Disaster Management/Emergency Preparedness in Maine

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Maine Medical Center
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MAINE EMS

Expectations/Objectives

- What are the types of disasters most likely in the state of Maine?
- What emergency preparedness activities that are on going in the state?
- What is the "All Hazards" approach to disaster preparedness?
- What are the various roles – between local, state, and federal responders?
- What is the Emergency Medical Services for Children's grant Maine recently received and how does it play a role in emergency preparedness?

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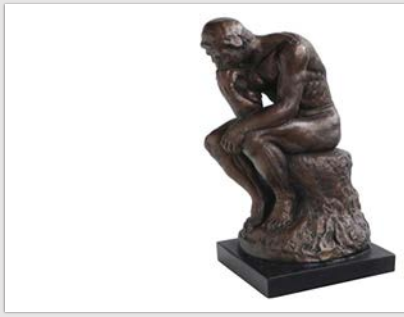
What is a Disaster?

Massachusetts-1 Disaster Medical Assistance Team, Response to New York City, September 2001

US Army Base Ft. Devens, Massachusetts, 1918



Timeframe – Within 5 years

Known Risk?

Historical Data

Future Scientific Projections (including impact of climate change)

Risk = Probability (Likelihood) x Severity (Magnitude – Mitigation)

Human Impact

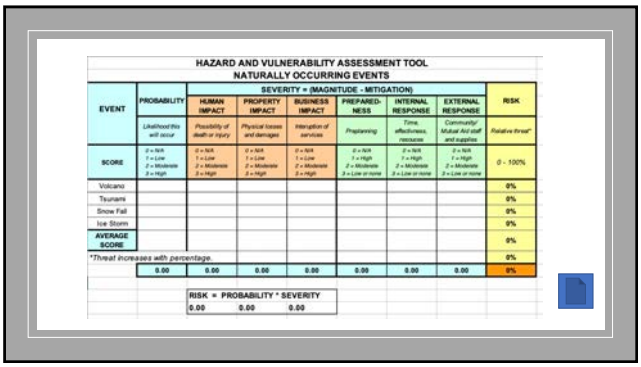
Property Impact

Business Impact

Preparedness

Internal Response

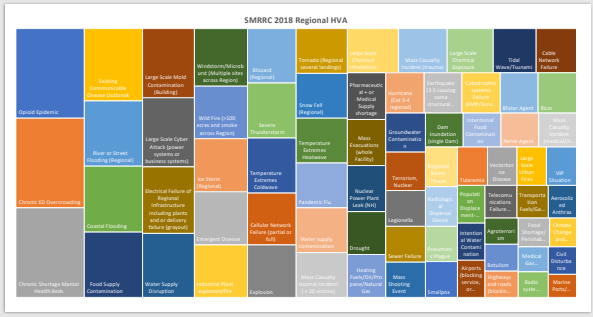
External Response

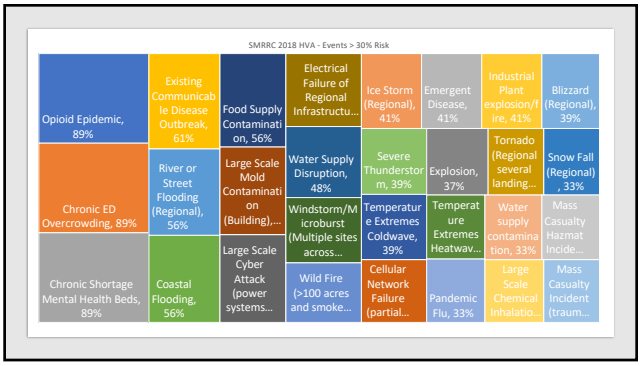


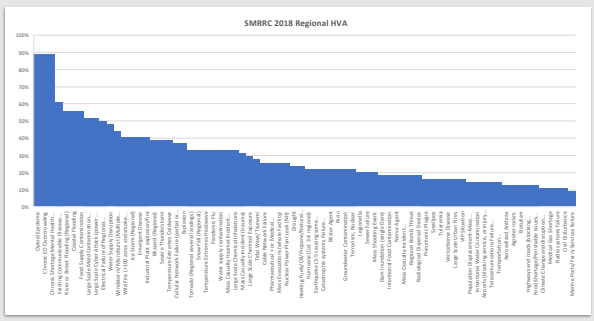
HAZARD AND VULNERABILITY ASSESSMENT TOOL
NATURALLY OCCURRING EVENTS

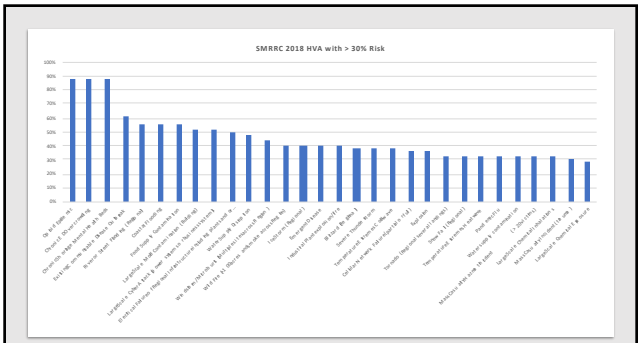
EVENT	PROBABILITY	SEVERITY = (MAGNITUDE - MITIGATION)						RISK
		HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	
	Likelihood this will occur	Possibility of death or injury	Physical losses and damages	Interuption of services	Preplanning	Time, effectiveness, resources	Community/ Mutual Aid staff and supplies	Relative threat*
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Volcano								0%
Tsunami								0%
Snow Fall								0%
Ice Storm								0%
AVERAGE SCORE								0%
*Threat increases with percentage.								0%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

RISK = PROBABILITY * SEVERITY
0.00 0.00 0.00









United State Border Patrol, Search Trauma and Rescue Team Response to Hurricane Harvey, Houston, TX, Fall 2017

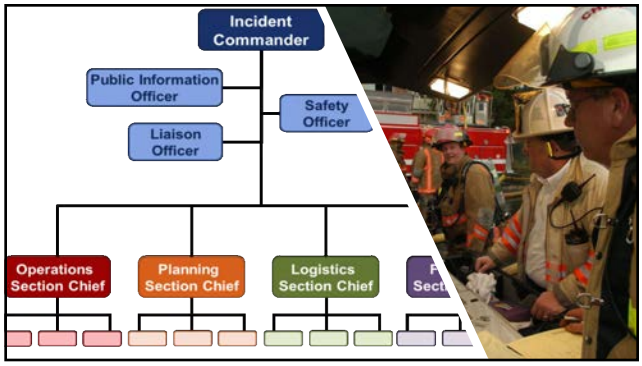
Themes and Characteristics of Disaster Response/Emergency Preparedness

Common Themes

- Incident Command System/HICS
- Principles of Triage
- Management of Surge on the Health Care System
- Phases of Disaster Response
- The Federal Response to Disasters – the National Response Framework
- Resiliency in Disaster Response

"Unique" Themes

- Decontamination/PPE and Levels of Personal Protection
