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COURSE TITLE:	**HazMat Toxicology for the Emergency Care Provider**	Course No. & Version:	**HAZ018 092021**
TOPIC AREA:	**Emergency Medical Services/ HazMat**	LEVEL:	**Technician**
SOURCE:	**Internal**	Course No.	**HAZ018**
PRIMARY DOMAIN:	Didactic X Psychomotor Combination		
DELIVERY METHOD:	**60**% Lecture **40%** Table Top activities		
DURATION:	**24 Hrs**	SCHEDULING:	**Three 8 hour days**
PROGRAM GOAL:	Upon successful completion of this training program, the ALS responder, while properly functioning as a member of a medical team, shall demonstrate through activities, the ability to deliver Advanced Life Support Care to victims at the hazardous materials or WMD emergency and identify the proper medical support of responders operating during the incident and having functioned in 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:	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", at the advanced life support level. This program also adjusts for the target audience based upon the protocols approved by the jurisdiction's Medical Director. In absence of locally established policies, medical treatment is based upon the recommendations of the state medical authority, poison control center or CDC and NIH medical management guidelines.		

Organization	No. / Date	Conditions
NFPA 473		Follows competencies of ALS responder

NOTES	

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HazMat Toxicology for the Emergency Care Provider

Course Educational Objectives

Given a hazardous material 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.

Given the hazardous materials/WMD scenario and patient information, 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.

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 materials/WMD emergency incident information, the ALS responder shall demonstrate the ability to participant in the proper termination of the incident.

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.
- Identify how incident cause impacts the potential on-scene hazards.
- Identify other potential hazards at the hazardous materials/WMD incident.
- Understand the importance of the following health related information to the development of a pre-hospital patient care plan.
    a. Chemical name and synonyms
    b. Physical/chemical properties
    c. Health hazards
    d. Signs and symptoms
    e. Route of exposure & exposure limits
    f. Recommended medical procedures
- Identify and evaluate the important physical and chemical properties associated with hazardous materials and WMDs.

- Identify important health hazards and toxicological terms and their meaning. 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.

  Based upon information obtained, determine the potential off-site health risks and make recommendations for protective actions.

  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.
  - 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).
  - 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).
  - Describe the organizational or regional, state and national resources and mutual aid policies for mass casualty incidents.
  - Identify the requirements and function of the mass casualty branch and the ALS responder to include organization, communication, location and responsibilities.

  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.

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Program Schedule

DAY 1	DAY 2	DAY 3
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	**Morning Start 0830** Quiz 1 "Risk Assessment" **Unit 4—Treatment Protocols** General Hazardous Materials Care Asphxyiants Respiratory Irritants Organic Solvents Corrosives Hydrofluoric Acid Case Studies —Incidents Involving TIC	**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**
Lunch	**Lunch**	**Lunch**
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**	**Afternoon** Case Studies - Chernobyl/Fukushima Radiological Biological Agents Pesticides Activity 4.1 Nexus to Weapons of Mass Destruction Toxic Syndrome Protocols	**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**
Evening Assignment Activity 2.1 System Assessment	**Evening Assignment** Activity 4.2 Protocol Review and Selecting Toxic Syndrome	