EMS Subspecialty Certification Review Course

4.4.4 Special Response Considerations

4.4.4.1 Allocation of scene resources

4.4.4.2 Provider Credentialing Issues

4.4.4.3 Modified Standards of Care 4.5.2 Technical Rescue

4.5.2.1 Confined Space Care

4.5.2.2 Extrication



2025

American College of Emergency Physician

1

Learning Objectives

- Discuss modified standards of care and how it applies to incidents that overwhelm local resources
- 2. List major considerations of resource management in a disaster
- 3. Explain the challenges of credentialing
- 4. Describe the Occupational Health and Safety Administration (OSHA) definition of permit-required confined space
- Describe the likely injuries in victims of confined space incidents and the hazards of extrication



American College of Emergency Physician

2

Altered Standards of Care

- · Resources are overwhelmed
- Legal standards of care may only be altered by an executive governmental official
 - IOM, 2009: Change in level of care is formally declared by a state government in recognition of a crisis to offer legal and regulatory protection for emergency responders FOR A DEFINED TIME PERIOD.
- Ethical standards may also be affected local, dynamic
 - Example, reuse of multidose vials
 - Changes minute to minute based on available resources
 - Focus on "the greatest amount of good for the greatest number"



Altered Standards of Care

5 Key elements to 'crisis standards'

- 1. Ethics: fairness, duty to care, steward of resources, transparency, consistency
- 2. Community and provider engagement/education: community trust, values, resilience building
- 3. Legal authority/environment: standards of care, scope of practice, mutual aid, govt emergency declarations, liability
- 4. Indicators/triggers: Situation awareness, illness/injury, social disruption, resource availability, staffing availability
- 5. Clinical processes and operations: committees, resourcesparing strategies, ICS principles, consistencies across regions, coordination, attention to vulnerable populations, communications



American College of Emergency Physician

Allocation of Resources

- · Macroallocation: Broad policies to distribute resources across a population, e.g., Trauma Center, ICU beds
- Microallocation: Process by which the needs of an individual patient are prioritized above or below those of another.
- · Primary principle: "Greatest good for the greatest number"
- · Triage algorithms sort based on immediate needs AND greatest likelihood of benefit
- Scarce resource allocation approaches 'rationing'
 - Random, everyone has similar chance
- Based on quality of life or 'societal value'
- Objective tools developed by consensus before resources become scarce



American College of Emergency Physician

5

Credentialing Issues

- · Most providers are credentialed by states or local jurisdictions
- Legal liability is an important EMS clinician concern in decision to participate in disaster response
 - Some states have regulatory language for protection
- Operating outside standard scope may be necessary, depending on the scope of the disaster
 - i.e., paramedics administering vaccinations in a pandemic, paramedics working in emergency departments
- · Planning section handles credentialing of providers inside the ICS structure
- Best to plan ahead and address credentialing issues BEFORE the disaster hits



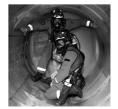


Prolonged management 'in the rubble'

Confined Space Medicine (CSM)

7

OSHA definition



- Permit-required confined space has one or more of the following characteristics:
 - Hazardous atmosphere
 - Material that can engulf the entrant
 - Walls or floors that taper into smaller areas that can trap or asphyxiate the entrant
 - Other safety hazards, such as unguarded machinery, exposed live wires or heat stress

8

Rescuer safety in CSM

- · Before entering:
 - Train and understand procedures
 - Identify potential hazards and monitor atmosphere O₂ content, flammability, toxicity...
- · While in space:
 - Use full PPE, rescue, air monitoring, lighting and ventilation equipment
 - Maintain comms at all times
 - Have an appropriately trained rescue team



*Nitrogen asphyxiation specifically mentioned

American College of Emergency Physician

Components of CSM

- Gather patient data early, before contact
- Monitor effects of rescue, environment
- · Preposition resources
- Begin assessment as soon as possible
- Initiate stabilization (treatment 'in the rubble')
- Coordinate with rescue
- · Reevaluate frequently
- · Prepare for handoff



American College of Emergency Physicians

10

Specific Clinical Issues in CSM

- Dust airway impaction: Provide victim with appropriate safety equipment helmet and face mask
 - Debris impacting the chest wall expansion can also cause respiratory problems
- Asphyxiation due to O₂ displacement
 - Oxygen utilization problematic due to weight, logistics, and fire safety considerations
- Crush syndrome management
- Environmental hypo/hyperthermia
- Prolonged care, extrication challenges





11

Question

All of the following factors are required by OSHA for appropriately trained rescue personnel for workplaces with permit-required confined space EXCEPT:

- A. All team members trained on appropriate PPE
- B. All team members trained in first aid and CPR
- C. At least one team member trained in first aid and CPR
- D. Practice exercises are conducted at least annually



American College of Emergency Physician

Question

All of the following factors are required by OSHA for appropriately trained rescue personnel for workplaces with permit-required confined space EXCEPT:

- A. All team members trained on appropriate PPE
- B. All team members trained in first aid and CPR
- C. At least one team member trained in first aid and CPR
- D. Practice exercises are conducted at least annually



American College of Emergency Physicians

13

Take-Home Points

- When resources are scarce, standards may need to change, plan in advance
- Credentialing of providers outside of the system may be needed, legal concerns
- Management in confined space has specific hazards monitor environment, be prepared for prolonged patient management in place



American College of Emergency Physicians

14

	<u> </u>	
	_	
	- —	
	_	
	- —	
	- —	
	_	
	_	
	_	
	<u> </u>	
	_	
-		
	_	
	- <u>-</u>	
	- <u>-</u>	