Why We’re Not Prepared for Megadisasters: Seven Challenges

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#1 Definitional challenges: “prepared” & “risk”

- What precisely is a “prepared” city, hospital, health system or nation?
- Without defining “prepared”, how do we establish goals, benchmarks, budgets?
#2: Scale and scope of planning for megadisasters is inadequate
“Megadisaster”

• Inability to manage immediate rescue of endangered survivors
• Significant backlog of victims unable to get appropriate medical care or other essential support
• Inability to protect vital infrastructure or prevent significant property destruction
• Societal breakdown
Pandemic flu in NYC

• Assumptions
  – Population of 8.2 million
  – H5N1 attack rate: 30%
  – Hospitalization rate: 10%
  – Mortality rate: 2.5% of those infected
  – Six month flu season
Potential Realities

• 2.4 million people sick (including 600,000 children) with avian flu
• 60,000 deaths (includes 15,000 children); 200,000 hospital admissions
• More than 300 deaths/ day
• Not enough: Vaccine, antiviral meds (tamiflu), hospital beds, ventilators, etc.

...plus schools closed, many parents ill, potential quarantines, economy in trouble, little assistance from “the outside”, etc.
10 KT IND detonation in Midtown Manhattan:
75,000 – 100,000 immediate fatalities
300,000 – 500,000 surviving casualties

Total staffed hospital beds in NY State
< 60,000
Orchestrated v. Spontaneous/Chaotic Evacuation

• Evacuation is not just government using buses and public transportation taking people to shelters
• Who will drive into contaminated areas to pick up people?
• Many people evacuate in private vehicles
Evacuees: Health/ Public Health Perspective

1. Separation from loved ones, dependents
2. Extreme “return uncertainty”
3. End of “normalcy”
4. Loss of possessions
5. Loss of pets
6. Injuries: blunt trauma, radiation, burns, shock…
7. Hunger, thirst
8. Acute evacuation trauma: MVA
9. Acute illness: MI, CVA, Acute respiratory problems
10. Complications of chronic disease: DKA, severe hypertension
11. Loss of medication (and critical device) access
12. Disoriented, terrified

(This is NOT a menu!)
To-do list for host communities

• Shelter
• Sanitation
• Reliable supply chains: food, water, medicines, diapers, cribs
• Communications & messaging
• Public Safety
• Re-unification
• Medical care: acute, chronic, mental health support, in-patient care
• Educational continuity & day care
• Permanent housing
• Economic opportunities
• Language and cultural accommodations
• Special populations: prisoners, nursing home residents

(this is NOT a menu, either!)
#3: Vulnerable populations need special, focused attention

= Achilles’ heel(s) of disaster response
Accommodated?
#4 We can’t do recovery...

Central Coord.:
- Federal assets
- Non-profits
- Insurance companies
- Banks
- Local assets
- State assets
#5: Coordination & integration challenges

- City
- Feds/DoD
- Voluntary Sector
- State/National Guard
- Private Sector
#6 The denominator problem: Spinning the boss, spinning the press/public

What’s been done
What’s actually needed
Starting Line  Current State

Ideal Realistic  100% Prepared

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Doing fine!
...or, we’re way behind!
#7 Lessons “learned”?  
Every disaster is a “wake-up call”

Experience  
Lesson(s) learned  
Lesson(s) applied

Sometimes/
Usually
Hardly ever?