MODULE 4

Emergency Preparedness: Prevention, Response and Recovery

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Module 4: Emergency Preparedness: Prevention, Response and Recovery

Part 3: Response
Objective

• Describe the process for emergency response for different scales/types of emergencies citing specific examples
Outline

• Governmental response chain

• Surveillance, Epidemiology, and Situational awareness

• Vulnerable populations

• Unintended consequences post emergency (disease, illness, etc.)
National Incident Management System (NIMS)

- Standardized approach to incident management that is scalable and flexible
- Enhanced cooperation and interoperability among responders
- Comprehensive all-hazards preparedness
- Efficient resource coordination among jurisdictions or organizations
- Reflects best practices and lessons learned
NIMS (Cont’d)

• NIMS preparedness focuses on:
  o Planning
  o Procedures and Protocols
  o Training and Exercises
  o Personnel Qualifications and Certification
  o Equipment Certification

• Enhanced through partnerships at all levels of government, private sector, and nongovernmental organizations
Incident Command System (ICS)
Multi-Agency Coordination System

Multi-agency coordination system defined:

- process that allows all levels of government to work together more effectively
- occurs across different disciplines
- can occur on a regular basis whenever personnel from different agencies interact
Public Information

• Consists of processes, procedures, and systems for communicating timely, accurate, and accessible information related to an incident

• Public information functions must be coordinated and integrated across jurisdictions and across functional agencies
Governmental Response Chain

LOCAL ➔ STATE ➔ FEDERAL
Outline

• Governmental response chain

• **Surveillance, Epidemiology, and Situational awareness**

• Vulnerable populations

• Unintended consequences post emergency (disease, illness, etc.)
Definitions

Surveillance - monitoring of behavior and activities for the purpose of influencing, managing, directing, or protecting

Epidemiology - the study of the patterns, causes, and effects of health and disease conditions

Situational awareness - perception of environmental elements with respect to time and/or space, the comprehension of their meaning, and the projection of their status after some variable has changed
Surveillance, Epidemiology, and Situational Awareness: H1N1

1. Identification of pH1N1 in California children
   - NHRC surveillance → Marshfield → Wisconsin → CDC

2. Recognition that apparently unconnected outbreaks throughout Mexico were a PHEIC
   - Surveillance and identification of pH1N1 at NML and CDC

3. Identification of pH1N1 outbreak in New York City high school
   - Traditional surveillance and lab capacity in NYC and CDC
Contributions of advances in global surveillance and notification systems

• Investments in global surveillance & notification systems made an importance difference
  o Enabling the earlier development and deployment of a pandemic vaccine
  o Triggering local, national, and global public health

• Enhanced lab capacity in US and Canada led to earlier detection and characterization of pH1N1
  o NHRC, CDC, state and local capacity in the U.S.
  o Trilateral agreement among U.S., Canada, and Mexico
Hurricane Katrina Response

- **August 23, 2005** - Initial Hurricane Advisory

- **August 26** - National Hurricane Center states that storm is “rapidly strengthening”; states of emergency issued

- **August 28** - Mayor of New Orleans, Ray Nagin, issues a mandatory evacuation order; thousands leave the city

- **Evening of August 28** - thousands who were unable or chose not to leave New Orleans and go to the SuperDome

- **August 29** - levees begin to fail
Katrina Response (Cont’d)

- **August 31** - Public health emergency declared in Louisiana, Mississippi, Alabama, and Florida; Louisiana Governor Kathleen Blanco orders all remaining residents to leave New Orleans, but transportation is not available.

- **September 1** - New Orleans Mayor Ray Nagin issues a "desperate SOS" for help from the federal government.

- **September 2** - U.S. National Guard troops arrive in New Orleans to distribute food and water to stranded residents; work to repair the city's levees, pumping out floodwaters, and finding homes for displaced residents is underway.
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Vulnerable Populations Defined

Vulnerable populations

- Any individual, group, or community circumstances that create barriers to obtaining or understanding information or the ability to react as the general population

- Circumstances that may create barriers include, but are not limited to:
  - Age
  - Physical, mental, emotional, or cognitive status
  - Culture
  - Ethnicity
  - Religion
  - Language
  - Citizenship
  - Geography
  - Socioeconomic status
Vulnerable Population Examples

- Hurricane Katrina
  - low SES and with no transportation

- H1N1
  - pregnant women, young children, and individuals who were immune compromised

- September 11, 2001
  - people with physical disabilities, language barriers
Outline

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Major Challenges to a Response

- Care
- Cooperation
- Transportation
- Situational Awareness
Unintended Consequences

- Insurance Challenges
- Financial Impacts
- Political Disputes
- Legal Implications
Summary

- Emergency responses require integration across many sectors.
- There are flexible, scalable systems in place to assist in emergency responses.
- Prior emergencies can teach us lessons about what worked well and what can be improved upon in future emergency responses.