



## EMS System for Metropolitan Oklahoma City and Tulsa 2021 Medical Control Board Treatment Protocols



Approved 9/9/20, Effective 1/15/21, replaces all prior versions

### 15C – CHEMICAL WEAPONS

EMERGENCY MEDICAL DISPATCHER
EMERGENCY MEDICAL RESPONDER
EMT
EMT-INTERMEDIATE 85
ADVANCED EMT
PARAMEDIC

#### **Communication Center Principles:**

911 calls present the first opportunity to identify that a potential weapon of mass destruction (WMD) - chemical incident exists. Identifying the incident, relaying potential threat information, and advising precautionary measures to ***all*** of the responding public safety professionals may be a key to saving lives of responding public safety professionals.

#### **Indicators of a Possible Chemical Weapons Incident:**

1. Explosion with little or no structural damage;
2. Reports of a device that dispersed a mist or vapor;
3. Multiple casualties exhibiting similar symptoms (may be without apparent reason);
4. Reports of unusual odors, liquids, spray devices, or cylinders;
5. Dead animals;
6. Discarded personal protective equipment (PPE).

#### **Potential Notifications (actual notification needed if chemical weapon event confirmed):**

1. Local Law Enforcement
2. Local Federal Bureau of Investigation (FBI) office – WMD Coordinator;
3. Local/State Office of Emergency Management (OEM);
4. Local Health Department

#### **Initial Actions/On – Scene Arrival:**

1. Approach upwind and uphill of the incident;
2. Stop at an apparent safe distance away from incident location;
3. Alert subsequent arriving responders;
4. Direct all personnel to use full PPE, including self-contained breathing apparatus (SCBA)
  - a. At a minimum, respiratory protection;
5. Be aware of possible secondary devices;
6. Treat as a crime scene/Consider that alleged perpetrator may still be on the scene;
7. Avoid contact with liquids;
8. Request appropriate resources (HazMat specialists, law enforcement officers, etc.).



## EMS System for Metropolitan Oklahoma City and Tulsa 2021 Medical Control Board Treatment Protocols



Approved 9/9/20, Effective 1/15/21, replaces all prior versions

### **PROTOCOL 15C: Chemical Weapons, cont.:**

#### **Establishing Incident Command: (Follow Specific Directives of Incident Commander)**

Follow National Incident Management System (NIMS) practices as reflected in local policies. Utilize a Unified Command structure, promoting effective and efficient multi-agency communications and operations.

Further information through NIMS courses can be accessed at this website:  
<https://www.fema.gov/national-incident-management-system>

#### **Casualty Rescue: (Follow Specific Directives of Incident Commander)**

As many ambulatory casualties as possible should be removed from the area without rescuers entering the incident site. It should be expected, though, that live, non-ambulatory casualties will be present at any chemical incident.

1. Use bull horns and vehicle public address (PA) system to give directions;
2. Be alert for secondary devices;
3. Determine if there are live victims in the contaminated area;
4. Use PPE appropriate for safe rescue – PPE level most likely determined by HazMat specialists advising the Incident Commander (IC). The IC evaluates the chemical threat, potential to save lives, risk to responders, and time constraints to achieve each level of responder protection before determining what level of PPE to use to perform rescue operations;
5. When safe and appropriate, assist/direct all victims to decontamination and triage area.

#### **Decontamination: (Follow Specific Directives of Incident Commander)**

The theories and procedures referred to by the Chemical Weapons Improved Response Program (CWIRP) are based on decontaminating victims using large volumes of water.

Establish decontamination location(s) upwind and uphill of the incident:

1. Decontamination personnel must wear appropriate PPE, likely to include SCBA;
2. Be alert for secondary devices, weapons, and perpetrators;
3. Avoid contact with unknown liquids;
4. Decontaminate (**immediately**) casualties with liquid contamination on their skin or clothing. For dry contamination, substance should be brushed off casualty immediately;
5. Clothing removal is often the most effective decontamination. Encourage victims to remove clothing at least down to their undergarments;
6. Prioritize asymptomatic, symptomatic, and non-ambulatory casualties:
  - a. Coordinate decontamination with EMS triage activities.
  - b. Establish separate technical decontamination for responders away from mass-casualty decontamination.

