

Emergency Preparedness

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Lecture Topics

- General aspects of preparedness for unexpected emergencies (“all-hazards” approach)
- Basic concepts of incident command/incident management
- Relationship between healthcare providers and public health
- Planning considerations
- Inter-organizational relationships

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Topics

- **General features of emergency response**
- Incident Command System (ICS)
- Emergency response functional roles
- NIMS (National Incident Management System)

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Healthcare and Public Health Workers Respond to a Range of Emergencies

from

“small” emergencies which involve a limited number of emergency response staff ...



Tanker Fire accident at Staten Island- March 2003

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- ... to “medium” or moderate emergencies, and ...



**HEAT EMERGENCY
July 1999**

Courtesy NYC DOHMH

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- “large” emergencies ...



NYC WTC 9/11/01

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Hurricane Katrina: New Orleans



Photo by U.S. Coast Guard, from BBC

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Emergency Response Plan

- Is a template for how things are to be done during emergency response
- Basic foundation: “All-Hazards” approach
- Build response to specific hazards on this foundation (Rad/Nuc, Bioterrorism, etc.)
 - We’re currently building the Pandemic Flu response into the University’s plan)

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Emergency Responses to RDD

- Trauma from explosive device
- Likely to be multi-casualty incident
- Complicated by radioactive contamination
- Dealing with contamination requires:
 - Evaluation of patient
 - Decontamination
 - Physical protection of clinician, others
 - Avoiding contamination of facility (hospital)

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Social Effects Caused by an RDD

- Fear
- Environmental contamination
- Possible need for mass evacuation
- Disruption of normal, day-to-day activities for extended periods of time
- Concern among first responders regarding long-term health issues

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The Litvinenko Case: Polonium 210



Litvinenko before his illness

Litvinenko before his death



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Everyone Should Know

- The emergency plan and their role in it
- How they will be contacted
- Where to report when contacted
- Whom they report to and who reports to them
- Not to “freelance”

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Example: 9/11

- Volunteers came from all over the city and the country
- Overwhelmed the city's capacity to deploy them effectively
- No systematic chain of command
- High stress: Many responders didn't know when to stop and became exhausted
- Sense of urgency, or inconvenience, prevented many responders from using PPE

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Emergency Response Plans Must be Practiced

Many methods to practice a plan:

- Re-evaluation of actual emergency response activities (e.g. electrical power outage response)
- Table top exercise
- Drill a section of the department or a portion of the plan
- Actual drill for entire department
- Drill or table top exercise with community and other agencies.

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Response to Findings After Practicing a Plan or After an Event

- Identify what went well and did not go well
- Develop an action plan to reinforce what went well (maybe it was the result of creative problem solving and should be incorporated into the plan)
- Develop an action plan to address what did not go well
- Re-evaluate if the plans were implemented, and test the system again with DRILLS

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What is the difference between day to day operations & emergency response?

Day to day operations

- deliberative / methodical
- consensus decision making
- decisions are data driven and can usually wait for more complete information

Emergency response

- time sensitive
- chain of command driven
- decisions made with available information

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Who Sets Standards for Healthcare Organization Preparedness?

- Healthcare organizations: JCAHO (Joint Commission on Accreditation of Healthcare Organizations)
- Legal requirements (EMTALA, HIPAA)
- Laboratories: CAP (CLIA), Health Dept.
- May be additional emergency preparedness requirements from NYS DOH, NYC DOHMH, NYC OEM

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JCAHO Emergency Management Standards

- **EC.1.4** The organization has an emergency management plan

Includes:

- Hazard vulnerability analysis
- Definition of a common (that is, "all hazards") command structure ... for responding to and recovery from emergencies, links with the command structure in the community
- Cooperative planning among health care organizations (effective 1/1/03)

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JCAHO Emergency Management Standards

- **EC.2.9.1:**

Drills are conducted regularly to test emergency management.

- Testing includes:

- a. For organizations that offer emergency services or are designated as disaster receiving stations, at least one drill yearly that includes an influx of volunteer or simulated individuals.