- Toxidrome Recognition and Management
- Management of Radiation Emergencies
- Management Priorities to Victims of Active Shooting and Blast Events/Pre-Hospital Control of Massive Hemorrhage



History of the Incident Command System

- 1970's – AZ & CA wildfire response
- Local, State and Federal responders noted several issues:
  - Lack of common organization
  - Poor on-scene and inter-agency communications
  - Inadequate joint planning
  - Lack of valid and timely "intelligence"
  - Inadequate resource management
  - Limited prediction capability
- All agencies joined under the FIRESCOPE program and created the Incident Command System (ICS)

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What *is* the ICS?

- ICS is a *management system*
- Utilizes management concepts and therefore:
- Improves effectiveness, accountability, and communication
  - Provides a common organizational structure and language
  - Allows multiple agencies (including local, state, federal) to work effectively during the response efforts

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General Principles of the Incident Command System

Single Command vs. Unified Command

- Chain of Command
  - Orderly line of authority within the ranks of the organization
  - Every responder has a designated superior
- Span of Control
  - No one supervisor as too many subordinates
  - Range is generally 3 – 7 personnel to one supervisor
  - Important where safety and accountability have top priority

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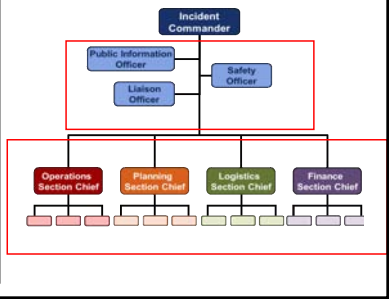
Primary Structure of the Basic ICS



Incident Command System and Hospitals

HOSPITAL INCIDENT COMMAND SYSTEM

Learning More…

- Federal Emergency Management Agency On-Line Courses
  https://training.fema.gov/emiweb/is/icsresource/trainingmaterials.htm
- IS 100 Introduction to ICS
- IS 200 ICS for Initial Action Incidents
- IS 700 National Incident Management System
- IS 800 National Response Framework

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Triage - Background

- Past experience suggests that of initial survivors of MOST disasters 80% will be NON-CRITICAL while 20% will be CRITICAL
- Need to identify those most critical patients and prioritize their care first

ALSO

- In any disaster – there exists the possibility for the NEEDS of the event to outstretch the RESOURCES AVAILABLE.
- Once this occurs – focus shifts from care for the individual to care for the population
  - Also known as Disaster Standards of Care
  - How to offer the greatest good for the greatest number?
  - May need to ration resources

