



University at Albany Center for
Public Health Preparedness

Grand Round Series

November 8, 2007
10:00am – 11:15 ET

A large, semi-transparent radiation symbol (a yellow circle with a black border and three black blades) is centered on a grey background. Overlaid on the symbol is the text "Rad Events" in large red font, and "Risk Communication & Psycho-social Issues in Radiation Events" in smaller red font below it.

Rad Events
Risk Communication &
Psycho-social Issues in
Radiation Events

Guest Speakers

Tim Tinker, MPH, Dr.PH
Senior Associate, Booz Allen Hamilton

Brian W. Flynn, Ed.D.
Associate Director
Center for the Study of Traumatic Stress
Uniformed Services University of the Health
Sciences

Sponsors

University at Albany
Center for Public Health Preparedness
supported by the CDC
(Centers for Disease Control and Prevention)

Call-In

Phone: 800-452-0662

Fax: 518-426-0696

Email: cphp@uamail.albany.edu

Evaluations

www.UAlbanyCPhp.org/evals

Nursing Contact Hours,
CME & CHES Credits Available

www.ualbanycphp.org

Ph: 518-486-7921

Today's Topics:

- Radiation Emergencies
- Communicating Radiation Risks
- Disaster Behavioral Health in Rad Events
- Resources and Tools

National Planning Scenario #1: Improvised Nuclear Device

- Casualties: Hundreds of Thousands
- Infrastructure: Total within 0.5 to 3.0 miles
- Evacuations: 100,000 in affected area
- Contamination: 3,000 square miles
- Economic Impact: Hundreds of billions of dollars
- Recovery Timeline: Years

National Planning Scenario #11 Radiological Dispersal Device

- Casualties: 180 fatalities; 270 injuries; 20,000 detectable contaminations
- Evacuations: 10,000 to shelters in safe areas
- Contamination: 36 city blocks
- Economic Impact: Billions of dollars
- Recovery Timeline: Months to Years

Characteristics of Rad Events

- Invisible
- Open-ended and unfamiliar threat
- Frightening historical images and associations (e.g., Chernobyl)
- Perceived as causing hidden and irreversible damage, including dreaded illness and death (e.g., cancer)
- Viewed as particularly dangerous to pregnant women and children

Slide Credit: Dr. S.M. Becker

Behavioral Health in Disasters

Psychosocial consequences of disasters:

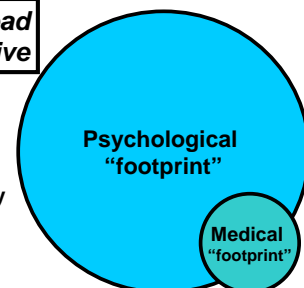
- 1) Widespread and pervasive
- 2) Spectrum of severity
- 3) Range of duration
- 4) Type of disaster

Source: Shultz JM, Espinel Z, Galea S, Reissman DB.
Disaster Ecology: Implications for Disaster Psychiatry. In Ursano et al. (eds.)
Textbook of Disaster Psychiatry, Cambridge University Press, in press.

