

BOVINE RESPIRATORY SYNCYTIAL VIRUS (BRSV)



CAUSES

BRSV is a pneumovirus and is specific to cattle. There are 2 subtypes called **A and B**, with different virulence amongst different isolates. The largest source of virus is other cattle shedding the virus through coughing and aerosol transmission or direct contact.

Disease occurs most commonly in nursing calves on pasture but can occur in older cattle as well.

Other points on BRSV:

- Reinfection is common.
- Natural infection and vaccination do not prevent reinfection because immunity is short-lived, but vaccination may reduce the severity of clinical disease.
- Persistent infection is possible.
- Outbreaks may occur with weather changes.

BRSV INFECTIONS ARE COMMON IN WESTERN CANADIAN BEEF HERDS AND FEEDLOTS.

CLINICAL SIGNS

BRSV causes **upper and lower respiratory disease** and can be part of the BRD complex. Infections are common and most animals have mild clinical disease and recover in a week.

A small percentage will develop a fatal viral interstitial pneumonia, with severe respiratory distress, abdominal breathing, mouth breathing, frothy foam around mouth, fever, reluctance to move, and unable to eat and drink due to severe respiratory distress, with death in 2-5 days.

Sudden outbreaks can occasionally occur in a susceptible herd, with high morbidity (30-50%) and mortality (3-5%).

Typical clinical signs include:

- Mild, moderate to severe respiratory distress.
- Dry non-productive cough.
- Nasal discharge.
- Fever (40-42°C).
- Reduced milk production.
- Decreased feed/water consumption.



BRSV IS A VIRAL DISEASE AND DOES NOT RESPOND TO ANTIMICROBIALS.



TREATMENT

BRSV is a viral disease; thus, it does not respond to antimicrobials. Your veterinarian may recommend antimicrobials to prevent or treat secondary bacterial infections in the lung i.e., Bovine Respiratory Disease (BRD).

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PREVENTATIVE MANAGEMENT

- Minimize stressors on cattle.
- **Vaccinate cattle prior to disease risk**, as per your veterinarian's vaccination protocol, using good vaccination techniques ([Watch videos here](#)).
- Segregate new stock for a few weeks from existing herd and ensure vaccinated against BRSV before mixing.
- **Ensure calves get sufficient colostrum from vaccinated dams.**
- Keep good vaccination records.



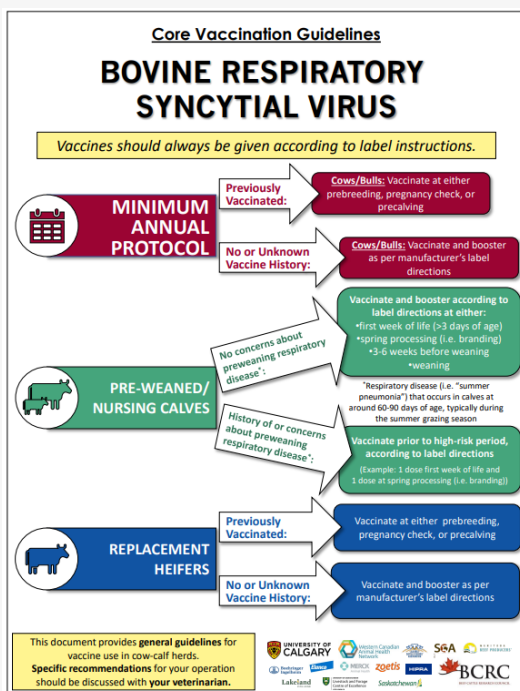
IN A BRSV OUTBREAK, CONTACT YOUR VETERINARIAN ON HOW TO CONTROL AND REDUCE DISEASE LOSSES.

RECOMMENDED VACCINATION SCHEDULE (CORE VACCINE):

Replacement heifers: vaccinate with a BRSV vaccine, and revaccinate as per manufacturer's label directions.

Cows and Bulls: vaccinate annually with a BRSV vaccine, and revaccinate as per manufacturer's label directions.

Calves: vaccinate with a BRSV vaccine at either 1) >3 days of age, 2) spring processing, 3) preweaning, or 4) weaning, and revaccinate as per manufacturer's label directions. If vaccinating in first week of life or at spring processing, use an intranasal BRSV vaccine to reduce immune response interference from maternal antibodies.



CONSULT THE CORE VACCINE GUIDELINES - BRSV VACCINES

