Centers for Public Health Preparedness Network

Preparedness Education for Vulnerable Populations

2005-2006 ASPH/CDC Preparedness Education for Vulnerable Populations Collaboration Group

Resource Gaps

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Many people and organizations joined forces to produce this resource. It is truly the result of an extensive collaboration effort that will continue into the future. The Centers for Disease Control and Prevention, Division of State and Local Readiness, Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER), along with staff at ASPH and the following 2005-2006 ASPH/CDC Preparedness Education for Vulnerable Populations Collaboration Group members (while members may have multiple affiliations, their relevant CPHP affiliation is the one listed), and partners who contributed to this report deserve credit:

Chair

- **Paul Campbell,** Harvard University School of Public Health, Center for Public Health Preparedness

Members

- **Dan Barnett,** Johns Hopkins Bloomberg School of Public Health, Center for Public Health Preparedness
- **Mark A. Brandenburg,** University of Oklahoma Health Sciences Center, Southwest Center for Public Health Preparedness
- **Joe Coulter,** University of Iowa College of Public Health, Upper Midwest Center for Public Health Preparedness
- **Prabu David,** Ohio State University School of Public Health, Ohio Center for Public Health Preparedness
- **Zelde Espinel,** University of Miami School of Medicine, Center for Disaster & Extreme Event Preparedness
- **Joshua Frances,** Harvard University School of Public Health, Center for Public Health Preparedness
- **Lynn Goldman,** Johns Hopkins Bloomberg School of Public Health, Center for Public Health Preparedness
- **Ana-Marie Jones,** University of California at Berkeley School of Public Health, Center for Infectious Disease Preparedness
- **Michael Meit,** University of Pittsburgh Graduate School of Public Health, Center for Public Health Preparedness
- **Gilbert Nick,** Harvard University School of Public Health, Harvard Center for Public Health Preparedness
- **Emily C. Perry,** University of Medicine and Dentistry of New Jersey School of Public Health, New Jersey Center for Public Health Preparedness at UMDNJ
- **Robert Roush,** University of Texas School of Public Health at Houston, Center for Biosecurity and Public Health Preparedness
- **Randy Rowel,** Morgan State University and the Johns Hopkins Bloomberg School of Public Health, Center for Public Health Preparedness
- **Jim Shultz,** University of Miami School of Medicine, Center for Disaster Training, Center for Disaster & Extreme Event Preparedness
- **Martha Wingate,** University of Alabama at Birmingham and Tulane University, South Central Center for Public Health Preparedness

Practice Partner(s)

- **Jennifer Nieratko,** Association of State and Territorial Health Officials

ASPH Coordinator(s)

- **Beth Rada**
- **Elizabeth Weist**

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Table of Contents

BACKGROUND

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 convener 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 2005-2006 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

The 2005-2006 ASPH/CDC Preparedness Education for Vulnerable Populations Collaboration Group (collaboration group) has produced two documents. The first is a resource grid (found at http://www.asph.org/cphp/CPHP_ResourceReport.cfm) of 323 resources geared towards practitioners and this companion document, which outlines specific gaps in resources for the populations, and is aimed at educators at Centers for Public Health Preparedness and individuals in other agencies.

In developing both resources, the collaboration group used the definition of vulnerable populations first developed by the Iowa Department of Public Health Center for Disaster Operations and Response:

> Any individual, group or community whose circumstances create barriers to obtaining or understanding information, or the ability to react as the general population has been requested to proceed during all phases of emergency management. Circumstances that may create barriers include, but are not limited to: age, physical, mental, emotional or cognitive status, culture, ethnicity, religion, language, citizenship, geography, or socio-economic status.

The resource grid reflects the collaboration group's preliminary effort to identify available resources on emergency education preparedness for eight special populations who require special consideration through a query of the CPHP Network online resource center (found at http://www.asph.org/acphp/phprc.cfm) and via other searches. This resource gap document aims to articulate the unique needs of vulnerable populations in emergencies and to identify the gaps in related planning and training resources so that future efforts can address these gaps.

