

UNIVERSITY OF SOUTH FLORIDA



# Mental Health in the Aftermath of a Disaster

**USF**  
HEALTH

**USF Center for  
Biological Defense**  
*[www.bt.usf.edu](http://www.bt.usf.edu)*

# Learning Objectives

1. Recognize the inherently stressful nature of disasters and disaster work
2. Understand the role of Disaster Mental Health Services
3. Recognize the warning signs of Compassion Fatigue
4. Identify preventive strategies for mitigating stress

# What is a “Disaster”?

- A “*Major*” disaster is *any* natural or human caused catastrophe, that causes *damage of sufficient severity and magnitude to warrant assistance supplementing state, local and disaster relief organizations* to alleviate damage, loss, hardship, or suffering.(FEMA)



**In 1996 and 1997, there were 118 presidential-declared disasters and 8 national emergencies in the United States.**

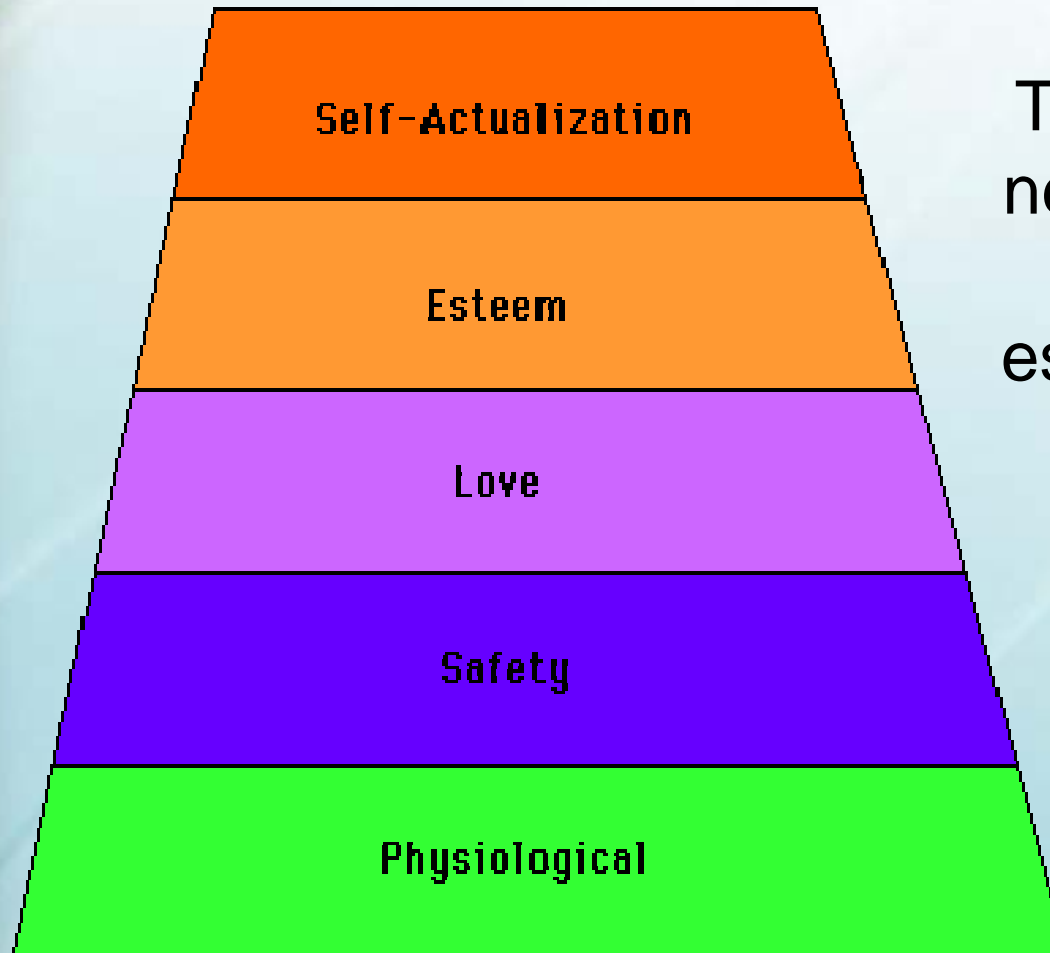
# Pre-Disaster Preparedness

- How can we “prepare” for something when we
- have no experience and the inherent nature of a disaster limits the time for preparation?
  
