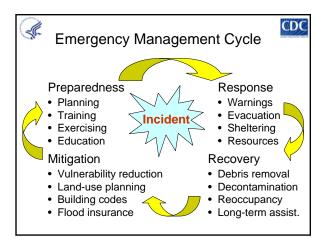




Module Objectives



- · Discuss plans, systems, guidelines, and programs that guide the role of environmental health during the four phases of the emergency management
- Identify emergency preparedness, response, recovery, and mitigation resources for environmental
- · Describe the structures and parameters in which environmental health will function during an emergency or disaster.
- Describe public health emergency preparedness and response in Massachusetts





The Stafford Act



CDC

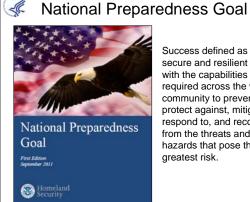
- Robert T. Stafford Disaster Relief & Emergency Assistance Act (1988)
- Amended version of Disaster Relief Act of 1974
- Provides statutory authority for most Federal disaster response activities
- Triggered by Presidential Disaster Declaration
- · Financial & physical assistance through FEMA



PPD-8: National Preparedness



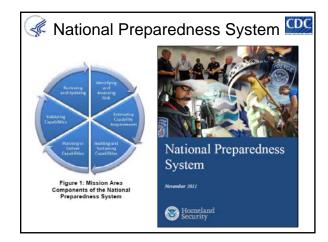
- Replaces HSPD-8 (National Preparedness)
- · Aimed at strengthening the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to the security of the Nation, including acts of terrorism, cyber attacks, pandemics, and catastrophic natural disasters.
- Directs development of
 - National Preparedness Goal
 - National Preparedness System
 - Campaign to Build and Sustain Preparedness
 - National Preparedness Report (annually)



secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.

Success defined as "A







National Infrastructure Protection Plan (NIPP)

CDC

CDC

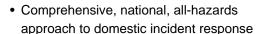


- Provides a unifying framework that integrates a range of efforts designed to enhance the safety of our nation's critical infrastructure.
- Goal is to build a safer, more secure, and more resilient America by preventing, deterring, neutralizing, or mitigating the effects of a terrorist attack or natural disaster, and to strengthen national preparedness, response, and recovery in the event of an emergency.
- 18 critical infrastructure sectors each with a Sector-Specific Agency (SSA) and Sector-Specific Plan (SSP)





National Response Framework (NRF)



- Overview of key response principles, roles, and structures that guide national response
- Contains Emergency Support Functions (ESFs) and support and incident annexes
- Replaces the National Response Plan (NRP)



Emergency Support Functions (ESFs)

CDC

- ESF #1 Transportation
- ESF #2 Communications
- ESF #3 Public Works & Engineering
- ESF #4 Firefighting
- ESF #5 Emergency Management
- ESF #6 Mass Care, Emergency Assistance, Housing & Human Services
- ESF #7 Resource Support
- ESF #8 Public Health & Medical Services

- ESF #9 Search & Rescue
- ESF #10 Oil & Hazardous Materials Response
- ESF #11 Agriculture & Natural Resources
- ESF #12 Energy
- ESF #13 Public Safety & Security
- ESF #14 Long-term Community Recovery
- ESF #15 External Affairs





National Disaster Recovery Framework (NDRF)



- · Consistent with the vision set forth in PPD-8
- Enables effective recovery support to disaster impacted states, Tribes, Territorial, and local jurisdictions
- Provides a flexible structure for disaster recovery managers to operate in a unified and collaborative manner
- Focuses on how to restore, redevelop, and revitalize the health, social, economic, natural, and environmental fabric of the community and build a more resilient Nation
- First framework published under PPD-8 reflecting the core recovery capabilities by supporting operational plans as an integral element of a National Preparedness System







National Incident Management System (NIMS)



- Established through Homeland Security Presidential Directive (HSPD) - 5
- · Comprehensive, national approach to incident management
- · Standardized organizational structures
- · Applicable to
 - All jurisdictional levels & functional disciplines
 - All incidents and hazards
 - Public and private entities

