



EMERGENCY
MANAGEMENT
INSTITUTE

Unit 4. Managing Mass Fatalities Operations



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Visual 4.1
Mass Fatality Incident Response

Incident Operations

- On-scene operations:
 - Staging
 - Search and recovery
 - Notification of response personnel
- Morgue operations
- Family Assistance Center operations



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Unit Objectives

- **Describe critical operations for mass fatalities incidents.**
- **Describe the protocols for on-scene operations.**
- **Establish procedures for working with the media.**
- **Identify measures required to take care of incident workers.**



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Protocols for On-Scene Operations

What on-scene protocols should be established in advance of an incident?



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Visual 4.4
Mass Fatality Incident Response

Protocols for On-Scene Operations

- Establish a perimeter to keep emergent volunteers, curious onlookers, and others away from the incident scene.
- Ensure that search operations methodology is established and followed.
- Ensure that all search and recovery personnel wear PPE.



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Visual 4.5
Mass Fatality Incident Response

Protocols for On-Scene Operations

- Protect the incident scene, even if it is not a suspected crime scene.
- Preserve evidence and personal effects.
- Manage expectations about how quickly operations can be completed.



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Visual 4.6
Mass Fatality Incident Response

Protocols for On-Scene Operations

**Who makes the decision to end
rescue operations and initiate
recovery operations?**



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Visual 4.7
Mass Fatality Incident Response

On-Scene Operations: Resource Staging

Staging areas:

- Are the location where resources, including equipment and crews, report until they are assigned.
- Are not intended as a holding place for:
 - Spontaneous volunteers.
 - Response/recovery resources that have been demobilized.



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Visual 4.8
Mass Fatality Incident Response

Staging Area Issues

- **Coordinating incoming personnel and equipment**
- **Limiting access**
- **Tracking assigned resources versus those awaiting assignment**



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Visual 4.9
Mass Fatality Incident Response

Search and Recovery

All procedures required to:

- Analyze the site to determine:
 - Whether hazardous materials are present
 - Whether the site presents a biological hazard
 - The condition of remains
- Locate, document, and remove remains and personal property
- Remove debris



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Visual 4.10
Mass Fatality Incident Response

Search Methods

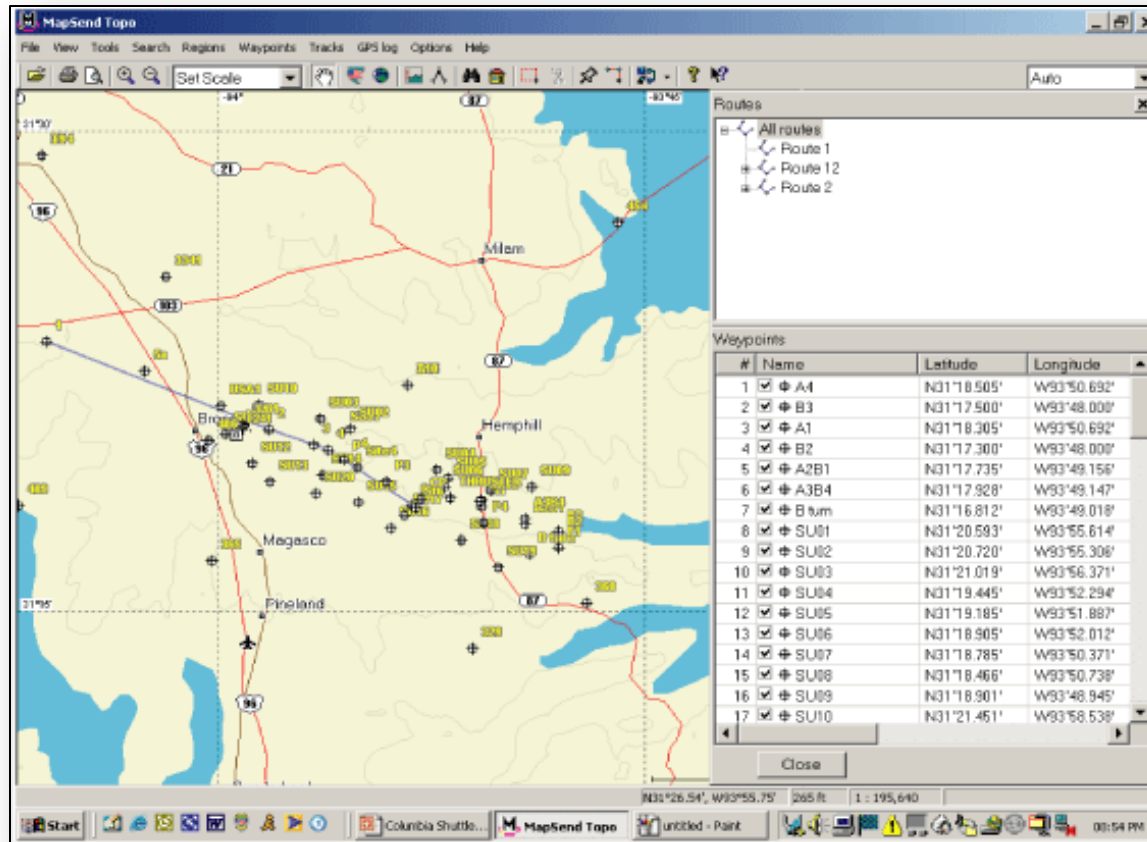
- **Global positioning system (GPS)**
- **Total station technology**
- **Grid searching**



