

The Mileti Effect in Action: 3 Lessons in Risk Communication

Nnenia Campbell, Ph.D.

Natural Hazards Center, University of Colorado Boulder

EMPA Webinar Series

May 26, 2021



PROJECT OVERVIEW

Objectives

- Synthesize large body of risk communication research into practical guidance
- Develop key principles that apply across diverse community settings
- Identify actionable recommendations for understanding and addressing social vulnerability

The screenshot shows a webpage from the Natural Hazards Center. At the top is the center's logo and a navigation menu with links for ABOUT US, PUBLICATIONS, TRAINING, WORKSHOP, AWARD PROGRAMS, RESEARCH, and RESOURCES. The main content area is titled "Risk Communication and Social Vulnerability: Guidance for Practitioners" and includes a "Project Purpose" section, a "What is the Challenge?" section, and a "Project Outcomes" section. Each section is accompanied by a small image of a related document cover. The "Project Purpose" section describes the team's collaboration with the U.S. Army Corps of Engineers Institute for Water Resources to create an annotated bibliography and worksheets. The "What is the Challenge?" section discusses the difficulty of disseminating research to diverse and vulnerable populations. The "Project Outcomes" section lists three deliverables: an annotated bibliography, a practitioner-oriented guide, and a worksheet booklet. It also lists the project lead, research assistants, sponsor, principal investigator, and program manager.

Risk Communication and Social Vulnerability: Guidance for Practitioners

Project Purpose

In collaboration with partners at the U.S. Army Corps of Engineers Institute for Water Resources, the Natural Hazards Center research team has summarized the state of knowledge about risk communication, with a particular focus on the needs of vulnerable populations. Additionally, team created an associated annotated bibliography that synthesizes existing literature into formats that are useful to practitioners managing floods and other related natural hazard risks. The most recent product that expands on the discussion in the *Principles of Risk Communication* is a booklet containing a set of worksheets that walk through the actions needed to put the principles into practice. **Please click on the images on this page to download the Worksheets, Guide, and Annotated Bibliography.**

What is the Challenge?

For more than three decades, social scientists have sought to understand how to best communicate information about disaster risk to diverse members of the public, building a substantial body of research literature around this topic. This growing body of knowledge has informed best practice guidance that applies across diverse fields within the hazards and disaster arena. Yet this research does not always make it into the hands of practitioners who could apply these lessons in their community outreach and engagement efforts. This means that core principles of risk communication are not always adopted and socially vulnerable populations—those that face disproportionate disaster risk due to a variety of historical, social, economic, and political conditions—may not receive practical and actionable communications about disaster risk.

Project Outcomes

Three deliverables are now available from this project. The first, an annotated bibliography, summarizes academic research and practical guidance on the topic of hazards and disaster risk communication, with a particular focus on socially vulnerable populations. It features a range of risk communication lessons that apply across the disaster lifecycle. The research included in the annotated bibliography informed the core guidance document.

The second deliverable is a practitioner-oriented guide, synthesizes insights from the published literature into three overarching principles, including:

1. Communicate Through Familiar and Trusted Messengers;
2. Provide Clear, Actionable Information; and
3. Tailor Messages and Information Pathways for Target Audiences.

The guide highlights how general risk communication principles can be thoughtfully applied to groups that are often marginalized, overlooked, or difficult to reach. It incorporates practice-oriented tips and a series of examples that reflect how related concerns have been documented or analyzed by researchers at each stage of the disaster lifecycle, including preparedness, response, recovery, and mitigation.

The third deliverable, which builds on the guide, is a worksheet booklet that breaks each of the core principles down into three steps with questions and considerations to guide users in applying the principles to their own work. The worksheets also include exercises to be conducted before and after implementing the core principles to help characterize the community and reflect on the risk communication process.

Project Lead: Nnenia Campbell, Natural Hazards Center (Nnenia.Campbell@colorado.edu)

Undergraduate Research Assistants: Kamryn Roper-Fetter and Mary Yoder, Natural Hazards Center

Sponsor: This project was produced with supplemental support to the National Science Foundation (NSF Award #1635593) from the U.S. Army Corps of Engineers Office of Homeland Security.

