“Are We Ready?”

The BCPWHO* Survey on Disaster Preparedness of US Healthcare Facilities

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*Business Continuity Planning Workgroup for Healthcare Organizations

National Emergency Management Summit -- February 3-5, 2008 -- Washington, DC
An Insider’s Perspective

Why we did the survey

Baystate Medical Center (Baystate Health) – Springfield, MA

Children’s Hospital & Regional Medical Center – Seattle, WA

Caritas Christi Healthcare System -- Boston, MA
Background Documents

AMA/APHA report (http://www.ama-assn.org/ama1/pub/upload/mm/415/final_summit_report.pdf)


Joint Commission 1/1/08 revised standards, EC.4.10 and EC.4.20


Trust for America’s Health (http://healthyamericans.org/reports/bioterror07/)
Recurring Issues

► Public health, EMS and medical preparedness at state and local levels are poorly integrated.

► “Under-preparedness” to deal with mass casualties, including lack of capability for coordinating resources.

► No all-hazards standards or guidelines for measuring health system preparedness.

► No shared platform for public health and healthcare organizations to build advocacy and legislative agenda to improve and sustain preparedness.

*(Improving health system preparedness for terrorism and mass casualty events – Recommendations for Action (AMA & APHA, July 2007)*
Priority Categories & Issues

- Collaboration, coordination and planning
- Communications and information exchange
- Disaster recovery and health systems
- Education and training
- Funding
- Health system surge capacity
- Legislation and regulation
- Research
The Survey
Participants

► Academic Medical Centers
► Trauma Centers
► Community Hospitals
► Health Clinics
► Children’s Hospitals
► Psychiatric Hospitals
► Long Term Care Facilities
► Health Systems
► Others
Survey Organization

- Response Profile
- Emergency Management Infrastructure
- Disaster Preparedness
- Business Continuity Planning/Disaster Recover Planning
- Hazard & Vulnerability Assessment/Business Impact Analysis
- Communications
- General Comments
Survey Distribution

Listervs & Forum
- BCPWHO
- Yahoo groups EM
- IAEM
- Region 1 ESF8
- MA DPH Hospital
- American Nurses Association
- Emergency Nurses Association

Other
- AMA TIIDE Partners
- State Hospital Preparedness/Bioterrorism Coordinators
- Personal contacts
- Forwarded to colleagues by primary recipients

Sponsored by the Business Continuity Planning Workgroup for Healthcare Organizations (www.bcpwho.org)

The American Medical Association and the American Public Health Association convened a series of meetings in 2005, 2006 and 2007, by 18 national medical, dental, nursing, public health, hospital and EMS organizations to deliberate the deficiencies in the medical and public health disaster response system and the lack of necessary integration and interoperability between key components of this system. The report produced by this Leadership Summit, titled “Improving Health System Preparedness for Terrorism and Mass Casualty Events – Recommendations for Action,” published in July 2007, serves as a national call for action. The Leadership Summit developed 53 recommendations to strengthen health system preparedness, response and resilience to terrorism and other catastrophic events. The AMA/APHA Leadership Summit is now working on ways to “give legs” to their recommendations. Their report defines “where we should be.”

Also, The Joint Commission’s new Revisions to Emergency Management Standards for Critical Access Hospitals, Hospitals, and Long Term Care (Environment of Care standards EC.4.10 and EC.4.20) will become effective January 1, 2008. The revised standards emphasize a “scalable” approach that can help manage the variety, intensity, and duration of the disasters that can affect a single organization, multiple organizations, or an entire community. The revisions also stress the importance of planning and testing response plans for emergencies during conditions when the local community cannot support the health care organization. These standards define “where we are expected to be.”

This survey you are asked to complete will help establish “where we are now.” While not intended to be all inclusive of the priority areas of the report or responsive to all the revised Joint Commission standards, the survey is designed as a first attempt to establish a baseline for important areas of disaster preparedness and emergency management for hospitals and other healthcare facilities and organizations.