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Visual 4.11
Mass Fatality Incident Response

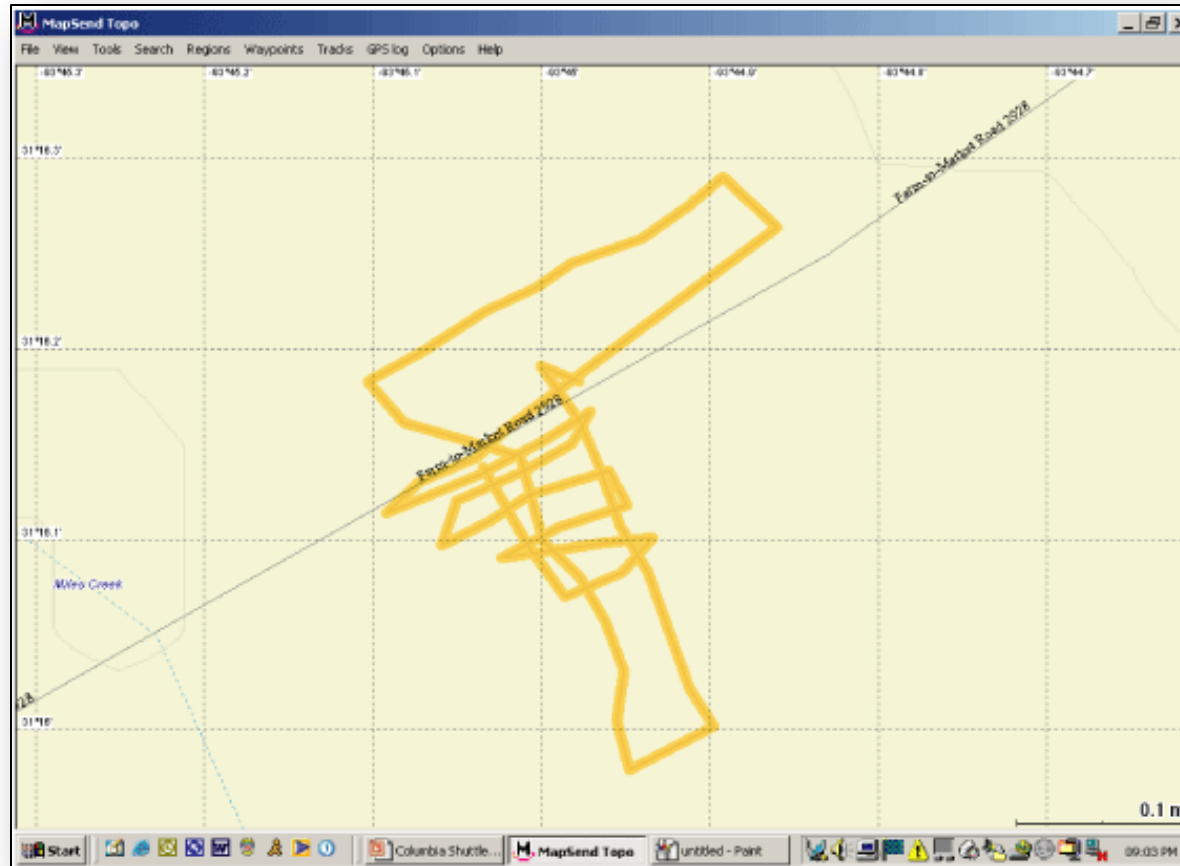
Global Positioning System



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Visual 4.12
Mass Fatality Incident Response