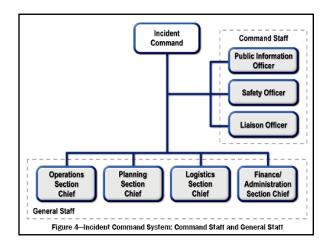


Incident Command System (ICS)



- · Standard, on-scene, all-hazard incident management system
- · Features include
 - Common terminology
 - Organizational resources
 - Manageable span of control
 - Organizational facilities
 - Use of position titles
 - Incident Action Plan (IAP)
 - Integrated communications
 - Accountability

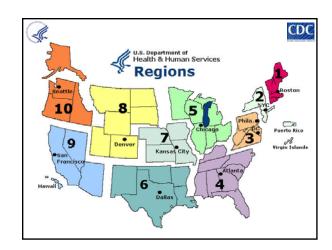


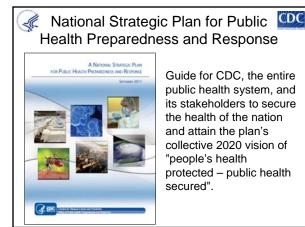


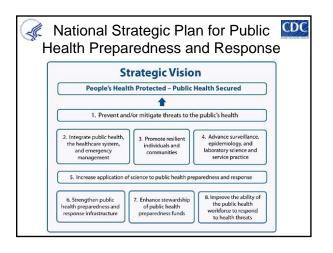


HHS Office of the Assistant Secretary for Preparedness and Response (ASPR)

- · Federal lead for ESF-8 activities
- Office of Preparedness and Emergency Operations (OPEO)
 - Secretary's Emergency Operations Center (SOC)
 - Incident Response Coordination Team (IRCT)
 - Planning and evaluation of exercises
 - Coordination of HHS COOP and COG programs
 - National Disaster Medical System (NDMS)
- Regional Emergency Coordinators (RECs)









CDC Public Health Preparedness Capabilities

Creates national standards for public health preparedness capabilitybased planning and assists state and local planners in identifying gaps in preparedness, determining specific jurisdictional priorities, and developing plans for building and sustaining capabilities





CDC Public Health **Preparedness Capabilities**



- Community Preparedness
- Community Recovery
- **Emergency Operations** Coordination
- **Emergency Public** Information and Warning
- 5. Fatality Management
- 6. Information Sharing
- Mass Care
- Medical Countermeasure Dispensing

- 9. Medical Material Management & Distribution
- 10. Medical Surge
- 11. Non-pharmaceutical Interventions
- 12. Public Health Laboratory Testing
- 13. Public Health Surveillance and Epidemiological Investigation
- 14. Responder Safety & Health
- 15. Volunteer Management



Comprehensive Preparedness Guide (CPG) 101



CDC



Developing and Maintaining **Emergency Operations Plans**



- Response and recovery planning guidance for state, territorial, tribal, and local governments
- Extends to prevention and protection mission areas.
- Guidance on emergency operations plan (EOP) development.
- Integrates concepts from NIMS, NRF, NIPP, lessons learned, and other plans, guidance, and activities
- Replaces State and Local Guide (SLG) 101



Emergency Operations Plan (EOP)



- · All hazards
- · The basic plan
- · Functional annexes
 - Focus on critical emergency functions
 - Communications, evacuation, mass care, health & medical services, environmental health, etc.
- Incident/hazard specific appendices
 - Based on hazard vulnerability assessment (HVA)
 - Tornado, earthquake, hurricane, terrorism, etc.



