

PRIMARY PNEUMONIA OF CATTLE

by

Dr. C. M. Patterson, Extension Veterinarian
TEXAS A. AND M. COLLEGE SYSTEM

Pneumonia in cattle falls into two classes; primary pneumonia which is not associated with or brought on by other disease or infection, and secondary pneumonia which is the result of infection or lowered resistance caused by some other condition. It is important to determine which type is being dealt with before trying to combat the condition.

Although primary pneumonia in cattle has a variety of names such as stockyards pneumonia, shipping fever or hemorrhagic septicemia it follows a rather definite pattern in both symptoms and treatment.

Pneumonia is any inflammation of the lower respiratory tract, which includes the lungs and bronchi (collection tubes which carry air from the trachea to the various sections of the lungs). Inflammation may be produced by chilling, dust, foreign material, or by the active bacteria. However, in most cases, bacteria produce no harmful effects until resistance has been lowered by some other agent.

CAUSES

1. *Chilling.* Chilling probably is responsible for the majority of pneumonia cases. Exposure to cold winds and rain while being hauled, exposure to severe weather in pasture or feed pens, and sudden chilling when hot often encourage this disease. This is especially true with pastured animals that are on a diet deficient in vitamin A or are in poor general condition. Fat animals are especially susceptible to this disease when heavily exercised and then cooled quickly as in hauling, dipping, or spraying.

2. *Dust.* Although this seldom is responsible for the more severe forms of the disease, it is important to consider in that animals suffering from 'dust pneumonia' lose weight and are extremely susceptible to a more severe type. Cattle worked in dusty lots, driven over dusty ground, grazing on grass covered with dust, or given feed with a high dust content are liable to contract this type of pneumonia.

3. *Foreign body material.* Any foreign material that gains entrance to the lungs sets up an inflammation followed by infection. This usually occurs when an animal is improperly drenched and some of the fluid enters the trachea instead of the gullet. This type of pneumonia frequently follows such diseases as milk fever in which the animal is in a state of coma. Regurgitated material from the stomach may be aspirated into the windpipe in such cases.

Another common type of pneumonia caused by foreign material is brought about by the penetration of wire or nails from the stomach into the lung cavity.

4. *Bacteria.* Although primary bacterial pneumonia is relatively infrequent, it may be brought on by chilling. A group of animals suffering from pneumonia may transmit the condition to apparently healthy animals when kept in direct contact with them. This is seen most commonly in animals that have contracted the disease during hauling or while being kept in public stockyards.

SYMPTOMS

The symptoms of all types of pneumonia are similar and vary mostly in severity. The onset is usually abrupt following hauling, severe weather, or exposure to affected animals. Most cases occur during the cool seasons. The first symptoms noticed probably will be high fever, depression, loss of appetite, and decreased milk flow. Breathing is labored and often accompanied by grunting. Open-mouth breathing, with extension of the tongue, retraction of the lips, and frothing indicates grave involvement of the lungs. A mucous or purulent discharge from the nose is common. Coughing is invariably associated with this condition.

PREVENTION

Vaccination of animals to be shipped with a 'shipping fever' bacterin two weeks prior to shipment is of value in cutting down losses from pneumonia. If it is impossible to treat

animals two weeks in advance of shipment, serum should be used instead of bacterin. Your local veterinarian will be able to help select the proper agent to use in any particular circumstance or location.

Cattle in transit should be unloaded, fed, and rested at least once in every twenty-four-hour period. Cattle being transported in inclement weather should be provided with a wind break and should be rested and fed at least every twelve hours. When the animals reach their destination, they should be fed liberally on grass hay, then watered, and placed in a sheltered place for a twenty-four-hour rest period. Any animal showing symptoms of pneumonia should be isolated and treated immediately.

In pastured animals, incidence of pneumonia can be held to a minimum by providing shelter in severe weather, feeding a vitamin

A supplement during the winter when there is no green grazing, and by maintaining the cattle in good general condition. Cattle should be kept out of dusty lots and feed pens as much as possible.

CARE OF AFFECTED ANIMALS

The first consideration is to find a dry place free from drafts for the sick animal, as the essential requirements for general treatment are dryness, medium temperature (60-65 degrees), absolute rest and nourishing food. Drinking should be encouraged by offering fresh water often. The bowels should be kept open with laxative foods or mild laxatives such as mineral oil.

Specific treatment should be entrusted to a veterinarian as many factors must be considered in selecting the proper treatment for any type of pneumonia.

Issued by
The Agricultural Extension Service
The Texas A. & M. College System and
The United States Department of Agriculture
G. G. Gibson, Director, College Station, Texas.

Cooperative Extension Work in Agriculture and Home Economics, The Texas A. and M. College System and the United States Department of Agriculture Cooperating. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.