Disease Control Guide

CREDIT: The Drovers Journal, Cattle **Disease Control Guide 1986**

How To Use This Guide

All disease descriptions are condensed and expressed in simplified language. Each disease description contains the following information: general description, transmission, signs (symptoms), diagnosis, prevention, treatment. In cases involving a family of diseases (i.e., respiratory diseases, clostridial diseases), a description is provided in terms of the disease complex. Then, individual diseases making up the complex are described separately.

Product listings follow disease descriptions. These listings are provided by marketing companies in accordance with approved labeling. This makes it possible to organize them according to ingredients and type. All products are individually coded three ways: available from veternarians only (*), and whether they are used for prevention (P), treatment (T) or prevention and treatment (PT).

This guide is not intended to be a definitive reference enabling cattle owners to fully diagnose and treat diseases. It should be used to supplement existing knowledge. The services of a veterinarian should be used to diagnose diseases, select drugs and evaluate treatment results

CLOSTRIDIAL DISEASES

Blackleg Novvi Malignant Edema Red Water Sord

Enterotoxemia B Enterotoxemia C Enterotoxemia D

The clostridial diseases are caused by a family of bacteria. The diseases are usually fatal. Death occurs suddenly, causing them to be commonly referred to as "sudden death" diseases. All livestock species are susceptible, although susceptibility to individual diseases is variable.

Clostridial bacteria have some unusual characteristics which make their resultant diseases especially difficult to manage. Several such characteristics are:

1. They transform into spore forms which are highly resistant to destructive forces. Thus, they

can exist in nature indefinitely.

2. They can exist within the bodies of animals in a latent state and not cause disease.

3. They grow in the absence of oxygen. Thus, if injury to animals results in an area of cell destruction, latent spores can be triggered into action.

4. Growing spores release potent toxins which can cause death faster than the body can mount a defense.

5. Causative bacteria fall into groups according to the type of tissue in which infection primarily occurs. These tissues are muscle, liver and gut.

TRANSMISSION: There is no direct transmission, meaning animals don't catch clostridial diseases from each other. Spores enter the body through the mouth and wounds from contaminated soil, hay, feed, etc. Some become latent residents of the animal body; others are excreted. Animals transported from one location to another may spread the diseases through shedding.

CLINICAL SIGNS: Signs of clostridial diseases vary according to the type of tissue in which infection occurs. Unless animals are closely observed, signs may not be seen before death. Swellings in the area of the hip, shoulder, neck and upper leg are frequently seen in cases of blackleg, malignant edema and sord. Serious breathing difficulty and, sometimes, blood-tinged froth and red-colored urine are signs of novyi and red water. In some gut infections, nervousness followed by convulsions and coma are seen; in others there may be abdominal pain, depression, "low bloat" and, in lingering cases, blood-tinged feces.

DIAGNOSIS: A general diagnosis of clostridial disease may be made by connecting the circumstances of death with effects in the types of tissues and areas commonly involved. Definitive diagnosis is best accomplished through bacterial identification in a diagnostic laboratory. This, however, is difficult since growth of latent spores not involved in the primary infection can be triggered by conditions in the animal following death.

PREVENTION: Vaccination is essential. Since the effect of clostridial toxin is too fast for the normal post-infection response to take effect, two doses of vaccine spaced 3-4 weeks apart are required. A vaccine that will protect against the entire group of clostridial diseases provides the best insurance against losses. However, numerous vaccines with narrower spectrums are available. Animals vaccinated under three months of age should be re-vaccinated at weaning or four to six months of age. In breeding herds, cows should be re-vaccinated annually. This maximizes their protection and helps assure high levels of protection in first-milk for their calves

TREATMENT: Treatment is rarely successful. High doses of penicillin and other broad-spectrum antibiotics may be effective, particularly early in the course of the disease. Antiserum may be of value in gut infections.

