2006-2007 ASPH/CDC Vulnerable Populations Collaboration Group
Preparedness Resource Kit

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This product may be accessed online at http://www.asph.org/cphp/CPHP_ResourceReport.cfm.
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BACKGROUND

The Centers for Public Health Preparedness (CPHP), funded by the Centers for Disease Control and Prevention (CDC), were initiated in 2000 to strengthen terrorism and emergency preparedness by linking academic expertise with state and local health agency needs. The program has grown to become an important national resource for the development, delivery, and evaluation of preparedness education. CDC supports the Association of Schools of Public Health (ASPH) as the national convenor of the CPHP Network so as to enhance collaboration among the CPHP and with their government and practice partners, minimize duplication in development of materials, and maximize outreach of existing resources. In 2006-2007, CPHP “collaboration groups” continued to focus on reviewing preparedness resources and to develop guides and reports responsive to the training needs of the public health workforce for all-hazards situations.

INTRODUCTION

During an emergency, material and physical resources are stretched thin, and often the needs of those who most need help, namely vulnerable populations, are left unmet. Vulnerable populations can be defined broadly to include those who are not able to access and use the standard resources offered in disaster preparedness and planning, response, and recovery. Age, class, race, poverty, language, and a host of other social, cultural, economic, and psychological factors may be relevant, depending on the nature of the emergency. Events over the last few years have illustrated the specific vulnerabilities of certain populations. The effects of natural disasters on the poor, elderly, children, and others were acutely evident in the pictures, stories, and data from Hurricane Katrina. However, it is important to note that Hurricane Katrina was only one example of the need for improvements in public health planning, response, and recovery efforts.

The Vulnerable Populations Collaboration Group produced two documents, both of which focused on the following eight vulnerable populations:

- Economically disadvantaged populations;
- Ethnic and racial populations;
- Mentally ill populations;
- Older adult populations;
- Pediatric populations;
- Populations with disabilities;
- Rural populations; and,
- Spanish-speaking populations.

One of the two documents was a resource grid listing 323 educational resources in the eight population categories (with an extra “Overview” category) that was intended for public health and emergency management practitioners at the federal, state, and local levels to effectively define, locate, and reach vulnerable populations and protect them in the event of public health emergencies. The other document was a resource gap document that outlined specific gaps in resources for the same eight populations. The gap document was intended for use by CPHP educators and others working in public health development.

Both of these detailed documents were considered only a prelude to the process of fully enabling public health responders to cooperate with vulnerable populations in all-hazards scenarios. The Vulnerable Populations Collaboration Group’s work in 2006–2007 takes last year’s products to the next level by synthesizing existing materials to provide practice partners with summary considerations (Table 1, page 35) and effective
practices for a few key vulnerable populations.

The charge of this group was to develop introductory training materials on select vulnerable populations that could be of help to public health practitioners. One contribution is a “getting started” tip list for practice partners. (See “Getting Started: Planning for Vulnerable Populations,” next page). below. This list provides an overview of issues to consider when planning for the preparedness needs of vulnerable populations. In addition, the tips are augmented through references and resources, which are provided in “References for Getting Started.”

The second contribution is a collection of key considerations for a few, selected vulnerable populations. Group member expertise, as well as the work of previous collaboration groups aided in the selection of these populations. It is anticipated that future work related to emergency preparedness and vulnerable populations will add to the findings of this product. Key considerations provide specific information on why a particular group is considered vulnerable and provides some tips on how to address these vulnerabilities.

In addition, appropriate and effective practices are highlighted in some sections to bring to attention some examples of successful practice. Throughout the text, resources are referenced that can be considered to be appropriate. It is important to note that while we believe that these resources are of high quality, an empirical quality measure was not employed. Also, we note that there is a rich and diverse body of resources related to vulnerable populations, and the resources highlighted in this document are only exemplars of the extant base of knowledge.

Public health practitioners, some of whom were involved in the development and review of this product, are the intended audience of this document. Hence, brevity and usability were emphasized at the expense of more in-depth discussions, explanations, and theoretical treatments. Also, in the interest of providing a broad overview, many of the nuances and intricacies of subpopulations within a vulnerable group have not been discussed extensively in this document. To the extent possible, resources have been provided for further review. This document is not to be interpreted as a one-size-fits-all approach to address the needs of vulnerable populations. Context of the situation and the subtleties of local differences are of paramount importance when engaging vulnerable populations.
GETTING STARTED: PLANNING FOR VULNERABLE POPULATIONS

In working with vulnerable populations, building trust is critical to success. The following list serves as a starting point that practice partners may use to jumpstart preparedness initiatives targeting the special needs of vulnerable populations. Knowledge is important and needed, but action is the ultimate goal of planning.

1. Establish criteria to define vulnerable populations in your community. Although not limited to these categories, vulnerable populations may include the following:
   - Economic Disadvantage
     - Persons living in poverty may be faced with daily survival crises and may be unable to take the necessary steps to be prepared.
   - Limited English Proficiency (LEP)
     - Persons who have limited English language proficiency may have difficulty getting information related to planning and response.
   - Disability (physical, mental, cognitive, or sensory)
     - Persons with disabilities may need special attention during a crisis.
   - Isolation (cultural, geographic, or social)
     - Persons living in isolation may include individuals or groups who may be isolated from mainstream society either out of their own volition (e.g., Amish) or because of circumstances (e.g., the homeless, migrant workers, etc.).
   - Age (children and elderly)
     - Both the frail elderly and children need special consideration because they may not be able to respond adequately to an emergency and because they may need specialized medical attention.

2. Different communities may have different vulnerable populations. Identify strategies to involve partners at an early stage in the planning process.

3. Collect population information and data in order to estimate the number of people in the vulnerable population groups in your community. It is important to recognize that some individuals will not perceive themselves to be vulnerable.

4. Examine the history of your local population’s experience with organizations and institutions in past disasters and crises.

5. Know the history of your organizational or institutional experience with vulnerable populations during disasters and crises.

6. Engage and maintain ongoing relationships and partnerships with community organizations, government agencies, first responders, and other service providers.

7. Empower the population identified as vulnerable by involving them in the planning process.

8. Instead of relying on actors, recruit representatives from the vulnerable populations to participate in drills and practice. Make improvements and necessary changes based on the results of the practice or drill. The involvement of specific populations should be done in keeping with the outreach methods.
developed in partnership with communities. In addition, emergency responders should be engaged in exercises conducted by the vulnerable population.

9. Understand the cross-cutting issues for vulnerable populations and know how to incorporate these situations into the planning process. For example, a child may be poor, technology-dependent, and part of a family that has limited language proficiency.

10. Consider the resiliency of the population as an asset in planning, response, and recovery.

Note: This list provides a brief overview of complex topics. Please refer to “References for ‘Getting Started’ Document” on the following page for more detailed information.
The following references are intended to augment the brief information presented in the “Getting Started” document and should serve as further reference material to any of the issues raised.

Defining the Population

Public Health Workbook to Define, Locate and Reach Special, Vulnerable, and At-Risk Populations in an Emergency (Draft) (www.bt.cdc.gov/workbook).

The initial draft of this workbook provides a process that can support state, local, and tribal planners as they advance in their efforts to reach all populations—and specifically, special populations—in day-to-day communication and during crisis or emergency situations.

The Workbook is divided into three primary sections, each representing a major stage in the process of communicating with special populations, and provides a baseline of research plus selected resources that should substantially reduce the work required of health departments to begin this process.

Collaboration Efforts


This article reviews existing educational models for teaching culturally appropriate care for emergency medical services. Hobgood et al. explain the barriers that exist for developing methods of culturally competent care in emergency medicine, both educational and professional. Several specific universities are presented as case studies, and educational methods are listed and discussed. The authors strongly advocate the training and implementation of culturally appropriate care methods and give resources. In addition, the importance of effective valid measures of competence is stressed to assess progress and guide ongoing improvement.

