

The most important basic human need . . .

# **Types of Disasters**

# **Technological**

# • Nuclear Accidents • Epidemics

# Chemical Spills

Air Crashes

# **Natural**

# Hurricanes

Tornadoes

• Floods

Forest Fires

event.

### Health

- Contaminated Water

### • Disinterred Bodies

### Social

- Riots
- Terrorism
- Warfare

Families of responders don't search for victims or tend the wounded, but they are still very much a part of the team and affected by the trauma of the

Two most important parts of a disaster:

Three aspects of a disaster:

People who experience disasters will find them to be stressful and even traumatic...

That is not to say they will necessarily be *traumatized*.

Factors Affecting the Impact of Disasters on the Population

Factors related to the disaster:

- Warning
- Type of disaster
- Scope
- Traumatic stimuli
- Duration
- Losses

# **Impact of Disasters**

Factors related to the individual:

- Age
- Ethnicity and culture
- Economic status
- Health
- Pre-existing stresses
- Previous traumatic experiences

# **Impact of Disasters**

Factors related to the individual:

- Coping skills
- Expectations of self and others
- Perception of threat
- Exposure to traumatic stimuli
- Interpretation of the event
- Social support system

# **Impact of Disasters**

Factors related to the individual:

- Level of disaster preparedness
- Role in disaster

### **Impact of Disasters**

### **Social Factors**

- Primary groups intact or separated
- Social solidarity in community
- Social disruption from disaster
- Socio-cultural characteristics
- Attitude of community toward event

# **Impact of Disasters**

### **Social Factors**

- Effectiveness of disaster response
- Characteristics of healing environment

# Considerations for: Pre-disaster Conditions

- Health care needs or pre-existing mental health conditions
- Homeless or the marginally housed
- Single parent households
- · Geographically isolated people
- · People living in poverty
- People lacking the support of family or friends

# Considerations for: Older Adults

- Coping skills enhanced from life experiences
- · Diminished physical and cognitive abilities
- · Fear of loss of independence
- Limited income
- Reluctance to accept perceived "handouts"
- Intense grief over irreplaceable possessions

# Considerations for: Cultural Groups

- Immigration status
- Pride in self-reliance
- Literacy
- Communication styles
- Family and gender roles

### **Shattered Assumptions**

- The assumption of invulnerability
- The world as meaningful and just
- Positive self-perceptions

### **Disaster Losses**

- Sense of safety
- Sense of predictability
- Sense of control
- . Sense of history, future
- Relationship to environment
- Basic assumptions about the world

# **Emotional Phases of Disaster Recovery**

- Heroic Phase
- Honeymoon Phase
- Disillusionment Phase
- Reconstruction Phase

### **Heroic Phase**

- Shock
- Fear
- Confusion
- Adrenaline rush
- Heroic acts
- Coming together

### **Heroic Phase**

### Workers (all above plus)

- Stress of check-in and orientation
- Frustration & anxiety to get started
- Once in action, inability to "let down" or rest
- Identification with victims
- Loyalty to fellow responders-Living/Dead

# **Honeymoon Phase**

- Attendance to basic needs in a chaotic environment
- Concerns about safety, food and shelter
- Unrealistic optimism about recovery
- Community cohesion, sharing of resources, cooperation
- Denial of needs and emotional impact

### **Honeymoon Phase**

# Workers (all above plus)

- Long hours for many days
- Constant exposure to clients and their losses
- But . . . "I'm OK!"

### **Disillusionment Phase**

- Reality of impact
- Realization of losses & work to be done
- Procedures to get assistance are frustrating
- Community politics emerge
- Grieving
- · Health problems
- Family stress, domestic violence, substance abuse issues

### **Disillusionment Phase**

# Workers (all above plus)

- Overwhelmed by magnitude of losses
- Pressures of community expectations and self expectation
- Sleep deprivation and safety issues
- Interpersonal and organizational conflict
- Staff turnover

### **Reconstruction Phase**

- Long phase of rebuilding, financially, psychologically, physically, spiritually
- Light at the end of the tunnel
- Begin to put disaster behind
- Renewed feeling of empowerment
- PTSD, depression, anxiety
- Return to pre-disaster activities

### **Reconstruction Phase**

# Workers (all above plus)

- Left with follow-up
- Out processing
- Feel good about contributions
- Reorient thoughts to home and regular job
- "Let down", sense of loss, guilt of not doing enough

### **Critical Incidents**

Events that have the potential to create significant human distress and can overwhelm one's usual coping mechanisms.

# **Crisis:**

A temporary disruption of psychological balance wherein usual coping mechanisms fail.

