

EMS System for Metropolitan Oklahoma City and Tulsa 2022 Medical Control Board Treatment Protocols

EMERGENCY MEDICINE UNIVERSITY OF OKLAHOMA

Approved 9/8/21, Effective 1/17/22, replaces all prior versions

8G – HAZARDOUS MATERIALS RESPONSE



This protocol contains generally accepted principles related to EMS response and activity relating to suspected or actual hazardous materials incidents. The overriding principle is safety, with an emphasis on minimizing, preferably preventing, further hazardous materials exposures and related illness.

Specific practices for individual hazardous material substances are beyond the capability of a general principle protocol and the EMS professional is directed to utilize hazardous material specialists within local fire services as well as hazardous material information found in resources such as:

- Emergency Response Guidebook (ERG 2012 edition if available), developed jointly by the US Department of Transportation (DOT), Transport Canada, and the Secretariat of Communications and Transportation of Mexico.
- 2) Wireless Information System for Emergency Responders (WISER), maintained at the US National Library of Medicine Specialized Information Services. The webpage for WISER is http://wiser.nlm.nih.gov/ and according to this website, "WISER is available for download as a standalone application on Microsoft Windows PCs, Apple iPhone and iPod Touch, Google Android devices, Windows Mobile devices, BlackBerry devices, Palm OS PDAs, and via WebWISER.

When responding to individuals in hazardous materials environment(s) and/or contaminated by hazardous materials, real danger exist that EMS professionals, public safety apparatus, and hospitals may be unable to effectively function if not protected from this contamination. Therefore, appropriate efforts must be made to protect the already apparent patient(s), responding public safety professionals, at-risk citizenry, and the emergency healthcare system from further contamination.

Treatment by unprotected or inappropriately protected EMS professionals should not be attempted until appropriate protective measures can be accomplished and the patient is decontaminated or otherwise determined non-toxic by appropriate authority (eg. Fire Department Hazardous Materials specialist, Oklahoma Poison Control Center specialist, and/or on-line medical control physician).



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Initial measures of protection for EMS professionals and equipment:

EMS professionals that are initially responding and arriving toward the incident location should perform the following:

- 1. Park in an anticipated safe area (typically upwind/uphill unless otherwise directed by Hazardous Materials specialists responding or already on-scene).
- 2. Determine and advise the appropriate communications center of the following (if not previously known):
 - a) The exact location of the incident.
 - b) The type of incident (transportation accident, fire, explosion, etc.).
 - c) Identification/nature of the hazardous materials, if known.
 - d) Environmental conditions (estimated wind direction and speed).
 - e) Recommended routes to and from the location.
 - f) Staging area.
 - g) Control line (perimeter) established or recommended to be established by fire service and/or law enforcement professionals.
 - h) Approximate number of patients (actual number preferred if known).
 - i) Number of ambulances needed (estimated transport resources).
- 3. **DO NOT** rush into a suspected hazardous/contaminated situation until appropriate safety measures are accomplished. If additional public safety professionals have not yet arrived, generally accepted safe practices include:
 - a) Do not drive any further into the area. Stay upwind and uphill.
 - b) Establish a control line at least 300 feet from the incident and stay outside of it.
 - c) Tell approaching persons to stop where they are.
 - d) Designate a refuge area for victims already inside the control line and direct those ambulatory to this refuge area.

Additional measures of protection for EMS professionals and equipment:

- 1. Whenever possible, use portable or disposable medical equipment for treating hazardous materials victims. Check with local policy, but in general a safe practice is to leave any potentially contaminated equipment with the Hazardous Materials team to coordinate decontamination of any potentially contaminated equipment.
- 2. Open any windows to the patient compartment of the ambulance. Dangerous concentrations of chemicals can develop when unintentionally contaminated victims or rescuers are in the unventilated patient compartment of an ambulance.
- 3. After decontaminated patients have been treated and/or transported to the emergency department, the EMS professionals should be formally evaluated by emergency health care providers at an emergency department if exhibiting unusual signs or symptoms consistent with hazardous materials exposure since participating in the incident.