HOW DID SEPTEMBER 11th AFFECT HAZMAT AND WMD RESPONSE?

Jeff Borkowski
HazMat Technician
FDNY





Outline

- What were the demands placed on FDNY?
 - On Sept. 11th / Post-incident / Today
- How did 9/11 change the way we respond to HazMat and WMD incidents?

How did 9/11 change our training needs?



FDNY Personnel Killed



- Chief of Department
- 1st Deputy Comm.
- 2 Ass't Chiefs
- 18 Battalion Chiefs
- 20 Captains
- 47 Lieutenants
- 250 Firefighters
- 1 Chaplain
- 2 Paramedics
- 1 Fire Marshall
- Total 343

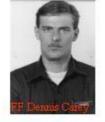


FDNY Haz-Mat Specialists Killed



Hazardous Materials Company 1

Haz-Mat 1 was formed on September 22, 1984 to combat the growing number of hazardous materials incidents in the City of New York. From it's humble beginning it quickly became a dedicated and experienced group of individuals. In it's relatively short existence, it's members have been recognized a number of times for exceptional work at operations. The work of this company and it's role in emergency response has been expanded to include Counter-Terrorist Operations and activities using advanced & sophisticated monitoring and detection equipment. This devotion to excellence is due in no small part to the commitment of the men Colleen mcArdsle see before you who gave their lives on 9/11/01. May God bless them all.















It can happen on our soil!

 "It's not a question of <u>if</u>, but when" has been replaced by "<u>When</u> and <u>where</u> will it happen again"



 Increased requests for training, equipment and funding

 Role of fire fighters as first responders

Lack of Federal support

Hi-lighted the lack of coordination between federal agencies

- 15 Engines
- 6 Ambulances
- 23 Sedans
- 16 Suburbans
 - 7 Support Vehicles
 - 91 Total Vehicles





 HazMat Training is the key to WMD Training

 We need to link equipment and approaches used in HazMat to WMD

Need for better cross-functional ICS training and practical exercises

- Level of PPE has changed
- Integration of Law Enforcement tactics in response
- Change in decontamination needs
- Lack of reliable bio detection field instruments



- Need to consider criminal intent during dispersion
- Fire Fighters need training + administrative support
- Analyze decontamination needs and capabilities



Positive HazMat/WMD Training Changes

- Students now know it can happen and are more attentive
- Increase in cross training
- Increase in cross training between inter-agencies in all levels, local-statefederal
- Federal recognition of need for backfill and administrative support



Positive HazMat/WMD Training Changes

- IAFF / NIEHS Projects
 - Rebuilding lost resources through training
 - Tech
 - CPC/Decon
 - First Responder
 - Administrative support / backfill
 - Without it, training would not be possible!



- Faster more direct access to new technologies currently classified by the military and law enforcement for response
- Firefighters do not typically need secret clearance for their work, without it they cannot get access to new technologies



- More Operations-level training for first responders to WMD events
- Unified Command training and exercises for interagency command staff members
- Additional training on PPE for responders that will protect them from the effects of WMD agents and materials



- More HazMat Technicians
- More HazMat Team Support personnel (CPC/Decon)
- Increased training of medical personnel in WMD PPE for treatment of victims in contaminated zones



Critical Incident Stress

Now and the future

- Our recruits have seen things most firefighters will never see
- How do you handle the rest of your career?







International Association of Firefighters





Protecting Emergency Responders

Lessons Learned from Terrorist Attacks

Conference on Personal Protective Technologies

New York City, December 2001





Sept. 11, 2001 -

the day our world Changed forever













Why the NYC meeting?

One part of a three-legged approach

- IA with RAND to formulate technology development roadmap
- NYC meeting to hear "lessons learned"
- New IA to evaluate environmental data to support users guidelines







NYC Meeting



Purpose

- Document first-hand views on the protection of emergency workers in terrorist attack response
 - PPE performance, availability, and use
 - Training
 - Hazard assessment and communication

Goals

- Understand the post-attack environment
- Provide input to PPE research agenda
- Improve safety PPE education and training





Conference Format

Participants:

110+ Responders with first hand experience at the attack sites

- World Trade Center
- Pentagon
- Oklahoma City
- Anthrax incidents

Process:

Panel discussions by service

- Firefighters
- ◆ EMTs
- Law enforcement
- Construction & trade services
- Public health specialists
- Federal and state agencies

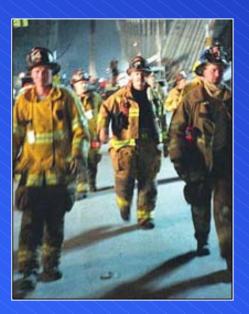
Plenary Sessions

- Protection Challenges
- Health and Safety Data
- Experience at the Sites





Recurring Themes



- The scale of the terrorism events, their duration, and the dynamic range of hazards they presented required that many emergency responders also take on atypical tasks for which they were insufficiently equipped or trained.
- The consensus among several panels was that unless practices are ingrained before a major incident and the use of equipment and procedures is part of preparedness, responders are unlikely to absorb training fully in the heat of the battle to save lives or to be predisposed to wear PPE as prescribed.





1. Resources unavailable or used ineffectively

- Large physical area
- Multiple & dynamically changing hazards
- Multiple simultaneous incidents
- Many responding agencies
- Acquisition and management of back-up supplies impeded by transportation systems shutdown
- Communications systems overloaded
- 1000's of anthrax calls
- Potential secondary incidents/devices







- 2. Responders abandoned/modified PPE during long duration campaign. Productivity Diminished
 - Equipment is designed for short intervals
 - SCBA air bottles lasted for only minutes
 - Respirator cartridges clogged
 - Batteries need recharging
 - Turnout gear heavy, hot, and uncomfortable
 - Extended wear caused blisters and fatigue
 - Disposable garments tear
 - Sustained high physiologic demands









3. Multi-Threat Events

- Large scale scene with diverse response activities
 Intense fire, falling debris, structure collapse
 search, rescue & recovery; security & crime scene;
 site stabilization & restoration; employee assistance
- Responders faced many additional risks

programs; mortuary; etc.

- Jet fuel, rubble, dust, toxins,
 body parts/fluids, hazardous materials
- Unknowns associated with terrorism
- Risks exacerbated by stress and fatigue





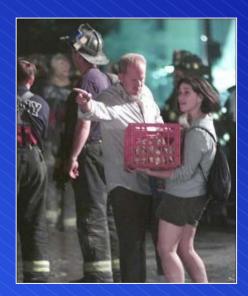




4. New Roles, New Responders

- Firefighters engaged in non-traditional tasks
- Trades workers thrown onto the front-lines
 - Equipment operators, iron-workers, sanitation, food service
- Off-duty personnel and citizen volunteers on scene
- Few agencies sufficiently prepared for "refined" anthrax
- Disaster sites were crime scenes extensive law enforcement activity
 - PPE supply and training for law enforcement very limited









What are we doing?