Hobgood et al. take their definition of cultural and linguistic competence from the Office of Minority Health: “Cultural and linguistic competence is a set of congruent behaviors, attitudes and policies that come together in a system, agency or among professionals that enables effective work in cross-cultural situations.”

Cultural Competency


Cultural Competence: “Cultural competence is a set of values, behaviors, attitudes, and practices within a system, organization, program, or among individuals that enable people to work effectively across cultures. It refers to the ability to honor and respect the beliefs, language, interpersonal styles,
and behaviors of individuals and families receiving services, as well as staff who are providing services."

Summary: This is part of a series of publications by the Center for Mental Health Services (CMHS). This is a guide meant to assist states, local governments, and communities in planning, designing, and implementing culturally competent disaster response programs. The goal is to tailor disaster crisis counseling that better serves the U.S. population, one that is ever growing in its diversity.


“Cultural competence in healthcare entails: understanding the importance of social and cultural influences on patients’ health beliefs and behaviors; considering how these factors interact at multiple levels of the healthcare delivery system; and devising interventions that take these issues into account to assure quality healthcare delivery to diverse patient populations.”

The authors review relevant literature to develop a definition of cultural competence (above), identify key components for intervention, and describe a framework for implementing measures to address racial/ethnic disparities in health and healthcare. They describe how sociocultural barriers to healthcare occur at the organizational (institutional leadership and healthcare workforce), structural (interpreter services, bureaucratic intake processes, and inadequate access to care), and clinical levels (the interaction between the provider and patient). Interventions at all of these levels are suggested via a cultural competence framework, with the ultimate goal of eliminating racial/ethnic disparities in health and healthcare.


The authors present cultural competency as a process that is integrated across all systems levels. This article identifies and describes nine major arenas in which to focus cultural competency: interpreter services; recruitment and retention policies; training, coordinating with traditional healers, use of community health workers; culturally competent health promotion, including family/community members; immersion into another culture; and administrative and organizational accommodations. It also forms a conceptual model of how cultural competency may reduce health disparities.


The population of the United States is becoming increasingly culturally diverse. This change in population has a direct effect on healthcare because significant health disparities exist between racial/ethnic and cultural groups. Culturally competent care improves health status of vulnerable populations and increases the quality and effectiveness of healthcare and decreases cost. In the maternal-child nursing practice and provision of holistic care, culturally competent care demonstrates cultural awareness and cultural knowledge, cultural skill, cultural sensitivity, and general sensitivity to the sociocultural context of women and children.
Child Welfare Information Gateway.  

This is an informative website that provides information to the reader about how cultural competence can help professionals better work with children and their families. It focuses on minority and underserved children and youth. This website deals with the question of why there are a disproportionate number of minorities in the child welfare system, adoption, services, child abuse and neglect, and suggests ways in which agencies can increase their cultural competence. They define cultural competence as “the ability of individuals and systems to respond respectfully and effectively to people of all cultures, classes, races, ethnic backgrounds, sexual orientations, and faiths or religions in a manner that recognizes, affirms, and values the worth of individuals, families, tribes, and communities, and protects and preserves the dignity of each.”


“Cultural competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations” (adapted from Cross et al. 1989).

Cross et al. developed this monograph to assist service providers, policy makers, and agency administrators in assuring culturally appropriate service development. The focus is on children of color (targeting African Americans, Asian Americans, Hispanic Americans, and American Indians) with severe emotional disabilities. The authors identify five essential elements that contribute to developing culturally competence. A system, institution, or agency would value diversity, have the capacity for cultural self-assessment, be conscious of the dynamics of cultural interaction, institutionalize cultural knowledge, and be adaptable to diversity.


This report uses an extensive literature review of published Medline literature to review the evidence base of using cultural and linguistic competence as a means to improve health outcomes and well-being. The authors conclude that the evidence shows promising impact but is not yet convincing due to poorly designed studies with methodological limitations. The report lays out areas of needed research (e.g., use of validated and shared definitions of cultural and linguistic competence and implementation of longitudinal and large studies to investigate health outcomes). Additionally, the report found a paucity of studies examining cultural and linguistic competence at the organizational and policy levels. The authors acknowledge that no one definition of cultural competency exists. However, for the purposes of the report, they use a conceptual framework connecting behaviors, practices, policies, attitudes, and structures and state the following:  
Cultural competence requires that organizations:
• Have a defined, congruent set of values and principles, and demonstrate behaviors, attitudes, policies, and structures that enable them and their personnel to work effectively cross-culturally;
• Have the capacity to value diversity, conduct self-assessment, manage the dynamics of difference, acquire, and institutionalize cultural knowledge, and adapt to diversity and the cultural contexts of the communities they serve; and,
• Incorporate the above in all aspects of policymaking, administration, practice, and service delivery, and systematically involve patients, families, and their communities;

Cultural competence is a developmental process that evolves over an extended period. Individuals and organizations can be at various levels of awareness, knowledge, and skills along the cultural competence continuum.


This study identifies three areas where physicians and patients likely differ according to experienced medical interpreters. As a result of a lack of mutual awareness, these differences lead to misunderstandings. Due to this finding, interpreters recommend cultural competency training for physicians that focuses on increasing awareness of common misunderstandings, basic background information on patients’ country of origin, and an adaptation to communication styles.


This report was the product of an advisory panel held by NICHQ on improving cultural competency. Twenty experts assembled for a two-day meeting to develop a culturally competent care model. The report consists of strategies for change in several areas related to cultural competence, including the organizational and service delivery systems. Also included are case studies and measures for evaluation of a program’s cultural competence.


Minority groups have less access to care, use fewer healthcare resources, and are less satisfied with their care than majority white populations. These inequalities may be partly attributable to racial, cultural, and communication barriers between patients and healthcare providers. A survey was created to gather information on how preclinical medical students feel about multiculturalism and gender equality. It is found these students differ significantly in their appreciation of cultural sensitivity, racial diversity, and gender equality among ethnic, gender, and political lines. Cultural competency for these purposes is defined as the ability to recognize the necessity to value population differences and preferences, and the self-awareness to respect and try to understand patients from whom we differ. The study is potentially useful if adapted to training needs of preparedness workforce.

This publication points out the language diversity in this country and then introduces 11 principles for language access in healthcare. The principles state that effective communication between healthcare providers and doctors is essential; competent healthcare language services are essential; society must help fund language services; mechanisms should be established for providing appropriate and timely language services; linguistic diversity is encouraged among the healthcare workforce; education about LEP issues is important; English as a Second Language (ESL) instruction is important and should be available; language services should be evaluated for effectiveness; those providing language services should be evaluated; primary language data collection should be improved; and language services must be available.

National Centers of Excellence, Research Coordinating Center.

This website is full of links and resources related to research and cultural competency.


Cultural competency has been described in terms of knowledge, attitude, and skills (educational perspectives), disease incidence and prevalence (epidemiologic perspective), and treatment efficacy (outcomes perspectives). It represents the ability of healthcare providers to interact with patients who are different from themselves. Cultural competency is also a set of behaviors, knowledge, attitudes, and policies that come together in a system or organization or among health care professionals that enables effective work in cross-cultural situations. One chapter discusses the need for cultural competence, what creates cultural competence, health disparities, and how to apply cultural competence. The entire book discusses the reasons why health disparities occur and how they are being addressed.


The OMH website provides access to health program funding for communities of color, data and statistics on health outcomes, information and guidelines on cultural competency, health topics, and links to health statistics based on regions.