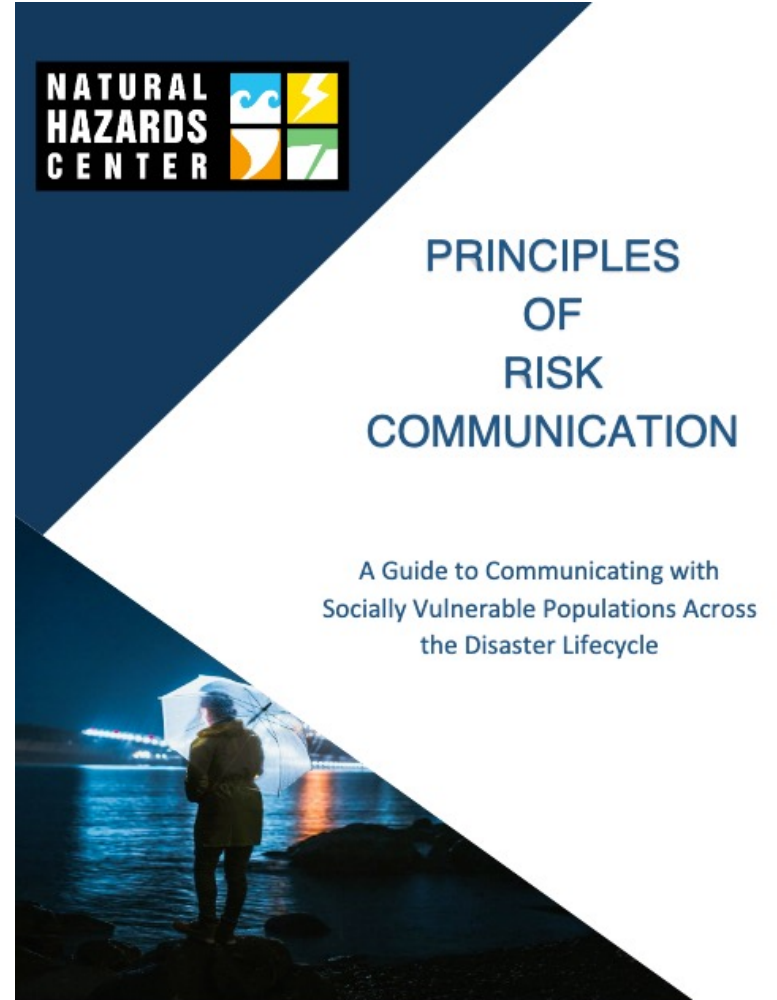
Principal Investigator: Lori Peek, Natural Hazards Center and Department of Sociology, University of Colorado Boulder (Lori.Peek@colorado.edu)

U.S. Army Corps of Engineers Program Manager: Ellen Berggren, Deputy, National Silver Jackets Program

<https://hazards.colorado.edu/research-projects/risk-communication-and-social-vulnerability>

RISK COMMUNICATION GUIDE

- At-a-glance resource for practitioners
- Provides tangible guidance and explanations grounded in academic research and established best practice



THREE PRINCIPLES OF RISK COMMUNICATION

- I. Communicate Through Familiar and Trusted Messengers
- II. Provide Clear, Actionable Information
- III. Tailor Messages and Information Pathways for Target Audiences

Principle II. Provide Clear, Actionable Information

Underlying Concepts	Implications for Socially Vulnerable Populations
Messages should be designed and tested to ensure that they are clear, consistent, and comprehensible . This requires ensuring that information is delivered at appropriate times and in volumes that are digestible by message recipients.	Risk communicators must consider how information will be interpreted by message recipients. Overly complicated messages can fail to adequately signal the risks people face or the steps to reduce it. Language barriers, cognitive limitations, competition for attention, and other considerations can hinder information uptake.
Knowledge alone is insufficient for prompting action. Instead, information about risk must be linked to actionable guidance so that people know how to respond appropriately.	Threat-related information can be frightening and overwhelming for some people, particularly persons with emotional and other mental and physical health challenges, the very young, and the very old. Pairing risk warnings with actionable information and examples can help mitigate these negative responses by empowering message recipients to take protective action. It is essential to establish the intent of the communication and its desired effect. Yet it is equally important to understand the constraints the audience faces so that the recommended actions are reasonable and possible in light of the recipient's circumstances.

LESSON 1

COMMUNICATE THROUGH FAMILIAR AND TRUSTED MESSENGERS

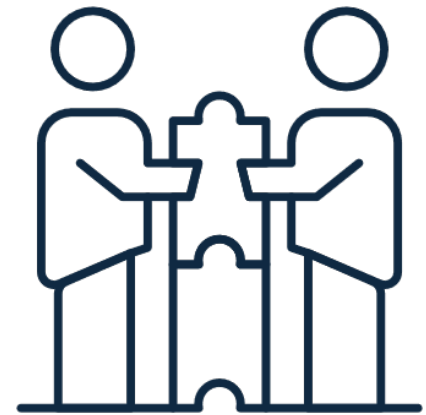
- **Credibility is essential.**
- Risk communicators **must be viewed as legitimate and trustworthy** sources of information.
- Find the **right entities** to deliver the message.



LESSON 2

PROVIDE CLEAR, ACTIONABLE INFORMATION

- Messages should be designed and tested to ensure that they are **clear, consistent, and comprehensible**.
- **Knowledge alone is insufficient** for prompting action. Information must be linked to **actionable** guidance.