- SCBA standards for CBRN completed
- PAPR and APR (full face) standards
- Guidelines with a twist
- Identifying/analyzing databases (RAND)
- End-of-Service-Life research
- Changing standards to promote interchangeable of parts
- Biological protection





What are we doing?

- Decon procedures and guidance
- PAPR and APR (full face) standards
- Guidelines with a twist
- Identifying/analyzing databases (RAND)
- End-of-Service-Life research
- Changing standards to promote interchangeable of parts
- Biological protection





What's it all mean to you?

- Lighter, more comfortable PPE for long duration operations
- Interchangeable parts
- Cooling systems
- PPE with hydration capabilities
- Combination SCBA/APR units
- Effective eye protection
- PPE as an ensemble
- Multifunctional ensembles (eye, ear, head protection, communication capabilities, sensor readouts)





What's it all mean to you?

- Integrated PPT technologies
- responder tracking systems
- enhanced communications
- displays
- Size selection to include female and multicultural responders
- Emergency re-supply logistics
- On-site training/materials
- Abrasion resistant, flexible, and bio-proof ensembles







Concluding Observations

- Responders believe they lack the necessary personal protection information, training, and equipment for major disaster responses
- Strategies for effectively providing needed equipment & training must be explored
- PPE must provide appropriate balance between responder safety and mission effectiveness
- Having coordinated personal protection policies, practices, and training are essential for effective successful responses
- R&D and technology transfer could provide ways to address the problems and trade-offs identified





Critical Incident Response

Marilyn Knight, M.S.W.

Incident Management Team Southfield, Michigan

Critical Incidents



Historical Sources of CISD

- Military Science
- Police and Fire Fighters
- Emergency Medical Services

Critical Incident

an event outside of the range of normal human experience which would be distressing to almost anyone

- > any situation where a person feels:
 - overwhelmed by a sense of vulnerability
 - > lack of control over the situation

Critical Incident Situations

- sudden and unexpected
- disrupts one's sense of control
- > shatters assumptions about how the world works
- perception of a life-damaging threat
- distressing to anyone

Types of Critical Incidents

> Natural Phenomena

Technological (Omission)

Man-Induced (Commission)

Natural Phenomena

- hurricanes
- earthquakes
- > floods
- windstorms
- > tornadoes

Work Environment

- > fires
- > chemical releases
- explosions
- > electrocutions

Work Environment

- falls / falling objects
- > nuclear
- machinery accidents
- > vehicle accidents

Work Trauma

- > fatalities
- > serious injuries
 - > crushing
 - maiming
 - > burns
- > car or plane wrecks

Threats and Violence

- > verbal threats
- > assaults
- > robbery
- > rape
- attempted / actual kidnapping

Threats and Violence

- > bomb threats
- hostage situations
- > suicide
- » murder

<u>Organizational</u>

- downsizing / layoffs
- plant closings
- > criminal indictments
- death of "key" worker or executive
- > embezzlement
- > mergers
- product tampering

Crisis Reactions

The Impact of Trauma on Individuals

Crisis Reactions - Physiological

- > Shock
- > Numbness
- "Frozen Fright"
- "Fight of Flight" survival response

Crisis Reactions - Physiological

- Body pumps adrenaline
- Body relieves itself of excess fluids
 - > perspiration
 - urination / defecation
 - nausea / vomiting

Crisis Reactions - Physiological

- Senses may become "acute"
- ► Heart rate increases
- Hyperventilation
- ▶ Heightened arousal may lead to exhaustion

- Stage One:
 - > Shock
 - Disbelief
 - Denial
 - > Numbness

Stage Two: Impact Stage

Cataclysms of emotions-

- Anger / Rage
- > Fear
- > Terror
- > Grief

- Stage Two: Impact Stage
 - **Confusion**
 - > Sorrow
 - > Frustration
 - > Self-Blame / Guilt
 - > Alienation / Withdrawal

> Stage Three: Reconstruction of Equilibrium

Emotional "roller-coaster" that

eventually becomes balanced

How Traumatic Events may be Re-Experienced:

- ► Intrusive images or thoughts
- Nightmares
- > Flashbacks
- Painful memories
- ► Intense reactions to "trigger events"

"Trigger Events"

- Sensing something similar that one was acutely aware of during the traumatic event:
 - > seeing
 - > hearing
 - > touching
 - > smelling
 - > tasting

"Trigger Events"

- Returning to the Worksite where the incident occurred
- "Anniversaries" of the event
- Media articles about similar events

"Trigger Events"

- Proximity of holidays or significant "life events"
- Phases of Criminal Justice Proceedings
 - > hearings
 - > trials
 - > appeals
 - depositions
 - > identification of assailant

Recovery Pitfalls

- Need to keep "brave" front
- Suppression of feelings
- Concerns for job security
- Lack of organizational support
- Skepticism about mental health

Signs of Post Traumatic Stress Disorder

- > Painful memories of incident
- Nightmares
- Continuously re-experiencing the event
- Numbing of one's emotions
- Avoiding thoughts or activities associated with the event
- > Feeling detached or "apart" from others

PTSD

- Loss of emotional control
- ▶ Intense irritability
- > Startle reflexes
- Sleep difficulties
- Loss of sense of
 - safety and security
 - > immortality and invulnerability
 - > identity

<u>Issues with Post Traumatic Stress (PTSD)</u>

- Fear of repetition
- Rage at the source
- Self-blame and guilt
- Bereavement and grief
- > Fear of symptoms

Psychological Issues

- Conflicts with aggression and alienation
- > Embarrassment and shame
- Challenge to self-esteem
- > Fear of scrutiny

Critical Incident Response

"The second best decision, quickly made, is better than the best decision never made."

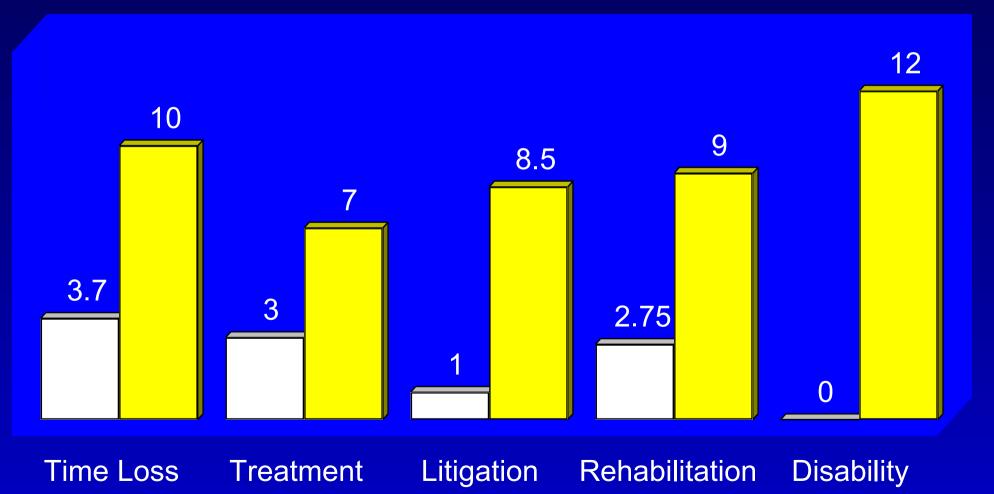
General Douglas MacArthur

Cost of Delaying Intervention

■ Early Detection

Thousands of Dollars

Late Detection



© 200% Ingident Management Team

Immediate help may be more effective than extended help at a later time.

