Follow label directions when using MLV vaccines

Recently there has been an increased awareness regarding use of Modified Live Viral (MLV) vaccines in pregnant cattle. There have been some reported and/or published accounts of abortions following a MLV vaccination. Typically, these abortions are attributed to the IBR portion of the vaccine. IBR virus is a known cause of abortion in cattle and there is substantial evidence that a MLV containing IBR can cause abortions in susceptible females.

In the last 10 years, several vaccine companies have obtained an approval from the USDA that their MLV vaccine can be used in pregnant cattle when the label directions are followed.

One of the primary label directions is that heifers need to have received two vaccinations with the same product used in the pregnant animal and that the second dose had to be given 30 days before breeding. This recommendation assures that the animal’s immune system was mature when she was given the last vaccination prior to breeding. Vaccination given prior to or at weaning will not protect in the long term since the calf’s immune system is not mature.

Additionally, it is important that the same brand of vaccine be given to pregnant animals as was given prior to breeding or within the last 12 months.

There are slight variations in strains of virus used between the different vaccine companies. This slight variation can allow the vaccine virus enough time to reach the fetus and cause an abortion before the immune system can respond to the new strain.

Remember that any time a pregnant animal is vaccinated there can be some risk to the fetus. Therefore, the best practice is to administer vaccines to open cows prior to breeding whenever possible.

MLV vaccines may be used in pregnant animals if label directions are strictly followed.

Always use good management practices (keep cool, use within one hour of reconstituting, avoid sunlight, and don’t contaminate syringe or bottle) and buy vaccine from a reputable supplier to make sure that the pre-breeding vaccine was efficacious before risking a pregnancy.

If there is any question about the immune status of the animal, a killed viral vaccine would be appropriate.

Purchased animals with an unknown vaccine history, heifers that were developed off-site where the vaccine program in not known, or animals that may not have been vaccinated the prior year should not receive a MLV vaccine if they are pregnant.

Work with your veterinarian to develop a vaccine program that will protect your animals from disease and work with your management calendar to provide the best protection.