



## DEFENSE INSTITUTE FOR MEDICAL OPERATIONS (DIMO)



### “Biosecurity and Biosafety: Planning for National Protection” Mobile Education Team (MET) Expanded IMET (E-IMET) MASL D309058

**Background:** Biosafety is the protection of laboratory workers from dangerous pathogens and the prevention of pathogen transmission to neighboring populations. The discipline of biosecurity seeks to protect potentially dangerous microbial agents, processes and knowledgeable staff from the harmful intentions of dangerous people. This “in-country” program assists national strategy refinement for planning and implementation of biosafety and biosecurity programs for medical, public health and research laboratories and repositories.

**Summary of Program Scope:** This “in-country” program addresses national planning to reduce risks associated with medical, research and public health laboratories and repositories utilizing dangerous pathogens. The course begins with a case-based recounting of biosafety failures leading to serious and even catastrophic outcomes, and a case for integrating military and civilian/academic efforts. The evolution of biological safety requirements, including procedural and engineering considerations for clinical and research laboratories, are reviewed. A convincing rationale for the necessity of a biosecurity program as a national security component is followed by step-by-step procedures for course participants to apply toward strengthening laboratory biosecurity programs through a national strategy of consolidation, increased security and course-introduced local measures. The course proceeds through four chapters of strategy development including biosecurity/biosafety planning and preparation, event recognition, response and intervention, and local application/grant development. The curriculum relies heavily on case-based learning, utilizing contemporary and historical real-world examples of issues in biosafety, biosecurity and epidemiologic surveillance to emphasize key concepts. Exercises in scenario-based development of biosafety and biosecurity plans are reinforced by real-world examples such as recent case studies involving healthcare worker safety and Congo-Crimean hemorrhagic fever in the Middle East. Participant exercises develop scenario-based biosafety and biosecurity plans and then evaluate plan strengths and weaknesses. The 5th day exercise takes students to a host nation selected facility to apply course lessons locally in a group discussion of biosafety, biosecurity and identifying procedures and resources needed for improvement.

**Course Objectives:** Assist national strategy refinement for planning and implementation of biosafety and biosecurity programs for medical, public health and research laboratories and repositories. Ensure the safety of medical and laboratory workers and the security of biologically hazardous materials, processes and trained personnel. Understand national security implications of intentional and accidental exposure and misuse of naturally occurring biologically hazardous agents. Design local and national approaches to consolidate and secure dangerous materials while advancing research and public health objectives. **Course Duration:** 5 Days. **Class size:** maximum of 60 students. The host nation may constrain the size of the day 5 site visit student cohort according to local facility capability. Lectures and course material will be translated for non-English speaking countries.

**Intended International Audience:** The course is intended for high-level government and civilian decision-makers, national security officials, medical planners, laboratory directors, public health and epidemic response officials.

**Points of Contact:** Respective Air Force Security Assistance Training Squadron (AFSAT) Country Program Manager and Defense Institute for Medical Operations Program Manager, Claudette Hudson at (210) 292-0955, e-mail: [alicia.hudson.1.ctr@us.af.mil](mailto:alicia.hudson.1.ctr@us.af.mil).