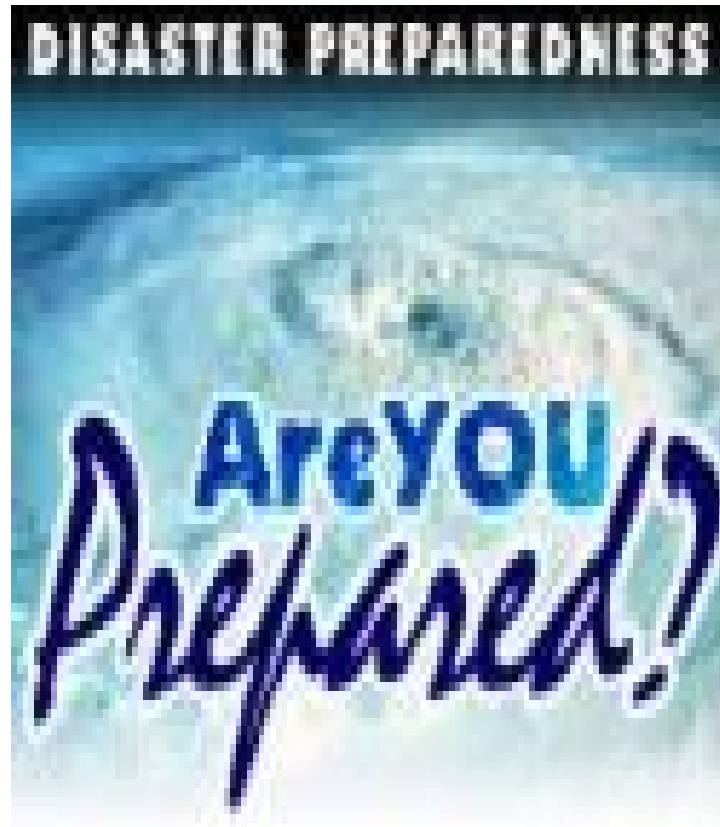**Broward Regional Health Planning Council, Inc.**

Disaster and Emergency Preparedness: Report of the 2006 Regional Census and Survey of Persons with Disabilities

Prepared by Michael Brady, Ph.D., Mila Davila, MPH, and Mike De Lucca, MHM

Disaster and Emergency Preparedness: Report of the 2006 Regional Census and Survey of Persons with Disabilities

A Partnership Project

Broward Regional Health Planning Council, Inc.

Health Council of South Florida, Inc.

Treasure Coast Health Council, Inc.

Health Planning Council of Southwest Florida, Inc.

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Executive Summary

The 9/11 tragedy, continued terrorism threats, and the 2004 and 2005 hurricanes caused human service providers to assess emergency preparedness of Floridians with disabilities. The *Disaster and Emergency Preparedness: Report of the 2006 Regional Census and Survey Persons with Disabilities* summarizes the findings of an initiative of the Florida Department of Health and the Taskforce for Persons with Disabilities and Preparedness to gather information on the issues faced by people with disabilities during catastrophic events, and to serve as a basis for future disaster and emergency planning. A census and survey was administered to 2,404 people with disabilities selected from counties in the following Local Health Councils:

- Broward Regional Health Planning Council (Broward)
- Health Council of South Florida (Miami-Dade and Monroe);
- Health Planning Council of Southwest Florida (Charlotte, Collier, Hendry, Lee, Sarasota);
- Treasure Coast Health Council (Okeechobee, Palm Beach); and

Findings were organized to address the five purposes of the survey.

1. ***How did people with disabilities access health care services?***
2. ***What potential solutions and accommodations exist to improve access to health care?***
3. ***What were the issues involving communication and mobility?***
4. ***What were the issues involving personal preparedness? and***
5. ***Were individuals identified to participate in future disaster exercises?***

Findings related to ***health care access***. Numerous participants (64%) reported that their disabilities require regular visits with health care providers. The vast majority of participants reported access to a primary provider (physician or nurse) when ill, and providers and office staff frequently made accommodations for their disabilities. Participants often received care through hospital emergency rooms, and more than one third (1/3) reported having used an ambulance to go to a hospital. Communication difficulties were common with health care providers, although 45% of participants were able to explain their conditions to their providers.

Findings related to ***solutions and accommodation for health care.*** These included a wide range of disability and non-disability suggestions: bathroom adaptations, service animals, talking books, magnifiers, communication aids, special beds, Spanish / Creole / ASL interpreters, Med Alert and ID bracelets, and mobility aids. Suggestions also included staffing; patient liaisons; assistants to help with feeding, moving, toileting, and other basic personal functions; access to social or psychological support, and other staff interaction suggestions (e.g., empathy and compassion in patient care).

Findings related to ***communication and mobility.*** Issues involving communication and mobility included the impact of telephone outages as a complicating factor for people with communication disorders, the double impact of electrical outages on people with communication devices and mobility aids, the impact of communication challenges on citizens' ability to gain information needed for recovery efforts, and mobility challenges that people faced within their own homes. Creative solutions were suggested as a means of improving communication and mobility.

Findings related to ***personal preparedness***. Several findings related to personal preparedness for disaster events were encouraging. For example, persons with disabilities across all counties reported a high degree of family or personal planning for emergency events. Nevertheless, even good disaster plans did not negate the need for attention to medical issues and the impact of interruptions to transportation or power interruptions on the continuity of medical care. In addition, issues related to hygiene, food and water, challenged many people despite a high level of preparedness.

Findings related to ***future disaster planning exercises***. A finding of the Census and Survey included the willingness of participants in the ten counties to engage in future disaster planning exercises. Overall, 31% of participants expressed a willingness to take part in future disaster planning exercises.

Finally, ***recommendations for "next steps" for disaster preparedness*** were made that would make a positive impact on persons with disabilities, their families, and the professionals who provide services for them. These recommendations include:

Global Recommendations

Finding Summary #1: A large proportion of people with disabilities had not discussed an emergency plan with their health care provider (81%), although many survey participants had developed family emergency plans. This is an especially important finding considering that 57% of the respondents had either sensory, behavioral, or cognitive disabilities, and 29% of respondents lived alone. Taken together, these findings point to the need for additional efforts to assess, among other things, whether certain sub-populations of people with disabilities will require more active disaster preparedness actions, and more systematic interactions with health care and other providers.

Recommendation:

Continue to assess the emergency planning and disaster preparedness needs of people with disabilities throughout the state, and include the perception of the health care, emergency management, and community based providers who serve them.

The sample size of this survey (2404), represents a broad cross-section of Floridians with disabilities in the counties included in the sample. Since there are regional differences among health care and community-based providers throughout the state, it would be useful to extend the survey to additional regions and to assess how prepared for disaster events are Floridians other areas of the state. Three modifications in the methodology are recommended to continue this process.

First, data gathering should be expanded to include a sample of providers from health care agencies, community based organizations, first responders, and county emergency management. Provider perspectives, in combination with information from emergency system staff, would likely identify actions, precautions, and solutions that were not captured through the survey. Information from health care providers and emergency management staff would help to identify specific strategies used to prepare for, mitigate the impact of disasters, and uncover strategies that have not been helpful when developing and implementing disaster preparedness plans.

Second, extension of the data collection methodology is also recommended. In addition to the census and survey, a smaller sample of individuals should be brought together for interviews, as a means of understanding their personal and family experiences in more depth. The methodology for this interviewing is more cumbersome than surveying, and precludes large numbers from participating. However, a purposeful sampling strategy can be used to identify one-two percent (1-2%) of the survey respondents who are willing to participate in more in-depth interviews. A combination of focus groups and individual interviews would generate useful information to reduce gaps in preparedness and response efforts to accommodate the needs of persons with disabilities. This methodology should be applied to health care providers and emergency management staff as well.

Third, the same survey instrument should be used, nevertheless; some data fields can be refined so that additional information can be gathered. For example, the age category 21-64

could be broken down. Age categories are recommended because they tend to elicit more responses than an open ended request for the participant's age.

Finding Summary #2: Participants in this survey identified that health care providers need specific skills and dispositions involving communication, and delivery of psychological supports to persons with disabilities. Twenty percent reported having difficulty communicating with health care providers. In addition, the large percentage of people with sensory, behavioral or cognitive needs suggests that even skilled providers face challenges when providing emergency support to people with the most severe disabilities.

Recommendation:

Increase awareness of the needs and responses of persons with disabilities related to disasters and emergency events among health care providers and emergency systems staff through training models addressing their particular needs.

Health care professionals participate in a range of training activities, and agencies are proactive in assessing the training needs of their staff. In some organizations, however, disaster-related training receives only minimal attention. Staff training that targets emergency preparedness has received increased attention during recent years, and resources do exist. For example, a modular based training program exists at the University of South Florida Center for Public Health Preparedness that includes on-line training (FCPHP, 2006; see www.FCPHP.usf.edu.). Another example of an on-line training program that targets direct service providers is the Environmental and Emergency Management. Program at the University of Findlay (OH) (see http://seem.findlay.edu/courses). Both of these training programs target practical training for front line staff. Finally, Lynn University provides certificate programs in (a) Emergency and Disaster Management and (b) Emergency Planning and Administration. Both of these programs are offered partially on-line, and are appropriate for planners and managers.

Finding Summary #3: Thirteen percent (13%) of respondents reported their medical treatments were interrupted, and 12% ran out of medications during past hurricanes. As many as 20% of survey respondents reported a need for special needs shelters,

although only 10% had actually pre-registered for these sites. In addition, transportation to shelters was a common need (reported by 21% of participants). Basic information on how and where to register for shelters was reported by a number of participants. Of those who used shelters or hospitals during disaster events, numerous participants reported the need for people to assist with their social and psychological needs. These findings suggest that while some health care providers and community agencies may be prepared for emergency events, many others have not yet undertaken the planning and mitigation efforts needed to provide disaster support to people with disabilities.

Recommendation:

Develop and implement a state-wide policy for persons with disabilities regarding disaster preparedness and service coordination during an emergency catastrophic event.

To prepare for a range of different types of emergency events in Florida, a state-wide initiative is needed to elevate the importance of disaster planning related to persons with disabilities within health care agencies and community based organizations. A state-wide policy that requires organizations to identify a point person for disaster planning would reduce the likelihood that such planning will be minimized. Gaps in services could be reduced by requiring any organization that receives city, county, or state funding for services to persons with disabilities to identify a responsible individual within the agency to coordinate disaster preparedness activities for persons with disabilities. Although many government agencies (e.g., schools, hospitals) currently have continuity of operations plans, many community based organizations do not. Many organizations lack the expertise to develop and implement realistic plans that would have mitigated the challenges faced by the people with disabilities in this study.

Finding Summary #4: A positive finding was the large percentage of people with disabilities who have already been involved in family emergency preparedness planning. In spite of this, 41% of participants did not have a family disaster plan, and 38% did not know the route in case of evacuation, a basic element of an emergency plan. Also, 38% of participants reported that they needed assistance to prepare for a disaster.

Further, during the past storms many participants had limited success in actually implementing their emergency plans. For example, assistance in re-supplying food and water was reported as a personal need for 50% of the participants; 30% of the participants actually reported running out of food or water during or after the storms. These findings indicate a need for continued attention to local disaster planning for people with disabilities.

Recommendation:

Support existing emergency preparedness planning for persons with disabilities and disaster exercises implementation at the county and local level and expand venues.

Personal planning. There are planning tools and templates that could serve as a helpful guide in the development of both personal and organizational action plans, but it is unclear just how many citizens will develop plans on their own. To build on the findings of this study, it might be necessary to increase attention within the community of persons with disabilities not just to the need, but the availability of planning and recovery assistance. Small scale initiatives through local community agencies could increase the preparation of individuals and their families for future emergency events.

A number of helpful guides promote personal disaster planning, and some recent guides include suggestions for people with disabilities. For example, the University of Florida's Institute of Food and Agricultural Sciences (see

http://edis.ifas.ufl.edu/TOPIC_Disaster_Preparedness_and_Recovery) contains a series of briefing papers and hotlinks to references that could assist in the development of plans. These guides include:

- Disaster Planning Tips for Senior Adults
- Preparing To Evacuate Your Home In Case Of An Emergency
- Disaster Planning: Important Papers and Documents
- Disaster Planning Tips for Caregivers of the Elderly and People with Disabilities
- Preparing for Disasters: Your Food and Drinking Water Supply
- Preparing for a Disaster: Strategies for Older Adults

Also, planning protocols and templates have become available recently, in recognition of the need to promote preparedness at the local level. Two planning templates (one for families

and another for businesses) are available from the Florida Division of Emergency Management (see http://www.floridadisaster.org/).

   Organizational planning. Although health care providers were not surveyed in this project, their readiness to respond to disasters was reported by the people who used their services. It appears that some providers are well prepared to render support to people with disabilities in times of crisis, while others need to refine their approaches. Governmental agencies have already developed continuity plans, and these plans may be revised as a result of future events, or even in response disaster exercise. Non-governmental organizations, however, may be in need of assistance in developing realistic, person-centered plans. An excellent example of an organizational perspective on planning suggested that regional and county-wide coalitions be established to develop and implement comprehensive action plans to address the needs of persons with disabilities identified in this report. This effort combined with the recommendation to identify an individual to coordinate disaster preparedness in each organization that accepts government funding (see Recommendation #2), will close many gaps in the current approach to disaster preparedness.

