

**TITLE:** A Stepped Health Care Delivery Strategy for Optimizing Provider-Patient Discussions of Health Risk Following Possible Military or Occupational Exposures.

**SESSION:** Risk Communication in Bioterrorism

**DATE/TIME:** Tuesday October 29, 10 AM to 12 noon

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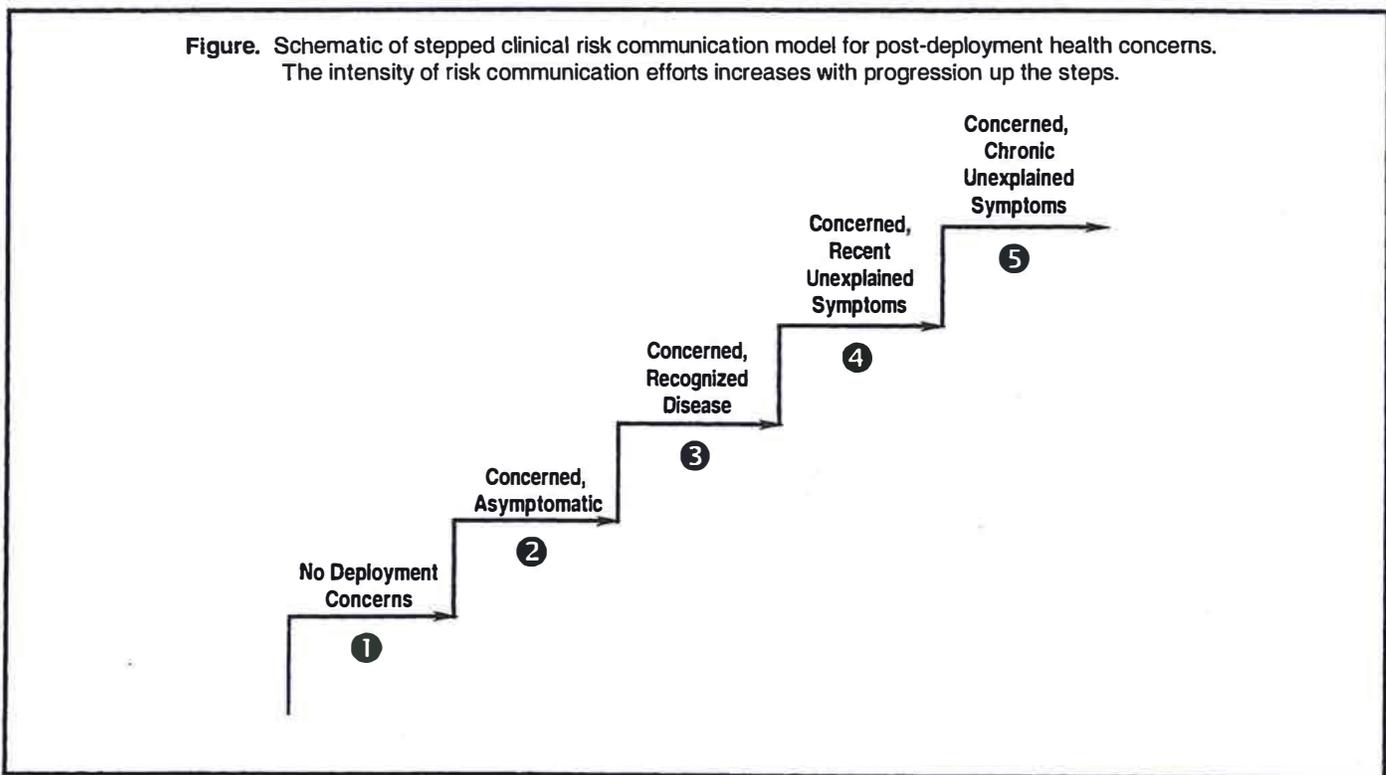
**DISCLAIMER:** The views expressed in this article are those of the authors and do not reflect official policy or position of the Department of the Army, The Department of Defense, the U.S. Government, or any of the institutional affiliations listed.