VACCINES

8-Way Vaccines

Blackleg, Malignant Edema, Sord, Red Water, Novyi, Enterotoxemia B, Enterotoxemia C, Enterotoxemia D Coopers Animal Health

Cutter Animal Health Blacklegol 8 (P) Clostri-Bac 8 (P) Clostrin MLG* (P) Norden Laboratories

7-Way Vaccines

Blackleg, Malignant Edema, Sord, Novyi, Enterotoxemia B, Enterotoxemia C, Enterotoxemia D Affiliated Laboratories Convac 7 (P) Convac 7/HS (P)

Agri Laboratories, Ltd.

Clostridial 7-Way (P) Bar-Vac 7 (P) Bar-Vac 7/Pinkeye (P) Bar-Vac 7/Somnus (P) Ultrabac-7* (P)
Ultrabac-7 (P)
Fermicon 7* (P)
Fermicon 7/Somnugen* (P)
Electroid 7 (P)

Beecham Laboratories **Bio-Ceutic**

Coopers Animal Health Blacklegol 7 (P) Clostridial 7-Way (P) Cutter Animal Health Durvet Farmland Industries Fort Dodge Laboratories Franklin Laboratories Lextron, Inc. Schering Corporation Tech America

Clostroid 7* Franklin 777 (P) Clostri-Bac 7* (P) Clostridial 7-Way (P) Piliguard Pinkeye + 7 Clostridial 7-Way* (P)

Coop CSNS C & D (P)

6-Way Vaccines

Blackleg, Malignant Edema, Sord, Enterotoxemia B, Enterotoxemia C, Enterotoxemia D
Norden Laboratories Clostrin MG* (P)

5-Way Vaccines

Blackleg, Malignant Edema, Sord, Red Water, Novyi
Coopers Animal Health Coopervax 5-wav (ML) (P) Coopervax 5-way (ML) (P) Coopervax 5-way Plus Lepto

(ML + Leptavoid P) (P) Norden Laboratories Clostrin ML* (P)

4-Way Vaccines

Blackleg, Malignant Edema, Sord, Novyi

Affiliated Laboratories Convac CSNS (P) Convac CSNS/HS (P) Agri Laboratories, Ltd.

CCSNS Bacterin Toxoid (P) Anchor Bar-Vac CSNS (P)
Bar-Vac CSNS/Somnus (P)
Ultrabac-CSNS* (P)
Ultrabac CSNS/Somnubac* (P) of bernewick Beecham Laboratories

Bio-Ceutic On M 9df 18 Colorado Serum Co. **Cutter Animal Health**

Durvet Farmland Industries Fort Dodge Laboratories Franklin Laboratories Haver

Lextron, Inc. Tech America

3-Way Vaccines

Blackleg, Malignant Edema, Sord

Coopers Animal Health

Farmland Industries Norden Laboratories Coopervax 3-way (M) (P) Siteguard M plus Pasteurella (P) Coop CCSP (P)

Fermicon 4* (P)

Blacklegol 4 (P) CCSNS Bacterin (P)

Coop CCSNS (P)
Clostroid CSNS* (P)

Franklin 4-Way (P)

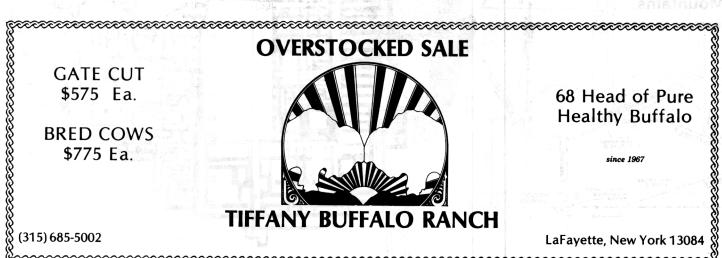
CCSNS Bacterin (P)

Clostri-Bac 4*

CCSNS* (P)

Fermicon 4/Somnugen* (P)

CCSNS Bacterin Toxoid



Blackleg, Malignant Edema, Novyi

Anchor Cutter Animal Health

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2-Way Vaccines

Blackleg, Malignant Edema

Affiliated Laboratories

Anchor **Beecham Laboratories**

Bio-Ceutic

Colorado Serum Co. Cutter Animal Health

Diamond Scientific Co. Farmland Industries Fort Dodge Laboratories

Lextron, Inc.