Chapter 9, “Responding to the health care needs of diverse populations: The need for diversity in the health care professions,” and Chapter 10, “Cultural competency and the practice of public administration,” both are valuable resources to understanding the need and use of cultural competency. Chapter 9 (B.L. Green et al.) argues that in order for our health care system to function efficiently and effectively, there is a need to enhance diversity within health professions. This chapter outlines the challenges to recruiting a diverse pool of professionals, current trends among health care providers and status of minority health, and a rationale for increasing diversity and recruitment strategies. Chapter 10 (M.L. Bailey) explains what cultural competency is, how it relates to public administration (including health care), and how it is applied. This resource offers the following definition of cultural competency: respect for understanding of diverse ethnic and cultural groups, their histories, traditions, beliefs, and value systems; services. Furthermore, cultural competency supports other assistance that is conducted or provided in a manner responsive to the beliefs, interpersonal styles, attitudes, language, and behaviors of individuals who receive these services and in a manner that has the greatest likelihood of ensuring their maximum participation in the program (as defined by Developmental Disabilities Assistance and Bill of Rights Act Amendments of 1987).


Cultural competence is defined, in Part II, as the need for cultural and linguistic competent care for families with special health problems (A. Bushy), in relation to the provider of health care services. As described in this part, a provider who displays cultural competence is “not only aware, sensitive and knowledgeable about another culture but also has a repertoire of skills to render care that is deemed appropriate by a client of minority origins.” This entire resource discusses the health issues and social issues affecting the health of specific populations, including people of color, rural dwellers, and teens. There is a full spectrum of diversity and health needs within these populations, and even in what appears to be a homogenous community there is diversity among the residents stemming from their life experiences and exposures to other cultural groups.


“Cultural and linguistic competence is a process that involves an ongoing commitment by individuals and organizations to develop the requisite knowledge, skills, and attitudes and to promote programs and systems that ensure that all individuals receive the highest quality health care.”

The Health Resources and Services Administration (HRSA) established Centers of Excellence (COEs) programs to focus on racially and ethnically underrepresented minorities in health professional programs. This curriculum guide is intended for COEs designing cultural and linguistic competency
curriculums for training health care professionals in medicine, dentistry, pharmacy, social work, psychology and counseling, and the allied fields. The guide addresses strategies for implementing the curriculum, content, delivery, assessment, and evaluation. Potentially, this could serve as a guide for adapting training of professionals and paraprofessionals specific to disaster preparedness and working with vulnerable populations.


“Cultural competence is a set of congruent behaviors, attitudes, and policies that come together in a system or agency or among professionals that enables effective interactions in a cross-cultural framework” (Cross et al. 1989).

This guide provides definitions used by the Centers for Medicare and Medicaid Services (CMS) in planning culturally and linguistically appropriate services, and links to other guides and references. It defines linguistic competence, cultural competence, and cultural and linguistic competence. CMS and the Agency for Healthcare Research and Quality are both federal entities; as such, these are the federal definitions for linguistic and cultural competence. Note that they use the definition established by Cross et al. in their seminal 1989 monograph.

Resources (cultural and ethnic minorities)

The following resources are available from the Centers for Public Health Preparedness Resource Center, http://preparedness.asph.org/ResourceCenter.cfm.

Assuring cultural competence in disaster response. DVD, http://www.fcphp.usf.edu/courses/course/course.asp?c=ACC.

This program is designed to prepare public health professionals for their functional roles in disaster response by offering culturally competent disaster interventions to survivors, witnesses, and responders of bioterrorism and other major public health threats and community disasters.


Changes in the demographic makeup of the country, enormous disparities in health among many groups, and a growing awareness of the under representation of certain groups in public health demand that public health workers represent groups in order to effectively work with them. This program, a part of the Public Health Leadership Institute, is designed to be thought provoking and interactive and will define cultural competence, especially as it relates to crisis situations. The focus of this program is how to gain competence to assess and increase our own level of competence and how to interact with clients and each other in a culturally competent manner, and during a crisis event.

After completing this course, the learner will be able to access documents that provide tips for communicating with special populations. The website provides a collection of documents that highlight important aspects of various cultures and people with special needs. The documents are organized under the following categories: animals and pets, bioterrorism, children, cross-cultural; disability; language; reference; seniors; and links to online resources.


This seminar provides a definition of special populations and an overview of key issues related to special populations in public health emergencies. In addition, speakers will address gaps, challenges, and strategies in emergency preparedness planning for special populations. Community-level speakers will share examples from their on-the-ground experience.


A statewide conference on providing policing, public health, emergency response and social services to the Hispanic community. Members of law enforcement, social work, and public health working with Hispanic populations to provide public safety information in times of emergency will accomplish the following:

1. Learn to perform better interviews;
2. Learn to identify Hispanic populations in their service area;
3. Learn to understand reasons and methods of Hispanic gang recruitment;
4. Learn how to hire translators and interpret Spanish documents;
5. Understand HIPAA regulations; and
6. Be provided techniques for distributing public education information to the Hispanic community.


The purpose of providing such training was to ensure these communities are adequately informed, aware, and skilled to implement coordinated response plans for a range of potential public health emergencies on tribal lands and in surrounding communities. Training of tribal public health professionals, emergency management personnel, and health care system providers, as well as representatives of tribal community networks, is considered a priority to strengthen their public health emergency preparedness infrastructure.

This web conferencing presentation and discussion was developed in cooperation with the Northwest Portland Area Indian Health Board (NPAIHB) to address a need identified by tribal leaders. NPAIHB solicited specific input regarding questions tribes had about public health law and authority. This presentation was developed in response to this input. The live session, held September 21, 2006, provided a forum for participants to ask questions and seek advice from the experts.


Our increasingly diverse and multicultural society provides special challenges to public health workers who want and need to reach populations who are traditionally hard to reach. These populations include recent immigrants who do not know how the local health system works; non-English speakers; racial or ethnic groups who historically have distrust for health departments and government; homeless individuals and families; and others who have physical and/or developmental disabilities. In this half-day workshop, participants explored their own assumptions and attitudes about working with populations that are considered hard to reach. Small group exercises allowed participants to explore tools and strategies to utilize when working with these populations.


This course is designed to help students understand how to address emergency preparedness for the hard-to-reach and special needs residents in their community. Created for those needing to understand disaster response and health issues of diverse audiences, this course covers who the most vulnerable residents are; what makes them more challenging to serve; and how to best reach and serve their needs. Course includes suggested reading and class exercises.


How willing and able is your community to understand differences when preparing for and responding to emergencies? Speakers provide detailed information on current cultural issues that surround emergency preparedness and response. They discuss strategies and available resources that will help the community become more culturally competent, and thus better prepared to respond to emergencies.

Title VI—Cultural competency. Comprehensive course outline, http://www.sph.unc.edu/nccphp/training/
This presentation by Aaron Wendelboe, PhD candidate, MSPH, gives an overview of cultural competency and its implications for workers in the health care industry, mainly public health. Upon completion of this training, the student will be awarded 0.05 CEUs. These learning modules are applicable to all public health, medical, veterinary, pharmacy, emergency management, hospital, and other professionals interested in public health preparedness. These modules are created by faculty and guest lecturers at the University of North Carolina-Chapel Hill School of Public Health and are equivalent to graduate level content.

Tribal public health emergency and bioterrorism preparedness and response training project modules. http://azcphp.publichealth.arizona.edu/resources.html.

The overall objective of this project was to provide basic public health emergency and bioterrorism (BT) preparedness and response training for tribal personnel through developing and delivering three training modules and coordinating implementation statewide through five regional 1½-day sessions in close cooperation with the Arizona Department of Health Services, Bureau of Public Health Emergency Preparedness and Response (BPHEPR), and American Indian liaison.

The purpose of providing such training was to ensure these communities are adequately informed, aware, and skilled to implement coordinated response plans for a range of potential public health emergencies on tribal lands and in surrounding communities. Training of tribal public health professionals, emergency management personnel, and health care system providers, as well as representatives of tribal community networks, is considered a priority to strengthen their public health emergency preparedness infrastructure.
SELECTED POPULATION-SPECIFIC SUMMARIES

These summaries provide key considerations on why a particular group is considered vulnerable and provides some tips on how to address these vulnerabilities. Additional references related to training for and with each population are included in a separate document. Each population summary provides an overview of information, including epidemiologic or demographic data. Certain population overviews may include descriptions of characteristics requiring special considerations (i.e., physical, emotional, etc.) during disasters. In addition, specific issues and concerns were outlined for the planning, management, and response for the populations. Given that each of the populations is unique, it was difficult to create a “one-size-fits-all” outline; therefore, the purpose of these summaries was to provide as much information as possible, with the recognition of gaps as opportunities for future insight from research and practice.

