





Nuclear Plant Emergency Response



Nuclear Plant Emergency Response

Mental Health First Aid



Module 7



Nuclear Plant Emergency Response

Objectives

- Describe psychological phases of a disaster
- Identify unique psychological effects of radiation disasters
- Define psychological first aid skills



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Disaster Mental Health Training

- Important for:
 - Public health professionals
 - Clinicians
 - First responders
 - Volunteers
- Disaster preparedness training can reduce the risk of post-traumatic stress disorder for workers and volunteers who respond to disasters.



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Radiation Disasters

- Psychological consequences of radiation disasters are unique, serious, and can be **more severe and longer lasting** than physical and economic consequences.



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Role of Public Health

- Screening of persons for external contamination
- Establish registry of information about all persons screened for long term monitoring
- Provide **initial psychological first aid**





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Public Conceptions

- Intense public fear of radiation
- Radiation not well understood
 - Invisible, silent, odorless
 - Only detectable using specialized equipment

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Reactions to Three Mile Island

[Click to play video](#)

David Houts
12 years-old at time of accident

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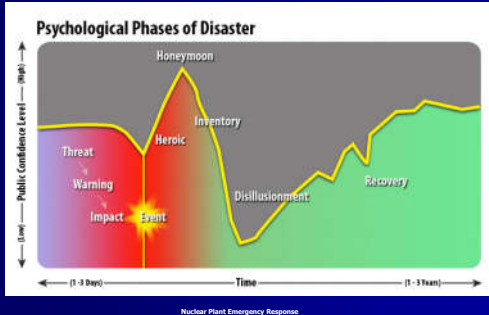
Reactions to Three Mile Island

[Click to play video](#)

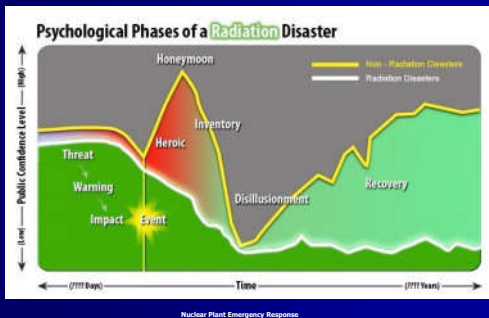
Dr. Peter Houts
Associate Professor of Behavioral Science
Penn State University College of Medicine

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Phases of a Disaster Model



Phases of a Radiation Disaster



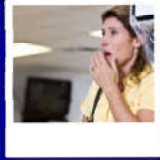
Adverse Psychological Effects

- Affects contaminated and non-contaminated
- Several factors may contribute:
 - Lack of understanding of radiation and the screening process
 - Delayed impact of exposure
 - Mistrust of officials who are unable to provide consistent and clear-cut guidance regarding safety measures



Common Responses

- Stress
- Panic
- Grief
- Questioning
 - “Why has God done this to me?”



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Mental Health Consequences

- Common in survivors of disasters:
 - Generalized anxiety disorder
 - Post-traumatic stress disorder
 - Major depression
 - Alcohol and medication abuse
 - “Psychosomatic bind”
 - Lingered doubts about safety
 - Social stigma, loss of social support

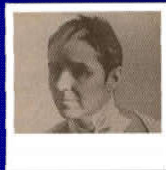


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Social Stigma

- Stigmatization of persons who are:
 - Contaminated
 - Potentially contaminated





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Recovery Post Goiânia

[Click to play video](#)

Dr. Jose Rozenal
Former Director in Brazilian National Commission of Nuclear Energy



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Social Stigma Post Goiânia

- Residents protested against caskets being buried in the local cemetery
- When residents traveled to other parts of the country they were turned away
- Agricultural products from the region were banned
 - Japan: concerns about beef and rice



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High-risk Groups

- Children
- Pregnant women
- Mothers with young children
- Evacuees
- Older persons
- People with mental illness
- Those with limited social support
- Emergency workers



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Providing Psychological First Aid



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What Can you Do to Help?



- You actually already have many essential attributes and skills that you can bring to assist survivors:
 - Good active listening skills
 - Patience
 - A caring attitude
 - Trustworthiness
 - Being approachable
 - Cultural sensitivity
 - A non-judgmental attitude
 - Flexibility and tolerance during chaos



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Psychological First Aid Basics

- Get the person to actively engage with you
- Promote:
 - Safety
 - Calm
 - Connectedness
 - Self-efficacy
 - Help



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What to Do

- Immediately introduce yourself and state your intent
- Remain calm yourself
- Communicate calmly and clearly
- Stand or sit squarely facing the survivor
- Keep your posture “open”
 - no crossed arms or legs
- Lean forward
- Keep eye contact

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What not to Do?

- Force people to share their stories with you
- Give simple reassurances
- Try to “explain” why you think they have suffered
- Break a promise or lie
- Criticize existing services

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When to Refer to a Specialist?



- A survivor hints or talks openly about suicide
- There is a possibility of child abuse
- There is a possibility of criminal activity
- Other cases for referral can be when:
 - The survivor seems to be socially isolated
 - The survivor feels persecuted
- Drug or alcohol dependent individuals
- Individuals engaging in risky/threatening behavior
- Individuals for whom it is difficult to maintain contact

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Always Remember!



- As a responder, you have to take care of yourself before you can take care of others!



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Psychological First Aid in Action

[Click to play video](#)



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Any Questions or Comments?



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Summary Points



- People have an intense fear of radiation, which can intensify the psychological response
- The social stigma experienced by victims in radiological disasters increases their need for services
- You are vital in the response to a disaster event!



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Summary Points



- You make a difference in physical and psychological consequences for survivors
- Prepare yourself to anticipate stress reactions
- Anticipate your own emotional and physical response
- Incorporate a mental health component into your preparations for disasters, especially radiological ones.



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Adapted from CDC course WB1645

http://www2a.cdc.gov/TCEOnline/registration/detailpage.asp?res_id=2490



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Radiological Terrorism: A Toolkit for Public Health Professionals

- Resources for Public Health
 - Virtual Community Reception Center
 - Population Monitoring Guide
 - EPA Risk Communication Guide
 - Contaminated Deceaseds Guide
 - Radiation Survey DVD
 - Webcasts
 - Fact Sheets
 - Psychological First Aid Self-Study



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Radiological Terrorism: A Toolkit for Emergency Services Clinicians

- Resources for Clinicians:
 - JIT Training
 - Pocket Guides
 - Radiation Triage Chart
 - Fact Sheets
 - Webcasts
 - Self-study Training
 - Psychological First Aid



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To order complimentary toolkits:
Email: cdcinfo@cdc.gov or

Call: 1-800-CDC-INFO (1-800-232-4636);
TTY: (888) 232-6348

Selected material available online:
www.emergency.cdc.gov/radiation



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