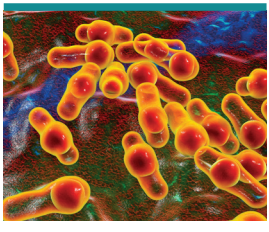
serval

# ADVICE SHEET


## ENTEROTOXEMIA

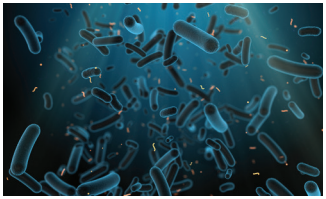


ENTEROTOXEMIA

# CHARACTERISTICS

Enterotoxemia is characterised by a **sudden mortality** affecting animals. It is a **bacterial disease** most often caused by Clostridium perfringens, Clostridium Sordeli, Clostridium Septicum but also enterotoxigenic E. Coli.

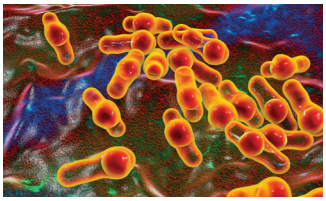
## CLOSTRIDIUM PERFRINGENS



- **G+ strict anaerobic bacteria** (difficult to find in the samples).
- **Affects** the top animals, the most glutton ones.
- **Ubiquitous germ**: C. perfringens is a normal host of the digestive tract. It is also found in the ground, water and air.
- The strains of **C. perfringens** are classed into **5 toxinotypes** (A, B, C, D, E).

- Responsible for a **large number** of **pathologies**, in humans as well as in animals:
  - → lamb dysentery (due to C. perfringens type B).
  - → pulpy kidney disease (due to C. perfringens type D).
  - → infectious necrotic hepatitis (due to C. noyi or C. oedematiens type B).
  - → gastrotoxemia (due to C. septicum) especially present in countries with extensive livestock production during weaning.

## E. COLI



- **Escherichia coli bacterium**: a Gram-negative bacillus present in the saprophytic flora.
- Among more than 200 different types, only a few are **pathogenic** causing **enterocolitis** on the first **segments** of the **small intestine**.
- The **pathogenic strains** of **E. coli** release **toxins**.

# CLINICAL SIGNS


ENTEROTOXEMIA

# CAUSES

## AUTOPSY

**Animals** found **dead without precursor clinical signs,** post mortem bloat.

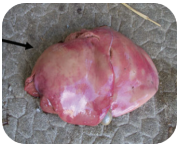
Perform the **autopsy quickly** in order to provide the proper diagnosis (max. 3 hours after death).

**Accumulation** of **gas** in the gastric reservoirs.

**Renal impairment**.

Generalised **intestinal congestion**.

**Hepatic impairment**.



**Inflammation** of the **abomasum**.

Photograph sources:
Réussir 2019

# CAUSES

### Intestinal flora imbalance

- **Sudden variation in diet.**
  - → Change in ration (milk replacers as well as fibrous feed).
  - → Poor dietary transition.
  - → Weaning management.
- **Dietary excess.**
  - → Amount of litres or concentration too high.
  - → Saturation of the animal's digestive capacities.
- **Acidogenic ration (excessive cereals).**

### Stress

- Stress: release of adrenaline that disturbs digestion.
- Substantial change in temperatures (cold nights).
- Not enough watering.
- Deworming.

### Deficiencies

- **Phosphorous deficiency** in lambs resulting in a pica.

### Parasites

- Tapeworm, coccidiosis, fluke.

ENTEROTOXEMIA

# PREVENTION & TREATMENT

### Avoid nutritional stress

- Comply with the feeding plans: volumes and concentration.
- Redistributing to good drinkers is a risk factor.
- Comply with the preparation and distribution temperatures.
- Meals at fixed times.
- Accompany weaning: plan, transition.
- Fibre management: excess nitrogen.
- Constant supply of clean water.

### Hygiene

- Cleaning and disinfection of buckets.
- Fallowing, scraping, disinfection of buildings.
- Mulching.
- Colostrum.
- Treatment of parasitism.
- Vaccination.

### Avoid thermal stress

- Ventilation.
- Volume of the buildings.
- Insulation.
- Cold spring and autumn nights.

### Avoid behavioural stress

- Noise.
- Behaviour.
- Water and food access points.

### Treatment

- **Mortality** is so **sudden** without prior signs that there is not enough time to set up **curative treatment**: beta-lactams, penicillin injections.
- **Vaccination** (against the toxins).

**Only veterinarians have the legal authority and abilities to diagnose and intervene on sick animals.**

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