ECONOMICALLY DISADVANTAGED POPULATIONS

This summary provides an overview of the vulnerabilities of economically disadvantaged populations, recognizing that this population overlaps with many other groups.

Both exposure to hazards and reduced capacity to cope and recover increases vulnerability. Because economically disadvantaged populations often lack access to services and resources, they are considered one of the most vulnerable groups in disasters and public health threats. Based on U.S. Census Bureau data collected in 2005, 37 million people live in poverty (12.6 percent of the population). Although poverty stabilized between 2004 and 2005, it continues to affect some groups more than others. The poverty rate among non-Hispanic whites was 8.3 percent in 2005 and approximately three times higher among blacks (24.9 percent) and Hispanics (21.8 percent). Of those living in poverty, non-Hispanic whites accounted for 43.9 percent of the total, followed by Hispanics (25.4 percent), and blacks (24.8 percent).

The dimensions of poverty are multifaceted (economic, protective, political, human, and socio-cultural) and not expressed solely in monetary terms. Although disasters affect all populations, loss of life, infrastructure and housing damage, and disease that often follows disasters further increases the needs of those living in poverty and their capacity to recover. Consequently, being poor not only exacerbates disaster risk; disasters can also exacerbate poverty. Recognizing these unmet needs, disaster policy makers, planners, and first responders as well as economically disadvantaged citizens are in a unique position to make a difference in minimizing the impact of disasters by creating a culture of preparedness for all.

Reference

ETHNIC AND CULTURAL MINORITY POPULATIONS

This summary provides an overview of the vulnerabilities of ethnic and cultural minority populations, recognizing that this population overlaps with many other groups. Further information on specific examples of these populations is needed.

Loosely defined, ethnic and cultural minorities, as defined by the U.S. Census Bureau, are generally those groups of individuals other than white. By the criteria applied by the Census Bureau, these groups can include black or African American, American Indian, Alaska Native, Asian, Native Hawaiian and other Pacific Islander, some other race, and Hispanic or Latino (of any race). Although each ethnic and cultural group has indigenous and unique traditions, there are some general common considerations, as well, that are emphasized in this document. The 2005 American Community Survey, Data Profile Highlights illustrates the following demographic information: Of the 288 million people accounted for by the census, 25.3 percent (roughly 73 million) identify themselves with designations other than white.

For example, for blacks or African Americans, who make up 12.1% of the total population, or roughly 39 million (Census 2000 Demographic Profile Highlights), the following issues may affect disaster planning and management:

- Median age: 30;
- High school graduate or higher: roughly 14.3 million;
- Bachelor’s degree or higher: roughly 2.8 million;
- Those with some level of disability: roughly 7.4 million;
- Speak a language other than English at home: roughly 2.2 million; and,
- Families below poverty level: roughly 8 million.

Thus, the special needs of groups within this highly variable population of cultural and ethnic minorities need to be known and accommodations made in emergency planning for the pre-event, event, and post-event phases of disasters. Emergency preparedness measures raise the threshold of community resiliency, helping keep emergencies from becoming disasters. A better understanding of special issues within each of these groups is essential to ensure successful disaster planning and management.

Physical and Medical Considerations

- The physical needs of the population, regardless of cultural and ethnic status, are the same, but proportions of elderly, people with disabilities, etc. are different.
- There is a possibility of larger percentage of diabetes (particularly in American Indian groups) or other health issues, requiring specific medications.

Psychosocial Concerns

- Limited English Proficiency (LEP) populations: Evaluate the psychosocial consequences of immigrant/refugee status; consider culturally constructed definitions of what constitutes “emergency” and “disaster,” how emergencies are perceived, and how they are experienced and the typical response.
- Consider mental health and social support needs of linguistic/cultural interpreter workforce.
• Both English language proficiency and literacy in language of origin should be considered when evaluating the needs of cultural and ethnic minorities.
• Consider dependency upon assistance in routine activities of daily living (ADLs) and those instrumental ADLs, such as paying bills, managing one’s financial investments, traveling, etc.
• Below-poverty-level groups require special physical considerations.

Important Considerations for Disaster Planning and Management or Emergency Preparedness

Inadequate disaster planning creates barriers to acquiring adequate services at critical phases of disaster management for many ethnic and racial groups throughout the country. Consequently, this section focuses on issues or key considerations related to the cultural competence of organizations and individuals who plan or provide disaster services to various ethnic and racial groups before, during, and after a disaster. This section also addresses the need to understand perceptions that ethnic and racial groups have about those who provide services throughout the disaster services continuum. Lastly, considerations listed for other vulnerable individuals, groups, or communities (i.e., low-income, mentally ill, older populations, etc.) throughout this document should also be applied to ethnic and racial populations because these groups are generally disproportionately represented among vulnerable populations.

Systemic Issues
• Discrimination and other inequities historically experienced by ethnic and racial populations can affect the level and quality of disaster-related services they receive.
• Failure to employ cultural competence principles for ethnic and racial minorities can lead to the development of culturally inappropriate policies, plans, and services before, during, or after a disaster.
  • Although many government agencies have taken steps to become culturally competent, they are often working with communities or individuals who do not always understand the organizational culture of those providing disaster-related services (i.e., public health, emergency management agencies, Red Cross, etc.).

Psychosocial Issues
• It is well documented that various ethnic and racial groups experience discrimination and other inequities before, during, and after disasters.
• Ethnic and racial populations are less likely to be informed or educated about disasters and more likely to distrust government and, instead, rely on friends and families during response and recovery periods.
• These groups may appear as “closed communities” and may distrust many outsiders.

Practical Concerns
• Define community boundaries (tribal jurisdiction, ethnic or cultural communities).
• Use GIS data/systems to provide specific details.
• Work with elders and other community members to identify special groups within the community, to ensure no one “falls through the cracks.”
• For immigrant/refugee populations, consider their health status prior to arrival in United States.
• Provide for pets and especially service animals.
POPULATIONS WITH DISABILITIES

This section includes a general discussion of people with disabilities, along with specific considerations for people with psychiatric diagnoses. Further information on other groups of persons with disabilities is needed and could be added to this section.

Although disability (physical, mental, cognitive, or sensory) is discussed as one group, in fact, it includes individuals with physical, sensory (deafness, blindness), cognitive, and mental health concerns; their needs in times of emergency may be different. While being able to leave their homes may be the issue for some, communication about where to go and what to do in an emergency may be difficult for others. For example, without captioning or sign language interpretation, the hearing impaired may be without access to information. Or, for people with cognitive impairments, simpler instructions may be necessary.

Much of the discussion about persons with disability frames them as being isolated individuals and recipients of care. However, the following must be taken into account:

- Many people with disabilities do not see themselves as part of a single group—this is particularly true for people who are disabled later in life or the frail elderly. Although their needs may be the same as a person with a disability, or a member of the hearing impaired community, such individuals will be more likely to identify with members of their families and general community.
- Most people with disabilities have family members or significant others who are not disabled and will not want to be separated from them. This is particularly true for someone with a disability who is a parent—for example, a mother who uses a wheelchair who will not want to be separated from her young children.

Many of the needs of those with disabilities can be anticipated and addressed far more easily in the context of general emergency plans.

How can resources currently available in the community for people with disabilities be better used in planning? For example, Centers for Independent Living are federally funded resource centers that exist around the country, but a recent follow-up study from Hurricane Katrina shows that there had been almost no contact between these centers and emergency services anywhere.

