Risk Factors Associated with the Addition of New Cattle Mel Pence DVM, MS, PAS, Diplomate ABVP (beef cattle) University of Georgia, College of Veterinary Medicine

Many new disease outbreaks on a farm are related to the purchase of new cattle. It could be from a purchased bull, cows, open heifers, or a newborn calf to replace one that was lost. Most of the time when we encounter a disastrous new disease outbreak on a cattle operation, someone often paid good money to start it! The cattle may not look diseased when they were brought and the seller may not have had any problem with the cattle. So how are we to know when we are buying trouble?

The problem often arises when the newly purchased cattle have different pathogens (viruses and bacteria that cause disease) than the pathogens our herd of cattle have already encountered. Cattle develop protection from a specific pathogen through exposure to that pathogen or through vaccination to that specific pathogen. It might be a different strain of E. coli or a virus that we have not vaccinated against, that causes the home raised cattle to get sick. The new cattle are immune to the infection but may be carrying the pathogen with them. Occasionally someone purchases a carrier animal for a disease that spreads though the herd.

The ideal situation might be to never expose cattle to outside animals but this is unrealistic. We need to bring in new genetics through our bulls and cows to make positive changes in the genetic pool. We just have to find a safe and economical way to do it without causing a disease outbreak in the home raised cattle.

Our first defense against introducing disease problems into our herds from new purchases is to only buy from known, reputable sources, people that stand behind their cattle. Each new purchase should come with a health certificate signed by a veterinarian. This will help insure against purchasing known infected animals. A record of any vaccinations and de-worming would be helpful.

The next line of defense against herd infections is to isolate all newly purchased cattle on your farm. A minimum of a thirty-day isolation period gives cattle a chance to develop immunity to your vaccines and for testing to ensure they do not carry any new disease threats. Isolation facilities should not have fence line contact with your current herd and feeders and waters should not be shared with your current cattle. The isolation period will also allow any cattle incubating a disease to show signs of the disease. Vaccines currently used in your herd should be given to all incoming cattle and boosters if needed. Your veterinarian is an excellent source of information on current disease problems in your area and your herd. Pathogens that commonly are a danger to cattle herds include IBR, BVD, BRSV, PI3, Blackleg, Lepto, and Vibrio. You should ensure that all incoming cattle have been properly vaccinated against these pathogens and others recommended by your veterinarian. By vaccinating new cattle as soon as they arrive on your farm, you give them an opportunity while they are in isolation to develop immunity. Some times even cattle that appear healthy can carry disease. There are several diseases that can be tested for to eliminate disease entry. Normal looking animals that are persistently infected with BVD can bring that devastating disease into your herd. Consequently, all incoming cattle should be tested to make sure that they are not persistently infected with BVD. This test is not the routine test to see if the animal has antibodies against the BVD virus. It is a special new test that involves identifying the virus in the animal's bloodstream. Other tests that might be run include measuring antibodies against Johne's, Lepto, Neospora, and Anaplasmosis.

Three weeks after all of the vaccinations are complete and when all of the test results are in, the new cattle can be mixed with the current herd. There is one exception to this rule: **no cattle should be mixed in with the herd from sixty days prior to calving until the youngest calf is three weeks old.** This is done to prevent an outbreak of calf scours out.

These procedures are part of a good biosecurity plan for your herd. With proper biosecurity, we can bring new additions into our herds with a minimum of problems.