

Emergencies 'R' us: what's the big deal?

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"Emergencies R Us"

- Governments establish/expand public health in response to perceived threats
 - cholera (Chicago and New York City)
 - smallpox (Oregon)
 - typhoid (Michigan and New York)
 - yellow fever (Philadelphia)
 - malaria (South Carolina)
 - salmonellosis (Milwaukee)
 - HIV infection (almost everywhere)

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Public health isn't see as equal to the fire department

- we can see fire fighters at work
 - public health often makes no public statements/doesn't wear uniforms/work alone or in small groups
- we'll understand down time between fires,
- if they can contribute to other things in between, that's good.

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Every PH agency has experience with an emergency

- the sudden appearance of symptoms (of a recognizable or strange pattern)
- Examples:
 - .Killer muffins (EDB)
 - .Watermelons (organo-phosphate/agricultural exposure)
 - .AIDS
 - .Diarrhea at county fairs in NY
 - .Deliberately contaminated OTC drugs
- What is it, where did it come from, what does it mean?

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Any emergency has public health implications:

- Disrupted supply of safe food or water (earthquake, flood)
- Inability to dispose of waste safely (North Carolina and hog farms?)
- Health of emergency crews (food for wildfire crews)
- Disrupted access to care (blocked roads or cut power supply)

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What has this age of terrorism changed

- Public health has had to learn to think 'deliberate action' instead of inadvertent circumstances:
 - Rajneeshpuram—trouble believing salmonellosis was deliberate rather than poor food handling
- The tools of public health are critical to understanding and controlling potential terrorist actions
 - epidemiology
 - legal power to isolate and quarantine
 - community organization and public communication

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More \$\$ and more attention than the past 40 years

- Other agencies are now a part of the action
- People who never talked epidemiology are trying to do so
- Not just interviewing people about symptoms, but doing so with FBI or police involvement

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There is a clash of cultures

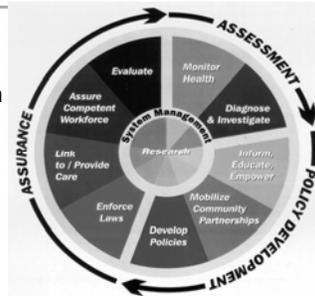
- Do something!! No! Don't just do something, wait for data!!
- Crime scene vs. vector/environment
- Command and control vs. collaboration
- The risks of losing balance

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Essential public health services

- Not specific to any population or program area
- Developmental over time
- Apply in emergencies as well as calmer times



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Public Health in an Emergency

Two Roles

Acute Response

Respond to public health needs created by the emergency

Maintain Services

Continue to provide essential public health services

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Emergency response requires change

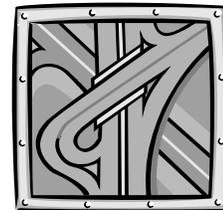
- | | |
|---|--|
| <ul style="list-style-type: none"> Day to day operations <ul style="list-style-type: none"> Deliberative/methodical Consensus decision making Decisions data driven and can often wait | <ul style="list-style-type: none"> Emergency response <ul style="list-style-type: none"> Time sensitive Chain of command driven Decisions made with available information |
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Phases of Emergency Management

- Preparedness
- Mitigation
- Response
- Recovery



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Preparedness

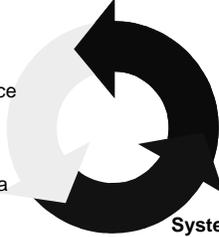
- Effective Public Health Emergency
- Preparedness Requires:
 - Core system capacities
 - Competent workforce
 - Defined, executable and practiced emergency preparedness plan...
- In place BEFORE the emergency occurs

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Public Health Infrastructure for emergency response

Data and Information:
cause or source
of emergency,
surveillance
information,
laboratory data



Prepared Workforce: competent to full assigned functional roles

Systems and Relationships: a practiced plan that ties to other responders

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Mitigation

- Making every effort to minimize the occurrence of an emergency
 - Prepared public
 - Alert agencies
 - Coordination across jurisdictions