Equipment such as electric wheelchairs cost thousands of dollars and many people will wind up in nursing homes if they are forced to abandon their chairs. In the aftermath of Hurricane Katrina, some wheelchair users refused to leave their homes because of their chairs. Yet electric chairs can operate for only a few hours before their batteries run out. Those who depend on ventilators to breathe face similar issues.

Individuals with mental retardation and other types of disabilities often have very set routines and will refuse evacuation fearing that their boss will fire them if they do not show up at work. A prior plan and prior discussion at work could alleviate this.

General plans about contacting and providing services to people with disability are important, but a recurrent issue in times of emergency is the need for local emergency providers to know exactly where individuals with disability are and what their needs are. A number of organizations—including a number of disability advocacy
groups—are now recommending some sort of voluntary registry for those who need help in times of emergency, where people self-identify as being disabled. While a registry has its merits, some issues deserve attention:

- The need to keep such lists up to date;
- Who has access to the list;
- Lack of access to such lists that seem to occur at the community level. In other words, some state or regional lists have been inaccessible to local first responders in times of emergency, or such lists are maintained on computers that may not be usable when the power goes out; and,
- Finding the right balance between an individual’s privacy and the need for information to better coordinate emergency response is a challenge that should addressed by communities.

**Persons with Psychiatric Diagnoses (specific sub-population)**

Clinical field experience has shown that disaster survivors with mental illness function fairly well following a disaster, if essential services have not been interrupted. People with mental illness have the same capacity to “rise to the occasion” and perform heroically as the general population during the immediate aftermath of the disaster. Many demonstrate an increased ability to handle this stress without an exacerbation of their mental illness, especially when they are able to maintain their medication regimens.

However, some survivors with mental illness have achieved only a tenuous balance before the disaster. The added stress of the disaster disrupts this balance; for some, additional mental health support services, medications, or hospitalization may be necessary to regain stability. For individuals diagnosed with Post Traumatic Stress Disorder (PTSD), disaster stimuli (e.g., helicopters, sirens) may trigger an exacerbation due to associations with prior traumatic events.

Many people with mental illness are vulnerable to sudden changes in their environment and routines. Orienting to new organizations and systems for disaster relief assistance can be difficult. Program planners need to be aware of how disaster services are being perceived and build bridges that facilitate access and referrals where necessary. Disaster mental health services designed for the general population are equally beneficial for those with mental illness; disaster stress affects all groups. In addition, when case managers and community mental health counselors have a solid understanding of disaster mental health issues, they are able to better provide services to this population following a disaster.

**Physical and Medical Considerations**

- Mental health consumers may be separated from mental health professionals, treatment, and medications.
- Mental health consumers may be inappropriately admitted to nursing home facilities and institutionalized care.

**Psychosocial Considerations**

- Early post-disaster psychiatric (“peri-traumatic”) symptoms: Among a range of psychological reactions in the aftermath, several are particularly strong predictors of future PTSD or other diagnosable psychiatric disorders. These include dissociation, extreme emotional response, and panic symptoms.
• Intense exposure: All other factors remaining constant, the greater the severity of exposure to the forces of harm during a disaster, the greater will be the risk of an adverse psychological outcome. Personal harm: Actual or perceived harm caused by the disaster event, including physical injury, illness, or perceived exposure to a harmful agent, is both a stressor and a risk factor for psychological impact. Death of a loved one: The sudden, unexpected, premature, and traumatic death of a loved one as a consequence of disaster is a significant consideration in response and recovery. Witnessing harm to a loved one, or separation from a loved one, particularly in the absence of information regarding whereabouts and vital status, may create extreme stressors.

• Incongruous scenes: Disasters and acts of mass violence may expose survivors to grotesque, horrific, and troubling scenes that are far outside common experience. Novel, incongruous exposures are difficult to process, since the usual guideposts of life experience simply do not accommodate what the survivor has witnessed.

• Complicated bereavement: While bereavement is a normal response to death, providers should be attentive to the special features of traumatic and complicated bereavement. Traumatic bereavement typically refers to a sudden and/or unexpected death depriving survivors of the opportunity to acclimate to the coming reality of loss, as well as the loss of opportunity to say goodbye or to engage in healing or concluding dialogue. Complicated bereavement typically refers to situations where, for example, remains are not recovered, are only partially recovered, or are recovered at different points over time, thereby causing uncertainty and drawing out the bereavement process.

Loss of social supports: Social support is an extremely important buffer against the traumatizing effects of disaster. Conversely, lack of social support is one of the most robust predictors of disaster-related PTSD.

Practical Considerations
Stressors associated with disasters such as job loss, loss of property, death of loved ones, and displacement tend to exacerbate preexisting problems within families. In addition to these stressors, maladaptive coping mechanisms such as increased substance abuse and increased violence create hardships for families in the aftermath of disaster.

Overlap Considerations
Severe economic loss to the individual and the community are among the most devastating of disaster consequences. Entire industries may experience a downturn, as happened to the U.S. airline industry following September 11, 2001, and the fishing and tourism industries along the tsunami-ravaged coastlines of Indonesia, Sri Lanka, and Thailand in 2004. The “working poor” who doggedly survive paycheck to paycheck may experience post-disaster hardships that create a sudden dependency on government programs. Loss of resources is viewed as one of the most powerful predictors of psychological impact of stressful events such as disasters.

Damage to community/family function: All disasters disrupt family and community function, but more so for those families and communities with serious problems preexisting before the disaster strikes. Some disasters of catastrophic proportions fundamentally destroy the fabric of community life. Death or displacement may leave the community leaderless and unable to sustain itself. Whole communities are affected by disasters, not just individuals. Research has shown that there exists a communitywide tendency for people to feel less positive about their surroundings, less enthusiastic, less energetic, and less able to enjoy life after being exposed to a
disaster. Disasters tend to diminish the quality of community life for a prolonged period of time.

Important Considerations for Disaster Planning and Management or Emergency Preparedness

Planning for preparedness can be addressed along two dimensions. The scope and nature of preparedness will depend upon two dimensions: temporal and response. Preparedness concerns along the temporal dimension can be tied to pre-event, event, and post-event.

Further, sought-after response behaviors can be related to individual response, community response, and infrastructure response.

Individual Response

People with mental illness have the same basic needs as the general population following a major disaster—safety, shelter, food, social support—but they may have other special needs. Programs designed to meet these special needs should not be any more stigmatized than programs for other special populations, such as children, the frail elderly, or people with special language or cultural needs.

The disaster needs of people with mental illness will be similar to those of the general population. It must be assumed that these needs cannot be met by traditional mental health and psychiatric programs.

People with mental illness have the same capacity to “rise to the occasion” and perform heroically in the aftermath of a disaster as the general population. Many demonstrate an increased ability to handle this stress without decompensation from their primary illness.

Community Response

Local and state authorities must provide special disaster services and interventions for those with psychiatric diagnoses, either through crisis counseling services for the general population or those specifically provided at mental health service sites. Preparedness training should also be provided to consumers.

Developing and maintaining a community support network is vital to the ability to access needed resources during a disaster. Using social group work as a methodology prepares people with mental illness and their caregivers for the teamwork needed to weather an emergency. The sense of community and ownership by consumers and staff plays a major role in recovery from a disaster.

Involving consumers in preparing for and recovering from a disaster provides needed human resources and makes good rehabilitative sense. Principles of psychiatric rehabilitation are as effective in a disaster as in normal times.
Infrastructure Response

State emergency operations plans and the mental health response should be organizationally integrated, and direct responses must be well coordinated. Establishment of predisaster plans, agreements, and relationships among state mental health authorities, local mental health provider agencies, state emergency management agencies, and the Federal Emergency Management Agency (FEMA) will help ensure rapid, effective disaster mental health response and timely implementation of crisis counseling programs.

