



FACT SHEET

The Cooperative Biological Engagement Program (CBEP) - Vietnam

PROJECT OVERVIEW

From 2017 to 2019, University Research Co., LLC (URC), as a subcontractor to Jacobs, is supporting implementation of the Defense Threat Reduction Agency's (DTRA) Cooperative Biological Engagement Program (CBEP) in the Socialist Republic of Vietnam (Vietnam). The mission of DTRA focuses on addressing the danger to global health security posed by the risk of outbreaks of dangerous infectious diseases. CBEP is engaged with Vietnam's public health sector to improve disease surveillance, detection and response capacity in Vietnam and in the region. This collaboration applies to testing and diagnostic laboratories and institutes controlled by the Ministry of Health (MOH), Ministry of Agriculture and Rural Development (MARD), and Ministry of Defense (MOD).

CBEP focuses on biological agents and seeks to enhance clinical, laboratory, and epidemiological safety and security by providing training, expertise, laboratory design support, security assessments, collaborative scientific research, and some equipment provisions to meet project objectives. The project activities will contribute and assist laboratories to meet national standards outlined in Decree 103/2016/ND-CP issued by the Vietnam Government and to achieve regional and international standards. The goal is to improve Vietnam's ability to prevent and control infectious diseases, safeguarding the global population from the accidental or intentional release of dangerous zoonotic pathogens of pandemic potential.

PROJECT OBJECTIVES

CBEP has four main objectives in Vietnam:

- ◆ Enhance the capacities of Biosafety and Biosecurity (BS&S) for laboratory systems
- ◆ Strengthen the abilities of Biosurveillance (BSV) to detect, diagnose, survey, and report emerging and re-emerging pathogens of national and international concern
- ◆ Improve the laboratory facilities for MOH, MARD and MOD in Vietnam
- ◆ Strengthen capacity for coordinated and collaborative research

KEY ACTIVITIES AND ACHIEVEMENTS

Biosafety and Biosecurity

CBEP's biosafety and biosecurity (BS&S) efforts are working to improve the country's ability to detect, diagnose, report, and respond to outbreaks of infectious disease, especially those associated with select agents (also referred to as especially dangerous pathogens [EDPs]), in accordance with international BS&S guidelines and best practices (including those published by WHO and CDC).

Training

CBEP's BS&S training focuses on strengthening the capacity of biorisk management staff from laboratories in the human health and veterinary sectors. BS&S training is being provided to regional institutes, including the National Institute of Hygiene and Epidemiology (NIHE), Tay Nguyen Institute of Hygiene and Epidemiology (TIHE), Pasteur Institute in Nha Trang (PI-NT), Pasteur Institute of Ho Chi Minh City (PI-HCMC), and others under GDPM-MOH, seven regional animal health offices, two veterinary faculties, two veterinary research institutes and other veterinary diagnostic centers under MARD, and Military Hospital 175 and Military Prevention Medicine Institutes under the direction of MoD.

Biorisk Management training for Biosafety Officers covers the following components: Biosafety and Biosecurity; Biorisk Management; Incident Management and Response; and BS&S Laboratory Skills Performance.



Laboratory practice as part of BS&S training

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Management and Leadership training events are also held for managers and leaders of institutes and laboratories to prepare them for the management practices, roles and responsibilities, policy writing and implementation techniques that relate to their specific BS&S programs.

To date, CBEP has trained 174 participants including 75 leaders and managers and 99 Biosafety Officers; among these, 24 were selected to become trainers.

Mentoring

Mentoring is a key component of CBEP efforts, focusing on work processes, technology, planning, implementation of BS&S standards, regulatory reform, and overall operation and maintenance of a comprehensive BS&S program. The project developed a comprehensive mentoring program plan to support the seven RAHO's, the National Centre for Veterinary Diagnosis (NCVD), and National Institute of Veterinary Research (NIVR), emphasizing these key components and requirements:

- ◆ BS&S requirements for veterinary diagnostic laboratories & animal experiments.
- ◆ BS&S certification requirements and plan for veterinary laboratories.
- ◆ BS&S laboratory inspection, audit, and regulatory guidance.
- ◆ SOPs for proper hazardous waste handling and disposal.
- ◆ Technical specification for BS&S equipment and supplies.
- ◆ Mentor each laboratory on international best practices in BS&S as well as Vietnam specific documents.
- ◆ Assist with the implementation of Decree 103 and other relevant national regulations.
- ◆ Writing and implementation of BS&S manuals.

