International Dairy Topics

Dairyhealth BYTES

Your own reference source on dairy health

Number: 48

Bovine viral diarrhoea VII

Improving herd health through vaccination

In the past the suspicion was that MLV virus was capable of inducing clinical disease including persistent infection. It was thought that this was due to inadequate attenuation of the vaccinal virus or because the product had become infected with BVD at some stage in its production.

Nowadays the latest testing technologies and the higher standards being placed on the testing of cell cultures and their components has greatly removed the possibility of these kinds of infections occurring.

A recommendation for single vaccination for the herd is difficult to monitor as this advice can be vaccine type dependent as well as on the number and type of field virus involved. Therefore, a single recommendation for the vaccination of dairy herds is unlikely to be uniformly accepted as optimal.

The following guidelines are worthy of consideration:

- **Replacement heifers which are kept separate from pregnant cows and heifers.**
  Vaccination with an MLV product that contains type 1 and type 2 strains at 5-6 months of age and repeated at 60 days before breeding. This approach of giving two doses of vaccine before breeding limits the potential problems caused by transient ovarian infections.

- **Adult cows.**
  Administer an MLV vaccine with a label claim for safety in pregnant cows once a year, 2-4 weeks before breeding.

Immunosuppression can occur following MLV BVD vaccination so it is best to avoid vaccination at times of high stress and high pathogen challenge.

If killed vaccines are preferred, follow the manufacturer's recommendations regarding the use of their product, especially with regard to timing and vaccination intervals.