Finding Summary # 5: In order to increase solutions and accommodations to improve access to health care, respondents suggested to have patient liaisons/ coordinators in hospital settings, and care assistants available to help with feeding, moving, toileting, and other basic personal functions.

Recommendation:

Identify staff or volunteers who can assist persons with disabilities with their system and personal needs. Provide training to individuals, who interface with persons with disabilities, as an integral part of a disaster preparedness plan, in addition to health care providers and emergency responders.

   Persons with disabilities often need assistance completing intake forms in hospital settings, moving around to get their exams, labs, prescriptions, referrals, etc. During an emergency this seemingly routine process is experienced by particularly, persons with mental, cognitive, hearing, visual, developmental and mobility challenges as confusing, and overwhelming. Additionally, once admitted, survey respondents reported the need for assistance with the activities of daily living. Where these support resources exist they often

lack the specific training to recognize and respond to the needs of persons with disabilities in the presence of an emergency and/or disaster. Organizations need to provide training to these resources once they are available, in hospitals and community agencies alike, including paraprofessionals, care coordinators, case managers and social workers who have frequent, direct contact with persons with disabilities.

Targeted Recommendations

For the Task Force for Persons With Disabilities and Preparedness, Health Care, Emergency Management, and Persons With Disabilities

Task Force

Task Force for Persons With Disability and Preparedness to identify a strategy, encourage and support specific county-wide efforts to use the survey data to develop local planning to increase the level of preparedness among persons with disabilities.

Task Force for Persons With Disability and Preparedness to evaluate and adopt a personal and family preparedness plan specific to persons with disabilities and recommend a mechanism for state-wide distribution.

Task Force for Persons With Disability and Preparedness to advocate for professionals and paraprofessionals with direct contact with PWD, other than health care providers, such as, care coordinators, case managers, social workers, counselors, paid caregivers to receive emergency preparedness training.

Task Force for Persons With Disability and Preparedness to advocate for government contracts to agencies providing services to PWD to include a requirement for staff participation in the local disaster exercises, evidenced by a certificate of attendance.

Health Care

Health care settings must appoint appropriate staff to discuss emergency planning with PWD, and/or caregivers and provide the necessary referrals and/or coordination to develop a plan that meets their needs, with particular attention to persons who live alone.

Health care settings must be able to accommodate the needs of persons with visual, hearing, mental, cognitive and mobility challenges during regular patient visits, as well as, during emergency events, including access to staff trained in American Sign Language. Accommodations also include, additional time for PWD to express their needs at their own pace to preserve their self sufficiency.

Emergency Management

Fifty-two (52%) of survey participants indicated their disability was not visible; staff giving emergency assistance must routinely request information about possible disabilities.

Staff responsible for planning and implementing local disaster exercises must communicate immediately with Persons With Disabilities who signed the consent to participate in the local disaster exercises and orient them as to their future actual participation.

Persons With Disabilities

Disclosure of any disability should be provided to any emergency/health care and shelter staff, regardless, if the information is requested or not. Either the PWD, the caregiver, relatives, significant others or individuals associated with the PWD need to proactively offer the information.

PWD to the extent it is possible, need to practice emergency responses at home with the support that would be available in case of a real event.

PWD in need of a special needs shelter must make every effort to pre-register and know the location of the shelter.

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Personal Anecdotes

Anecdotes have the power to give us a story that often remains undisclosed. Throughout the course of the survey implementation, anecdotes emerged, some of which are presented below.

A person has created an online registry with many of the same questions as the survey. People who had signed up, said they already completed the survey when they had not. This was confusing.

Several people stated they did not do the survey because they did not need a special shelter.

A person with disabilities (PWD) thought he could not fill out a survey because he works. He believed persons who identify themselves with disabilities are those who do not have a job.

A social worker assisting a consumer realized that she and her family were very much unprepared for a disaster/emergency incident.

Several consumers of mental health services decided not to disclose the type of disability on the survey because they thought it was stigmatizing.

Although he thought he was well prepared, a PWD realized his lack of preparedness for a catastrophic event after completing the survey.

A PWD believed he could not complete a survey for himself because he had already completed one for his child.

Disaster and Emergency Preparedness
Report of the 2006 Regional Census and Survey of Persons with Disabilities

The tragic events that took place on September 11, 2001 and the continued threats of biological and other threats have caused human service providers to assess carefully the readiness of the emergency first responders and health care systems. The 2004 and 2005 hurricanes had a devastating impact on Floridians. The combined seasons' storms affected every aspect of people's lives, and continue to present both individual (e.g., insurance costs, housing repairs) and societal (e.g., population migration, electrical infrastructure) concerns. Nearly all Floridians were affected by the events of the last two years, and there is a renewed focus on emergency planning issues involving law enforcement, transportation, public safety, and health care at state, county and city government.

As these issues gain media and public policy attention, a growing number of people recognized that people with disabilities face unique challenges immediately before, during, and long after disaster events. People with disabilities comprise up to 20% of the state population providing for a large segment that is vulnerable to future disaster or emergency events. Public policy involving health care and emergency preparedness must include explicit attention to the needs of people with disabilities.

Early in the spring of 2006 the Florida Department of Health and the Taskforce for Persons with Disabilities and Preparedness initiated an effort to gather information on the issues faced by people with disabilities during catastrophic events. This information is intended to serve as a basis future disaster and emergency planning. With an understanding of the issues faced during a series of disaster events, emergency preparation activities can be planned that take into account the special needs of Floridians with disabilities. These preparation and implementation activities can be used to reduce disparities involving emergency assistance, improve access to health care during and following catastrophic events, and assist local governments in developing emergency-related health policies. At a minimum, future emergency preparedness actions for people with disabilities should take into account:

- Issues pertaining to accessing *health care services*, emergency care in hospitals, pre-hospital services (e.g., Emergency Medical Services), and emergency care at public shelters;

- Identification of potential solutions and accommodations that **would** *improve access to health care services*, emergency care in hospitals, pre-hospital services (e.g., EMS), and emergency care at public shelters;

- Issues and potential solutions involving *communication and mobility*;

- Issues and potential solutions involving *personal preparedness* for emergency events; and

- Identification of *individuals to participate in future disaster exercises* as evaluators, participants, or observers.

In response to this need for information, the Florida Department of Health contracted with the Broward Regional Health Planning Council (BRHPC) as the lead agency to coordinate a *Regional Census and Survey Persons with Disabilities*. BRHPC, upon Department of Health approval, sub-contracted with four Local Health Councils; Health Council of South Florida (Miami-Dade and Monroe counties), Health Planning Council of Southwest Florida (Charlotte, Collier, De Soto, Glades, Hendry, Lee, and Sarasota counties), and Treasure Coast Health Council (Indian River, Martin, Okeechobee, Palm Beach, and St. Lucie counties). [*Technical Note*: Not every county in these Local Health Councils (Local Health Council's statutory areas of responsibility participated in this project. To facilitate distribution and collection of the instruments, 10 counties were selected.]

To gain input across a wide range of perspectives, a Project Work Group consisting of individuals with disabilities, representatives of persons with disabilities, and caregivers was formed. The Project Work Group made recommendations regarding:

- Selection of agencies that serve people with disabilities;

- Working definition of disability for this project;

- Design of the census and survey;

- Development and refinement of survey items;

- Piloting of the instrument;

- Recommendations to increase the data collection response rate; and

- Identification of individuals to participate in disaster exercises.

Each Local Health Council convened a local committee within the counties included in the project to provide input into the development of the survey instrument, assist with the distribution and collection of surveys, and preview the data from the surveyed respondents within their areas.

Instrument Development

A census and survey instrument was developed to correspond to the primary areas of concern identified in the Department of Health initiative. In addition to items involving basic demographics (gender, ethnicity, language preference, type of disability), the instrument contains items in the following a categories: access to health care, issues involving communication and mobility, personal disaster preparedness, access to shelter, past hurricane experience, and willingness to participate in future disaster or emergency exercises. Most items on the instrument are directly applicable to disaster preparedness for any type of catastrophic event. Six items specifically called for participants' reactions to the hurricanes of 2004 and 2005 to provide a concrete reference in order to link their personal circumstances to a specific event.

Survey questions for the instrument were drawn from members of the Project Work Group, which assisted in giving direction to the project, input from the committees of the Local Health Councils, the Task Force and the guidance of the Department of Health Program Manager. The instrument underwent several revisions for completeness and clarity. To accommodate the needs of persons with visual disabilities, the instrument was created in large print. An on-line version was set up for persons with visual disabilities with the appropriate equipment that would assist them in completing it and for individuals with fine motor skill challenges with access to a computer. A Spanish language version was also developed. The instrument was piloted to assure that items were clear, and that the response format was understandable. Ultimately, 41 items were included, using a multiple choice format with allowance for open ended replies.

Who Participated in the Census and Survey?

Each Council convened a local committee to assist in the development of the instrument and implementation. Data collection spanned 12 weeks. Respondents were able to participate by

either completing the instrument independently, or by completing it with the support of a caregiver or representative. Completed instruments were forwarded to BRHPC for analysis. The distribution of participants is provided in the table below.

Table 1. Survey participants by Local Health Council and county

Local Health Council	Counties Included	Participants	
Health Council of South Florida (HCSF)	Miami-Dade	589	(25%)
	Monroe	21	(1%)
Health Planning Council of Southwest Florida (HPCSWF)	Charlotte	77	(3%)
	Collier	77	(3%)
	Hendry	27	(1%)
	Lee	246	(10%)
	Sarasota	173	(7%)
Treasure Coast Health Council (TCHC)	Okeechobee	23	(1%)
	Palm Beach	567	(24%)
Broward Regional Health Council (BRHC)	Broward	604	(25%)
Total	10 Counties	2,404	

GENDER
An analysis of the first demographic characteristic, gender, revealed that 45% of the participants were male and 55% were female.
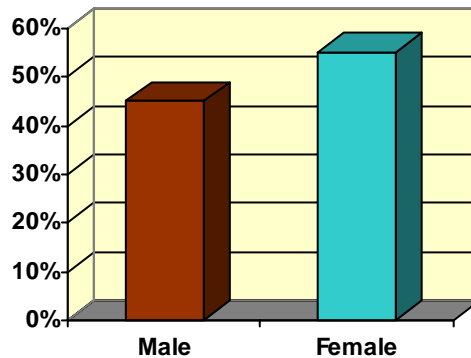
Fig.1. Survey participants by gender.

AGE

Ages were provided for 92% of the participants, and revealed that 8% of the participants were between 5-15 years old; 5% were between 16-20 years old; 66% were between 21-69 years old; 11% were between 65-74 years old; and 10% were 75 years or older. This indicates that the sample represented the full range of ages of people with disabilities.
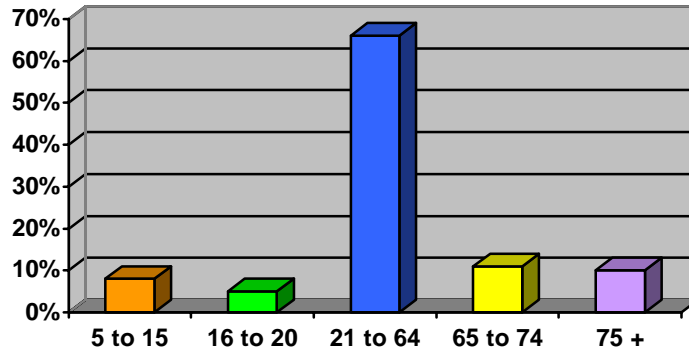
Fig.2. Survey participants by age.

RACE

Racial demographics were identified for 98% of the sample, and also showed substantial diversity; 65% of the sample was identified as White, and 35% were identified as Non-White. Black or African American participants comprised 27% of the sample. Participants identified as representing two or more races, or from racial groups not listed represented 7% of the sample. Participants identified as American Indian / Alaska Native, Asian, Native Hawaiian / Other Pacific Islander represented slightly more than 1% of respondents.
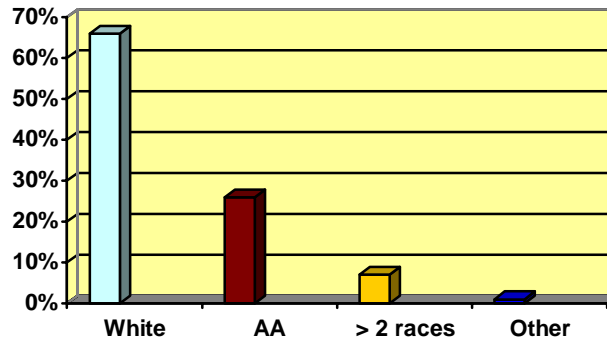
Fig.3. Survey participants by race.

ETHNICITY

Information on participants' ethnicity was available for 83% of the sample. Approximately 19% of participants were identified from Hispanic/Spanish / Latino ethnic origin, and 81% were identified as Non-Hispanic.
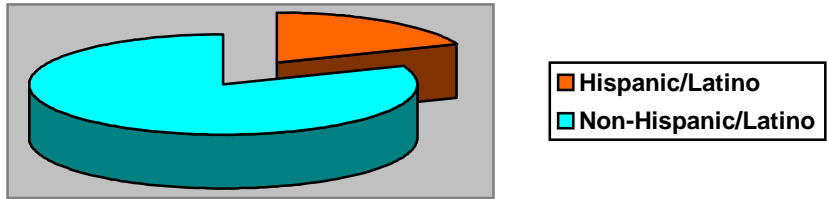
Fig. 4. Survey participants by ethnicity.