Laboratory Certification

CBEP also provides laboratory certification support for NIHE to achieve ISO 15190, including close collaboration with NIHE leadership to plan for personnel requirements and long-term sustainability costs to obtain and maintain certification. Initial project activities are focused on selecting the number of laboratories and providing a series of steps to assist laboratories with implementation of ISO 15190 requirements. Specific activities planned include:

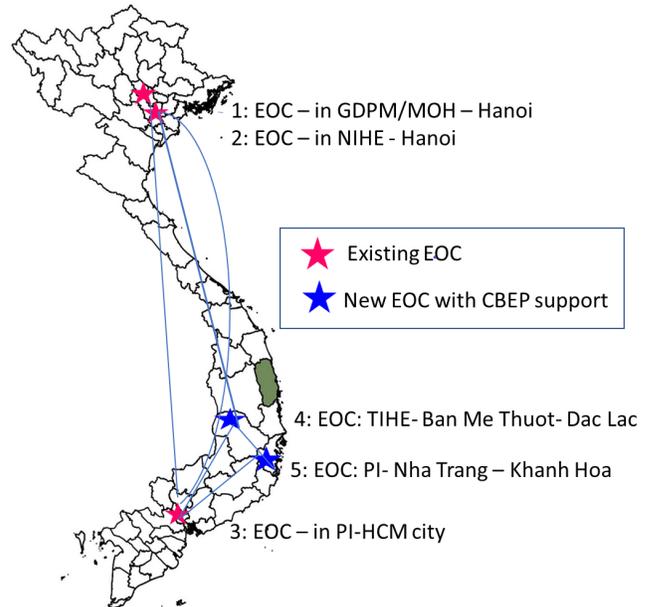
- ◆ Developing site assessment tool for lab selection and analysis, tailored to NIHE specifications;
- ◆ Regular and ongoing coordination of activities with CDC BS&S staff; and
- ◆ Additional formal discussions with all relevant stakeholders after preliminary assessments to discuss next steps and actions.

Biosurveillance

Upgrades and Emergency Operations Center (EOC) Equipment

CBEP assists the MOH to increase capacity of their EOC's to effectively provide reliable surveillance and response to all

public health hazards in a coordinated and systematic fashion. The project will support the establishment of two EOCs in TIHE and PI-NT, including providing facility upgrades and improvements, procurement and installation of electronic equipment, and commissioning of the EOCs. These two new EOCs will be integrated and linked with the three existing EOCs under the GDPM–MOH system.



Current and planned Emergency Operations Centers

Laboratory Equipment Procurement

CBEP supports the procurement of laboratory equipment, including Real Time PCR and Biosystems 3700xL Genetic Analyzer machines, for TIHE's diagnostic laboratory and one regional animal health office (No. 6), respectively.

Science and Research

CBEP is providing training on grant proposal writing for staff within MARD, the Military Medical Department (MMD), and other relevant University personnel to support reasonable and safe research on pathogens of security concern. Training is provided on various research topics and disciplines related to the development of concept papers, research proposals, and budgets for external funding, including preparing for IRB reviews and external review requirements.

Approximately 124 staff are anticipated to be trained on the following topics:

- ◆ Preparation for Grantwriting
- ◆ Project Planning
- ◆ Technical Elements in Proposals
- ◆ Options for Vietnamese Grant Submissions: Asia, EU-UK, US
- ◆ Mock Panel and Grant Evaluation Review
- ◆ BAA Opportunity Submission
- ◆ Research Conduct: Human Subject Protection, Plagiarism, Data Plan, Authorship Plan, Misconduct