Conferences such as the upcoming Joint Commission “Preparing for the Unknown: ‘Are You Ready?’ Emergency Preparedness Conference” in October 2007 will help identify “what we need to do to get there.” The developers of this survey plan to present the survey results at this conference.

We ask that you complete this survey and provide the information requested in as much detail as possible. Your input, as the emergency management/disaster preparedness expert for your facility/organization is essential in helping “us”, individually and collectively, to be better prepared “for the next one.”

Contact Ric Skinner (ric.skinner-ols@hhs.org) or Jennifer Davey (jd9913@gmail.com) with questions and/or comments.
Analysis
### Response Summary

#### Page: Contextual Information

1. What type of healthcare entity are you responding for (select all that apply)?

<table>
<thead>
<tr>
<th>Entity</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Medical Center</td>
<td>8.0%</td>
<td>103</td>
</tr>
<tr>
<td>Trauma Center</td>
<td>14.0%</td>
<td>151</td>
</tr>
<tr>
<td>Children’s Hospital</td>
<td>5.0%</td>
<td>58</td>
</tr>
<tr>
<td>Psychiatric Hospital</td>
<td>3.7%</td>
<td>43</td>
</tr>
<tr>
<td>Community Hospital</td>
<td>46.1%</td>
<td>531</td>
</tr>
<tr>
<td>Community Health Center/Clinic</td>
<td>7.2%</td>
<td>83</td>
</tr>
<tr>
<td>Long Term Care Facility</td>
<td>22.6%</td>
<td>251</td>
</tr>
<tr>
<td>Healthcare System</td>
<td>13.6%</td>
<td>159</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>17.4%</td>
<td>201</td>
</tr>
</tbody>
</table>

answered question                1153
skipped question                  15
Analysis

- Challenges
- Duplicate responses
- Cleaning up the entries
- The “Others”
- Multiple facilities in single response
- Multiple states in single response
- Free text information
Results

►► Survey Period -- August 13 to Sept. 28, 2007 (46 days)

►► 1429 Total Individual Surveys

►► 1055 Total Acceptable Individual Surveys
Percent Total Responses by ESF-8 Region

Percent

- 4 - 6
- 7 - 9
- 10 - 11
- 12 - 14
- 15 - 17

Map showing regions with different color codes for response percentages.
Results & Discussion
Response Profile - % of Total (n=1429)

- Comm. Hosp. 34%
- Specialty Hosp. 1%
- Health Syst 10%
- "Other" 6%
- Trauma Ctr. 10%
- Long Term Care 19%
- Psych. Hosp. 3%
- Child. Hosp. 4%
- Acad. Med. Ctr. 7%
- Comm. Health Ctr. 6%
Results and Discussion
Key observations

► A Standardized Framework for Healthcare Emergency Management Does Not Exist

► Significant Gaps and Inequity Exist Weakening the Preparedness of the Overall Health System

► Business Continuity Planning/Disaster Recover Planning is Not Standard Practice in Healthcare

► Emergency Management Communications in Healthcare is Fractured
Tying it all together

Key Observations
► A Standardized Framework for Healthcare Emergency Management Does Not Exist

AMA/APHA Report
► Research
► Education and training
► Funding
► Legislation and regulation
Tying it all together

Key Observations
► Significant Gaps and Inequity Exist
► Weakening the Preparedness of the Overall Health System

AMA Report
► Collaboration, coordination and planning
► Health system surge capacity
Tying it all together

Key Observations
- Business Continuity Planning/Disaster Recover Planning is Not Standard Practice in Healthcare

AMA Report
- Disaster recovery and health systems
Tying it all together

Key Observations
► Emergency Management Communications in Healthcare is Fractured

AMA Report
► Communications and information exchange
Key Observation #1

A Standardized Framework for Healthcare Emergency Management Does Not Exist
Titles Responsible for EM Functions Across Survey Respondents