PRIMARY LANGUAGE

Primary language was identified for 98% of the sample. The majority of participants spoke English as their primary language (86%), followed by Spanish (10%), American Sign Language and Creole (approximately 2% each).
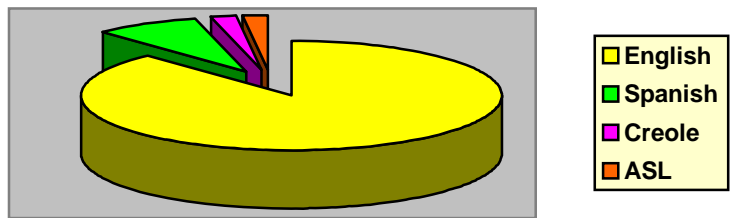
Fig. 5. Survey participants by primary language spoken.

EDUCATION

Level of education was available for 89% of the participants. A high school education was held by 50% of the sample. Approximately 40% of participants had additional formal education from either a technical school (4%) or from a college or community college (25%).

VISIBILITY OF DISABILITY
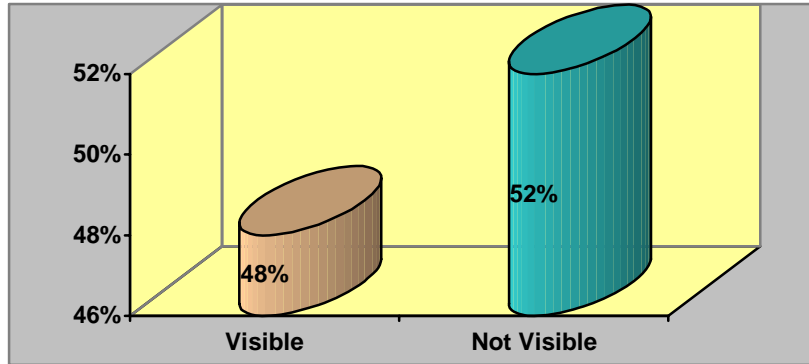
Fig. 6. Survey participants by visibility of disability.

Several questions were presented to ascertain the nature of the participants' disabilities. One question asked whether the disability could be *seen by others*. In response to this question, 48% of the respondents reported that their disabilities were visible, and 52% said they were not.

TYPE OF DISABILITY

Participants also were asked to describe their disabilities in functional terms.
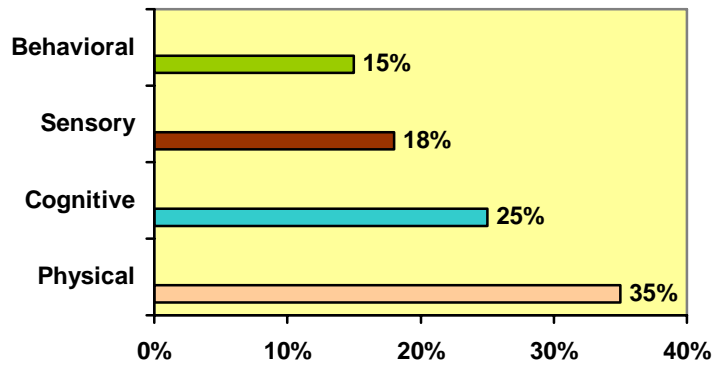
Fig.7. Survey participants by type of functional disability.

Physical disabilities (difficulties walking, climbing stairs, reaching, lifting, carrying, etc.) were listed as the most common disability, with 35% of the participants identifying these issues as either a primary or secondary limitation. Cognitive and/or developmental

disabilities were the second most common disability; 25% of the participants identified primary or secondary limitations in this area. Sensory (e.g., blindness, deafness, severe vision or hearing loss) and behavioral / psychiatric disabilities (difficulty with personal or interpersonal relations, concentration) were reported by 18% and 15% of the participants respectively.

 Participants also were asked to identify difficulties with certain personal or community functions.
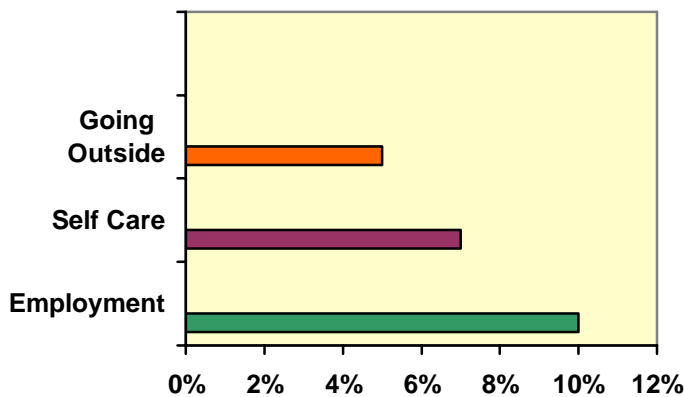
Fig. 8. Survey participants by type of personal or community disability functions.

Ten percent (10%) of participants reported that their disability affected their employment; 7% reported difficulties with self care, and 5% noted primary or secondary difficulties going outside of their homes alone (for instance, to shop or visit a doctor's office).

ADAPTIVE DEVICES

Participants in this survey used an array of adaptive devices to accommodate their disabilities. Over 35% of participants used some type of *mobility device*, including power and non-powered wheelchairs or scooters (20%), and walkers and crutches. Several adaptive devices were used to assist with *vision and hearing* difficulties, ranging from glasses and magnifiers (38%), hearing aids (10%), text messaging, note taking, and other communication devices (8%), and TTY (4%). Slightly more than 4% of the participants had a service or companion pet.

MARITAL STATUS

A question probed the domestic arrangements of participants. *Marital status* was supplied for 98% of the sample; 64% were single, and 20% were married; 16% of the sample identified "other" as their marital status.
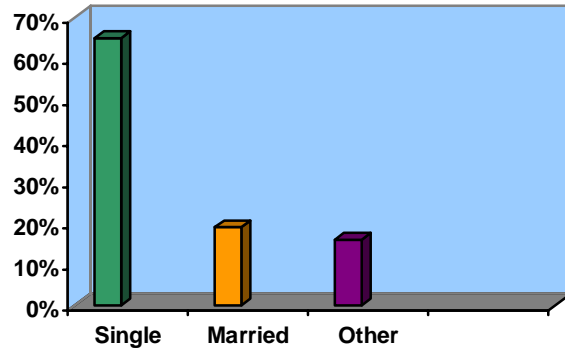
Fig. 9. Survey participants by marital status.

LIVING ARRANGEMENT

Just over 92% of participants provided information on their living arrangements. The vast majority (73%) lived with others including relatives (33%), a spouse or partner (22%), a roommate or housemate (12%), or a full- or part-time caregiver (4%). Twenty nine percent (29%) of the sample lived alone. Collier (47%), Monroe (43%), and Charlotte (39%) counties reported the largest proportion of participants living alone, while Lee (17%), Hendry (22%) and Sarasota (24%) reported the fewest.

Table 2. Survey participants by living arrangements.

Live with relatives	33%
Live with spouse or partner	22%
Live with roommate or housemate	12%
Live with caregiver	4%
Live alone	29%

TYPE OF HOUSING

The type of housing people live in was identified by 69% of persons surveyed (31% described their housing type as "other"). Single family homes were the most frequent type of housing (65%), with apartments (12%) and mobile homes (7%) following. Supported or sheltered living arrangements were identified by 16% of the participants, with Sarasota participants (34%) reporting the most frequent use of these arrangements.

Table 3. Survey participants by type of housing.

Single family homes	65%
Group or assisted living facilities	16%
Apartments	12%
Mobile homes	7%

None of the participants from Monroe, Okeechobee, and Hendry counties reported living in sheltered or supported homes. Within the supported or sheltered living arrangements, group homes (12%) and assisted living facilities (5%) were the most frequently reported options. Within all the home environments, 39% of participants reported that they were able to use stairs, although only 28% of the buildings had stairs. Nine percent (9%) of participants reported that they needed elevators to get to their homes.

How Did People with Disabilities Access Health Care Services?

A large proportion of participants (64%) reported that their disabilities require regular visits with health care providers on a monthly (29%), weekly (8%), or daily (2%) basis. These participants typically had access to a primary provider (physician or nurse) when ill (86%), and the provider (63%) or office staff (59%) made accommodations for their disabilities.

Participants in Monroe, Okeechobee, Sarasota, and Palm Beach were most likely to report that accommodations had been made by physicians, nurses, and office staff at health

care facilities; fewer than 50% of participants in Charlotte and Hendry reported accommodation.

Nearly 52% of participants received care through hospital emergency rooms, and 38% weretransported to a hospital by an ambulance. The lowest usage of emergency rooms was reported in Sarasota (34%), Lee (45%) and Hendry (48%). Counties in which participants reported the highest use of hospital emergency rooms included:

- Monroe (71%),
- Okeechobee (65%), and
- Collier (65%);

Accommodations for participants' disabilities by providers at hospitals and by ambulance personnel were reported by 37% and 26% respectively. Accommodations were most frequently reported by participants from Monroe (62%), Collier (55%), and Okeechobee (52%); participants least likely to report these accommodations were from Sarasota (26%) and Lee (33%) counties.

Many participants in this survey (61%) also received disability-related services through community-based organizations. Medical services (20%) and case management / support coordination (19%) were the most common services reported by participants. Mental health services were obtained by 6% of the surveyed population and medical transportation by 4%. Other services utilized included food services (3%), oxygen delivery (2%), and other services and supplies (8%).

While many participants in this survey have communication-based disabilities, 45% reported they were able to explain their conditions to health care providers and others. However, 20% reported having difficulty communicating with providers. Twelve percent (12%) of all participants reported that health care providers were hesitant in providing services. Participants in Hendry (22%), Miami-Dade (17%), and Palm Beach (16%) counties were most likely to report having this problem; however fewer than 1% of participants Monroe, Okeechobee, Collier, and Sarasota counties experienced this problem. Eighty-one (81%) of participants had not discussed an emergency plan with the health care provider. Of the 466 who had, 75% (351) reported the plan met their needs.

What Potential Solutions and Accommodations Exist to Improve Access to Health Care?

When participants were asked to identify accommodations, modifications, or equipment that would be helpful in hospital settings, a wide range of suggestions were mentioned. These suggestions frequently involved specific disability accommodations. Suggestions for improvements and accommodations were included in several items throughout the survey, and were typically provided in response to open-ended questions. These suggestions are included in this and in other sections of this report, particularly in the Communication and Mobility section. The responses varied widely, and included broad, conceptual suggestions, as well as very specific suggestions related to individuals' particular needs. Many suggestions were the direct result of living through the storms of 2004-2005.

The majority of the suggestions for accommodations included practical modifications such as:

- bathroom adaptations
- service animals
- talking books
- magnifiers
- communication aids
- special beds
- Spanish / Creole / American Sign Language interpreters
- Med Alert
- ID bracelets
- mobility aids.

Participants frequently reported that during times of crisis, they simply wanted their existing accommodations to work. For example, many participants who used electronic communication devices in their daily routines were left without these accommodated communication means due to power losses. A similar impact was found on people who used battery operated wheelchairs, power-assisted lifts, etc. Their suggestions for these accommodations include reliable backup systems, access to batteries, or temporary equipment exchanges.

A <u>second</u> category of suggestions included access to the same <u>supplies</u> sought by most citizens during times of crisis. With the loss of electrical power as a common experience during recent storm seasons, participants in this survey frequently cited the need for simple solutions to problems such as, the need for batteries, fans, ice, and cooking supplies. While not disability-specific accommodations, many participants reported that the presence of their disability limited their access to these commodities.

The <u>third</u> type of requested accommodations involved <u>staffing</u>. While some of the staffing suggestions were linked to health care providers or hospital personnel, other suggestions targeted the broader community. Hospital care suggestions included access to patient liaisons/coordinators, and the availability of care assistants to help with feeding, moving, toileting, and other basic personal functions. Access to social or psychological support was recommended both in and outside of hospital settings.

<u>Interaction suggestions</u> were provided regarding empathy and compassion in patient care. Supportive emotional characteristics were often lacking during crisis times, seriously impacting individuals with communication challenges, mental health issues, and other disabilities. Numerous participants reported the need for people tasked with assuring the social and psychological stability of people in hospitals and shelters.

What Were the Issues Involving Communication and Mobility?

There were numerous communication and mobility issues reported during emergency events in each county. Participants reported the need for a large amount of mobility devices and/or aids to assist with their vision or hearing difficulties.

<u>Communication challenges</u> ranged from simple to complex disability-specific issues. For example, telephone outages were reported as a common problem that interfered with the ability to gain information from caregivers, obtain news about friends and family, and communicate with employers, etc.. Following the 2004-2005 hurricanes, telephone outages were reported as a significant problem by 61% of the participants. There was wide variability reported across the counties which was associated with the storm tracks and repair crew availability. For example, 100% of the Okeechobee County participants identified phone outages as a major difficulty; as opposed to 55% of surveys respondents in the participating counties in the Southwest Florida Local Health Council.

Individual participants reported other communication problems as well. Without phones, communication problems for TTY users intensified. Participants also informed a loss of access to interpreters. Speech difficulties were associated with stroke, tracheotomy, and deafness. Language barriers already known to Florida's multi-language environment were also reported. People with vision impairments stated communication difficulties too.

