



RESPIRATORY ISSUES IN ORGANIC CATTLE

Guidance

Bovine Respiratory Disease (BRD) is a general term for respiratory disease in cattle caused by a range of factors. A major cause of economic losses, BRD affects the lower respiratory tract/ lungs (pneumonia) or upper respiratory tract (rhinitis, tracheitis, bronchitis). Bovine respiratory disease can be a major economic drain on organic farms, causing loss of production, increased labor costs, premature culling, and death. Upper respiratory disease (URD) affects the nostrils, throat, and windpipe; pneumonia (or lower respiratory tract disease) affects the bronchial tree and lungs.

BRD is often triggered by stressful environmental factors. Stressors include humidity, dust, dehydration, irritating gases from manure build-up, and nutritional deficiencies. Abrupt weather changes, cattle transport, and poorly ventilated barns may also lead to respiratory disease outbreaks.

NOP REGULATIONS AND PCO POLICY

The National Organic Program (NOP) regulations require that livestock producers establish and maintain preventive livestock health care practices. When preventive practices and veterinary biologics are inadequate to prevent a sickness, such as bovine respiratory disease, a producer may administer synthetic medications, provided that such medications are allowed according to the NOP regulations. If allowed medications fail, you must not withhold a medical treatment from a sick animal in an effort to preserve its organic status. All appropriate medications must be used to restore an animal to health when methods acceptable to organic production fail. Livestock treated with a prohibited substance must be clearly identified and shall not be sold, labeled, or represented as organically produced. §205.238

ADDITIONAL INFORMATION

SYMPTOMS OF BRD

Signs of upper respiratory disease include:

- Discharge from the nose and eyes
- Coughing
- Loud sounds while breathing

Signs of pneumonia include:

- Fever
- Depression
- Lack of appetite
- Increased breathing rate
- Coughing
- Death

BEST MANAGEMENT PRACTICES

Cows out on pasture are at a lower risk for respiratory disease than cows in a poorly ventilated barn. Fans improve airflow inside barns and you can retrofit many older barns with tunnel ventilation. In tunnel ventilation systems, fresh air is drawn through openings in one end wall by exhaust fans mounted in the opposite end wall.

If respiratory disease is a problem on the farm, or if new cattle are introduced to the farm, consider vaccinating both the home herd and new cattle. Vaccinations should include: IBR, PI3, BVD (Types I and II), BRSV, Pasteurella,

and *Haemophilus somnus*. Early in a herd outbreak, vaccination or boosting with an intranasal vaccine may be helpful.

Dust from poor-quality hay can increase the risk of respiratory disease in a number of ways. Dust (possibly including mold spores) can act as a physical irritant on the respiratory system and may trigger allergic reactions and noninfectious pneumonia (interstitial pneumonia).

TREATMENT PRACTICES

- **Vitamin B and C injections:** Both of these vitamins are good anti-oxidants. You can administer both under the skin or in the vein. Vitamin injections are limited to use by or on the order of a licensed veterinarian. §205.603(a)(21)
- **Anti-inflammatories (aspirin or flunixin):** Used to reduce fever and prevent damage to lungs. These must not be administered in the absence of illness. Records must be kept documenting specific animal treated, treatment/dosage used, and duration of treatment. Flunixin requires a milk discard period of at least 3 days after administering to dairy animals and a meat withdrawal period of at least 8 days after administering to livestock intended for slaughter. §205.603(a)(9)
- **Antibiotics:** In cases where the calf does not respond to the above treatments, antibiotics or other drugs cannot be withheld to preserve the organic status of an animal that is suffering. Livestock treated with a prohibited substance must be clearly identified and shall not be sold, labeled, or represented as organically produced.

APPROVED INPUTS

All inputs must be reviewed and approved by PCO prior to use, so be sure to check with us or consult a current PCO Approved Materials List, OMRI, or WSDA list prior to purchasing or using a product. PCO does not endorse any of the products listed in this guidance document. This is not an all-inclusive list and other inputs may be allowed. Please contact PCO if you have any questions on materials or restrictions.

These products must not be administered in the absence of illness. Records must be kept documenting specific animal treated, treatment/dosage used, and duration of treatment. §205.238(b)

- **Herbal antibiotic tinctures**
- **Garlic**
- **Homeopathy** determined by cow's presentation and symptoms
- **Essential oils** (eucalyptus)
- **PulMate** by Crystal Creek
- **Garlic Oil Tincture** By Fertrell
- **Apple Cider Vinegar**

The therapies included in this document may not be scientifically evaluated or appropriate for all farms. PCO is not endorsing the efficacy of any of the approved treatments, and producers should work with a trained professional to treat any distressed animals.

RESOURCES

- <http://articles.extension.org/pages/67227/organic-dairy-herd-health:-managing-disease-in-the-organic-herd>

- <https://www.zoetisus.com/conditions/dairy/bovine-respiratory-disease- brd .aspx>