Marathons – A Tale of Two Cities and the Running of a Planned Mass Casualty Event

Richard Serino,
Chief of Department, Boston EMS
Asst. Director, Boston Public Health
Presentation Overview

- Planned Disaster Concept
- Groundwork
- Collaboration
- Planning
- Execution
- Evaluation and Analysis
Special Events as Planned Disasters

CONCEPT
Special Events: Sharing the Characteristics of a Major Incident

- Special Events ("High Threat Incidents")
  - Draw large crowds
  - Require above normal resource commitments by emergency responders
  - Special circumstances, such as heat, cold, exertion, substance abuse, and others present responders with real (not simulated) opportunities to perform interventions on a large number of patients
  - Frequently result in a high number of casualties
  - Excellent opportunities to exercise disaster, large-scale, and mass-casualty incident plans
Special Events as Planned Disasters

GROUNDWORK
Groundwork

• Plans must be in place
  – Communications
  – Notifications
  – Operations
    • Mass-casualty
    • Mass-evacuation
    • Pharmaceuticals/
      Prophylaxis Distribution
    • Fire suppression
    • Other consequence management
• Partnerships need to be developed
Special Events as Planned Disasters

COLLABORATION
Collaboration

- During an actual major incident, no one agency works alone.
- Agencies have unique responsibilities.
- Agencies must know how cooperating agencies will respond.
Collaboration

Working Together

Utilize special events and drills as opportunities to plan & train together so that you may institutionalize ‘working together’.

People and agencies will fall back on what they know during emergencies. Through building necessary actions and protocols into regular operations, we become better prepared.
Collaboration

Unified Command

• Jurisdictions talk about unified command often

• Plan to implement a unified command structure for your planned disaster

• Consider opening a unified command center
Collaboration

Working with the Media

Their mission is to get a story. Building a longstanding relationship with journalists and reporters ensures that they get the right story and that they serve as a resource when needed.
Special Events as Planned Disasters

PLANNING
Planning

• Interface and integrate with the event organizers
• Bring the right people to the table
• Develop a mission
• Develop specific and measurable objectives
• Decide the elements of your plan you want to focus on exercising
• Determine what partners you want to include in your exercise
• Be ambitious, but be realistic
Planning
Assess Potential Threats

• Determine what could go wrong and what would be done to minimize risk, injury, and/or damage.

• Ex: How would you shelter marathon runners if there was a hurricane?
Planning
Special Operations
Boston EMS – Tango Trucks (3)

- Tyvek Suits
- Backboards
- Stretchers
- Defibrillator
- Ladder
- Blocks

- O2 Tanks
- Multilators
- Mark 1
- etc....
Boston EMS – Gators & Golf Carts
Incident Command System (ICS)
- Incident Commander
- Command staff
- General staff
- Appropriate branches
- Pre-designated task forces
- De-escalation
- Call sign usage

Unified Command
- Develop structure in advance
- Explain the concept
- Build relationships with cooperating agencies
Planning Communications

- Interoperable communication across agencies & jurisdictions
- Consider a tactical frequency
- Dedicate a dispatcher for large events
- Utilize earpieces
Planning
Access and Egress

• Cordon-off evacuation routes around congested areas
• Make use of aerial views for planning
• Escalate resource commitments around busy event periods
Planning
Event Escalation

• Assign personnel to busy areas but bear access and egress in mind
• De-mobilize resources as the event de-escalates
• If there is a mass exodus, consider impact units around heavy exodus zones
• Delicate balance: maintaining citywide coverage during major events
• “Life goes on…” while “everyone” is at the event
EXECUTION

Special Events as Planned Disasters
Execution

- **Proactive action** (for heat or cold)
  - Mount a coordinated risk communication campaign using media outlets before and during the event
  - Encourage runners & revelers to wear sunscreen, stay hydrated, etc.
  - Develop hot-weather safety tips pocket cards and magnets
Execution

- Incident Action Plan developed in advance
- Mobilization details, demobilization details
- Coverage assignments
- ICS call signs, grid map locations, contingency plans, pertinent appendices
- BEMA and BFoJ or BAA coordinate inter-agency planning
Mapping

• Scaled maps for the event, specialized for a specific purpose
  – Improved upon each year
• All maps are based on consistent grid coordinates
  – Makes dispatching simple and efficient
  – Zone designations for incident reporting
Mapping
Boston Marathon
Medical Response

- Much of the care rendered is the result of patients self-delivering to medical tents.
- Large crowds present access issues for rapid responses for patients that cannot self-deliver.
- Solution: Proceed Out and Rapid Response Teams
  - Gators
  - Bicycles
  - Fully staffed and equipped medical tents
Medical Response

- All tents can function near the capacity of an emergency room
  - Assorted medical supplies
  - Pharmaceuticals
  - Defibrillators
  - Re-hydration solution
  - Disaster supplies
- Physicians present at medical tents for close medical oversight and critical patients
- WMD CST and BFD partnered with for HazMat/MCI decontamination
• Using MMRS & UASI funding, Boston EMS has developed a Patient Tracking System for the Metro Boston Region.

• Patients tracked with unique barcodes on a web based system.
  – Location, status & unique ID are required fields.
  – Registered runners are preloaded in the system

• Special Events have been utilized to trial and evaluate the system.
Credentialing

For all Exercises & Special Events

- All personnel pre-screened
- All personnel must go through credentialing process
- All personnel (even uniformed) must display credential at all times
Transferable Lessons

• Boston Marathon officials observe Boston Fourth of July operations (vice-versa)
• Over the years, lessons have been learned on both sides as to how to enhance operations safety
Logistics Needs

• Food, ice, and water will all be needed during a major incident – special events are no different
• Distribution can be tricky, given all of the personnel to feed
• EMS cordons off our own logistics center
Special Events as Planned Disasters

EVALUATION AND ANALYSIS
After every major special event or incident, there are formal and informal discussions evaluating the response, what went well and areas for improvement.
Evaluation and Analysis

• Each year is a learning experience
• Essential to take lessons learned from the planned disaster and integrate them into operational planning

• Analysis should be ongoing
• After-action reports are essential to effectively capture the successes and failures
• Develop action items
Due to the inherent similarity between the medical response for special events and disasters, we have seen a continual improvement in our emergency response capabilities as we prepare for and execute plans for special events.

For that reason, we consider any weakness in our response to a special event to be a weakness in our emergency preparedness capabilities, taking the utmost care to address such issues as soon as possible.
Thank You

Richard Serino
Chief, Boston EMS
617-343-2367
serino@bostonems.org