Calf diarrhea diagnostics

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Abstract

The decision to submit calf diarrhea samples to a veterinary diagnostic lab can often be challenging. Balancing the value of the information with the ability to promote positive management changes is the conundrum the veterinarian often finds themself in. It is important for veterinarians to understand the available tests, interpret results properly, and convey those results in a manner that promotes improvements in calf health.

Key words: diarrhea, calves, diagnostics, prevention

In a challenging economic climate, dairy producers may be more less willing to spend money on diagnostics; however, veterinarians should aim at providing valuable information to reduce disease and improve current and future performance. Framing the conversation in this manner may convince producers to invest in diagnostics when the veterinarian determines it to be necessary.

Calf diarrhea investigations should have the goal of reducing losses in the current outbreak and preventing new cases from occurring. Veterinarians must understand that knowledge of the etiologic agent may explain the cause of death of the animal; however, it rarely provides a singular solution. The diagnostic testing objectives should be to confirm a clinical

diagnosis, identify actions needed to prevent new cases, and effectively communicate a plan of action. The overarching goal of the investigation must be to find a solution to the problem, and knowledge of the etiologic agent(s) helps guide the plan of action.

Veterinary diagnostic laboratories now provide molecular diagnostic testing such as real-time polymerase chain reaction (RT-PCR) tests that are very sensitive to target organisms. Laboratories also understand the epidemiologic picture and offer pathogen diagnostic panels based on the age of the animal at the time of clinical disease. The veterinarian needs to understand that "common things happen commonly" and that certain pathogens cause disease consistently at specific age ranges, while others might be more variable.

The most important aspect of performing diagnostic tests is providing meaningful and convincing feedback to the producer to promote positive change that improves calf health. Producers are often more motivated to make these changes after investing money in diagnostics. It is then up to the veterinarian to continue to provide oversight and monitoring to ensure these the changes have long-term meaningful impact.