It should be noted that only a limited number of special populations were addressed by the collaboration group. The choice of the special populations was driven primarily by the interests and expertise of the group members and with the goal of keeping the task manageable. For example, although a number of special populations can be examined on the basis of language, only Spanish was considered because some of the members of the collaboration group had expertise in working with Hispanic populations. Missing, for example, are resources in sign language or other media for people with disabilities. Finally, the group discussed the added challenge of offering services to overlapping special populations, such as ethnic and racial minority populations with disabilities. Therefore, the grid provides only a start on the many groups that require special consideration in preparedness planning, and it includes the following populations:

- Economically Disadvantaged Populations
- Ethnic and Racial Populations
- Mentally Ill Populations
- Older Adult Populations
- Pediatric Populations
- Populations with Disabilities
- Rural Populations
- Spanish-Speaking Populations

Given the complexities of the nuanced issues with such finer categories, the collaboration group decided to consider further issues as part of the group's activities for the next fiscal year.

Tables 1 and 2 provide a summary of specific training gaps. Table 1 "Training Gaps in Specific Populations and Areas to Address these Needs" illustrates general gaps noted for each specific population in the areas of 1) planning/policy; 2) courses available for responders; 3) training exercises and drills; 4) consumer-oriented information aids; 5) collaboration with government or other organizations; and, 6) measurement and evaluation. While Table 1 denotes the gaps by general category, Table 2 "Examples of Gaps and Needs by Specific Populations" provides specific examples of gaps for each of these populations. The text that follows the tables provides more information on each vulnerable population. While these recommendations are not comprehensive, they do provide a broad perspective on needs for future training and other activities related to the emergency preparedness of vulnerable populations.

Table 1. Training Gaps in Specific Populations and Areas to Address these Needs

Population	General Topics					
	Planning/ Policy	Courses Available for Responders	Training Exercises and Drills	Consumer-oriented Information Aids	Collaboration with Government or Other Organizations	Measurement and Evaluation
Economically Disadvantaged Populations	X	X		X		X
Ethnic and Racial Minority Populations	X	X	X		X	X
Mentally Ill Populations	X		X	X	X	X
Older Adult Populations	X		X	X	X	X
Pediatric Populations	X	X	X		X	X
Populations with Disabilities	X	X	X		X	X
Rural Populations	X	X	X		X	X
Spanish-Speaking Populations	X			X		X

Note: X indicates a noted gap by general topic area.

Table 2. Examples of Gaps and Needs by Specific Populations

Population	Examples of Gaps and Needs
Economically Disadvantaged Populations	• Practitioner audiences • Broader resources (currently, too wildfire-focused in Oregon) • Understanding of cultural and urban poverty
Ethnic and Racial Minority Populations	• Definition • Basic (vs. advanced) resources other than mental health content • Particular groups – (e.g., Middle Eastern, Native American)
Mentally Ill Populations	• Information on informal networks, community networks (cross-cutting issue) • Information on preparing one's facility (e.g., medications, evacuations)
Older Adult Populations	• Nursing homes and assisted-living facilities • Evacuation planning • Disabilities addressed (e.g., hearing/sight impairments) • Language barriers
Pediatric Populations	• Surge capacity for pediatric care • Children in other groups (cross-cutting issue)
Populations with Disabilities	• Collaboration with National Organization on Disabilities
Rural Populations	• Evacuation • Public (risk) communication • State assurance of services in areas without formal public health • Seasonal vacationing/tourists
Spanish-Speaking Populations	• Definition of the population • Country of origin and generation (1st vs. 2nd generation)
Cross-cutting issues	• Recovery • Literacy • Trust • Media • Use of informal and community networks

Requirements

Several general principles serve as the cornerstone for inclusion of vulnerable populations in each stage of preparedness. The most important is to identify the most vulnerable populations, their locations, and the number of people included. Understanding the issues for each population related to mitigation, preparedness, planning, response, and recovery is critical. Personal, community, and infrastructure needs and capabilities are unique for each population and must be measured. An assessment is needed of local strengths, weaknesses, opportunities, and threats to each individual population. Finally, to develop plans for response and recovery, engagement by direct service providers, community leaders, and others who are integrated into the day-to-day activities of the vulnerable population is also imperative.