Global Positioning System



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Visual 4.13
Mass Fatality Incident Response

Global Positioning System

- **Space Segment**
- **Control Segment**
- **User Segment**



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Visual 4.14
Mass Fatality Incident Response

Identifying Remains: Grid Searching

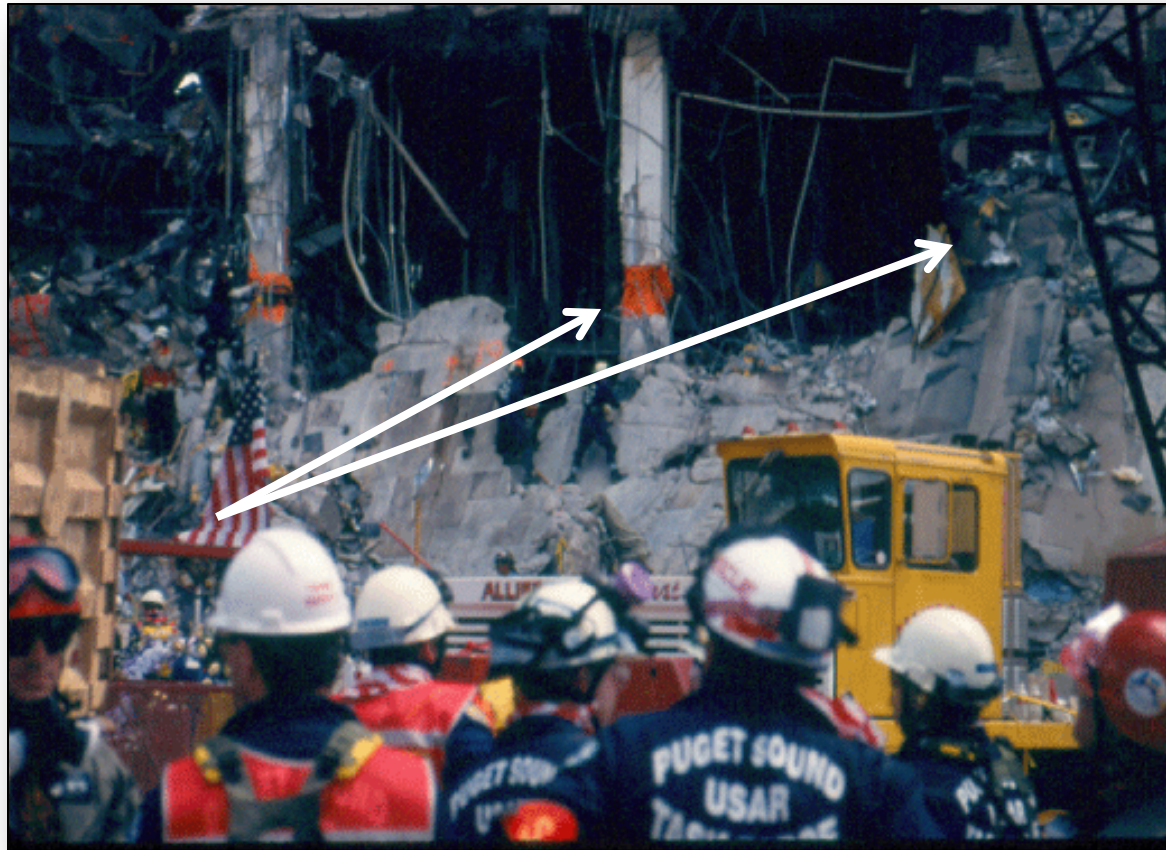
- Location of remains may reveal placement of the victim before the incident.
- Injuries may reveal the cause of the incident.
- Evidence is critical to ensuing investigation.
- Fragmented remains may be reassociated after the incident.



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Visual 4.15
Mass Fatality Incident Response

Using the Structure as a Grid



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Visual 4.16
Mass Fatality Incident Response

Search and Recovery Issues

- Worker safety, including removal of hazards
- Debris removal
- Locating, marking, and removing remains
- Doing all of the above without disturbing potential evidence (if the site is or could be a crime scene)



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Visual 4.17
Mass Fatality Incident Response

Activity: Search and Recovery

1. Work in table groups as assigned by the instructor.
2. Consider your jurisdiction's ability to respond to a mass fatalities incident and answer the questions included in the activity.
3. Select a spokesperson to present your responses to the class. Be ready to explain your group's responses.



You have 15 minutes to complete this activity.



