

CIRCULAR A-182

OCTOBER 1962

NORTH DAKOTA STATE UNIVERSITY



3 0109 00816 0478

Anthrax

D. F. Eveleth
Veterinarian
Agricultural Experiment Station

S
544.3
• NQ
A8
op. 182
1962

NDSU LIBRARIES

EXTENSION SERVICE
NORTH DAKOTA STATE UNIVERSITY
OF AGRICULTURE AND APPLIED SCIENCE

ANTHRAX

Anthrax is an acute infectious disease. Nearly all types of mammals, including man, are susceptible to infection by the anthrax organism.

The germ causing anthrax, Bacillus anthracis, is a spore-forming organism that is very resistant to heat, drying and to the usual disinfectants. Once the spores infect a barn, corral, or pasture they may remain there for years. It is even thought that they multiply in wet soil during warm weather.

Most cases of anthrax are caused by animals eating the causative organism. However, the disease can be transmitted on surgical instruments and even hypodermic needles. Portions of anthrax infected carcasses often are carried from place to place by birds and animals, and thus spread the infective material.

Nearly all animals that become infected with anthrax die. In many cases the duration of the disease is very short. Cattle have been observed that showed no signs before death. In most cases, however, the animals have high fever, may be very thirsty and walk with a staggering gait. Antibiotics or anti-anthrax serum may be of value in treating infected animals. However, the animals often die before the owner sees signs of illness.

Swine usually show swelling of the region of the throat and jowls. Recovery from anthrax in swine occurs much oftener than in other species of animals.

Since anthrax is so highly infectious for man it is not desirable to open an animal suspected of having died of anthrax. At the time of death, or soon after, animals dying

from anthrax bleed at the body openings or through breaks in the skin. This blood is dark and has a tarry appearance.

The diagnosis of anthrax is based on identification of the organism. This is accomplished by animal inoculation and bacteriological culturing of the specimen.

Anthrax may be confused with prussic acid poisoning or some of the other diseases which cause death soon after signs of disease become apparent.

WHAT TO DO IN CASES OF SUSPECTED ANTHRAX

1. If the animal is alive, call your local veterinarian or the State Veterinarian's office.

2. If the animal is dead, get a blood sample by soaking a small piece of cotton or cloth with blood and taking it to your veterinarian or to a veterinary diagnostic laboratory. The swab can be wrapped around a match and then soaked in the blood. The swab and match should then be placed in a stoppered bottle. When shipped, the bottle should be packed properly.

Do not send an ear as often the blood is drained out and it requires extra time in getting a diagnosis.

A letter describing the case should be attached to the shipping carton and the package labeled "Anthrax Suspect".

In North Dakota the control of anthrax is handled by the State Veterinarian. In no case should a vaccine be given except by direction of the State Veterinarian.

Carcasses of animals that have died of anthrax cannot be disposed of by any of the rendering plants. The carcasses should not be skinned.

The carcasses should be burned completely.

When possible it is best to burn the carcass where it lays. This sterilizes the ground also.

When necessary to move the carcass, haul it rather than drag it.

Disinfect all equipment that comes into contact with the carcass. One of the best disinfectants against anthrax is a 10 per cent formalin solution.

Your veterinarian will give you directions regarding the disposal of anthrax carcasses.

[illegible]

Extension Service, North Dakota, U. S. Department of Agriculture and Applied Science, and U. S. Department of Agriculture cooperating. A. H. Schulz, Director, Fargo, North Dakota. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.