Procedure: HazMat Medical Treatment Protocols Part 1: EMS Responder Definitions, Training and Roles

PURPOSE

It is the intent of these Hazardous Materials Medical Care Protocols to facilitate rapid medical identification and possible intervention of a victim or victims of a chemical exposure within the response community, at a medical event and/or at the scene of a Hazardous Materials Incident, or Weapons of Mass Destruction event. It is a layered response approach dependent on the human and physical resources a department/agency may have available.

TYPES OF RESPONDERS

It is the responsibility of all individuals involved in this type of response to take precautions to reduce secondary exposure while at the same time rendering appropriate medical care. It is the responsibility of those responders designated as:

EMS Core Responder – is defined as a BLS qualified responder that has successfully completed an Operational Core curriculum competencies as identified in NFPA 472 2008 ed. Their role at a Hazmat/WMD incident is limited to support functions.

HazMat/WMD Rescuer is defined as either a BLS or ALS responder that has successfully completed an Operational Core competencies and mission specific competencies for victim rescue, personal protective equipment, technical and mass decontamination as defined NFPA 472 2008 ed. Their role at a Hazmat/WMD incident would be to perform life saving rescue within the limits of the personal protective equipment provided to them by their employer and to perform or assist with mass and technical decontamination.

Toxmedic – is defined as an ALS responder (State of Florida Certified Paramedic) and has successfully completed and demonstrated Operational Core and mission specific competencies for victim rescue, personal protective equipment, technical and mass decontamination as defined NFPA 472 2008 ed. In addition, the Toxmedic shall meet and demonstrate competency in NFPA 473 ALS 2008 ed. as well as treatment modalities for any additional toxic syndromes addressed in this document.

HazMat Medic – is defined as an ALS responder (State of Florida Certified Paramedic) and has successfully completed and demonstrated competency as a Hazardous Materials Technician in accordance with NFPA 472 2008 ed. In addition, the HazMat Medic shall meet and demonstrate competency in NFPA 473 ALS 2008 ed. as well as treatment modalities for any additional toxic syndromes addressed in this document.

Individual must maintain working knowledge of the level of medical care their training and service agency provides, which are contained within these medical protocols and are associated to general care protocols with the agency and training levels as identified by the State Emergency Response Committee (SERC).

					Trai	ning l	Matr	ix		ī			
			Mi	ssion S	Specifi	c Com	peten	cies					
	NFPA 472 Ops Core	PPE Mission	Mass Decon	Technical Decon	Evidence & Sampling	Product Control	Air Monit. & Sampling	Victim Rescue	Illict Labs	NFPA 473 BLS EMS	NFPA 473 ALS EMS	Toxic Syndromes	NFPA 472 Technician
EMS Hazmat/WMD Core	X												
EMS HazMat/WMD Rescuer	X	X	X	X	X			X		X or	X		
"Toxmedic"	X	X	X		X			X			X	X	
"HazMat Medic"	X	\mathbf{X}^{1}	X^1	\mathbf{X}^{1}	\mathbf{X}^{1}	X^1	X^1	\mathbf{X}^{1}	\mathbf{X}^{1}		X	X	X

Notes: ¹ The HazMedic completes mission specific competencies by virtue of completion of NFPA 472 Technician Level training competencies.

POLICY

In addition to the providers general Medical Care Protocols, the response agency should develop Hazardous Materials Medical Care Protocols for the emergency treatment and handling for non-specific exposure and specific exposure conditions.

The possibility of secondary contamination shall be recognized and measures taken to reduce the chance of such contamination. Appropriate protective gear shall be worn at all applicable times during treatment procedures. When feasible contamination shall be left at the scene of the emergency with appropriate precautions for the definitive care facility.

If there will be extended operations with the possibility of exposure, or victims transported for definitive medical care from a medical call involving Hazardous Materials/WMD, EMS personnel should notify the closest appropriate medical facility, advising the emergency department of the nature, possible number of victims, and extent of operations from the scene. This advance notification will alert the hospital of the need to set up decontamination and / or isolation areas for treatment of exposed individuals. The report should include if possible specific names of chemicals involved, specific amounts, and the type of exposure expected, i.e. inhalation, skin absorption, ingestion, or injection.

PROCEDURE

Site and personal safety is of paramount concern for the responder. Site Safety "standard practices" shall include baring entry into the <u>Hot Zone</u> without proper precautions, proper protective clothing based on the risk, and knowledge and permission of the Incident Commander. Treatment can begin when it is safe to do so this would include but not limited to Basic Life Support procedures. Patients should be evaluated for contamination and decontaminated accordingly.

The following Hazardous Materials medical care guidelines are designed and applied based on the level of training the responder possess and maintains along with the equipment levels at the responders disposal. These are classified within three levels of HazMat medical response. At each level the prerequisite procedures apply.

EMS Core

- Secure airway
- Avoid all body fluids and protect against secondary contamination
- With history of ingestion protect against secondary contamination due to burping and/or emesis
- Supplemental Oxygen as indicated; record and monitor vitals
- Obtain a history
 - o Method of exposure (Inhalation, topical, ingestion)
 - o Specific agent involved
 - o Exact time of exposure
 - Duration of exposure
 - o Quantity and concentration of substance involved in the exposure
 - o Specific symptoms and duration of symptoms since exposure
 - Identifying positive symptom consistent with chemical exposure
 - Identifying negative symptoms that are not consistent with exposure
 - o Past medical history, medications, allergies, and/or exposures
- Transport in vehicle with open windows and good ventilation; properly prepared.
- Contact local Emergency Department
- Contact the Regional Poison Control Center (1-800-222-1222)
- If from a facility any documents such as MSDS brought to the ED
- Auto injectors may be administered if the responder has been qualified by the medical director.

Hazmat/WMD Rescuer

In addition	to the	actions	identified	for the	EMS	Core	Responder,	the F	Hazmat/V	VMD	Rescuer
shall:											

 Conduct life saving rescuer within the limits of the PPE availabl

☐ Perform or assist with mass or technical decontamination

ToxMedic

The Toxmedic shall perform all of the EMS Operations functions along with ALS General Medical and ALS Specific HazMat/WMD Medical Guidelines. Assistance from the HazMat Medic or HazMat Technician is recommended based upon the hazards and risks associated with the incident in order to ensure safety, procedures, and considerations from the hazardous materials aspect are addressed.

HazMat Medic

The HazMat Medic shall perform the functions of the EMS Operations, ALS treatment modalities, evaluation for toxidromes (toxic syndromes) and have communication with the Regional Poison Control for the development of a medical plan.

The HazMat Medic has additional skill level which allows him/her to operate as a HazMat Technician, utilizing his/her analyzing ability to characterize the chemical into a chemical family, hazard class, or potential analog, by using air monitoring techniques, and/or chemical observations.