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Documentation

- The incident scene
- Human remains, including fragmented and/or remains that are decomposing
- Personal effects
- Debris



Preserve Evidence; Don't Rush!



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Visual 4.19
Mass Fatality Incident Response

Document the Scene

- Both still photographs and videotape
- Aerial photographs
- Ground-level photographs with proper orientation or location noted in the photo
- Photograph body in relationship to wreckage and personal effects



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Visual 4.20
Mass Fatality Incident Response

Document the Scene

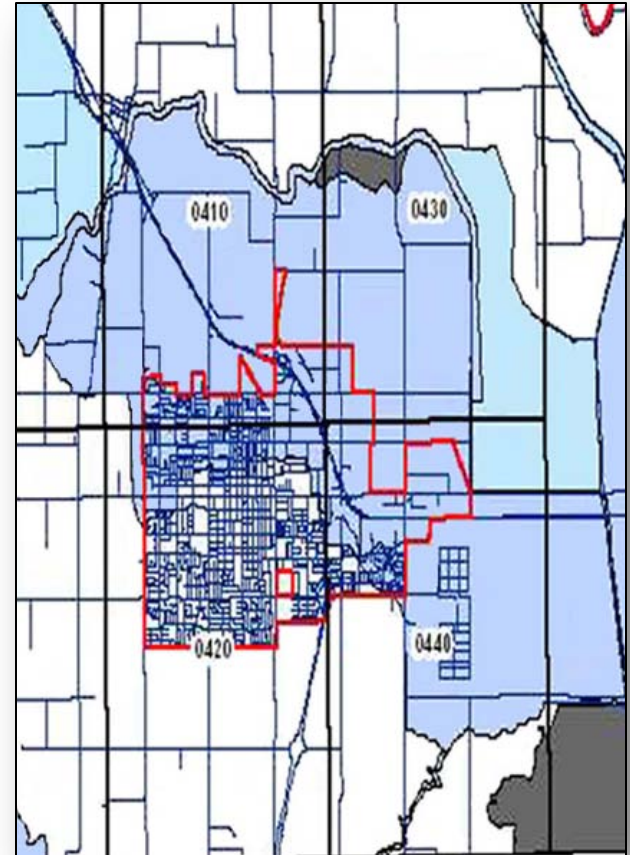


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Visual 4.21
Mass Fatality Incident Response

Document the Scene

- Detailed written documentation at the scene is a must.
- Consider a detailed scene sketch.
- Assign a scribe, if necessary.
- Make certain that this documentation is put into the record of the event.



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Visual 4.22
Mass Fatality Incident Response

Debris Removal

**It took 7 days to
remove these
remains!**



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Visual 4.23
Mass Fatality Incident Response

Debris Removal

How are you going to remove all of the debris? Where will you put it?



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Visual 4.24
Mass Fatality Incident Response

Documenting Wreckage

- Debris patterns may provide clues about how incidents, especially transportation incidents occurred.
- Workers should be briefed on:
 - What to look for.
 - What to avoid moving.
 - Known safety issues within the wreckage.



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Visual 4.25
Mass Fatality Incident Response

Documenting Personal Effects

- In a major event, there may be thousands of pieces of personal property scattered throughout the site.
- All of the personal property must be collected and accounted for.



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Visual 4.26
Mass Fatality Incident Response

Personal Effects Management

- In transportation incidents, the Family Assistance Act recommends how personal effects are managed.
- In non-transportation incidents, decisions on personal effects are made jointly with the family.
- Aside from monetary value, families gain greatly from return of personal effects.