CIS Assumptions

- "Normal people" reacting to an abnormal event
- Event is sudden, unpredictable and overwhelming
- Crisis intervention is:
 - > rapid
 - > active
 - temporary
 - > incident specific

Benefits of On-Site Crisis Team

- Immediate Response to Re-establish Control of Situation
- Sets Expectancy of Recovery
- Shows Loyalty to Employees
- Assesses Severity of Impact on Employees,Company, Customers

On-Site Crisis Goals

- Provide safety and support
- Ventilation and validation
- Explore personal impact of trauma
- "Normalize" stress reactions
- Predict and prepare
- Suggest coping strategies

On-Site Crisis Goals

- Establish follow-up plan
- Assure that problems are being addressed
- Mobilize peer / group support
- Reduce assumption of uniqueness and abnormality
- Accelerate recovery process

On-Site Crisis Activities

- **Establish Crisis Center**
- Identify Crisis Team
- Define "At-Risk" Groups
- Organize Debriefing Groups
- Establish Family Support

On-Site Crisis Activities

- Develop Follow-up Plan
- Define Internal / External Resources
- Educate Supervisors, Union on Immediate and Delayed Reactions
- Document Activities

Crisis Communications

- Identify Media Liaison
- Release Statement of Facts
- **Establish Rumor Control Hotline**
- List Crisis Team Location
- Distribute Stress Handouts

Crisis Communications

- Publish Schedule of Employee DebriefingGroups
- Release Updates of Injured Employees
- Memorial Biographies
- Define Interim Continuity Plans

Critical Incident Response Formats

Critical Incident Stress Formats

- On-Scene Support
- Defusing
- Demobilization
- Critical Incident Stress Debriefing
- > Individual Consults
- Follow-Up Services

The Critical Incident Response Program

POST INCIDENT RECOVERY

Critical Incident

PEOPLE

COMPANY IMAGE

OPERATIONS

LOSS AND RISK

Criticality Assessment

Incident Notification

Matching and Deployment of Resources

Comprehensive Impact Assessment

Investigations

Containment and Recovery

Follow-up



POST-INCIDENT RECOVERY COMPONENT

EVENT

IMPACT

FIRST RESPONDERS

IMMEDIATE SUPPORT

INTERVENTIONS



Victims Observers

traumatic stress reactions

hazmat

violence

terrorism

chemical release

workplace accident

natural disaster

Supervisors Managers

Emergency Medical Team

Security

impact assessment

personnel support

resource access

Emergency Response Team

Employee Assistance Program

impact assessment and triage

recovery strategies

site stabilization

deployment and coordination of

within 12 hours

Defusing Sessions

within 72 hours

Debriefing Sessions

after 72 hours

Intervention
Counseling
and
Follow-up

resources 002 Incident Management 7 m

Worker Re-Entry

Facilitating Worker Re-Entry

- Explore contractual options for re-entry:
 - less-demanding assignments
 - phases-in return schedules
- Identify resources for assisting the worker
- Monitor job performance
- Reasonable accommodation

Supervisor's / Employee Representative's Role During

Re-Entry

- Be model for empathy and tolerance
- ➤ Be understanding about possible limitations
- Be sensitive to needs and concerns of co-workers and organization
- Monitor for problem indicators

Supervisor's / Representative's Role During Re-Entry

- On-going Family Involvement
 - invitations to social functions
 - have supervisors / union members maintain supportive calls, visits with spouse and children

Problem Cases

Problem Cases

- Individual who "causes" injury / death to others
- Traumatized family members
- Supervisor / representative from incident scene
- Severely injured / disabled worker

The Cost of Caring

"The best deed in the world after creating a human life, is saving a human life."

Abraham Lincoln

Remember!!!

It wasn't raining when Noah built the Ark.

Thank You

Marilyn Knight, M.S.W.

Incident Management Team Southfield, Michigan

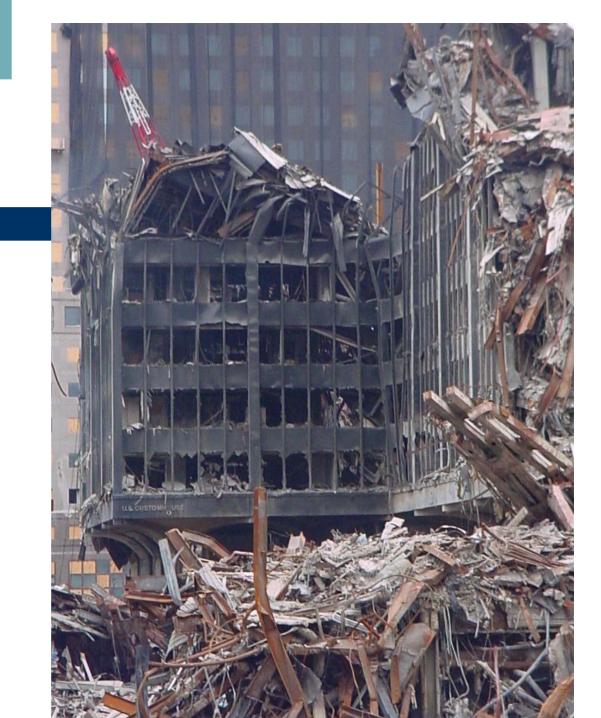
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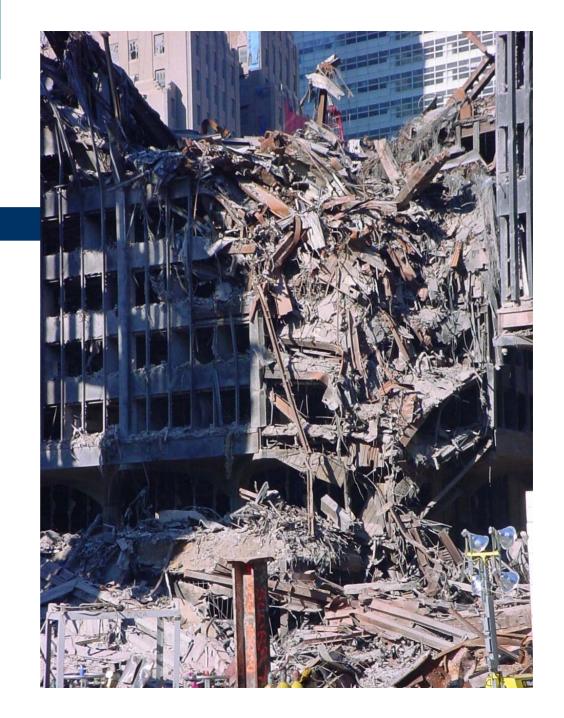
Response to Destructive Incidents

