Using EMS Personnel as Safety Officers

What you need to know to keep personnel safe! Jeffrey T. Lindsey, Ph.D., CFO, EMT-P

Objectives

- Why EMS personnel
- Define the role of a safety officer.
- Identify the basic safety issues at the scene of an incident.
- Relate how EMS personnel can be used to fulfill the role of a safety officer.

16 Initiatives

- Define and advocate the need for a cultural change within the fire service relating to safety, incorporating leadership, management, supervision, accountability and personal responsibility.
- Enhance the personal and organizational accountability for health and safety throughout the fire service.
- Focus greater attention on the integration of risk management with incident management at all levels, including strategic, tactical, and planning responsibilities.
- Empower all firefighters to stop unsafe practices.
- Develop and implement national standards for training, qualifications, and certification (including regular recertification) that are equally applicable to all firefighters, based on the duties they are expected to perform.
- Develop and implement national medical and physical fitness standards that are equally applicable to all firefighters, based on the duties they are expected to perform.
- Create a national research agenda and data collection system that relates to the initiatives.
- Utilize available technology wherever it can produce higher levels of health and safety.

16 Initiatives

- Thoroughly investigate all firefighter fatalities, injuries, and near misses.
- Ensure grant programs support the implementation of safe practices and/or mandate safe practices as an eligibility requirement.
- Develop and champion national standards for emergency response policies and procedures.
- Develop and champion national protocols for response to violent incidents.
- Provide firefighters and their families access to counseling and psychological support.
- Provide public education more resources and champion it as a critical fire and life safety program.
- Strengthen advocacy for the enforcement of codes and the installation of home fire sprinklers.
- Make safety be a primary consideration in the design of apparatus and equipment.

Why EMS Personnel

- Two responders
- Reduce injuries and deaths for all situations
- Integrate personnel
- Know injury mechanism
- Different angle
- Many are trained as firefighters
- Third party

Standards

 NFPA 1500 - Fire Department Occupational Safety and Health Program
 NFPA 1521 - Fire Department Safety Officer

Roles and Tasks



- Respond
- Assess personnel at incident scenes
- Identify and correct safety hazards
- Attend PIA
- Know applicable laws, regulations, etc.
- Investigate all on-the-job injuries
- Keep accurate personnel records
- Maintain inspection and service records
- Investigate emergency vehicle crashes
- Liaison to other organizations

Duties and Responsibilities

PPE

- Working in teams
- Back-up/RIT
- Accountability system
- Following appropriate safety practices
- Training exercises



Structure Fires



Building construction
Fire behavior
Flame spread
Firefighters operating on SCBA

EMS Response



Infection control procedures
 Scene security measures
 PPE
 CISD/M

Special Operations



- Safety lines, i.e. water rescues, high angle rescues
- Proper shoring, i.e. cave-ins
- Proper ID of hazmat materials
- Use of technical experts

Forecasting Tools for Structure Fires



Features of Fire Building

- Access to the interior
- Maze-like floor plans
- Utilities



Four Attributes of Smoke

- Color
- Thickness
- Pressure
- Amount



Fire Protection Systems

- Operating sprinkler system
- Added weight from water
- Automatic or manual smoke vents
- Presence of special agents

Access for Crews



Large buildingsHidden spaces

Egress for Crews

- Find their way out
- Ladders to upper floors
 - Stairways or alternate means



Construction Type

- Bowstring truss and lightweight truss roofs
- Presence of "stars" reinforcement by steel rods
- Early signs of structural failure
- Suspended loads or other hazards

Age of the Fire Building

- Older buildings do not typically have lightweight trusses
 - Egress and access may be difficult
- Signs of structural weakness
- New building will collapse as quickly as an old building

Potential for Fire Extension



- Gauge amount of fire involvement
- Distance between buildings
- Wind conditions

Amount of Fire Involvement

- Big fires = no survivors
- Lots of fire = early structure collapse



Roof Hazards

- Ladders at two corners
- FF's walking on structural members = hazard
- No "roof shepherds"
- Watch for potential collapse



Time



- Ignition to flashover –
 2-3minutes
- The longer the fire burns – the weaker the structure becomes

Tactical Objectives



- FF's removed from building if things go wrong
 - Water supply must be adequate

Weather

- Extreme heat
 - Cold weather
- Electrical storms
- Winds



Medical Emergency Forecasting



- Protection from communicable diseases
 Protection from
 - physical hazards

Violent Acts

- Crowd gathering
- Perpetrator still in area
- Establish escape routes
- Law enforcement on scene



Protection from Surroundings

Moving trafficWeather



Sufficient Staffing



Lifting and carryingNumber of patients

Special Operations Forecasting



- Incident duration will be longer
- Technical experts
- Properly equipped responders
- Time can be a benefit or an enemy

Termination of Events

NFPA 1521 Section 2.5.1 reads:

At an emergency incident where activities are judged by the incident safety officer to be unsafe or involve an imminent hazard, the incident safety officer shall have the authority to alter, suspend, or terminate those activities. The incident safety officer shall immediately inform the incident commander of any actions taken to correct imminent hazards at an emergency scene.

Items to Notify the IC



- Condition of personnel
- Change in conditions
- Other problems
 - Freelancing
 - Accountability issues

Worksheets



- Fire
 - MCI
- Hazmat
- Technical Rescue

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References

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Questions



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