The diagrams on the following page are provided to illustrate commonly recognized methods of mass “wet” decontamination. Follow the directives of the Incident Commander and HazMat specialists in charge of decontamination.



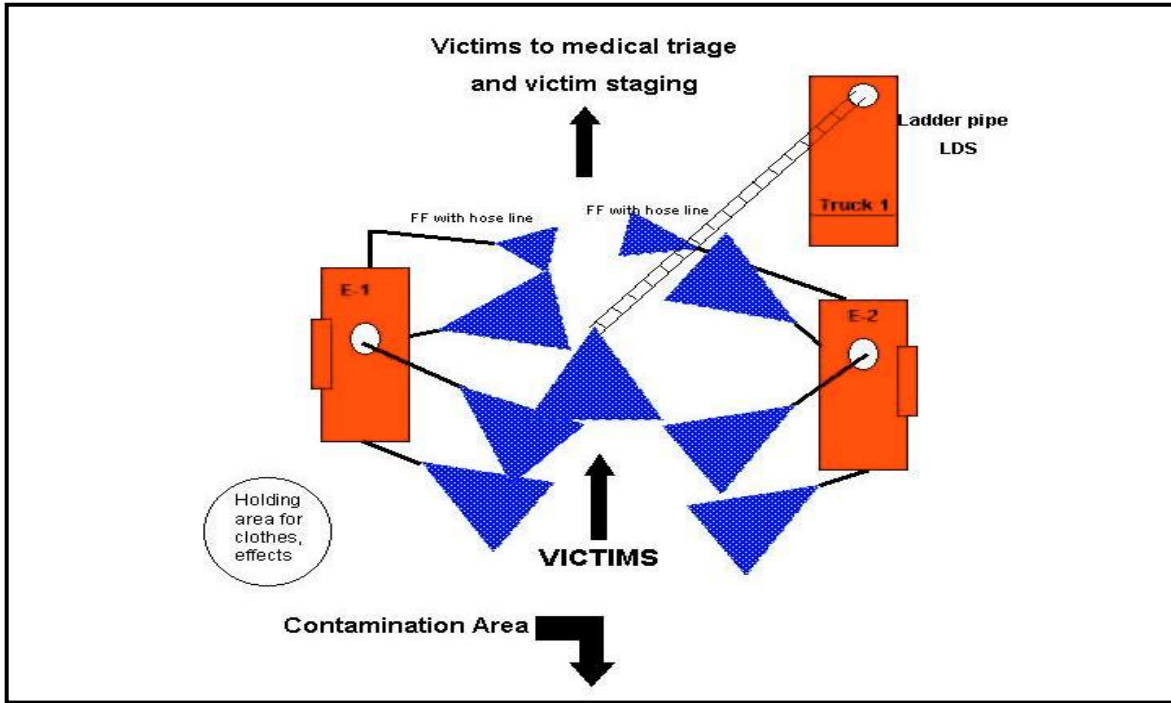
# EMS System for Metropolitan Oklahoma City and Tulsa 2021 Medical Control Board Treatment Protocols