- Community Mental Health
  - “Readiness to Respond” training
  - Crisis Response Teams
- Family and Community
  - ❖ Emergency Deployment “Readiness”
  - ❖ Evacuation plan
  - ❖ Neighborhood Support Network

# Pre-Disaster Preparedness

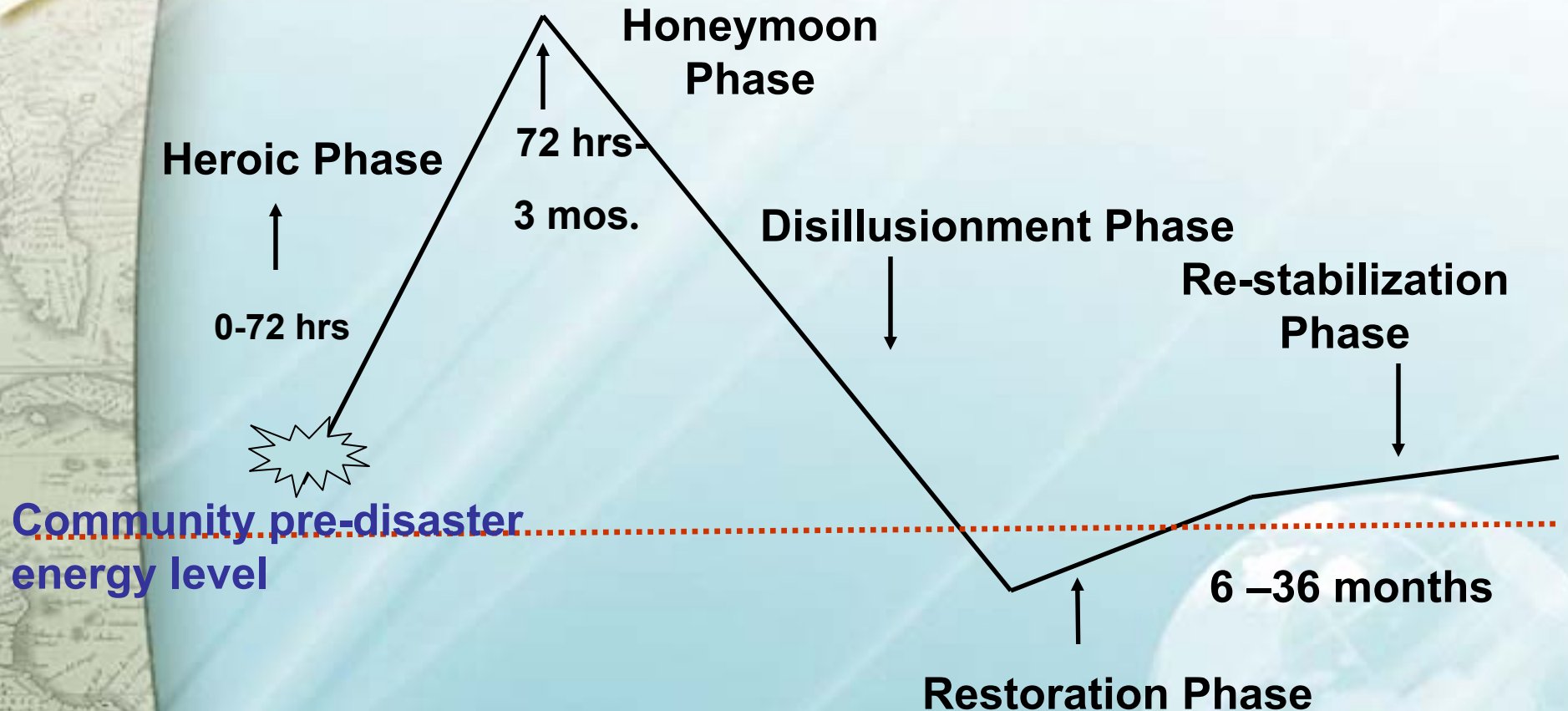
- Establish a Disaster Mental Health Team
- Establish an emergency management organization chart
- Establish procedures for emergency response
- Train mental health staff in disaster mental health plan
- Schedule mock exercises

