



# SCOURS IN ORGANIC CALVES

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## Guidance

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Scours is another term for diarrhea occurring in calves during the first 30 days of life. Scours is caused by viruses, parasites, bacteria, or any combination of those. Fecal-oral contact is the primary source of scours. The main concerns with scours are dehydration, loss of electrolytes (body salts), and inflammation of intestinal lining impairing the ability to digest nutrients. These symptoms can cause weight loss and low blood sugar, leading to death if not treated as soon as possible. If untreated, some calves may survive up to two weeks after symptoms appear; others may survive only 1-2 days. This can not only be fatal to calves but can also cause lasting negative economic impacts on the farm.

### **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 scours, 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 SCOURS**

Symptoms of scours include:

- Watery or bloody stools that may be brown, grey, green, yellow in color.
- Weakness and depression.
- Lack of desire to nurse.
- Sunken-eyed appearance as a result of dehydration. A bony appearance as the calves dehydrate and metabolize their body fat reserves.
- Staggering or swaying while walking due to weakness and low blood sugar concentrations.
- Calves become too weak to stand. Left untreated, death typically occurs within 24 hours.

#### **BEST MANAGEMENT PRACTICES**

- It is important to clean the milk bottles and equipment for feeding calves. Sufficient calf rations should be provided at regular intervals for animals. All calves should be provided appropriately clean and dry calf housing.
- It is essential that all newborn calves receive colostrum. It is common practice for dairy farmers to milk the dam and feed the calf colostrum manually. The calf should nurse or be given 2 quarts of colostrum during the first 2-4 hours after being born and a total of 4 quarts in 12 hours.
- It may be a good back up plan to have colostrum frozen or purchased from another dairy. Be sure to source colostrum from certified organic sources.

- Vaccinations are often important for the management of herd health. Be sure to consult your local veterinarian about vaccine products and time of administration. All registered vaccines are allowed for organic production.
- Calve in dry areas and drain pastures or corrals to minimize accumulation of moisture.
- Maintain a clean calving area and do not calve on pastures where cows have been kept in large numbers for long periods of time or scours has been recently diagnosed.
- Segregate calves by age to prevent passage of infectious agents from apparently healthy older calves to newborns.
- Maintain adequate protein, energy, and micronutrient nutrition for the dam during gestation.

## TREATMENT PRACTICES

One of the immediate concerns with scours is dehydration. Treating the calf with an electrolyte solution will help with maintaining adequate hydration levels. Calves can lose 5% to 10% of their body weight daily in fluids due to scours. To replace these lost fluids, electrolytes should be fed in addition and separately to the calf's allocation of milk. Electrolytes alone do not provide an adequate amount of energy for the calf to fight off the disease and maintain body weight. Methods to restore electrolyte concentration and hydration of body fluids include:

- **Oral administration:** This option is most appropriate for scouring calves that are still able to stand and who are alert enough to follow their dams and move away when approached. Depending on the size of the calf and the severity of the scours, 2 - 6 quarts of electrolytes may need to be administered each day. Typically, the total volume of fluid is divided into two or more feedings per day.
- **Intravenous administration:** This route of fluid administration is typically reserved for those calves that are too weak to stand or too lethargic to follow the dam or avoid being caught. The fluids are typically administered through a catheter placed in the jugular vein. The volume to be given depends on the calf's size and the severity of the scours.
- **Nutritional support:** A calf with severe scours may not want to nurse much in the first day or two of the illness. Most calves will regain their appetite with appropriate fluid therapy, as described above. However, since scours can last several days, baby calves that fail to nurse or be fed milk are at risk of starvation. Consult with your veterinarian to develop a feeding regimen for scouring calves.
- **Thermal support:** Providing bedding, shelter from wind, rain, and snow so that the calf does not experience excessive cold stress on top of its existing disease.

Practicing proper biosecurity is also critical. People working with infected calves should not work with healthy calves. Whenever possible, isolate scouring calves and their dams from healthy cattle. It is important to note that some infectious agents that make calves ill can also make people sick. People working with scouring calves should wash their hands before and after handling calves, their feed or their bedding.

## 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 list, 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.*

Treatments 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). This is not an all-inclusive list and other

treatments may be allowed. Please contact your certification specialist if you have any questions on materials or restrictions.

- **Pecti Cap** by Bio-Vet Inc.
- **HolisTec Calf Rescue Paste 911** by Animal Medic Inc.
- **Calf Start** by Dr. Paul's

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://msue.anr.msu.edu/news/calf\\_scours\\_signs\\_treatment\\_and\\_prevention\\_part\\_2](http://msue.anr.msu.edu/news/calf_scours_signs_treatment_and_prevention_part_2)
- [https://www.agriculture.com/livestock/cattle/health/calf-scours-symptoms-treatment\\_280-ar47114](https://www.agriculture.com/livestock/cattle/health/calf-scours-symptoms-treatment_280-ar47114)
- [https://articles.extension.org/pages/15695/calf-diseases-and-prevention#Early Identification of Sick Calves](https://articles.extension.org/pages/15695/calf-diseases-and-prevention#Early_Identification_of_Sick_Calves)