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Recommended Citation

South Dakota State University, Cooperative Extension, "Transmissible Gastroenteritis (TGE)" (1969). *SDSU Extension Fact Sheets*. 1175.

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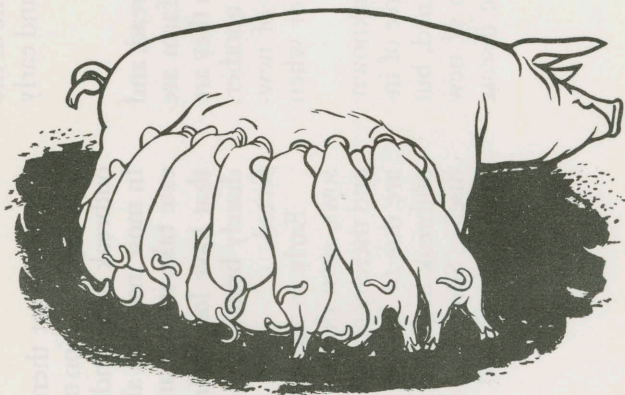
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Transmissible Gastroenteritis (TGE)



Cooperative Extension Service: South Dakota
State University and U. S. Department of
Agriculture

Transmissible Gastroenteritis (TGE)

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Transmissible gastroenteritis (TGE) is one of the leading types of scours in baby pigs and one of the most economically important diseases facing swine producers. The economic loss is not attributed entirely to death, but also to loss of condition during a siege of scours. The poor-doer that results will remain unthrifty the rest of his life.

Research has uncovered significant information concerning the cause, the development of the disease, and methods used to diagnose TGE. However, much research remains to be done before this disease can be effectively controlled.

CAUSE AND OCCURRENCE

Transmissible gastroenteritis (TGE) is caused by a filterable virus. It is not known to cause disease in any other animal. The virus dies rapidly at room temperature and is destroyed by most common disinfectants. However, it will remain infective for many months when frozen in body tissues. The virus is present in practically all tissues of the pig during active stages of the disease. It is shed in the urine and feces and has been shown to be present in these discharges up to 8 weeks after recovery of the pig.

TGE affects swine of all breeds, ages, and sexes. Nearly 100 percent of pigs less than one week of age will die. Death loss in older hogs is not of major importance, but loss of weight in feeder pigs may result in considerable economic loss.

The disease is present throughout the United States. It usually occurs sporadically, affecting swine on individual farms, but sometimes it occurs on many farms in a single locale. It may occur at any time of the year, but most cases occur during the winter and early spring farrowing season.

SPREAD

The term *transmissible* means it can be spread, and this is very true of TGE. All swine on the farm are usually affected within a few days, even when they are in pens located at some distance from one another. The spread may be most rapid when litters of newborn pigs are in a central farrowing house or when hogs are crowded on a feeding floor.

The means of spread of the disease is unknown but it is probably many and varied. The source of infection in many outbreaks is never determined, but many can be traced directly to the addition of new swine to the premises. It is possible that the disease

might be spread by birds, wild or tame animals, or by individuals or vehicles traveling from one pen or farm to another.

Recent research indicates that dogs which have had no known contact with swine may harbor the virus without showing any external signs of the disease.

SYMPTOMS

Symptoms of the disease are suggested by the name gastroenteritis. "*Gastro*" refers to the stomach, "*entero*" refers to the intestine and "*itis*" refers to an inflammation; thus *an inflammation of the stomach and the intestine*.

In young pigs diarrhea and vomiting are seen consistently. The bowel discharge may be white, yellow, or green. It is extremely liquid in consistency. Pigs may appear thirsty and stand in or near watering pans and appear to be drinking. This is caused by loss of large amounts of fluids from the body as a result of scouring and vomiting. Consequently pigs dehydrate and lose weight rapidly. Young pigs usually die within 5 to 7 days after the symptoms appear; some deaths may occur as early as 48 hours.

Symptoms are more variable in older swine. Sows may not show any noticeable symptoms, others may have a mild diarrhea and go off feed. Some may have symptoms as severe as those seen in small pigs, but do not die. Feeder pigs usually go off feed, vomit, scour for 3 to 5 days, and lose considerable weight. They seldom die. Animals that survive may be stunted and unthrifty for a considerable length of time.

CONTROL

At present there is no effective vaccine available for the prevention of TGE. Control of the spread of an outbreak on an individual farm is usually impossible. In most instances all that can be done is to let the disease take its toll and then rebreed the sows. If sows that have lost their pigs from the disease are immediately bred back, the next litters usually are not affected.

Early in an outbreak it may be possible to move sows, soon due to farrow, away from infected hogs and thereby prevent their infection. However, if sows are due to farrow a month or longer after a disease outbreak begins, it may be better to let them get the disease. Sows so affected develop a degree of resistance to the disease and this resistance is passed on to the

nursing pigs in the milk. This resistance is not permanent and probably lasts less than one year.

One of the most typical histories: *a group of feeder pigs or a new boar were purchased 10 days to 2 weeks before an outbreak of TGE*. Since the most severe economic loss due to this disease is death of young pigs, a hard and fast rule should be **DO NOT purchase new hogs for 1 month before or 15 days after a scheduled farrowing**.

Continuous farrowing is not advised when TGE is present on a farm. It should be discontinued for a month or longer to help control the disease. During this period the premises should be thoroughly cleaned and disinfected. Any dead animals should be disposed

of by a rendering truck or by burning. This is particularly true during cold winter weather since the virus may remain alive in frozen tissue for many months.

DIAGNOSIS

The diagnosis of TGE is not easy, particularly in early stages of an outbreak, since other intestinal diseases of swine have similar symptoms and death loss. A positive diagnosis depends on demonstration of the virus in the tissue of an affected animal together with typical symptoms, history, and pathologic lesions. Other disease must be eliminated by proper laboratory procedures. Your local veterinarian is well trained in the recognition of this disease; ask for his assistance.

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5M-10-69; 3M Reprint-1-73—File: 4.11-2-5060

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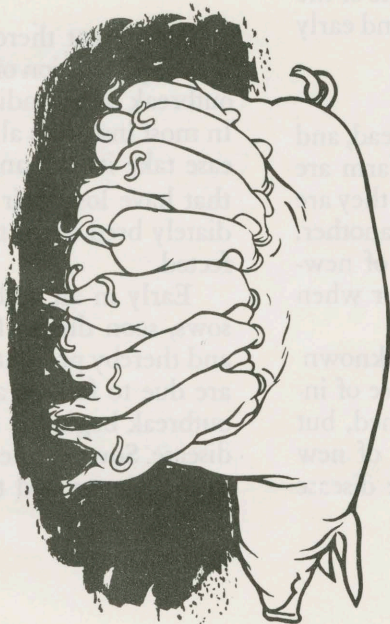
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