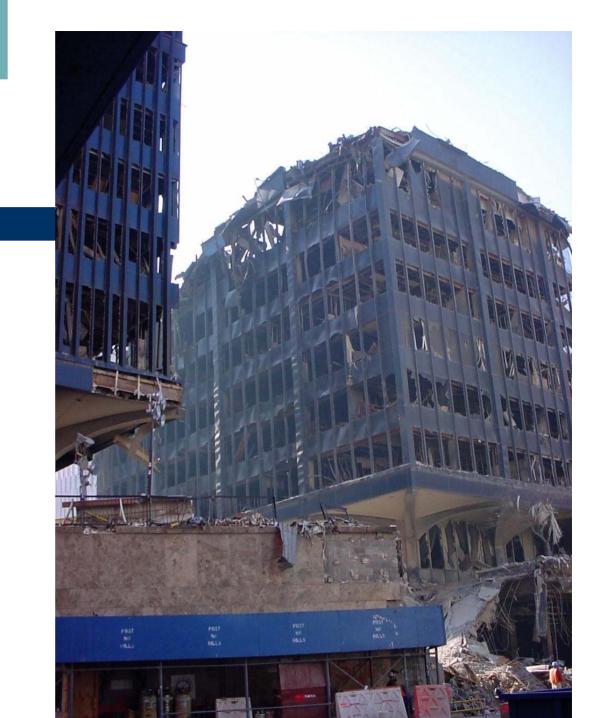


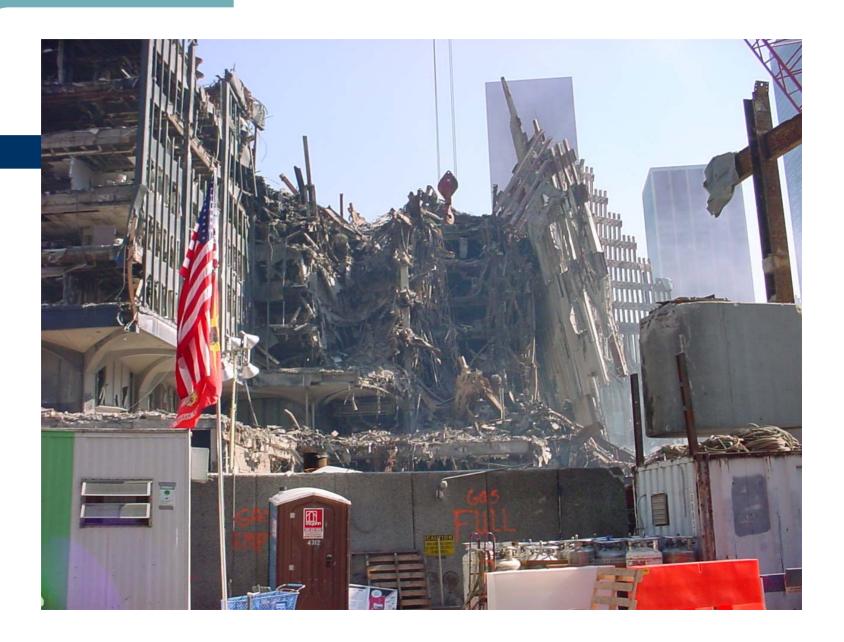
OSHA's experience at the World Trade Center

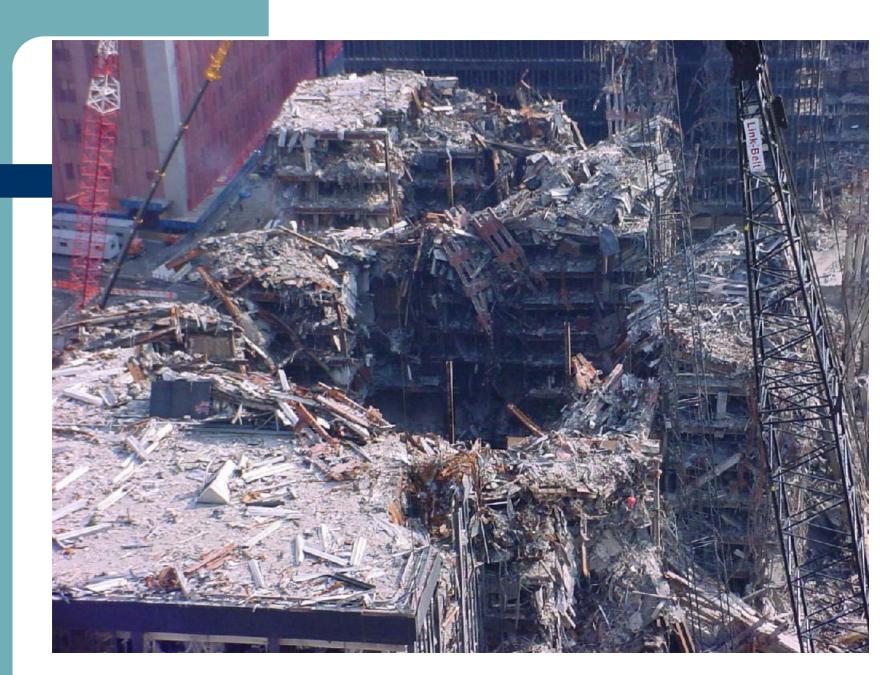
Richard Mendelson Area Director OSHA – Manhattan Area Office











Planning for emergencies

- Conduct a comprehensive assessment
- Consider accidents, fires, medical emergencies, chemicals, severe weather, transportation, utilities, deliberate acts
 - Most likely scenarios
 - Worst-case scenarios
- Implement an Emergency Action Plan

Employee training

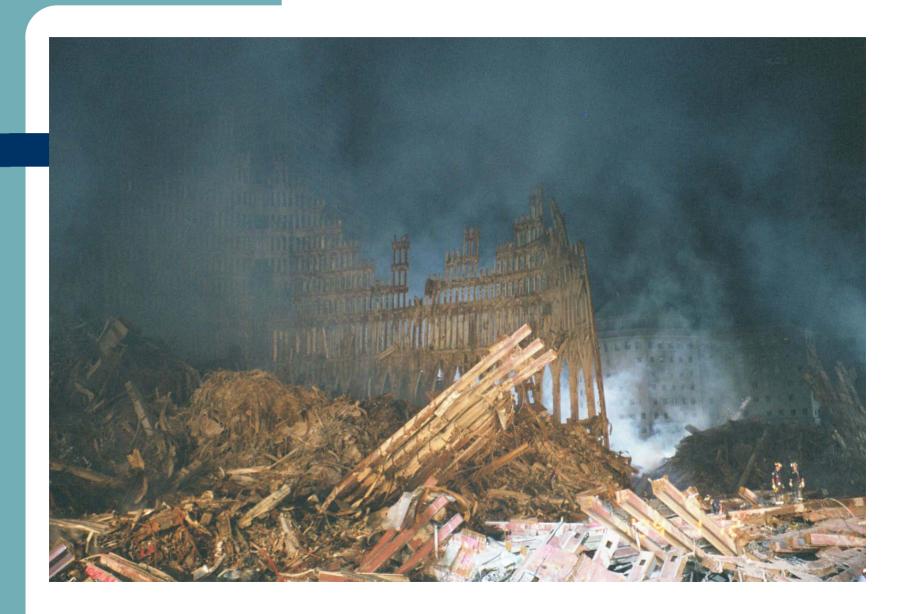
- Roles & responsibilities
- Threats, hazards, and protective actions
- Notification, warning, and communication
- Proper response
- Train employees:
 - Initially
 - New hires
 - Changes to process, facility, or plan