# Maslow's Hierarchy of Needs

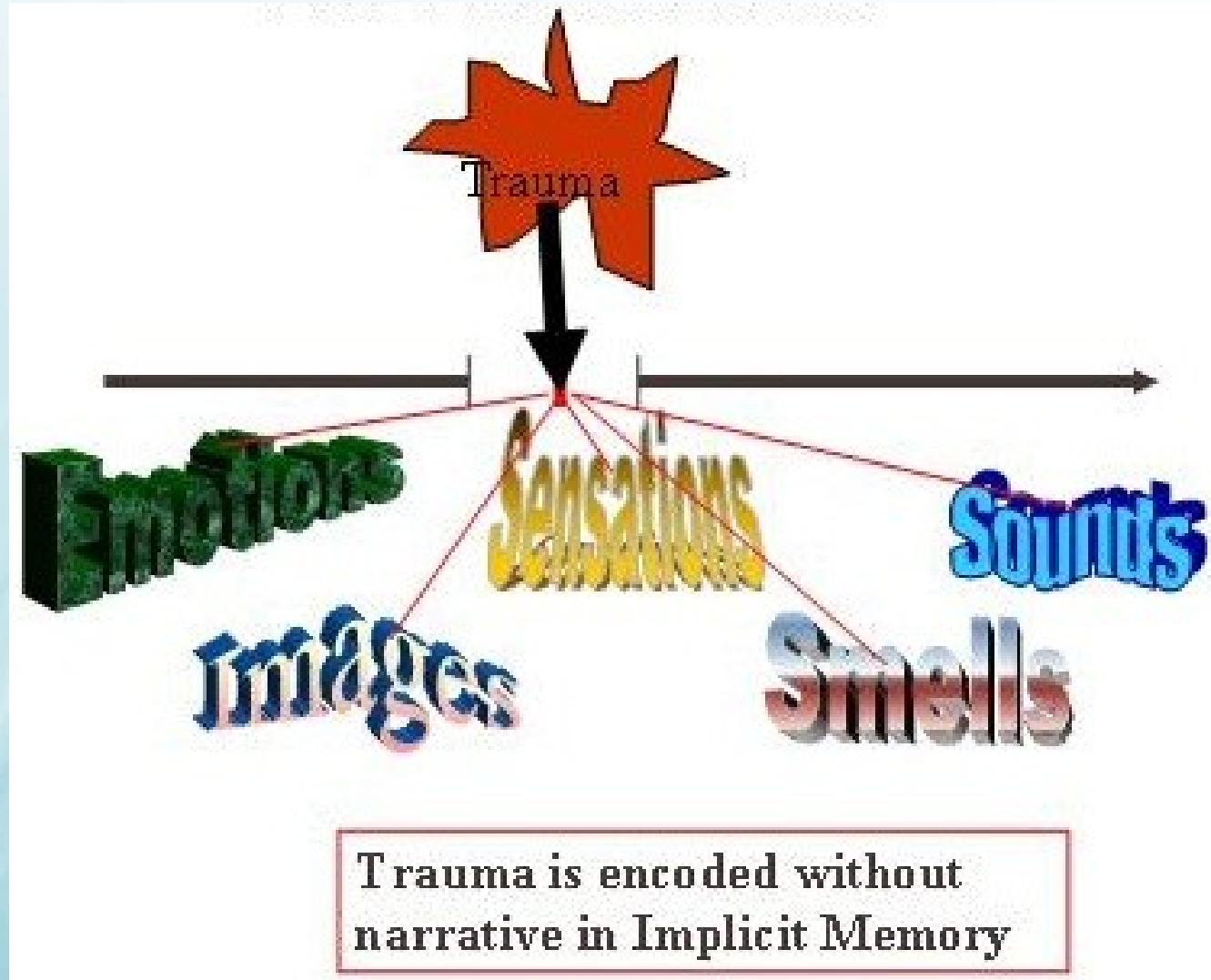


There are general needs (physiological, safety, love, and esteem) that must be satisfied before a person can act unselfishly.

