Statewide Emergency Preparedness in Rhode Island:

Lessons Learned “The Station” Nightclub Fire

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State Representative, R.I. General Assembly

“When Disaster Strikes”
National Emergency Management Summit
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Rhode Island - Setting the Stage:
Rhode Island – *Key Characteristics:*

- **Our Size**
  - Just over 1,000,000 population

- **16 Hospitals**
  - 10 acute care with acute care ED (1 ACS Level-1 Trauma center in Providence)
  - 1 Women's and Infants specialty (limited ED capabilities)
  - 1 Rehabilitation
  - 1 Adult Psychiatric
  - 1 Pediatric Psychiatric
  - 1 Long-term Care Acute/Psych - state run/no ED
  - 1 Veteran’s Affairs Medical Center
Rhode Island – *Key Characteristics:*

- 39 Cities and Towns
- Scene First Responders – Municipal Fire
- No County Government
- One State Department of Health
- State Emergency Management Agency on limited hours schedule
- Local EMA’s (Civil Defense)
Rhode Island – **Strengths:**

- Relatively small, close-knit group with effective communication processes among key groups
- Strong, collaborative relationships with member hospitals and key hospital groups
- Effective, collaborative relationships with key stakeholders
Rhode Island - **Weaknesses**

- Multiple fire districts with inadequate intercity communications and no interoperability
- Inter-hospital Nextel system that was seldom used
- Hospitals independent of one another
- Inadequate MCI training
“The Station” Nightclub Fire

February 20, 2003
The “Station” Nightclub
"The Station" Nightclub Fire with 1, 5 and 10 Mile Zones
Upon Arrival 11:19 p.m.

Arrived on scene four minutes after dispatch.

Approximately ten minutes after initial alarm, task force arrives with flames through the roof.
Combustibles Ignite!
Bad Decisions !!!
Delay in Escape !!
Inadequate Egress !!
The Struggle to Survive

- Front doors became blocked within 1 minute.
- Front doors became impassable after 1:16 sec. (As recorded).
- Interior ignition temperatures reached in 60 sec.
- N.F.P.A. Suggested 50 people exit every 200 seconds.
- This formula could not account for the illegal use of pyrotechnics, flammable wall coverings, low ceilings, no sprinklers and a rapidly moving fire.
Protecting the Entrance
People vs. **Fire** and **Smoke**
Smoke: The BIG Killer

Chemical compounds typically found in building fire smoke.

- Ammonia
- Sulfur Dioxide
- Chlorine
- Cyanide
- Phosgene
- Carbon Monoxide
- Formaldehyde
- Hydrogen Chloride and more
Problems in the building

- Overcrowding with inadequate exits.
- No fire suppression system
- No active municipal fire detection system
- Delay in acknowledging the “problem”
- Patrons limited knowledge of the building
- Blocked, hidden and secured doorways
- Smoke obscured all visibility, “lights out!”
- Flame spread “beat patrons to the door”
“Triage” Established

• Triage was quickly established in the “Cowesett Inn” restaurant after West Warwick firefighters led victims away from the fire scene to the restaurant.
• Sheltering was critical (26-30 degrees)
• 80-100 victims in the street
• 30+ victims in the triage area
• 30-50 survivors still in the fire building
• 97 perished initially in the blaze
Triage: Start to Finish

• Establishment of a triage area
• Security of triage area (State and local Police)
• Assignment of assistants (use all available)
• Logistics outside the building (staging, transport)
• Hospital notifications and updates (communication problems)
• Assignments of victims to EMS units and accepting hospitals
• Constant evaluation of victims (minutes count)
Assessment of Victims

- Primary size up of triage area
- Visualize injuries and brief discussion
  - Calm each patient, talk while evaluating
  - Assess the degree of inhalation injury
  - Look for signs of smoke/heat injuries
  - Grade their injuries for transport
  - Treat obvious injuries first
  - Bypass mortal injuries
Typical Injuries
Third Degree Burns
Visual Triage
Injuries

• 40%+ third degree burns of face, hands and/or upper bodies.
• Most with inhalation burns and smoke.
• Many with lacerations to arms and legs.
• Some crushing injuries.
• Several hyperventilation victims, mostly with moderate to lesser injuries, important to control!
• 20-30 critical third degree victims saved from the fire by firefighters.
Follow standard precautions.
Move the patient away from the burning area into a protected warm environment.
Stop the burning process.
Cover with dry, sterile dressing.
Administer oxygen (carefully).
Monitor the airway closely.
Emergency Care for Burns 2 of 2

- Protect patients temperature.
- Check for traumatic injuries.
- Estimate the burn severity.
- Treat the patient for shock/hypothermia.
- Provide prompt transport to nearest receiving facility for treatment, stabilization and/or transfer.
Rescues Arrive
Transporting the injured
Hospital Location:

- The closest hospital is about 3 miles from the scene (KCMH ~ 63K ED visits/year)
- The level 1 Trauma Center is located about 12 miles away (RIH ~140K ED visits/year)
- 7 of the acute care hospitals are located within a 15 mile radius of Providence
- West Warwick is located approximately on the outskirts of this radius
Area Hospitals

