

BIOSECURITY IS A CONCERN

Biosecurity has become a very popular buzzword this last year. While it applies to any disease situation that cattle are exposed to, the most discussed concerns are the contagious diseases. This last year we have seen some of these problems move to the Pacific Northwest. BVD, salmonella and mycoplasma have become a much greater priority.

Type II BVD with severe hemorrhage has been diagnosed in Oregon due to the purchase of heifers from the Midwest. Killed vaccines might be effective for six months. So far all the outbreaks have occurred in herds that only use killed vaccine. As much as 50% of the cattle have died. Live vaccines have been very effective to date in preventing hemorrhagic BVD. Cattle need to be exposed to live vaccine by at least three months of age with a booster in one to three months. After this, yearly vaccination will maintain protection. Remember you cannot give live BVD or IBR vaccines to pregnant cattle or within two weeks of breeding. The best opportunity is after cattle are one week fresh. There are many live viral vaccines that are not created equal. We choose vaccines that are currently giving good results. It is also possible to test cattle for the BVD carrier. This might be a good idea when looking at replacements.

Salmonella has been much closer to home this last year. Salmonella can cause many problems. In calves and growing heifers, diarrhea, pneumonia and acute death can occur. Adult cattle can be mildly to fatally ill usually with diarrhea that can be very bloody. There are many sources and types of Salmonella. There can be carrier cows that intermittently shed without signs of clinical disease. They would maintain a disease reservoir in a herd. Other birds and animals could bring the disease to your farm. So far it has not spread from farm to farm. Salmonella is shed both in the manure and saliva. Animals contract the disease by ingesting it while they are in a stressed condition. Most cases occur in cows just after calving and very young calves. The hygiene of water tanks and feed bunks is important to the reduction of Salmonella problems. There is some debate among health professionals regarding the value of salmonella vaccines. In our practice they have worked well to date at preventing the disease. Our outbreaks occur when dairymen have never vaccinated or quit vaccinating. The Colorado Serum Salmonella typhimurium/dublin vaccine seems to work the best to prevent infection. Endovac Boyl vaccine is for mastitis but is made from salmonella bacteria and can reduce the severity of salmonellosis. The coliform mastitis vaccine J-5 by Upjohn Pharmacia can also give some protection due to the similarities between E.coli and salmonella. Remember it is difficult to prevent salmonella from coming to your farm. With vaccination the impact of salmonellosis has been greatly reduced. For years, the clostridial 8-way vaccine has been a very high priority. Today it seems that salmonella vaccination should receive a high priority also.

Mycoplasma was not considered a problem in the Northwest five years ago. There have been some cases recently in Western Washington. Cows are more commonly considered the source of mycoplasma. However, heifers can also be a reservoir. Mycoplasma problems for dairies include untreatable mastitis, joint infections in cows and calves, and pneumonia in calves. It spreads in milk and respiratory secretions. Flies seem to help it move within a herd. It has not contaminated other herds in the same area probably because movement between neighbors rarely occurs. At this time the only monitoring test we have is milk culture. This can be used to monitor mastitis cows, lactating cow purchases, your bulk tank and the bulk tank of dairies from which recipients might be purchased. Reaction to joint infections and positive bulk tank cultures has helped us limit the impact of mycoplasma.

Dairygold and our lab at Pilchuck Veterinary Hospital can culture for mycoplasma. Mycoplasma is one of the reasons we recommend monthly bulk tank culturing for all mastitis pathogens.