In addition to the general principles, specific needs must be met within certain segments of the populations. For example, communication barriers and specific clinical issues should be considered relative to specific populations. For some jurisdictions, segmenting may be more easily or comfortably addressed by function. Evacuation, for example, can then be broken down by those who can self-evacuate, those in institutions needing assistance and supervision, necessary partners, appropriate existing agreements, best messages to be shared by evacuation partners, exercises and drills for flexing evacuation capacity, and the like. Table 3 "Segmenting Examples" provides examples of how to segment populations in relation to emergency preparedness.

Table 3. Segmenting Examples

- Clinical issues for the populations
- Communication barriers
- Transportation issues (evacuation)
- Strategies/protocols to overcome barriers
- Appropriate pre-emergency planning
- Relevant community partnerships that facilitate preparedness
- Defined changes in outreach, materials, and mindsets to ensure success

Various educational strategies are available for both the responder and the consumer that can be used for emergency preparedness, response, and recovery. Table 4 "Educational Strategies" provides specific examples of responder-oriented strategies versus consumer-oriented strategies. For each of these strategies, measurement is a key component. The presence of monitoring tools, evaluation methodology, and other applied research tools should be an integral part of these training materials. In addition, deliverables and results for the educational offering for the specific populations should be measurable in the target community. For example, funding to distribute brochures or provide generic classes for Spanish-speaking audiences does not always translate into specific, measurable, preparedness results in the Spanish-speaking community. The agency or institution providing the training for the target population should be concerned with a consumer-oriented approach that will contribute to a change in behaviors of the specific audience.

Table 4. Educational Strategies	
Education Strategies (responder-oriented)	**Education Strategies (consumer-oriented)**
Didactic training Tabletop/exercises	Community facilitation Socratic dialogue
Traditional drills Education materials	Mnemonic devices (beyond acronyms) Situational debriefing Storytelling Mind mapping Intentional design models

IDENTIFIED GAPS FOR SPECIFIC POPULATIONS

A. Economically Disadvantaged Populations

Social vulnerability, the connection between socio-demographics and the inability to deal with hazard's effects, is intricately tied to the resources that a population can access. Increased levels of social vulnerability for economically disadvantaged populations are a critical concern for public health and emergency management practitioners.

Overall, resources to address disaster-related needs of low-income or economically disadvantaged populations are scarce and lack specificity. Most available resources are tailored to practitioners, with a few for policy makers or researchers. The resources developed for practitioners consist of vulnerability assessment tools and community engagement strategies. Most of the available resources do not discuss strategies for involving economically disadvantaged populations in preparedness, response, or recovery phases of disaster.

Resources also lack the specificity needed to work effectively with economically disadvantaged populations. Those that specifically address poverty do not provide information about the culture of poverty and how limited access to social, economic, and political resources affects this population during preparedness, response, and recovery phases of disaster. Disaster planning resources intended for economically disadvantaged populations in other countries are available. In most instances, however, the information is not relevant to emergency management systems in the United States. Other needs noted among resources intended for economically disadvantaged populations include the following:

- Information on how to address distrust of government that often exists among low-income populations;
- Resources employing an all-hazards approach;
- Segmentation of unique groups within economically disadvantaged populations (e.g., low-income and people with disabilities, low-income and homeless, low-income and chronically ill, low-income residing in urban or rural environments, low-income with no access to a vehicle);
- Resources that address how to engage low-income populations in each phase of disaster;
- Examples of U.S.-based community empowerment models that promote active participation of people and communities in determining their well-being and their role in building their infrastructure of protection; and
- Examples of "grassroots" risk communication models.

Resources Needed

Resources describing how to gain trust, reach, and engage economically disadvantaged populations in preparedness activities is a major resource gap. To a large degree, this population represents the "working poor" in this country. Many individuals have two jobs and are often dealing with daily crises and safety issues. Consequently, soliciting their involvement and interest is difficult when daily survival needs take precedence in their lives. Furthermore, the target audience for economically disadvantaged populations is primarily restricted to emergency management planners. The identified resources do not address the need to target other practitioners who work with this population, such as HIV, cardiovascular, and diabetes prevention specialists or outreach workers.

