Leading products

New screening tools for animal agriculture – Diagnostic test development and validation ensures early detection and supports business continuity in the face of a high-consequence disease introduction.

AgConnect: A suite of data-sharing products that allow decision makers to integrate a wide range of validated information into a single, easy-to-use, real-time format. These products support the entire emergency cycle. Products in the AgConnect line include:

- The Emergency Response Support System (ERSS), under development for USDA's Animal and Plant Health Inspection Service, organizes data from authoritative sources to enhance the sharing of information during an animal disease outbreak.
- The Laboratory Capacity Estimation Model (LCEM), under development for the USDA National Animal Health Laboratory Network, will help increase the nation's capability to prepare and respond to a highconsequence animal disease.
- The Bio-surveillance Field Entry System (BFES) provides an integrated application for collecting and analyzing enhanced surveillance data. It allows veterinarians to use an iPad to enter clinical animal health data from livestock premises, feedlots, and markets.
- The Bio-surveillance Common Operating Picture (BCOP) allows analysts at the National Bio-surveillance Integration Center to track, organize, and share biological event information from around the world.

Novel vaccine platforms – These platforms use cutting-edge expression systems and novel bioinformatics capabilities to define the next generation of animal vaccines.

One Health Career-Oriented Youth Educational National Program – This high school–level training program is designed to address a national shortage in paraprofessionals to provide support to human and animal medicine.

FAZD CENTER

NATIONAL CENTER FOR FOREIGN ANIMAL AND ZOONOTIC DISEASE DEFENSE

About the FAZD Center

Founded in April 2004 as a U.S. Department of Homeland Security Center of Excellence, the National Center for Foreign Animal and Zoonotic Disease Defense (FAZD Center) focuses on research, education, and outreach to prevent, detect, mitigate, and recover from exotic animal, emerging, and/or zoonotic (transmissible between animals and humans) diseases, which may be introduced intentionally or through natural processes.

FAZD Center champions the One Health concept with its research on the high-consequence diseases that are transmissible between animals and humans, and through its partnerships with the Centers for Disease Control and Preparedness and the One Health program of the U.S. Department of Agriculture's Animal and Plant Health Inspection Service.

Headquartered at Texas A&M University, the nation's sixth-largest university by enrollment, the FAZD Center also leverages the resources of other major universities and Minority-Serving Institutions.

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Protecting Agriculture and Public Health from High-Consequence Diseases

FAZD CENTER

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Increasing resiliency for the agricultural and public health sectors

Why high-consequence animal diseases pose significant threats to U.S. homeland security



60%

of animal pathogens are zoonotic that is, transmissible between animals and humans.



75%

of recently emerging infectious diseases affecting humans began as animal diseases. The most dangerous of these pose catastrophic risks to human health and livestock health.



13% of all U.S. jobs and \$1 trillion in annual

U.S. economic activity are at risk when the national agricultural economy is threatened by high-consequence animal diseases.

How we find solutions

Biological Systems

Vaccines, screening tools, diagnostic assays, and universal sample preparation/preservation platforms help meet the goals of early detection, diagnosis, prevention, response, and recovery.

Information Analysis Systems

Data-sharing products to support emergency management, biosurveillance, and business continuity.

Education and Outreach

Graduate programs, early responder training, K–12 education, and stakeholder workshops provide the next generation workforce for agriculture, public health, and homeland security.









100-plus partners in 35 U.S. states, plus the District of Columbia, and 7 international partners

The FAZD Center is a multi-institutional organization representing major research universities and Minority-Serving Institutions from across the United States and around the world, including the Pirbright Institute in the United Kingdom, plus laboratories in the National Animal Health Network.

The center is also closely aligned with the Department of Homeland Security (DHS) Science and Technology Directorate, the U.S. Department of Agriculture (USDA), the Animal and Plant Health Inspection Service (USDA-APHIS), the Agricultural Research Service (USDA-ARS), agricultural and allied industries, the private sector, bio-pharmaceutical companies, additional federal agencies, national laboratories, and other DHS Centers of Excellence.