Cot-to-Cot: Identifying Access and Functional Needs in Community Disaster Shelters - What this Means and How it Applies to Public Health Nursing Practice
Learning Objectives

At the end of this presentation the learner will be able to:

- Describe the CMIST model for access and functional needs
- Integrate the Cot-to-Cot© Model into local disaster shelter health operation plans
Definitions

- Community Shelter vs. Evacuation Shelter
- Medical Special Needs Shelters
- Functional Needs Support Services (FNSS)
- Access and Functional Needs
Includes:

- 15 Capabilities which are intended to serve as national standards to advance preparedness planning.
- Includes key areas of overlap with Red Cross disaster response operations thus
- Critical partnerships and opportunities!
Mass Care Responsibility of Public Health

Capability #7

- Determine Public Health role in operations
- Determine Mass Care needs of population
- Coordinate public health, medical, and mental health mass care services
- Monitor mass care population health
Emergency Support Function (ESF) 6 - Mass Care

Provide life-sustaining services to the affected population with a focus on hydration, feeding, and sheltering to those with the most need, as well as support for reunifying families.

Red Cross is lead partner with FEMA for sheltering. Red Cross has a family reunification program called Safe and Well.
ESF 6 Critical Tasks

- Move and deliver resources and capabilities to meet the needs of disaster survivors, including individuals with access and functional needs.
- Establish, staff, and equip emergency shelters and other temporary housing options ensuring that shelters and temporary housing units are physically accessible for individuals with disabilities and others with access and functional needs.
Health care includes assessment, evaluation and treatment of disaster related illness or injuries. Replacement of lost medical items and medications and referrals to appropriate levels of care.
Emergency Support Function (ESF) # 8
Public Health and Medical

Provides the mechanism for coordinated federal assistance to supplement state, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated federal response, and/or during a developing potential health and medical emergency.
ESF 8 Critical Tasks

- Deliver medical countermeasures to exposed populations.
- Complete triage and the initial stabilization of casualties and begin definitive care for those likely to survive their injuries.
- Return medical surge resources to pre-incident levels, complete health assessments, and identify recovery processes.
## Care in Shelters: A Nurse-Led Model

### Medical vs. Public Health Model

<table>
<thead>
<tr>
<th>Clinical/Medical Model</th>
<th>Public Health Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary focus is on the individual</td>
<td>Primary focus on population</td>
</tr>
<tr>
<td>Personal service ethic, conditioned by awareness of social responsibilities</td>
<td>Public service ethic, tempered by concerns for the individual</td>
</tr>
<tr>
<td>Emphasis on diagnosis, treatment and care for the whole patient</td>
<td>Emphasis on prevention and health promotion for the whole community</td>
</tr>
<tr>
<td>Paradigm places predominant emphasis on medical care</td>
<td>Paradigm employs a spectrum of interventions aimed at the environment, human behavior and lifestyle, and medical care</td>
</tr>
</tbody>
</table>

*The Community Tool Box, 2012, Used with Permission.*
Cornerstones of Public Health Nursing

- Focus on the health of entire populations –*which is what a shelter becomes*
- Reflects community priorities and needs –*all disasters are local*
- Establishes *caring relationships* with communities, systems, individuals and families
- Grounded in *social justice, compassion, sensitivity to diversity, and respect for the worth of all people, especially the vulnerable*
Cornerstones of Public Health Nursing

- Encompasses mental, physical, emotional, social, spiritual, and environmental aspects of health
- Promotes health through strategies driven by epidemiological evidence
- Collaborates with community resources to achieve those strategies, but can and will work alone if necessary
- Derives its authority for independent action from the Nurse Practice Act
Model for Independence and Health in a Community Shelter

Persons living at home and in community are supported/served by PH concepts

Public health model of community care

Independent Living concepts

PH can refer to medical when needed

Medical model of care

PH model of care incorporates all members of community and cradle to grave health care knowledge

Work in progress, Janice Springer 2013
Accessible Language

To create a larger umbrella to include the Whole Community Transition from “Activities of Daily Living” (ADL) language to Access and Functional Needs
# Identifying Access and Function through CMIST

<table>
<thead>
<tr>
<th>Community Member not Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Communication</td>
</tr>
<tr>
<td>M Maintain health</td>
</tr>
<tr>
<td>I Independence</td>
</tr>
<tr>
<td>S Safety, Support Services and Self-Determination</td>
</tr>
<tr>
<td>T Transportation</td>
</tr>
</tbody>
</table>
CMIST Job aid *(trialed in Hurricane Sandy)*  
Communication

| Access to Auxiliary Communication Services | Provide Written materials in alternate format  
Provide Visual public announcements  
Provide qualified language or oral interpreters |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Access to Auxiliary Communication Device</td>
<td>Provide access to teletypewriter (TTY, TDD, or cell phone capability)</td>
</tr>
</tbody>
</table>
| Replacement of Auxiliary communication equipment | Provide replacement eyeglasses  
Provide replacement hearing aid and or batteries |
## Maintaining Health