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Response

- Actions taken during the event to minimize impact and move quickly to recovery
- Public health responds to many 'little' emergencies
 - Outbreaks
 - Single water system contaminations

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Recovery

- Continuing to assist those directly affected
- Assuring that additional damage does not occur
- Implementing 'lessons learned' to benefit future actions

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Large Scale Emergency Response

- Extraordinary Circumstances Require
- Extraordinary Measures...
 - Strong, decisive leadership
 - Chain of command structure
 - Increased centralization of decision making
 - Functional roles that are more narrowly focused than day to day roles

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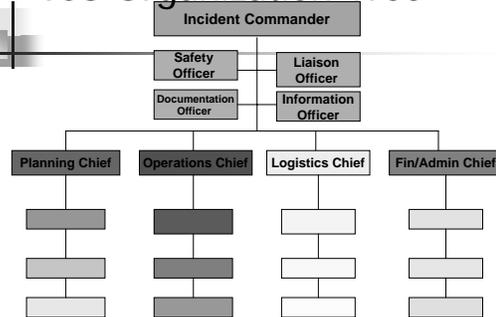
Incident Command System

- History: Developed during 1970-80's in So. CA in response to wildfires
- A management model for command, control and coordination of an organization's emergency response activities
- A defined management structure, with:
 - clear reporting channels
 - common nomenclature
 - defined responsibilities

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ICS Organization Tree

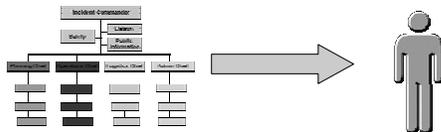


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From boxes to people...

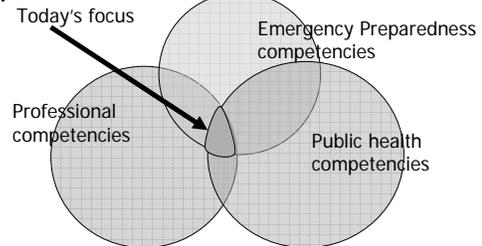
- Any well crafted plan requires talented, knowledgeable people who are available and able to execute the plan.



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Competency combinations

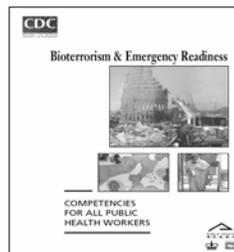


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Guide to competencies

- Overview of key competencies for public health workers
- Basis for role development
- Skeleton for training



<http://cpmcnet.columbia.edu/dept/nursing/index.html>

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Levels of competence

- Aware
 - describe, define
- Able to perform
 - demonstrate, combine
- Proficient
 - analyze, evaluate
 - teach others



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What do I do????

- Describe your functional role(s) in emergency response and demonstrate your role(s) in regular drills.
- Your role may be
 - the same as what you do every day
 - a limited portion of what you do everyday
 - a different role than you usually play

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Job Action Sheets

- Describe the specific functional role of the employee during emergency response.
- Define:
 - primary purpose of role during emergency response
 - what actions need to be taken
- Needed as different people may need to fill each role over duration of event, or for different events.

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Job action sheets

- One for each anticipated functional role
- Must include
 - Mission of the role
 - Chain of command
 - Expected duties
 - Beginning of shift
 - Ongoing
 - Transition to new shift

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Communicable disease staff

- Preparedness
 - generate plans to conduct risk assessments
- Response
 - activate enhanced surveillance
- Recovery
 - define algorithms that trigger further investigation

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JAS: Epidemiology investigation site coordinator