# Human Disaster Response Pattern and Temporal Phases of Disaster

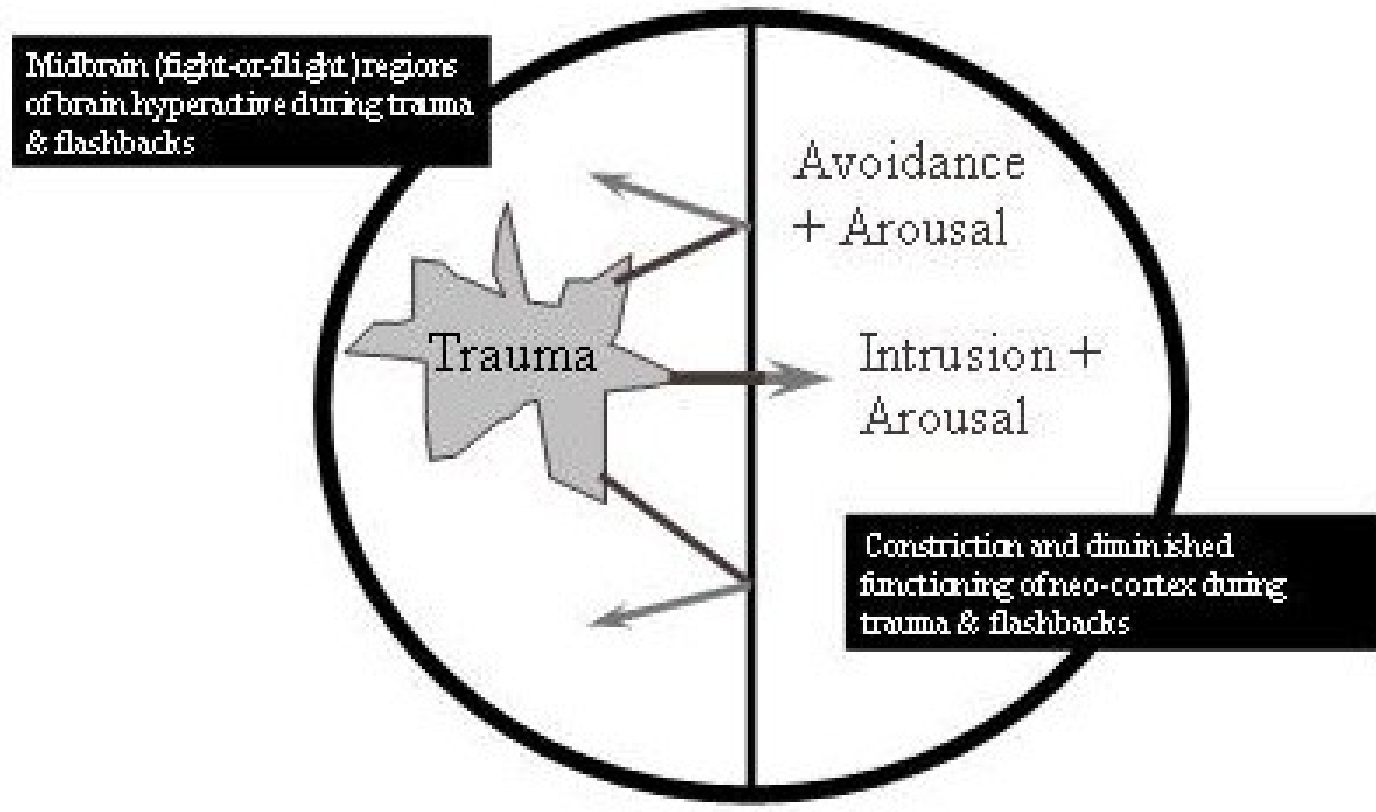


# What Happens In Your Brain!?



# Disaster and Trauma

## Trauma & The Brain



# Initial Responses to the Disaster

- Fear
- Disbelief
- Reluctance to abandon property
- Disorientation and numbing
- Difficulty in making decisions
- Need for information
- Seeking help for yourself and your family
- Helpfulness to other disaster victims