Important considerations

- Evacuation routes
 - Alternatives
- Muster point
 - Alternatives
- Accountability
- Handicapped individuals
- Visitors and contractors
- Coordination with other tenants
- Practice drills

Contingency plans

- Who's in charge?
- Call-up lists (kept current? available offsite?)
- Staff morale
- Temporary space
- Resumption of operations
- Telecommunication & information technology
- Administrative functions & files
- Permanent relocation



OSHA's response role

- Providing technical assistance & support
 - Advice and consultation as safety & health professionals
- Federal Response Plan
- CPL 2.94 OSHA Response to Significant Events of Potentially Catastrophic Consequences (7/22/91)

OSHA activities at WTC

- Health risk assessment & sampling
- Safety monitoring & PPE compliance
- Respiratory protection & PPE distribution
- Emergency Operations Center staffing

Safety and health hazards

- Hazards associated with initial response
- Hazards associated with long-term recovery operation
- Prediction and identification
- Control and abatement

Challenges

- Operating under incident-command structure
 - FDNY / DDC co-incident commanders
- Uniform services
- Law-enforcement considerations
 - Crime scene
- Coordination and logistics
- Volunteers, bereaved, sightseers, celebrities
 - Perimeter security
 - Access control

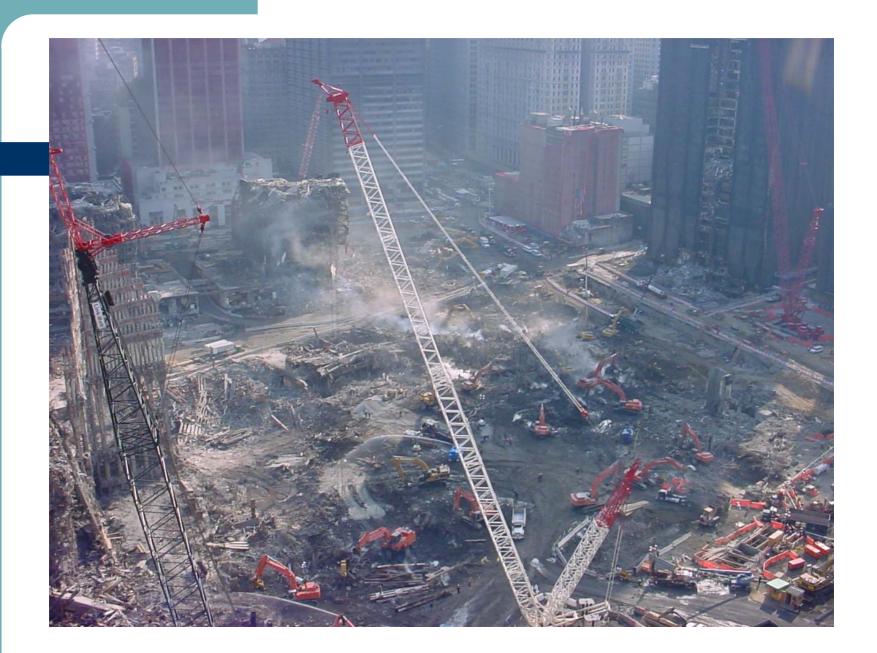
Special considerations

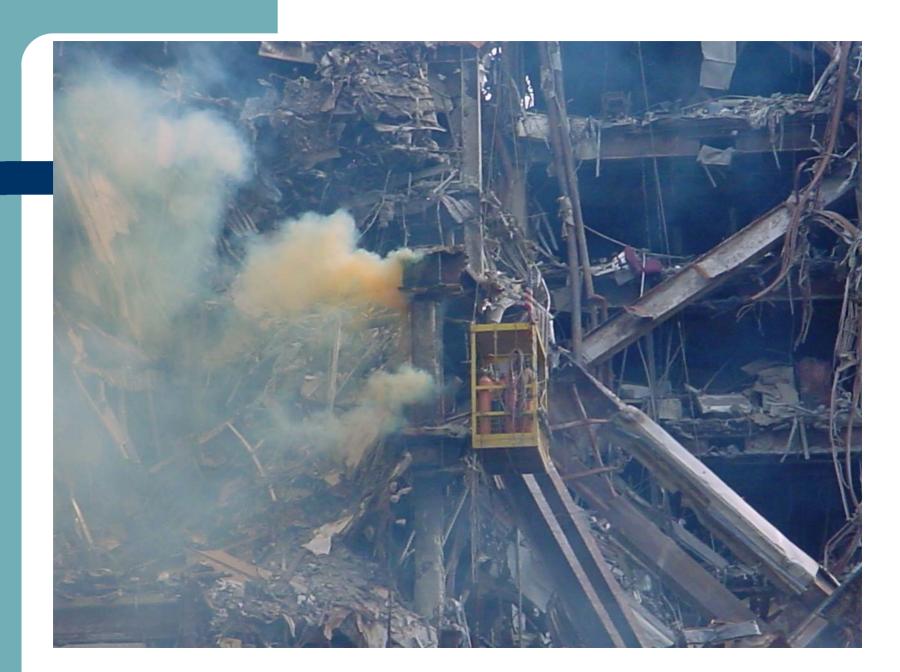
- Risk communication
- Critical incident stress
- Weather
- Fatigue
- Unknowns

Safety and health management

- Partnership agreements
- Environmental Safety & Health Plan
- Site safety & health infrastructure
- Safety and health meetings
- Standing and ad-hoc committees
- Employee involvement