- b. Participation in at least one community-wide practice drill yearly (where applicable) relevant to the priority emergencies identified by the organization's hazard vulnerability analysis, that assesses communication, coordination, and the effectiveness of the organization's and community's command structures. ¹⁹

For Private Practitioners: Planning Within Your Practice Setting

Need a plan for your practice:

- Communication with staff
- Communication with patients

Decision about community involvement

- Role with a hospital or other institution
- Role with health department or other government agency

Decision about voluntarism

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Incident Command System

Emergency Response uses the Incident Command / Incident Management System (ICS / IMS) as a basis for its emergency response plan

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Incident Command System (ICS)

- History: Developed during 1970s in Southern California in response to wildfires
- ICS is a management model for *command*, *control* and *coordination* of an organization's emergency response activities
- ICS employs a defined management structure, with:
 - defined responsibilities
 - clear reporting channels
 - common nomenclature

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Some Concepts and Principles of ICS

- Predictable chain of command
- Modular organization, flexible organization chart
- Accountability and clearly defined roles (e.g., job action sheets)
- Common terminology
- Use of **INCIDENT ACTION PLANS** with a defined operational period

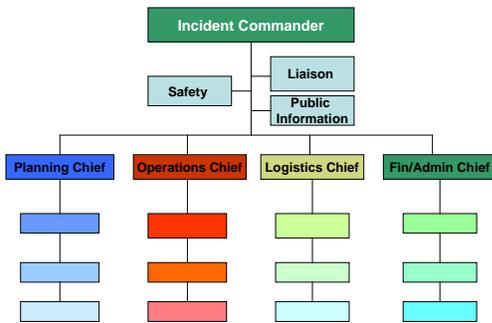
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Some Concepts and Principles of ICS (2)

- **Unified command structure:** ALL involved agencies have common set of incident objectives
- **Integrated communications** within and between agencies
- **Comprehensive resource management**
- **Unity of command:** Each person reports to ONE individual
- **Manageable span of control** limits number of employees supervised (usually ~ 5 - 7)

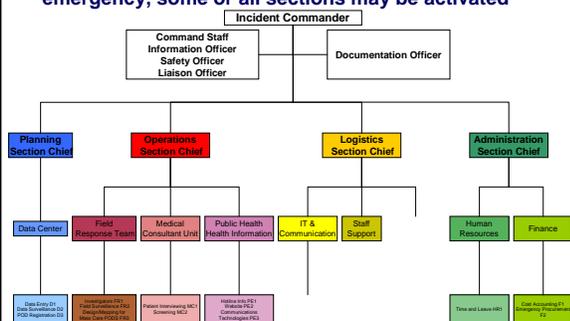
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Generic ICS Organization Tree



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Depending upon the nature and extent of the emergency, some or all sections may be activated



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Incident Commander (IC)

- Directs the response activities during emergencies
- In charge of the *Incident Command Post (ICP)*, if there is one
- Evaluates need for outside assistance, and responds to inter-agency requests
- Reports information and raises major policy issues
- *Role would usually filled by a (relatively) high-level administrator, but NOT the CEO*

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Public Information Officer

- Reports to the Incident Commander
- Serves as the institutional spokesperson and is responsible for releasing information to the public or the media
- Arrange for interviews, teleconferences, video conferences, etc.
- Monitor incident as to the need to modify or change the public alerts or messages

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Safety Officer

- Monitors the safety conditions, and develops measures for ensuring the safety of all assigned personnel
- Has authority over safety of all operations, and identifies hazardous environment
- Reports to the Incident Commander

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Planning Section

- Collects and analyzes information/data for the purpose of developing forecasts and assisting with the development of the Incident Action plan (IAP)
- Continually provides information to the Incident Command Post

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Operations Section

- The “doers”
- Activates and coordinates the units that may be required to achieve the goals of the Incident Action Plan (IAP)
- The operations section carries out the job that needs to be done

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Logistics Section

- Organizes, directs and coordinates those operations that support the activities of the Operations Section
- Includes assurance of: physical environment, security services, supplies and equipment

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Finance/ Administrative Section

- Oversees and advises on issues related to finance and personnel (guides, does not direct)
- Critical for tracking incident costs and reimbursement accounting

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INCIDENT ACTION PLAN (IAP)

Results in improved efficiency and streamlining of:

- Operations
- Decision making
- Integration with other agencies
- Process

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IAP Elements

IAP Component	Normally Prepared By:
• Incident Objectives	Incident Commander
• Organization List or Chart	Resources Unit
• Assignment List	Resources Unit
• Communications Plan	Communication Unit
• Responder Medical Plan	Medical Unit
• Incident Map	Situation Unit
• Health and Safety Plan	Safety Officer

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Emergency Response Chain of Command

During times of emergency response some things may change....