Multiple factors are linked to both vulnerability and poverty. Understanding poverty within the context of disaster requires a closer examination of these factors as well as the power relationships that determine who gets what, who makes decisions, and who is excluded from the planning process where these decisions are made, and, in some instances, cast in stone.

B. Ethnic and Racial Minority Populations

The specific focus on ethnic and racial minority individuals as a vulnerable population calls attention to the need to be sensitive to the cultural milieu that often decides how various groups make decisions before, during, or after a disaster. One must be mindful that race and ethnicity do not alone determine vulnerability. Rather, it is circumstances that create barriers to obtaining or understanding information, as well as the ability and willingness to do what has been requested during all phases of emergency management.

Understanding ethnic identity, or the extent to which individuals identify with and gravitate to their racial or ethnic group, is a key prerequisite to helping public health and emergency management practitioners define, locate, and reach at-risk populations targeted in the collaboration group's resource grid. Consequently, educational resources should familiarize practitioners with cultural norms of persons from diverse backgrounds. In addition, resources are available to help understand and implement key concepts associated with racial and ethnic identity, such as cultural competence, cultural sensitivity, cultural appropriateness, and multi-culturalism. With this information practitioners can enhance the effectiveness of services, which is essential to achieving the long-term goal of parity among vulnerable populations before, during, and after a disaster.

The gaps noted in the area of ethnic and racial populations could have dire consequences in preparing emergency managers to plan, implement, and evaluate culturally appropriate disaster-related services. Without resources to address the following concerns, planning for ethnic and racial populations becomes problematic:

- Insufficient cultural competence along the continuum of disaster services (prevention, preparedness, response, and recovery);
- Less than ideal relationships between community and emergency managers;
- Inadequate understanding of community perceptions, disaster behaviors, and experiences among racial and ethnic populations; and
- Lack of measurements of organizational and individual cultural competence, despite the availability of research.

Resources Needed

Current resources provide an adequate framework for introducing emergency management practitioners to key concepts, such as cultural competence, sensitivity, and appropriateness. Although extensive information is provided regarding the key concepts, the focus is limited to children and youth health, primary health care, and sudden infant death syndrome. Discussion is limited of cultural competence within the framework of disaster preparedness, response, and recovery services, but a comprehensive training course and guiding principles are provided for developing culturally competent disaster services. Existing resources that explore the practical use of cultural competence are limited to patient/provider relations. None of the resources examine culture within the context of community/emergency manager

relations. With few exceptions, current resources fail to discuss measurement.

Of particular concern is the lack of information about community perceptions and disaster behaviors and experiences. There is much debate about whether the failed response to Hurricane Katrina was due to racism or class discrimination. Either perception could potentially affect future disaster relief efforts in the Gulf Coast area and in other locations throughout the United States. Lessons learned about ethnic and racial groups during other disaster experiences should be employed to strengthen planning efforts for these populations. Because "the community's perception is their reality," these concerns must be taken into consideration by emergency managers and practitioners.

C. Mentally Ill Populations

Current resources target not only individuals dealing with severe or persistent mental illness but also the caregivers and professionals who assist these individuals. A review of the resources indicates considerable overlap between the resources for the elderly, particularly the frail elderly, and resources for the disabled. Many of the resources for the disabled provide detailed checklists that could be of use to consumers. Although some of these checklists provide a general framework of preparedness for people with disabilities, others address issues specific to certain disabilities.

Search methodologies for these populations should differentiate "mentally ill populations" from general "mental health or psychosocial impacts of disasters." In addition, information surrounding screening and referral for the general population should be differentiated from information surrounding observation and treatment of those with pre-existing mental health conditions.

Information on informal or community networks should be explored further. In the case of mentally ill populations, informal networks often become an important source of support, practical management, and recovery. Information should be explored on how to build and support these networks, which could include family members, friends, neighbors, fellow consumers, and consumer groups.

