Evidence-Based Guidance for Public Risk Communication and Education

**Project:** Modeling and Simulation of Public Response to Threat and Attacks  
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**Overview of this Brief**

This brief presents the state-of-the-art knowledge regarding public risk communication and education as a means to increase general citizen preparedness prior to a terrorist attack or natural disaster.

**Interim Findings:**

For high consequence, low probability events, community public education is needed to yield actual public preparedness activities before an event occurs. To ensure greater public readiness, the education campaign should contain as many of the following elements as possible:

**One: Maintain a Stream of Communication Over Time**
- The communication is ongoing over time rather than off-and-on
- The communication is comprised of multimedia communications over time, followed by printed materials, such as brochures distributed to households, and then followed by more multimedia communications over time

**Two: Make Use of Experts’ Knowledge**
- The education campaign employs authoritative people who can quickly translate large amounts of technical information into manageable amounts of simple language
- The campaign uses a variety of experts who are knowledgeable in relevant applicable areas and others who are familiar to the locals
- The campaign includes provisions to cultivate and support local champions who can communicate to diverse audiences about what they should do to increase their preparedness.
- The campaign includes a plan to send local VIPs to view emergency response and evacuations that occur in other crisis situations.

**Three: Make Use of Partnerships**
- The education campaign employs partnerships, including high-profile organizations from at risk areas that have an established track record, holding only one organization accountable for disseminating the totality of the information
- The campaign delivers messages that are consistent with that of other reputable sources (e.g. Red Cross, schools, state agencies, etc.)
Four: Disseminate the Messages Correctly

- The messages are clear, e.g. they explain complicated phenomena clearly using non-technical terms
- The information in the messages is consistent, explaining any changes in risk to the public and other event characteristics.
- The message posits the problem and tells people how to solve it
- The message tells people what to do before, during and after an event
- The message convinces people to take action soon, even though the probability of an event may be very low
- The message is explicit about the probability of an event
- The message communicates the uncertainty in predicting the event and its effects
- The message explains potential losses, e.g., to people, the built environment, social structures, psychological health, and tells people how to reduce their losses
- The messages states who is most at risk, who is not, and why
- The same message is repeatedly delivered over and over again
- The message is presented in a way that leaves people thinking that what needs to be done is their own idea, rather than telling them what to do
- An incremental approach over time is used in the thematic content of messages

Five: Ensure Appropriate Strategies for Information Dissemination

- The dissemination encompasses an interactive and experiential approach
- The dissemination supports people’s search for additional information by strategically locating easy-to-find resources and informing the public on where to find them
- The dissemination is presented in an attractive format with an appropriate combination of words and graphics
- The information is delivered through many diverse media and varied networks
  - For example, does it employ the full range of communication avenues ranging from such methods as messages on grocery bags and grammar school coloring books to high-end radio and television spots?
- The mailed brochure answers the following questions:
  - What is the risk, where does it exist geographically and where does it not?
  - Is the event likely to happen and what will the effects be?
  - What should people do before, during and after the event?
  - Where can people get additional information?
- The information is adapted and customized for at-risk groups, for example,
  - Presented in the languages that they speak
  - Delivered through the diverse media that different local populations use
  - References recent disasters in local memory
- Media packets address a full range of topics, present the information in clear and understandable language, and utilize both language and graphics to present the information
- The dissemination uses multiple communication campaigns designed to reach different sub-publics through the means most appropriate to reach them rather than a ‘one-size-fits-all’ approach
- The dissemination includes being ready to take advantage of the educational opportunity that presents itself following a disaster striking somewhere else
- The dissemination strategy views “near misses” and disasters occurring elsewhere as teachable moments.
Six: Evaluate and Provide Feedback to Enhance Effectiveness

☐ Evaluation components are used to determine success or failure of the program and suggest improvements whenever possible

Project Background:

The larger project represented by this brief has the goals of: (a) synthesizing state-of-the-art findings regarding public evacuation warnings at the community and building scales, (b) risk communication and education to the general public and building occupants to enhance their general preparedness, and (c) the production of user documents to enhance the application of research findings in both of these areas.

Method:

The method used in developing this brief was a comprehensive review of the research literature. The findings were then comprehensively tested in the field on representative samples of residents in different communities.

Future Directions:

The current findings will soon be tested regarding the hazards of terrorism on a statistically representative sample of households in the United States through a national survey. It is likely that the survey will provide some unique lessons with respect to the hazards of terrorism, and the existing findings will be modified to accommodate any additional lessons learned from terrorism-specific data. Future research will also extend the findings beyond risk communication and public education for people in communities to the specific population of occupants in high rise buildings, and to the topic of communicating risk in public warnings regarding imminent attacks.

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The National Consortium for the Study of Terrorism and Responses to Terror (START) is a U.S. Department of Homeland Security Center of Excellence, tasked by the Department of Homeland Security's Science and Technology Directorate with using state-of-the-art theories, methods, and data from the social and behavioral sciences to improve understanding of the origins, dynamics, and social and psychological impacts of terrorism. START, based at the University of Maryland, College Park, aims to provide timely guidance on how to disrupt terrorist networks, reduce the incidence of terrorism, and enhance the resilience of U.S. society in the face of the terrorist threat.

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