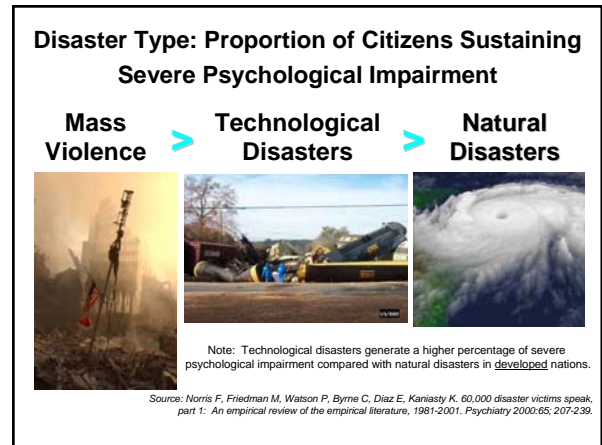
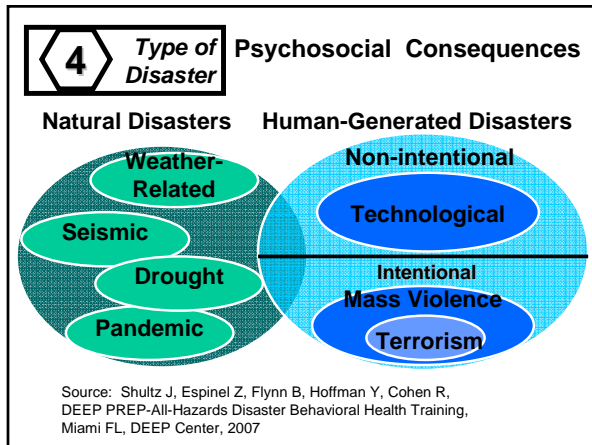
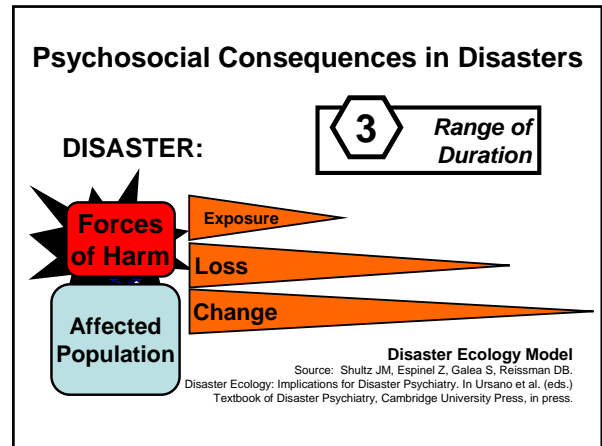
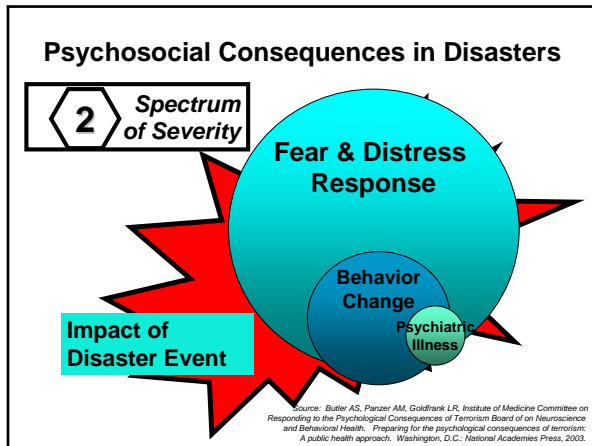
Psychosocial Consequences in Disasters

1 Widespread
& Pervasive

In a disaster, the size of the psychological "footprint" greatly exceeds the size of the medical "footprint."



Source: Shultz JM, et al., Behavioral Health Awareness Training for Terrorism and Disasters, Miami FL, DEEP Center, 2003



- ### Risk Communication Challenges
- Evacuation and shelter
 - Decontamination
 - Isolation & quarantine
 - Medical surge
 - Victim care
 - Long-term health issues
 - Economic impact

Risk & Crisis Communications

Crisis

+ heightened public emotions

+ limited access to facts

+ rumor, gossip, speculation, assumption, and inference

=

an unstable information environment

Rules Change

High stress situations **CHANGE**
the **RULES** of communication!

Rules Change

When people are stressed and upset they:

- Have difficulty processing information
- Become less trusting
- Tend to think more negatively
- May experience that their perceptions may vary from reality

Communications Goal

- Hear
- Understand
- Remember
- DO! / NOT DO!

Recipients of Behavioral Health Approaches In Radiation Events

- General public
- Leaders
- Response workers
- Health care workers
- Health care provider organizations

Stressors In Radiation Events

Workers:

- Health impact
- PPE
- Overwork
- Degraded performance
- Mass illness/death
- Body handling

Victims:

- Health impact
- Status of loved ones
- Inadequate information
- Grief/bereavement
- Economic impact
- Social stigma

The Five Elements of Early Intervention:

