

Chemical/Biological Panel

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The National Center for Foreign Animal and
Zoonotic Disease Defense

Abstract

The National Center for Foreign Animal and Zoonotic Disease Defense (FAZD Center) was established September 4, 2004 as a critical component of the national response to Homeland Security Presidential Directive 9: Defense of United States Agriculture and Food. The purpose of the FAZD Center, as that of the Directive, is to “defend the agriculture and food system against terrorist attacks, major disasters, and other emergencies.” The research and education mission of the Center is uniquely challenging in that it addresses not only the potential movement of pathogens and diseases in the complex infrastructure of the American agriculture and food systems, but it simultaneously addresses the potential impacts of animal diseases on public health. The Center creates means and mechanisms to produce products to protect America from biological weapons of mass effect that could devastate the agricultural and national economy. The Center’s products protect Americans from biological attacks that use diseases that can be transmitted directly to humans or to humans through contact with animal populations. The Center is unique in its focus on the interface between animal and human diseases, recognizing that it will be impossible to prevent or successfully respond to catastrophic and pandemic diseases without a comprehensive understanding of the movement of diseases within animal populations and the environment, and their interactions with human populations. To address these interrelated challenges, the Center has established a portfolio of research and education projects using model diseases and cutting-edge computer modeling technologies that build from basic discovery research through the development of homeland security products for use by the nation’s first responders. The FAZD Center is organized under three interactive and integrated themes that form a framework for interdisciplinary and inter-institutional research and education: Biological Systems, Information Analysis Systems, and Education and Outreach Systems. Texas A&M University is the lead institution with core partners that include the University of California Davis, University of Texas Medical Branch, University of Southern California, University of Maryland, and Huston Tillotson University. There are active collaborations with multiple DOE National Laboratories and Federal Laboratories.