Other Parts of the EOP



(continued)

- Standard Operating Procedures (SOPs)
 - Provide detailed instructions to fulfill responsibilities & perform tasks in the EOP
 - May or may not be attached to EOP
- Standard Operating Guidelines (SOGs)
 - Similar to SOPs, but less proscriptive
 - Guidelines/guidance vs. procedures
 - Accountability/liability factor



The Planning Process



- · More important than the plan itself
- Don't "reinvent the wheel"
- Don't go it alone... use a team approach
- · Don't forget the politicians and administrators
- Plan development, validation & maintenance
- · Continuous process





Credentialing for **Emergency Response**



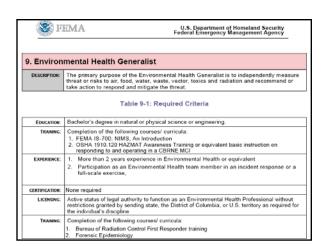
- · NIMS process for validating personnel qualifications and providing authorization to perform specific functions & to have access to an incident involving mutual aid.
- · Process entails objective evaluation of:
 - Certification, license, or degree
 - Training and experience
 - Competence or proficiency to meet nationally accepted standards, provide particular services and/or functions, or perform specific tasks under specific conditions during an incident

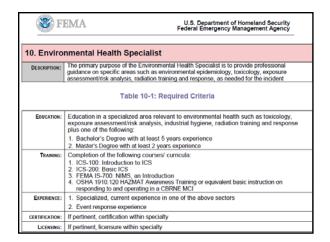


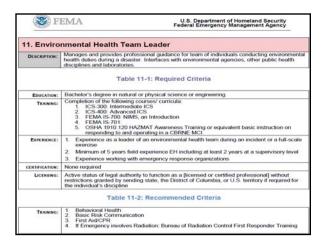
Credentialing for **Emergency Response** (continued)

CDC

- National Emergency Responder Credentialing System will document minimum professional qualifications, certifications, training, and education requirements that define the standards required for specific emergency response functional positions.
- Three NIMS environmental health job credentialing titles for emergency response





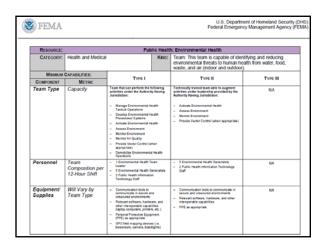


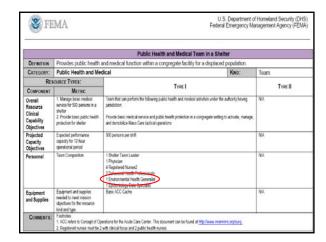


Resource Typing



- · Categorization of personnel, resources, and assets according to specific criteria
- NIMS resource typing is based on
 - Category: Where a resource is most useful (e.g., Public Health and Medical)
 - Kind: Broad classes that characterize resources
 - Components: Elements that make up a resource
 - Metrics: Measurable standards
 - Type: Level of capability
- Environmental health resource type under Public Health and Medical category





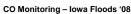


EH Response Teams



- Several states already have or are developing these (AZ, CA, FL, GA, IA, IN, KY, LA)
- · Based on NIMS credentialing & resource typing









Mutual Aid



- Agreements between agencies, organizations, and jurisdictions that provide a mechanism to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services.
- Primary objective is to facilitate rapid, shortterm deployment of emergency support prior to, during, and after an incident.



Types of Mutual Aid Agreements



- International (e.g., PNEMA, IEMA-MOU)
- Regional (e.g. Great Lakes Border Health Initiative, Mid-America Alliance for Public Health Preparedness)
- State-to-State (e.g., EMAC)
- County-to-County
- · City-to-City
- Interagency and Intra-agency
- · Private Sector-to-Government



What Is EMAC?



- Video
- Voluntary interstate mutual aid compact
- Ratified by Congress and signed into law in 1996 (PL 104-321)
- Predecessor was Southern Regional Emergency Management Compact (SREMAC)
- 50 states, 3 territories (USVI, PR & Guam), and DC have enacted EMAC legislation
- · Administered and managed by NEMA
- Mission: share resources during disasters



EMAC Mission Ready Packages (MRPs)

- CDC
- 120 total Designed to address
 - Mission
 - Limitations that might impact mission
 - Required support
 - Space needed to stage and complete mission
 - Estimated cost
- Based on NIMS credentialing and resource typing
- Three EMAC MRPs for EH