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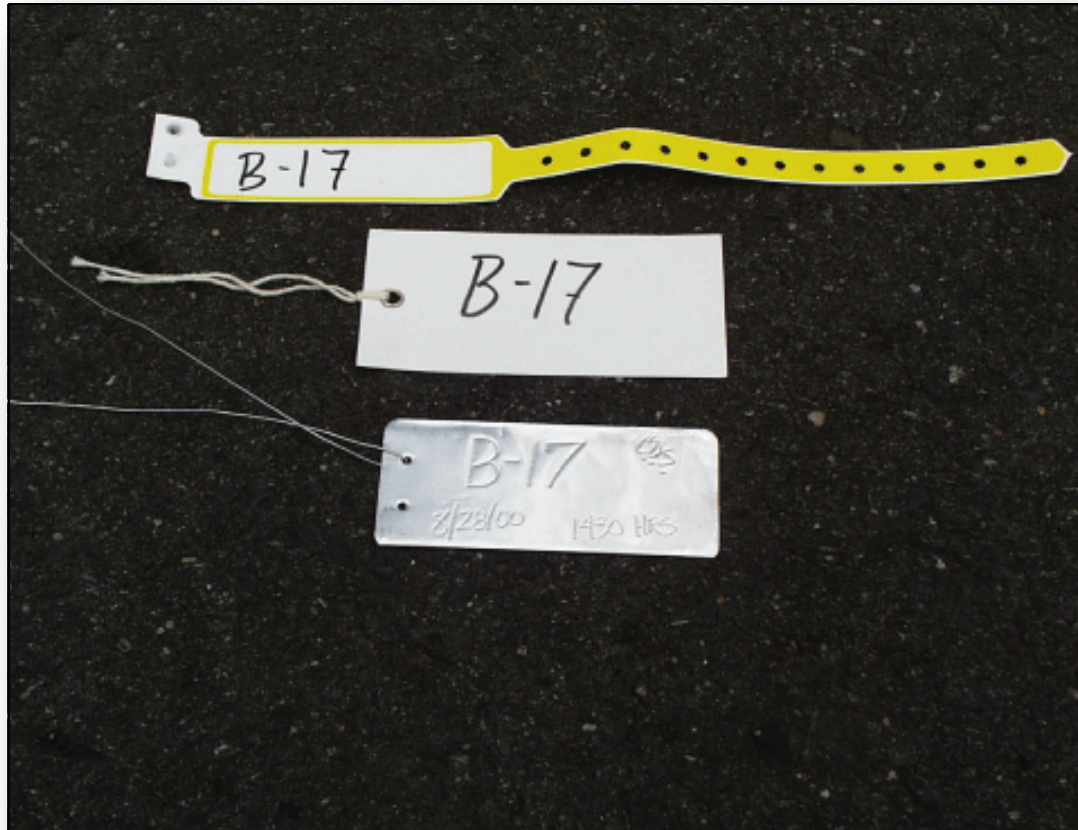
Visual 4.27
Mass Fatality Incident Response

Numbering System Considerations

- **The system should be simple and use whole numbers.**
- **Use the same number on the toe tag, the tag on the outside of the remains pouch, and on personal effects that are definitely associated with the remains.**
- **Assign a range of non-duplicative, consecutive numbers to each search and recovery team.**
- **After morgue triage, the remains should be assigned a sequential morgue reference number.**
- **Do not use leading zeros.**



Numbering System Considerations



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Visual 4.29
Mass Fatality Incident Response

Extrication and Transport of Remains

- Extrication
- Show of respect
- Transport
- Temporary storage of remains



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Visual 4.30
Mass Fatality Incident Response

Extrication Myths

According to OSHA:

- **There is no direct risk of contagion or infectious disease from being near human remains for those who are not directly involved in recovery.**
- **Pathogens associated with human remains:**
 - **Do not pose a risk to those who are not directly involved in recovery.**
 - **Do not pose an environmental risk.**
- **The smell of human decay does not create a public health hazard.**

--www.osha.gov/oshd/doc/data_hurricane_facts/mortuary.pdf



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Visual 4.31
Mass Fatality Incident Response

Incident Site Collection and Storage

- An area may be set to collect remains prior to transport to morgue.
- Refrigerated trucks may be necessary at this site.
- Remains may be transported by refrigerated truck or individually.
- This is simply an on-site storage facility.



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Visual 4.32
Mass Fatality Incident Response

Removing Remains From The Scene

Log sheet should include the:

- Field recovery number.
- Number of remains being transported.
- License number of transport vehicle.
- Name of vehicle driver.
- Signature of driver.
- Date and time of departure from site.



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Visual 4.33
Mass Fatality Incident Response

Removing Remains From Scene

- Store body bags in refrigerated/cooler truck until transported at 38 to 42 degrees Fahrenheit.
- Use trucks with metal construction.
- No company names should be visible.



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Visual 4.34
Mass Fatality Incident Response

Temporary Storage

- Arrange with vendor in advance
- Figure 20-25 bodies per truck
- No wooden floors
- Cover truck names completely
- Be prepared for mechanical problems
- Sanitize thoroughly after Mission
- Maintain an aisle down the center of the trailer



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Visual 4.35
Mass Fatality Incident Response

Managing Catastrophic Incidents

Basic procedures remain unchanged, but scale changes everything!

Human Remains



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Visual 4.36
Mass Fatality Incident Response

Managing Catastrophic Incidents

What constitutes a catastrophic incident?