Resources Needed

Many general and cross-cutting resource gaps are relevant to this population. These gaps include the following:

- Pre-emergency planning
    - Preparing consumers and caregivers to be able to obtain necessary medications during and in the aftermath of a disaster;
    - Preparing professionals to be able to sustain a facility or group home during and in the aftermath of a disaster;
    - Building community networks; and
    - Reaching family or "informal" caregivers as well as professionals;
- Evacuation/Transportation issues;
- Educational strategies: exercises and functional drills are needed the most;
- Measurement issues: how to measure post-disaster functioning, on both individual and system levels, how to evaluate the impact of educational efforts, and how to evaluate post-disaster outcomes for these populations;

- Response to low health literacy among the mentally ill and their caregivers; and
- Collaboration with partners: for example, the National Alliance for the Mentally Ill (NAMI), Substanc Abuse and Mental Health Services Administration (SAMHSA), and the American Psychiatric Association.

Many issues that affect emergency management among the vulnerable mentally ill are similar to those that affect disabled and older adult populations. Additional efforts should identify those specific populations that are susceptible to, or in treatment for, substance abuse/addiction issues.

D. Older Adult Populations

An extensive array of resources is available for the older adult population. These resources target public health professionals, consumers, and health care providers. The materials targeted to consumers and public health professionals typically consist of checklists that can help people prepare for disasters. In addition, most of these resources provide contact information for agencies and organizations that can assist the elderly in the event of a disaster. An assortment of information is available, and the materials target diverse populations, including health care and public health professionals, first responders, and clinicians. The materials cover both natural and human-made disasters.

Resources Needed

Many of the current resources can be categorized as informational. In a few instances, particularly for nursing homes and other assisted-care facilities, tabletop exercises are available. However, the existing resources do not provide clear guidelines or best practices to address preparedness among the older adult population.

Resources that stratify older adult populations to include not only those persons in assisted living facilities and other long-term care circumstances but also frail elders living either alone or with part-time caregivers would be helpful. Also, such resources may distinguish between elders who are cognitively impaired versus those who are not. This distinction notwithstanding, future resources may address the issue of older adults' capacity for mobility.

While the checklists may be of help to the older adult who has Internet access and is able to follow the detailed instructions, these sources of information may be cover the frail elderly. Moreover, a significant proportion of the older adult audience does not have access to the Internet or may not be in a position to follow detailed instructions.

The support of community- and faith-based organizations is recommended to help the frail elderly who may need special assistance during a crisis. However, concrete proposals to galvanize such efforts are not available. In summary, although issues related to preparedness of older adults in nursing homes and other assisted care facilities has received some attention, the needs of the frail elderly living at home as well as those who are cognitively impaired or lacking in mobility have not been adequately addressed.

E. Pediatric Populations

Typically, the approach taken by disaster planners toward children is simply to extend adult resources to them. This thinking, however, is fundamentally flawed, as children have anatomic, physiologic, and behavioral differences that make them unique and vulnerable during and following disasters. The lack of children's capacity to provide for their own basic needs and protection is at the root of their vulnerability. Pediatric care is typically designated as care for 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. Although a significant proportion of children (i.e., adolescents) have a physiologic composition similar to that of adults, younger children have special requirements related to physical needs. Moreover, all children have unique mental health and psychosocial needs that should be considered during disasters. Given the large number of children in the United States who require pediatric-specific care, the limited pediatric resources (e.g., equipment, hospitals), and the unique needs of children, it is imperative that preparedness and response planners specifically consider the needs of children.

Existing preparedness resources related to children are numerous and address a variety of issues, including physical and mental health, school preparedness, family preparedness, among others. The target audiences for these resources include children, physicians, parents, teachers, and other individuals who work with children. The National Advisory Committee on Children and Terrorism (NACCT) has issued a number of helpful recommendations. In addition, the following suggestions provide information relevant to some of the planning and training activities that can directly address the gaps in pediatric resources.

Resources Needed

Although a plethora of resources exists related to response and coping, few planning resources provide examples of how a public health agency might incorporate the needs of children into the planning component of emergency preparedness. Collaboration is needed with agencies and programs typically outside of the emergency preparedness realm (e.g., schools and child care centers).

- ***Courses***

Although the quality of available material related to children is strong, the quantity is overwhelming and is not integrated into usable forms. Despite the quantity, no pediatric training courses specifically target public health responders.