**FUNDING:** This work was funded in part by a grant from the Centers for Disease Control & Prevention.

Military deployments routinely involve environmental and psychosocial exposures of uncertain health consequence. The Institute of Medicine has recommended and the U.S. Congress now requires that “force health protection” efforts involve detailed environmental monitoring for all overseas tactical troop deployments. These environmental monitoring efforts often produce complex data that necessitate careful population risk communication planning and implementation. An often-overlooked opportunity to convey these data occurs in primary care. Nearly 80 percent of all Department of Defense health care beneficiaries see a primary care provider each year. Therefore, primary care efforts to communicate the health risks of previous deployments offer nearly population-based risk communication coverage provided quality of these communications is ensured.

We present a model for maintaining and improving high quality risk communication performance among clinicians providing care for military personnel and veterans with various

deployment-related health concerns. The central feature of the model is its reliance on a stepped health care delivery strategy. Patients are “diagnosed” into one of five groups, each with increasing levels of unmet clinical risk communication need (see figure). These groups include patients with 1) no deployment-related health concerns; 2) deployment-related concerns and no illness or disease (i.e., “asymptomatic patient with concerns”); 3) deployment-related concerns and recognized disease; 4) deployment-related health concerns with recent onset of medically unexplained symptoms; and 5) deployment-related health concerns with chronic medically unexplained symptoms. The intensity of risk communication efforts increases with



progression up the “steps”.

Department of Defense (DoD) and Department of Veterans Affairs (VHA) medical facilities are using this clinical risk communication strategy in a new practice guideline called the DoD-VHA Clinical Practice Guideline for Post-Deployment Health Evaluation and Management (PD-CPG). Research is underway to develop web-based tools to improve the implementation of

this communication strategy in DoD and VHA medical facilities. Future research is needed to determine the model's positive and negative impacts on patients, on health care settings, and on clinicians. Outcomes of particular interest include acceptability of the model for clinicians and for patients, its clinical feasibility, clinician levels of adherence, and capacity of this model to alter outcomes such as patient health status, provider-patient trust, and provider and patient satisfaction with post-deployment health care.

In federal health care settings, efforts to protect military forces and their families are examining clinical risk communication strategies with intense interest. These efforts may also be used to inform efforts to provide care and mitigate symptoms and disability in communities during the weeks, months, and years following a terrorist attack.

#### References.

1. Engel CC Jr. Clinical Risk Communication. Communication of causation to Gulf War veterans with chronic multisymptom illnesses. Proceedings of the 1999 Conference on Federally Sponsored Gulf War Veterans' Illnesses Research. Pentagon City, VA. June 25, 1999
2. Engel CC Jr, Adkins JA, Cowan D. Caring for medically unexplained physical symptoms following toxic environmental exposures: effects of contested causation. *Environmental Health Perspectives* 2002; 110(suppl 4):641-647
3. Engel CC Jr, Jaffer A, Adkins J, Sheliga V, Cowan D, Katon WJ. Population-based health care: A model for restoring community health and productivity following terrorist attack. In Norwood A, Ursano RJ. Editors. *Individual and Community Responses to Trauma and Disaster: The Structure of Human Chaos*, Second Edition. Cambridge University Press. In Press

***International Ballroom 'D'***  
***Lobby Level***

**Best Practices in Meeting the Needs of Occupational  
Safety and Health Professionals and Workers in Training and  
Education**

*Elise Handelman, RN, MEd, USA*  
Director, Office of Occupational Health Nursing  
Occupational Safety and Health Administration  
Washington, DC, USA

