existing capacity to respond. Operational capability scores ranged from 33% (death care industry) to 77% (offices of emergency management). Resource sharing capability analysis indicated that only 42% of possible reciprocal relationships between resource-sharing partners were present. The overall cross-sector composite score was 51%; that is, half of the key capabilities for preparedness were in place.
Conclusion: Results indicate that the US mass fatality infrastructure is sub-optimally prepared for MFI that exceeds 25 or fewer additional deaths in a 48-hr period. National leadership is needed to ensure sector-specific and infrastructure-wide preparedness, with a special focus on training, drills, and planning activities for large-scale or complex MFI.
Prehosp Disaster Med 2017;32(Suppl. 1):s55–s56
doi:10.1017/S1049023X17001534

Preparedness of US Health Care Volunteers Who Deployed to the West Africa Ebola Epidemic

Robyn R. Gershon[1], Liza A. Dernehl[2], Ezinne Nwankwo[3], Qi Zhi[3], Kristine A. Qureshi[4]
1. Institute For Health Policy Studies, Sch Of Medicine, University of California, San Francisco, San Francisco/United States of America
2. Graduate School Division, University of California, San Francisco, San Francisco/CA/United States of America
3. Institute For Health Policy Studies, Sch Of Medicine, University of California, San Francisco, San Francisco/CA/United States of America
4. School Of Nursing, University of Hawaii at Manoa, Honolulu/HI/United States of America

Study/Objective: To identify the preparedness of US health care volunteers for hot zone (West Africa Ebola) deployment.
Background: Each year, an estimated 200,000 US health care workers voluntarily deploy to provide care and expertise to disaster events worldwide. Many of these involve bioevents (outbreaks, epidemics, and pandemics), and sometimes these bioevents involve extremely dangerous and novel pathogens. The preparedness of these volunteers to work in high risk "hot zones," had not, to our knowledge, been previously assessed.
Methods: In 2015, a sample of 16 US health care volunteers who had recently returned from West Africa were recruited for qualitative interviews. Data on preparedness for each phase of deployment (pre, peri, and post) was collected and analyzed using thematic analysis and constant comparison methodology.
Results: Prior to deployment, most participants reported very limited preparation for the deployment. Training, especially in the early days of the epidemic, was highly variable, and in some cases consisted of simply reading a manual on lethal viruses. During the deployment, extreme resource limitations and poor management of the mission was a serious source of frustration and concern. The necessity for altered standards of care delivery was also very troubling. Upon return home, participants were unprepared for the negative reactions and resentment of their friends and family members. The isolation they felt during the quarantine period was reported as one of the most stressful aspects of the entire experience. Depression, stigmatization, and interpersonal difficulties were also common upon return to the US.
Conclusion: Preparedness of healthcare volunteers was sub-optimal at each stage of deployment. All stakeholders, including volunteers, sponsoring organizations, government agencies, and professional organizations have a shared responsibility in ensuring that volunteers to medical missions are adequately prepared.
Prehosp Disaster Med 2017;32(Suppl. 1):s56
doi:10.1017/S1049023X17001546

Health Emergency Operation Center to Face Public Health Events in Africa: Senegalese Experience

Abdoulaye Bousso
Health Emergency Operation Center, Ministry of Health, Senegal, Dakar/Senegal

Study/Objective: To share the experience of a low-income country on setting up a Heath Emergency Operation Center (HEOC) to face health threats.
Background: The last Ebola outbreak in West Africa was a great alert for our countries on the importance of preparedness, and to face public health events with international concern. For Senegal, after managing our imported case, our big lesson learned was to establish a national structure, which can involve an all-emergency management cycle. It's why we set up a HEOC; the HEOC is in charge of all health events, beyond epidemics.
Methods: The HEOC was established in December 2014. A participative approach was developed during the process of setting up, with the ministry of health, other ministries and partners, which was part of the process.
Results: The HEOC brought some added value:

- Coordination: the incident management system is now adopted for the management of emergencies and disasters.
- Plans and procedures have been developed, for the HEOC and for some risk
- Exercises and drills were conducted to test SOPs and the response efficiency
- One health approach was adopted.

Conclusion: Shared experiences of a low-income country, on setting up a Health Emergency Operation Center (HEOC) to face health threats.
Prehosp Disaster Med 2017;32(Suppl. 1):s56
doi:10.1017/S1049023X17001558

Hazard Vulnerability Analysis: Practices in Boston Hospitals

Douglas A. Romney[1], Meg S. Femino[2], Ritu R. Sarin[1], Michael S. Molloy[1], Amalia Voskanyan[1], Gregory R. Ciottone[1]
1. Department Of Emergency Medicine, BIDMC Fellowship in Disaster Medicine, Boston/MA/United States of America
2. Emergency Management, Beth Israel Deaconess Medical Center, Boston/MA/United States of America

Study/Objective: To determine what instruments and methods Boston hospitals and hospital systems use to perform Hazard Vulnerability Analysis (HVA).