# And Then...

- Change in appetite and digestive problems
- Difficulty in sleeping and headaches
- Anger and suspicion
- Apathy and signs of depression
- Frustration and feelings of powerlessness over one's own future
- Increased effects of allergies, colds, and flu
- Feelings of being overwhelmed
- Moodiness, irritability and anxiety about the future
- Disappointment with, and rejection of, outside help
- Isolating oneself from family, friends, or social activities
- Guilt over not being able to prevent the disaster
- Lashing out and domestic violence

# Human Responses To Disaster

## Emotional

**Shock**

**Disbelief**

**Helplessness**

**Guilt**

**Anger**

**Grief**

## Cognitive

**Confusion**

**Poor  
Concentration**

**Self-blame**

**Intrusive  
Thoughts**

**Disorientation**

## Biological

**Fatigue**

**Somatic  
Complaints**

**Insomnia**

**Nightmares**

**Startle response**

## Psychosocial

**Social Withdrawal**

**Substance Abuse**

**Relationship Stress**

**Work Impairment**

# Disaster Mental Health Services

- Provide crisis intervention services to restore psychological and social functioning to “normal” people in “extraordinary” situation.
- Ensure environmental safety
- Acknowledge and validate survivors experience
- Limit the severity of adverse mental health impacts through early identification and referral



## Roles of DMH

**Protect**

**Direct**

**Connect**

# Impact Phase (0 – 48 hours)

## “What Just Happened”

- **Goals:** Survival, communication
- **Behavior:** Fight/flight, freeze, surrender, etc
- **Role of All Helpers:** Rescue, protect
- **Role of Mental Health Professionals:**
  - ❖ Help to establish safety, security, survival
  - ❖ Ensure food & water
  - ❖ Provide orientation
  - ❖ Facilitate communication with family, friends, community
  - ❖ Assess environment for ongoing threat/toxins

# Rescue Phase (0 – 1 week)

“What Can I Do?”

- **Goals:** Adjustment
- **Behavior:** Resilience vs. exhaustion
- **Role of All Helpers:** Orient, provide for needs
- **Role of Mental Health Professionals:**
  - ❖ Assess current status
  - ❖ Assess recovery environment (How well are needs being met?)
  - ❖ What additional interventions are needed for individual, community, and population?

# Recovery Phase (1 – 4 weeks)

## “Reality of the Aftermath”

- **Goals:** Appraisal, planning
- **Behavior:** Grief, reappraisal, intrusive memories, narrative formation
- **Role of All Helpers:** Respond with sensitivity
- **Role of Mental Health Professionals:**
  - ❖ Observe and listen to those most affected

# Return To Life (2 weeks – 2 years)

- **Goals:** Reintegration
- **Behavior:** Adjustment vs. phobias, PTSD, avoidance, depression, etc.
- **Role of All Helpers:** Continue assistance
- **Role of Mental Health Professionals:**
  - ❖ Treatment - Reduce or ameliorate symptoms or improve functioning via Individual, family, or group psychotherapy, Pharmacotherapy, Short-term or long-term hospitalization.

# Effects Of Traumatic Stress

- The vast *majority* of individuals experience
  - Short-term effects (<3months)
  - Transient
- A small *minority* of individuals experience
  - Longer-term effects (>3 months)
  - Delayed reactions (>6 months)
  - Develop Post Traumatic Stress Disorder

# Post Traumatic Stress Disorder

- **Post-traumatic stress** is a common pattern of behavioral, biological, psychological, and social responses among individuals exposed directly or vicariously to life-threatening events
- Approximately **25-30%** of disaster survivors develop chronic posttraumatic stress disorders (PTSD) or other psychiatric disorders (anxiety, depression)
- Women are twice as likely to have PTSD
- **Recovery** from traumatic stress responses usually **occurs within 6-16 months**

# Diagnostic Criteria For PTSD (DSMIV)

## ➤ The Event

- The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death, physical injury, or a threat to the physical integrity of self or others.
- The person's response involved intense fear, helplessness, or horror.

