Sheltering from the Storms: Collaborative Shelter Creation and Management in 2011

Public Health Preparedness Today Series

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Objectives

By the completion of this presentation, the participant will be able to:

Introduction

• What's a PERLC and What's a PHEP?
  – A PERLC is a Preparedness and Emergency Response Learning Center with cooperative agreements between the CDC and Schools of Public Health to deliver PHP training to PH workers on the job, to build the competencies of the workforce.
  – The PHEP are ongoing Public Health Emergency Preparedness cooperative agreements that go to state and local public health to build the capabilities of the organization.
The Competency Project

- Mandated by the Pandemic and All-Hazards Preparedness Act (PAHPA) 2006
- Association of Schools of Public Health (ASPH) and Centers for Disease Control and Prevention (CDC) effort

The Masters’ Level Competency Project

- Association of Schools of Public Health (ASPH) and Centers for Disease Control and Prevention (CDC) effort
- Master’s-Level Public Health Preparedness and Response Competency Model
- DRAFT Model Version 1.0 August 25, 2011

Training to Competencies

- Focus on doing – performance application
- Ensure application of knowledge, skills and attitudes
- Strengthens teams (interdisciplinary practice)
- Facilitates efforts across programs and organizations
- THE Foundation in building capacity/capabilities of organizations
1: **Model Leadership**

1.1 Solve problems under emergency conditions.

1.2 Manage behaviors associated with emotional responses in self and others.

1.3 Facilitate collaboration with internal and external emergency response partners.

1.4 Maintain situational awareness.

1.5 Demonstrate respect for all persons and cultures.

1.6 Act within the scope of one’s legal authority.

2: **Communicate and Manage Information**

2.1 Manage information related to an emergency.

2.2 Use principles of crisis and risk communication.

2.3 Report information potentially relevant to the identification and control of an emergency through the chain of command.

2.4 Collect data according to protocol.

2.5 Manage the recording and/or transcription of data according to protocol.
3: Plan for and Improve Practice

3.1 Contribute expertise to a community hazard vulnerability analysis (HVA).
3.2 Contribute expertise to the development of emergency plans.
3.3 Participate in improving the organization’s capacities (including, but not limited to programs, plans, policies, laws, and workforce training).
3.4 Refer matters outside of one’s scope of legal authority through the chain of command.

4: Protect Worker Health and Safety

4.1 Maintain personal/family emergency preparedness plans.
4.2 Employ protective behaviors according to changing conditions, personal limitations, and threats.
4.3 Report unresolved threats to physical and mental health through the chain of command.
What is Sheltering?

• When emergencies or disasters occur, people may be directed to ‘shelter’ to remain safe.

• Sheltering is often the most critical element in protecting life in times of disasters.

• Sheltering can be either short or long term depending on the emergency.

Where to Shelter?

• Sheltering may be ‘in place’ or outside the affected area.
  – The most ideal shelter in an emergency is one’s own home.

• Temporary shelters are opened for those who cannot safely remain in their homes due to an emergency.

• Shelters have many inconveniences and often struggle to adequately accommodate persons with special needs.

Sheltering-In-Place

• In certain circumstances, leaving may take too long or put one in harm’s way. In such a case it is often safer to stay indoors rather than go outside.
  – Short-term emergencies (brief power loss) often don’t require out of home shelter

• Nonetheless, sheltering-in-place requires emergency supplies when sheltering in place
  – Unusual circumstances – radiological/nuclear, extreme weather – require more than simple ‘staying put in place’
Safe Rooms

- Safe rooms, a form of sheltering-in-place, are a protective measure against hazards particularly tornadoes, hurricanes, and high winds.
- Several forms:
  - An interior room away from windows, doors, and outside walls.
  - An underground space created beneath the floor, such as a cellar or basement.
  - A room specifically designed and constructed as shelter space.

Shelters Outside of Affected Areas

- Family member or friend's house…etc.
- Public shelter
  - General population (pre-identified, building standards, trained staff)
  - Shelters of last resort (not pre-assigned, limited facilities)
  - Special Needs shelters
    - People who require special accommodations, medical assistance, or observation

Do You Need An “Out-of-Home” Shelter Plan?

- Hazard and Vulnerability Analysis 101, 201, etc.
- Of All the Esoteric/Exotic Hazards Discussed in the Last 10 Years, NJ’s Most Frequent Hazard That Evokes Sheltering Remains….
H2O in All It’s Forms

• Raising Water
• Falling Water
• Freezing Water
• Blowing Water
• Surging Water
• Etc., Etc., Etc.