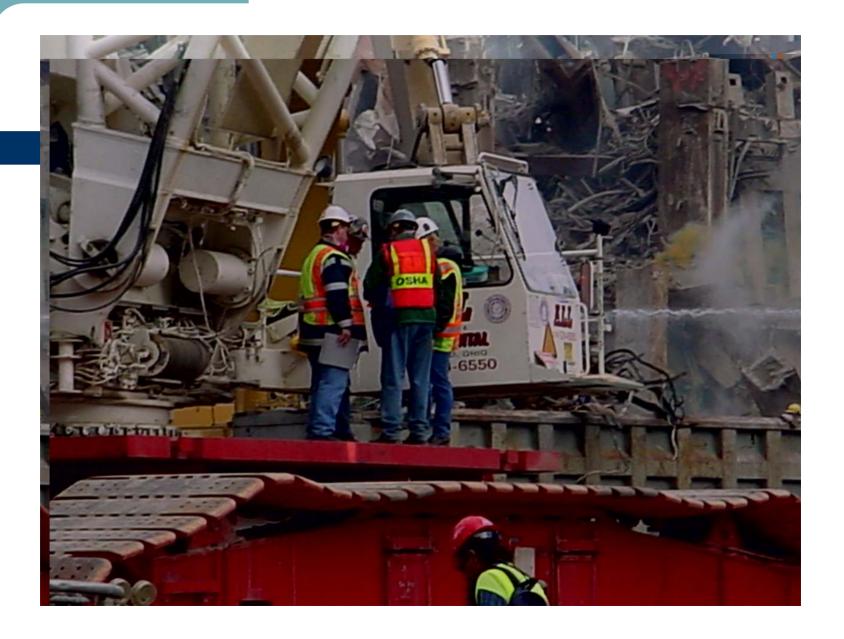






Success story: Joint Crane Inspection Task Force

- Early October:
 - Dozens of cranes on site
 - Numerous hazard interventions
- Task force launched 10/12, on-site for 3 weeks
 - 17 cranes inspected in first three days
 - 222 pieces of rigging inspected in next four days
- Follow-up: three additional one-week inspections (November, December, March)
- Incidence of crane-related hazards greatly reduced









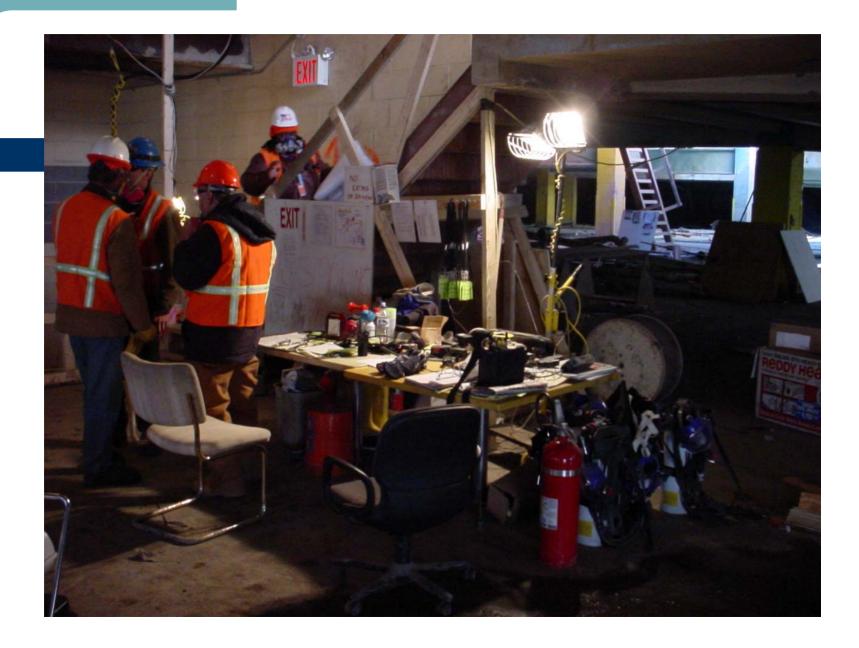






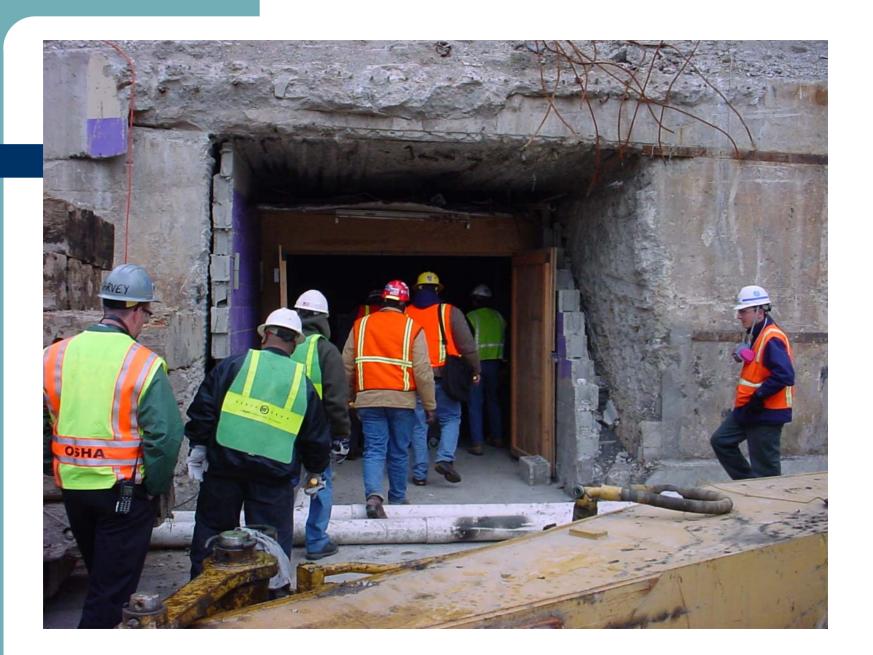
Success story:Confined space entry #1

- Area below 6WTC designated a "permitrequired confined space"
- Stewards raised concerns
- Meeting held with all parties
- Joint walk-through of space before work began
- Management adopted all suggestions