The rapidly evolving nature of disaster events requires a flexible mental health response. Quick implementation of preplanned administrative procedures assures availability of crisis counselors and crisis counseling services.

Disaster mental health training should be provided to therapists, case managers, and care coordinators as well as to consumers, families, board-and-care home operators, single-room-occupancy hotel managers, and consumers who operate satellite housing programs.

Making disaster planning a part of an ongoing psychiatric rehabilitation program is a way to educate staff and consumers about preparedness, response, and recovery. Consumers can develop the curriculum and train their peers.

Staff must address disaster-related needs of consumers, provide opportunities for group work to share experiences and resolve the painful aspects of the experience, and provide opportunities for consumers to serve the larger community in its recovery.
ISOLATED POPULATIONS (cultural, geographic, or social)

This section provides a general overview of isolated populations. Specific sub-population examples may be added.

The idea of an isolated population will overlap with many of the other groups. This section on isolated populations includes individuals who, for cultural, geographic, or social reasons, generally do not fall into any of the other categories. For example, this would include individuals who travel from one area to another seeking seasonal work (but who are not necessarily part of ethnic or minority groups); someone who is homeless and living on the streets; individuals who are part of religious or cultural groups (Amish, for example, or other sects) who specifically avoid contact with the outside world; or individuals and groups that historically have avoided interactions with local or federal agencies (Roma groups, for example).

Following are some of the issues that need to be considered:

- Those in charge of emergency plans may have little or no information on where such people are or how many of them are in the community at any given point, and so plans must be put in place to anticipate this unknown variable. This may be different in the case of established religious groups or communes who live within the community, but for whom outreach will need to be anticipated and planned in times of disaster. Links to such groups can be established beforehand by local emergency personnel, but in times of emergency, direct contact with such groups will have to be ensured, as it cannot be assumed that they will get such information through media or community routes.
- Communicating emergency information to isolated individuals and groups may be difficult: Some may avoid/not have access to mass media or will not know what local channels and stations to turn to; some may not know the local area enough to be able to follow evacuation information or instructions; and those who are isolated from others—for example, someone living in a motel at the edge of town for a couple of weeks, or someone with a mental health problem living on the streets—may not interact with others on a daily basis and not hear about a disaster or an upcoming emergency.
- Particularly for those people who are migrating through the area, the response to an emergency may be an attempt to try to leave the area immediately despite dire consequences—and this will need to be anticipated and addressed.
- Alternatively, many may have little or no money to move away for the community and cannot call on the community to help in rebuilding their lives.
- Inclusion of isolated people and groups in times of emergency may be lower on emergency workers’ priority lists than reaching and providing services to known populations and individuals within the established community. Perhaps prior listing of where isolated individuals and groups exist in the community—even if numbers are hard to determine beforehand—and assigning a specific person to follow up in times of emergency would help reach out to these people.
AGE-RELATED FACTORS OF SPECIAL NEEDS GROUPS THAT INCREASE THEIR VULNERABILITY TO ADVERSE EFFECTS OF DISASTERS

In this summary, an overview of age vulnerability is presented and followed by specific examples (pediatrics and elderly).

Two groups of special needs persons can be affected solely by age-related factors. Neonates, infants, and young children constitute one such group; frail elderly, the other. The parallels in their capacity for self-care during disasters are striking: Maturing immune systems and devolving ones make both groups vulnerable to changes in their environs and to pathogens, as do their mobility capacities and ability to understand and follow directions. Besides their intra-individual characteristics are the usual concerns of their respective family members.

Simply knowing where these persons are and what their special needs are is the first step in reducing their vulnerability to disasters, whether the disaster is natural or caused by humans. Having healthcare professionals knowledgeable about their unique special needs can reduce the vulnerability index associated with the very young and very old. Arguably, these and other special needs groups are disproportionately affected by disasters. We have a moral responsibility to protect these vulnerable people by ongoing planning efforts, conducting periodic drills, learning from each event as to what worked and what did not, and disseminating effective and appropriate practices as widely as possible.

Pediatric Population (children under age 18)

The pediatric population is typically designated as those from birth to age 18. In 2004, more than 25 percent (roughly 73.3 million) of the total U.S. population was under age 18. Of that substantial population, 20.1 million were under the age of 5 (7 percent of total population). Although a significant proportion of children under age 18 may have a physiologic composition similar to that of adults, younger children have special requirements related to physical needs.

In emergency preparedness efforts, it is commonly believed that whatever is acceptable for adults is acceptable for children. However, children have unique physical, mental, and social needs, particularly in the case of emergencies or disasters. While some of these physical needs of children are similar to those of adults due to weight or height in older children, the social and mental health needs of children are unique throughout the spectrum of children compared to adults. Although the needs may differ by age and developmental state, children’s needs do differ from those of adults, and these differences must be considered for emergency preparedness, response, and recovery. The following information focuses on the preparedness considerations related to children.

Physical and Medical Considerations

- **Anatomy/Physiology**
  - Different from adults
  - Specialty training needed for treatment (inclusion of pediatric medical specialists)
  - Anatomical differences: airway, head injury susceptibility, more rapid skin absorption of agents or toxins, dehydration
• **Pharmacology: Dosages, Side Effects, Adverse Reactions**
  • Equivalent pediatric supplies needed in Strategic National Stockpile (SNS)
  • Weight considerations

• **Dependency upon Pediatric Medical Equipment and Basic Supplies**
  • Inadequate and insufficient supply of pediatric-specific medical equipment on ambulances and in emergency departments
  • Surge capacity at pediatric facilities is limited
  • Basic supplies for daily living, including, formula, baby food, bottles, diapers, cribs, clothes, etc.

• **Post-Event Injury Prevention**
  • Increase in child abuse after a disaster
  • Increased susceptibility to unintentional injury, such as drowning, electrocution, auto-pedestrian injuries, accidental poisonings, etc.

**Psychosocial Considerations**

• **Emotional Differences (mental health considerations)**
  • Need an open, honest, and reassuring approach to understand the events.
  • Advise caregivers on how to approach children.
  • Avoid overwhelming children with aftereffects of the event.
  • Return the environment to normal as quickly as possible.

**Practical Considerations**

• **Dependency upon Guardians for Safety, Security, and Emotional Needs**
  • Family unity/reunification due to children’s dependency upon caregivers
  • Need for post-disaster identification system
  • Protection of children in shelters from sexual predators

• **Child Care and Needs for Guardians to Find Basic Resources**
  • Use schools and child care facilities in community disaster plans.
  • Give special consideration for homeless and orphaned children.

• **Increased Incidence of Prenatal Complications and Premature Births (prenatal and neonatal Medicine)**
  • Ensuring surge capacity in labor and delivery, newborn nursery, and neonatal intensive care wards
  • Pregnant women seeking medical attention
  • Understanding of third trimester pregnancy-related complications and premature births and the impact that these might have on the pediatric population

• **Children with Special Health Care Needs**
  • In addition to the unique attributes of typically developing children, there is a substantial population (up to 30 percent) that requires additional medical, behavioral, or psychological attention.
• ADHD, ventilator-dependent, diabetes, autistic, feeding tube, etc.

Overlap Considerations
• Children also may be a part of other categories considered to be vulnerable (have disabilities, live in non–English speaking households, are incarcerated, etc.).

Important Considerations for Disaster Planning and Management or Emergency Preparedness

Individual Response
• Children are not able to care for themselves and are part of a family unit. Parents and guardians should take the necessary steps to ensure that all food, water, and medication needs for children are met.
• Adults must watch for the signs and symptoms of post-traumatic distress and other mental health issues after disasters.

Community Response
• Children are among the most vulnerable in a disaster. Being separated from parents and other family members can be scary for young children. Working with families to develop plans is of utmost importance.