Planning A Shelter: Planning

• Community response in sheltering, feeding, and meeting the emergency needs of those affected by disasters is maximized by having sheltering agreements in place and by having local staff who are trained to operate those shelters
• Connect with Population to Plan A Variety of Shelter Alternative

Planning A Shelter: Partnering

• Government
  – Emergency Management
  – Social Services
  – Fire & Rescue
  – Law & PS
  – Code Enforcement
  – Schools
• Non-Government
  – ARC, Hospitals
  – In-home and home health Providers
  – Churches
  – Salvation Army
  – MANY OTHERS!
Facility Selection and Life Safety

- The ‘Safe Haven’ Being Provided Must Be Safe – Physically & Emotionally
- Facilities that Normally House People
  - Churches, Schools, Hotels, Arenas, Other Community Buildings
- Properly Trained Staff
- Accessibility
- Multiple Structural Needs

Food, Water, Waste 1

- Food & Water: a simple concept will be a major challenge full of potential problems.
- While the PH Department Is Unlikely To Have Direct Food Prep Responsibility, Legal Responsibility for Safe Food Prep Remains!
  - Supply, Storage, Prep, Service, and Storage

Food, Water, Waste 2

- Food Waste Management, Handler Training, Cleaning Are ‘Routine’ PH Issues in a Non-Routine Situation
- Water: Again, Supply May Not Be the Issue of the PH Org, but the Safety of the Water – Bottled or Tap – Will Be
- Waste: Refuse Management, Septic Issues, Adequate Disposal
Disease Prevention and Control

- Hand washing
  - Not Just Materials, but Potentially Training
- Cleaning and Disinfection
  - Not Just Materials, but Potentially Training
- Medical Waste Management
  - Not Just Materials, but Potentially Training

Medical Services

- Depends on Length of Sheltering and Service to Special Needs Populations
  - Lessons of Katrina
- Basics of First Aid & CPR
- Consideration of Emergency Specialty Shelter, Based on Community Needs and Resources

Special Needs Shelters

- Several options exist for establishing special needs shelters on the local level
  - Co-locate special needs shelters within general population shelters.
  - A stand alone special needs shelter.
- Individuals with personal and/or medical special needs may be transferred into and out of a shelter as medical conditions, diagnoses, shelter capabilities, and staff skill levels vary.
Child Needs

- A Distinct Challenge
  - Baby Food to Toys, Baby Beds to Play Areas
  - Diaper Access and Disposal
  - Safety & Security
  - Privacy Areas
  - ADOLESCENTS!

Pets & Service Animals

- Another Lesson of Katrina
- Solutions
  - Develop plans and policies that define where you will shelter the pets that will not be allowed to stay in shelters with their owners.
  - Pet with Human Shelters (See Suffolk)
  - Service Animal Issues

Pest Control: No One Tells The Pests It’s An Emergency

- Depending on Location and Time of Year
  - Plan for dealing with the variety of potential pests: insects (flies, mosquitoes, fleas, lice), mammals (rodents, bats, skunks, wild dogs and cats) that you know are in your community.
  - Identify entry points and potential attractants and mitigate
  - Establish protocols for eliminating or trapping pests, including approved use of insecticides and rodenticides.
Sheltering from the Storm: 
Local Public Health Experience in Sheltering in NJ

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Sheltering

• Planning and Response Must be a Team Effort
• Communication is Essential
• Incident Command System Works
• Know Your Resources

Sheltering – Preparedness

• Most Important of Four Phases
• Know Your Contacts
  = Who Is doing what?
  • Red Cross, OEM, Local Health, Salvation Army…
  • Facility contacts
• Know Your Resources - Physical
  = Shelter Locations
  • Red Cross vs. non-Red Cross Designated Shelters
  = Supplies, Materials, Food Source, Showers
Sheltering – Preparedness

- Know Your Resources – Personnel
  - Medical Reserve Corps, Community Emergency Response Teams, OEM personnel, MD, Nursing, Pharmacist, Maintenance/Custodial, Food Service, Local Volunteers
- Specific Resource Considerations
  - Multiple Languages
  - Auxiliary Power
  - Alternate Water Source

Sheltering - Response

- Control Issues
  - Hopefully avoidable by Preparing, but ….
- Locations – Schools, cleaning, opening
- Education/Communication
  - Communicable Disease Control
    - Hand washing – Facilities maintenance, Signage
  - Food Service - just in time training
  - Shelter Manager – transfer of information

Sheltering - Response

- Medical Care
  - Emergency Medical Care
    - Local EMS & Resident Medics - EMS Task Force
    - Local Doctors & Nurses, Pharmacist
  - Long-Term Medical Care
    - Red Cross Nursing
    - Conflict with VNA and MRC
    - Local Doctors as Oversight
**Shelters – Response**

- Communicable Disease Control
- Sanitization
  - Daily Inspections
  - Supplies
  - Showers
- Specific Examples
  - Tetanus, Conjunctivitis, Tuberculosis, GI Issues
  - Ringworm
  - Lice

**Sheltering - Response**

- Food Service
  - Facility – Schools & Churches
  - Food Source
  - Food Preparation
  - Food Storage
  - Water source
  - Training – Volunteers
- Must Put Procedures in Place and Enforce

**Sheltering - Recovery**

- Clean Up
  - Facility responsibility
  - HD provides guidance
Sheltering - Mitigation

- Evaluation
- De-Briefing
- Update plans, contacts

Sheltering - Suggestions

- Be Part of the Team
- Pre-planning & Preparing
- Para-Militarize Your Team for Organization and Control
  - Incident Command System Works
  - Provides Accountability and Smooth Response
- Develop Contacts
- Know Your Response Area
- Know Your Resources & the Various Sources
- Communication

Best Case Scenario?