In spite of the volume of difficulties, many participants reported a range of methods for communicating after the storms. Some methods paralleled the common means used elsewhere throughout Florida, while others were quite creative. For example common communication approaches included the use of battery-operated TVs and radios, videophones, and pagers. Others included the use of community bulletin boards, message boards located at food and water distribution centers, asking Sheriff's officers to pass messages to agencies and health care providers, portable picture boards, caregiver networks, job coaches, and where available, sharing TTY, DynaVox, and amplifiers.

The 2004-2005 storms also created <u>mobility challenges</u> for many people. Although some of the problems throughout the community mirrored the challenges by people without disabilities, participants reported disability-specific issues, as well as mobility challenges with their own homes. For example, community transit for people using wheelchairs, walkers, and other mobility devices was limited in many counties due to debris, downed power lines, and blocked roadways. This was a barrier to access health care services, as well as participating in typical community tasks (e.g., grocery shopping, banking).

In addition, 14% of participants reported difficulty moving in their own homes after the hurricanes. This was due to a number of factors including home damage, loss of power needed to recharge wheelchair batteries, loss of home lighting. Only 39% of participants in this survey reported that they were able to use stairs. In homes with damaged stairs, this created obvious in-home mobility restrictions. Also, 9% of the sample required elevators to access their homes, although the proportion of homes with elevators varied widely across the participating counties (from 2% or less in Charlotte, Collier, Hendry, Monroe, and Okeechobee counties to 22% in Sarasota).

Participants offered several suggestions for improving mobility. These included;
- increasing gas supply for agencies who offer wheelchair transportation
- increasing use of ramps in community and health care centers

- providing central locations for wheelchair battery exchanges
- providing additional transportation to shelters.

One participant identified the use of golf carts as a possible solution to increase access to the immediate, local community.

What Were the Issues Involving Personal Preparedness?

A variety of issues were reported by participants that involved their personal needs during a disaster. These included, medical needs, development of a personal or family preparedness plan, personal care assistance, and housing.

Almost half of respondents (45%) reported that attention to medical issues must be part of their disaster preparation. Monroe (86%), Okeechobee (70%), and Collier (61%) reported the most need; and Sarasota (32%) and Palm Beach (38%) counties reported the least.

Attention to medical issues included 1) both in-home / high frequency care as well as more episodic, 2) out-of-home care.

- Over 9% of the participants reported that they will need ventilator or nebulizer access during an emergency event.
- Injectable medications, and access to therapeutic oxygen, were both reported as a need by 7% of the participants.
- Nearly 16% of the participants expressed concern that their medications (e.g., insulin) would be at-risk if extended electrical failures resulted in a loss of refrigeration.
- More than 13% of the group reported a need for incontinence and/or other toileting supplies. A smaller number of people (just under 2%) reported a need for dialysis.
- Over 36% of the group reported that other preparation needs included additional medical devices or supplies such as walkers, wheelchairs, catheters, feeding pumps, back supports, and syringes.

Medical care was impacted during the 2004-2005 for a number of participants; 13% reported interruption in medical treatments, and 12% ran out of medications. There was wide variability in these findings across counties. Participants reporting an interruption in treatment ranged from a high of 17% in Palm Beach to a low of 4% in Sarasota; those who reported running out of medications ranged from 19% in Hendry County to 0 in Monroe.

Awareness of the need for a family preparedness plan was high among participants. Most participants had already been involved in developing personal assistance disaster plans. Fifty-nine percent (59%) of the group had a family disaster plan, and many others had important elements of a plan, although there was substantial variability across the counties. Counties where participants most frequently reported disaster plans were Monroe (90%), Palm Beach (73%), and Okeechobee (65%) respectively; Hendry had the lowest reported disaster plans 41%. While this level of personal or family planning is encouraging, many participants reported a need for assistance with disaster planning. In response to the direct question about whether participants needed assistance to prepare for a disaster, 38% replied that they did.

For those who already had a personal or family preparedness plan, many of these plans included both "the paperwork" and household supplies planning. Paperwork planning included:

- a collection of personal identification (e.g., insurance papers or product information for assistive equipment) (62%);
- names and telephone numbers of families, friends, or providers (69%);
- a living will (32%); a list of medications (60%); and
- emergency telephone numbers (79%).

In addition, 62% reported they knew the evacuation route to use if they were required to leave their neighborhood.

Household supplies planning included:

- a battery-operated radio (62%),
- a two-week battery supply (62%),
- a three-five (3-5 day) food and water supply (69%), and
- bleach and first aid supplies (52%).

There were various issues involving assistance with personal care across all the counties. Assistance with basic self-care (feeding, bathing, taking medications, toileting) was reported as a need by 23% of the participants. Assistance for re-supplying food and water was a personal need for 50% of the participants. A number of participants reported a high need for very basic self-care during the 2004-2005 hurricanes; 30% reported running out of food or water during or after the storms. Communications loss with hospitals and shelters

(14%) and with family, friends, and caregivers (36%) interfered with normal functioning, as did job losses following the storms (8%).

While family, friends, and caregivers are central to personal preparedness plans, members of churches, temples and other houses of worship are also an important factor. During the hurricanes 17% of survey participants reported receiving assistance from houses of worship. This included assistance with:

- food (13%),
- transportation (2%),
- companionship (4%),
- financial assistance (2%) and
- a range of other supports such as shelter, assistance with shutters, ice and water, pet food, yard clean-up, home repairs, spiritual support, home visits, batteries and other home supplies, and clothing.

Need for shelter was a serious challenge for many participants; 44% of participants reported a need for alternate shelter (general or special needs shelter) during disasters, and 11% reported a need for pet-friendly shelters. The need for shelters was most frequently reported by participants from Sarasota (61%), Charlotte (48%), and Miami-Dade (48%) counties; counties with the least frequent need were Hendry (33%), Okeechobee (39%), and Palm Beach (39%). Twenty percent (20%) reported a need for special needs shelters, although only 10% had pre-registered for these sites. Transportation to a shelter was reported as a need by 21%. Additionally, 10% required basic information on registering for shelters; and 16% did not know where to register for a special needs shelter.

In response to a question regarding participants' past experiences in shelters, 14% of the participants had previously stayed in a shelter. Thirty-four percent of participants reported a need for accommodations in order to stay in a shelter. In addition to disability-related accommodations, participants reported a need for basic security, showers, and better food. Nine percent reported their needs were met.

There were numerous responses to the question: "What would make you decide to go to a shelter?" These responses most frequently cited the severity of a storm or disaster event (i.e., relocation was directly proportional to intensity) as a determining factor for going to a shelter. A second common response was that participants would relocate if their homes were

damaged, or if their security was threatened. Finally, a number of participants reported that they would go to a shelter to avoid being alone during times of stress.

Were Individuals Identified to Participate in Future Disaster Exercises?

Each person participating in the census and survey was asked whether they would be willing to participate in, observe, or evaluate disaster exercises. Willingness to participate included either indicating "Yes" on the survey question asking about their interest and completing the consent form or by completing the consent form and signing it. Nearly 31% of the people surveyed (752) indicated their willingness to participate in these exercises. Although there was variability across the counties, 20% or more of the respondents reported a willingness to participate in exercises in 8 of the 10 counties. In two counties, over half of participants expressed their willingness to participate. This indicates a high degree of willingness to invest their personal time and energy in future disaster preparation activities. The table below reports participants' willingness to engage in future disaster exercises for each county.

Table 4. Survey participants willing to participate in disaster exercises by LHC and county.

Local Health Council	Counties Included	Participants
Health Council of South Florida	Miami-Dade	255 (43%)
(HCSF)	Monroe	21 (100%)
Health Planning Council of	Charlotte	14 (18%)
Southwest Florida	Collier	41 (53%)
(HPCSWF)	Hendry	04 (26%)
	Lee	56 (23%)
	Sarasota	36 (21%)
Treasure Coast Health Council	Okeechobee	06 (26%)
(TCHC)	Palm Beach	78 (14%)
Broward Regional Health Council	Broward	236 (39%)
(BRHPC)		
Total	10 Counties	752

Selected Variables by County

Many variables were considered in the development of the census-survey. The first part of this report described the findings at a global level and highlights of county level data. This section presents more detailed data for each of the ten counties included in the project. A county-wide summary of relevant facts, Facts at a Glance, is followed by tables of survey data which depict the demographics of the population surveyed, type of disability, communication and mobility devices needed by participants, their living arrangements, and type of housing. Issues relative to health care access, problems communicating with providers, availability of support during a disaster/emergency, experience with shelter stays and the best sources of information during the hurricanes are also included.

Broward County

Facts at a Glance

* Survey respondents were mainly white, English speaking women, ages 21-64, single, high school graduates.
* Live with relatives in single family homes.
* A large number of individuals live alone.
* The primary disability although physical is not visible.
* The second largest disability was cognitive/developmental.
* Have regular visits with a primary care provider.
* Have not discussed an emergency plan with provider.
* One fourth of respondents expressed having problems communicating with providers.
* More than half have a family plan and someone available in case of a disaster/emergency.

Demographic Data

Table 5. Survey participants by selected demographics.

Sex	Male	262
	Female	339
Age	5-15	57
	16-20	46
	21-64	352
	65-74	62
	75-84	40
	85+	40
Race	White	381
	Black/African American	163
	American Indian/Alaska Native	03
	Asian	01
	Native Hawaiian/Other Pacific Islander	02
	2 + races	04
	Other	40
Ethnicity	Spanish/Hispanic/Latino	88
	Non- Spanish/Hispanic/Latino	377
Education	High school	259
	Tech school	36
	College/community college	116
	Other	124
Language	English	531
	Spanish	38
	Creole	06
	American Sign Language	07
Marital Status	Married	92
	Single	411
	Other	83

Type of Disability

Table 6. Type of disability reported by survey participants.

Disability	Primary	Secondary
Sensory	81	10
Physical	**118**	60
Cognitive/Developmental	110	41
Behavioral/Psychiatric	55	58
Self-care	08	30
Going-outside-home	08	30
Employment	21	32

Table 7. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	248	**356**

Communication/Mobility Devices

Table 8. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	44
Non- Powered wheelchair/scooter	46
Walkers	73
Crutches	08
Hearing aid	48
TTY	24
Cochlear implant	04
Prosthesis	04
Text/email pager/voicephone	19
Note-taking device	08
Glasses/magnifiers	227
Service animal	06
Companion animal	11
Communication devices	13
Other	199

Living Arrangements

Table 9. Living arrangements reported by survey participants.

Live alone	154
With relatives	**191**
With spouse/partner	102
Full/part time caregiver	28
Roommates/housemates	81
Other	36

Type of Housing

Table 10. Type of housing reported by survey participants.

Single home	**239**
Condo/townhouse	00
Mobile home	10
Assisted Living Facility	25
Group home	55
Apartment	67
Other	43

Health care				
Regular visits with health care provider	Yes	361	No	243
Problems communicating with health care providers	Yes	119	No	485
Personal preparedness				
Talked with health care provider about emergency plan	Yes	163	No	**441**
Someone available in case of disaster	Yes	481	No	123
Have a family plan	Yes	329	No	275
Shelter				
Stayed in a shelter in the past	Yes	65	No	539
Needs were met	Yes	47	No	18

Past hurricanes

Table 11. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
335	37	159	112

Table 12. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 81			
Food	Transportation	Companionship	Financial
73	10	18	12

Charlotte County

Facts at a Glance

✶ Survey respondents were mainly white, English speaking women, ages 21-64, single, high school graduates.
✶ Live alone in single family homes.
✶ The primary disability is physical and visible.
✶ Have regular visits with a primary care provider, and have not discussed an emergency plan.
✶ Slightly over half (39) have a family plan, the other half does not.
✶ Most of them have someone available in case of a disaster/emergency.

Demographic Data

Table 13. Survey participants by selected demographics.

Sex	Male	34
	Female	43
Age	5-15	00
	16-20	01
	21-64	30
	65-74	07
	75-84	17
	85+	17
Race	White	59
	Black/African American	14
	American Indian/Alaska Native	00
	Asian	00
	Native Hawaiian/Other Pacific Islander	00
	2 + races	02
	Other	00
Ethnicity	Spanish/Hispanic/Latino	05
	Non- Spanish/Hispanic/Latino	50
Education	High school	33
	Tech school	04
	College/community college	20
	Other	14
Language	English	70
	Spanish	02
	Creole	00
	American Sign Language	03
Marital Status	Married	21
	Single	30
	Other	23

Type of Disability

Table 14. Type of disability reported by survey participants.

Disability	Primary	Secondary
Sensory	05	01
Physical	**07**	03
Cognitive/Developmental	01	03
Behavioral/Psychiatric	05	02
Self-care	00	01
Going-outside-home	00	01
Employment	04	04

Table 15. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	44	33

Communication/Mobility Devices

Table 16. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	12
Non- Powered wheelchair/scooter	13
Walkers	27
Crutches	03
Hearing aid	13
TTY	03
Cochlear implant	00
Prosthesis	03
Text/email pager/voicephone	02
Note-taking device	00
Glasses/magnifiers	44
Service animal	00
Companion animal	03
Communication devices	02
Other	56

Living Arrangements

Table 17. Living arrangements reported by survey participants.