# **Psychological Crisis**

An acute response to trauma, disaster, or other critical incident wherein:

- 1. Psychological balance is disrupted
- 2. One's usual coping mechanisms have failed
- 3. Evidence of significant distress, impairment, dysfunction

# Increased Risk Factors for Psychological Impact

- Rapid Events
- Intentional (Terrorism/Warfare)
- Children
- Number and Condition of Fatalities
- Media
- Social Interpretation

# Increased Risk Factors for Psychological Impact

- Personalization
- Sensory Load
- Responder Issues
- Handling of Remains / Personal Effects
- Support System
- Hereditary Gene Factor

# Psychological Response to Aspects of Trauma

Aspects

Response

Threat to life

Loss or death of loved one

# Psychological Response to Aspects of Trauma

Aspects

Response

Horror

**Bad outcome** 

#### The Need for Crisis Services

# **Post Oklahoma City**

- 25-30% increase in divorce rate, OKC PD
- 300% increase divorce rate, OKC FD
- >5 suicides in personnel who worked on disaster response

### FIRST RESPONDER STUDY

14% – 35% had PTSD, moderate to extreme

- Repeated memories, images
- Avoided thinking about it
- Upset when reminded, avoided reminders
- Disturbing dreams
- Irritable, angry
- Hyper-alert
- · Difficulty concentrating
- Feel distant
- Feel numb

### FIRST RESPONDER STUDY

10% - 30% had health symptoms new or worsened

- Sleep problems
- Fatigue
- Sudden mood changes
- Anxious/upset
- Depressed
- Coughing

#### FIRST RESPONDER STUDY

18% - 24% had problems functioning:

- Anger
- Problems with spouse/partner
- Difficulty relaxing
- Difficulty enjoying work
- · Feeling upset at work

### The Need for Crisis Services

### New York City, September 11

- Retirement rate doubled for both firefighters and officers
- 4,000 years of FD experience lost

# Psychological Impact of 9/11

### Fire Department:

- 14,000 FDNY members have sought mental health services through FDNY Counseling Services Unit since 9/11
- Prior to 9/11, CSU treated 50 new cases per month
- Post 9/11, CSU treated 260 new cases per month

Dr. Kerry Kelly, FDNY, 2007

### Psychological Impact of 9/11

- NYPD suicide rate averaged 4-8 per year for 12 years prior to 2001
- September 11, 2001 to September 11, 2002 was the first year without one suicide in NYPD history
- Results are attributed to increased support to police officers and decreased stigma about obtaining assistance

Peter Volkmann, MSW

# Psychological Impact of 9/11 WTC Health Registry

Prevalence of PTSD 2-3 years post-9/11:

- 12.4% all rescue and recovery workers
- 12.2% firefighters
- 6.2% police
- 21.2% unaffiliated volunteers and workers from non-emergency occupations (construction, engineering, sanitation)

  Perrin et al., A.J. Psychiatry, Nov. 2007

# Psychological Impact of 9/11 WTC Health Registry

# Most vulnerable to PTSD EQUALS Most highly exposed:

- Those who started work on or soon after 9/11
- Those who worked longer periods of time
- Those who worked at the site for at least three months (except for police)

Perrin et al., A.J. Psychiatry, Nov. 2007

# WTC Health Registry Recommendations

- Use shift rotations to reduce workers' and volunteers' duration of service at sites
- Limit exposure of those who have less prior training and exposure to disaster
- Establish mental health services to address needs of workers who have received less disaster training than police and fire staff

Perrin et al., A.J. Psychiatry, Nov. 2007

### The Need for Crisis Services

- Up to 35% disaster victims develop PTSD
- Mass disasters and terrorism will create more psychological casualties than physical casualties

### The Need for Crisis Services

Over 50% of disaster workers can be expected to develop significant post-traumatic distress

(Wee & Myers, 2001)

### **Categories of Stress**

- General
- Cumulative
- Critical Incident (Traumatic Stress)
- Post-Traumatic Stress Disorder

Initially stress reactions are adaptive and helpful. As the stress reactions increase, however, there is a greater chance that they will be maladaptive and disruptive.

# **Crisis Related Symptoms**

- Anxiety, TensionViolence
- AngerImpulsivity
- Helplessness Self-Medication
- DepressionSleep Disruption
- Sadness Irritability
- Suicidal Ideation Fatigue

### **Crisis Related Symptoms**

- Difficulty Concentrating
- Headaches, Nausea
- Memory Problems
- Trigger Reactions

### **Common Forms of Self-Medication**

- Stimulants (caffeine, amphetamine, cocaine, chocolate, nicotine)
- Depressants (alcohol)
- Hallucinogens
- · Antihistamines, Sleep
- Food, Sex, Shopping and Gambling

#### **Crisis Intervention**

- Emotional first aid.
- Focus on the immediate crisis, not past historical events.

### **Goals of Crisis Intervention**

- Stabilization
- Symptom reduction
- Return to adaptive functioning
- Facilitation of access to continued care

# **Keys to Crisis Intervention**

(Slaby, Lieb & Tancredi, 1975)

- Immediacy
- Brevity
- Innovation
- Expectancy
- Pragmatism
- Simplicity
- Proximity

#### CISM

**Critical Incident Stress** Management is a comprehensive, systematic, and multi-component approach to the management of traumatic stress.