Background: Assessment of hazard vulnerability is a critical stage in the disaster preparation cycle. This process determines the relative priority of each disaster subtype to the organization, and provides guidance to the organization for allocating time and resources. Since 2001, the Joint Commission International requires all hospitals in the United States to perform a hazard vulnerability analysis annually, and use their findings to guide planning efforts. To date, there is no officially recommended method for the hazard vulnerability assessment of health care institutions, and little literature on best practices. As such, methods utilized are heterogeneous and institution specific.
Methods: Qualitative and quantitative methodologies are used for this study. Surveys are administered by email and on paper to emergency managers at hospitals in Boston, Massachusetts USA, who are queried regarding their method for hazard vulnerability assessment, the instrument used, who completes the analysis, what guidance/training is given, and if subanalysis is completed when the hazard profile changes from previous years. Responses are analyzed using quantitative and qualitative methods.
Results: This study is in progress, with results expected by March 2017.
Conclusion: The study is currently ongoing. We anticipate that hazard vulnerability analysis methods and instruments will reflect a lack of standardization of practice in the field. Relative strength and weaknesses of different instruments will be highlighted, and common practices at health care institutions will be reviewed. Our hope is that such discussion will encourage greater standardization, and the development of best practices for this critical stage in the disaster preparation cycle.
Prehosp Disaster Med 2017;32(Suppl. 1):s56–s57
doi:10.1017/S1049023X1700156X

Hazard Vulnerability Analysis: Practices in Massachusetts Hospitals

Douglas A. Romney[1], *Meg S. Femino*[2], *Ritu R. Sarin*[1], *Michael S. Molloy*[1], *Amalia Voskanyan*[1], *Gregory R. Ciottone*[1]
1. Department Of Emergency Medicine, BIDMC Fellowship in Disaster Medicine, Boston/MA/United States of America
2. Emergency Management, Beth Israel Deaconess Medical Center, Boston/MA/United States of America

Study/Objective: To determine what instruments and methods Massachusetts hospitals and hospital systems use to perform Hazard Vulnerability Analysis (HVA).
Background: Assessment of hazard vulnerability is a critical stage in the disaster preparation cycle. This process determines the relative priority of each disaster subtype to the organization and provides guidance to the organization for allocating time and resources. Since 2001, the Joint Commission International requires all hospitals in the United States to perform a hazard vulnerability analysis annually and use their findings to guide planning efforts. To date, there is no officially recommended method for the hazard vulnerability assessment of health care institutions and little literature on best practices. As such, methods utilized are heterogeneous and institution specific.
Methods: Qualitative and quantitative methodologies are used for this study. Surveys are administered by email and on paper to emergency managers at hospitals in Massachusetts USA, who are queried regarding their method for hazard vulnerability assessment and the instrument used. Responses are analyzed using quantitative and qualitative methods.
Results: This study is in progress, with results expected by March 2017.
Conclusion: The study is currently ongoing. We anticipate that hazard vulnerability analysis methods and instruments will reflect a lack of standardization of practice in the field. Relative strength and weaknesses of different instruments will be highlighted and common practices at health care institutions will be reviewed. Our hope is that such discussion will encourage greater standardization and the development of best practices for this critical stage in the disaster preparation cycle.
Prehosp Disaster Med 2017;32(Suppl. 1):s57
doi:10.1017/S1049023X17001571

Fitness Requirements for DMAT Teams: A Systematic Review

Douglas A. Romney, Reem B. Alfalasi, Michael S. Molloy, Ritu R. Sarin, Amalia Voskanyan, Gregory R. Ciottone
Department Of Emergency Medicine, BIDMC Fellowship in Disaster Medicine, Boston/MA/United States of America

Study/Objective: To review the physical fitness requirements for disaster responders serving on Disaster Medical Assistance Teams (DMATs) in the United States.
Background: The United States has trained and credentialed teams of disaster responders which may be rapidly deployed to assist with search and rescue efforts, and to provide essential medical care. This field work is physically and mentally demanding, placing team members themselves at risk. On prior deployments, literature suggests significant numbers of team members have sustained injury or illness requiring medical attention and, in some cases, extraction for off-site treatment. This significantly depletes teams capabilities, and may involve other team members in the treatment further depleting the DMAT response. Military responders must maintain a level of physical fitness to minimize their risk of injury or illness, should DMAT teams have the same requirement, or do they presently?
Methods: Publicly available policy documents were collected for each DMAT from their respective websites. A comparative analysis of physical fitness requirements for DMATs was undertaken.
Results: The study is ongoing with results expected by January 2017. Of the DMAT teams in the United States, 14 have publicly available documents referencing fitness requirements.
Conclusion: The study is currently ongoing. Based on preliminary work, it appears that no minimum physical fitness standard currently exists for federal disaster responders in the United States. Individuals may deploy with unknown physical liabilities, placing themselves and team members at risk of illness, injury, or mission failure. Given the hazardous nature of deployment to disaster zones which are, by their very nature, resource limited and may be physically remote from care, efforts