Live alone	30
With relatives	12
With spouse/partner	19
Full/part time caregiver	03
Roommates/housemates	03
Other	09

Type of Housing

Table 18. Type of housing reported by survey participants.

Single home	39
Condo/townhouse	00
Mobile home	05
Assisted Living Facility	10
Group home	02
Apartment	06
Other	02

Health care

Regular visits with health care provider	Yes	49	No	28
Problems communicating with health care providers:	Yes	07	No	70

Personal preparedness

Talked with health care provider about emergency plan	Yes	12	No	65
Someone available in case of disaster	Yes	53	No	24
Have a family plan	Yes	39	No	38

Shelter

Stayed in a shelter in the past	Yes	08	No	69
Needs were met	Yes	07	No	01

Past hurricanes

Table 19. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
44	04	24	15

Table 20. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 20			
Food	Transportation	Companionship	Financial
10	03	05	02

Collier County

Facts at a Glance

* Survey respondents are equally divided between males and females, most of them were white, English speaking, ages 21-64, single, high school graduates.
* Almost half live alone in single family homes.
* The primary disability although physical is not visible.
* More than half have regular visits with a primary care provider, and have not discussed an emergency plan.
* Half have a family plan and almost three fourths (¾) have someone available in case of a disaster/emergency.

Demographic Data

Table 21. Survey participants by selected demographics.

Sex	Male	38
	Female	38
Age	5-15	11
	16-20	02
	21-64	20
	65-74	12
	75-84	18
	85+	18
Race	White	51
	Black/African American	11
	American Indian/Alaska Native	00
	Asian	00
	Native Hawaiian/Other Pacific Islander	00
	2 + races	01
	Other	12
Ethnicity	Spanish/Hispanic/Latino	18
	Non- Spanish/Hispanic/Latino	40
Education	High school	31
	Tech school	05
	College/community college	18
	Other	15
Language	English	61
	Spanish	10
	Creole	00
	American Sign Language	01
Marital Status	Married	11
	Single	42
	Other	18

Type of Disability

Table 22. Type of disability reported by survey participants.

Disability	Primary	Secondary
Sensory	05	04
Physical	11	04
Cognitive/Developmental	04	02
Behavioral/Psychiatric	05	02
Self-care	00	03
Going-outside-home	01	04
Employment	04	09

Table 23. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	34	43

Communication/Mobility Devices

Table 24. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	07
Non- Powered wheelchair/scooter	11
Walkers	22
Crutches	02
Hearing aid	12
TTY	05
Cochlear implant	01
Prosthesis	00
Text/email pager/voicephone	01
Note-taking device	01
Glasses/magnifiers	38
Service animal	00
Companion animal	03
Communication devices	02
Other	57

Living Arrangements

Table 25. Living arrangements reported by survey participants.

Live alone	36
With relatives	20
With spouse/partner	09
Full/part time caregiver	01
Roommates/housemates	06
Other	03

Type of Housing

Table 10. Type of housing reported by survey participants.

Single home	27
Condo/townhouse	00
Mobile home	13
Assisted Living Facility	03
Group home	03
Apartment	05
Other	05

Health care

Regular visits with health care provider	Yes	52	No	25
Problems communicating with health care providers:	Yes	08	No	69

Personal preparedness

Talked with health care provider about emergency plan	Yes	24	No	53
Someone available in case of disaster	Yes	55	No	22
Have a family plan	Yes	40	No	37

Shelter

Stayed in a shelter in the past	Yes	15	No	62
Needs were met	Yes	12	No	03

Past hurricanes

Table 27. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
53	03	14	20

Table 28. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 22			
Food	Transportation	Companionship	Financial
16	02	02	01

Hendry County

Facts at a Glance

* Slightly over half of survey respondents were males and almost half are females.
* Half are white, and half are Black/African American.
* Most are English speaking, ages 21-64, mainly single, high school graduates.
* The majority live with a spouse or partner; also, a large number live alone or with relatives.
* Over a third lives in single family homes, 30% live in mobile homes.
* The primary disability is employment.
* Have regular visits with a primary care provider, and have not discussed an emergency plan.
* One fourth expressed having communication problems with providers.
* More than half do not have a family plan and most have someone available in case of a disaster/emergency.

Demographic Data

Table 29. Survey participants by selected demographics.

Sex	Male	14
	Female	13
Age	5-15	03
	16-20	01
	21-64	22
	65-74	00
	75-84	01
	85+	01
Race	White	11
	Black/African American	11
	American Indian/Alaska Native	00
	Asian	00
	Native Hawaiian/Other Pacific Islander	00
	2 + races	00
	Other	05
Ethnicity	Spanish/Hispanic/Latino	06
	Non- Spanish/Hispanic/Latino	13
Education	High school	10
	Tech school	02
	College/community college	05
	Other	08
Language	English	24
	Spanish	03
	Creole	00
	American Sign Language	00
Marital Status	Married	08
	Single	17
	Other	01

Type of Disability

Table 30. Type of disability reported by survey participants.

Disability	Primary	Secondary
Sensory	03	00
Physical	01	02
Cognitive/Developmental	03	03
Behavioral/Psychiatric	04	01
Self-care	00	02
Going-outside-home	01	01
Employment	05	01

Table 31. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	09	18

Communication/Mobility Devices

Table 32. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	01
Non- Powered wheelchair/scooter	04
Walkers	02
Crutches	00
Hearing aid	00
TTY	00
Cochlear implant	00
Prosthesis	01
Text/email pager/voicephone	00
Note-taking device	01
Glasses/magnifiers	07
Service animal	01
Companion animal	00
Communication devices	01
Other	11

Living Arrangements

Table 33. Living arrangements reported by survey participants.

Live alone	06
With relatives	06
With spouse/partner	09
Full/part time caregiver	00
Roommates/housemates	01
Other	05

Type of Housing

Table 34. Type of housing reported by survey participants.

Single home	07
Condo/townhouse	00
Mobile home	06
Assisted Living Facility	00
Group home	00
Apartment	04
Other	03

Health care

Regular visits with health care provider	Yes	17	No	10
Problems communicating with health care providers:	Yes	07	No	20

Personal preparedness

Talked with health care provider about emergency plan	Yes	06	No	21
Someone available in case of disaster	Yes	20	No	07
Have a family plan	Yes	11	No	16

Shelter

Stayed in a shelter in the past	Yes	08	No	19
Needs were met	Yes	03	No	05

Past hurricanes

Table 35. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
05	00	09	08

Table 36. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 08			
Food	Transportation	Companionship	Financial
06	02	02	02

Lee County

Facts at a Glance

✱ Survey respondents were mainly white, English speaking women, ages 21-64, single, high school graduates.
✱ Live with relatives in single family homes.
✱ The primary disability is cognitive/developmental.
✱ Have regular visits with a primary care provider, and ¾ had not discussed an emergency plan with the provider.
✱ Most have a family plan and someone available in case of a disaster/emergency.
✱ A third of those who stayed in a shelter expressed their needs were not met.

Demographic Data

Table 37. Survey participants by selected demographics.

Sex	Male	118
	Female	124
Age	5-15	46
	16-20	16
	21-64	143
	65-74	16
	75-84	12
	85+	12
Race	White	171
	Black/African American	54
	American Indian/Alaska Native	00
	Asian	01
	Native Hawaiian/Other Pacific Islander	02
	2 + races	02
	Other	10
Ethnicity	Spanish/Hispanic/Latino	30
	Non- Spanish/Hispanic/Latino	163
Education	High school	107
	Tech school	07
	College/community college	36
	Other	53
Language	English	221
	Spanish	12
	Creole	04
	American Sign Language	01
Marital Status	Married	42
	Single	180
	Other	17

Type of Disability

Table 38. Type of disability reported by survey participants.

Disability	Primary	Secondary
Sensory	20	07
Physical	39	15
Cognitive/Developmental	58	19
Behavioral/Psychiatric	06	24
Self-care	01	15
Going-outside-home	00	10
Employment	05	08

Table 39. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	118	128

Communication/Mobility Devices

Table 40. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	19
Non- Powered wheelchair/scooter	22
Walkers	23
Crutches	05
Hearing aid	22
TTY	05
Cochlear implant	01
Prosthesis	02
Text/email pager/voicephone	09
Note-taking device	03
Glasses/magnifiers	94
Service animal	01
Companion animal	01
Communication devices	07
Other	115

Living Arrangements

Table 41. Living arrangements reported by survey participants.

Live alone	42
With relatives	85
With spouse/partner	40
Full/part time caregiver	18
Roommates/housemates	43
Other	13

Type of Housing

Table 42. Type of housing reported by survey participants.

Single home	125
Condo/townhouse	00
Mobile home	11
Assisted Living Facility	03
Group home	34
Apartment	18
Other	11

Health care

Regular visits with health care provider	Yes	139	No	107
Problems communicating with health care providers	Yes	43	No	203
Personal preparedness				
Talked with health care provider about emergency plan	Yes	64	No	**182**
Someone available in case of disaster	Yes	198	No	48
Have a family plan	Yes	144	No	102
Shelter				
Stayed in a shelter in the past	Yes	30	No	216
Needs were met	Yes	20	No	10

Past hurricanes

Table 43. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
147	05	54	45

Table 44. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 27			
Food	Transportation	Companionship	Financial
17	03	07	03

Miami-Dade County

Facts at a Glance

* Survey respondents were mainly white, English speaking men, ages 21-64, single, high school graduates.
* Live with relatives in single family homes.
* The primary disability although physical is not visible.
* A large majority have regular visits with a primary care provider.
* A total of 85% have not discussed an emergency plan with a provider.
* More than half have a family plan and a large number have someone available in case of a disaster/emergency.
* Of the 86 persons who had stayed in a shelter 48 expressed their needs were not met.

Demographic Data

Table 45. Survey participants by selected demographics.

Sex	Male	310
	Female	273
Age	5-15	25
	16-20	28
	21-64	422
	65-74	60
	75-84	23
	85+	26
Race	White	355
	Black/African American	178
	American Indian/Alaska Native	01
	Asian	03
	Native Hawaiian/Other Pacific Islander	01
	2 + races	16
	Other	17
Ethnicity	Spanish/Hispanic/Latino	196
	Non- Spanish/Hispanic/Latino	325
Education	High school	246
	Tech school	34
	College/community college	162
	Other	91
Language	English	426
	Spanish	126
	Creole	20
	American Sign Language	10
Marital Status	Married	122
	Single	381
	Other	77

Type of Disability

Table 46. Type of disability reported by survey participants.

Disability	Primary	Secondary
Sensory	120	30
Physical	260	41
Cognitive/Developmental	99	38
Behavioral/Psychiatric	38	39
Self-care	08	40
Going-outside-home	06	25
Employment	17	30

Table 47. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	262	327

Communication/Mobility Devices

Table 48. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	116
Non- Powered wheelchair/scooter	89
Walkers	65
Crutches	14
Hearing aid	59
TTY	25
Cochlear implant	03
Prosthesis	11
Text/email pager/voicephone	30
Note-taking device	19
Glasses/magnifiers	144
Service animal	26
Companion animal	06
Communication devices	17
Other	75

Living Arrangements

Table 49. Living arrangements reported by survey participants.

Live alone	163
With relatives	204
With spouse/partner	129
Full/part time caregiver	31
Roommates/housemates	30
Other	23

Type of Housing

Table 50. Type of housing reported by survey participants.

Single home	292
Condo/townhouse	00
Mobile home	16
Assisted Living Facility	20
Group home	19
Apartment	38
Other	34

Health care				
Regular visits with health care provider	Yes	367	No	222
Problems communicating with health care providers	Yes	109	No	480
Personal preparedness				
Talked with health care provider about emergency plan	Yes	90	No	499
Someone available in case of disaster	Yes	466	No	123
Have a family plan	Yes	322	No	267
Shelter				
Stayed in a shelter in the past	Yes	86	No	503
Needs were met	Yes	38	No	48

Past hurricanes

Table 51. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
317	35	195	106

Table 52. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 105			
Food	Transportation	Companionship	Financial
69	11	14	21

Monroe County

Facts at a Glance

✶ Survey respondents were mainly white, English speaking men, ages 21-64, single, high school graduates.
✶ Live alone either in single family homes or an apartment.
✶ The primary disability is cognitive/developmental and is visible.
✶ The secondary disability was identified as behavioral/psychiatric
✶ A large majority have regular visits with a primary care provider.
✶ Only one person had discussed an emergency plan with a provider.
✶ Only two did not have a family plan.
✶ All have someone available in case of a disaster/emergency.
✶ Of the three (03) persons who had stayed in a shelter all expressed their needs were not met.

Demographic Data

Table 53. Survey participants by selected demographics.

Sex	Male	14
	Female	07
Age	5-15	00
	16-20	03
	21-64	14
	65-74	02
	75-84	02
	85+	02
Race	White	18
	Black/African American	01
	American Indian/Alaska Native	00
	Asian	02
	Native Hawaiian/Other Pacific Islander	00
	2 + races	00
	Other	00
Ethnicity	Spanish/Hispanic/Latino	04
	Non- Spanish/Hispanic/Latino	15
Education	High school	15
	Tech school	01
	College/community college	02
	Other	02
Language	English	19
	Spanish	01
	Creole	00
	American Sign Language	00
Marital Status	Married	02
	Single	19
	Other	00

Type of Disability

Table 54. Type of disability reported by survey participants.