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Visual 4.37
Mass Fatality Incident Response

Managing Catastrophic Incidents

What issues would you face in a catastrophic incident that you might not face in incidents involving a smaller number of fatalities?



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Visual 4.38
Mass Fatality Incident Response

Legal and Financial Constraints

- **Does your State have laws to protect MEs/Cs during a severe incident?**
- **Does your State have a “good Samaritan” law?**
- **Do purchasing requirements change?**
- **Is the ME/C responsible for on-scene recovery personnel?**
- **How do the ME/C responsibilities change if assistance is requested from the State and/or Federal government?**



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Managing Resources at Catastrophic Incidents

- How many fatalities can your current resource system handle accurately, efficiently, and safely?
- Has your jurisdiction determined how many additional resources, including personnel and facilities, will be required for “X” fatalities?
- Who has the authority to approve resource orders?
- Has your jurisdiction identified sources for additional resources?
 - How long will it take to receive them?
 - How will they be received? Stored? Distributed? Paid for?
 - What if they don't arrive?



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Visual 4.40
Mass Fatality Incident Response

Activity: Managing Resources

Instructions:

1. Work in groups assigned by the instructor. The instructor will assign a type of resource.
2. Answer the question about the resource assigned:
What will you do if the resources you need don't arrive?
3. Try to develop at least 2 strategies for either obtaining or working around the needed resource.



You have 15 minutes to complete this activity.

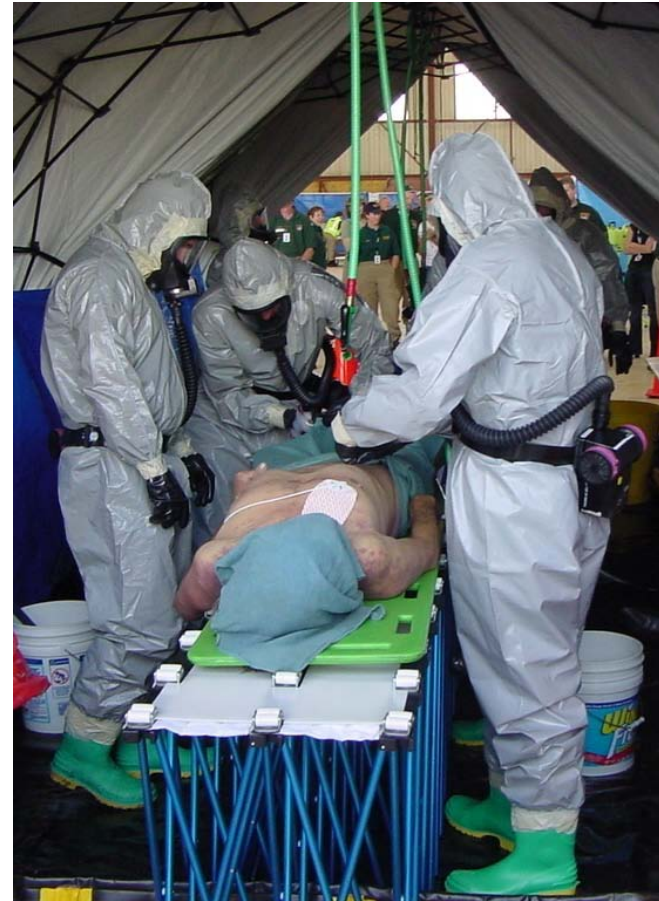


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Visual 4.41
Mass Fatality Incident Response

Protecting Workers

- How will you protect:
 - Recovery personnel?
 - Transport personnel?
 - Morgue Personnel?
- How will you ensure that personnel will eat and take breaks?
- How will you enforce the requirements?



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Visual 4.42
Mass Fatality Incident Response

Transportation and Storage

- **What facilities are available?**
- **What are your options?**
- **What actions are taboo?**



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Visual 4.43
Mass Fatality Incident Response

Temporary Interment

- **May be necessary in a catastrophic situation**
- **Try to complete identification process before interment**
- **Must document where various sets of remains are buried**



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Visual 4.44
Mass Fatality Incident Response

Security

- All areas must be secured. There may be legal repercussions for any security breach.
- Media and other onlookers must be kept out of all facilities.
- Personnel must be safe when they are working.



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Visual 4.45
Mass Fatality Incident Response

Taking Care of Workers

- Provide appropriate Personal Protective Equipment (PPE).
- Provide appropriate safety briefings.
- Enforce the use of PPE and safety rules.
- Establish a stress management program.
- Ensure adequate rest and rehab.
- Provide and enforce breaks.
- Provide a consistent work schedule.