LESSON 3

TAILOR MESSAGES AND INFORMATION PATHWAYS FOR TARGET AUDIENCES

- A one-size-fits-all approach is ineffective.
- To communicate effectively, **know your audience.**




PRACTICAL TIPS AND EXAMPLES

Disaster Response	
Examples	Key Takeaways
<p>Individuals displaced by Hurricane Katrina pointed to conflicting and vague messaging from local authorities as a challenge for evacuation decision-making. Research on their experiences suggests that greater specificity regarding nature of the risk, whether evacuations were warranted, and where residents should go for shelter may have better facilitated decision-making and appropriate action on the part of residents (Eisenman et al. 2007).</p>	<p>Research demonstrates that failure to provide clear information that addresses recipients' needs and access barriers can hinder their compliance with evacuation orders.</p> 


Disaster Recovery	
Examples	Key Takeaways
<p>Low-income households face recovery challenges that can constrain their capacity to reduce their risk in the aftermath of a flood or other disaster. For instance, while buyout programs are intended to help homeowners relocate from flood-prone structures, the process can take years. Researchers have found that households with limited financial resources may be unable to afford to continue paying their mortgages to maintain ownership of damaged structures while also paying for alternative accommodations. For many, the only seemingly viable options are to quickly sell, abandon, or repair their flood-damaged property—actions that often place them or future residents in harm's way during the next flood event (Brokopp Binder and Greer 2018). Scholars emphasize the need for risk communications to present message recipients with recommendations that are actionable and that reflect the realities of their day-to-day lives.</p>	<p>Risk communicators must account for the day-to-day considerations their audience must make throughout the disaster recovery period in order to develop recommended actions that are feasible.</p> 

Tips for Tailoring Message and Information Pathways




Getting to Know Your Audience

- Be mindful about the contexts in which the audiences you are attempting to reach live or operate. Consider whether the message you are designing resonates with their responsibilities and needs. Be respectful of local expertise and link your guidance to issues that are important to locals.
- Ask audience members to share their stories to create a connection and encourage mutual understanding.
- Remember that different audiences may rely upon diverse information formats and pathways. Social media, television, radio, newspapers, and word of mouth are all channels through which information may reach various segments of a community.
- Sometimes too much information can be overwhelming. When appropriate, phase information dissemination efforts to build over time so that the target audience will not have to process everything at once.



Engaging Community Partners and Gatekeepers

- Partners that work with the groups of interest may be able to help develop culturally relevant messages, translate messages into multiple languages, identify useful information channels, and provide feedback to improve their impact. Communication pathways should be similarly diversified, as outlets such as



Relaying Technical Information

- While technical information is an important resource that underpins many decisions and activities, risk communication cannot stop with “just the facts.” Messages must resonate with recipients and clearly state what is being asked of them. Detail potential impacts and emphasize protective actions that the audience has the capacity and resources to implement.
- Be honest about what you don’t know while emphasizing what you do know about the risks. Create space for audience members to share their thoughts and ideas. Respectfully refute misinformation by explaining the evidence instead of providing flat rebuttals.
- When possible, facilitate a discussion to identify which actions are most locally and culturally appropriate, given the needs and conditions in the community.
- Use or encourage storytelling to find opportunities to link technical details with the audience’s lived experiences.

THANK YOU!



[ABOUT US](#) • [PUBLICATIONS](#) • [TRAINING](#) • [WORKSHOP](#) • [AWARD PROGRAMS](#) • [RESEARCH](#) • [RESOURCES](#)

Center News

February 1, 2021

Dennis Mileti: November 7, 1945 to January 31, 2021

We are deeply saddened to share the news that our former Natural Hazards Center Director Dennis Mileti has died of complications from COVID-19. He was 75 years old.

Mileti was a luminary in the field of hazards and disaster research. During his tenure as director, he led the second assessment of natural hazards research, which culminated in the publication of *Disasters by Design: A Reassessment of Natural Hazards in the United States*. The work leveraged the knowledge of more than 130 of the nation's disaster experts and established a framework for sustainable hazard mitigation in the United States.

Mileti is also widely recognized as one of the world's leading risk communication scholars. He was an advocate of creating messages and warnings that encouraged people to prepare for and respond appropriately to disaster risks. He knew that moving this research into action could save lives.

"Dennis was a mentor, friend, colleague, and inspiration to all who met him, heard him speak, or were fortunate enough to know him," said current Director Lori Peek. "He could light up an entire room with his powerful words and insights."

Mileti earned his PhD in Sociology at the University of Colorado Boulder, where he studied under Natural Hazards Center founder Gilbert White. He graduated in 1975 after contributing to the first Assessment of Research on Natural Hazards. He returned to CU in 1994 to become the third director of the Natural Hazards Center and professor in the Department of Sociology. During his tenure, which ended in 2003, he worked to advance research on the societal aspects of hazards and disasters and to support the next generation of researchers and practitioners.

We invite you to please share your thoughts, memories, and photos using the form linked below. Comments and images will appear on the Dennis Mileti tribute page on the Center's website and be shared at the Natural Hazards Workshop.

[Click Here to Share Your Memories](#)

[Click Here to View the Tribute Page](#)



Nnenia.Campbell@colorado.edu

