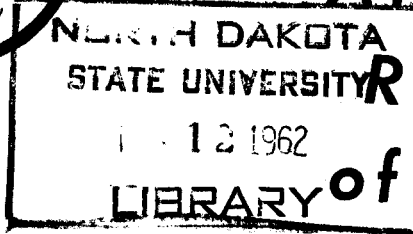


*** Infectious
Atrophic
Rhinitis
of Swine**



*** Virus Pig
Pneumonia**

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EXTENSION SERVICE
NORTH DAKOTA STATE UNIVERSITY
OF AGRICULTURE AND APPLIED SCIENCE

INFECTIOUS ATROPHIC RHINITIS OF SWINE

Atrophic rhinitis of swine is an infectious disease of which the cause is unknown. Viruses, protozoa and a number of bacteria have been suggested as playing a part in the disease. Secondary bacterial infections are common. This disease differs entirely from the well known "bullnose" of swine. The disease has become a very important problem in the last few years. This condition has been known in Europe for many years.

The symptoms of atrophic rhinitis are not particularly distinctive and the disease may be present without the owner being aware of it. In small pigs, bleeding from the nostrils may be observed in some cases; in others the pigs may lacerate their snouts by rubbing on fences, feed troughs and other objects. Sneezing is a common sign. A few pigs may show a lateral or upward twisting of the snout. Growth is slow in infected pigs and the utilization of the feed is low. Costs are frequently much more to produce a pound of pork than the pork is worth.

On post mortem examination, the lesions vary from a mild inflammation of the turbinate bones (filter bones of the nasal cavity) to a complete absence of these structures. It has been noted in a private survey made at an establishment, where the pigs appeared healthy, that at least 20 per cent showed visible lesions of infectious atrophic rhinitis when slaughtered. These pigs had been purchased by experienced hog buyers and apparently were healthy. It is not always possible to avoid purchasing infected animals.

In some cases, the infection appears to spread into the lungs, and there may be pneumonia.

There is no vaccine to be used against this disease. Some of the antibiotics may be of value in treating infected pigs but this is only to combat secondary infections. At present, prevention is the only control measure to be used. The control measures are:

1. Separating the sows into individual colony houses offers the most practical method of building a clean herd. Animals suspected should be culled vigorously. No litters that show any signs of nose bleed or "sneezers" should be kept for breeding. These should be removed at once from the piggery.

2. Pens from which infected animals have been removed should be thoroughly cleaned and disinfected before putting other pigs into them.

3. The living pig probably is the main source of infection. In purchasing breeding stock use the following points as a guide:

1. Number of pigs farrowed.
2. Number of pigs weaned.
3. Number of runts.
4. Are there any with distorted facial bones?
5. Are there any with nosebleeds or sneezing?
6. Does the drove appear "thrifty"?
7. Has the owner recently purchased swine that might be infected?
8. What about other diseases, such as erysipelas and brucellosis?

Infected pigs fed good balanced rations with the addition of high concentration of antibiotics often make satisfactory growth gains. See your local veterinarian for recommendations on antibiotics and the levels to be fed. Your county extension agent can be of help because he usually knows who has had trouble.

VIRUS PNEUMONIA OF PIGS (VPP)

(Infectious pneumonia of pigs)

Virus pneumonia of pigs is a respiratory (chronic) disease of pigs which is often in combination or associated with infectious atrophic rhinitis of swine. This disease is characterized by a persistent nonproductive, dry, rough cough and stunting.

The (VPP) is caused by a large virus and evidently the body of the pig cannot produce enough antibodies to off set the virus and this leads to "carrier" pigs. They can spread the infection for six months or more. No data are available on the number of herds infected in North Dakota but it is estimated approximately

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40 per cent of the United States swine herds are now infected. This disease has world wide distribution but swine influenza occurs only in the United States.

(VPP) cannot be distinguished on post mortem from those lesions caused by swine influenza (Hog "Flu") but your veterinarian can by the signs and the necropsy as well as a good history make a diagnosis for you. Or, he may send in 2 or 3 pigs to the diagnostic laboratory for confirmation.

The first symptom the owner will notice is the coughing. This is more severe in the morning and is aggravated by dusty bedding. Diarrhea often is seen in affected pigs in the early stages of the disease. Diarrhea lasts only a few days but the cough persists. The affected pigs continue to eat and, even when they have a fever above normal (105) they do not appear sick.

Feed conversion may be poor, and gains may be very slow. However, a real illness may occur only when the pigs are stressed and the resistance lowered by secondary bacterial infection, or when they become heavily parasitised.

Your veterinarian will tell you that swine influenza is distinguished by its acute severe illness, a high fever and a loss of appetite and movement.

As with atrophic rhinitis, no vaccine for virus pig pneumonia is available as yet. Control of (VPP) depends to a large extent on the introduction of new stocks and eradication is now a practical procedure.

VPP-free pigs may be purchased but, until more data are compiled on the resistance and cost of these pigs, it is better to have the veterinarian, the pig producers and your county extension agent give you the information regarding the herd history from which you intend to purchase breeding stocks.