

Foreign Animal Diseases Threatening United States

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The United States is seriously threatened by potential occurrences of foreign animal diseases. The ruin of these diseases in foreign countries causes tremendous economic losses to livestock industries and creates devastating sociologic and economic impacts on communities.

In 2001 the Texas Governor established the Foreign Animal Disease Working Group. More than 30 state agencies are members of this group, and the group's objective is to manage, under the direction of Texas Animal Health Commission, an animal disease emergency in the most efficient manner as possible. The working group and a stakeholder advisory group have developed the Texas plan to manage animal health emergencies. The state agencies are prepared and ready to respond in case of an animal disease outbreak, whether it is by natural or accidental occurrence or by intentional or bioterrorist act.

Emergency management for foreign animal diseases is also a preparedness for bioterrorism against human populations since biological warfare agents or pathogens are commonly contagious to animals, such as Anthrax, Plague and Tularemia. A bioterrorist attack on human populations in the U.S. will likely be realized by livestock producers, county Extension agents and veterinarians with evidence of unusual sickness and death in large numbers of animals before it is determined to be involving large numbers of people by the medical profession.

Foot and Mouth Disease is the most highly contagious disease of livestock, and its presence will be devastating to the agricultural and general economy of our Nation. Susceptible livestock and wildlife are cattle, sheep, goats, domestic and feral swine, deer and llamas. Although it is not contagious to people, its devastation will destroy human lives emotionally, sociologically and economically.

Once Foot and Mouth Disease is recognized on a livestock premise, the impacts of the potential rapid spread of the outbreak to susceptible livestock and wildlife will be "big and bad". The virus can spread by aerosol means in the wind, by mechanical means on people, vehicles and animals and by biological means with movement of infected or diseased livestock and uncooked or undercooked meat products.

Livestock movement restrictions statewide will be declared, quarantines will be established and fighting the disease will be started. Any delays in action to stop the spread of the virus could be costly for livestock producers. To stop the outbreak, infected and exposed animals must be slaughtered immediately and properly disposed, either by burning or deep burial. Due to the delayed response to the Foot and Mouth Disease outbreak in February 2001 in Great Britain, more than 6 million head of livestock on 9,662 farms were slaughtered which brought the cost of the outbreak well over \$4 billion.

The risk of potential occurrence of Foot and Mouth Disease in the U.S. is higher than ever because of the increasing terrorist threats and the high incidence and continual spread of Foot and Mouth Disease throughout many countries of the world. Entry of the virus can be by travelers, meat products and garbage or by a bioterrorist. A Texas Animal Health Commission regulation prohibits the feeding of meat garbage to swine.

The risk of Mad Cow Disease occurring in the U.S. is lowered by not allowing ruminant animals and products to be imported from European countries and other countries known to have the disease. A USDA regulation prohibits the feeding of ruminant protein (meat, bone and blood meals) to ruminants. A USDA regulation prohibits the slaughtering of downer cattle and processing of high risk materials of slaughtered cattle for human food.

The first line of defense of biosecurity to threats of foreign animal diseases occurring and spreading in the U.S. is the livestock owners by their early detection and reporting. A sharp eye on livestock and prompt reporting any unusual signs of disease could save billions of dollars to our livestock industries and communities. A hotline (1-800-550-8242) for reporting signs of a foreign animal disease is available 24 hours a day and operated by Texas Animal Health Commission and USDA in Austin, Texas.

As a state agency, Texas Cooperative Extension of the Texas A&M University System has positioned itself through ongoing educational and coordinative efforts for the last several years in addressing foreign and emerging animal diseases. We began with Mad Cow Disease in 1995, followed by Bovine Tuberculosis in 1996, Johne's Disease in 1997, Anthrax in 1998, West Nile Encephalitis in 1999, Foot and Mouth Disease in 2001, Chronic Wasting Disease in 2002, Exotic Newcastle Disease in 2003 and Avian Influenza and Vesicular Stomatitis in 2004.

Participation on the Texas Foreign Animal Disease Working Group and development of an Agency Emergency Management Plan have established a preparedness mode for Texas Cooperative Extension to address through outreach education the potential occurrences of foreign animal diseases. The plan takes a proactive educational approach in emergency preparedness and response to emerging threats of any foreign or emerging animal disease.

The Department of Homeland Security established in 2004 the National Center for Foreign Animal and Zoonotic Disease Defense. The Center is a consortium of four academic institutions and designed to have the capacity to address the range of threats of intentionally or accidentally introduced foreign animal diseases and zoonotic diseases (shared by people and animals). The Texas A&M University System, along with its collaborating partners (University of California - Davis, University of Texas Medical Branch and University of Southern California), offer substantial strengths in research, education, training and communication for areas of prevention, detection, response and recovery from foreign animal and zoonotic diseases.