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CCPR Project: Large Scale Emergency Readiness (LaSER) Project - Risk Communication

Project start / DHS approval date: 11/22/04

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Updated: 11/06/06

Summary of Objectives and Approach:

The goal of the risk communication task of the LaSER project is to develop and test critical communication strategies and plans for community public health preparedness, response, and mitigation of event consequences before, during and after a large scale, urban terrorist event. This work will coordinate with and support other work included within the LaSER Public Health Project.

Understanding risk communication principles is critical for responsive leadership in times of crisis, and will enable the building of effective capacity to reduce the consequences of terrorism. Under crisis conditions, communication should be planned based upon consideration of message content, the characteristics of message senders and recipients, and the technology being used to convey messages to minimize delay in involving the correct personnel and utilizing the correct responses. The nature of these factors differs for pre-disaster, during disaster and post-disaster conditions. These dimensions will be incorporated into the risk communication task for LaSER. An interdisciplinary approach is adopted drawing on social psychology, communication technology, and risk communication directly applied to health threats associated with disasters.

Accomplishments:

1. Developed a typology for organizing risk communication indicators
2. Developed and identified an extensive set of indicators supported by a literature and case review on risk communication and behavior in disasters, covering a broad range of medical, sociological, and risk analysis publications, articles, and cases
3. Developed a framework portraying parties involved in disaster communication (government, public, media, specialists, and services/industry/health care), their roles, and mode of interaction as a means of portraying communication networks
4. Attended risk communication-related workshops and conferences, including those sponsored by the Greater NY Hospital Association
5. Designed preliminary message sets for a terror scenario involving a hypothetical release of Sarin gas in a confined space and for Smallpox and the modeling of human responses to messages based on risk communication indicators and the messenger-recipient role framework (ongoing)
6. Designed focus group strategy, including recruitment script, scenarios and scenario scripts, and obtained IRB approval to conduct focus groups to obtain inputs for the risk communication indicators and scenario message sets; implemented two focus groups in August 2006 and documented results.
7. Trained graduate students in risk communication methods and techniques, particularly with respect to applications in the area of health emergencies.



8. Current products include: a set of risk communication indicators, an extensive literature review as background and support for the indicators, the identification of actual and desired behaviors by various public groups (including emergency responders) including whether or not people stay or leave an area in an attack, the preliminary design of message frameworks for Sarin release and Smallpox release scenarios, and publications, reports and presentations listed below on preliminary findings, a focus group report, a working paper on initial public behavior (whether people stay or leave) in a disaster, and various conference presentations. An additional product consisted of inputs in the form of questions pertaining to communication for the LaSER survey (Organization Based Incident Management: The Role of Volunteers on University Campus during Catastrophic Events).

Publications/Reports/Presentations:

- September 30, 2005. Participant in LaSER-sponsored *Panel Discussion on Hurricane Katrina and Vulnerability*. New York, NY: New York University.
- January 19, 2006. A. Kling and R. Zimmerman, "Risk Communication for Large Scale Emergency Readiness (LaSER): Highlights of Preliminary Findings," NY, NY: NYU-Wagner and CCPR.
- August 15, 2006. R. Zimmerman, C. E. Restrepo, W. Remington and A. Culpén, "Risk Communication Focus Groups Report."
- September 2-6, 2006. R. Zimmerman, A. Kling, G. Foltin, and I. Portelli, "Communicating Risk to Reduce Human Loss in Large Scale Disasters," *International Conference on Environmental Epidemiology and Exposure* (co-organized by the International Society for Environmental Epidemiology (ISEE) and the International Society of Exposure Assessment (ISEA), Paris, France.
- October 4, 2006. R. Zimmerman and A. Culpén, "Likelihood of People Staying or Leaving in a Disaster," draft working paper.
- Fall 2006. T. Fulmer and others from the NYU School of Medicine and R. Zimmerman, "Organization Based Incident Management: The Role of Volunteers on the University Campus during Catastrophic Events" (LaSER survey), journal submission planned.
- December 5, 2006. R. Zimmerman, A. Kling, G. Foltin, and I. Portelli, "A Comparison of Risk Communication Structures for Two Attack Scenarios," accepted for presentation at the *Society for Risk Analysis (SRA) Annual Meeting*. Baltimore, MD.

Papers in development:

"Comparison of Risk Communication Approaches for Sarin and Smallpox Scenarios"

"Risk Communication Indicators for Emergency Response"

Submissions anticipated to *Risk Analysis*, the *American Public Health Association*, or the *Journal of Homeland Security and Emergency Response*.

Future Plans for the Remainder of the Project Period:

1. Continue to refine, expand and test risk communication indicators, typology, and application to scenarios based on focus group results and seek peer review of indicator findings (such a review would typically go beyond the official project period), targeting model input needs
2. Expand literature review to psycho-social literature and add recent cases
3. Continue to develop risk communication inputs to LaSER modeling efforts
4. Prepare materials for dissemination as monographs and journal articles (based in part on conference presentations), the production of which typically goes beyond the official project period
5. Produce handbook as guidance for emergency managers, and seek input from potential users on the content of the handbook (such a review typically goes beyond the official project period)
6. Provide analytical support for the communication data portion of the LaSER survey (Organization Based Incident Management: The Role of Volunteers on University Campus during Catastrophic Events)