<table>
<thead>
<tr>
<th>Special Diets Allergies</th>
<th>Provide alternative: gluten free; peanut free; kosher; low sugar food &amp; beverages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Supplies or Equipment</td>
<td>Medications; wound management; diabetes; bowel or bladder, etc.</td>
</tr>
<tr>
<td>Assistance with care normally given in the home setting</td>
<td>Medication administration, wound care; bowel or bladder care; O2, and other.</td>
</tr>
<tr>
<td>Support for pregnant women</td>
<td>Ongoing observation when indicated</td>
</tr>
<tr>
<td>Access to quiet areas</td>
<td>As needed for elderly, psychiatric situations; autism; infant care etc.</td>
</tr>
<tr>
<td>Access to temperature controlled area</td>
<td>For persons who cannot regulate body temp</td>
</tr>
<tr>
<td>Mental Health care, anxiety and stress management</td>
<td>Referrals to Disaster Mental Health</td>
</tr>
</tbody>
</table>
## Independence

<table>
<thead>
<tr>
<th>Durable Medical Equipment for support of mobility</th>
<th>Provide assistive mobility equipment (e.g., wheelchair, walker, cane, crutches) Provide assistive equipment for bathing and/or toileting (e.g., raised toilet seat with grab bars, handled shower, bath bench) Provide accessible cot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power source for battery-powered assistive devices</td>
<td>Power source to charge batteries</td>
</tr>
<tr>
<td>Bariatric accommodation</td>
<td>Provide appropriate weight cot</td>
</tr>
<tr>
<td>Service Animal</td>
<td>Provide area for exercise and relief Provide supplies, food, water</td>
</tr>
<tr>
<td>Infants</td>
<td>Provide infant food, diapers, supplies</td>
</tr>
</tbody>
</table>
# Services, Support, and Self-Determination

| Adult Personal Assistive Services | Identify family member or friend caregiver  
|                                 | Assign qualified shelter volunteer to provide personal assistance services  
|                                 | Contact local agency to provide personal assistance services  
| Child Personal Assistive Services | Same as for adult  
| Incl. general observation and/or assistance with activities of daily living, such as grooming, eating, bathing, toileting, dressing and undressing, walking, etc. |
## Transportation

| Transportation to designated facility for medical care or treatment | Coordinate provision of accessible shelter vehicle and driver for transportation  
Contact local transit service to provide accessible transportation |
| --- | --- |
| Transportation for non-medical appointment | Coordinate all transportation with Shelter Manager.  
Work with local community to identify transportation. |
Follow-Up

**Actions:**
- No needs identified
- Contact Shelter Manager
- Contact Disaster Mental Health Services
- Agency, *please provide agency name*


☐ Other

Follow-up/ Resolution/date:

Disaster Health Services print name/signature/date:
CMIST Snapshot Hurricane Irene

Dr145-13 C-MIST Unmet Needs

- Count
  - Communication: 9
  - Maintaining Health: 740
  - Independence: 204
  - Services, Support and Self-determination: 62
  - Transportation: 20
Aggregate Morbidity Study
Hurricane Sandy: New Jersey Shelters

- Representing data from 22 shelters and 149 shelter days
- Health needs N=6850
## Categories of Health Needs Addressed

<table>
<thead>
<tr>
<th>Category</th>
<th>No.</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Symptoms</td>
<td>3549</td>
<td>(52)</td>
</tr>
<tr>
<td>Follow-up Care</td>
<td>2253</td>
<td>(33)</td>
</tr>
<tr>
<td>Exacerbation of Chronic Illness</td>
<td>756</td>
<td>(11)</td>
</tr>
<tr>
<td>Injury</td>
<td>247</td>
<td>(4)</td>
</tr>
</tbody>
</table>
### Further Breakdown of Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>1135</td>
<td>17%</td>
</tr>
<tr>
<td>Medications refill</td>
<td>768</td>
<td>11%</td>
</tr>
<tr>
<td>Respiratory/Influenza like illness</td>
<td>768</td>
<td>11%</td>
</tr>
<tr>
<td>Any Mental Health</td>
<td>660</td>
<td>10%</td>
</tr>
<tr>
<td>Gastro-intestinal</td>
<td>183</td>
<td>3%</td>
</tr>
</tbody>
</table>

*This is not generalizable to all shelters, only a sample*
Creation of a Model to Meet the Need

- Original Post-Katrina intake and assessment
- New version adapted from a successful tool used in Katrina for seniors-tested after a tornado
- A third version, designed by a team, tested in Hurricane Irene
- Observation that it was not the questions, it was the relationships. . .
  and, enhanced by nurses “walking around” day after day in the shelters.
County Data: Persons with Disabilities

- State PWD %
- County PWD %
- Actual % need in Shelter

Comparison of tornado, hurricanes #1, #2, and #3.
Evidence-Based Process: Cot-to-Cot©

- 2+2 Observations and Questions at registration then,
- Cot-to-Cot Within 6-8 hours if possible,
- Using CMIST or other system
- Include access and functional needs in the 24 hour surveillance plan
Tornado or other disaster leads to a population collecting in a congregate care shelter. Entire population displaced, may include frail seniors, persons with disabilities, English as second language, children and unknown vulnerabilities.

