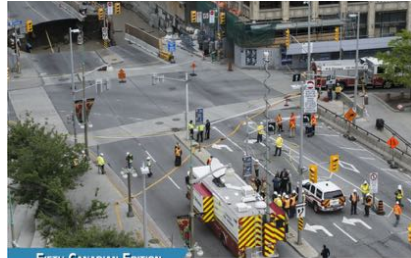


Emergency Medical Responder: A Skills Approach

Fifth Canadian Edition



FIFTH CANADIAN EDITION

EMERGENCY MEDICAL RESPONDER

A SKILLS APPROACH

MEETS PARAMEDIC ASSOCIATION OF CANADA'S
NATIONAL OCCUPATIONAL COMPETENCY PROFILE



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Chapter 30

Hazardous Material
Incidents and Emergencies

Objectives (1 of 2)

- Define hazardous materials.
- Identify the resources that may be called upon once a hazardous material incident is recognized.
- Identify the four levels of training required to respond to a hazardous material emergency.
- Discuss how to recognize the presence of a hazardous material at the scene of an emergency.



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Objectives (2 of 2)

- Describe what the EMR should do and the actions that need to be taken if there is reason to believe that there is a hazard at the scene, including identifying the hazardous material incident and the specific hazardous materials.
- State the role the EMR should take until appropriately trained personnel arrive at the scene of a hazardous material situation.

Hazardous Materials

Hazardous materials (HazMats) are those that in any quantity pose a threat or unreasonable risk to life, health, or property if not properly controlled.

Hazardous Materials Commonly Shipped

- Explosives
- Compressed and/or poisonous gases
- Flammable solids and liquids
- Oxidizers
- Corrosives
- Radioactive materials

Figure 30–1 The NFPA 704 System Helps You Identify Health, Reactivity, and Fire Hazards

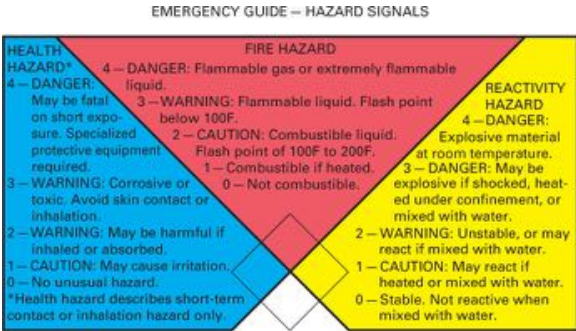


Figure 30–1 The NFPA 704 system helps you identify health, reactivity, and fire hazards.

Reprinted with permission from NFPA 704-2012, System for the Identification of the Hazards of Materials for Emergency Response. Copyright © 2011, National Fire Protection Association. This reprinted material is not the complete and official position of the NFPA on the referenced subject, which is represented solely by the standard in its entirety. The classification of any particular material within this system is the sole responsibility of the user and not the NFPA. NFPA bears no responsibility for any determinations of any values for any particular material classified or represented using this system.

Figure 30–2 *2016 Emergency Response Guidebook*

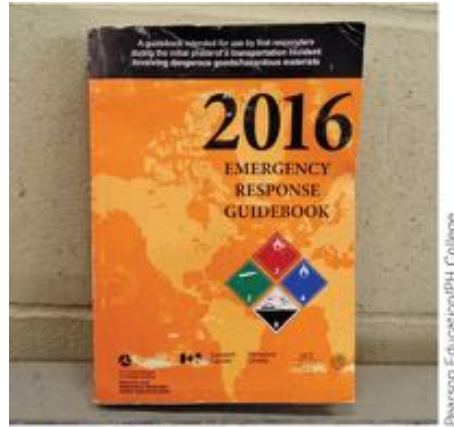


Figure 30–2 *2016 Emergency Response Guidebook.*

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Four Identified Levels of HazMat Training

- EMR Awareness
- EMR Operations
- Hazardous Materials Technician
- Hazardous Materials Specialist



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Specific Responsibilities During a Hazardous Material Incident

- Identify the emergency as a hazardous material incident
- Identify the hazardous materials
- Establish command and control zones
- Establish a medical treatment sector

Identifying the Hazardous Material Incident

Visual Clues can Indicate a Possible Hazardous Material

- Smoking or self-igniting materials
- Extraordinary fire conditions
- Boiling or spattering of materials that haven't been heated
- Coloured vapour clouds
- Frost near a container leak
- Unusual condition of containers

HazMat Reports Include

- Nature and exact location of incident
- Description of incident
- Number of patients involved
- Request for additional help

If Possible, Identify:

- What the material is
- Sizes, shapes, and kinds of containers
- Possibility of imminent danger from the contamination spreading?

Establishing Command

Include the following in your plan

- One command officer responsible for all decisions
- A clear chain of command
- An established system of communication
- Receiving facilities

Incident Command Officers Should Know:

(1 of 2)

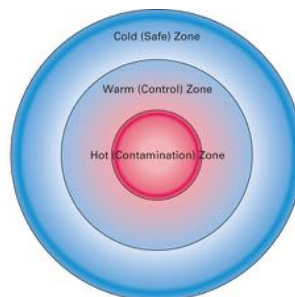
- Nature of problem
- Identification of hazardous materials
- Kind and condition of containers
- Existing weather conditions
- Whether fire is present

Incident Command Officers Should Know:

(2 of 2)

- Time elapsed since emergency started
- Actions of people on-scene
- Number of victims
- Danger to others

Figure 30–5 Establish Control Zones



Hot (Contamination) Zone

Contamination actually present
Personnel must wear appropriate protective gear
Number of rescuers limited to those absolutely necessary
Bystanders never allowed

Warm (Control) Zone

Area surrounding the contamination zone
Vital to preventing spread of contamination
Personnel must wear appropriate protective gear
Life-saving emergency care performed

Cold (Safe) Zone

Normal triage, stabilization, and treatment performed
Rescuers must shed contaminated gear before entering the cold zone

Figure 30-5 Establish control zones.

Reminder:

The decontamination process must take place within the warm zone.

Establishing a Medical Treatment Sector

All EMS personnel and equipment must be set up in the cold zone.