64	RETAIL FOOD AND LODGING ASSESSMENT/ INSPECTION PACKAGE					
э.	TASK & PURPOSE: To assist local and state authorities in assessing/inspecting retail food and lodging establishments during emergency response operations within the state in support of Emergency Management objectives.	b.	MISSION: Retail Food Service Assessments Inspections Lodging Facility Assessments Inspections			
ů	ESFs: 8 (Public Health and Medical Services), 14 (Long-Term Community Recovery)	d.	LIMITATIONS: Retail food service and lodging assessment inspection grodance, repolations, procedures, standards, and sudicities flow state to state Litegration with local trate federal public health, environmental health, business, and emergency response activities			
*	PERSONNEL 2 - 10 Smitterium, Registered Environmental Health Specialists, Industrial Hygienists, other qualified personnel	£	EQUENTY: Vehicle-invention on (2 responses per vehicle) Go bags lots Assessment imperior forum laits Mobile tastilise phones GP units Fatalisphs Other equipment, is necessary			
a)	REQUIRED SUPPORT: Billeting and meal support Fuel for veilacle(s) Maps of impacted area(s) Other required support, as needed	h.	WORKS WITH: Local state federal public health and environmental health agencies Business and private industry Other agencies and organizations, as necessary			
· ·	N-BOUR SEQUENCE: N-24	j.	SPECIAL INSTRUCTIONS: • Must be self-importing for up to first 72hrs • Interface with local state federal poblic health, environmental health, business, and emergency response operations • 10 - 14 days deployment			
k.	ESTIMATED COST PER DAY: PERSONNEL: \$400.00/person		EQUIPMENT: \$1,170.00 TOTAL:\$5,170.00			

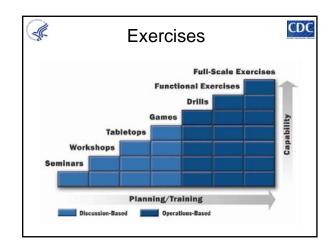
65	PUBLIC/PRIVATE WATER SUPPLY ASSESSMENT/INSPECTION PACKAGE				
a.	TASK & PURPOSE: To assist local and state sutherities in assessing impecting public and/or private water supply systems (e.g., municipal) water systems, wells, etc.) during emergency response operations within the state in support of Emergency Management objectives.	ь.	MISSION: • Poblic-private water supply system assessment/inspection, testing, and remediation		
с.	ESTs: 3 (Public Works and Engineering); It (Public Health and Medical Services); 14 (Long-Term Community Recovery)	d.	LIMITATION'S: Public-private water upply system assessment/impection, testing, and remediation pulsance, regulation, percedures, standardes, and subscripte from unite to state Vasiety-infliferences in public-private water supply systems from state to state (e.g., diffield well, day well, cristern, etc.) Integration with local/state federal public health, environmental health, public words, and emergency response activates		
e.	PERSONNEL 2 - 10 Sanitarians, Registered Environmental Health Specialists, Industrial Hypematis, Certified Imprectors, Engineers, public works personnel, other qualified personnel Some personnel may also have Water Treatment Certification	£	EQUIPMENT : Vehiclevienat can (2 responder per vehicle) Go* bars lets Water assessment impection from labs Water strong uppfore kin Mobels water for per per per per per per per per per pe		
8-	REQUIRED SUPPORT: Billheting and meal support Fuel for vehicle(s) Maps of impacted area(s) Other required support, as needed	h.	WORKS WITH: Local state federal public health, environmental health, and public works agencies and organizations Business and private industry Other agencies and organization, as necessary		
i.	N.HOUR SEQUENCE: N+24	j.	SPECIAL INSTRUCTIONS: • Must be self-supporting for up to first 72hrs • Interface with local interfederal public health, environmental health, public works, and emergency operations • 10 - 14 day deployment		