Infrastructure Response
• Inclusion of children’s needs in disaster planning, response, and recovery is lacking and the needs are often overlooked. General planning is not adequate for children; special considerations should be made to ensure the pediatric needs are addressed.
• Inclusion of pediatricians, teachers, and others involved in the lives and care of children are needed at the planning stages.
• Mental health needs of children are critical as well and often overlooked. First responders and first receivers should be trained on relevant techniques to ensure that children feel safe and protected.

Frail Elders

Approximately 13 percent of U.S. population (38 million people) is 65 years of age or older. It is projected that this number will double by the year 2029 when all of the baby boom cohorts reach the age of 65. The first wave of those reaching that milestone will do so in 2011. Thus, this age group of Americans will be among those disproportionately affected by disasters of all types.

Although geriatrics is a specialized area of medicine that focuses on all people who are 65 years or older, for the purposes of emergency preparedness issues, it is important to focus on people with certain vulnerabilities within this broader population. Frail elders and those lacking functional capacity, both cognitive or the ability for self-care, deserve special attention in emergency preparedness plans.

The special needs of these frail elders, a highly variable population, require careful analysis. Emergency preparedness measures raise the threshold of community resiliency, helping keep emergencies from becoming disasters. Knowing who they are, where they live, and what their special needs are is the first step in that direc-
tion. Thus, all agency planners, first responders and first receivers, and other health care providers need special training in Geriatric Emergency Preparedness and Response (GEPR) issues.

GEPR issues have come to the fore in calamities around the globe. Since 1995, heat waves, extreme cold, and floods in Europe, plus earthquakes and weather-related disasters around the world have killed almost a million persons, with over 2.5 billion people affected and costing $738 billion (U.S. dollars). Lessons learned from the anthrax attacks of 2001, SARS in 2003, the tsunami in 2004, the London bombings and Gulf Coast hurricanes of 2005, and the specter of an influenza pandemic that dominated 2006 need to be applied to 2007 and beyond as we craft planning and training exercises. Further, given the proximity of many U.S. citizens to our fellow North Americans in Canada and in Mexico, cross-border considerations need to be included in plans with neighboring states and provinces.

Physical and Medical Considerations

- Limitations in mobility due to arthritis and other neurodegenerative diseases increase dependency.
- Those relying on assistive living devices such as oxygen machines, powered wheelchairs, and feeding tubes, or those in nursing homes, will need special attention.
- Dehydration during summer emergencies and loss of thermoregulation of body heat during winter emergencies need attention.
- Elders with dementia will require additional measures for medical, behavioral, or psychological attention.
- Any alone-living elder with co-morbid conditions and those who fall frequently are particularly vulnerable.

Psychosocial Considerations

- Changes in decisional capacity resulting from mild cognitive impairment increase dependency.
- Changes in cognitive abilities impinge on capacity to understand the impending events and follow directions.
- Returning the environment to normal as quickly as possible via “psychological first aid” and facilitating use of restorative resources is vital to reduce stress.
- Older people may experience PTSD later than younger adults, so 6- and 12-month follow-up is needed.

Practical Considerations

- In addition to the unique attributes associated with frailty (i.e., limitations in mobility and slower response time), others, including robust elders, who have recently been discharged from acute care hospital stays may be adversely affected due to their short-term vulnerable states.
- If evacuated, frail elders must have meds, dentures, eyeglasses, and the assurance that their pets will have adequate care.
- If sheltered-in-place, preventing loss of electricity and having potable drinking water are key factors, as are having sufficient numbers of caregivers.

Overlap Considerations

- Ethnogeriatric differences in language and cultural influences need accommodation using the principles of culturally and linguistically appropriate services (CLAS).
- An understanding of levels of health literacy of older people is important in treating them.
- Many frail elders lack financial resources and would be easily classified as impoverished without Meals-on-Wheels and Medicaid housing, and they have little cash to pay for relocation and other
Important Considerations for Disaster Planning and Management or Emergency Preparedness

- Planning for preparedness can be addressed along two dimensions. The scope and nature of preparedness will depend upon two dimensions: temporal and response. Preparedness concerns along the temporal dimension can be tied to pre-event, event, and post-event.
- Further, sought-after response behaviors can be related to individual response, community response, and infrastructure response.

Individual Response

- Have emergency kits, sufficient food and water for several days, auxiliary power and light sources, maps, evacuation routes, cash, communication devices and plans, medicines, personal identification, and personal assistance and transportation arrangements.

Community Response

- A community’s coping resources are its people, materials, equipment, and services used to meet demand created by an incident. See Figure 1.
Preparedness measures—e.g., sandbagging and evacuating vulnerable populations before flooding occurs—
increase the disaster threshold, permitting the community to cope better (see Figure 2). (Source of figures 1 and
2: Canadian F/P/T Network for Emergency Preparedness and Response 2004)

**Infrastructure Response**

- Think “pre-event” preparedness.
- Develop local relationships.
- Conduct education and training.
- Communicate to patients/public.
  - What is their risk?
  - What is being done to protect them?
  - How can I protect myself?
  - How can I protect my colleagues?
  - What else do we need to know?
- The four pillars of emergency preparedness need to be understood and incorporated into
  planning for GEPR (see Figure 3).
RESOURCES

These resources for selected populations are provided to supplement the information presented in the summary pages. Additional resources are provided in the 2005-2006 Resource Matrix document produced by the Vulnerable Populations Collaboration Group.

Populations with disabilities

Training Resources for Public Health Practitioners


Resources for Members of the Vulnerable Population

Additional Resources


Pediatric Population

Training Resources for Public Health Practitioners


Resources for Children and Families


Additional Resources


Frail elders

Training Resources for Public Health Practitioners

A site of sites on GEPR resources.
http://www.mc.uky.edu/aging/btepa.

Another of the HRSA geriatrics-specific grant resources, with exercises.
http://darla.neoucom.edu/ElderPrepare.

A site of sites on disaster mental health issues affecting older people.
http://www.aagponline.org/prof/disaster.asp.

A disaster help online community for effective practices in Long Term Care

Using ethnographic methods in the selection of post-disaster, mental-health interventions.

The needs of people with psychiatric disabilities during and after hurricanes Katrina and Rita: Position papers and recommendations. National Council on Disability.

**Members of the Vulnerable Populations**
United States Administration on Aging page on disaster preparedness for older people.


**Additional Resources**
GAO report on evacuating nursing homes during hurricanes and other disasters.

Description of best practices following Hurricane Rita in Houston.
http://www bcm.edu/pdf/bestpractices.pdf.

AARP's “We Can Do Better” lessons from the 2005 Gulf Coast hurricanes.
http://assets.aarp.org/rgcenter/il/better.pdf.


Best practices model including the needs of people with disabilities, seniors and individuals with chronic mental illness in emergency preparedness and planning. Report to the New Mexico Department of Health.


Table 1. Summary considerations for selected populations at each preparedness phase

This table provides a quick reference to the major issues of selected populations. More detail is provided in the individual summary section for each population.

