



PER-228

Advanced Forensic Investigations for Hazardous Environments

This course, *Advanced Forensic Investigations for Hazardous Environments*, addresses response in a hazardous environment, with emphasis on evidence collection and recovery. The purpose of the course is to provide participants with the knowledge, skills, and abilities to investigate a hazardous environment crime scene.

This is a five-day course that provides participants with the essential skills to investigate a hazardous environment crime scene for the identification, documentation, presumptive forensic testing, collection, packaging, preservation, and transportation to the laboratory for analysis of hazardous environment forensic evidence. The course will address these areas by following the FBI 12-step crime scene management process as applied to a high-consequence event. This will enable participants to properly collect evidence that may be used in a criminal prosecution. Finally, the course is intended to enhance the participants' skills needed to provide expert testimony for the successful prosecution of the perpetrators of a criminal hazardous environment.

Course Objectives

At the end of this course, participants will be able to:

- Define terminology relevant to this course.
- Describe actions required when working in CBRNE/TIC and non-CBRNE/TIC environments.
- Delineate the roles and responsibilities of the NIMS and the NRF.
- Summarize incidents where CBRNE/TIC agents or materials were used in acts of terrorism.
- Describe the functions and responsibilities of CBRNE crime scene investigation unit members.
- Describe and discuss the FBI's 12-step process for crime scene management.
- Identify the different classes/types of respirators.
- Identify the different levels of PPE and CPC.
- Identify PPE and CPC based on incident hazard assessment.
- Discuss and complete inspection procedures for PPE/CPC.
- Recognize the limitations of using PPE/CPC while operating in a hazardous environment.
- Inspect, don, function in, and doff PPE/CPC following proper procedures.
- Describe decontamination principles for evidence and personnel.
- Articulate effective detection and monitoring at a potentially hazardous crime scene.
- Explain how chemical/physical properties of materials relate to detection and monitoring.
- Locate, document, collect, and preserve evidence at a CBRNE/TIC-contaminated crime scene.
- Properly field-screen evidence as required.
- Prepare evidentiary samples for transport through decontamination process to the laboratory.
- Relate importance of chain-of-custody and proper evidence documentation is the ultimate responsibility of the investigating law enforcement agencies.
- Identify essential crime scene documentation: investigator notes, photographs, and sketches.
- Determine types of sketches to be developed by the crime scene investigation unit.
- List types of equipment that may be used by the crime scene investigation team.
- Evaluate pre-existing plans and determine their usefulness for crime scene documentation.

- Employ technologies to plot and document crime scene and evidence found.
- Determine equipment for collecting and packaging evidence in a CBRNE/TIC crime scene.
- Summarize procedures for collecting and packaging evidence in a CBRNE/TIC crime scene.
- Demonstrate the proper procedures to collect: latent fingerprints, hair and fiber evidence, serological/DNA evidence, trace evidence, and impression evidence.
- Identify common precursors associated with production of CBRNE/TIC agents and materials.
- Recognize and distinguish equipment used to manufacture CBRNE/TIC agents and materials.
- Assess written documentation utilized to manufacture CBRNE/TIC agents and materials.
- Explain the impact on the CSI when a given precursor or material is present at the scene.
- Identify and describe indicators of CBRNE/TIC terrorism at a crime scene.
- Recover physical evidence properly at a CBRNE/TIC-contaminated crime scene.
- Distinguish the role of the CSI at a CBRNE/TIC versus a non-CBRNE/TIC crime scene.
- List and explain all legal aspects relating to a CBRNE/TIC terrorist crime scene.
- Differentiate the complexities of a CBRNE/TIC with the non-CBRNE/TIC crime scene.

Target Audience/Discipline

Law Enforcement

The audience includes crime scene investigators (CSIs), technicians, and analysts. CSI personnel currently trained to work with all of the following types of evidence as part of his/her job requirements: crime scene photography, crime scene mapping/sketching, latent fingerprints, hair and fibers, serological evidence, trace/transfer evidence, and impression evidence.

Scheduling

See **Front Inside Cover** to find contact information for the training coordinator in your FEMA region.

Min/Max Enrollment
20

Hours 40.0

Format Instructor-Led
Training (Direct Delivery)

DHS Course # PER-228

Prerequisites

- Successful completion of institutionally delivered training in: WMD Awareness-level training course or higher, ICS 100, ICS 200, ICS 700, ICS 800a

Brian L. Christmas
Sumter Police
Department
Sumter, SC

The hands on experience processing scenes while in PPE was the most useful aspect of this course. I have been in charge of several operations since the class and used some of the knowledge gained to help make command decisions.