- Administrator, 36%
- Chief, Emerg. Med., 10%
- Coordinator, 18%
- Corp. Officer, 3%
- Director, 36%
- Exec. Director, 9%
- Manager, 17%
- Sr. VP, 10%
- Superintendent, 1%
- Supervisor, 7%
- Other*, 17%

Across Survey Respondents

- Administrator, 36%
- Chief, Emerg. Med., 10%
- Coordinator, 18%
- Corp. Officer, 3%
- Director, 36%
- Exec. Director, 9%
- Manager, 17%
- Sr. VP, 10%
- Superintendent, 1%
- Supervisor, 7%
- Other*, 17%
Where Do EM functions live within hospitals & healthcare organizations?

- Administration: 47%
- Clinical/Nursing: 38%
- Emerg. Dept.: 41%
- Emerg. Mgmt.: 34%
- Environ. Svcs.: 24%
- Engineering: 22%
- Facilities: 23%
- Risk Mgmt.: 20%
- Safety: 48%
- Security: 30%
- Trauma: 15%
- Other*: 16%
Emergency Management Committee that Meets on a Regular Basis

- Health Syst (91%)
- Long Term Care (62%)
- Comm. Health Ctr. (78%)
- Specialty Hosp. (71%)
- Comm. Hosp. (81%)
- Psych. Hosp. (95%)
- Trauma Ctr. (93%)
- Child. Hosp. (91%)
- "Other" (60%)
- Acad. Med. Ctr. (92%)
Key Observation #2

Significant Gaps and Inequity Exist Weakening the Preparedness of the Overall Health System
Facility has Emergency Management Program

- Health Syst. 91%
- Long Term Care 75%
- Comm. Hlth. Clinic 83%
- Specialty Hosp. 71%
- "Other" 69%
- Acad. Med. Ctr. 89%
- Trauma Ctr. 87%
- Child. Hosp. 91%
- Psych. Hosp. 95%
- Comm. Hosp. 86%

Facility has Emergency Management Program
EM staffing by Percent of Respondents

- <1 FTE: 35%
- 1 FTE: 16%
- 1-3 FTEs: 11%
- >3 FTEs: 8%
- 3 FTEs: 1%
- No FTEs: 18%
- Outside Consultants: 1%
- Don't Know: 6%
NIMS Compliance required for funding but not all respondents were candidates or recipients of funding. Also only 65% were compliant at the time of the survey.
Drills & Exercises
Drills/Exercises

Within past month 10%
Within past 6 months 35%
Within past year 20%
Within past 2 years 4%

Duration

Less than 1 hr. 13%
1 to 2 hr. 20%
2 to 4 hr. 36%
More than 4 hr. 13%
Activated EOC in Past 3 Years

Natural 43%
Technological 42%
Human-caused 25%
Key Observation #3

Business Continuity Planning/Disaster Recover Planning is Not Standard Practice in Healthcare
45% have a Business Continuity Plan (BCP)

- 69% BCP and Emergency Management Program by same group

- 62% have an IT Disaster Recovery Plan (DRP)

- 81% BCP and DRP by same group
- 81% have conducted HVA and/or BIA
- 75% have an HVA
- 78% done with local EM
Key Observation #4

Emergency Management Communications in Healthcare is Fractured
How Emergency Managers Stay in Contact within Health facilities

- Email: 25%
- Phone: 22%
- Confs/Mtgs: 24%
- Other: 28%

- EM/DM/BCP Listservs: 7%
- EM/DM/BCP Forums: 3%
- In Person: 19%
Conclusions

Looking to the Future: The following are required using the AMA/APHA recommendations & a National Workgroup to carry out deliverables:

- A Standardized Framework
- System Wide Planning & Funding
- BCP/DRP Integration
- Communications Framework & Forum
<table>
<thead>
<tr>
<th>Observation</th>
<th>Conclusion</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>▶ Standardize healthcare preparedness terminology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ Standardize HVA tools and processes</td>
</tr>
<tr>
<td>Significant Gaps and Inequity Exist Weakening the Preparedness of the <em>Overall</em> Health System</td>
<td>System Wide Planning &amp; Funding</td>
<td>▶ Advocate for improvements in funding sources and funding administration</td>
</tr>
<tr>
<td>Business Continuity Planning/Disaster Recover Planning is Not Standard Practice in Healthcare</td>
<td>BCP/DRP Integration</td>
<td>▶ Educate on need for integration of HVA, BCP, DRP, BIA</td>
</tr>
<tr>
<td>Communications in Healthcare is Fractured</td>
<td>Communications Framework &amp; Forum</td>
<td>▶ Establish a single national communications/collaboration portal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ Identify ways to improve interoperability within and between healthcare facilities</td>
</tr>
</tbody>
</table>
Healthcare Preparedness Collaboration Portal

► Productivity: by doing more consensus communications virtually

► Interoperability: for processes and potentially different systems

► Contact management/maintenance where needed, i.e., the portal would keep the contact info fresh and feed it to different systems, i.e., notification

► Continuous improvement lifecycle: (with above productivity) get the leads to review, test and then continually upgrade collaboration, i.e., plans, interoperations, etc.

► Topical Forums and Listservs linked to others

► Clearinghouse for grants, AARs, lessons learned, best practices
# Medical Center Hazard and Vulnerability Analysis

## INSTRUCTIONS:

1. Evaluate potential for event and hazard, specific score criteria.
2. Please note specific score criteria.
3. Issues to consider for probability.
4. Issues to consider for response.
5. Issues to consider for human.
6. Issues to consider for property.
7. Issues to consider for business.

## NATURALLY OCCURRING EVENTS

<table>
<thead>
<tr>
<th>EVENT</th>
<th>PROBABILITY</th>
<th>HUMAN IMPACT</th>
<th>PROPERTY IMPACT</th>
<th>BUSINESS IMPACT</th>
<th>PREPAREDNESS</th>
<th>INTERNAL RESPONSE</th>
<th>EXTERNAL RESPONSE</th>
<th>RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hurricane</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Tornado</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
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<tr>
<td>Severe Thunderstorm</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Snow Fall</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
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<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
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<tr>
<td>Blizzard</td>
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<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Ice Storm</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
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<tr>
<td>Earthquake</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Tidal Wave</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Temperature</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Extremes</td>
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<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
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<tr>
<td>Drought</td>
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<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Flood, External</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Wild Fire</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Landslide</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Dam Inundation</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
<tr>
<td>Volcano</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
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<tr>
<td>Epidemic</td>
<td>Likelihood this will occur</td>
<td>Possibility of death or injury</td>
<td>Physical losses and damages</td>
<td>Interruption of services</td>
<td>Preplanning</td>
<td>Time, effectiveness, resources</td>
<td>Community/ Mutual Aid staff and supplies</td>
<td>0%</td>
</tr>
</tbody>
</table>

| AVERAGE SCORE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0%       |

*Risk increases with percentage.*

**RISK = PROBABILITY * SEVERITY**
“Making the Case for an Interoperable, Multi-Scale Healthcare/Hospital Information Domain”

For want of a bed, a hospital was lost
For want of a hospital a community was lost
For want of a community a region was lost
For want of a region a Nation was lost.

... And all for the want of a hospital bed.
Trial 3.27 Integrated Information Management System
Operational and Systems View

Civil Sector

Military Unclassified

Military Classified

National Level

Applications CAP CAP IMS USMTF USMTF Applications

State/regional/Intermediate Command Level

Applications CAP CAP IMS USMTF USMTF Applications

Local Level

Applications CAP CAP IMS USMTF USMTF Applications

Disaster

CAP = Common Alerting Protocol
USMTF = United States Message Text Format
The purpose of this survey is not ... to make a statement.

The purpose of this survey is ... to make a difference!