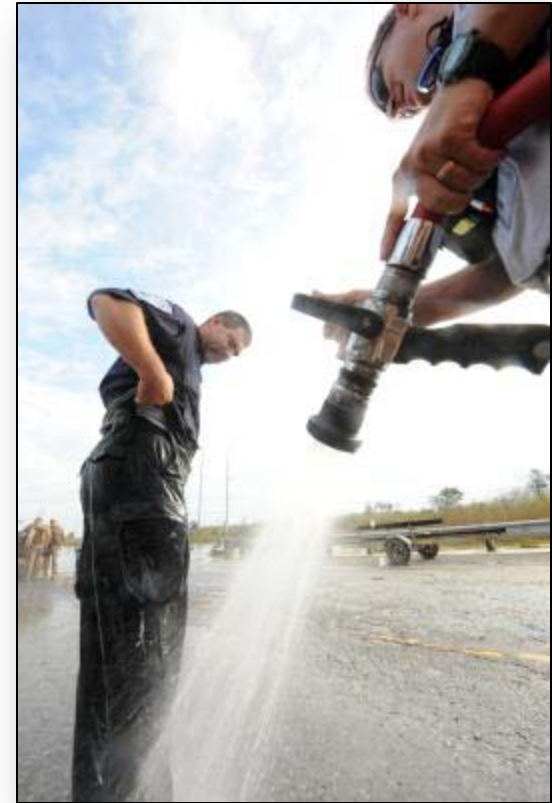


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Visual 4.46
Mass Fatality Incident Response

Worker Responsibilities

- **Wear the PPE that is issued.**
- **Use universal precautions.**
- **Decontaminate when necessary.**
- **Follow all safety information and guidelines provided.**
- **Report any and all injuries immediately.**
- **Keep an eye on fellow workers.**



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Visual 4.47
Mass Fatality Incident Response

Mass Fatalities Incidents and Stress

- Mass Fatalities incidents are stressful
- Initial discomfort & distress common
- Most people adapt well psychologically
- Most people function well
- Stress is incident-specific & cumulative
- Affected by other stressors (“real-world” issues)



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Visual 4.48
Mass Fatality Incident Response

Preparedness for Mass Fatalities

- Practice promotes resiliency to stress
- Use realistic training & exercises
- Learn your chain-of-command
- Develop family support plans
- Establish workplace agreements
- Maintain physical fitness & good health practices



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Visual 4.49
Mass Fatality Incident Response

Traumatic Stressors in Mass Death

- **Emotional involvement—that which reminds us that the remains were people**
- **Personal effects—makes a life real**
- **Bodies of children—affect everyone emotionally**



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Visual 4.50
Mass Fatality Incident Response

Traumatic Stressors in Mass Death

- **Surprise and novelty—shock at the unexpected**
- **Sensory stimuli—be prepared for overload**
- **Condition of remains—natural or gruesome**
- **Hands and faces of the remains**



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Visual 4.51
Mass Fatality Incident Response

Common Emotional Reactions to Human Remains

- **Sadness**
- **Pity**
- **Horror**
- **Repulsion**
- **Anger**
- **Fear**
- **Numbness**
- **Disgust**



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Visual 4.52
Mass Fatality Incident Response

Physical Reactions to Stress

- Sense of being “wired” or “keyed up”
- Headaches
- Nausea
- Difficulty sleeping
- Diarrhea
- Appetite changes
- Fatigue



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Visual 4.53
Mass Fatality Incident Response

Managing Incident Stress: Self and Buddy Care

- Pair off with a co-worker and look out for each other
- Remember the larger purpose of your work
- Talk with others
- Switch tasks as needed
- Be a good listener
- Use appropriate humor



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Visual 4.54
Mass Fatality Incident Response