# Diagnostic Criteria for PTSD (DSMIV)

## Intrusion

(1 symptom required for diagnosis)

- 1. Recurrent ***unwanted thoughts***, images or perceptions of the event(s);
- 2. Recurrent dreams/nightmares;
- 3. Acting or feeling as if event were ***recurring***
- 4. Physiological distress when exposed to reminders of events

# Diagnostic Criteria for PTSD (DSMIV)

## Avoidance

(3 symptoms required for diagnosis)

1. Efforts to avoid thoughts or feelings of the event
2. Efforts to avoid activities or situations which arouse recollection
3. Inability to recall important aspects of the trauma
4. Diminished interest or participation in significant activities
5. Feelings of detachment or estrangement from others
6. Restricted range of affect – no emotion
7. Sense of foreshortened future

# Diagnostic Criteria for PTSD (DSMIV)

## Arousal

(2 symptoms required for diagnosis)

1. Difficulty falling or staying asleep
2. Irritability or outbursts of anger
3. Difficulty concentrating
4. Hyper-vigilance - “Eternal Watchfulness”

# PTSD

## *Associated Features*

- Alexithymia (“inability to language feelings”)
- Guilt over acts of commission or omission
- Survival guilt
- Suicidal/homicidal ideation/behaviors
- Sadness and depression
- Feelings of hopelessness/helplessness
- Memory impairment and forgetfulness
- Feelings of being overwhelmed
- Self-destructive soothing behaviors
- Somatization (manifesting physical complaints)
- Relationship problems

# What You Can Do To Help After the Initial Crisis

- Recognize your own feelings
- **Talk to others** about your feelings; this will help relieve your stress and help you realize that your feelings are shared by other victims
- **Accept help** from others
- When possible, **take time off** and do something you enjoy
- Get enough **rest**
- Get as much **physical activity** as possible; running or walking
- Give someone a **hug**; touching is very important.

# Effects on Young Children

- Return to earlier behavior, such as thumb sucking or bed wetting
- *Clinging to parents*
- Reluctance to go to bed
- *Nightmares*
- Fantasies that the disaster never happened
- *Crying and screaming*
- Withdrawal and immobility
- *Refusal to attend school*
- Problems at school and inability to concentrate

# Helping Your Child

- ✓ Talk about his or her feelings and your feelings. You will find that many of your feelings are shared, regardless of your child's age.
- ✓ Encourage your child to draw pictures of the disaster. This will help you understand how he or she views what happened.
- ✓ Talk with your child about what happened, providing factual information that she or he can understand.
- ✓ Reassure your child, they are safe. Repeat this assurance as often as necessary.
- ✓ Review safety procedures that are now in place, including the role your child can take.

# Helping Your Child

- Hold your child. Touching provides extra reassurance that someone is there for her or him.
- Spend extra time with your child, especially at bedtime.
- Relax rules, but maintain family structure and responsibility.
- Praise and recognize responsible behavior.
- Work closely with teachers, day-care personnel, baby-sitters and others who may not understand how the disaster has affected your child.

# Risk of Being Traumatized

- Individual Risk
- Interpersonal Risk
- Situational/Environmental Risk
- Occupational Risk

# Individual/Interpersonal Risk Factors

- Demographic characteristics
  - Gender (females at higher risk)
- Personality
  - Anxious
- Personal loss history
- Perception of the event
  - Personal control
- Interpersonal
  - Lack of social support system
  - Relationships
- Previous exposure to trauma/disaster

# Situational Risk Factors

- **Type of traumatic event**
  - Human caused (Terrorism, Combat, Torture, Violence)
  - Natural disaster
- **Proximity to Harm**
- **Social Support**
  - Social support buffers stress responses
- **Preparedness**
  - proactive
- **Community Emergency Response**
  - Integrated disaster response