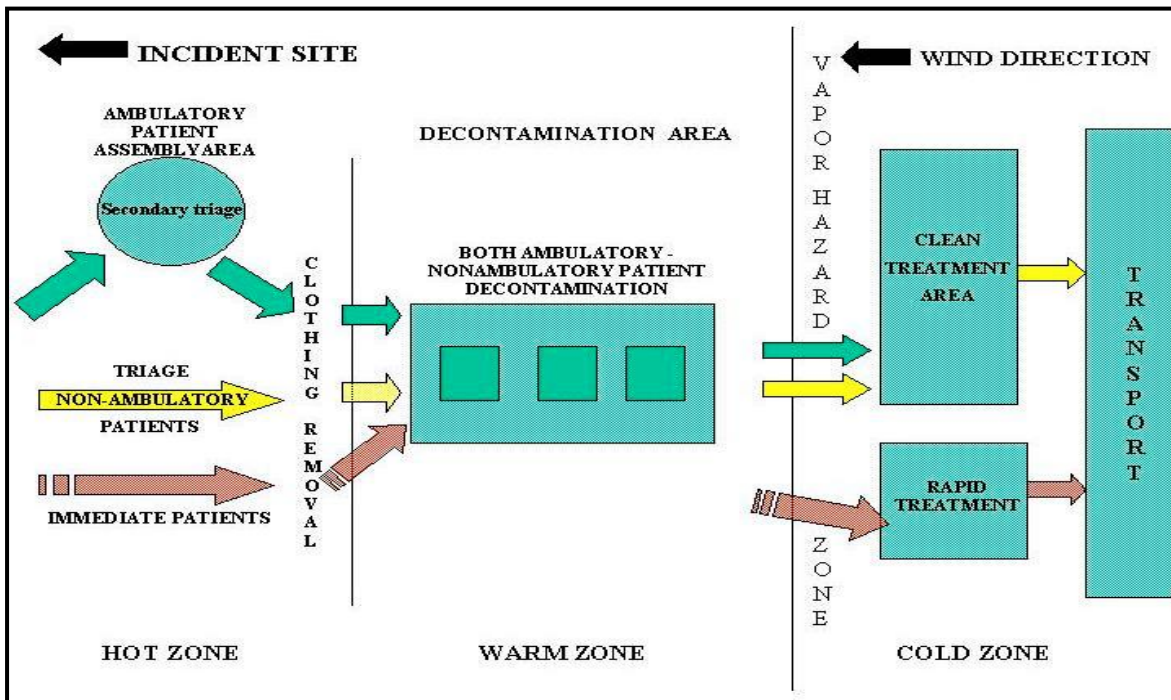
Approved 9/9/20, Effective 1/15/21, replaces all prior versions

## PROTOCOL 15C: Chemical Weapons, cont.:

### LADDER PIPE DECONTAMINATION SYSTEM (LDS)



### EMERGENCY DECONTAMINATION CORRIDOR SYSTEM (EDCS)





## EMS System for Metropolitan Oklahoma City and Tulsa 2021 Medical Control Board Treatment Protocols



Approved 9/9/20, Effective 1/15/21, replaces all prior versions

### Protocol 15C: Chemical Weapons, cont.:

#### Types of Decontamination:

- a. Passive (clothing removal) – often the simplest and effective method
- b. Dry agents
  - i. Dirt - Flour
  - ii. Baking powder - Sawdust
  - iii. Charcoal - Silica gel
- c. Wet agents
  - i. Soap and water
  - ii. Water (only)
  - iii. Bleach (for equipment decontamination)
- d. Air decontamination (positive pressure ventilation [PPV]/portable fans)

#### **EMS Principles: (Follow Specific Directives of Incident Commander)**

One of the primary challenges facing EMS on a chemical weapons incident will be the number of casualties (eg. trauma and agent exposure) and segregating these casualties by severity of illness/injury as well as attempting to segregate the “worried well” from actual exposed victims.

Work with appropriate HazMat specialists to determine proper level of PPE and respiratory protection needed for EMS personnel and what areas are appropriate for EMS care activities.

- a. Be alert for secondary devices and perpetrators;
- b. Avoid contact with liquids other than non-contaminated water;
- c. Rapid prioritization of number of patients;
- d. Triage victims based on medical necessity, using MCI protocols;
- e. Establish patient identification and tracking.
- f. Establish:
  - i. Communications with command post and hospitals;
  - ii. Staging for EMS personnel, ambulances, supplies, and resources;
  - iii. Transportation area – avoid transporting any contaminated patient(s).