- ***Increased Surge Capacity for Children***

The pediatric health care system (e.g., pediatric hospitals, care units) is not well incorporated into the National Disaster Medical System (NDMS). Pediatric surge capacity for acute clinical care is extremely low due to fewer pediatric beds and fewer pediatric-specific care centers. Currently, only two pediatric Disaster Medical Assistance Teams (D-MAT) can be deployed in emergencies.

- ***Exercises and Drills***

Children's issues are seldom considered in drills and exercises. In designing and planning tabletops and functional drills, children should be included. Some available resources relate to school safety, but the inclusion of agencies that would respond in a state or federal disaster is very limited.

- ***Special Subpopulations of Children***

  Children with special needs should also be considered in emergency situations. Specific resources related to children with physical and mental disabilities are limited, although the American Academy of Pediatrics does provide a worksheet for families of children with special needs that helps outline care protocols and other issues. Planning for children in need of specific medical equipment, such as ventilators, is important. In addition, the needs of children should be included in planning for other vulnerable populations, such as the non-English-speaking, the low-income, and the homeless, among others.

F. Populations with Disabilities

The collaboration group's review of existing resources indicates considerable overlap between the resources for the elderly, particularly the frail elderly, and the resources for the disabled. Detailed checklists for preparedness are available for individuals and caregivers. Also, policy guidelines and strategies for building resources are available.

In training, preparedness issues specific to populations with disabilities often appear to be part of a larger course. Although many of the resources emphasize the importance of building capacity in the pre-event phase, only a few courses provide concrete proposals on how to accomplish this objective. One of the concrete proposals calls for building stronger ties between government agencies and community- and faith-based organizations. However, strategies for achieving this objective lack concrete ideas for implementation.

Resources Needed

Data, research, and position papers on preparedness issues relevant to populations with disabilities are available on the National Organization of Disability (NOD) Website. In addition, NOD-issued recommendations merit consideration by CPHP interested in developing new courses. However, clear guidelines and strategies for representing the needs of people with disabilities are lacking. Also, the available resources do not offer much guidance on the coordination between government agencies and nongovernmental organizations (NGOs). Again, although it is widely recognized that community- and faith-based organizations could play an instrumental role, concrete proposals on how such arrangements could be negotiated in the pre-event phase of a crisis are not available.

- ***Courses***

  Preparedness courses that focus specifically on the needs of populations with disabilities could not be found through the CPHP Network online resource center. Such courses might be helpful.

- ***Exercises and Drills***

  With the exception of some preparedness exercises on special needs populations offered by the University of California at Berkeley School of Public Health, Center for Infectious Disease Preparedness, few exercises and drills that specifically address the needs of the disabled are available through the ASPH Resource Center.

G. Rural Populations

The exact definition of the term "rural" has been debated by many organizations. What most agree upon, however, is that rural America is mostly poor and faced with large geographical challenges.

Poverty and geographic remoteness make emergency preparedness education, training, and information dissemination difficult. Through an extensive search, the group has identified the following areas in which gaps exist for resources, as well as for educational strategies, focusing on rural populations and emergency preparedness.

Resources Needed

- ***Evacuation***

Since the disasters of hurricanes Katrina, Rita, and Wilma in 2005, rural evacuation issues have become more of a priority. The likelihood that rural areas will receive urban evacuees after a future hurricane, disaster, or terrorist event has become even greater, now that thousands of evacuees have fled to rural America after the gulf coast hurricanes of 2005. State, local, and federal governments need to develop guidelines specific to rural areas and mass evacuation after a large-scale event.

- ***Distance-Learning (Courses/Certificates)***

One of the major challenges facing rural populations is the distances that often exist between work and home and other settings. Although numerous courses are offered through the Internet, more course-work needs to be developed for rural areas specifically. Such courses should be offered widely (e.g., through the World Wide Web, video conferencing, teleconferencing) to accommodate rural areas without Internet access and/or that lack costly communications equipment. Courses need to have certificates of completion with CME credits for multiple medical disciplines.