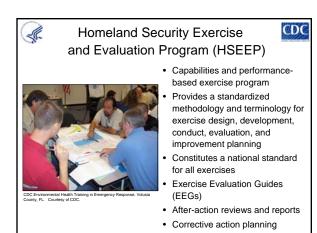
66	ONSITE WASTEWATER ASSESS	M	ENT/INSPECTION PACKAGE
a.	TASK & PURPOSE: To assist local and state suthersties in assessing impecting public and private wastewater systems (e.g., municipal wastewater treatment systems, septic studs, etc.) affected by the disaster within the state in support of Emergency Management objectives.	ь.	MISSION: Assessment impection of operational status of public and private wastewater systems
с.	ESFs: 3 (Public Works and Engineering); 8 (Public Health and Medical Services); 14 (Long-Term Community Recovery)	d.	LIMITATIONS: Public private wastewater system assessment/imspection, testing, and remediation guidance, regulations, procedures, standards, and sufficients from state to state Integration with local/state federal public health, environmental health, public works, and emergency response activities
4	FERSONNEL 2: 10 Sanitarians, Registered Environmental Health Specialists, Industrial Health Specialists, Industrial Gualified personnel Some personnel may also have Wastewater Treatment Certification	£	EQUIPMENT (10 Veholes) Vehiclevisma care (2 responder per vehicle) Go- bags late Waterwater assessment inspection from kits Waterwater assessment inspection from kits Mobile statistic phonon OPS unit Flashights Other enquantat, as necessary
rá .	REQUIRED SUPPORT: - Billeting and meal support - Fuel for vehicle(v) - Maps of impacted area(s)	h.	WORKS WITH: Local tate federal public health, environmental health, and public works agencies and organizations Business and private industry Other apencies and organizations, as necessary Homeowners' general public
4	N-HOUR SEQUENCE: N+24 to N+48	j.	SPECIAL INSTRUCTIONS: Must be self-supporting for up to first 72hrs Interface with local/state federal public health, environmental health, public works, and emergency operations Interface with homeowners/general public 10.14 day deployment
k.	ESTMATED COST PER DAY: PERSONNEL: \$400.00/person	E	QUIPMENT: \$1.170.00 TOTAL: \$5,170.00

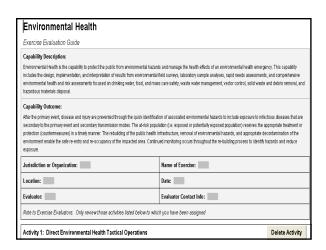


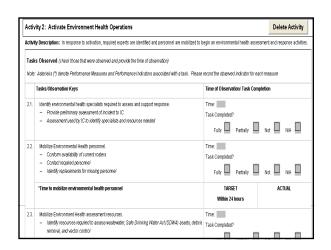
















Continuity of Operations (COOP) Planning



- · Ensure continued performance of essential functions
- · Reduce loss of life and minimize damage
- · Ensure succession of key leadership
- · Reduce/mitigate disruptions to operations
- · Protect essential assets
- · Achieve timely recovery/reconstitution to pre-event status
- Maintain a training program for validation









Staging Area



- · Usually temporary location
- · Established by **Operations Section** Chief
- · Can have multiple staging areas

Operations Section Chief

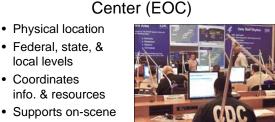
· Positioning of resources awaiting assignment · Manager assigned to each staging area by



· Physical location

S.

- local levels
- Coordinates info. & resources
- · Supports on-scene operations
- Can be organized by functional disciplines, jurisdictions, ICS, or a combination of all three



Emergency Operations

CDC



Joint Field Office (JFO)



incident management

field structure

coordination of

Temporary facility

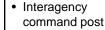
Central location for

response and short-

term recovery efforts







- · Established by the Federal Bureau of Investigation (FBI)
- Manages terrorist threats and incidents



- · Investigative and intelligence activities
- · Coordinates with state, local, and tribal law enforcement and other agencies



Organized, staffed & managed according to NIMS

Led by Unified Coordination Group (UCG)



Joint Information Center (JIC)







- Focal point for release of public information
- Established at or virtual connection to JFO, EOC, or other facility
- May be established at multiple locations
- Staffed by external affairs (ESF #15) personnel from various agencies

