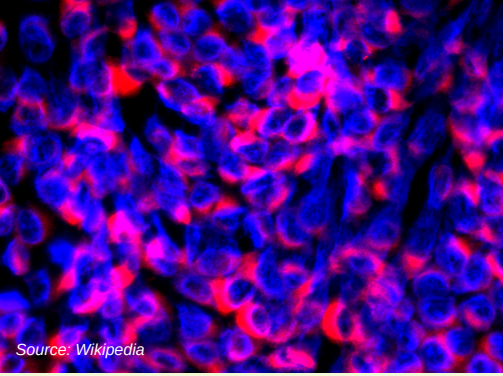


BOVINE VIRAL DIARRHEA (BVD)



CAUSES

Bovine Viral Diarrhea Virus (BVDV), the cause of BVD, has many different strains that cause varying severity and types of disease.

The main source of infection is calves infected during the first trimester of gestation, who shed the virus for life (**Persistently Infected, PI**).

Animals get infected by direct contact, through the placenta, and by indirect contact (e.g., airborne, flies, rectal sleeves, needles, stomach tubes, nose tongs).

BVD VIRUS IS COMMON IN WESTERN CANADIAN BEEF HERDS AND FEEDLOTS. INFECTION SPREADS QUICKLY WITHIN AND AMONGST GROUPS OF CATTLE.

CLINICAL SIGNS

- **Reproductive Disease:** infertility, low conception and pregnancy rates, abortions, stillbirths, weak calves, congenital defects.
- **Diarrhea:** mild diarrhea, fever, off feed, quick recovery, high numbers of animals affected.
- **Peracute Diarrhea:** severe diarrhea, fever, high numbers of sick animals, frequent and rapid death.
- **Unthrifty PI calves:** may be smaller than rest, grow poorly, curly hair.
- **Acute Mucosal Disease** (PI calves 6-24 months of age): depressed, off feed, salivation, profuse watery diarrhea with mucus and/or blood, straining, fever; may have erosions in mouth and nose, dirty nasal discharge, or lameness; rapid death.
- **Chronic Mucosal Disease** (PI cattle): unthrifty, chronic diarrhea and bloat, weight loss, chronic skin lesions, hoof deformities, chronic erosions in mouth, pneumonia; high death loss.
- **Hemorrhagic Disease:** bloody diarrhea, hemorrhages in eyes, bleed from injection sites, nose bleeds.

BVDV causes immunosuppression so it increases the risk of other diseases (e.g. BRD).



BVD IS A VIRAL DISEASE SO IT DOES NOT RESPOND TO ANTIMICROBIALS.

TREATMENT

This is a viral disease so it does not respond to antimicrobials. Discuss treatment options, including addressing potential secondary bacteria infection, with your veterinarian.

PREVENTATIVE MANAGEMENT

Segregate new stock from existing herd for a few weeks and ensure proper vaccination before mixing.

Ensure calves get sufficient colostrum from vaccinated dams. In a BVDV outbreak, contact your veterinarian on how to control and reduce disease losses, and discuss value of testing and culling BVD PI cattle.

VACCINATION

BVDV is considered a **core vaccine**, so it should be included in every herd's vaccination program ([See Core Vaccine Guidelines - BVD Vaccines](#)).

Cattle that have not been previously vaccinated or have unknown vaccine history should be given a booster series (i.e., 2 vaccines, 3-6 weeks apart), as per label directions. Cattle that have been previously vaccinated should be re-vaccinated annually.

Calves should be vaccinated 2 or more times at either 1) spring processing, 2) preweaning, or 3) weaning, as per label directions.

If exporting breeding stock, some countries have restrictions on BVDV vaccination.

Modified Live BVDV vaccine should never be used in pregnant animals of unknown vaccination history and should always be given no less than 1 month before breeding.