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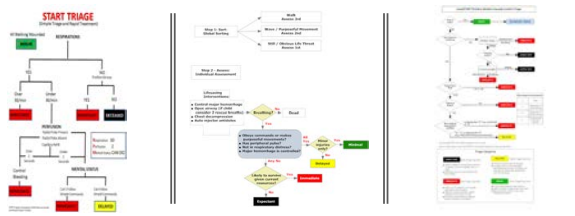
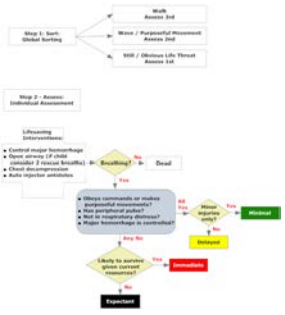
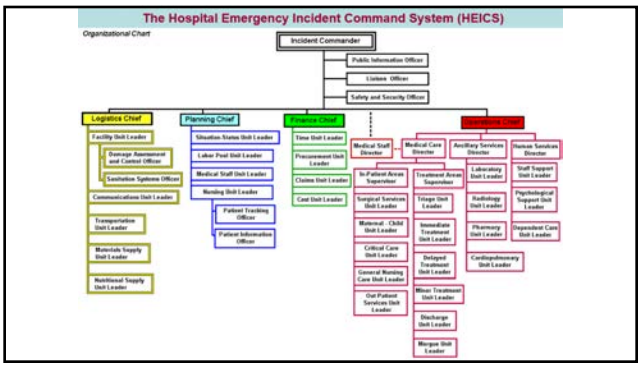
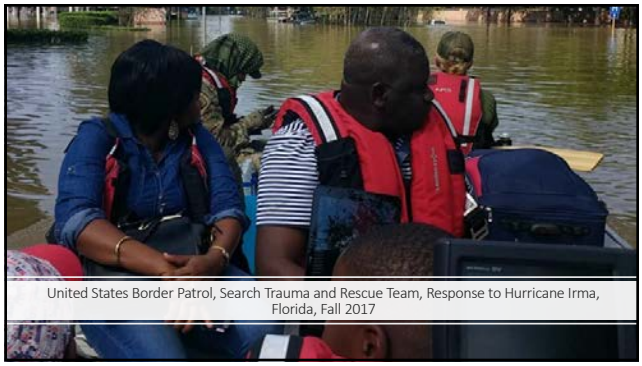


Triage Systems

SALT Triage System




The Hospital Emergency Incident Command System (HEICS)
Organizational Chart
Incident Commander
Public Information Officer
Liaison Officer
Safety and Security Officer
Logistics Chief
Planning Chief
Finance Chief
Operations Chief



United States Border Patrol, Search Trauma and Rescue Team, Response to Hurricane Irma, Florida, Fall 2017

Maine Department of Health and Human Services
Maine CDC
Maine Center for Disease Control and Prevention

SOUTHERN MAINE RRC

ALL CLEAR EMERGENCY MANAGEMENT GROUP

Maine-Based Resources: MEMA Task Force 1 and the Maine CDC

NORTHERN NEW ENGLAND METROPOLITAN MEDICAL RESPONSE SYSTEM
MAINE TASK FORCE ONE

National Response Framework

Homeland Security

The Stafford Act

Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended

1. Transportation
   Department of Transportation
2. Communications
   National Communications System
3. Public Works and Engineering
   U.S. Army Corps of Engineers
4. Firefighting
   Department of Agriculture/Forest Service
5. Emergency Management
   Federal Emergency Management Agency
6. Mass Care, Housing, Human Services
   Department of Homeland Security
   American Red Cross
7. Resource Support
   General Services Administration
8. Public Health and Medical Services
   Department of Health and Human Services
9. Urban Search and Rescue
   Federal Emergency Management Agency
10. Oil and Hazardous Materials Response
    Environmental Protection Agency
11. Agriculture and Natural Resource
    US Department of Agriculture/Department of the Interior
12. Energy
    Department of Energy
13. Public Safety and Security
    Department of Homeland Security/Justice
14. Community Recovery, Mitigation, and Economic Stabilization
    U.S. Small Business Administration
15. External Communications
    Federal Emergency Management Agency

Federal Emergency Support Function #8

- Core Capabilities Include:
  - Public Information and Warning
  - Critical Transportation
  - Environmental Response/Health and Safety
  - Fatality Management Services
  - Mass Care Services
  - Logistics and Supply Chain Management
  - **Public Health, Healthcare and Emergency Medical Services**

ASPR
ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA ·

ESF 8 - Direct Medical Care

- National Disaster Medical System
  - DHHS Lead
  - DHS/DOD/DVA support
- Three Major Components
  1. Emergency Medical Response – including personnel, equipment and supplies
  2. Movement of ill or injured patients from a disaster site to area unaffected by the disaster
  3. Definitive care of patients at hospitals in an area NOT affected by the disaster
- Deployable Teams – Disaster Medical Assistance Teams, Disaster Mortuary Operational Response Teams, National Veterinary Response Teams, etc.

NDMS
National Disaster Medical System
United States of America