- ***Exercises and Drills***

Exercises and drills are arguably the most effective way to train personnel for disaster situations. Although federal partners have developed many models for tabletop and full-scale exercises, most do not focus on rural areas or include rural components. Tabletops, in particular, are needed to serve rural communities and rural states.

- ***Community Groups***

Community groups are an untapped resource for emergency preparedness training. Historically, attention has focused on the traditional first responders, hospital staff, and public health professionals for preparedness training. One lesson learned in 2005 from Hurricane Katrina is that community groups, such as the Rotary Club, religious organizations, and even local business owners, are valuable assets. They can play a significant role in community responsiveness to emergencies and recovery from a disaster.

- ***Seasonal Vacationing/Tourists***

This topic is not specific to all rural areas of the United States, though it is pertinent to many. In Maine, for example, a year-round population of 1.2 million people is spread out over 36,000 square miles and 498 cities and towns. During the peak tourist season, however, the number of people in Maine doubles,

bringing the population to almost 2.5 million in this same geographical area. Theoretically, visitors/tourists from other parts of the nation constitute a vulnerable population (many stay in coastal motels, park RVs in Maine's dense national forests, or pitch tents outdoors). Although government has given preparedness dollars to the state, little information and guidance/education is available regarding the best strategy to deal with issues related to this tourist population influx in times of disaster.

H. Spanish-Speaking Populations

The number of resources available in Spanish is very large. Particular issues, however, should be considered when using these resources or when developing others. In addition, the need to translate many of these resources into languages besides Spanish is critical. Some issues and gaps to consider follow:

Country of Origin
As the resource list is refined and expanded, it will be useful to better define the target population. Although Spanish is the primary language for Spain and 21 nations throughout Latin America, preparedness is important for both Spanish-speaking persons residing within the United States and for citizens of all Spanish-speaking nations.

For Spanish-speaking populations residing within the United States, country of origin is relevant from several vantage points. Use of the Spanish language, vocabulary, and meaning differ among persons from different nations and from different locales within a single nation. Persons from Latin American nations who have immigrated to the United States vary widely in their disaster and trauma experience. Within the United States, wide variation exists in the acculturation, education, and socioeconomic status among Hispanics/Latinos from a range of Spanish-speaking nations.

Generation of Immigration
Although first-generation immigrants are more likely to retain Spanish fluency and to have variable skills in English, second and subsequent generations likely have achieved English-speaking skills and frequently prefer preparedness materials and training delivered in English. Some later generations may have limited Spanish fluency.

Access to Populations
Spanish-speaking populations may be accessed using a variety of strategies including neighborhood outreach and faith-based recruitment and training, as well as through community gatekeepers and influence leaders. For many Hispanic/Latino immigrants, the family is paramount, therefore, some outreach efforts therefore may be directed to family-oriented functions.

Training Strategies
Ideally, native speakers, who are fluent in Spanish as their primary language and who have close ties to the specific immigrant groups to be served and trained, should lead the training sessions for Spanish-speaking populations. Such native speakers may include community influence leaders, indigenous workers, or others identified through strategies to match trainers to the community members who will be trained.

Cross-cutting Themes

Prominent issues include literacy levels (some immigrant groups have limited educational attainment and both Spanish and English language skills are limited) and immigration status (the ability to reach and train these populations may be a function of the level of trust engendered and the perception of safety to attend public gatherings among those at various stages in the immigration process). Public communications and media coverage must be considered when promoting the availability of preparedness training.

For more information regarding the CPHP Network preparedness training products, see the CPHP Network online "Education Resource Guides" at http://www.asph.org/cphp/CPHP_ResourceReport.cfm and the searchable CPHP Network online resource center at http://www.asph.org/acphp/phprc.cfm.

Resources Needed

Preparedness materials need to be developed with illustrations and pictorial presentations of key points to accommodate the diversity of populations, literacy levels, and differences in Spanish language across countries and regions of origin.

At the other end of the literacy spectrum, preparedness materials for professionals must be more widely available in Spanish. Although many U.S.-based Hispanic professionals are fluent in English, benefit would be had if key resource documents in Spanish were available for interchange with Spanish-speaking professionals globally.