Vet Call

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Herd health considerations when purchasing cattle

Expanding your herd size or adding new genetics usually involves purchasing cattle and introducing them into the current breeding herd. And although purchasing new bulls or replacement females is a necessary herd management tool, these additions carry the risk of bringing disease agents into the herd that can negatively affect herd health.

Level of protection

Because most infectious diseases of cattle do not survive for long periods of time in the environment and don't travel great distances through the air or water, efforts to keep disease agents off your farm or ranch must focus on a plan to minimize the risk of introducing disease agents at the time you add animals from outside herds. Bacteria, viruses, parasites, and other agents that can cause abortion, sickness, death or production loss can be introduced to your herd when new cattle are purchased.

In order to establish a biosecurity plan to minimize the risk of introducing disease with herd additions, you should work with your bull and female suppliers to ensure that both you and your veterinarian understand your suppliers' herd health programs. Buying cattle with little or no information about the health status of their herd of origin adds risk for the health of your herd. Based on the health program of the source herd and local risk factors, your veterinarian can help you determine which vaccines, diagnostic tests and quarantine protocols provide an appropriate level of protection for your herd.

One aspect of protecting your herd is a plan to quarantine new cattle for a period of time prior to mixing with your current herd. All cattle that you purchase should be held at a location that does not share a fenceline or water source with any cattle from your current herd for at least three to four weeks, during which time they show no indications of illness. If the purchased cattle appear ill during the isolation period, the isolation period should be extended.

If the cattle you purchased arrive with certain diseases that can spread to other cattle, this isolation period should allow time for the new cattle's immune systems to clear the disease-causing organism and reduce the risk that they will introduce the problem to your current herd.

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While the new cattle are being isolated, they should receive vaccines that bring them to the same vaccination status as your current herd. Your current herd should also receive booster vaccines so immunity to common disease agents is enhanced in both the purchased cattle and your current herd prior to mixing the animals.

Carrier cattle

For some diseases, cattle can be infected for long periods of time without clearing the organism and without necessarily showing signs of illness. During this long — sometimes lifelong — time period, these carriers can pass the disease-causing agent to other cattle. A test-and-refusal strategy should be implemented if a disease that causes significant health and economic losses has a long-term carrier state, the disease agent is not currently present on the farm or ranch, and the available tests are highly accurate.

Bovine viral diarrhea (BVD) fits this strategy, as the disease can cause significant losses in cow-calf herds, and persistently infected (PI) cattle can be identified with accurate tests. Because of the unique characteristics of BVD virus and PI cattle, it is highly recommended all ranches test incoming cattle to ensure they do not bring PI cattle into contact with their breeding herd.

In the case of purchasing pregnant animals, the pregnant heifer or cow should be isolated until the calf is born and can be tested for PI status before the pair is allowed to come into contact with the breeding herd.

Other diseases such as bovine leukosis virus (BLV), anaplasmosis and Johne's disease have lifelong carriers, but I do not uniformly recommend testing new purchases because of either disease or test characteristics.

Problem areas

Bovine leukosis virus. BLV is a common virus that infects many beef herds in the U.S. but only occasionally causes illness or death. The test for BLV is sufficiently accurate, so false-negative and false-positive results are not common.

If you have tested your herd and found you do not have any BLV-infected cattle, you should seriously consider testing any purchased cattle and only allowing negative cattle to enter your herd. If you currently have BLV-infected cattle in your herd, testing and refusing BLV-positive cattle is not likely to help reduce the number of infected cattle in your herd unless that policy is accompanied by other disease control strategies.

Anaplasmosis. Anaplasmosis is caused by a parasite that infects red blood cells. It can be passed from infected cattle to susceptible cattle by ticks, horse flies and human activities that pass small amounts of blood from one animal to another.

Some available tests will not consistently identify all carrier animals, so if you choose to use a testing program, work closely with your veterinarian to select the most appropriate test. The type of anaplasmosis control program that is most appropriate for your herd will depend on the percentage of cattle in your herd that are currently infected with the parasite and the risk of being infected from cattle in neighboring herds.

If you live in an area where no or very few cattle are infected with anaplasmosis, you and your veterinarian may elect to test

incoming cattle, and if you identify positive animals, attempt to clear the carrier state with appropriate, long-term administration of antibiotics. Some animals will fail to clear the organism; therefore, all treated cattle must be retested and found to be negative with an accurate test before being allowed into a herd with a strict anaplasmosis control program.

If you live in an area where your herd and the neighboring herds have a high percentage of cattle infected with anaplasmosis, importing anaplasmosis-negative cattle will result in a high risk that the imported cattle will become infected with the organism and may show signs of serious illness or even death. In areas with high anaplasmosis infection risk, importing only positive animals may be the best strategy.

Johne's disease. Johne's disease is caused by an organism that usually infects cattle when they are young but does not generally cause signs of illness until the infected cattle are older. The diagnostic tests that are currently available are not accurate in early stages of the infection, in that young infected cattle will usually test negative.

Because many bulls and heifers that you are likely to purchase and import onto your farm or ranch are fairly young (less than 2½ years of age), a test-and-refusal strategy does not work well to limit your risk of importing Johne's disease. If you are participating in a Johne's control program to limit your risk of Johne's disease, rather than testing individual animals that you purchase, you should only purchase cattle from ranches that are also on a strict Johne's control program.

Protecting your herd from purchased animals that could bring disease agents onto your farm or ranch is an important part of your herd health program. You should work closely with your veterinarian to identify your herd goals and the strategies that will help you meet those goals.

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