Biosecurity: Infectious Disease Management
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As recently as five years ago few dairy producers were familiar with the term "biosecurity" or considered implementing biosecurity measures on their operation. Events since then have made it increasingly apparent that infectious disease management is extremely important. Simply stated, biosecurity is our most important tool for preventing the importation, and minimizing the spread of infectious problems on livestock operations. Pork and poultry producers have employed these practices for years as the mainstay of their animal health programs. While dairies are not, and may never be, at that same level of intensive production, many of the same principles will serve dairy producers well.

Livestock infectious disease problems present three different levels of concern to producers. First are ongoing losses from animal disease, the costs of treatment and the costs of reduced animal production due to agents that are common on many farms, such as contagious mastitis, hairy heel warts, Johne’s disease, IBR, and Pasteurella pneumonia. Even more troublesome than ongoing losses can be the development of explosive new infectious problems. Pathogens such as Mycoplasma, salmonella, anaplasmosis, and viruses such as BVD and BRSV can cause dramatic disease outbreaks. Another threat from infectious disease agents such as salmonella, brucellosis, and tuberculosis is the potential for some of them to transfer via food products, animal contact, or environment to present as human health problems. Infectious agents are still as important as ever and perhaps even more problematic as animal density and herd size increase. Recent awareness of the potential impact of Foot and Mouth disease has heightened some producers’ level of concern.

What methods do we have to prevent and control the occurrence and spread of infectious agents? Many have come to rely on vaccination as the primary means of infectious disease control, but this is only one of the management practices at our disposal. To many involved in the cattle industries, however, biosecurity concepts remain somewhat vague and appear impractical. Biosecurity is the most powerful means available to minimize the spread and the impact of many infectious diseases. We use the term biosecurity to refer to management and hygiene practices that reduce the risk of introducing or spreading infectious disease agents.

The list of considerations may seem daunting. Our goal for this and future Colorado Dairy News issues is to provide you with ideas for Standard Operating Procedures that you can employ to help limit infectious disease introduction or spread. We will distinguish between “Importation Biosecurity Measures” that limit introduction of problems onto the operation, and “Internal Biosecurity Measures” that limit spread of disease between resident animals. This issue will begin with risks associated with incoming traffic to the dairy.