# Occupational Risk Factors

- *Occupational hazards account for the majority of stress responses in disaster work*
  - Proximity to unpredictable physical danger
  - Mass death, destruction, and human remains
  - Personal injury, injury or fatality of loved ones
  - Long hours, erratic work schedules, extreme fatigue
  - Weather conditions
  - Inadequate human resources, equipment and supplies

# The Stress of Service: Preventing Compassion Fatigue Following A Disaster Event

# The Cost of Disaster Service



- Unprecedented demands on personal resources over time
- Inadequate time off for recovery
- “Let Down”

# Compassion Stress

- The **naturally** consequent emotions and behaviors resulting from *knowledge* about a traumatic event and the *stress* resulting from helping or wanting to help the suffering person (Figley 1995).

# Helping the Helpers

- **Pre incident “readiness” education**
- **On-site intervention and support services**
  - Pre-shift briefings
  - Buddy system
  - Defusing and Debriefing
  - Compassion Fatigue Monitoring
  - Crisis Self Care
- **Post deployment follow-up**
  - 4-6 weeks after deployment
  - Evaluation and referral 4-6 weeks after
  - Family Centered

# Stress Responses of Disaster Workers

- **Compassion strain**: Frustration, psychic numbing
- **Vicarious Trauma**: Shock, fear and horror
- Hyper-arousal and hyper-vigilance
- Confusion and disorientation
- Urge to “anaesthetize” (e.g., excessive sleep, substance abuse)

# Ignoring the Problem

- **Compassion Fatigue is often unrecognized and untreated because:**
  - ❖ It is viewed by emergency workers as a weakness or pathology
  - ❖ Public expectations for emergency workers to be strong and able prevents them from seeking help.
  - ❖ Few role models exist for dealing effectively with emotions in the field of disaster.
  
- Professional care givers with more **frequent** and **intense** exposure are more at risk to the traumatized

# Early Signs of **Burnout** and *Compassion Fatigue*

- Fatigue
- Feeling isolated and alienated
- Fantasies of escape
- Impatience
- Cynicism
- Blaming, complaining, whining
- Discouragement

- Physical and Mental Exhaustion
- Increased Risk of Physical Illness
- Disruptions in all aspects of life

# When to Seek Treatment...

- **Symptoms lasting  $\geq 1$  month**
- **Symptoms interfere with day-to-day functioning**
- **Symptoms of posttraumatic stress:**
  - Nightmares
  - Recurring and intrusive thoughts or images of event
  - Avoiding thoughts, feelings, or conversations about event
  - A sense of a foreshortened future
  - Ongoing difficulty falling asleep or staying asleep
  - Easily startled
  - Overly concerned with personal safety
- **Symptoms of depression:**
  - Feelings of guilt, worthlessness, or hopelessness
  - No pleasure in previously enjoyed activities
  - Frequent thoughts of death or suicide.

# **Assessment and Prevention of Secondary Traumatic Stress**

# “AIM” To Prevent

- **Assess**
  - *Self-Assessment/Awareness and Self-Monitoring of Stress*
- **Intervene**
  - *Health Maintenance*
  - *Social Support Network*
- **Mitigate Stress**
  - *Self-Care Strategies*

# Identify Your Stressors

1. Are there any current demands I can eliminate or deadlines I can change?
2. Am I managing my time effectively?
3. Is there anyone I can delegate/ask for help?
4. How can I use my support system more effectively?
5. Is there a stressful situation I can learn to manage more effectively?

# Stress Reduction Strategies

- Stay “in the moment”
- Prioritize activities
- Focus on one task at a time
- Set realistic expectations
- Ask for help and delegate
- Seek advice and support
- Maintain healthy boundaries
- Diversify your life and interests

# Internet Resources

- American Red Cross: <http://www.crossnet.org/>
- Federal Emergency Management Agency: <http://www.fema.gov/>
- Knowledge Exchange Network: <http://www.mentalhealth.org>
- National Centers for PTSD: <http://www.dartmouth.edu.dms.ptsd>
- Natural Hazards Center: <http://www.Colorado.edu/hazards/>