**9:30 am**            **Break**  
***Promenade Lobby***  
***Lobby Level***

**10-12 noon**        **Concurrent Scientific Sessions**

**Critical Factors of Risk Communication: Lessons Learned from Partnering with Stakeholders**

***Hopkins Room***  
***Lower Lobby Level***

Moderator: *Donna L. Orti, MS, MPH, USA*

- **Communication with Local Communities about Health, Safety, and Environmental Issues.** *Charles Franks, BS, USA.* Coauthor: *Marion Cox*
- **Addressing Risk Communication in Environmental Justice Communities.** *Francisco A. Tomei-Torres, PhD, USA.* Coauthor: *Rueben C. Warren, DDS, MPH, DrPH*
- **Community Outreach Following the Attack on the World Trade Center.** *Reena Mahajan, MHS, USA.* Coauthors: *Roger Hayes, MA; Rachel Kramer, ScD, Andrew Goodman, MD, MPH*
- **Empowering Stakeholders in Health and Safety Communications.** *Rob Nicholas, MA, USA*
- **Some Lessons Learned from Working with Tribal Stakeholders Concerned about Exposures and Risks to Hazardous Substances.** *Jane Michaud, MPH, USA.* Coauthor: *John Persell*

**Risk Communication in Bioterrorism**

***Pratt 'A' Room***  
***Lower Lobby Level***

Moderator: *Clifford Mitchell, MD, MPH, USA*

- Risk Communication during Biological Response Incidents. *Lieutenant Colonel Donald F. Archibald, MS, USA*. Coauthors: *Lori S. Geckle, BS, USA*
- US Department of Veteran's Affairs Terrorism/Bioterrorism Education Program: What Every Health Care System Worker Needs to Know. *V. Troy Knighton, EdS, LPC, USA*. Coauthors: *Constance Raab; Lawrence Deyton, MSPH, MD*
- A Stepped Health Care Delivery Strategy for Optimizing Provider-Patient Discussions of Health Risk Following Possible Military or Occupational Exposures. *Charles C. Engel, Jr., MD, MPH, USA*. Coauthors: *Joyce Adkins, PhD; David Cowan, PhD; James R. Riddle, DVM, MPH*
- Workplace Health Defense. *Richard Ennals, MA, United Kingdom*
- Terrorism Preparedness Training for Non-Clinical Hospital Workers: Addressing the "Hazard + Outrage." *Craig D. Thorne, MD, MPH, USA*. Coauthors: *Barbara Curbow, PhD; Marc Oliver, RN, MPH, MA; Mohamed Al-Ibrahim, MD; Melissa McDiarmid, MD, MPH*

## **Learning from Evaluation of our OSH Efforts: Expected and Unexpected Results**

### ***Lincoln Room***

#### ***Cabana Level, North***

Moderator: *Catherine Heaney, PhD, MPH, USA*

- Paying Attention to Evaluation. *Catherine A. Heaney, PhD, MPH, USA*
- Evaluation of a Best Practices Back Injury Prevention Program in Nursing Homes. *James W. Collins, PhD MSME, USA*. Coauthors: *Laurie Wolf, MS, CPE, BJC; Jennifer Bell, PhD; Bradley Evanoff, MD, MPH*
- Evaluating a Farm Safety Training Program with Rural High School Students. *Ted Scharf, PhD, USA*. Coauthors: *Henry Cole, EdD; Pamela Kidd, PhD, FNP-C, FAAN; Joan Mazur, PhD; Susan Westneat, MA; Stacey Phillips, BS; Steve Bayer, CEO; Pauline Elliott, AA; Michael Colligan, PhD; Dave Chrislip, BA*
- Effective Safety Committee Training. *Ivan G. Most, ScD, PE, USA*. Coauthor: *John Dodge, CSP*
- A Four Year Intervention to Promote Safer, More Profitable Production Practices to 4,300 Dairy Farmers. *Larry J. Chapman, PhD, USA*. Coauthors: *K. Gunnar Josefsson; Christopher M. Brunette; Robert H. Meyer; Marcia G. Miquelon*

