Core Strategies to Enhance Emergency Preparedness Planning and Response for Special Needs Populations

While each population has specific needs requiring unique strategies, there are four cross-cutting approaches that are essential to ensuring successful emergency planning:

- Identify, enumerate, and locate special needs populations
- Involve members of special needs populations in planning
- Involve the community in assisting special needs populations
- Coordinate preparedness and response efforts with relevant organizations

Promoting community resilience for special needs populations is also critical to preparing communities for public health emergencies. Strengthening communities involves taking the following steps:

- Implement strategies that will ensure that special needs populations have access to needed, quality health services during and after an emergency event
- Provide access to basic preventive and curative care including essential drugs and vaccines for all, with special focus on those with special needs
- Address chronic diseases, such as obesity, that can place populations at greater risk during an emergency
- Alleviate social and economic inequities before an emergency occurs, which can mitigate the negative impact during a disaster.

Strategy	How can planners help special needs populations?	What resources are available?
Identify who is at risk	• Identify special needs populations by consulting relevant documents (e.g. ASTHO and CDC) • Use technology to map the locations of special needs populations	• RAND special-needs-populations-mapping tool
Involve members of special needs populations in planning	• Assist organizations in identifying funding resources for preparedness planning • Include special needs populations in all aspects of preparedness planning exercises and drills • Include organizations in the local alert network and help them to develop systems for notifying and assisting their clients in an emergency	• Linn County, Iowa Emergency Management Agency's Special Needs Registration Card • Special Needs Assistance Program – Online Registry

	• Enlist help from organizations to identify and obtain special equipment (e.g. Braille writers) and supplies that first responders and shelter providers will require to adequately prepare for special needs populations. • Develop a community advisory committee that includes staff and clients from multiple advocacy and service organization to provide direction and guidance on implementing preparedness plans for various emergency situations • Provide preparedness materials to advocacy organizations, service agencies, and support groups that are specific to the population they serve and can be freely distributed • Develop a self-identified registry enrollment and request delivery through community-based organizations	• Guide for Training Non-Public Health Workers to Respond to Public Health Emergencies • CDC Emergency Preparedness Guides (multiple languages) • American Red Cross Disaster Preparedness Info (multiple languages)
Involve the community in assisting special needs populations	• Disseminate materials that encourage community residents to identify their friends and neighbors who would need assistance in an emergency and help those with special needs develop a preparedness plan • Establish a public hotline or website with information and free materials for guiding people • Encourage people to help the elderly, disabled, or those with medical conditions stockpile enough supplies of food, water and medications in order to safely remain in their homes • Include ideas for people to assist neighbors to evacuate safely	• Neighbor to Neighbor (N2N) Network • SAFELY OUT • Emergency Supply Kits for Homebound Elderly Residents • The Special Needs Assistance Program (SNAP) • North Carolina Pandemic Flu Program • Emergency, Community and Health Outreach (ECHO)

	• Encourage health care providers, home health agencies, and businesses that provide goods and services to special needs populations to promote preparedness among their clients and patients • Engage established organizations (e.g. neighborhood watch), cultural, civic, and faith-based groups and schools in broadly disseminating preparedness information and materials	
Coordinate preparedness and response efforts with relevant organizations	• Draft emergency plans directly with the facilities and community-based organizations that care for and support these populations (e.g. long-term care, day care, assisted living facilities) • Provide a notification hotline or other mechanism to alert facilities to begin early evacuations • Plan for transportation of facility staff as well as truck rental to get water, food, and medical supplies to facilities • Include personal caregivers or essential family members when transporting individuals who are disabled, elderly, or have functional limitations • Integrate local and community plans into the larger jurisdictional plan • Execute formal agreements such as memoranda of understanding (MOUs) with other organizations in order to facilitate collaboration • Work with organizations to provide a single, consistent message or set of messages about preparedness (e.g. risk communication)	• FEMA Preparing for Disaster for People with Disabilities and other Special Needs • Partnering to Achieve Rural Emergency Prepare

Strategies and Resources for Addressing the Public Health Emergency Needs of Children

Children can often be overlooked as a special needs population, but they have special needs that are both biophysical and emotional in scope. Because their needs vary considerably by developmental age, the way their needs are addressed may have both immediate and long-term effects. Specific concerns for children who experience a public health emergency include the following:

- Increased susceptibility to man-made disasters (e.g., chemical, biological or radiological attack)
- Rapid respiratory rates compared with adults, thus increasing their absorption of aerosolized chemical or biological agents
- Greater surface area relative to their body mass and can absorb more chemicals through the skin.
- An array of potential psychological consequences during and after a public health emergency
- May react to their parents' anxious response during an emergency
- May develop a fear or anxiety of being separated from parents or other family members
- May have difficulty understanding what is occurring and need extra attention and explanation.

