Timely Tips to Prevent Costly Calf Scours

Calf scours can cause major economic losses for cow-calf producers, as great as 50% death losses in severe situations, according to Iowa State University research. Some calves die of scours. While others do recover with treatment, scours treatment costs valuable time and money. In addition research shows calves treated for scours weigh as much as 15 lbs. less at weaning than healthy calves.

Any number of microorganisms can cause scours, ranging from viruses such as rotaviruses (serotypes G6 & G10) and coronavirus as well as bacteria like E. coli K99, salmonella and Clostridium perfringens: Type C, and protozoa such as cryptosporidia. The good news is the occurrence of calf scours can be minimized and often prevented through management practices that reduce exposure and enhance immunity to the common scours pathogens.

Minimizing or preventing scours is a multi-step, management-reliant endeavor that involves three tiers: the animal, the infectious agents responsible for the illness and the environment.

Simply put, sanitation, animal management and vaccination are the key starting points for scour prevention, says John Rodgers, Pfizer Animal Health veterinarian, of Fairmont, Minn.

“Develop a plan to clean up calving areas from last season to reduce the concentrations of scours pathogens,” Rodgers says. “In all actuality, the environment should be the first variable that producers consider as wet, unsanitary conditions and mud can be primary culprits behind calf scours.”

It’s also important to work with your local veterinarian to choose a demonstrated, broad-spectrum vaccine and plan vaccination for the cows and heifers prior to calving, but not too early.

“We know production of colostral antibodies begins about 3 weeks prior to calving and peaks at 2 weeks pre-calving. To ensure the cow’s passive immunity is at optimum levels, vaccination and revaccination should be done according to labeled directions, and ideally close to calving, so important antibodies are as high as possible in the cow’s colostrum,” Rodgers explains.

“The vaccination window for a product such as ScourGuard® 4KC coincides well with the peak in the cow’s colostral antibody levels,” Rodgers continues. “Initial vaccination with ScourGuard 4KC requires two shots given three weeks apart with the second dose given three to six weeks prior to calving. For cows vaccinated with ScourGuard in previous years, an annual booster should be given three to six weeks prior to calving.”

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Four steps to calf scours prevention

John Rodgers, Pfizer Animal Health veterinarian, shares four key management tactics to use prior to and during calving to maximum producers’ success in preventing calf scours.

1. Reduce exposure of newborns to infectious agents.
   - Prior to calving season, clean and disinfect all calving areas to the best of your ability.
   - Choose a calving environment that is well drained and offers protection from wind and the elements, and if possible, calve during warmer, dryer weather.
   - Separate healthy pairs from sick calves immediately.
   - Be sure equipment, boots and hands are thoroughly cleaned after handling sick animals.
   - Move healthy pairs to clean pastures to decrease exposure to pathogens.

2. Reduce stress on cows and calves.
   - Assist with calving as necessary, especially with heifers.
   - Keep animals as clean and dry as possible.
   - Have cows in body condition score 6 or 7 for optimum calving.

3. Make sure calves start nursing as soon as possible after calving to get adequate colostrum (4-6 quarts in the first 24 hours).

4. Vaccinate the cow prior to calving to help provide disease protection through the colostrum. If the cow herd has not been vaccinated, consider using an oral vaccine in newborn calves prior to nursing to help provide immediate protection in the gut. Consult your veterinarian for the scours prevention and vaccine program most appropriate for your herd. In most cases, a scours vaccination program should include protection against rotavirus, coronavirus, E. coli K99 and Clostridium perfringens Type C.

Make sure calves start nursing as soon as possible after birth to make sure they get adequate colostrum to help build immunity. A calf needs 4-6 quarts of colostrum in the first 24 hours of life.