰F. The skin over the rear udder sections may be purple and very swollen. In this case, the litter probably will die unless feed in another manner.

This condition requires the use of antibiotics or other therapeutic agents and, unless the operator understands the disease, the services of a veterinarian will be required.

Anemia

This is one of the most common ailments among young pigs. It causes heavy breathing, a rough coat, and sometimes death, unless prevented or properly handled. Anemia is an iron deficiency in the blood. There are several ways of preventing it. One, which is quite satisfactory, includes making parasite-free soil available to young pigs from birth. The most reliable method is giving young pigs, from 5 to 7 days of age, injectable iron according to directions. Some operators provide both soil and injections. Be sure the syringe and needle are sterile, and disinfect the injection site. While pigs raised on the ground may not need this injection, it may be beneficial to administer one when they are 5 to 7 days of age. Pigs not raised on the ground should be given a second injection about 10 days after the first, repeated each 10 days until they are eating creep feed well. Do not inject iron into the ham after pigs weigh about 25 pounds because of the possibility of causing a dark spot in the ham. If such an injection is necessary, give it in the jowl.

If anemia is present in pigs at birth it is a sign of iron deficiency in the sow's rations, or some other form of anemia other than iron deficiency anemia. In this circumstance, administer iron when the pigs are from 2 to 3 days of age.

Roundworms, Nodular or Whip Worms

Hogs may have large roundworms, which are the most common of all internal parasites affecting swine. They may also have nodular or whip worms.

Most hogs have roundworms. They give the animals a rough appearance, cause tail rubbing, and in severe cases, diarrhea and emaciation. If in doubt, have a veterinarian take a sample of droppings for a worm egg count. The roundworm is a thick worm, and when fullgrown is about the size of a pencil, and yellow to pink in color. One good treatment for all intestinal worms affecting swine is diclorvos, which is mixed with the feed according to directions. Sodium fluoride, piperazine and hygromycin are all approved chemical treatments for worms. Be sure to follow directions when treating pigs of different weights and for pregnant sows. This applies to any approved dewormer.

Young pigs should be dewormed after they are on feed following weaning, and if the worm infestation is severe, a second treatment should follow a week later. Bred sows should be dewormed between one month and two weeks

before farrowing, and the pens thoroughly cleaned before the sow is put in for farrowing. If the sow farrows outside, or if the litter is moved out on pasture, a rotation system should be followed so that each pasture is used only every other year. When circumstances permit, use of a pasture only every third year is desirable. The lot should be tilled and used for some crop the years it is not used for pigs. This management practice will help keep down the worm infestation.

Lung Worms

Lung worms manifest themselves by causing coughing, labored breathing and loss of appetite in pigs. Parasitic pneumonia may develop, especially in young pigs. These worms live in the pig's lungs, grow to be about two inches long and are white to pinkish-red in color. Lungworms may bring on other diseases by weakening the pigs. These worm cannot be effectively treated by chemicals.

Improved management methods and sanitation do the best job of controlling lungworms. Lungworm eggs are coughed up, swallowed, and passed in the feces. The eggs are eaten by earthworms, the larvae hatch in the worm, and if the earthworm is swallowed by a pig, the earthworm is digested and the lungworm larvae set free and finally work themselves into the pig's lungs. Don't turn young pigs into pasture infected with earthworms. These pastures may remain infected for years. Where lungworms are a problem, pigs should be placed on a clean floor or in a clean, well drained pasture that has not been used for hogs for several years and is free of manure and trash.

Diarrhea

Diarrhea, which is one form of gastro-intestinal enteritis or scours, may occur in young pigs any time from birth. Clean quarters, washing the sow before she goes into her farrowing pen or crate, a dry floor, uniform temperature of 50° or more and vaccination of the sow for erysipelas one month before farrowing may help this condition.