- Reporting relationships
- Boundaries to decision making and authority
- Flow of communication
- Functional roles

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“All That JAS”: Job Action Sheets (JAS) “What do I need to do in an emergency?”

- Every role should have a JAS
- Describes the specific functional role of the employee during emergency response.
- Defines:
 - primary purpose of role during emergency response
 - what actions need to be taken
- Why is this needed: so that different people can do the same role
- Staff members involved in a response will be given a JAS for the role they are assigned

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Communication with the Media

- Unified message to the public and the media
- In emergency situations, there are many media inquiries, and they are made to many employees
- Usual media policy: all external media inquiries are coordinated through the Public Information Officer

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Communication with Other Agencies

Depending upon the nature and extent of the incident, the agencies you are communicating with may change

Winter Storm

- EMS
- DOT
- ARC
- County Executive Office

Bioterrorist Event

- CDC
- FBI
- NYS DOH
- EPA

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Topics

- Public health emergency response
- Incident Command System (ICS)
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The National Incident Management System



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National Incident Management System

"...a consistent nationwide approach for federal, state, tribal, and local governments to work effectively and efficiently together to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity." - HSPD-5

Integrated with federal National Response Plan



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WORKING WITH PUBLIC HEALTH

Public Health Every Day....

(PH Functions Steering Committee p. 21, July 1995)

- Prevents epidemics and spread of disease
- Protects against environmental hazards
- Works to prevent injuries
- Promotes and encourages healthy behaviors
- Assures the quality and accessibility of health services
- *Responds to disasters and assists communities in recovery*

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The Role of the Health Department in Emergency Response

- Collaborate with other agencies in policy decisions and actions
- Surveillance
- Investigation
- Public information
- Medical provider information
- Public health interventions (e.g., mass vaccinations)

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Goals of Public Health During Emergency Response

Two Roles

Acute Response

Respond to public health needs created by the emergency

Maintain Services

Continue to provide essential public health services

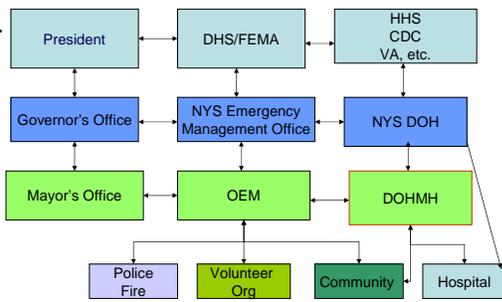
- Be sure to designate staff to continue program work

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ICS/IMS AND NIMS HELP IN INTER-AGENCY COORDINATION

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Federal, State and Local Coordination in NATURAL DISASTERS



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Role of the State or Local Emergency Management Office

Plans, monitors and coordinates all *inter-agency activities* for potential or actual emergency situations.

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Who is Responsible at the Federal Level?

- In most cases, Dept. of Homeland Security (DHS)
- Recent legislation (Pandemic & All-Hazards Preparedness Act, "PAHPA") designates HHS as federal lead for medical emergencies

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Additional Supplies May Be Available in Emergencies

Example: **National Strategic Stockpile Program (federal):**

Requires Federal, State and Local Coordination

- 12 "Push Packages" nationwide
- Available within 12 hours
- Each Package contains
 - Oral prophylaxis for 360,000 people x 7 days
 - IV treatment for 6,000 x 7 days
 - Many other supplies

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National Strategic Stockpile 2/3 of ONE Push Package



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Mass Prophylaxis

How will it be distributed in NYC?

- ~200 sites throughout city

How many people would be needed?

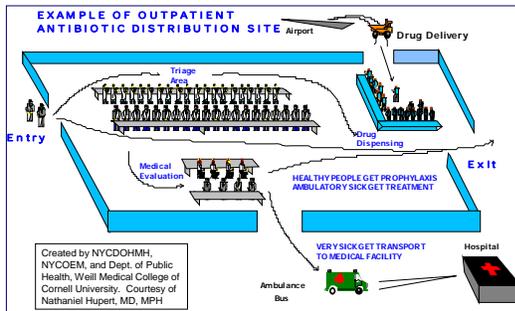
- Large number of personnel
- Who (Many providers, incl. Medical Reserve Corps volunteers)

How quickly can it be distributed?

- Within 48 hours

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NYC'S Point of Dispensing (POD) Clinics



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AND DON'T FORGET SELF-CARE

For you, your employees and families

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