Why is this group at greater risk?	How can planners help this group?	What resources are available?
Increased physiological susceptibility to attacks	• Ensure that decontamination equipment is suitable for children • Provide assistance in taking medication, and make sure the dosages are specific for children • Use appropriate pediatric triaging methods • Ensure children with special health care needs have adequate home health care plans in place	• Pediatric Terrorism Preparedness National Guidelines • JumpSTART Pediatric Multiple Casualty Incident Triage Tool • American Academy of Pediatrics
Immediate and long-term emotional consequences	• Provide children with a way to express their feelings via play or writing such as toys or journals • Understand the developmental age-specific responses of children during an emergency • Provide constant reassurance and a chance to resume normal routines as quickly as possible	• FEMA for Kids • NC Child Care Training Program • National Association of School Nurses

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	• Engage children in creating safety kits as part of school projects • Ensure that school leaders, child care staff members have training in how children may react during an event	
Lack of developmentally appropriate information	• Find risk communication materials tailored to the developmental needs of children • Find materials that use engaging graphics or pictures and simple language	• American Academy of Child and Adolescent Psychiatry • Ready.gov/kids
Dependence on school and child care staff	• Share school and child care emergency plans with parents and caregivers well in advance of an emergency • Include parents and caregivers on emergency planning committees so that their needs and concerns for their children are addressed • Offer multiple communication methods for parents in case of different emergencies • Develop strong partnerships with facilities that will provide resources during an emergency • Develop memorandum of understanding/agreement (MOU/MOA) with transportation companies that can be used if children need to be evacuated from schools	• Contra Costa School Action

Strategies and Resources for Addressing the Public Health Emergency Needs of Populations with Functional Limitations

Many people with conditions make them unusually vulnerable to harm during a public health emergency. Among them are those who are visually, hearing, speaking, or cognitively impaired as well as those with physical limitations. Moreover, people with a health condition such as pregnancy, obesity, asthma, or diabetes may have mobility limitations like those with physical disabilities. As a result, it is important for planners to consider a wide range of functional limitations that constrain the capacity of an individual to react to a public health emergency. There are a number of issues relevant to developing emergency response plans for these populations:

1. Both the level of disability or functional limitation and the nature and severity of the emergency event will vary widely; these are significant factors in determining the extent to which an individual will need assistance
2. People who are visually impaired, deaf or hearing impaired, or cognitively impaired are limited in their ability to receive warning messages or to communicate.

Effective public health emergency preparedness planning also requires consideration of points critical to each individual population:

- In dangerous environments or cluttered areas, visually impaired individuals are at increased risk of injuries, particularly if they become separated from their service animals or assistive devices (e.g., canes).
- Cognitively impaired persons may not understand what is happening or be able to cope with the event; they may become easily confused and upset in unfamiliar surroundings, with people they do not know, or in unusual situations, particularly those that are chaotic.
- Cognitively impaired persons may be particularly vulnerable if they become separated from caregivers or are in mass shelters where others may take advantage of their limitations.
- Physical limitations can reduce mobility raising concerns for both evacuation and navigating mass care shelters.

Why is this group at greater risk?	How can planners help this group?	What resources are available?
Difficulty planning due to population's diverse needs	• Engage community-based organizations that serve these populations • Identify the most pressing needs among disabled and functionally limited populations using risk assessments and tabletop exercises	• EchoMinnesota.org • UCLA Center for Public Health and Disasters Hazard Risk Assessment Instrument
Communication challenges	• Coordinate with Community-based organizations (CBOs) to develop calling trees • Offer a telephone messaging service for the visually impaired • Translate all communications into Braille, non-auditory formats, and create simplified versions and formats which incorporate pictures, drawings or objects • Train first responders to communicate with people who are cognitively impaired	• CDC Hurricane Preparedness Videos in American Sign Language • OK-WARN: A Remote Notification Program for the Hearing Impaired

