



# Vet Call

► by **Bob Larson**, professor of production medicine, Kansas State University

## Foreign animal diseases

*Identifying the roles and responsibilities of producers and veterinarians.*

### What's at risk

Animal health officials define a foreign animal disease (FAD) as a contagious disease of livestock that is believed to be absent from the United States and that has potential to cause significant negative health or economic effect. Particular foreign animal diseases are considered a threat to the U.S. if they could negatively affect human health, if they could negatively affect animal production, or if the cost to control and eradicate the disease is very high.

Some livestock diseases are very contagious and can rapidly move through a population. One such disease is foot-and-mouth disease (FMD). If FMD entered the U.S., it could move very rapidly through a number of species, including cattle, hogs and sheep, causing illness, some death loss and production loss.

Other FADs of high importance are Texas fever, contagious bovine pleuropneumonia, heartwater disease, malignant catarrhal fever, Rift Valley fever, rinderpest (cattle plague), screwworm and some ticks.

On one hand, the risk of FADs entering the U.S. increases as the amount of international travel increases, as the amount of trade among countries increases and as the risk of intentional introduction of FADs by terrorists increases. On the other hand, work by veterinarians and animal health officials within the U.S. government in cooperation with animal health agencies around the world has enhanced the surveillance and control of many livestock diseases to reduce the risk of those diseases occurring or spreading.

### A costly scenario

To limit the spread of an FAD if one is diagnosed in the U.S., state and federal veterinarians work quickly to quarantine

infected farms and nearby farms that are at high risk for infection. Depending on the disease and livestock species affected, control plans usually involve the destruction of all susceptible animals on those identified farms. The short-term costs of these control measures can be very high.

In addition to production loss and control costs if a foreign animal disease were to occur, another substantial cost would be the loss of export markets. In order to protect animal health, the U.S. and other countries restrict the importation of animals or animal products from countries that have animals infected with contagious diseases that are not present in their own countries. Although U.S. consumers are by far the largest market for our beef and other meats, exports of meats and animal products are increasingly important to U.S. cattlemen, especially for organ meats and certain specialty cuts that do not have high demand from U.S. consumers.

As the financial importance of exports increases, the financial cost of losing those exports due to an FAD also increases. Theoretically, the long-term trade effects of an FAD occurrence in a large country like the U.S. could be reduced by distinguishing between specified affected regions and other unaffected areas, which could be free to continue exporting. However, it would take considerable time to have infected regions identified and other regions certified as disease-free. In the meantime, all trade in animals and animal products from affected livestock species would be stopped.

### Damage control

The U.S. Department of Agriculture (USDA) works with state animal health officials to monitor and control FADs; but

these government agencies rely on livestock producers and veterinarians to be the front line for identifying potential animal disease problems. Because veterinarians are very familiar with the diseases commonly present within a geographic area, they are likely to be the first to identify an FAD that is not expected in that area.

The negative effects of both common diseases and FADs are reduced when producers notice signs of illness early in a disease process. Decreased feed intake, weight loss, depressed activity and the presence of discharge from any body opening are all indications that an animal needs care and potentially veterinary diagnosis and treatment.

If an FAD is suspected, the veterinarian or producer will immediately call the state or federal veterinarian directly from the farm or premises and provide information about the symptoms observed in all affected species, the number of susceptible species on the farm and their disease status.

Based on the disease signs reported and the recent history of animal movements, state and federal veterinary officials will take steps to conduct an investigation, obtain a diagnosis and contain a possible FAD before it spreads.

As the human population grows and as animal production units become larger, the effects of an FAD increase. Foreign livestock diseases are an important threat to the health and profitability of livestock production in the U.S. Constant efforts by producers, veterinarians, and state and federal animal health officials are needed to reduce the risk posed by FADs.

Everyone in livestock production has a role to play in protecting the health and welfare of animals by noticing and quickly responding to any animal health problem with appropriate care and veterinary involvement.

**E-MAIL:** [rlarson@vet.ksu.edu](mailto:rlarson@vet.ksu.edu)

**As the financial importance of exports increases, the financial cost of losing those exports due to a foreign animal disease (FAD) also increases.**