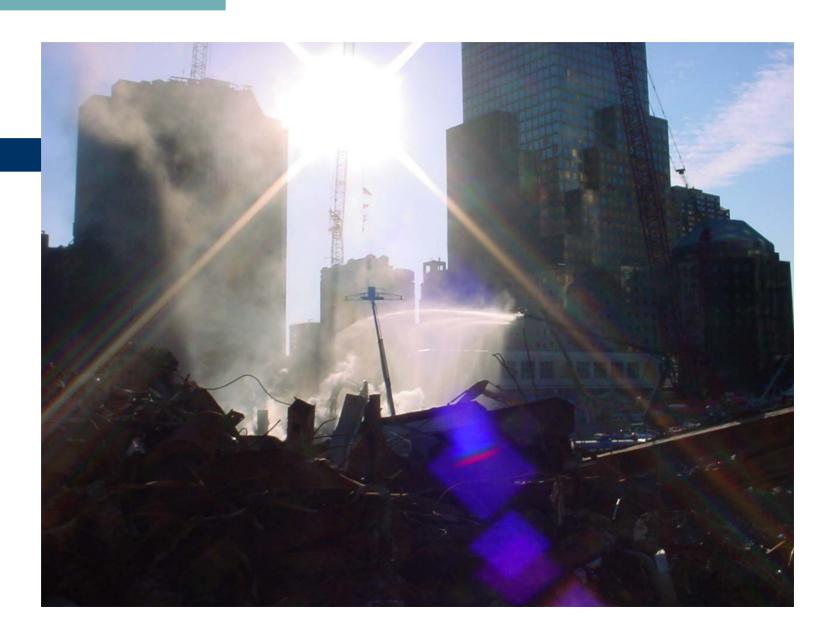
Success story:Confined space entry #2

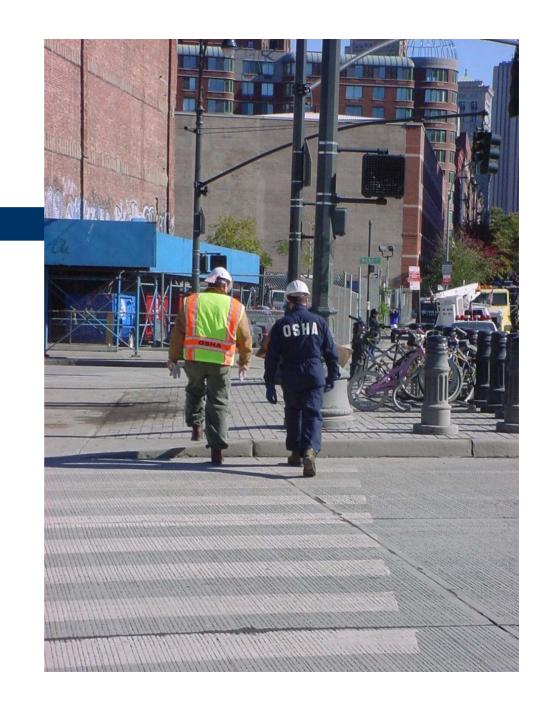
- Alleged CO overexposure reported under 5WTC
- Ad-hoc committee reviewed situation, brainstormed possible hazards and controls
- Committee conducted walk-through of entire area
- CO determined not to be a cause
- General safety & health improvements suggested
- Suggestions implemented



Success story: Evacuation drill

- Suggested by shop-stewards
- Committee formed to work out logistics
- Two drills held:
 - 6WTC confined space
 - Southern portion of pit
- Deficiencies were noted for correction
- Overall, drills were successful





Bio/Chemical Incident Response

Glenn Paulson, Ph.D.

Paulson and Cooper, Inc.

Jackson Hole, WY

Purpose

- Provide a framework
- Lessons learned
- Spark discussion
- Help set the stage for breakouts

Topics

- "Thinking about the (formerly) unthinkable"
- Similarities
- Differences
- Military experience
- Lessons learned lately

The Unthinkable

- History: of very limited use
- First responders v. skilled support personnel
- Who is in charge, and when?
- Who has the knowledge?
- Who has the equipment?
- Who has the skills?
- When is the job done?

Similarities: Biological v. Chemical Weapons

- Unexpected
- Often very limited in area first affected
- More effective inside structures
- Personal protective equipment
- Poor real time monitoring capability

Differences: Biological v. Chemical Weapons

- Mechanisms of action
- Speed of action
- Detection techniques
- Medical aspects
- Remedial measures
- Remedial equipment

Military Experience

- Hard to obtain
- Of limited use in attacks on civilians
- Need continuing access (with safeguards)

Lessons Recently Learned

- No single reliable comprehensive source of either authoritative expertise or wisdom
- Uncertainties abound
- Inherently multi-disciplinary
- Create/maintain your network
- External peer review

Suggestions for Next Steps

Recommendations from the breakout groups should be as specific as possible

- Actions/activities of awardees
- Actions/activities of Clearinghouse
- Actions/activities of NIEHS WETP
- Other actions/activities

The Federal Response Plan vs.

the National Contingency Plan during Terrorist Attacks

Rod Turpin

U.S. Environmental Protection Agency
Environmental Response Team
Edison, NJ, USA

National Contingency Plan (NCP)

- National Oil and Hazardous Substances Pollution Contingency Plan
- 1968 Clean Water Act

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1967 Oil Spill – Torrey Canyon – 37 million gallons of crude oil
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(Alaska Exxon Valdez - 11 million gallons of crude oil)

- First comprehensive system of accident reporting, spill containment, and cleanup
- Established a response headquarters, national reaction team, and regional reaction teams
 - precursors to today's NRT and RRTs.

NCP Members



- Plus state and local representatives
- Six of these agencies were designated as key Federal CT agencies DOJ/FBI, FEMA, EPA, DOD, HHS, DOE

Agencies

- Environmental Protection Agency
- U.S. Coast Guard
- Department of State
- Department of Health and Human Services
- Department of Defense
- General Services Administration
- Department of Energy
- Department of Agriculture
- Department of Labor/Occupational Safety and Health Administration
- Six of these agencies were designated as key Federal CT agencies DOJ/FBI, FEMA, EPA, DOD, HHS, DOE

Agencies, cont'd.

- Department of Transportation
- Department of the Interior
- Department of Justice
- Department of Commerce/National Oceanic and Atmospheric Administration
- Federal Emergency Management Agency
- Department of the Treasury
- Nuclear Regulatory Commission
- Six of these agencies were designated as key Federal CT agencies DOJ/FBI, FEMA, EPA, DOD, HHS, DOE

National Response Team (NRT)

- NRT does NCP planning and coordination
- NRT Chair: USEPA

NRT Vice Chair: USCG

Regional Response Teams (RRTs)

- Established by NCP to ensure regional response actions
- Made up of same Federal agencies as NRT but at a regional level
- Coordinates assistance and advice to the Federal On-Scene Coordinator (OSC)

National Response Team



Regional Response Teams

Response Assets

- Federal On-Scene Coordinators
- Regional Response Teams
- EPA Removal Managers
- Response contractor support
- Special Forces



Special Forces

- EPA's Environmental Response Team (ERT)
- EPA's Radiological Environmental Response Team (RERT)
- NOAA and EPA Scientific Support Coordinator (SSC)
- USCG National Strike Force (NSF)
- USCG District Response Groups (DRG)
- USCG Public Information Assist Team (PIAT)
- Navy Supervisor of Salvage (SUPSALV)
- Radiological Assistance Teams (RATs)



Federal OSC's Role

- Federal OSCs play a pivotal role in a response.
 They ensure:
 - a. that the responsible party (RP) cleans up the spill or release.
 - b. immediate access to technical assistance and cleanup contractors if the RP does not adequately respond.

Federal OSC's Role, cont'd.

- Direct/coordinate, and/or provide technical assistance to all response efforts at site
- Maintain final decision-making authority for protecting health and safety
- Ensure access to information by other interested relevant parties

What is the NCP's Involvement in Counter Terrorism?

Response to Chemical Terrorism

Response to Radiological Terrorism

National Response System

Response to Biological Terrorism

NBC
Domestic Preparedness
Training Program

Federal Response Plan

- Issued in 1992, the FRP describes the mechanism and structure by which the Federal Government mobilizes to address the consequences of any major disaster or emergency that overwhelms the capabilities of State and local governments.
- Federal assistance is available to:
 - 1. save lives
 - 2. protect public health, safety, and property
 - 3. alleviate damage and hardship
 - 4. reduce future vulnerability

Letter of Agreement

- By signing this letter of agreement, Federal departments and agencies commit to:
 - * Support the FRP concept of operations and carry out their assigned functional responsibilities.
 - * Cooperate with the Federal Coordinating Officer appointed by the President.
 - * Make maximum use of existing authorities to reduce disaster relief costs.
 - * Form partnerships with counterpart State agencies, voluntary organizations, and the private sector to take advantage of all existing resources.
 - * Develop headquarters and regional planning, exercise, and training activities.