Difficulty navigating unfamiliar surroundings	• Train first responders to assist people with visual impairments	• HHS - Tips for First Responders
Service disruptions	• Develop a community-based network to provide assistance to people with physical limitations • Encourage individuals with physical limitations to assess their needs before a disaster and take actions to prepare	• Neighbor to Neighbor (N2N) Network • SafelyOut™ • American Red Cross • Ready.gov
Evacuation challenges	• Develop plans for identifying, ahead of time if possible, people needing assistance to evacuate • Develop evacuation plans that ensure access to special equipment (e.g., portable oxygen tanks, devices to secure wheel chairs) needed to evacuate people with physical limitations	• The Special Needs Assistance Program (SNAP)
Challenges of mass care shelters	• Ensure mass care plans address the special needs of people with physical limitations • Use intake assessments to identify functional independence needs	• NC Cresp Quick Reference Guide

Strategies and Resources for Addressing the Public Health Emergency Needs of the Frail Elderly

Recent disasters, including Hurricanes Katrina and Rita in 2005 and the Chicago heat waves during the previous decade were shocking illustrations of how vulnerable the elderly, particularly the frail elderly, are in disasters. Their vulnerability is not only related to increased prevalence of chronic diseases and functional limitations that are associated with aging but also compounded by social isolation and low income. The following issues are concerns for the frail elderly in disasters:

- Physical and cognitive limitations, including reduced vision and hearing, dementia, and reduced mobility
- Dependence on medications or durable medical equipment (e.g. oxygen containers for those with respiratory conditions)
- General "frailty," which is characterized by muscle weakness, slow walking speed, exhaustion, low physical activity and little tolerance for physical stress
- Social isolation (i.e. lacking families, friends, and neighbors who can provide assistance when an emergency occurs)

- Difficulties with transportation, as they are more likely to have a disability, have limited income, or choose not to drive
- Resistance to help, fearing that it represents a defeat or a step toward total dependency even during disasters

Why is this group at greater risk?	How can planners help this group?	What resources are available?
Physical and cognitive limitations including general frailty	- See this website's section on disabled populations - Partner with programs that can help locate individuals with dementia and mental illnesses who may wander from their homes and/or caregivers during an emergency	Disaster Preparedness: Home and Community-Based Services for People With Dementia and Their Caregivers
Dependence on medications or durable medical equipment	- Equip shelters with appropriate medications, medical supplies and facilities to address the short-term needs of the frail elderly - Register elderly residents in a special needs registry to provide disability-specific information such as need of medications and medical equipment	- Coordinated Care Special Needs Shelter Brevard County Health Department - The Specials Needs Assistance Program - Administration on Aging: Emergency Assistance Guide 2006
Disrupted services (e.g., home health care, food delivery)	- Work with service organizations to ensure a continuation of services for elderly populations before, during, and after emergencies - Encourage elderly individuals to assess their needs and take actions to prepare a plan before a disaster - Reach out to the elderly to provide assistance in the wake of a disaster	- The Aging Services Council of Central Texas's Emergency Supply Kits for Homebound Elderly Residents - Emergency Preparedness for Older People - American Red Cross – Preparing for Disaster for People with Disabilities and other Special Needs

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Evacuation challenges (e.g. "transfer trauma")	Develop a plan for addressing the needs of the elderly in mass care shelters	• Seniors Without Families Team (SWiFT) Triage Tool • We Can Do Better: Lessons Learned For Protecting Older Persons In Disasters
Social isolation	• Have agencies that regularly provide financial, medical, food, and/or transportation assistance proactively offer assistance to elderly rather than waiting for requests • Help older people register for disaster assistance	• The Special Needs Assistance Program • Emergency.cdc.gov
Transportation concerns	• Create a plan for identifying, ahead of time if possible, people needing assistance to evacuate • Develop a memorandum of understanding/agreement (MOU/MOA) with transportation companies that can be used if the frail and elderly need to be evacuated • Develop a plan for dispensing strategic national stockpile materials to individuals who are unable to leave their homes	• SpecialNeeds-ASTHO Best Practices.pdf • MOU Between Main and Maine Motor Transport Association • Oklahoma City-County Health Department's System for Dispensing Strategic National Stockpile Materials to Immobile Populations
Post-disaster scams targeting the elderly	• Educate the population about how to avoid scams • Build a network of community-based organizations to rapidly share information about scams that are being perpetrated in the wake of an emergency	• Federal Trade Commission Information on Avoiding Scams