### **Core CISM Mechanisms of Action**

(Mitchell & Everly, 1997)

- Early Intervention
- Psychological Support
- Opportunity for Expression
- · Crisis Education: Cognitive Processing: Behavioral Response

### **Core Elements of CISM Program**

- Pre-incident Preparation / Education
- On-Scene Support Services • Defusing
- One-on-One Crisis Intervention
- Demobilization
- Crisis Management **Briefing**
- Critical Incident Stress Debriefing (CISD)

### **Core Elements of CISM Program**

- Organizational / Follow-up/ **Education/ Referral** Community Support
- Family Support
- Pastoral Crisis Intervention

### **Pre-Incident Preparation/Education**

- Provides general information on stress and trauma
- Sets expectations for actual experience (physical and psychological)
- Teaches acute and long-term coping techniques

### **On-Scene Support Services**

- Outreach to where people work, live, congregate
- One-on-one interactions
- No interference with operations
- "Over a cup of coffee" conversation, "curbside counseling," "therapeutic schmoozing", "Stealth Counseling"

# One-on-One Individual Crisis Intervention

Most crisis intervention is done individually, one-on-one, either face-to-face or by telephone.

# Organizational / Community Crisis Support

Consists of risk assessment, pre- and post-incident strategic planning, tactical training and intervention, and the development of a comprehensive crisis plan.

#### Demobilization

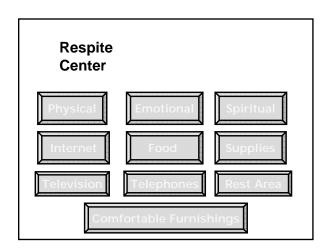
- A transition from a traumatic exposure to a return to home or new assignment
- Typically used in response to large scale events or major disasters
- Respite Centers are an innovative form of stress management and demobilization

### RESPITE / REHAB CENTERS

These are important ongoing physical & psychosocial decompression areas constructed near the disaster site to provide support (beverages, light food, protection from weather, and provision of psychological support / stress management) to emergency personnel.

# **RESPITE / REHAB CENTERS**

- On going and less structured than demobilization
- Most commonly used for on going events
- Provides areas for rest and / or diversion (e.g., TV, VCR) appropriate for use in ongoing event
- · Provides food and fluids
- Provides first aid, stress management, spiritual care support



# **Crisis Management Briefings**

- Structured large group community /organizational "town meetings"
- Designed to provide information about the incident, control rumors, educate about symptoms of distress, inform about basic stress management, and identify resources available for continued support.

### **Defusing**

- Structured small group (less than 20) discussion of crisis event
- Provided on same day as event (up to 12 hours)
- 20-45 minutes in duration
- Homogeneous work groups

# Critical Incident Stress Debriefing (CISD)

Used within the context of CISM, the term "debriefing" refers to a 7-phase structured small group crisis intervention more specifically named Critical Incident Stress Debriefing (CISD).

### **CISD GOALS**

- Mitigate distress.
- Facilitate psychological normalization and reconstruction.
- Set appropriate expectations for psychological / behavioral reactions.
- Serve as a forum for stress management education.

### **CISD GOALS**

- Identification of external coping resources.
- Serve as a platform for psychological triage and referral.
- Never mandatory.
- Not used doing ongoing disaster operations—it is used afterwards.
- Always conducted by a mental health professional with CISM training.

### **Family Support**

- The person in crisis may spread intense feelings to family members
- Family support is an important aspect of CISM
- Family support is typically provided by those with special training

### **Pastoral Crisis Intervention**

The functional integration of the principles and practices of psychological crisis intervention with the principles and practices of pastoral support.

(Everly, 2000)

### Follow-up / Education / Referral

Assuring that those who need continued help are not lost in the aftermath.

### Remember:

CISD / CISM are not substitutes for psychotherapy.

Rather, they are elements within the emergency mental health system designed to precede and complement psychotherapy; i.e., part of the full continuum of care.

### **Self-Care**

Why is this important?

- Responding to disasters can be frustrating due to competing needs of agencies, clients and caregivers.
- Adrenaline and desire to help can lead to regrettable decisions and practices.

### **Self-Care**

Why is this important?

- Normal mechanisms of self-care can be more difficult to access.
- Self-care often gets overlooked by responders and workers

# **Self-Care**

How can we care for ourselves?

- Pre-incident training classes, drills
- Pre-incident preparation affiliations, operational plans and protocols

#### **Self-Care**

### How can we care for ourselves?

- Orientation to disaster/incident
- Boundaries length of shift, type of duty, breaks, limit exposure to traumatic stimuli

### **Self-Care**

### How can we care for ourselves?

- Buddy system connect with others
- Use formal mechanisms already in place, such as CISM services

### **Self-Care**

# How can we care for ourselves?

- Use stress management techniques (deep breathing, meditation, journaling, positive self-talk, relaxation techniques, visualization, music, humor)
- Ask for help from family, friends and mental health professional

### **Self-Care**

### How can we care for ourselves?

- Pay attention to physical needs (food, fluids, rest, exercise – avoid overuse of alcohol, drugs, and stimulants)
- Participate in events that provide meaning and commemoration

# **Staff-Care**

# Mitigating the impact of a response

- Pre-incident education
- Pairing experience with inexperienced
- Adjusting work shifts
- · Rotation of duties
- Workers have permission to say Yes / No
- Staff orientation and daily briefing
- Staff recognition post event
- · Follow support programs