Beginning the hour they are born, any time young pigs show any signs of a watery or loose feces they probably are developing diarrhea. Treat these cases with whatever your veterinarian recommends to stop the scours without delay. If a watery discharge is noted in small pigs, treat the litter at once. Don't wait even an hour. Delayed treatment can mean the difference between losing and saving the litter.

In some areas transmissible gastroenteritis (TGE), a severe form of enteritis, causes heavy losses among young pigs. There is no satisfactory medication for this disease. If it contaminates the premises, practice extreme care in the management of sows and their litters. Do not permit stepping from litter contaminated with TGE organisms to clean litter in stalls where pigs are not showing signs of the disease. Disinfect thoroughly any pen where diseased pigs have been held before any young pigs are allowed in. Laboratory diagnosis of an infected pig results in the best suggestions as to how the immediate outbreak of any disease may best be controlled. Consult your veterinarian on the best management in your specific case, don't let disease get a start in your hog lots.

At the Dickinson Experiment Station the following formula has given excellent results in curing an outbreak of scours in pigs ranging in age from newborn to several weeks old. Mix well one-third Tylan 200, and two-thirds erysipelas antiserum. Store in a dark place under refrigeration. The most successful dosage is: 2 cc from birth to 5 days old, 3 cc up to 14 days, and 4 cc after 2 weeks, given subcutaneously just under the loose skin below the elbow joint back of the front leg. This treatment gave excellent results when all others seemed to fail. Sometimes little pigs go into mild shock following the injection, but in all cases at the experiment station this painful condition was of short duration and no ill effects followed. Good effects have been obtained at the Dickinson station by treating scours in older animals with Tylan 50 according to directions for an animal under one month old, and with twice the recommended amount for a pig over that age.

Intestinal or Gut Edema

This form of enteritis that may cause quick death to young pigs following weaning.

A very rich ration of 30 per cent corn, 20 per cent oat groats and 30 per cent of a good supplement, 10.5 per cent dried milk or whey, along with 5 per cent sugar, proper minerals and vitamins, has been known to bring this condition about.

Diluting this or any other ration with 30 to 50 per cent of finely ground oats will stop the death losses from intestinal edema. No medication is of known value at this time.

One way of treating for gut edema has been to give the baby pigs a laxative, such as epsom salts. In the process of

creating a good severe diarrhea, they dehydrate themselves and eliminate the edema this way.

Skin Diseases

Pigs fed zinc sulfate or zinc carbonate at the rate of 180 grams per ton of feed should not develop parakeratosis, which causes a rough condition of the skin on the body, in the ears and on the legs. Zinc should be included in all balanced rations. Keeping the calcium content of the ration below one per cent also will help prevent this trouble.

External parasites, such as mange, mites and lice, may cause a rough skin condition. These can be eradicated with lindane, applied according to directions. Other approved medications may be used for this purpose. Always follow the directions approved for use on swine for any medication. Do not spray pigs before weaning and at least 30 days before slaughter. If pigs are dipped in lindane the holding period for before slaughter is 30 days.

SMEDI Virus

This disease causes sows or gilts to be serviced several times without establishing pregnancy. It also causes them to farrow smaller than normal litters. Dark, mummified pigs are farrowed and whole litters do not do well. The disease is a combination of embryonic death, infertility, stillbirth, and mummified feti.

No vaccine or drugs are available to control this disease. After running a course of several months it may correct itself. Isolation of the organism can be satisfactorily done only if a bred sow is sacrificed about two months after breeding.

If this condition is suspected, keep all visitors, animals, birds and insects away from the herd. Exposing all animals in the herd to the areas on the farm most contaminated with this disease about 4 weeks before breeding may give some protection by establishing immunity. One currently recommended practice to control SMEDI virus is to have through-the-fence contact with any new additions to the herd of infected animals at least 30 days before breeding. This creates a spread of infection through the animals and builds up immunity previous to breeding.

Atrophic Rhinitis

This disease is identified by sneezing in spring pigs. Later, crooked noses are observed in slow-growing groups of pigs. Some sneezing with blood in evidence around the nostrils is probable.