- Rhode Island Hospital (ACS Level 1 Trauma)
- Kent County Memorial Hospital
- Roger Williams Medical Center
- Westerly Hospital
- South County Hospital
- Newport Hospital
- Fatima Hospital
- Landmark Medical Center
- Miriam Hospital
- Memorial Hospital
## Patient Activity:

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<th>Received</th>
<th>Treated and Released</th>
<th>Transfers</th>
<th>Admits</th>
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<td>41</td>
<td>18</td>
<td>7</td>
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<tr>
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<td>18</td>
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<td>4</td>
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<tr>
<td>Totals</td>
<td>197</td>
<td>103</td>
<td>36</td>
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</table>


Rhode Island Hospital

- 719 bed facility
- Acute care hospital
- Academic medical center w/ Brown Univ. Med. School
- Southeastern New England's level 1 trauma center, 140,000+ ER visits
Kent County Memorial Hosp.

- Closest hospital to incident
- 359 Bed Facility
- Acute Care Hospital
- 63,000 Emergency Room Visits
- Rhode Islands second largest hospital
Reassess and Reroute

All area Life Flights from Massachusetts and Connecticut responded
Swift and Unforgiving!!
Grim work, One reward!
Emergency Preparedness

- Reform communications
  - Nextel between hospitals and EMS/IC
  - Statewide radio system, multi-channel
  - Discipline !!!!!

- Cross border resources
- Rapid response teams (DMAT, MRC, USAR and Hospital Response Team)
- Secondary triage team (re-evaluation)
- Unified trauma system (treat and transfer)
In the End

- 160 Firefighters from 15 Communities responded to West Warwick
- 65 Rescues/Ambulances from R.I. and Southeastern Massachusetts responded.
- All injured transported in 1 hour 45 min.
- Hundreds of Support workers responded as planned.
The Fire Service Responds!

• Aggressive pre-planning
• Fire line inspections (visible presence)
• Review of all public occupancies
• More mass casualty training, planning
• Hospital to EMS communications
• Additional mass casualty equipment
• Improved communications
R.I. Legislature Responds

- “Grand fathering” clause removed by legislative act in Rhode Island.
- Sprinklers in “high risk” assemblies by 07/01/05.
- Increased number of inspectors.
- Installation of active fire alarm systems.
- Occupancy rates adjusted until compliance met.
- On duty Firefighter in building during events.
- Night time inspections/stronger enforcement.
Critical Incident Stress Management
The Nation Heals
Need to Heed!

While the nation and the world have mourned the losses of this tragedy, have they really learned or are they just sympathetic?

Rhode Island remains the only state in the country to have made sweeping changes to the fire safety codes. Some have made prospective changes but none address the existing structures that possess the highest risks.
Should we be scared?
BUENOS AIRES, 188 DEAD

Cromagnon Club, Legal Occupancy 1500, Actual 4,000

• Overcrowding

• Pyrotechnics ignites ceiling foam

• Doors locked to avoid unpaid admission
Should we be prepared?

- Domestic Terrorism
- International Terrorism
- Natural Disasters
- Normal daily events
  - excessive surge of patients
  - simultaneous events
- Pandemic Influenza
Sharing Lessons Learned
Lessons Learned...

Opportunities exist to:

- Improve SCENE to HOSPITAL communications
  - Need to know approximately how many victims and the extent of injuries is critical to a hospital’s response to “How many can you take”
  - Computerized Hospital Capacity System
Lessons Learned...

Opportunities exist to:

• Improve HOSPITAL to HOSPITAL communications
  – Issues with Nextel System operations
    • Training
    • Host Hospital
    • Redundant Systems
    • HEAR (VHF), 800mHz, Satellite
Lessons Learned...

Opportunities exist to:

• Improve PATIENT TRACKING
  – Many victims were not identifiable
  – Need tracking system sooner
  – Immediate media attention made issue much more significant
  – Expansion of Hospital Capacity System
Lessons Learned...

Opportunities exist to:

- Improve AIR TRANSPORT coordination
  - One hospital had four air transport units in use
  - No mechanism to redirect to other facilities
  - Improved landing zones with increased capacities
Lessons Learned...

Staffing and Surge Capacity

• All hospitals were ready
  - We did not exceed capacity
  - Reassured that our capacity to response was better than what our planning efforts were assuming....BUT...
  - Timing was on our side
  - New surge capacity plans in effect
Lessons Learned...

Media Management

• Can “make or break”!
  - Hospital Public Relations
  - worked with the media
  - encouraged communications
  - established history with media
  - Does your PIO communicate well?
Next Steps
Next Steps:

Action Plan:

• Developed and monitored by HPPC
• Involves hospitals and others
• Addresses key opportunities identified through review activities
• Status updates at monthly HPPC meetings

Statewide Review:

• Completed – Titan Systems Corp.
• Findings will be incorporated into HPPC Action Plan
Summary:

- Our emergency preparedness efforts have paid off but we still have work to do.
- No drill could have adequately prepared us for what happened.
- Our commitment to emergency preparedness efforts has been renewed.
- Improved HEICS/HICS with leadership endorsement.
“The best drill is the one you practice everyday”

Joseph Amaral M.D. CEO
Questions: