



# U.S. Federal Bureau of Investigation Weapons of Mass Destruction Directorate Chemical-Biological Countermeasures Unit

## ANIMAL/PLANT HEALTH JOINT CRIMINAL-EPIDEMIOLOGICAL INVESTIGATIONS COURSE

- **Course Format:** This course is a two day training workshop that develops the concepts and operational tools for: 1- joint law enforcement and animal-plant health agency investigational techniques and procedures, 2- agricultural threat and intelligence briefings, 3- application of operational case studies and field scenarios, 4- concepts of information sharing, joint interviews, and hazardous materials (CBRN) crime scene investigations, and 5- Red Cell exercises. The Animal-Plant Health (APH) Joint Criminal-Epidemiological Investigations Course was developed by the FBI, USDA APHIS VS, and other subject matter experts. This course, which addresses the specific threats to animal-plant health and the pre-harvest phases of agricultural production, is based on the existing Public Health Criminal-Epidemiological Investigations Course developed and implemented by the FBI and CDC more than a decade ago.
- This course is also based on and serves to implement the elements of the FBI-WMDD, USDA APHIS, USDA OIG Memorandum of Understanding for joint law enforcement and epidemiological investigations of acts of agricultural terrorism, the intentional use of CBRN materials, economic espionage, and the deliberate introduction high consequence animal and plant diseases.  
This is an FBI Course designed to be developed and delivered by the local FBI Field Offices in support of the WMD Coordinator agriculture sector outreach program requirements and annual performance objectives for Biological Countermeasures and Counterterrorism operations. The Program of Instruction (POI) is developed in accordance with FBI WMD Countermeasures funding and training program goals and with the support and cooperation of the USDA and State Departments of Agriculture and other state and local agricultural sector defense partners.
- **Mission:** (1) To provide an efficient and effective joint Animal-Plant Health (APH) and Law Enforcement (LE) response to suspicious or unusual activities and disease events and possible intentional introductions of Foreign Animal Diseases, Emerging Animal Diseases, and Exotic Plant Diseases and Pests. (2) To establish information sharing and threat communication procedures, (3) emphasize the benefits of joint investigations and response operations, and (4) develop operational relationships between FBI, local and State Law Enforcement, State Departments of Agriculture, and USDA field level response personnel.
- **Why Needed:**
  - The agriculture and veterinary communities as well as Congress, the U.S. intelligence community, and agricultural commodity producers are concerned that U.S. agriculture may be a target of domestic and international criminal or terrorist activities including state and non-state sponsored espionage. Agroterrorism is a significant national security threat with potentially severe consequences to the overall economy, international



## U.S. Federal Bureau of Investigation Weapons of Mass Destruction Directorate Chemical-Biological Countermeasures Unit

export markets, the gross domestic product, international balance of trade, domestic food security, as well as the National Security of the United States.

- An intentional disease introduction and bioterrorism attack against US agricultural sector targets could be difficult to discern between accidental or natural disease introductions. In these situations, disease investigation and control operations as well as criminal/terrorism investigations would have to occur at the same time, same locations, and likely involve the same witnesses, victims, owners, and responders.
- Evidence of an intentional disease introduction is fragile and may be difficult to recognize and protect so there is a limited window of opportunity to identify and report threats, initiate investigations, preserve forensic evidence, and prevent or disrupt an on-going act of terrorism.
- This is best accomplished by performing coordinated, concurrent “Crim-Epi” investigations by APH and LE personnel that have been trained to operate using joint interagency protocols.
- Key elements of Joint Criminal-Epidemiological Investigations include: establishment of jointly recognized agricultural and law enforcement triggers and tripwire initiatives for the identification of suspicious or unusual incidents, rapid interagency notification of the detection of these triggers, the effective use of interagency Threat Credibility Evaluations (TCE) and information sharing protocols, and seamless “Crim-Epi” investigations and response operations.
- Shared information from criminal and epidemiological investigations is critical to the ability of joint investigational teams to detect, recognize, prevent, and disrupt criminal / terrorist use of harmful CBRN agents. The key goals of joint investigations are:
  - Recognize and report triggers and tripwires;
  - Identify and characterize the biological agent, the source, and geographic origin;
  - Determine how it was introduced;
  - Perform joint threat credibility evaluations to determine if the introduction was accidental, naturally occurring, or intentional; and if the threat of an intentional act is feasible and credible;
  - Determine if the bio-agent has been manipulated or weaponized and Identify the means of dissemination;
  - Identify the likely perpetrators, disrupt on-going or further attacks, determine the motivations and the attack planning process.
- The initial recognition of key indicators and triggers and the rapid notification of APH and LE partners are the most critical elements of identifying and interrupting terrorism regardless of the threat, the target, the individual or group, and their motivations and



