Preparing For and Responding to Public Health and Medical Emergencies/Disasters

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Ronald C. Burger
The first emergency preparedness and response to disasters:
The first time one of them sneezes, cut the rope....
What is an Emergency?

An Emergency is, “An unscheduled, serious occurrence or situation urgently requiring prompt action.”

- Webster’s II, New Riverside Dictionary

*It is an unscheduled event; it is not unplanned!*
Why are we: Public Health Ready?
Why are we Public Health Ready?
Because an emergency threatens people’s basic needs:

- Electricity
- Communications
- Safety
- Health and Medical Care
- Safe and adequate food, water and shelter

Threats to those needs impact public health.
Preparedness for natural disasters, technological problems, and terrorism is necessary for rapid public health assistance.

- Natural Problems
  - Hurricanes
  - Severe Weather
  - Earthquakes/
    Tsunamis
  - Volcanic Eruptions
Preparedness for natural disasters, technological problems, and terrorism is necessary for rapid public health assistance.

- **Natural Problems**
  - Floods
  - Severe Heat/Cold
  - Disease Clusters/Outbreaks
  - Drought
  - Fires
  - Avalanche
Preparedness for natural disasters, technological problems, and terrorism is necessary for rapid public health assistance.

- Technological Problems
  - Radiation
  - Hazardous Chemical
  - Oil
  - Biological
  - Water Systems
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- Terrorism
  - Chemical
  - Biological
  - Radiological
  - Nuclear
  - Explosion
Disasters, terrorism and other public health emergencies all require **rapid mobilization of resources and experts across agencies and across jurisdictional lines.**
The American Public Health System is defined by its Partnerships.
An all-hazards approach means responding in the same way to every incident.

Kelly, as you look over ground zero, close your eyes—now, that could be the result of a hurricane, tornado, unintentional explosion, or two planes intentionally flying into two buildings. Public health is responding the same know matter how the cat got out of the bag.

Ron Burger, CDC, September 13, 2001, Ground Zero to Kelly McKinney, NYCDHMH Environmental Health Incident Commander
Public Health & Medical Issues
After a Public Health Emergency
Public Health & Medical Issues After a Public Health Emergency

1- Rapid Assessment of Health and Medical Care Delivery
Public Health & Medical Issues
After a Public Health Emergency

2- Delivery of Health and Medical Care
3- Community Assessment for Public Health Emergency Response (CASPER): Public Health and Emergency Management Tool
Public Health & Medical Issues
After a Public Health Emergency

4- Special Medical Needs Shelter (SpNS): site; staff; supplies; Federal Medical Stations
Public Health & Medical Issues After a Public Health Emergency

5- Injury & Illness Surveillance and Follow-up: Epidemiology and Strike Teams

Injuries and Illnesses Related to Hurricane Andrew 1992

WORLD TRADE CENTER SURVEILLANCE
Eye injuries (12%)
Lung injuries (11%)
Headache (8%)
Blisters (5%)
Sprains/strains (5%)

Surveillance for Illness and Injury After Hurricane Katrina --- New Orleans, Louisiana, September 8--25, 2005
Public Health & Medical Issues
After a Public Health Emergency

6- Laboratory: routine and special needs
Public Health & Medical Issues
After a Public Health Emergency

7- Isolation (ill)- Quarantine (exposed not ill) Measures
Public Health & Medical Issues
After a Public Health Emergency

9- Potable Water, Safe Food, and Sanitation and Hygiene: shelters; comfort stations; medical care areas
10- Vector Control: stinging/biting critters
Public Health & Medical Issues
After a Public Health Emergency

11- Solid Waste:
household refuse;
hazards and critters
Public Health & Medical Issues
After a Public Health Emergency

12- Hazardous Materials: household; plants; stores
Public Health & Medical Issues
After a Public Health Emergency

13- Decontamination/Environmental Surety: hazmat; molds
14- Worker health and safety: we are all workers
Public Health & Medical Issues
After a Public Health Emergency

15- Behavioral Health: Critical Incident Stress Management
Public Health & Medical Issues
After a Public Health Emergency

16- Sheltering and Housing: Mass Congregation; needs injury/illness surveillance
Public Health & Medical Issues
After a Public Health Emergency

17- Animal Health, Care, and Sheltering

NDMS-NVRT, VMATs, Animal Control, ASPCA, HSUS; pet-friendly shelters

[Images of AVMA, NDMS, Humane Society, etc.]
18- Handling of Deceased (humans and animals) = Mass Fatalities Management
Public Health & Medical Issues
After a Public Health Emergency

19- Staffing/Surge Capacity

20- Rumor Control: take care of before it becomes a fact
Public Health & Medical Issues
After a Public Health Emergency

21- Registries: keeping track

Zika in Pregnancy

FLINT Registry
flintregistry.org

Monitoring and Treatment

9.11

WTC Health Program

Click to LOOK INSIDE!

"WE WERE THERE SEPTEMBER 11th.

Three Mile Island

World Trade Center

WE WERE THERE SEPTEMBER 11th.
Public Health & Medical Issues
After a Public Health Emergency

22- Public Information and Risk Communication

- Be first
- Be right
- Be credible
Public Health & Medical Issues
After a Public Health Emergency

23- Political Science: parade of the dignitaries; politicians; the Boss
All emergencies are local.

First responders may be your next door neighbors.
Emergency public health is not a new public health activity.

It is a new public health priority.

• Different culture
• Different way of doing business
• Involves national security and law enforcement
Globalization has impacted public health.

Our neighbors are not just down the street—they are around the world.
Public health works to assure the conditions so that even people impacted by a disaster can still live, work, play, learn and worship safely and healthfully!
Thank you for your attention!

SO ... DO YOU HAVE ANY QUESTIONS FOR ME?

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