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## HAZARDOUS MATERIALS (HAZ MAT) OR WEAPONS OF MASS DESTRUCTION (WMD)

### PURPOSE

This policy establishes guidelines for the response of ambulance transport providers to incidents involving Haz Mat or WMD.

### AUTHORITY

Health & Safety Code, Division 2.5, Chapter 3, Article 4, §§ 1797.150, 1797.151  
Health & Safety Code, Division 2.5, Chapter 4, Article 1, §§ 1797.204, 1797.214  
Health & Safety Code, Division 2.5, Chapter 5, § 1798.6  
California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 7, Group 16, Article 109, § 5192

### DEFINITIONS

**Hazardous Materials:** are classified as any material which is explosive, flammable, poisonous, corrosive, reactive, or radioactive, or any combination, and requires special care in handling because of the hazards it poses to public health, safety, and/or the environment.

**Haz Mat Response Team:** Is an emergency team that has received specialized training and equipment for the purpose of protecting the public and the environment in the event of an accidental or intentional release of hazardous materials into the environment.

**Emergency Decontamination (Decon):** An emergency procedure for the removal of contamination from an exposed victim requiring immediate lifesaving care.

**Planned Decon:** The procedures in place for the Haz Mat Response Team to perform decontamination at a hazardous materials incident.

**Mass Decon:** Decontamination of the greatest number of people possible with available resources. Normally accomplished by emergency decon followed by full decon.

**Exclusion Zone (Hot Zone):** Area that encompasses all known or suspected hazardous materials

**Contamination Reduction Zone (CRZ) (Warm Zone):** Area between the "Exclusion Zone" and the "Support Area". The "Safe Refuge Area" and "Contamination Reduction Corridor" are set up within this area.

**Contamination Reduction Corridor:** An area within the "CRZ" where the actual decontamination takes place. Emergency Medical Service (EMS) personnel, once cleared, receive patients at the end of the "Contamination Reduction Corridor" and move them to the "Support Area" for secondary treatment.



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**Safe Refuge Area (SRA):** A safe area within the CRZ for the assembly of individuals who were on site at the time of the spill. Separation of any potentially contaminated or exposed persons from non-exposed persons should be accomplished in this area.

**Support Zone (Cold Zone):** Clean area outside the "CRZ" where equipment and rescue personnel are staged to receive and treat decontaminated patients. Secondary exposure to hazardous materials is not expected in this area and special clothing is not required.

## TRAINING AND COMPETENCY

According to the California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 7, Group 16, Article 109, § 5192, the minimum training for EMS responders shall be Haz Mat First Responder Awareness level. Annual refresher training is required to be provided by the employer to be of sufficient content and duration to maintain competencies or to demonstrate those competencies. Additional training may be required to function at an emergency.

## POLICY

- I. The responsibility for hazardous material containment, identification, decontamination, and victim evacuation rests with the Incident Commander (IC), or their designee of the fire and/or law enforcement agencies having primary investigative authority.
  - A. The management structure utilizes the Incident Command System (ICS). All resources ordered for a Haz Mat incident shall be committed to the incident until released by the IC or their designee.
  - B. Avoid contamination, accept only decontaminated patients. Do not transport contaminated patients without IC or their designee's approval and appropriate Personal Protective Equipment (PPE).
  - C. **Exception:** For radiation contaminated patients that meet immediate triage criterion, treatment and transport will not be delayed for decontamination processes
  - D. **DO NOT ENTER** the Exclusion Zone. EMS personnel will not use PPE/Self-Contained Breathing Apparatus (SCBAs) unless they have been specifically trained in its use prior to the incident.
  - E. Contact the Base or Receiving Hospital as soon as possible (ASAP) in an incident, so they may prepare to receive victims. The Base Hospital should assist field personnel determine a decontamination and treatment plan.

## DISPATCH

- I. Units dispatched to a possible hazardous materials incident shall be advised by dispatch (in addition to the usual information) of the following:
  - A. On scene wind direction and recommended approach route; coordinated with IC or their designee.
  - B. Staging Area location.
  - C. Location of Incident Command Post (if established).
  - D. Communication frequencies
  - E. Type of hazardous material(s) involved (if known).
  - F. Estimated number of patients.



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### SCENE MANAGEMENT

- I. Ambulances will approach cautiously and park upwind, uphill and upstream from the incident using the Department of Transportation - Emergency Response Guidebook (DOT - ERG) as a guide for the distance to park from the incident.
  - A. Observe wind and/or plume direction, if applicable.
  