If these symptoms are observed, call a veterinarian and follow his recommendations. Send several affected pigs to a laboratory for diagnosis. If the disease is present, you can clean up the herd by using the following methods:

1. Get rid of all swine on the farm. Thoroughly clean up the premises. Stay out of the hog business for at least 3 months, and bring in breeding stock from a herd known to be disease free. Do not bring in animals from a herd being fed antibiotics, since the antibiotics could cover up the disease.
2. Get rid of all pigs and the sow farrowing the litter in which the disease has shown up in one or more animals. This usually will eliminate rhinitis in the herd.
3. Attempt to clear the herd by sulfonamide medication.
4. With your veterinarian's help, locate the infected animals by taking a nasal swab from all sows and boars in the herd. These should be cultured at a laboratory, and all animals found to be infected should be culled from the premises at once. This must be continued until all animals remaining in the herd have passed three negative tests.

Virus Pneumonia

Virus pneumonia probably is the world's most serious swine disease. Pigs usually show the first signs of the disease between 3 and 10 weeks of age. The incubation period is between 10 and 16 days after exposure.

Some of the first signs are diarrhea for 2 or 3 days, followed by a dry cough with little or no material being expelled. Suckling pigs may go through a period of sneezing for several weeks. This is most marked when pigs come out in the morning, and may be brought on by vigorous exercise. Otherwise, respiratory movements may be normal, unless the case is extreme.

Pigs usually eat well, but do not make gains and become stunted. There may even be a weight loss. Pigs may apparently recover from the disease, and then get a relapse several months later.

The disease is spread by contact of healthy individuals with diseased pigs.

Good management will help control virus pneumonia. Keeping pigs well fed, in a warm environment free of drafts, and with good worm control, is extremely beneficial. No vaccines or antibiotics are of real value.

Where virus pneumonia is suspected, it is best to discuss the problem with the local veterinarian.

Swine Influenza

Swine influenza is a herd sickness, affecting large numbers of individuals rather than one or two. The disease comes on suddenly, and affects most of the herd under one year of age. Fever runs high. The animal becomes prostrate and develops a cough. The period of illness usually is not over 6 days, and recovery is sudden. Death losses usually are light.

There is no known treatment for influenza except good management. Keep the animals in a clean, dry warm place free of drafts, well bedded, and as comfortable as possible.

Erysipelas

Death losses from erysipelas in North Dakota are very high, and the disease, which affects animals in numerous ways, may render the animals worthless if it doesn't cause death. It is transmitted to poultry, sheep and man. Animals that have not been vaccinated for erysipelas shouldn't be brought into a herd.

Acute erysipelas may cause sudden death of one or more animals in the herd. Animals with erysipelas have high temperatures, sometimes show lameness, may have a stilted gait, and if touched, squeal because of severe pain. The skin on the sides usually becomes red or purple, and later may get very dark. Animals often are found dead as the first warning of an erysipelas outbreak. Call your local veterinarian at once, and if there is any question about what the disease really is, send a specimen to an approved laboratory for diagnosis.

In many cases, recovery by animals with the disease is very good if antierysipelas serum and a suitable antibiotic is administered.

Both medications should be given in an amount about three times greater than generally recommended, i. e., about 50 to 70 cc of the anti-erysipelas serum and 20 to 30 cc of the antibiotic, streptomycin penicillin.

In the chronic form, the joints may become swollen, lameness develops, the pigs become unthrifty and gain slowly. They will never develop into first class market hogs.

Once erysipelas is on the premises a regular vaccination program should be followed. This includes vaccination of healthy pigs with vaccine or bacterin at about 6 weeks of age, and, if there has been a recent outbreak, re-vaccinate again in 3 weeks. Gilts kept for breeding should be vaccinated when selected at about 220 pounds and again about 4 weeks before farrowing. Breeding stock over one year old should be re-vaccinated annually.

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