Real time population assessment for urgent needs on arrival to shelter. 2 observations + 2 questions by registration staff

Urgent medical needs referred to EMS or Health services personnel on site

Urgent needs for health supplies or care attendant referred to Health Services. *Urgent non-health to shelter manager.*

Non-urgent needs (if identified) logged for later RN review. (6-8 hr goal)
Activities of Daily Living: support for eating, bathing, dressing, moving about the shelter; DME, CMS, PAS, and functional support.

Psychological first aid, referrals for mental health support as needed.

Health care needs for individuals, acute care, medication refills, referrals, support for chronic care. Population public health to include surveillance, education, counseling, collaboration with external resources, advocacy.

Shelter operations underway. Cot-to-Cot assessment repeated daily.

How Many Caregivers are Needed?

- Percent of clients in shelters with Access and Functional needs (previous slide)
  - Range from 20-47%
- Actual ratios in Cot to Cot research
  Range of staffing for those shelters:
  From 1:6 to 1:43

Recommendations 1:50
Supported by FEMA ESF #6 Shelter Guidance
Who are Your Partners?

- Emergency Management
- Deaf and Hard of Hearing
- Centers for Independent Living
- Retired Senior Volunteer Program(s)
- State Council on Disability
- Parish Nurses
- Non-traditional partners such as VFW, Lions

and many more...
What Can Partners Bring?

- Who in your community has
  - Extra wheel chairs, canes, walkers?
  - Medical or Universal cots or even Beds?
- Who might donate
  - Dressings, gloves, masks?
- Do you have enough trained volunteers?
  - Are there individuals or services to support blind? Hard of hearing? Seniors? Developmentally disabled?
How Do We Respond Together?

- Shelters have 24 hour health surveillance documentation—how to share it?
- All assignment settings have health and mental health expertise on site or available for consultation. How to coordinate?
- Where is the interface?
  - On site?
  - EOC?
  - Liaison team
Find Out Ahead of Time.....

- Who is going to open the shelter?
  - IF Public Health, what is the transition plan?
  - What is the plan for record-keeping?
  - What is the plan for surveillance?
  - How is shelter registration handled?

- What system or method will be used for daily communication?
  - Briefings in person?
  - Multi agency phone call?
  - Text?
The Future?

- Get to know each other - and re-consider who “each other” might be
- Train together
- Use members from the Whole Community in drills
- Consider cross-training
- Clarify roles and systems
- And if the day comes...

- Remember it is a disaster.....that is why they are called that
What About People & Supplies?

- Determine ahead of disaster:
  - Durable Medical Equipment (DME) sources
  - Consumable Medical Supplies (CMS) sources
  - Medications
  - What of these can be pre-staged? What can not?
  - Also.....
    - Assistive technology
    - Personal Assistance Services, home care agencies, Certified Nursing Assistants
    - Human resources- such as voluntary groups
Other What Ifs?

- What if the public health department itself is overwhelmed?
- What if the health needs in the shelter exceed the resources at hand?
- What if the ‘system’ won’t pay....
- What if the usual communications systems are down?
- What if you can’t travel due to the damage?
Resources

- Functional Needs Support Services Guide
  - www.fema.gov
- Student Nurses Shelter Training Course
  - www.disasterhealthandsanctuary.org
- National Mass Care Strategy
  - www.nationalmasscarestrategy.org
- Training for Cot-to-Cot©, CMIST and Registration
  - https://voicethread.com/share/4547245/
More Resources


Janice Springer DNP, RN, PHN
Disaster Health Services Advisor
Janice.Springer@redcross.org
320-290-9532
Acknowledgements

- New England Alliance for Public Health Workforce Development
- Boston University School of Public Health
- Massachusetts Association of Public Health Nurses (MAPHN)
How to Obtain Nursing Continuing Education Credit
30 days following ‘live’ webinar date

• Please visit: www.maphn.org/webinars
• Click on the "Evaluation Forms" link which will take you to the evaluation form in Survey Monkey
• Fill out your evaluation in Survey Monkey and at the end there will be instructions to “click here” to get your CE Certificate. Click to open up your certificate first and then submit your evaluation.
• Thank you!

Questions please email: educationchair@maphn.org
The link to the archives and the PP slides are available at
http://www.masslocalinstitute.org/?page_id=2888
To view the archive select the session you wish to view, click on the right facing arrow below the large black viewing box and the video will play.

You can also access the archive link and the PP slides on the MAPHN website at
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