Public Health Emergency Preparedness in Massachusetts

State and Local Partnership



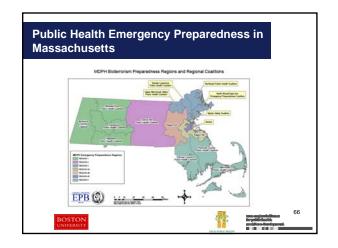


Public Health Emergency Preparedness in Massachusetts

- The Emergency Preparedness Bureau (EPB) is a unit of the Massachusetts Department of Public Health and has responsibility for policy-making and program coordination across all DPH emergency preparedness
- EPB provides support to local health departments' emergency preparedness efforts through the CDC Public Health Emergency Preparedness (PHEP) program and state funding









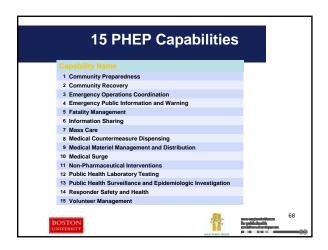
Public Health Emergency Preparedness in Massachusetts

- In 2011, CDC issued a new cooperative agreement through the PHEP program to fund public health preparedness.
- The program is based on 15 Capabilities, which are national standards for public health preparedness capability-based planning and will assist state and local planners in identifying gaps in preparedness, determining the specific jurisdictional priorities, and developing plans for building and sustaining those capabilities.

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Public Health Emergency Preparedness in Massachusetts

In 2011 PHEP Funding Supports these local health activities:

- · Hazard Vulnerability Analysis
- Planning (all-hazards, COOP, EDS);
- Testing and updating 24/7 contact lists;
- EDS planning and CDC-required metrics for testing EDS operational capabilities;
- · NIMS and ICS trainings for appropriate personnel;
- · continuing development of mutual aid agreements;
- · updating multi-year exercise plans; and
- Support to individuals requiring additional assistance.

Public Health Emergency Preparedness in Massachusetts

Other Emergency Preparedness Functions coordinated by EPB

 The Hospital Preparedness Program is tasked with building medical surge capability through planning, personnel, equipment, training and exercise capabilities at the state, regional, and local levels.

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70

Public Health Emergency Preparedness in Massachusetts



 The Medical Reserve Corps' mission of the Medical Reserve Corps (MRC) is to improve the health and safety of communities across the country by organizing and utilizing public health, medical and other volunteers. Massachusetts has 46 recognized MRC units.



 Massachusetts Responds is the statewide volunteer registration system for MRC units and unaffiliated volunteers.





71

How are Emergencies handled in MA? 2008 Ice Storm



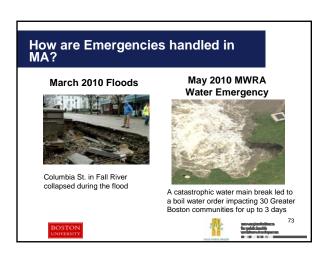
The Emergency Shelter in Fitchburg Remained open for 2 weeks after the storm

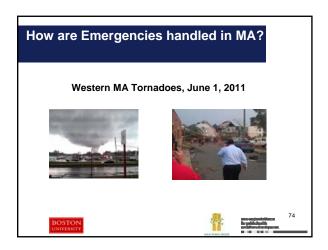


Worcester -- The first public H1N1 Clinic in MA 11/4/09



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How are emergencies handled in MA?

The Massachusetts Emergency Management Agency (MEMA) coordinates federal, state, local, and private resources throughout the Commonwealth during times of disaster and other types of emergencies.

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75

How are emergencies handled in MA?

With headquarters in Framingham and four regional offices, MEMA:

- Helps develop response plans for all types of hazards
- · Trains emergency personnel
- Provides technical assistance
- Assists in responding to and recovering from emergencies

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76

How are emergencies handled in MA?

- Acts as the State Emergency Operations Center (SEOC) during emergencies, providing state-wide dispatch services 24 hours a day, 7 days a week
- SEOC serves as the command and control center for the Commonwealth during an emergency

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77

How are emergencies handled in MA?

When fully activated, the SEOC is staffed according to 18 Emergency Support Functions (ESF).

The federal, state, local, volunteer, public and private organizations that comprise the ESFs are part of the Massachusetts Emergency Management Team (MEMT).

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