## U.S. Federal Bureau of Investigation Weapons of Mass Destruction Directorate Chemical-Biological Countermeasures Unit

goals. “Triggers” are the first signs or traces of unusual behavior, activities, threats, or disease incidents that we recognize as abnormal or suspicious. “Tripwires” are specific, agreed-upon threshold levels of jointly recognized triggers that criminal-epidemiological investigators use to activate notification - information sharing SOPs. Based on these commonly understood indicators APH and LE teams can develop “Interagency Tripwire Initiatives” to initiate time-sensitive joint investigations of initial trigger reports.

- If we miss the early indicators or delay sharing sensitive information, then we are behind the curve and will be in a response and mitigation mode for a prolonged or indefinite period.
- Training is needed to assist LE and APH agencies to work together effectively and to maximize resources and communication between field level personnel. The goal is to develop operational skills and relationships to communicate threats at the earliest opportunity and initiate joint responses.
- **Targeted Audience:** Local and State LE, FBI Field Office Personnel (Agents-WMD Coordinators and Intelligence Analysts), State and USDA Field Veterinary Medical Officers, Animal Health Technicians, Epidemiologists, Emergency Coordinators, State and USDA Agricultural Law Enforcement Investigators, university and Extension Service personnel, and other State and Federal agency investigators, disease experts, laboratory personnel. The domestic course has also been adapted for international training events with partner nation Agricultural and Law Enforcement agencies.
- **Goals and Long-Term Vision:**
  - **Facilitate Threat and Operational Awareness:** Provide an overview of criminal and epidemiological investigational procedures and protocols for a response to a criminal, bioterrorism, or espionage attack against agricultural sector targets and to enhance the understanding of the roles and responsibilities of LE and Agricultural agencies.
    - **Long Term Vision:** LE understands the goals and techniques of animal and plant disease investigations. APH understands the LE priorities and procedures such as intelligence operations, the roles and duties of the FBI WMD Coordinator, crime scene preservation and investigations, chain of custody, and protecting sensitive information.
  - **Establish joint Interagency Triggers and Tripwire Initiatives:** Establish joint APH, PH, and LE working groups to develop lists of key triggers, establish tripwire initiatives and the methods to communicate detected threats or incidents, and initiate joint investigations and response operations.
    - **Long Term Vision:** LE and APH understand and recognize threats and incidents at the earliest point of detection and rapidly report these to partner agencies.



## U.S. Federal Bureau of Investigation Weapons of Mass Destruction Directorate Chemical-Biological Countermeasures Unit

- **Develop Information Sharing Protocols:** Develop joint alert notification and information sharing techniques and procedures, develop communication plans and contact lists for LE and APH personnel, and establish jointly recognized triggers and the tripwires needed for the earliest detection of possible intentional use of CBRN agents.
  - **Long Term Vision:** Develop headquarters and field level communication procedures for information sharing, joint threat assessment procedures, and joint investigations. Define what type of information is of value to the partner agencies and establish effective notification protocols.
- **Foster State and Local APH-LE Contact Networks:** During the training, APH and LE personnel meet their counterparts and develop working-level relationships, identify resources and assets for joint operations, and develop useful operational points of contact.
  - **Long Term Vision:** Develop strong professional ties between APH and LE personnel, develop working groups and joint planning teams, and implement timely information sharing during suspicious and unusual disease investigations and outbreaks.

### For more information and assistance, please contact:

Heng Liv, Supervisory Special Agent - [hkliv@fbi.gov](mailto:hkliv@fbi.gov)

Stephen W. Goldsmith DVM, Management Program Analyst - [swgoldsmith@fbi.gov](mailto:swgoldsmith@fbi.gov)

Federal Bureau of Investigation

Weapons of Mass Destruction Directorate

Chemical-Biological Countermeasures Unit

Washington, DC