Suffolk County NY Emergency Shelter Planning
Suffolk County’s Emergency Preparedness Efforts

- Evacuation
- Shelters
- Special Needs Population
- Pets
- Logistics
- Information Dissemination
- Interoperability of Communications
- Emergency Operations Center

Forecast Storm Track

Sunday 11/13 1100 E
29.00130.01W
Tropical Storm (45 mph)
Maxing 12 mph
A computerized planning tool used to compare coastal storm plans developed by all regional jurisdictions (Suffolk, Nassau, NYC, Westchester, MTA and Port Authority) and helps to identify decision points related to evacuation and response plans.

General Population Shelters
- American Red Cross shelters
  - 145 school buildings
    - 108 not in flood zone / 37 in flood zone
    - 59 have generators (not in flood zone & w/gen – 37)
  - Capacity of 108 buildings – 60,000
    - Top 25 will be opened first 5/10/10
    - Directions to top 25 are on website
  - Food, water, basic medical supplies – ARC
  - Volunteers needed to staff shelters

County Run Shelters
- First Responder Shelters
- Pet Friendly Shelters
- Special Needs Shelters
First Responder Shelters

- Shelter families of law enforcement, firefighters, EMTs, school bus drivers, etc.
- Sheriff’s Office to provide security, food/water

Pet Friendly Shelters

- SC Fire Academy
- Ducks Stadium
- SCCC Campuses
  - Capacity of 750 pets and 550 people
  - Suffolk County is partnering with SPCA
  - Owners asked to bring cage, pet food, medicine, leash, records, water bowl

Special Needs Shelters

- Shelter Locations:
  - John J Foley Skilled Nursing Facility
  - SCCC Campuses
  - Town special needs shelters
- Staffing Support:
  - Medical Reserve Corps
  - CERT
  - County Employees
JEEP
Joint Emergency Evacuation Program
- Assists eligible disabled individuals who need emergency evacuation assistance
- Need to pre-register and apply for approval
- Database of all JEEP registered individuals
- Transportation will be provided to:
  - general population shelter
  - Special needs shelter
  - hospital
- Call (631) 852-4900 for application

Evacuation
- Evacuating LI not practical
- Evacuate or Shelter-In-Place
- Evacuate to higher ground
  - RUN from the Water
  - HIDE from the Wind
- County & private bus companies
- Bus pick up points designated
- Wheelchair accessible vehicles
- LIRR – Evacuation Trains
- Nursing homes & hospitals – evacuate 72 hours prior to storm
- Mobile homes & trailer parks priority

Logistics
- Pre-positioned supplies
  - FEMA/REMO
  - American Red Cross
  - Suffolk County
- Food – MRE’s / Heater Meals / Prepared Meals (MOW)
  - 3 days food supply in Long Island
- Water Supply
  - SCWA has generators for pumping stations
  - Bottled water 9600’s
- Air mattresses / Cots – Storage trailers around County
- Generators – availability, cost & funding
Logistics

- Fuel supply – prioritize all facilities that require fuel – diesel & gasoline
- MOUs with fuel distributors
- LIPA – prioritize electric restoration for critical infrastructure facilities
- LIRR/MTA/Verizon – identified all critical infrastructure in inundation zone

Community Outreach/Public Information

- Public presentations (English/Spanish) to:
  - Community groups
  - Chambers of commerce
  - Senior citizen groups
  - Church groups
  - Special needs individuals
  - Minority communities – East End migrant workers
  - Indian Reservation
- Website & info materials – English/Spanish version
- Map & interactive website for finding nearest shelter

Volunteers

Community Emergency Response Team
- 300 trained volunteers
- New classes starting regularly
- Trained in shelter operations, first aid, search & rescue, firefighting

County Employee Volunteers
- 80 employees trained in Shelter Operations
- Recruiting more volunteers
Resources 1

- CDC Environ Site: The important basics of environmental support of external sheltering
  http://www.cdc.gov/nceh/ehs/topics/shelters.htm

- CDC Rad Site: Remarkable in the depth of information on what to do after a radiological/nuclear event… and in the level of expectations for local health departments before the Feds arrive
  http://emergency.cdc.gov/radiation/publichealth.asp

Resources 2

- FEMA for Citizens – Great to start the conversation with the community on sheltering-in-place:
  http://www.disasterhelp.gov/emergency-shelter.shtm

- FEMA For Professionals - Accommodating Individuals With Disabilities In The Provision Of Disaster Mass Care, Housing, And Human Services: Reference Guide
  http://www.fema.gov/oer/reference/index.shtm

Resources 3

- NJDHSS Division of Public Health Infrastructure, Laboratories and Emergency Preparedness (PHILEP) PHP Strategic Plan for Responding to PH Emergencies

- NJ ESF #8 2008

- Missouri PH Site: Outstanding guide that outlines the public health aspects of out-of-home sheltering
  http://health.mo.gov/emergencies/ert/emershelterguide.php
Questions

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