

# NATIONAL BIO AND AGRO-DEFENSE FACILITY (NBAF)



**Location:** Manhattan, Kansas (under construction)

**Core Competencies:** Diagnostics, Training, North American Vaccine Bank, Basic and Applied Research, Vaccines and Agriculture Biological Countermeasures, and Vaccine Licensure

**Key Customers:** U.S. Livestock Producers, National Veterinary Stockpile, National Animal Health Laboratory Network, FBI, USDA ARS and APHIS, Private Industry, and Academia

## Protecting the Nation's Food Supply Against All Threats

The United States needs to be on the front line of livestock animal health research to defend against foreign animal, emerging, and zoonotic diseases. The National Bio and Agro-Defense Facility (NBAF) is envisioned as a state-of-the-art biosafety level (BSL) 3 and 4 facility that will enable the United States to conduct comprehensive research, develop vaccines and anti-virals, and provide enhanced diagnostic capabilities to protect our country from numerous foreign animal and emerging diseases. As a replacement to the aging Plum Island Animal Disease Center (PIADC), NBAF will provide additional capabilities that are not currently available in the United States, including BSL-4 space for livestock and a vaccine development module. The NBAF will be the nation's only large animal BSL-4 facility built to safely handle pathogens that do not currently have treatments or countermeasures.

## Construction

The NBAF will provide safe, secure, and state-of-the-art agriculture biocontainment laboratories that research and develop diagnostic capabilities for foreign animal and zoonotic diseases. The facility will augment the existing bio-defense complex by adding large animal biosafety level 4 (ABSL-4) and vaccine development facilities, which are presently lacking. Both of these capabilities will enhance the related DHS risk-characterization and forensics capacity in order to better meet the mission.

With the award of the construction contract for the Central Utility Plant (CUP) in February 2013, DHS reached an important milestone in the NBAF timeline. Funding for the CUP showcases the collaborative nature of the NBAF as the contract was awarded using both congressional appropriations and gift funding provided by the State of Kansas. The 87,000-square-foot CUP will house the primary heating and cooling systems as well as the emergency generators for the main lab building. DHS is also moving forward with the process to award the main laboratory construction contract in 2015. In fiscal year 2014, \$404 million was received for laboratory construction. To help alleviate the federal cost burden, the State of Kansas agreed to commit more than \$300 million of gift funding toward the total NBAF construction project. At peak construction, NBAF will employ 1,000 people.

## Design

After a comprehensive three-year federal examination of potential sites that focused on the environmental impacts, threats, and risks of operating the NBAF, the Department of Homeland Security (DHS) selected a site located within the Animal Health Corridor on the campus of Kansas State University. DHS developed an iterative risk assessment process to ensure that the NBAF is safe, secure, and operable over its entire life cycle. Significant design features beyond the industry standard were incorporated into the NBAF design to reduce risk. For example, the biocontainment areas are designed to meet structural and containment building integrity standards similar to those used in the nuclear industry. By adhering to these standards, the final design minimizes the potential for accidental release from the research laboratories.

## Operations Will Begin in 2022

Current operations at PIADC will continue through NBAF construction. DHS is developing a plan to ease the transition from PIADC to NBAF that includes an overlap of operations to ensure there is no interruption of the critical science mission. DHS will not build or operate the NBAF unless it can be done in a safe manner. No select agent permits will be issued by the U.S. Department of Agriculture or the Centers for Disease Control and Prevention until all requirements are met. NBAF will be government owned-government operated with contractor support. When fully operational, NBAF will employ 400 people.

## Contact

Questions? For more information, visit <http://www.dhs.gov/nbaf> or email [NBAFProgramManager@dhs.gov](mailto:NBAFProgramManager@dhs.gov).