- Reports to: Epidemiologist
- Mission: Coordinate collection of data, collate, and report data coming from field, direct investigative staff
- Immediate:
 - Read the entire Job Action Sheet
 - Obtain briefing from Epidemiologist
 - Direct staff for field assignments and what/how to collect
 - Review staff PPE needs if relevant
- Intermediate:
- Extended:
 - Monitor staff for signs of fatigue and stress
 - Prepare end of shift report for Epidemiologist and incoming Coordinator
 - Plan for the possibility of extended deployment

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Clinical staff

- Preparedness
 - Specify safety measures that should be taken, including PPE
- Response
 - Apply appropriate techniques for preserving possible evidence at an incident site or medical facility
- Recovery
 - Recognize/treat psychological impact

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JAS: Triage nurse

- Reports to: Mass Care Operations Coordinator
- Mission: Assess individuals presenting for care and direct them to the appropriate level of care or care site.
- Immediate
 - Read entire Job Action Sheet and obtain briefing from Operations
 - Check equipment and supply expiration dates if appropriate
 - Conduct triage - emergent, urgent and non-urgent care
 - Refer to the appropriate level of care, providing first aid as needed
- Intermediate
 - Maintain patient assessment log
 - Prepare patient for transport to appropriate level of care
- Extended
 - Prepare end of shift report for Coordinator and incoming Triage Nurse

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Environmental Health Staff

- Preparedness
 - Maintain written plans for 24/7 availability of specific staff and specialists required
- Response
 - Use established communication systems for coordination among the response community during event.
- Recovery
 - Apply appropriate science-based public health measures to ensure continued population protection appropriate to the threat involved.

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JAS: Field environmental specimen collector

- Reports to: Environmental Director – Field Coordinator, Operations Command Center
- Mission: Gather environmental samples.
- Immediate:
 - Read entire Job Action Sheet
 - Obtain briefing from supervisor
 - Communicate/verify contact information
 - Obtain necessary supplies and equipment (bottles, coolers, etc.)
- Intermediate:
 - Collect, label, and submit samples according to SOP
 - Maintain chain of custody
 - Sign out/ Debrief
- Extended:
 - Plan for the possibility of extended deployment

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General principles of working under stress

- Clarity of purpose / mission
- Clarity of communications
- Use of chain of command
- Awareness of personal response to stress
- Attention to safety and response to stress

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Clarity of Purpose / Mission

- What is expected of your section or unit?
 - Generally
 - Under the specific IAP or SAP?
- What are the specific actions required to fill this mission?
- What is the chain of command?
 - Title, not name!
 - Contact methods

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Clarity of Communications

- Short, declarative sentences
- Write whenever possible
- NO jargon
- Use the 'message of the day'
- Use JAS
- Don't just give problems, give actions

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Use of chain of command

- Critical to avoid duplication, gaps and confusion
- Know the chart and use it
- Use it in both directions!!



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Awareness of personal response to stress

- Your stress will be communicated to those around you
- Breathe and move around!
- Think about what you take in
 - Caffeine?
 - Rumors?
- Ask for relief—it's not wimpy!

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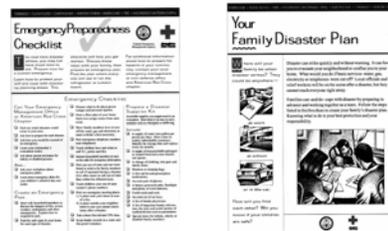
Attention to safety and response to stress

- If we become victims, we can't help
- Verify safety equipment in advance for any deployed staff
- Have at least water on hand
- If there are any questions, request safety officer assistance
- Think through shift length and assignments carefully

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Family Disaster Plan Materials



Source: <http://www.fema.gov/pdf/library/yfdp.pdf>
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Personal emergency plan

- Unless you already work a random schedule and have full-time backup, such a plan can be critical
- Key items include
 - Child care
 - Elder care
 - Pet care
 - Transportation

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Public health workers and leaders are in general

- happy to have been discovered
- pleased that checks are in the mail
- concerned that their long-term function on behalf of the whole community not be lost as they gear up for a true partnership with all of those concerned about protection from or response to terrorism.

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