Strategies and Resources for Addressing the Public Health Emergency Needs of Minorities and LEP Populations

Racial and ethnic minorities and Limited English Proficiency (LEP) populations are vulnerable in a public health emergency for several reasons:

- Lack of material and social resources needed to navigate a disaster
- Higher rates of disability and poor health, making some in this group more reliant on others
- Greater likelihood of cultural or linguistic isolation, which affects both perceptions of risk and communication
- Low levels of trust in traditional sources of public health information.

Often, racial and ethnic minorities and LEP populations encounter a number of these difficulties simultaneously. As a result, these groups are vulnerable to the immediate impact of an emergency and less able to rebound after the threat has passed, putting them at risk for longer-term ill effects.

Why is this group at greater risk?	How can planners help this group?	What resources are available?
Low levels of income, education, and wealth	• Create evacuation plans that do not rely on individual resources such as car ownership, or personal finances for temporary housing • Provide pre-made home disaster kits for low-income populations that include critical items such as food, water, a small radio, and batteries • Plan for longer-term food, shelter, clothing, and medical needs of recovering minority populations • Communicate information about legitimate disaster-related resources to reduce the risk of the population falling victim to fraudulent recovery services	• National Resource Center on Advancing Emergency Preparedness for Culturally Diverse Communities • Federal Emergency Management Agency (FEMA) - Citizen Preparedness Guide
Poor health, disabilities, and inadequate health insurance coverage	• Create registries of disabled populations to facilitate advance planning for their needs • Equip shelters with appropriate medications, medical supplies, and facilities to address the short term needs of these populations	• NICOS Chinese Health Coalition • Collaborating Agencies Responding to Disaster (CARD)

	• Conduct tabletop and other training exercises with scenarios focused on minority disabled or chronically ill patients • Seek information on the unique needs and concerns of minority and LEP populations from community based organizations that serve their interests	
Cultural and linguistic isolation	• Construct preparedness and response programs in a manner that is consistent with cultural differences in living arrangements, family structure, and behavioral norms • Translate materials into the languages spoken in the local community • Identify the steps citizens must take to protect themselves in an emergency • Communicate in more than one medium: translate TV and radio messages as well as print and the Internet • Tailor messages to persons with low literacy by using audio and visual aides • Rely on existing communication/social networks and people to convey critical public health information • Develop programs to train and deploy health promoters and medical interpreters as messengers of public health information	• National Resource Center on Advancing Emergency Preparedness for Culturally Diverse Communities
Low-trust	• Coordinate efforts with representatives of minority populations in planning sessions to build trust and open a dialog for exchanging critical information • Clarify when and how citizenship affects access to aid	National Resource Center on Diversity Preparedness

	• Identify trusted messengers and information networks and use them to convey public health warnings and directives	

Strategies and Resources for Addressing the Public Health Emergency Needs of Resource-Poor Populations

When a disaster occurs, people who will be hardest hit are those who are already struggling to meet the material needs of their families. Less disposable income, low education, a lack of personal transportation options, and fewer economic opportunities are all reasons why people with limited material resources face greater risks in an emergency. As a result, these groups face a number of specific challenges to public health emergency preparedness that public health agencies and other organizations can address including:

- Fewer transportation and evacuation options
- Lack of material resources and individual-level preparedness
- Communication challenges
- Skepticism of government
- Post-disaster scams

Resource-poor populations are also more likely to be found among other special needs populations including racial and ethnic minorities, rural populations, and the elderly. Thus, strategies used to address the needs of these other groups may also be applicable to resource poor populations.