- II. Initial Ambulance is first on scene:
  - A. If first on scene, assume IC until otherwise established.
    1. First provide for your own safety.
    2. Isolate scene and Deny entry (keep others away!). Move uninvolved victims to a safe zone.
    3. Notify dispatch and the Base Hospital that it is a Haz Mat scene.
    4. Ensure notification of local Haz Mat resources utilizing local procedures for hazardous materials incidents.
    5. Coordinate with other public safety personnel as they arrive on scene to establish the ICS.
  
  - B. Confirm Haz Mat using DOT - ERG and notify appropriate authorities. Reconfirm Haz Mat with other references and resources if available.
  
- III. Initial Ambulance with first responders already on scene:
  - A. If upon arrival of the first ambulance, the first responders have determined or have suspicion of a hazardous material incident, ambulance providers will coordinate with other public safety personnel on scene.
  
  - B. If the ICS has been established, ambulance personnel shall report to the IC or staging area manager upon arrival on scene.
  
- IV. Arrival at a known Hazardous Material scene:
  - A. At no time shall EMS personnel enter the scene of a known Haz Mat incident without the clearance from the IC or their designee. Once the Support Zone is established, the responding EMS unit(s) will stage as directed by the IC or their designee. Once at scene, in coordination with the IC or their designee, EMS will provide treatment and transport of patient(s) after decontamination is completed, with the exception of radiation incidents (See exception for radiation contamination under this policy section, B).
  
- V. Recognition of a Hazardous Material on scene or during transport:
  - A. If EMS personnel become aware of hazardous materials while on scene or during transport:
    1. Request Haz Mat response from appropriate jurisdictional authority.
    2. Personnel shall consider themselves contaminated and part of the incident (Exclusion Zone), and consider self-decontamination.
    3. Evacuate to a safe location to minimize exposure and notify EMS Dispatch of the potential contamination. If identified during transport, notify dispatch of contamination and await direction.
    4. Request closest fire and law enforcement agencies respond to the scene for site control and emergency decontamination.



### PATIENT CARE

- I. EMS personnel shall not attempt to enter any Haz Mat scene or render medical care beyond the Support Zone without the specific direction from the IC or their designee. **ONLY appropriately trained prehospital personnel utilizing appropriate PPE shall perform treatment within the "Exclusion" and "Contamination Reduction" zones.**
- II. Medical treatment and transportation is secondary to the prevention of spreading the contaminate, and the management of the Hazardous Materials incident. The IC or their designee is responsible for determining the treatment priority for the patient(s). EMS transport personnel may be requested to receive non-ambulatory patients from the CRZ after decontamination has been completed.
- III. For radiation contaminated patients that meet immediate triage criteria, treatment and transport will not be delayed for decontamination processes.
- IV. EMS personnel may only provide and/or initiate patient care after the patient has been transferred to them in the designated area as deemed by the IC or their designee.
- V. Deceased victims shall be left undisturbed at the scene, or moved at the direction of the coroner, IC or their designee.
- VI. The use of EMS helicopters for the transport of potentially contaminated Haz Mat patient(s), or WMD is generally, **NOT APPROPRIATE**. Patient transport by helicopter shall occur only by direction of the IC or their designee. EMS helicopters may be utilized at the discretion of the IC, or their designee to transport immediate, radiation contaminated patients under the same criteria as ground based transportation assets.
- VII. Advise the Base Hospital of material involved and request direction for treatment.
- VIII. If necessary, request CHEMPACK activation via the Yolo Emergency Communications Agency (YECA). YECA will notify the Medical Health Operational Area Coordinator (MHOAC) who will release/deploy/coordinate CHEMPACK.
- IX. Treat as directed by specific Yolo County Emergency Medical Services Agency (YEMSA) protocols, and/or the Base Hospital.
  - A. Decon as directed, if trained and properly equipped.
  - B. Determine effectiveness of decon.
  - C. ABC's.
  - D. Oxygen (O<sub>2</sub>) and ventilate as needed.
  - E. Cover the patient and consider modesty when possible. Warming measures as needed after decon.
- X. Procedures and treatment as clinically indicated and per Base Hospital order.
- XI. For specific treatments see YEMSA protocols as follows:
  - A. Organophosphate or Carbamate pesticides, or Hydrofluoric Acid see Ingestion Overdose & Poisoning Protocol
  - B. Nerve Agent Exposure see Nerve Agent Treatment Protocol.
- XII. Information that must be obtained by Emergency Medical Service (EMS) personnel on every Haz Mat incident:
  - A. Number of Patients
  - B. Material involved or DOT four (4) digit placard number.
  - C. Route(s) of exposure for each patient
  - D. Signs and symptoms for each patient
  - E. Decontamination procedure completed for each patient
  - F. Procedure utilized to determine effectiveness of the decontamination procedure



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- G. Risk of secondary exposure to rescuers
- H. PPE required for transporting patients