Signatories to the Federal Response Plan

James & With Thurman

Federal Emergency Management Agency

General Services Administration

Assistant Attorney General Administration Department of Justice

Assistant Secretary Administration and Management Department of Labor

Administration Department of Agriculture

Secretary Department of Commerce

National Aeronautics and Space Administration

National Companications System

Bureau of Administration Department of State

Department of Transportation

Secretary of the Army Department of Defense

Department of Education

Nuclear Regulatory Commission

Office of Personnel Management

Assistant Secretary

Management Department of the Treasury Assistant Secretary

Human Resources and Administration Department of Veterans Affairs

Director, Office of Nonproliferation and National Security Department of Energy

Secretary Department of Health and Human Services

Associate Administrator

Disaster Assistance Board of Directors Small Business Administration Tennessee Valley Authority

Assistant Administrator Agency for International Development

American Red Cross

Department of Housing and Urban Development

Policy, Management, and Budget Department of the Interior

U.S. Postal Service

Environmental Protection Agency

Federal Communications Commission

9230.1-PL Supersedes FEMA 229 (April 1992)



Policies **Authorities Plans** Other Agency Plans, MOUs, and Directives Federal Radiological Emergency Response Plan FBIWMD Incident Contingency Plan (Including Regional Supplements) Voluntary Organization Plans National Contingency Plan Federal Response Plan International Plans Private Sector Plans State Plans Local Plans **Procedures**

FRP Actions

- State and local responders handle most disasters and emergencies
- Federal Government is asked for assistance to assist when disaster exceeds state or local capabilities
- It employs a multi-agency incident command system (ICS)
 - --- based on fire and rescue ICS
- Provides for other Federal emergency operations, such as the NCP
- It subdivides major disasters/emergencies into twelve emergency support functions (ESFs)

Emergency Support Functions (ESF)

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- 1. Transportation
- 2. Communication
- 3. Public works & engineering
- 4. Firefighting
- 5. Information and planning
- 6. Mass care
- 7. Resource support
- 8. Health and medical services
- 9. Urban search and rescue
- 10. Hazardous materials
- 11. Food

Primary Agency

Dept. of Transportation

National. Communication System

Dept. of Defense, US Army Corps of Engineers

Dept. of Agriculture, Forest Services

Federal Emergency Management Agency

American Red Cross

General Service Administration

Dept. of Health and Human Services

Federal Emergency Management Agency

U.S. Environmental Protection Agency

Dept. of Agriculture, Food & Nutrition Service

12. Energy Dept. of Energy

Emergency Support Function Designation Matrix

#	1	2	3	4	5	6	7	8	9	10	11	12
ESF Agency	Transportation	Communications	Public Works and Engineering	Firefighting	Information and Planning	Mass Care	Resource Support	Health and Medical Services	Urban Search and Rescue	Hazardous Materials	Food	Energy
USDA	s	s	s	Р	S	S	s	S	S	S	Р	S
DOC		s	s	S	s		s			S		
DOD	s	s	Р	s	s	s	s	S	s	S	S	S
DOEd					s							
DOE					s		s	s		S	9.1.1.1.1.1.1.1	Р
HHS			S		S	s		Р	s	S	S	
HUD						s						
DOI		s	s	s	S					S		S
DOJ					S			S	S	S		
DOL			s				s		s	S		
DOS	s									S.		S
DOT	Р				S		S	S		S		S
TREAS	S				S		S					
VA			S			s	s	s				
AID								s	s			
ARC					S	Р		s			s	
EPA			s	s	S			s		Р	S	
FCC		s										
FEMA	s	s		s	Р	S	S	S	Р		S	
GSA	s	s			S	S	Р	S			S	
NASA					S		S		S			
NCS		Р			s		s	s				s
NRC					S					s		S
ОРМ							s					
SBA					s							
TVA	s		S									s
USPS	s					s		s				

Р

= Primary Agency: Responsible for Coordination of the ESF

s

= Support Agency: Responsible for Supporting the Primary Agency

Signatories to the Federal Response Plan

Federal Emergency Management Agency

Deputy Administrator General Services Administration

Administration Department of Justice

Assistant Secretary Administration and Management Department of Labor

Administration Department of Agriculture Department of Commerce

National Aeronautics and Space Administration

National Companications System

Assistant Secretary Bureau of Administration Department of State

Secretary of the Army Department of Transportation Department of Defense

Department of Education

Nuclear Regulatory Commission

Office of Personnel Management

Management Department of the Treasury Assistant Secretary

Human Resources and Administration Department of Veterans Affairs

Director, Office of Nonproliferation and National Security Department of Energy

Department of Health and Human Services

Associate Administrator Disaster Assistance Small Business Administration

Board of Directors Tennessee Valley Authority Agency for International Development

American Red Cross

Department of Housing and Urban Development Policy, Management, and Budget Department of the Interior

Environmental Protection Agency

Federal Communications Commission

- NCP & ESF Primary

- ESF Primary only

- NCP only

U.S. Postal Service

Emergency Support Function #9 (Urban Search & Rescue Annex)

Participating agencies: FEMA is the primary agency with the following as the supporting agencies:

Dept. of Agriculture

Dept. of Health & Human Services

Agency for International Development

Dept. of Defense

Dept. of Justice

Dept. of Labor

National Aeronautics & Space Administration

ESF #9 Purpose & Scope

- Deploy National Urban Search & Rescue (US&R) Response Units.
- Provide lifesaving assistance such as:
 - * Locating and extracting victims
 - * Providing on-site medical treatment

Emergency Support Function #10(Hazardous Materials Annex)

Primary Agency U.S. Environmental Protection Agency

Support Agencies

U.S. Coast Guard

Dept. of Agriculture

Dept. of Commerce

Dept. of Defense

Dept. of Energy

Dept. of Health & Human Services

Dept. of the Interior

Dept. of Justice

Dept. of Labor

Dept. of State

Dept. of Transportation

Nuclear Regulatory Commission

ESF #10 Purpose & Scope

- Provide Federal support to releases of hazardous materials
 - * Hazardous materials is defined to include:
 - Oil
 - **CERCLA** hazardous materials
 - Weapons of mass destructions
- The ESF #10 response is carried out under the NCP

Conclusions

- Title is misleading
- Until September 11, 2001, FRP response activities fit nicely into ESF activities' rules of engagement:
 - floods
 hurricanes
 oil spills
 chemical spills
 etc.

Conclusions, cont'd.

 The September 11, 2001 attacks on the Pentagon and the World Trade Center showed that the unimaginable is possible – more than one or two ESF may be involved.

Conclusions, cont'd.

 As the NCP has been refined since 1968, so will the FRP.

September 11, 2001 has demonstrated the need for:

- * Better communication
- * Well established chain of command
- * Good inter-agency coordination

For more information:

