

## Biosecurity Issues Affect Beef Industry Production

By Kris Ringwall  
Extension Beef Specialist  
NDSU Extension Service



In the origin of all species, natural geographic barriers (like mountains, rivers, oceans, and forests) limited travel. Through time those barriers in concert with natural selection produced strains of animals and a multitude of species.

Those same barriers served to limit the spread and transmission of many diseases. This isolation, in many ways, was the key to survival for most species. Competition, comingling and general exposure across species tends to reduce species numbers.

Within the past century, the breakdown of these natural barriers, because of advanced methods of sharing genetics and transportation, has affected the beef industry. Herd health and other related issues involving the general health of individual beef animals have made subsequent impacts on the industry.

A recent exercise among public agencies in North Dakota simulating the release of a particular pathogen ña "bad bug"ñ within the cattle industry showed how such an event could impact us all. This is not an effort to create hysteria or rush to a technical fix, but rather to focus a simple principle evident in any natural or artificial disease outbreak.

Isolation restricts the transmission of potentially harmful disease vectors. In preparation for the future, beef producers need to start thinking of biosecurity for their individual operations. Over the centuries the cattle industry has progressively expanded to become global in scope. The shipping of cattle across regional, national and international boundaries has been applauded as great marketing progress and expanded opportunity. The price, until now, has been relatively small.

The North Dakota bioterrorism exercise created a lasting impression. Cattle herds constantly and frequently transferred from various events or activities face an increase in odds of being involved in a breach of biosecurity. Much of this has been known for years. Exposure of cattle without adequate isolation upon returning to the main herd carries a significant risk.

Other industries, in particular the swine and poultry industries, have adopted a principle called "all in, all out".

Managing these operations in this manner does not allow for the exposure of potentially harmful disease-carrying agents. Realizing the beef industry is not a hog barn or a poultry barn, there still is a lesson we can learn.

It is time for good beef production guidelines to encourage the development of a biosecurity plan and implement it. Knowing the source of all cattle, buying from only proven sources, restricting exposure of the herd to other cattle and restricting access to the premise may be components each producer needs to start thinking about.

These options have not been high on any beef producer's list of management tools. However, a real biosecurity breach, the deliberate or accidental introduction of a "bad bug" into herd, should not be needed to create this awareness. Good management of a beef operation today should include these general principles:

Do not introduce any newly purchased or returning animals directly to the main herd. Maintain isolation and observation pens to hold animals until your local veterinarian clears them to be placed in the main herd.

Be conservative. Err on the side of being safe and avoid bringing animals back into the herd once they have left.

Develop strong relationships with your local source of breeding stock, and make sure the breeding operation has a thorough biosecurity plan.

Stay local with the importation of new stock, keep good records and restrict general access to your operation.

These were good practices when "bad bugs" were spread naturally, or at least unintentionally. Now that the danger from those who would spread biological agents maliciously is real, these practices are essential.

May you find all your ear tags.

Your comments are always welcome at [www.BeefTalk.com](http://www.BeefTalk.com). For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to [www.CHAPS2000.com](http://www.CHAPS2000.com) on the Internet. In correspondence about this column, refer to BT0152.

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# General Principles of a Biosecurity Plan for Your Beef Operation

## The reality of today's beef business

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1. Initiate and enforce the isolation of any newly purchased or returning animals
2. Restrict general access
3. Keep good records