	Primary	Secondary
Sensory	00	00
Physical	07	01
Cognitive/Developmental	14	02
Behavioral/Psychiatric	00	09
Self-care	00	03
Going-outside-home	00	01
Employment	00	02

Table 55. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	13	08

Communication/Mobility Devices

Table 56. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	02
Non- Powered wheelchair/scooter	03
Walkers	00
Crutches	02
Hearing aid	00
TTY	00
Cochlear implant	00
Prosthesis	00
Text/email pager/voicephone	00
Note-taking device	00
Glasses/magnifiers	06
Service animal	00
Companion animal	01
Communication devices	00
Other	01

Living Arrangements

Table 57. Living arrangements reported by survey participants.

Live alone	09
With relatives	06
With spouse/partner	02
Full/part time caregiver	01
Roommates/housemates	03
Other	00

Type of Housing

Table 58. Type of housing reported by survey participants.

Single home	09
Condo/townhouse	00
Mobile home	05
Assisted Living Facility	00
Group home	00
Apartment	07
Other	00

Health care

Regular visits with health care provider	Yes	16	No	05
Problems communicating with health care providers	Yes	02	No	19

Personal preparedness

Talked with health care provider about emergency plan	Yes	01	No	20
Someone available in case of disaster	Yes	21	No	00
Have a family plan	Yes	19	No	02

Shelter

Stayed in a shelter in the past	Yes	03	No	18
Needs were met	Yes	00	No	03

Past hurricanes

Table 59. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
17	00	16	12

01

Table 60. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 02			
Food	Transportation	Companionship	Financial
00	00	01	00

Okeechobee County

Facts at a Glance

* Survey respondents were mainly white, English speaking women, ages 65-74 single, high school graduates.
* They were either single or identified other as the marital status.
* Live with spouses, partners or alone in mobile homes.
* The primary disability is physical, and it is visible.
* A large majority have regular visits with a primary care provider.
* Only two persons had discussed an emergency plan with a provider.
* The majority have a family plan and someone available in case of a disaster/emergency.
* Three persons had stayed in a shelter and all expressed their needs were met.

Demographic Data

Table 61 Survey participants by selected demographics.

Sex	Male	09
	Female	14
Age	5-15	01
	16-20	01
	21-64	07
	65-74	09
	75-84	02
	85+	02
Race	White	20
	Black/African American	00
	American Indian/Alaska Native	00
	Asian	01
	Native Hawaiian/Other Pacific Islander	00
	2 + races	00
	Other	02
Ethnicity	Spanish/Hispanic/Latino	03
	Non- Spanish/Hispanic/Latino	20
Education	High school	14
	Tech school	01
	College/community college	02
	Other	05
Language	English	12
	Spanish	02
	Creole	00
	American Sign Language	00
Marital Status	Married	07
	Single	08
	Other	08

Disability

Table 62. Type of disability reported by survey participants.

Type Disability	Primary	Secondary
Sensory	00	00
Physical	11	08
Cognitive/Developmental	03	00
Behavioral/Psychiatric	02	02
Self-care	06	07
Going-outside-home	00	00
Employment	00	02

Table 63. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	13	10

Communication/Mobility Devices

Table 64. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	04
Non- Powered wheelchair/scooter	02
Walkers	02
Crutches	00
Hearing aid	01
TTY	00
Cochlear implant	00
Prosthesis	00
Text/email pager/voicephone	00
Note-taking device	00
Glasses/magnifiers	08
Service animal	00
Companion animal	00
Communication devices	01
Other	22

Living Arrangements

Table 65. Living arrangements reported by survey participants.

Live alone	07
With relatives	05
With spouse/partner	08
Full/part time caregiver	01
Roommates/housemates	01
Other	01

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Type of Housing

Table 66. Type of housing reported by survey participants.

Single home	07
Condo/townhouse	00
Mobile home	11
Assisted Living Facility	00
Group home	00
Apartment	00
Other	03

Health care				
Regular visits with health care provider	Yes	22	No	01
Problems communicating with health care providers	Yes	04	No	19
Personal preparedness				
Talked with health care provider about emergency plan	Yes	02	No	21
Someone available in case of disaster	Yes	18	No	05
Have a family plan	Yes	15	No	08
Shelter				
Stayed in a shelter in the past	Yes	03	No	20
Needs were met	Yes	03	No	00

Past hurricanes

Table 67. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
17	00	12	07

Table 68. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 01			
Food	Transportation	Companionship	Financial
01	00	00	00

Palm Beach County

Facts at a Glance

✶ Survey respondents were mainly white, English speaking women, ages 21-64 single, high school graduates.
✶ Live with relatives in single homes.
✶ Most have a physical disability and it is visible.
✶ A large majority have regular visits with a primary care provider.
✶ A considerable number of persons (86%) had not discussed an emergency plan with a provider.
✶ A large amount has a family plan and someone available in case of a disaster/emergency.
✶ Seventeen of 79 (22%) participants who had stayed in a shelter expressed their needs were not met.

Demographic Data

Table 69. Survey participants by selected demographics.

Sex	Male	222
	Female	345
Age	5-15	22
	16-20	22
	21-64	340
	65-74	71
	75-84	79
	85+	79
Race	White	332
	Black/African American	177
	American Indian/Alaska Native	04
	Asian	02
	Native Hawaiian/Other Pacific Islander	01
	2 + races	10
	Other	39
Ethnicity	Spanish/Hispanic/Latino	71
	Non- Spanish/Hispanic/Latino	478
Education	High school	243
	Tech school	41
	College/community college	142
	Other	125
Language	English	488
	Spanish	35
	Creole	06
	American Sign Language	28
Marital Status	Married	148
	Single	296
	Other	119

Type of Disability

Table 70. Type of disability reported by survey participants.

Disability	Primary	Secondary
Sensory	127	36
Physical	225	58
Cognitive/Developmental	133	36
Behavioral/Psychiatric	33	48
Self-care	11	34
Going-outside-home	05	32
Employment	27	50

Table 71. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	292	275

Communication/Mobility Devices

Table 72. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	44
Non- Powered wheelchair/scooter	42
Walkers	72
Crutches	08
Hearing aid	59
TTY	35
Cochlear implant	02
Prosthesis	12
Text/email pager/voicephone	23
Note-taking device	12
Glasses/magnifiers	254
Service animal	07
Companion animal	25
Communication devices	31
Other	92

Living Arrangements

Table 73. Living arrangements reported by survey participants.

Live alone	153
With relatives	184
With spouse/partner	147
Full/part time caregiver	13
Roommates/housemates	46
Other	21

Type of Housing

Table 74. Type of housing reported by survey participants.

Single home	289
Condo/townhouse	00
Mobile home	27
Assisted Living Facility	14
Group home	25
Apartment	37
Other	22

Health care				
Regular visits with health care provider	Yes	419	No	148
Problems communicating with health care providers	Yes	137	No	430
Personal preparedness				
Talked with health care provider about emergency plan	Yes	80	No	487
Someone available in case of disaster	Yes	492	No	75
Have a family plan	Yes	414	No	153
Shelter				
Stayed in a shelter in the past	Yes	79	No	488
Needs were met	Yes	62	No	17

Past hurricanes

Table 75. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
293	19	178	137

Table 76. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 136			
Food	Transportation	Companionship	Financial
103	06	32	14

Sarasota County

Facts at a Glance

✶ Survey respondents were mainly white, English speaking women, ages 21-64, single.
✶ Live alone in single family homes.
✶ The primary disability is either physical or cognitive/developmental and is visible.
✶ Slightly over half have regular visits with a primary care provider and 47% do not.
✶ Most persons had not discussed an emergency plan with a provider.
✶ The majority has a family plan and a large amount has someone available in case of a disaster/emergency.

Demographic Data

Table 77. Survey participants by selected demographics.

Sex	Male	65
	Female	103
Age	5-15	00
	16-20	02
	21-64	100
	65-74	15
	75-84	28
	85+	28
Race	White	146
	Black/African American	20
	American Indian/Alaska Native	00
	Asian	01
	Native Hawaiian/Other Pacific Islander	00
	2 + races	00
	Other	02
Ethnicity	Spanish/Hispanic/Latino	10
	Non- Spanish/Hispanic/Latino	114
Education	High school	45
	Tech school	03
	College/community college	43
	Other	71
Language	English	161
	Spanish	05
	Creole	02
	American Sign Language	01
Marital Status	Married	18
	Single	116
	Other	35

Type of Disability

Table 78. Type of disability reported by survey participants.

Disability	Primary	Secondary
Sensory	00	00
Physical	05	00
Cognitive/Developmental	04	00
Behavioral/Psychiatric	01	02
Self-care	00	01
Going-outside-home	00	01
Employment	01	01

Table 79. Visibility of disability reported by survey participants.

Disability visible	Yes	No
	126	47

Communication/Mobility Devices

Table 80. Devices for communication and mobility reported by survey participants.

Powered wheelchair/scooter	07
Non- Powered wheelchair/scooter	26
Walkers	36
Crutches	07
Hearing aid	21
TTY	00
Cochlear implant	00
Prosthesis	02
Text/email pager/voicephone	05
Note-taking device	00
Glasses/magnifiers	60
Service animal	01
Companion animal	03
Communication devices	00
Other	158

Living Arrangements

Table 81. Living arrangements reported by survey participants.

Live alone	41
With relatives	26
With spouse/partner	16
Full/part time caregiver	04
Roommates/housemates	44
Other	39

Type of Housing

Table 82. Type of housing reported by survey participants.

Single home	44
Condo/townhouse	00
Mobile home	05
Assisted Living Facility	03
Group home	56
Apartment	09
Other	39

Health care				
Regular visits with health care provider	Yes	91	No	82
Problems communicating with health care providers	Yes	38	No	135
Personal preparedness				
Talked with health care provider about emergency plan	Yes	24	No	149
Someone available in case of disaster	Yes	146	No	27
Have a family plan	Yes	97	No	76
Shelter				
Stayed in a shelter in the past	Yes	33	No	140
Needs were met	Yes	31	No	02

Past hurricanes

Table 83. Best sources of information reported by survey participants.

Best sources of information about family/friends/caregivers			
Phone	Email	Received visits	Visited them
78	10	15	09

Table 84. Assistance received from faith organizations reported by survey participants.

Received assistance received from house of worship/temple/church or member of a congregation Total = 09			
Food	Transportation	Companionship	Financial
06	01	03	04

Recommendations

The *2006 Regional Census and Survey of Persons with Disabilities* evidences the challenges people with disabilities confront during emergency events and to a lesser extent the impact on health care providers and emergency systems,. Lessons were learned and recommendations have emerged from this project. Some refer to <u>systems level issues</u> in need of attention while others address <u>personal, or individual and family issues</u>.

Though planning at the personal level will continue to focus on the immediate health and welfare of individuals with disabilities and their families, it is recommended that knowledge of issues involving mobility, transportation to hospitals or clinics, and reliable power for communication devices be considered as important as food, shelter, and clothing. At a systems level, future planning will continue to target inter-agency use of resources and expertise and also needs to find and fund creative solutions. To better understand these personal and systems level perspectives, a summary of selected findings leading to several recommendations are provided.

Global Recommendations

Finding Summary #1: A large proportion of people with disabilities had not discussed an emergency plan with their health care provider (81%), although many survey participants had developed family emergency plans. This is an especially important finding considering that 57% of the respondents had either sensory, behavioral, or cognitive disabilities, and 29% of respondents lived alone. Taken together, these findings point to the need for additional efforts to assess, among other things, whether certain sub-populations of people with disabilities will require more active disaster preparedness actions, and more systematic interactions with health care and other providers.

Recommendation:

Continue to assess the emergency planning and disaster preparedness needs of people with disabilities throughout the state, and include the perception of the health care, emergency management, and community based providers who serve them.

The sample size of this survey (2404), represents a broad cross-section of Floridians with disabilities in the counties included in the sample. Since there are regional differences among health care and community-based providers throughout the state, it would be useful to extend the survey to additional regions and to assess how prepared for disaster events are Floridians other areas of the state. Three modifications in the methodology are recommended to continue this process.

First, data gathering should be expanded to include a sample of providers from health care agencies, community based organizations, first responders, and county emergency management. Provider perspectives, in combination with information from emergency system staff, would likely identify actions, precautions, and solutions that were not captured through the survey. Information from health care providers and emergency management staff would help to identify specific strategies used to prepare for, mitigate the impact of disasters, and uncover strategies that have not been helpful when developing and implementing disaster preparedness plans.

Second, extension of the data collection methodology is also recommended. In addition to the census and survey, a smaller sample of individuals should be brought together for interviews, as a means of understanding their personal and family experiences in more depth. The methodology for this interviewing is more cumbersome than surveying, and precludes large numbers from participating. However, a purposeful sampling strategy can be used to identify one-two percent (1-2%) of the survey respondents who are willing to participate in more in-depth interviews. A combination of focus groups and individual interviews would generate useful information to reduce gaps in preparedness and response efforts to accommodate the needs of persons with disabilities. This methodology should be applied to health care providers and emergency management staff as well.

Third, the same survey instrument should be used, nevertheless; some data fields can be refined so that additional information can be gathered. For example, the age category 21-64 could be broken down. Age categories are recommended because they tend to elicit more responses than an open ended request for the participant's age.

