



COURSE TITLE:		HazMat Toxicology for the Emergency Care Provider		Course No. & Version:	HAZ018
TOPIC AREA:		Emergency Medical Services/ HazMat		LEVEL:	Technician
SOURCE:	Internal			Course No.	HAZ018
PRIMARY DOMAIN:	Didactic		Psychomotor	Combination	
DELIVERY METHOD:	60% Lecture		40% Hands-on	% Distanced	
DURATION:	Hrs 21	SCHEDULING:	Three 7 hour days		
PROGRAM GOAL:	Upon successful completion of this training program, the ALS responder, while properly functioning within the established incident command system, shall be able to deliver Advanced Life Support Care at the hazardous materials or WMD emergency and to provide for the medical support of responders operating in the hazardous environment.				
TARGET AUDIENCE:	This program is designed for medical care providers who have the responsibility to respond to hazardous materials incidents, provide on-scene medical care for victims or responders or who deliver in-hospital care for the chemically exposed patient.				
COURSE DESCRIPTION:	The Hazardous Materials Toxicology Program is a 24-hour class designed to provide participants with training and insight into the role of providing pre-hospital and emergency department medical care for the chemically exposed victim. Course content will include the functions of the care provider in support of operating members of a hazardous materials response team and in caring for those persons injured by hazardous materials.				
MAX STUDENTS:	24		MAX INST. RATIO:	1:12	
STANDARDS MET:	<p>This program is closely aligned to the recommendations of NFPA 473 “Standards for Competencies for EMS Personnel Responding to Hazardous Materials/Weapons of Mass Destruction Incidents”, 2008 Edition at the advanced life support level.</p> <p>This program also adjusts for the target audience based upon the protocols approved by the jurisdiction’s medical control. In absence of locally established policies, medical treatment is based upon the recommendations of the state medical authority, SERC or poison control center.</p>				
APPROVALS					
Organization	No. / Date		Conditions		
NOTES					

HazMat Toxicology for the Emergency Care Provider

Course Educational Objectives

Given a hazardous materials or WMD incident scene, the ALS responder shall be able to survey the scene and collect appropriate information to determine potential health and other on-scene hazards. **(IAFF 160 Technician Modules 2, 3, 11)**

Given the hazardous materials/WMD incident and simulated patients, the ALS responder shall be able to plan and implement the delivery of ALS pre-hospital care to include functioning within the established ICS, patient triage, decontamination, and treatment. **(IAFF 160 Technician Modules 10, 11, 12)**

Given various case studies, evaluate the health risks associated with various types of incidents to include transportation, fixed facilities and illicit activities. **(IAFF 160 Technician Modules 3, 11, 12)**

Given a hazardous materials/WMD emergency incident, the ALS responder shall demonstrate the ability to participant in the proper termination of the incident. **(IAFF 160 Technician Module 10)**

Given a hazardous materials or WMD incident scene, the ALS responder shall be able to survey the scene and collect appropriate information to determine potential health and other on-scene hazards.

- Based upon the 6 clues of hazardous materials recognition, the ALS responder shall be able to identify the potential materials or hazards present. **(IAFF 160 Technician Modules 2, 4)**
- Identify how incident cause impacts the potential on-scene hazards. **(IAFF 160 Technician Module 11)**
- Identify other potential hazards at the hazardous materials/WMD incident based upon TEAM CPR acronym. **(IAFF 160 Technician Modules 3, 4)**
- Understand the importance of the following health related information to the development of a pre-hospital patient care plan. **(IAFF 160 Technician Modules 3, 5)**
 - a. Chemical name and synonyms
 - b. Physical/chemical properties
 - c. Health hazards
 - d. Signs and symptoms
 - e. Route of exposure & exposure limits

- Identify and evaluate the important physical and chemical properties associated with hazardous materials and WMDs. **(IAFF 160 Technician Modules 4, 5)**
- Identify important health hazards and toxicological terms and their meaning. **(IAFF 160 Technician Module 4)**

Identify various human, printed and electronic sources of information helpful to the ALS responder and demonstrate the ability to obtain the information necessary for the development of a pre-hospital patient care plan. **(IAFF 160 Technician Modules 3, 4, 12)**

Based upon information obtained, determine the potential off-site health risks and make recommendations for protective actions. **(IAFF 160 Technician Modules 11, 12)**

Given the hazardous materials/WMD incident and simulated patients, the ALS responder shall be able to plan and implement the delivery of ALS pre-hospital care to include functioning within the established ICS, patient triage, decontamination, treatment and transport.

- Identify locations within their jurisdiction that present potential high risks for accidental or incidentally created hazardous materials emergencies. **(IAFF 160 Technician Module 4)**
- Identify the capabilities of the local hospital network with regards to hazardous materials/WMD emergencies, trauma care, hyperbaric chambers, decontamination capabilities and field deployable assets (e.g. MMRS, DMAT teams). **(IAFF 160 Technician Module 4)**
- Describe organizational policies for communications during periods of disrupted communications infrastructure.
- Identify the specific roles and responsibilities of the ALS responder at hazardous materials/WMD emergencies (Florida FOG, responder wellness). **(IAFF 160 Technician Module 10)**
- Describe the organizational or regional, state and national resources and mutual aid policies for mass casualty incidents. **(IAFF 160 Technician Modules 8, 11)**
- Identify the requirements and function of the mass casualty branch and the ALS responder to include organization, communication, location and responsibilities. **(IAFF 160 Technician Module 11)**

Given various case studies, evaluate the health risks associated with various types of incidents to include transportation, fixed facilities and illicit activities.

Given a hazardous material/WMD emergency incident, the ALS responder shall demonstrate the ability to participant in the proper termination of the incident.

Program Schedule

DAY 1	DAY 2	DAY 3
<p>Morning Start 0830 Registration Welcome & Registration Unit 1—Introduction to Hazard Risk Assessment Hazard Risk Assessment Information Sources Electronic Sources Activity 1.1 Medical Hazard Risk Assessment</p>	<p>Morning Start 0830 Quiz 1 “Risk Assessment” Unit 4—Treatment Protocols General Hazardous Materials Care Asphyxiants Respiratory Irritants Organic Solvents Corrosives Hydrofluoric Acid Case Studies —Incidents Involving TIC</p>	<p>Morning Start 0830 Quiz 2 Protocols and Treatment” Group A Unit 5— Responder Medical Safety Role of the Medical Group Physiologic Status Monitoring Heat Stress Rehabilitation Role of the Medical Officer Group B Patient Simulations</p>
Lunch	Lunch	Lunch
<p>Afternoon Unit 2—System Preparation Capabilities and limitations NIMS Implications & Triage Patient Decontamination Existing Local Policies Group A Unit 3—Introduction to Toxic Syndromes Group B Patient Triage & Decontamination</p>	<p>Afternoon Case Studies - Chernobyl/Fukushima Radiological Biological Agents Pesticides Activity 4.1 Nexus to Weapons of Mass Destruction Toxic Syndrome Protocols</p>	<p>Afternoon Group B Unit 5— Responder Medical Safety Role of the Medical Group Physiologic Status Monitoring Heat Stress Rehabilitation Role of the Medical Officer Group A Patient Simulations Program Closure</p>
<p>Evening Assignment Activity 2.1 System Assessment</p>	<p>Evening Assignment Activity 4.2 Protocol Review and Selecting Toxic Syndrome</p>	