1-Way Vaccines Red Water

Affiliated Laboratories Colorado Serum Co. Cutter Animal Health

TOXOIDS

Enterotoxemia Types C & D

Affiliated Laboratories Agri Laboratories, Ltd. Convac CS (P)
COS Bacterin (P)
Bar-Vac CSP (P)
Illirahac-CS* (P) Ultrabac-CS* (P)
Ultrabac-CSP* (P) bowed po Fermicon 2P* (P)

Clostridium Chauvoei-Septicum Bacterin (P) Blacklegol S (P) Blacklegol SHS (P) CCSP Bacterin (P) Coop CCS (P)
Clostroid CS* (P) Clostri-Bac CS* (P)
Clostri-Bac CSP* (P) t of a

MEEN

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Convac H (P) Clostridium Haemolyticum Bacterin (P) Redwol (P)

CCS Bacterin (P)

Convac CD (P)

Clostridium Perfringens Types C&D (P)

THE PARTY OF

Tech America **ANTITOXIN**

Bio-Ceutic

Beecham Laboratories

Coopers Animal Health

Cutter Animal Health

Franklin Laboratories

Norden Laboratories

Diamond Scientific Co

Grand Laboratories, Inc.

Colorado Serum Co.

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Enterotoxemia Types C & D

Bio-Ceutic Ceva Laboratories, Inc. Colorado Serum Co.

Grand Laboratories'

性性物 Clostridium Perfringens Types C & D Antitoxin (PT)

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Clostridium Perfringens Types C&D Toxoid (P) Bar-Vac CD-T (P)

Fermicon CD* (P)
Fermicon CD-T* (P)

Clostridium Perfringens Types C & D Toxoid (P) Clostridium Perfringens Types C & D-Tetanus Toxoid (P)

Clostridium Perfringens Types C & D (P)

C-D Bacterin Toxoid* (P)

Clostri Bac C & D* (P) Clostrin G* (P)

Deltox C & D* (P)

Coopervax C & D (G) (P) Siteguard G (P)

Ultrabac-CD* (P)

Fringol C & D (P) E. Coli-Guard (P)

C & D Antitoxin (PT)

Dybelon* (PT)

CVAC Clostridium Perfringens
Types C & D Antitoxin (P)

Clostridium Perfringens Types

C & D Antitoxin (P)

Clostridium perfringens antitoxin
Type BCD* (PT)

Clostridium perfringens antitoxin
Type C* (PT)

Perfringens Coli-Coryne,
Pasteurella Serum* (T)

ANTIBACTERIALS

Affiliated Laboratories Agri Laboratories, Ltd.

Anchor

Bio-Ceutic

Bristol Ag Products Bristol Veterinary Products Durvet

Farmland Industries Fort Dodge Laboratories

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Lextron, Inc. Solvay Veterinary Inc

Tech America

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Di-Pen/L.A. (T) Twin-Pen (T)
Penicillin Dihydro-Strep (T)
Agrimycin-50 (T)
Agrimycin-100 (T)
Combination Antibiotic (T)
Oxy-tet 50 (T)
Oxy-tet 100 (T)

Amoxi-Inject* (T) Benza-Pen* (T)

Procaine Penicillin G* (T)
Bio-Mycin* (T)
Bio-Mycin C* (T) Dura-Biotic (T)

Dura-Biotic (T)
Flo-Cillin* (T)
Polyflex* (T)
Duramycin-50 (T)
Duramycin-100 (T)
Dura-Pen (T)
Oxyject 100 (T)
Pen-Dihydro (T)
Coop Duo Biotic (T)
Longicil* (T)
H/L Bi-Pen
Terralyet 50 (T)

H/L Bi-Pen
TerraVet 50 (T)
TerraVet 100 (T)
Crysticillin (T)
Distrycillin (T)
Dual-Pen* (T)
Pen-Strep* (T)

Medamycin Inj. 50mg/cc* (T) Medamycin Inj. 100mg/cc* (T)

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