Finding Summary #2: Participants in this survey identified that health care providers need specific skills and dispositions involving communication, and delivery of psychological supports to persons with disabilities. Twenty percent reported having difficulty communicating with health care providers. In addition, the large percentage of people with sensory, behavioral or cognitive needs suggests that even skilled providers face challenges when providing emergency support to people with the most severe disabilities.

Recommendation:

Increase awareness of the needs and responses of persons with disabilities related to disasters and emergency events among health care providers and emergency systems staff through training models addressing their particular needs.

Health care professionals participate in a range of training activities, and agencies are proactive in assessing the training needs of their staff. In some organizations, however, disaster-related training receives only minimal attention. Staff training that targets emergency preparedness has received increased attention during recent years, and resources do exist. For example, a modular based training program exists at the University of South Florida Center for Public Health Preparedness that includes on-line training (FCPHP, 2006; see www.FCPHP.usf.edu.). Another example of an on-line training program that targets direct service providers is the Environmental and Emergency Management. Program at the University of Findlay (OH) (see http://seem.findlay.edu/courses). Both of these training programs target practical training for front line staff. Finally, Lynn University provides certificate programs in (a) Emergency and Disaster Management and (b) Emergency Planning and Administration. Both of these programs are offered partially on-line, and are appropriate for planners and managers.

Finding Summary #3: Thirteen percent (13%) of respondents reported their medical treatments were interrupted, and 12% ran out of medications during past hurricanes. As many as 20% of survey respondents reported a need for special needs shelters, although only 10% had actually pre-registered for these sites. In addition, transportation to shelters was a common need (reported by 21% of participants). Basic information on how and where to register for shelters was reported by a number of

participants. Of those who used shelters or hospitals during disaster events, numerous participants reported the need for people to assist with their social and psychological needs. These findings suggest that while some health care providers and community agencies may be prepared for emergency events, many others have not yet undertaken the planning and mitigation efforts needed to provide disaster support to people with disabilities.

Recommendation:

Develop and implement a state-wide policy for persons with disabilities regarding disaster preparedness and service coordination during an emergency catastrophic event.

To prepare for a range of different types of emergency events in Florida, a state-wide initiative is needed to elevate the importance of disaster planning related to persons with disabilities within health care agencies and community based organizations. A state-wide policy that requires organizations to identify a point person for disaster planning would reduce the likelihood that such planning will be minimized. Gaps in services could be reduced by requiring any organization that receives city, county, or state funding for services to persons with disabilities to identify a responsible individual within the agency to coordinate disaster preparedness activities for persons with disabilities. Although many government agencies (e.g., schools, hospitals) currently have continuity of operations plans, many community based organizations do not. Many organizations lack the expertise to develop and implement realistic plans that would have mitigated the challenges faced by the people with disabilities in this study.

Finding Summary #4: A positive finding was the large percentage of people with disabilities who have already been involved in family emergency preparedness planning. In spite of this, 41% of participants did not have a family disaster plan, and 38% did not know the route in case of evacuation, a basic element of an emergency plan. Also, 38% of participants reported that they needed assistance to prepare for a disaster. Further, during the past storms many participants had limited success in actually implementing their emergency plans. For example, assistance in re-supplying food and water was reported as a personal need for 50% of the participants; 30% of the participants

actually reported running out of food or water during or after the storms. These findings indicate a need for continued attention to local disaster planning for people with disabilities.

Recommendation:

Support existing emergency preparedness planning for persons with disabilities and disaster exercises implementation at the county and local level and expand venues.

Personal planning. There are planning tools and templates that could serve as a helpful guide in the development of both personal and organizational action plans, but it is unclear just how many citizens will develop plans on their own. To build on the findings of this study, it might be necessary to increase attention within the community of persons with disabilities not just to the need, but the availability of planning and recovery assistance. Small scale initiatives through local community agencies could increase the preparation of individuals and their families for future emergency events.

A number of helpful guides promote personal disaster planning, and some recent guides include suggestions for people with disabilities. For example, the University of Florida's Institute of Food and Agricultural Sciences (see http://edis.ifas.ufl.edu/TOPIC_Disaster_Preparedness_and_Recovery) contains a series of briefing papers and hotlinks to references that could assist in the development of plans. These guides include:

- Disaster Planning Tips for Senior Adults
- Preparing To Evacuate Your Home In Case Of An Emergency
- Disaster Planning: Important Papers and Documents
- Disaster Planning Tips for Caregivers of the Elderly and People with Disabilities
- Preparing for Disasters: Your Food and Drinking Water Supply
- Preparing for a Disaster: Strategies for Older Adults

Also, planning protocols and templates have become available recently, in recognition of the need to promote preparedness at the local level. Two planning templates (one for families and another for businesses) are available from the Florida Division of Emergency Management (see http://www.floridadisaster.org/).

Organizational planning. Although health care providers were not surveyed in this project, their readiness to respond to disasters was reported by the people who used their

services. It appears that some providers are well prepared to render support to people with disabilities in times of crisis, while others need to refine their approaches. Governmental agencies have already developed continuity plans, and these plans may be revised as a result of future events, or even in response disaster exercise. Non-governmental organizations, however, may be in need of assistance in developing realistic, person-centered plans. An excellent example of an organizational perspective on planning suggested that regional and county-wide coalitions be established to develop and implement comprehensive action plans to address the needs of persons with disabilities identified in this report. This effort combined with the recommendation to identify an individual to coordinate disaster preparedness in each organization that accepts government funding (see Recommendation #2), will close many gaps in the current approach to disaster preparedness.

Finding Summary # 5: In order to increase solutions and accommodations to improve access to health care, respondents suggested to have patient liaisons/ coordinators in hospital settings, and care assistants available to help with feeding, moving, toileting, and other basic personal functions.

Recommendation:

Identify staff or volunteers who can assist persons with disabilities with their system and personal needs. Provide training to individuals, who interface with persons with disabilities, as an integral part of a disaster preparedness plan, in addition to health care providers and emergency responders.

Persons with disabilities often need assistance completing intake forms in hospital settings, moving around to get their exams, labs, prescriptions, referrals, etc. During an emergency this seemingly routine process is experienced by particularly, persons with mental, cognitive, hearing, visual, developmental and mobility challenges as confusing, and overwhelming. Additionally, once admitted, survey respondents reported the need for assistance with the activities of daily living. Where these support resources exist they often lack the specific training to recognize and respond to the needs of persons with disabilities in the presence of an emergency and/or disaster. Organizations need to provide training to these resources once they are available, in hospitals and community agencies alike, including

paraprofessionals, care coordinators, case managers and social workers who have frequent, direct contact with persons with disabilities.

Targeted Recommendations
For the Task Force for Persons With Disabilities and Preparedness,
Health Care, Emergency Management, and
Persons With Disabilities

<u>Task Force</u>

Task Force for Persons With Disability and Preparedness to identify a strategy, encourage and support specific county-wide efforts to use the survey data to develop local planning to increase the level of preparedness among persons with disabilities.

Task Force for Persons With Disability and Preparedness to evaluate and adopt a personal and family preparedness plan specific to persons with disabilities and recommend a mechanism for state-wide distribution.

Task Force for Persons With Disability and Preparedness to advocate for professionals and paraprofessionals with direct contact with PWD, other than health care providers, such as, care coordinators, case managers, social workers, counselors, paid caregivers receive emergency preparedness training.

Task Force for Persons With Disability and Preparedness to advocate for government contracts to agencies providing services to PWD to include a requirement for staff participation in the local disaster exercises, evidenced by a certificate of attendance.

<u>Health Care</u>

Health care settings must appoint appropriate staff to discuss emergency planning with PWD, and/or caregivers and provide the necessary referrals and/or coordination to develop a plan that meets their needs, with particular attention to persons who live alone.

Health care settings must be able to accommodate the needs of persons with visual, hearing, mental, cognitive and mobility challenges during regular patient visits, as well as, during

emergency events, including access to staff trained in American Sign Language. Accommodations also include, additional time for PWD to express their needs at their own pace to preserve their self sufficiency.

Emergency Management

Fifty-two (52%) of survey participants indicated their disability was not visible; staff giving emergency assistance must routinely request information about possible disabilities.

Staff responsible for planning and implementing local disaster exercises must communicate immediately with Persons With Disabilities who signed the consent to participate in the local disaster exercises and orient them as to their future actual participation.

Persons With Disabilities

Disclosure of any disability should be provided to any emergency/health care and shelter staff, regardless, if the information is requested or not. Either the PWD, the caregiver, relatives, significant others or individuals associated with the PWD need to proactively offer the information.

PWD to the extent it is possible, need to practice emergency responses at home with the support that would be available in case of a real event.

PWD in need of a special needs shelter must make every effort to pre-register and know the location of the shelter.

APPENDIX I

Census-Survey Responses to Open Ended Questions

The census-survey captured information by asking persons to either mark the item that best reflected their reality or by answering open ended questions. This appendix comprises the responses to the open ended questions. Responses to questions 21, 26, 34, and 35 have been categorized to create a more focused approach. The highlighted responses indicate a greater number of persons wrote the same answer. Question 15, the first one in this segment, lists other medical needs, written by respondents which had not been addressed in that question.

Census-Survey Responses to Open Ended Questions

Q. 15. Medical supply needs in case disaster (Answers to Other)

Medications
Catheter kit
Back support
Walkers
Nebulizers/inhalers
Feeding pump
Wheelchairs

Q. 21. Have you experienced problems communicating with health care providers?

Verbal limitations
Difficulty with verbal communication
Speech
Paralyzed vocal cords
Recent stroke
Has tracheotomy

Language barriers
Interpreter, including American Sign Language
Staff's limited English
Creole

Hearing difficulties
Medical doctors (MD) do not listen
Deaf
Cannot hear well

Psychiatric/mental health problems
HP (health provider) do not believe patient nor accommodate for them
MDs do not understand psych meds
Lack of respect for Persons With Disabilities (PWD) with mental health needs
MDs cannot deal with the behavior of PWD with mental health problems

Health provider attitudes
Do not hear what doesn't work from patient perspective
No return calls
Staff inattentive to patient. needs
Uncaring
Do not accommodate PWD
Specialists have no patience
Too busy to talk with patient
Was called a "drug seeker"
Feel lack of communication

Treatment

Billing issues
Difficulty receiving proper referral
Long wait for appt.
Difficult to get treatment
Cannot see, so cannot write
Feel limited time with MD

Understanding

Someone else communicates needs
Difficulty explaining problem
Misunderstood by health provider
Difficulty remembering instructions
Repeating to MDs what was said to other staff
Difficulty getting health provider to understand
Do not understand health provider
MDs do not understand severity
Gets confused

Personal problems

No concrete concept of time
No health provider to hand out meds
MD unwilling to prescribe antidepressant
Other personal problems

Q. 26. What equipment would be helpful to support your communication or mobility needs in hospital settings?

Equipment

Wheelchair, including powered
Walker/cane
Special bed
Phone/pager – large key pad, amplifier
Videophones
Wheelchair accessibility
Hoyer lift
Bathroom adaptations (grab bars, shower stool/bench, higher toilet seat)
Hearing aids
Large print
Bedside toilet/commode
Service animal
Talking books
Breathing machine
Magnifier
Air purifier
Faster wheelchair transport
Ambulance
Transfer board
Extra wide wheel chairs
Feeding pump
Wide halls

Golf cart to get from parking
Written instructions
Communicative device
Low vision machine
Picture board
C-DAD machine
Bright light
Dynavox (speech assistance.)

Communication
Interpreter
American Sign Language
Spanish & Creole
TTD (TTY or TDD telecommunication display devices)
ID bracelets
MedAlert
Contact with family to explain health issue

Staff
Personal assistant, include social service assistant (feeding, move around, explain treatment, fill documents, help the blind)
Liaison/Coordinator
Listen to patients
Access to nurse
MD who understand medical and psych meds
Mental health training for MDs
English speakers
Time for patient to explain
Health surrogate
Better staff training to do assessments
Better care nurses
Empathy
Patience
Compassion

Other
Nebulizers/inhalers
Meds
Back support
Glucometer syringes
Dialysis
AC, generator, TV/VCR, respiratory therapy

Q.27. Do you receive services related to your disability from an organization?

The list includes medical, social, volunteer organizations, government, churches that provide services to persons with disabilities.

Q. 32. Have you stayed in any kind of shelter in the past? How can your needs be met in the future?

      Work better with people with disabilities
      Security
      Showers
      Better food
      Wider bathrooms
      More staff

Q.33. What would make you decide to go to a shelter?

