

Evacuation Planning: The Achilles Heel of Disaster Readiness

By Irwin Redlener, MD
Director, National Center for Disaster Preparedness
Columbia University Mailman School of Public Health

Five Key Points:

1. **Will Expectation be Orchestrated or Spontaneous Evacuation?**
 - Evacuation should not be conceptualized only as the government bringing in buses and taking people to shelters.
 - Rather, the vast majority of people evacuate on their own, in their own vehicles.
 - Where do they go?
 - What are the implications for the host communities?
2. **Every evacuation is a public health challenge/crisis**
 - 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: Motor Vehicle Accidents (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
3. **Pre-disaster vulnerabilities represent critical variables**
 - How many people (in U.S.A)?
 - Children: 75 million
 - > 65 years old: 40 million
 - Significant chronic illness: > 120 million
 - People with disabilities, age 21 – 64: 22 million
 - Living in poverty: 44 million
 - Undocumented: >11 million
 - Prison population: > 2 million
 - Nursing homes: 1.5 million
 - *...Vulnerable Individuals/ Population > 50% of U.S.A.*
4. **Host Community Needs Must be Accounted for (and Resourced)**
 - 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
 - Language and cultural accommodations
 - Special populations: prisoners, nursing home residents
5. **Competency of Evacuation Planning Cannot be “Out of Scope” in Evaluating Relicensing of Nuclear Power Plants**
 - “Right now, what I just told you – every word of it – cannot be used to not certify a new plant or recertify an old plant.”