Why is this group at greater risk?	How can planners help this group?	What resources are available?
Transportation concerns	• Develop plans for identifying, ahead of time if possible, people needing assistance to evacuate • Develop a memorandum of understanding/agreement (MOU/MOA) with transportation companies that can be used if the frail and elderly need to be evacuated	• MOU Between Maine Emergency Management and Maine Motor Transport Association
Lack of material resources and individual-level preparedness	• Provide pre-made home disaster kits for low-income populations • Provide preparedness materials to advocacy organizations, service agencies, and support groups that are specific to the population they serve and can be freely distributed	• National Resource Center on Advancing Emergency Preparedness for Culturally Diverse Communities

	• Create evacuation plans that do not rely on individual resources such as car ownership, or personal finances for temporary housing • Plan for longer-term food, shelter, clothing, and medical needs of recovering minority populations	• 🅰️FEMA – Citizen Preparedness Guide
Communication challenges	• Conduct an assessment of communication needs and capabilities in your community • Develop a local network to help ensure that everyone, particularly those people with special needs, are cared for in an emergency • Tailor messages to persons with low literacy by using audio and visual aids • Rely on existing communication/social networks and people to convey critical public health information	• Neighbor to Neighbor (N2N) Network • Emergency, Community and Health Outreach Program (ECHO)
Skepticism of government	• Study how people in the community are likely to respond to potential public health orders or recommendations • Identify trusted messengers and information networks and use them to convey public health warnings and directives	• New Mexico Tribal Outreach for Pandemic Planning • Public Health Promotores
Post-disaster scams	• Educate the population about how to avoid scams • Communicate information about legitimate disaster-related resources to reduce the risk of the population falling victim to fraudulent recovery • Build a network of community-based organizations to rapidly share information about scams that are being perpetrated in the wake of an emergency	

Strategies and Resources for Addressing the Public Health Emergency Needs of Rural Populations

Although rural populations vary considerably based on the regions where they live, they share a number of individual- and community-level characteristics that make them particularly vulnerable in a public health emergency. On average rural populations are more likely to have:

- Advanced age
- Lower income
- Greater rates of no insurance
- Less trust in governmental authorities

Community factors contributing to vulnerability include:
- Proximity to potential terrorist targets such as nuclear facilities, and chemical plants, coupled with low awareness of the dangers these facilities pose
- Geographic dispersion of the population creates challenges for an effective public health response (e.g., delivery of countermeasures, assistance with evacuation, and door-to-door delivery of information)
- Geographic isolation poses difficulties in communication since coverage for Internet, television, and telephone service can be limited
- Limited public health and medical infrastructure in rural areas constrains the ability of these systems to meet the increased demand for services in an emergency

Why is this group at greater risk?	How can planners help this group?	What resources are available?
Individual characteristics such as age, poverty, and under or no insurance	• Identify and locate individuals with additional vulnerabilities (e.g. elderly, chronically ill, low-income, and limited English proficiency) • Build relationships with community- and faith-based organizations to reach out to, learn about, and communicate with the special needs populations in a rural community	• Identifying Aging Populations • Assisting Vulnerable Communities
Skepticism of government	• Study how people in the community are likely to respond to potential public health orders or recommendations • Take advantage of the independent nature of the rural population and promote individual preparedness	• New Mexico Tribal Outreach for Pandemic Planning • RAND reference card for chemical, radiological, or biological terrorist attack

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False sense of security	• Conduct hazard vulnerability and risk assessments on a regular basis and communicate about potential threats to the rural community • Engage the community in preparedness planning activities, including exercises covering the most likely scenarios	• The UCLA Center for Public Health and Disasters Hazard Risk Assessment Tool
Geographic dispersion	• Promote and encourage individual preparedness in the community • Develop community networks to assist in gathering and delivering information or services in an emergency	• California Health Department Guidebook for Providing Care at Home During a Pandemic • Caring for the sick at home when it's the only option • Kentucky Outreach and Information Network (KOIN)
Communication challenges	• Conduct an assessment of communication needs and capabilities in your community • Develop a local network to help ensure that everyone, particularly those people with special needs, are cared for in an emergency	• Neighbor to Neighbor (N2N) Network
Limited public health and medical infrastructure	• Develop and execute agreements with other health departments in the region to share resources in an emergency • Train non-medical personnel and community volunteers to assist with a public health and medical response • Develop policies and protocols for triaging people seeking care in an emergency	• Partnering to Achieve Rural Emergency Preparedness: A Workbook for Healthcare Providers in Rural Communities • Public Health Preparedness Training Guide for Non-Public Health Professionals

		• Promising Practices for Pandemic Influenza (Triage Strategies)

RAND. Promising practices: The special needs populations. Retrieved from
http://www.rand.org/health/projects/special-needs-populations-mapping/promising-practices.html