      Massive disaster
      Severe storm
      Loss of home
      Mandatory evacuation
      Unsafe home
      Medical need
      Family cannot help
      Adequate assistance provided for my type of disability
      Homeless
      If friends go
      Last resort
      Mobile home
      To have AC/electric power
      Flooding
      Personal safety
      Lack of water
      Don't want to be alone
      Cannot get out of town
      Damage to home
      Lack of food
      Fear
      Current care staff is unavailable

Q. 34. Do you need any reasonable accommodations to stay in a shelter in case of disaster?

Communication
      Interpreter, including, ASL
      Assistance to understand procedures
Mobility
      Walker
      Personal assistance (activities of daily living, medications)
      Wheelchair accessibility
      Transportation to shelter
      No stairs
      Bathroom adaptations
Environment
      AC, fans
      Electric power (powered wheelchair)
      Noise control
      Pet friendly
      Clean

Hygiene
>	Showers
>	Change of clothes
>	Personal cleaning

Meds
>	Cooling, med supplies, nebulizers, oxygen

Supplies

Personal needs/Comfort
>	Bed, not a cot, air mattress, Hoyer lift
>	Persona space
>	Privacy screen
>	Special diet
>	Caregiver/relative be accepted in same shelter

Q. 35. What were the major difficulties you faced during/after the hurricanes?

Mobility
>	Lack of ramps
>	Elevators not working
>	No gas
>	No batteries for wheelchair
>	No transportation
>	No work

Environment
>	No electricity
>	Damaged home
>	Loss of home
>	Stayed in mobile home
>	Flood

Emotional
>	Depression
>	Scared
>	Overwhelmed
>	Anxiety
>	Isolation
>	Cabin fever
>	Not knowing where to go

Communication
>	No TTY
>	No phone

Medical
>	Difficulty breathing due to lack of AC
>	Couldn't cool meds
>	No access to meds
>	Unable to use CPAP machine (Continuous Positive Airway Pressure)

Financial
>	Loss of income

Evacuation from home

No food, water

Q.36. What were the major resources during/after the hurricanes?

Assistance from organizations (Red Cross, Memorial Regional Hospital shelter, FEMA (Federal Emergency Management Agency), home health agency, drop in center, Assisted Living Facility, hospital, group home, Meals-on-Wheels, county, North East Focal Point)
Community pulled resources together
Friends
Family
Church
Communication (cellular phone, phone, text messenger)
Generator
Gas stove
Water delivery
Counseling
Food (food distribution, food stamps, Wells Center food distribution)

Q. 37. What was the best source of information about family, friends, or your caregivers after the hurricanes?

TV, including, battery operated
Family
Building information board
Cellular phone
Media coverage, news
Sheriff's office
Neighbors
Mail
Case management
TTY
Radio
Work
Roommates
Caregivers
In-home- staff
Fire Dept
Videophone

Q. 38. **What was the best source of information about work and/or school after the hurricanes?**

Other people
Family
Partner
Pager
Neighbors
Drove around
Battery operated tv/radio
Friends
Organizations (Marc Home, College Living Experience)
Walked to work

Visitors
FEMA
Word of mouth
Pager
Boss
Job coach
TTY
Staff updates
Cellular phone
Videophone

Q. 40. Did you receive any assistance from your house of worship, church, or temple or from a member of a congregation after the hurricanes?

Supplies
Water
Phone calls
Visits
Clean up, including yard clean up
Shelter
Clothes
Spiritual support
Putting up shutters
Charcoal for cooking
Portable TV
Checked in
Support
Pet food
Housing
Prepare for the storm
Batteries
Food stamps
Household items
Interpreter
Generator

APPENDIX II

Additional Anecdotes Related to the Census-Survey

Comments and anecdotes from Okeechobee County:
- It's rare that we get anyone fighting for Okeechobee.
- It's rare that anyone cares about us out here.
- The community is extremely concerned about this issue and is lacking resources to adequately meet the needs of PWD in the area.
- Okeechobee has only one hospital.
- There is a small special needs shelter (capacity 125) in the only building that can withstand a CAT 2. The shelter is not adequately equipped; has electricity but no medical equipment, no ventilator, only 40 cots, and no dialysis.
- There is no Assisted Living Facility in Okeechobee, so many PWD live at home with few resources.
- There is only one nursing home – and it does not admit during the storm.
- There is no homeless shelter.
- Okeechobee needs places to which it can transport PWD in the event of a disaster.
- There are at least 4,000 people, mostly elderly PWD, living in trailers on the north dike.
- Okeechobee County always gets "the short end of the stick".

Comment/anecdote from Palm Beach County:

There is a serious problem in getting an extra supply of medication if a hurricane is approaching toward the end of a month when the supply of a prescription medication is nearly depleted. **HMO's, including Medicare and Medicaid HMO's will not pay for the medication in advance** to allow stockpiling to ensure a supply through the end of the crisis period. In the immediate aftermath of a disaster, refilling a prescription will be impossible and without reasonable stockpiling, people will run out of medication. This creates life-threatening conditions for many PWD.

Other comments:
Some retired people and people who work, but who did have a disability did not complete the survey because they didn't consider themselves disabled – "old but not disabled". People assumed you had to be collecting disability payments to be disabled.

APPENDIX III

Note: Although created in response to earthquakes, it is useful for any kind of disaster.

People With Disabilities and Disaster Planning

Disabled People and Disaster Planning" (DP2) was a group of people primarily from Los Angeles County who met during 1996 and 1997 and formulated recommendations to reduce or eliminate problems with accessibility that many people with disabilities experienced after the Northridge Earthquake of 1994. Within the group were individuals with disabilities and individuals from the disaster planning and response professions.

This website (www.citycent.com/dp2) contains the group's recommendations, as well as other information relevant to assisting people with disabilities prepare for and cope with disastrous earthquakes.

PREPARE FOR WHAT WILL HAPPEN

1. Telephone service may be interrupted.

2. Electricity may be lost. This means no lights, air conditioning, electric heating, and elevators. Refrigerators and electric stoves will not work and you may have no hot water. Also, because of lost water pressure toilets may not flush. Without electricity you cannot run mechanical breathing aids; you will not be able to recharge a power wheelchair. Only battery operated clocks, radios, televisions, and other appliances will help you. At work and at home – keep a flashlight, battery operated radio and fresh batteries handy.

3. A fire is much more possible than under normal conditions. In or near any building or residence, there may be a ruptured gas line, torn electrical wiring, or spilled flammable fluids. At home, have a fire extinguisher handy. At work, know where the nearest two extinguishers are located. Know how to direct someone to turn off your gas if you cannot do so yourself.

4. Don't expect help from fire and police personnel for at least 72 hours: they will be busy with the most crucial situations. Some emergency shelters are up and running within hours of a major disaster; others take two or three days to become operational. Be mentally prepared to rely on your own resources and the help of neighbors and work colleagues during the first 72 hours after a disaster. Be ready for serious

problems with transportation. Roads may be closed; a freeway may be blocked; bus service will be erratic; Dial-A-Ride service will be disrupted.

5. It can take up to three days for emergency water to get to your area. Every person should store at least 3 gallons, and more for those people who need extra water. And still more if you have a service animal. It is best to store filtered water because it will stay fresher during a long storage. (Replace the water every few months.)

6. In the days following a major disaster, many people find themselves easily distracted, strangely absent-minded, and occasionally losing track of keys, phone numbers, and other things. If you experience this, don't worry greatly; it is a normal reaction to the stress of a being in a major disaster.

7. It may take several days before order is restored and you can replace even the simplest disability related items like hearing-aid batteries and prescription medications. Keep spares and backup supplies at home or at work.

SHELTER MANAGERS SHOULD KNOW . . .

HOW TO OBTAIN DISABILITY RELATED ITEMS

- Folding white cane
- Regular cane
- Crutches
- Walker
- Manual wheelchair
- Portable ramp
- Shower chair
- Transfer board
- Portable accessible commode
- Disposable briefs
- Large handled eating utensils
- Flexible straws
- Two handled drinking mug
- Leash and collar for service animal
- Pet bowl
- Portable TDD

HOW TO GET INFORMATION ABOUT COMMUNITY RESOURCES

- Restaurants
- Grocery store
- Water storage tanks
- Drugstore
- Medical supply store
- Municipal bus system
- School district buses
- Paratransit services
- Independent taxis
- Sign language interpreters
- Volunteers to do residence cleanup
- Volunteers to do minor home repair/reconstruction

TRAINING RESCUE WORKERS

Pre-Disaster Planning

1. Local police and fire stations should have lists of locations where people with disabilities live in concentrated numbers such as: senior housing, Section 8 buildings, and board and care facilities. Lists need to be updated annually and shared with field rescue personnel during an emergency.

2. If police and fire departments decide to have registries of people with disabilities, both the departments and the people on the registry need to understand the limitations of a registry:

   a) it only helps people who are home at the time of the disaster,

   b) it does not identify any disabled person who visits or works in the area at the time of the disaster, and

   c) it is always out of date.

Training for Rescue Service During an Emergency

1. Train personnel to regard a disabled person as the best expert in his or her disability and to ask a disabled person for advice before lifting or moving that person.

2. Train personnel to take extra time when communicating with people who are deaf, hearing impaired, or speech impaired.

3. Train personnel to never separate a disabled person from his or her assistive aids: wheelchairs, canes, hearing aids, medications, special diet food, urinary supplies, etc. Also, a service animal, usually a dog, is an assistive aid used by some blind, deaf and mobility impaired people.

4. Train personnel to realize that a disabled person's equipment may not be working after a disaster occurs, or it may be insufficient for emergency circumstances.

5. Train personnel to realize that a disaster may temporarily confuse service animals and they may not be able to help their owners as effectively as before the disaster.

6. Train rescue workers to know that some individuals with emotional and developmental disabilities may be too unsettled to respond appropriately to instructions and directions, such as a public address announcement to evacuate a building. Some disabled individuals may need to be in a quiet place for a while to regain their composure; others may even try to hide from rescue workers.

7. Train personnel to realize that some individuals with significant mental or learning disabilities might not understand the significance of "Keep Out" signs and barricade tape.

MANAGING SHELTERS

Recommendations on making emergency shelters more accessible:

- Some cots should be available that are high enough for mobility impaired people to use comfortably and safely.

- Be prepared to provide extra food and water to people with disabilities with service guide animals.

- In neighborhoods where familiar landmarks are altered or missing due to a disaster, some visually impaired people may need personal assistance to travel about.

- Some people are non-vocal but still capable of thinking and making their needs known. Shelter staff need to be aware, patient and creative.

- Avoid using outdoor areas that are muddy, sandy, or covered by thick grass.

- Shelter personnel should know how to use the California Relay Service to make and receive phone calls with hearing and speech impaired individuals.
- Permit people with mobility impairments the option of going to the head of long lines.
- Train staff to realize that some people have the physical ability to ride buses, but do not have the cognitive ability to learn new routes established because of a disaster.
- Train staff to know how to contact disability agencies, such as sign interpreter agencies and agencies that help families with at-risk infants with disabilities.
- Train staff to realize that some service animals may temporarily not be able to provide their owners with service as fully effective as before the disaster.
- Train staff about the difference between the medical model and the independence model of disability. Train staff not to see a disabled person as only a person needing medical services.
- Shelters should have telephone books for the local area.
- Shelters should have information about transportation resources and disability service agencies.
- People with disabilities and out-of-area emergency volunteers should not have to vie for hotel accommodations.
- Portable telephones should be ordered that have volume controls.
- Public phone stations need power sockets nearby to supply power to portable TDDs used by deaf, hearing impaired, and speech impaired people.
- Train staff to know that even normal amounts of background noise may prevent a person with a hearing impairment from understanding spoken directions and instructions.
- Train staff to know that some disabilities may give a person the appearance of intoxication.
- Train staff to know that some disabilities in certain circumstances leads to disruptive behaviors; and to how to respond appropriately when such behaviors occur.
- In the early days after a disaster, locations of shelters need to be well publicized so that family and friends can search more effectively for people with disabilities and vice versa.

- Stock writing tablets and pencils for hearing impaired people to use.
- At the accessible entrance to a shelter, have signage providing information about features of the shelter that are less than fully accessible.
- Insure that the shelter's address is clearly visible from the nearby street.
- The approach to outdoor toilets is free of stones, rubble, steps, tree roots, mud, and loose sand.
- Stock simple tools and patch kits for repairing flat tires on wheelchairs.
- Establish contact with local agencies that supply personal care attendants for people with disabilities.
- Train staff to realize the large number of hard of hearing people and their needs.
- All shelters need information boards with notices about announcements that people with disabilities may not hear or where not present when the announcements were made.

POINTS OF SERVICE (FOOD, WATER, FINANCIAL AID, ETC.)

Recommendations on how to make services accessible after a disaster:

- All service locations must be accessible with parking nearby and near accessible transit.
- People with mobility impairments and many visually impaired people will likely need assistance to transport food and 5-gallon water containers from distribution points to their residences.
- Some people with disabilities may need assistance to travel to and from points of emergency and recovery services.
- Some people with disabilities may need assistance to wait in line at points of service.
- Avoid using outdoor areas that are muddy, sandy, or covered by thick grass.
- Permit people with mobility impairments the option of going to the head of long lines.
- Train staff to realize that some people have the physical ability to ride buses, but do not have the cognitive ability to learn new routes established because of a disaster.
- Train staff to realize that some people with emotional or developmental disabilities may be too unsettled by the disaster to return to their safe residences unless

accompanied by a counselor familiar with the particular disability. Train staff to know how to locate resources for these counselors.

- Some people with mental retardation may need assistance understanding and filling out emergency paperwork.

- Train staff to know that even normal amounts of background noise may prevent a person with a hearing impairment from understanding spoken instructions and directions.

- Forms and explanations for FEMA and other assistance should be available in Braille, large print, and on audio tape.

- Stock bicycle tire patch kits for use on wheelchair and scooters with flat tires.

- Train staff to know essential sign language signs.

- Realize that a Food Stamp application question such as "Do you buy and prepare your own food?" yields a misleading answer when asked of people with disabilities who use attendants.

- FEMA disaster centers need to have TDDs.

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