1. Provide a sense of safety
2. Calmness
3. A sense of self and community efficacy
4. Connectedness
5. Hope

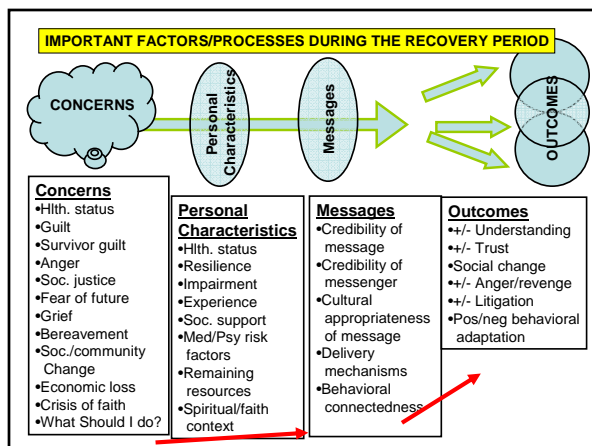
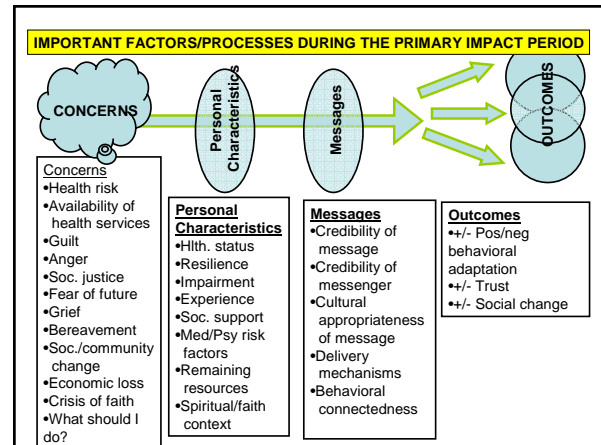
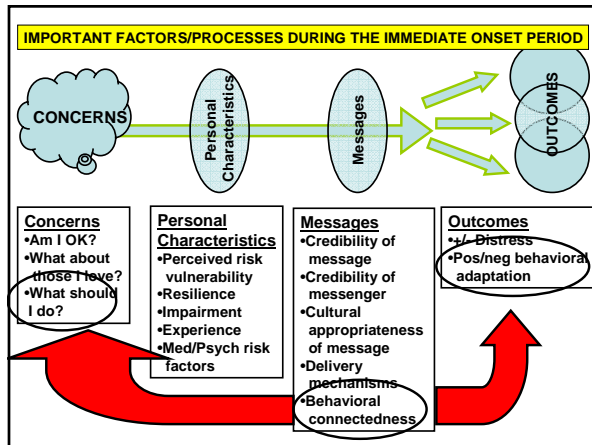
Author: Steven Hobfoll et al

Suggested Matrix For Radiological Event Messaging Strategies

	Preparedness	During Event	Recovery Period
Provide sense of safety			
Calming			
Self & Community efficacy			
Connectedness			
Hope			

Focus on
What People Want To Know

In addition to
What We Want Them To Know



Message Construction

- Risk Communication Templates
- Message Mapping
- Message Enhancements

Risk Communication Templates

27/9/3 27 Words, 9 Seconds, 3 Key Messages

CCO Compassion, Conviction & Optimism

AGL-4 Average Grade Level minus 4

Primacy/Recency

1N = 3P 1 Negative equals 3 Positives

Radiation Message Map

Sample

Key Message "Stay informed."		Key Message "Remove your clothes."		Key Message "Wash yourself and your valuables."	
Support Fact 1.1	Local TV and radio broadcasts.	Support Fact 2.1	Place clothes in a plastic bag and seal.	Support Fact 3.1	Clean yourself thoroughly with soap and water.
Support Fact 1.2	Follow recommendations from public health officials.	Support Fact 2.2	Keep bag away from people and pets.	Support Fact 3.2	Blow your nose and wash your eyes, ears and mouth.
Support Fact 1.3	Visit [Web site] for continued updates.	Support Fact 2.3,2	Bagged clothes can be examined later for contamination.	Support Fact 3.3	Wash valuables & identification. Wash hands afterward.

Message Development

Message Enhancements

- Visual aids
- Supporting factual information
- Citations to credible third parties
- Sources of more information

Challenges/Needs

- Improved plans
- More training (and exercises)
- Effective messages and information for public health professionals, emergency responders, and the general public

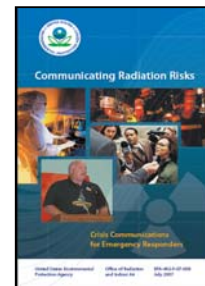
Types of Interventions

- Individual and collective psychosocial
- General and specialized information
- Planning and preparedness
- Consultation to leadership
- Training/education

EPA Radiation Communications Guide

Includes:

- How to be a good spokesperson
- Sample scenarios
- Pre-approved messages
- Tips for working with the media
- How to build on lessons learned



Radiation Scenarios

- Radioactive Materials – Transportation Incident
- Radiological Dispersal Device (RDD) – Dirty Bomb
- Improvised Nuclear Device (IND)

Contact Information

Tim Tinker, MPH, Dr.PH
tinker_timothy@bah.com
703-902-4519

Brian W. Flynn, Ed.D.
brianwflynn@aol.com
410-987-4682

Call-In

Phone: 800-452-0662

Fax: 518-426-0696

E: cphp@uamail.albany.edu

Behavioral Health Resources

- Substance Abuse and Mental Health Services Administration
www.samhsa.gov/Matrix/matrix_disaster.aspx
- National Center for Post Traumatic Stress Disorder
www.ncptsd.va.gov/
- Center for the Study of Traumatic Stress
www.centerforthestudyoftraumaticstress.org/
- National Child Traumatic Stress Network
www.nctsnet.org/

Evaluations

www.UAlbanyCPHP.org/evals

Nursing Contact Hours,
CME & CHES Credits Available

www.ualbanycphp.org

Ph: 518-486-7921