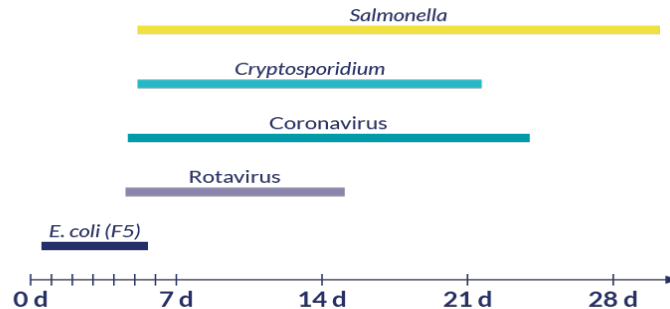


Calf Scours – Prevention and Treatment

Scours is often the cause of sick and even dead calves on both beef and dairy farms. Common causes include *e. coli*, rotavirus, coronavirus, and cryptosporidium. Many farms often have more than one agent at a time causing scours in calves, but the typical timeline is illustrated in the figure below.



There are a few critical strategies that will help prevent scours on all farms regardless of the causative agent. The most important, and often forgotten, of these are cleanliness and the importance of receiving colostrum. The sooner the calf gets good quality, clean colostrum the better. At a minimum calves should have 4L of good quality colostrum in the first 12 hours of life. On beef farms this means ensuring that the calf is up and drinking from the cow asap. If you are unsure if the calf has drank from the cow it is recommended to feed supplementary colostrum, but remember not all colostrum replacers are created equal! It is important to look at the level of IgG's provided in a package of colostrum replacer; market products vary from 50 – 200IgG in a single package. As a total colostrum replacer, the 200IgG products are best but if you believe the calf has received some colostrum from the cow you may be able to get away with a cheaper product containing less IgG's.

Cleanliness is also critical on all farms. As many beef farms will notice, it is typically the calves born in the second half of the calving season that get the worst scours. This is because the causative agents of scours have now built up in the environment. In a perfect world we would clean and disinfect the pen between each calf, which we often can do on dairy farms. But on beef farms this is not practical, if space allows it is a good idea to group cows by calving dates. This way you can avoid contamination by older calves in pens of newborn calves. However, many farms cannot do this, so an alternative is to ensure cows are not overcrowded and that bedding is kept clean and dry. If bedding is clean and dry, cows' udders and teats will have less manure contamination, and this means less direct transfer of diarrhea causing agents from the cow to the calf.

Cow vaccination strategies and products that can be given to newborn calves to provide immunity are also an important part of prevention. Vaccinations can be given to the cow

pre-calving to provide immunity through the colostrum or passive immunity products can be given at birth to provide immunity directly to the calf. There are many different options available, so it is important to talk to your herd veterinarian about what is best for your farm.

Regarding treatment, fluid therapy is by far the most important. Calves with diarrhea can lose 3-6L of fluid every day, so it is no wonder that they can go downhill so quickly! As soon as you see a dull calf that is not up and drinking a normal amount you should be supplementing with oral electrolytes. If the calf is still drinking milk, you may be able to get away with one electrolyte feeding a day. But if the calf shows no interest in drinking milk you can feed 2L of electrolytes up to 4 times a day depending on the severity of illness. If the calf will not drink a bottle of electrolytes on its own, it is important to tube feed electrolytes to ensure it does not get dehydrated and die. Some calves may need IV fluids, if the calf is down with sunken eyes and no suckle reflex call your veterinarian to administer IV fluids.

Another important aspect of treatment is non-steroidal anti-inflammatory medications (NSAIDs). Administration of an NSAID as soon as you notice a sick calf provides pain relief as well as fever reduction which allows the calf to feel better and get drinking normal amounts of milk sooner. A common example of an NSAID is Metacam, talk to your veterinarian about which one is best for your farm. Antibiotics may also be needed in some cases. However, only about 30% of calves with diarrhea also have bacteria in their bloodstream, so not every calf will need antibiotics. Talk to your veterinarian to develop a protocol for antibiotic treatment of scouring calves.

Remember that it is easier to spend a little extra time cleaning and ensuring good colostrum intake than it is to treat a bunch of sick calves!

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