<table>
<thead>
<tr>
<th>Population</th>
<th>Pre-event</th>
<th>Event</th>
<th>Post-event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economically Disadvantaged</td>
<td>Utilize faith-based organizations to help reach economically disadvantaged populations.</td>
<td>Like other residents, people living in poverty are the “first responders” until professional help arrives on the scene.</td>
<td>Ensure physical and property safety.</td>
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<td></td>
<td>Be aware that this population sometimes lacks trust and confidence in the government.</td>
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<td>Take steps to understand the trust level between economically disadvantaged populations and the media.</td>
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<td>Understand that perceptions may be that failed response is due to income distribution and lack of concern for people living in poverty.</td>
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<td>Assist in financial disruptions likely to occur after a disaster.</td>
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<td></td>
<td>Take steps to alleviate the costs related to emergency kit.</td>
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<td>Caution media representatives not to concentrate solely on the negative aspects of a few (i.e., looting) but to pay more attention to the coping capacity of the majority following a disaster and to highlight the heroism of the communities.</td>
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<td></td>
<td>Understand the difference among those experiencing “situational poverty” (i.e., loss of a job) from those experiencing “generational poverty” (condition experienced across generations) at all phases of disaster management.</td>
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<td></td>
<td>To reach and teach people living in poverty about disaster preparedness, form partnerships with groups already providing health and social services to this group.</td>
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<tr>
<td>Ethnic &amp; Cultural Minority Populations</td>
<td>Utilize long-term care facilities in community disaster plans.</td>
<td>Shelter-in-place, minimize trauma, maintain communication, let individuals know that their locations and conditions are known to emergency responders. Coordinate with emergency management at the state, local, and municipal (and/or tribal, if applicable) levels. Train emergency man-</td>
<td>Integrate linguistic/cultural interpreter workforce into the larger public health workforce: Formal, structural integration should address mobilization, training, and support for linguistic/cultural interpreters. Identify cultural or ethnicity-based expressions of distress and responses to</td>
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<td></td>
<td>Disasters cause us to react and that reaction is centrally situated within the cultural context of our lives.</td>
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<td></td>
<td>Allocate resources to help understand the cultural context of disaster and other crisis experienced by various ethnic and racial groups is imperative.</td>
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<td>Seek to understand the role of spirituality and faith in disaster preparedness, response, and recovery among various</td>
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</table>
ethnic populations.

Build on existing relationships with ethnic and racial groups to develop a culture of preparedness.

Define community boundaries (tribal jurisdiction, ethnic, or cultural communities).

Use Geographic Information Systems (GIS) data to provide information that can improve services provided to ethnic and racial groups during or after a disaster.

Work with elders and other gatekeepers to identify vulnerable individuals and groups among ethnic and racial populations.

Coordinate emergency management efforts with all recognized governing bodies at the state, local, and tribal levels, when applicable.

agreement/first responders to work with interpreters during an emergency/disaster.

Train medical interpreters/bilingual-bicultural workers to interpret in emergency/disaster situations.

Emergency management: Develop strategies for identifying and mobilizing a linguistic/cultural interpreter workforce.

Linguistic/cultural interpreter workforce: Partner with emergency management to develop strategies for effectively reaching LEP populations.

Identify trusted community leaders and organizations who can convey critical information regarding the disaster to various ethnic and racial groups.

Do not let the negative actions of a few individuals define the actions of the majority before, during, and after a disaster.

Consult on the development of risk communication.

Meet basic safety and security needs of target populations.

healing.

Establish a post-disaster identification system.

Debrief all who were involved to improve crisis planning for the future.

During the recovery period, ethnic and racial populations are least likely to be informed of services available, how to navigate the service delivery system, and how to receive recovery-related services.

Recovery service inequities increase over time for ethnic and racial populations.

Make certain all groups affected by the event are aware of post-disaster identification systems to locate family, friends, and pets.

Debrief lessons learned with all groups affected by the event to make plans for the next disaster more effective.

Identify alternate channels of information to and from targeted communities.

Institute surveillance and needs assessment across the affected communities.

Monitor emerging needs of mentally ill.

Populations with Disabilities

Build relationships with public health officials, community stakeholders, private and public medical providers, and school officials.

Identify alternate channels of information to and from targeted communities.
| Conduct baseline health surveillance (to look for both physical and mental health outcomes). |
| Identify the mentally ill and characteristics relevant to recovery. |
| Collaborate with public health and emergency response planning groups. |
| Train mental health professionals and qualified paraprofessionals to perform a range of appropriate interventions, including psychological first aid, triage, outreach, and education. |
| Train provider groups, including public health nurses, school health professionals, community support workers, etc., in psychosocial consequences of terrorism/disasters. |
| Train and exercise agency and state preparedness plans under public health and emergency management response leads. |
| Prepare public education and risk communication templates. |
| Perform psychological first aid at impact site(s). |
| Monitor the impact environment and initiate responses appropriate to the findings. |
| Distribute educational information appropriate to the event. |
| Offer technical assistance, consultation, and training to emergency response managers. |
| Field evidence-informed interventions to support natural recovery processes, foster resilience, and treat acute distress. |
| Train and enhance capacity of social support networks. |
| Promote availability of and ongoing need for recovery resources. |
| Anticipate and plan to deal with trauma reminders. |
APPROPRIATE AND EFFECTIVE PRACTICES IN EMERGENCY PREPAREDNESS FOR VULNERABLE POPULATIONS

Despite the nation’s progress in emergency preparedness planning, the widespread devastation of the Gulf Coast by hurricanes Katrina and Rita exposed major gaps in planning for large segments of the population, including those most vulnerable to the effects of a disaster.

Today, the nation is charged with shaping education and training efforts that focus on emergency response plans prospectively and providing mechanisms that lead the way to a more unified response. Further, as research provides insight into the lapses in preparedness, the importance of addressing the issues of vulnerable populations has become apparent.

For the last 100 years, emergency preparedness has been shared with the public as a list of items to obtain, information to learn, and plans to write. The designated messengers have been authority figures from traditional disaster response agencies—whose actions and resources are triggered by natural disasters such as earthquakes, fires, floods, tornados, storms, and other sudden, disruptive events, some of which may be caused by humans. Over the past several years, greater emphasis has been placed on the role of the public health workforce as a way to help define a more unified response, as well as to meet the demands of any exceptional event with significant health challenges. The influences of this unified command system have been based on a systems approach rather than on a philosophical approach to preparedness, which has been so well supported over the past decade.

Albeit challenging, it is important to consider the lessons learned from disasters, and it is imperative to reflect on response systems that have been tested. Community, family, and individual preparedness must be solidified while also bridging stronger links between our first responders. For example, since the 1989 Loma Prieta earthquake, an alternative program, CARD (Collaborating Agencies Responding to Disasters), based in Alameda County, California, has addressed preparedness from the perspective of the most vulnerable communities. From this perspective, the message to get prepared “because disasters will strike!” ignores the daily “disasters” vulnerable communities face: lack of health care, poverty, crime, discrimination, abuse, addiction, etc. Unfortunately, no matter how high the threat level is raised, no matter how many brochures are distributed, some vulnerable communities still lack the financial, physical, and mental resources and motivation to take action.

We must shift the traditional preparedness message to a more universal perspective in considering community engagement to reach vulnerable groups. The “have a plan, get a kit, be informed” message targets an upper middle class, healthy, able, archetypal American audience—whose trust in the messenger and whose resources and abilities facilitate easy compliance.

In the unified response model, those agents who have regular daily, intimate contact with the most vulnerable people must be considered. Those who have a greater capacity to understand the special needs of audiences can tailor their messages and classes accordingly and train and sustain the staff to deliver culturally appropriate offerings. Emergency preparedness, planning, and response initiatives must include the meaningful participation and subsequent implementation of recommendations by the most vulnerable audiences.

Appropriate and effective practices used in emergency preparedness for vulnerable populations can be closely mirrored after the CARD model to include eliminating threat- and fear-based messages; engaging
community-based organizations as the messengers and helping them to build preparedness and safety into their cultures; creating culturally appropriate tools and resources in partnership with community agencies; and articulating a wide range of alternative contexts and conversations for action. This includes, but is not limited to, economic development, leadership cultivation, peace building, marketing, customer service, and capacity building.

The cornerstone, and the critical success factor, of the CARD model is the active engagement of the training audience, the public. The expertise and creativity of the audience becomes the content, with the goal being to have the audience learn how to generate and implement their own effective and sustainable solutions to their preparedness needs. Similarly, CARD staff members serve to facilitate the process; provide tools to ensure compatibility with the traditional emergency management systems and infrastructure; share successes created by other similar agencies; and otherwise serve as a link between diverse service providers and the traditional emergency management community. These are practices that can be replicated and emulated.

As research and funding for alternative preparedness practices for vulnerable communities grows and other successful, sustainable projects emerge, efforts that support those practices that may be more effective and appropriate in reaching vulnerable groups deserve careful consideration.
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