Managing Incident Stress: Self and Buddy Care

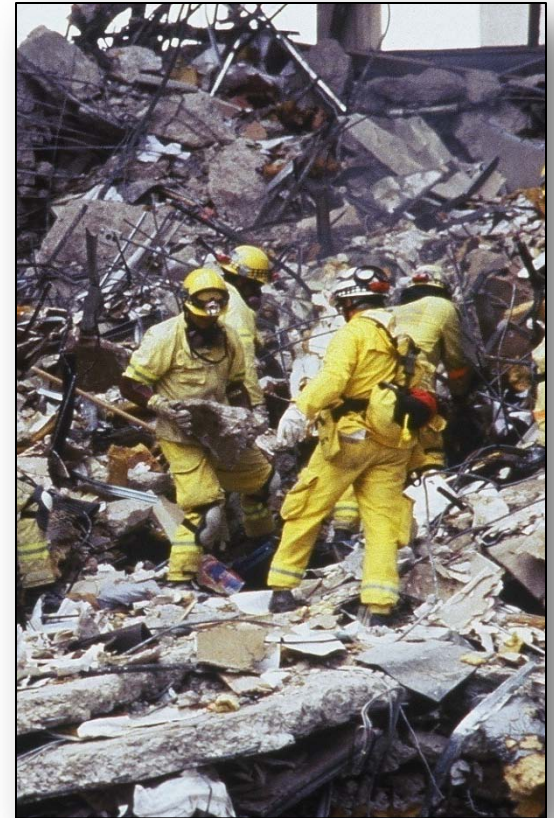
- **Consider avoiding TV news during incident**
- **Take time to decompress at end of shift**
- **Limit exposure to stressors**
- **Avoid focusing on remains' hands and faces**
- **Use operational discipline:**
 - **Avoid overwork & fatigue—take breaks and leave at shift's end**
 - **Use proper PPE**



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Leadership Actions to Diminish Incident Stress

- **Lead by example**
- **Maximize worker safety**
- **Communicate regularly**
- **Limit traumatic exposure**
- **Visit work areas and talk with workers**
- **Praise and reward people's work**
- **Ensure adherence to work/rest cycles**



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Visual 4.56
Mass Fatality Incident Response

Leadership Actions to Diminish Incident Stress

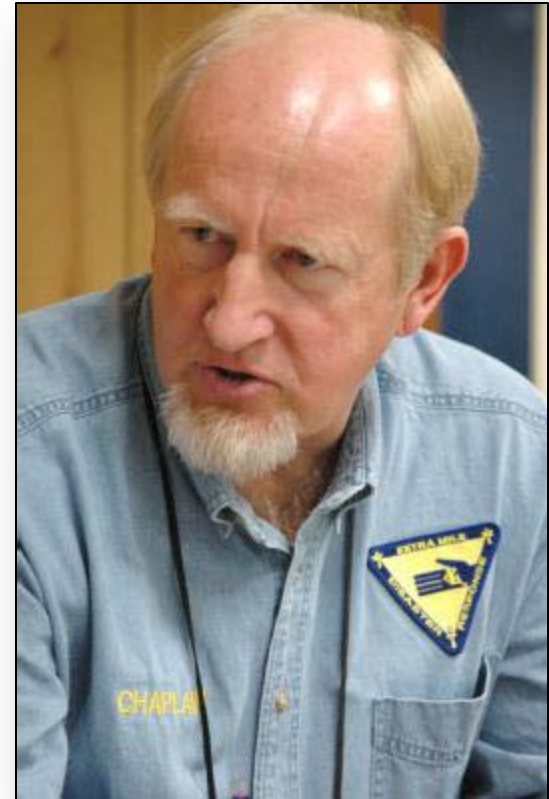
- **Protect workers from distractions/hassles**
- **Allow workers to “ease in” & vary tasks**
- **Pair inexperienced with experienced workers**
- **Remember that people react and cope differently**
- **Be alert to changes in workers’ behaviors**
- **Foster supportive command climate**



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Leadership Issues as Teams Rotate Out

- **Perform After-Action Review (AAR)**
 - Information sharing
 - Lessons learned
- **Establish safe climate for candor**
- **Information on assistance resources**
 - Personal
 - Financial
 - Family



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Visual 4.58
Mass Fatality Incident Response

Working With the Media

- Helps manage the public's expectations
- NIMS requirements:
 - Assign a PIO
 - Develop a Joint Information System
 - Establish a Joint Information Center



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Visual 4.59
Mass Fatality Incident Response

Public Information Officer

- **Must be assigned as early as possible. The PIO must also be familiar with:**
 - **The overall incident.**
 - **Procedures for recovering and identifying remains.**
 - **Procedures for release of remains.**
 - **Family notification procedures.**



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Visual 4.60
Mass Fatality Incident Response

Working With the Media

What are some ways to work successfully with the media?



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Visual 4.61
Mass Fatality Incident Response

Working With the Media

Has anyone developed templates for media releases for mass fatalities incidents?



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Unit Summary



**Operational
Issues**



**Taking Care
of Workers**



**Working With
the Media**



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