



The Next Big Challenges in Preparedness

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Background

- Planners and responders have made significant progress in selected areas in the past 5+ years
- Strong local efforts have been nationally recognized
- Significant gaps remain
- Reasons we have not filled the gaps include:
 - Financial
 - Political
 - Logistical
 - Technological
 - Societal

Selected Persisting Challenges

- Priority setting
- Surveillance
- Response to alarms
- Communication
- Surge capacity
- “All-hazards” preparedness
- Liability concerns
- Practice
- Measuring preparedness

Priority Setting

- Funding has frequently prioritized the most recently perceived threats
 - Smallpox vaccination
 - Anthrax detection
 - Decontamination
 - Pandemic response
- Preparedness funds generally cannot be used to fund infrastructure
- Resulting plans are often hazard-oriented rather than overall emergency response oriented
 - Organizations have a few broadly prepared members and few generally prepared members

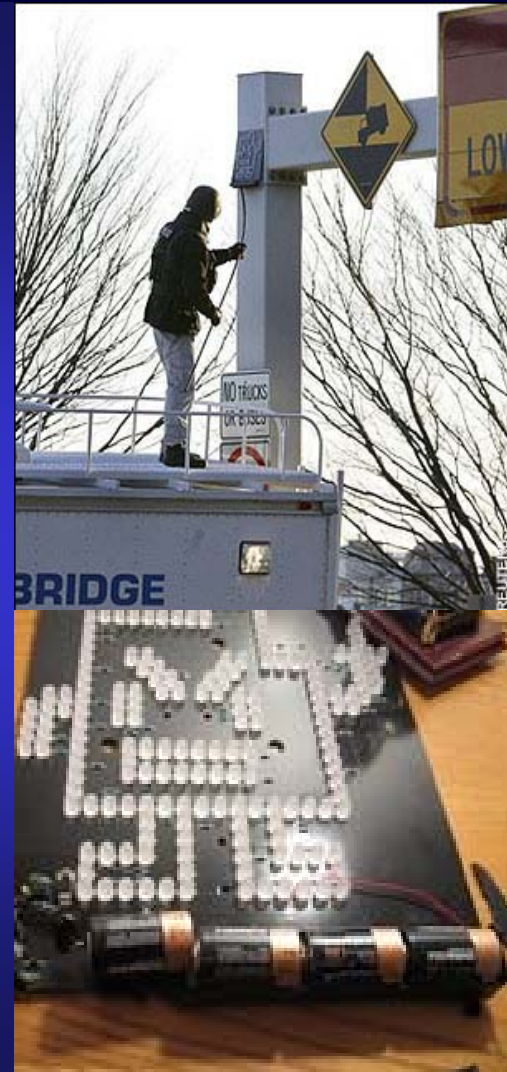
Surveillance

- Multiple new surveillance systems have been developed
- Debate persists regarding thresholds for action and appropriate response
- Responses to heightened surveillance frequently demonstrate problems in the overall system
 - Anthrax and “white powders”
 - SARS
 - H5N1 influenza

Response to Alarms

The Sequence of Events on January 31st:

1. **Explosion Erupts On D.C. Metro Bus** (at 5am) raised concerns of terrorism.
2. In Boston a concerned citizen sees **Cartoon Network ad**, suspects that it is a bomb and alerts authorities. Police Bomb Squad responds and declares that it is not a bomb.
3. Unrelated to the Cartoon Network ad campaign, a call is received from New England Medical Center, a **suspected pipe bomb** has been left in an employee's office.
4. A **second Cartoon Network ad** is identified.
5. Unrelated to the Cartoon Network ad campaign, a **second device appearing to be a pipe bomb** is spotted under the Tobin Bridge. Police respond and declare that it is not a bomb.
6. **Numerous cartoon network ads** began to be reported throughout the city.



Response to Alarms

- For a system to have appropriate sensitivity, there must be false alarms
- False alarms
 - Can cause panic
 - Can cause fatigue
 - Waste resources
- Nonetheless, leaders, the media, and the public need to find a comfort level with occasional false alarms

Communication

- Despite new systems and procedures, rapid access to reliable information is often limited among responders
- Moreover, systems to develop and share policy-level information among agencies are limited

Surge Capacity

- Changes in medical reimbursement over the past 20 years have squeezed most surge capacity out of the system.
- On most days, emergency departments are severely overcrowded
- Hospitals have worked to maximize beds that could be made available in a disaster, but such capacity is limited in scope and limited in time

Surge Capacity

- Specialty care unit plans are hindered by:
 - Hesitancy of building owners to commit their sites
 - Uncertainty about quality/quantity of medical staffing available
 - Lack of funding for basic equipment and supplies
 - Liability concerns

All-Hazards Preparedness

- The best available plans call for preparing for the “worst” when facing an unknown event
- The “worst” is generally the least likely
- Consequences for not doing so can be significant
 - Tokyo sarin gas attack 1995

All-Hazards Preparedness

- In reality, however, few responders have followed the all-hazards guidelines
 - Delayed response
 - Cumbersome clothing and equipment
 - Risk of worsening public fears
- In reality, also, it may not be possible to follow the guidelines
 - Ongoing training and equipment maintenance needs
 - Time required to set-up decontamination units
 - Time required to don personal protective equipment
 - Large numbers of responders required
 - Weather/environment concerns

Liability Concerns

- Concerns are significant for
 - Institutions
 - Individual providers
- Questions are even more significant with altered standards of care

Practice

- Practice is essential to:
 - Train staff
 - Retain knowledge
 - Uncover flaws in plans and systems
- Practice is difficult:
 - Expensive
 - Time consuming
 - Difficult to coordinate among many players
- Must perform honest evaluations of exercises and real events in order to continually

Measuring Preparedness

- Disasters are thankfully rare events
- Few other events can be used as proxy measures of preparedness
- Difference between capacity and capability
- Exercises may be our best measure of both training and testing preparedness
- Little data exists on how to measure performance in exercises or how to standardize measures

Summary

- We have made progress
- We have a long way to go
- Planners and funding agencies should ensure core emergency plans are consistent with best practices, widely disseminated, and well practiced
- We need better measures of true preparedness capability in order to guide future plans and evaluate the effectiveness of money spent