## **Health Threats: Communicating the Risk**

### ***Calhoun Room***

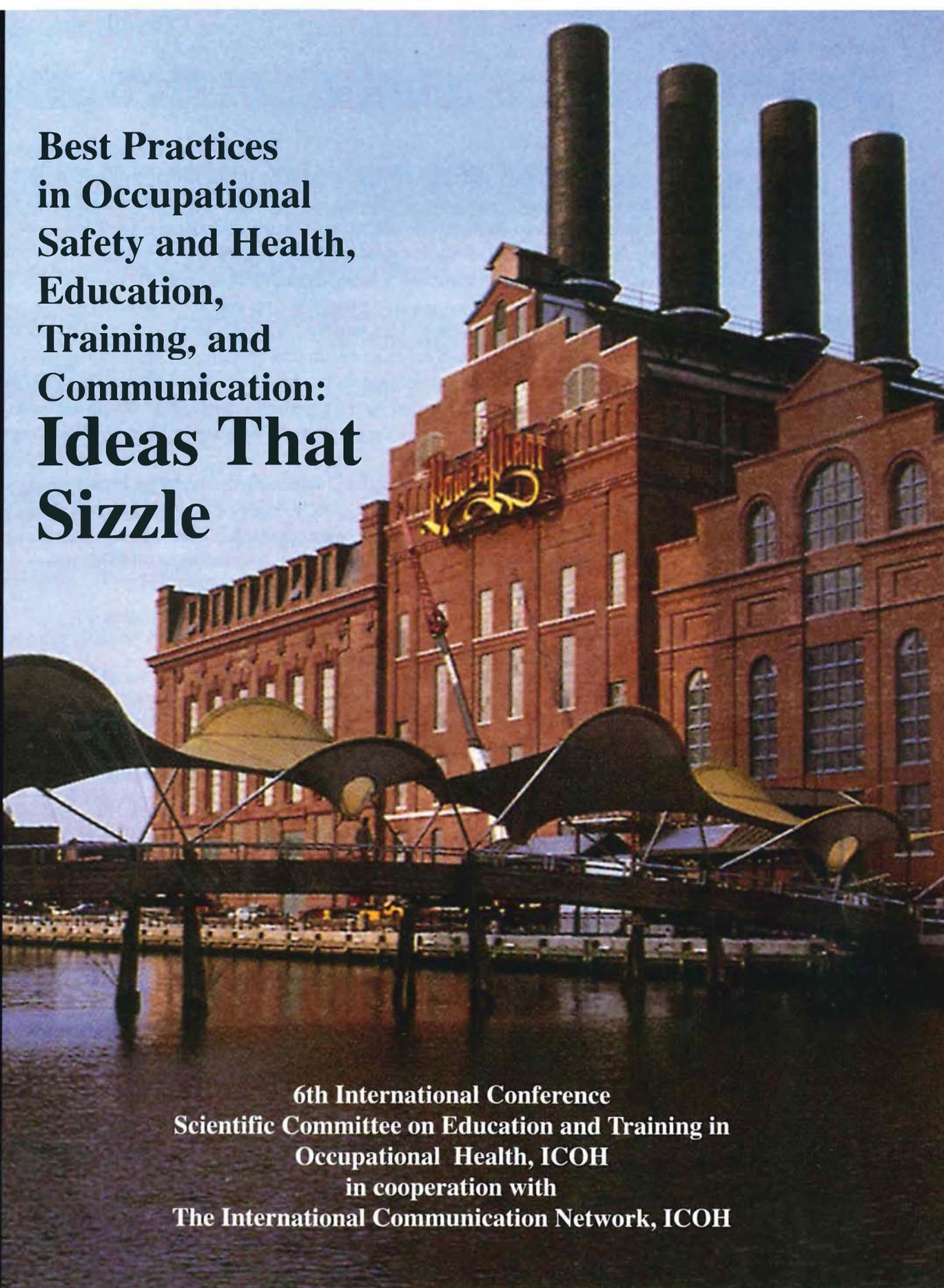
#### ***Cabana Level, South***

Moderator: *Margaret M. Farrell, MPH, RD, USA*

- Glove Use and Traumatic Hand Injury Prevention. *Gary Sorock, PhD, USA*. Coauthors: *David A. Lombardi, PhD; David K. Peng; Russ Hauser, MD, ScD; Ellen Eisen, ScD; Murray A. Mittleman, MD, DrPH*

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