



Promising Practices for Evacuating People with Disabilities

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Overview

This report presents data compiled from telephone interviews with 35 selected providers of services to persons with disabilities and emergency managers across the nation who have developed promising practices for evacuating persons with disabilities in emergency or disaster situations. Promising practices have been selected only from those organizations that have developed effective evacuation strategies either by direct experience of supporting evacuation of persons with disabilities or by research into the experiences of others who have themselves been evacuated or have supported evacuations of persons with disabilities.

This is a qualitative rather than a quantitative study; for the purposes of this study, a qualitative approach is appropriate. This method employed began with a short list of providers and emergency management officials who had participated in other portions of the study. These respondents were asked to identify and discuss promising practices, and then were asked to recommend other contacts or programs in emergency management or service providers to be interviewed. This cumulative approach is known as “snowball sampling”, and is a well-established method of identifying and involving knowledgeable respondents in a field. This methodology identified a network of key respondents in the nationwide field of professionals knowledgeable about evacuation of persons with disabilities from disaster areas. For a complete listing of study participants, see Appendix A.

For each program identified as models of best practice, telephone interviews were conducted to obtain details about each model program or program component. Programs were only considered if they had been developed and tested in an actual disaster that impacted persons with disabilities. While quantitative evaluations of each model program are not available, respondents in this study are convinced that these represent some of the best practices currently available for supporting evacuation for people with disabilities from regions across the United States.

The data included in this report are direct quotes taken from interviews conducted by telephone between March and June 2010. The report is

organized into sections so that it can be used both as a resource guide, where users can search just for the information they need, or as a complete document, that can be read cover-to-cover. The report includes the following sections: promising practices by evacuation component, by type of disability, by type of disaster, and models of best practices for evacuating persons with disabilities.

This report is part of a larger project funded by the United States Department of Education’s National Institute on Disability Rehabilitation and Research (NIDRR) to study evacuation for persons with disabilities. It is a cooperative project with a team of investigators headed by Dr. Brian Gerber from the University of Colorado-Denver (UCD), Dr. Frances Norwood from Inclusion Research Institute Inclusive Preparedness Center (IRI/IPC) and Dr. Michael Zakour from West Virginia University (WVU). This report represents one research effort as part of this project.

The goal of the overall project is to improve future planning and preparedness activities by governmental and non-governmental organizations that provide assistance to persons with disabilities and their households during emergency and disaster evacuations. This goal is accomplished through systematic assessment of the needs, behaviors, and attitudes of persons with disabilities and their households across conditions of hazard types, varied levels of hazard vulnerabilities, past experiences, and other relevant community conditions. The overall project can be summarized as having three core elements:

(1) Research Component:

- Individual-level data collection with persons with disabilities and their households
- Organization-level data collection with disability service providers, emergency management and responders

(2) Applications Component:

- Evidence-based documentation of best practices
- Community & organizational assessment reporting

(3) Training and Exercise Evaluation Component:

- Exercise development, testing, and evaluation reporting
- Training materials development



Promising Practices by Evacuation Component

Findings

Respondents to this survey identified a number of components of evacuation practices that have been tested in actual disaster and evacuation situations. These components address different stages of emergencies and disasters – preparedness, response, and recovery – for persons with disabilities. Registries and alternatives to registries were the most frequently mentioned evacuation component. Other topics ranged from how to track people once they enter a public shelter, to choosing a viable shelter (home or facility), to how to maintain normalcy and recover when damages may prevent prompt return to a residence. The following sections detail some of the promising practices for emergency or disaster preparation, response and recovery.

Registries and Alternatives to Registries

Establishment of registries was one of the earliest preparedness efforts by the emergency management community to improve response to the specific needs of persons with disabilities in disasters. Registries vary in form, but in theory they all attempt to collect in one place the names, locations and contact information of people in a given area or jurisdiction who are likely to need assistance in evacuation, sheltering and care during major emergencies or disasters. The purpose of the typical registry is to provide convenient and reliable information that would help emergency management and public safety agencies to efficiently and effectively respond to persons with evacuation needs in disaster. Responders could, for example, have special equipment with them needed to evacuate a medically fragile child from her home, arrange transportation to accessible shelters or access to electricity, or provide early warning information in a variety of formats that are accessible to persons with disabilities.

Registries have been established in communities across the United States, but respondents report that they have usually yielded mixed to negative results. Reported reasons not to institute a registry

include: they are expensive to build; difficult to maintain; and communicate the message that responders are coming to help you, when in mid- to large-scale disasters that is often not the case.

Respondents were asked to discuss their experience with registries. Every respondent with registry experience listed problems with registries and most reported that registries just were not working. Here is what respondents had to say:

You have to set up a system that is realistic. Registries don't work. That sets up the feeling that government is going to come rescue you, but that's not happening (Richard Devylder, CALEMA, Sacramento, California)

I am the keeper of the registry. Registration for the registry had to take thousands of calls when Gustav was in the Gulf. So the problem was we weren't able to coordinate the right type of transportation for everyone because of the new registrations (Evangeline Franklin, MD, former Director of Emergency Preparedness and Special Projects, New Orleans, Department of Health).
RESEARCHER NOTE: As of this interview, there were no plans or resources for maintaining the registry beyond a message on 311 where, after following a phone tree, residents can register themselves. When we called 311, the opportunity to register was one of the last options on the phone tree.

There are a lot of problems with a registry. When laws require that counties have them you lose the voluntary aspect of the registry. When you have that requirement it strikes me as a round up. There are privacy issues there. Also, they may not consider themselves a person with a disability. My independence may be reliant on accessible public transportation, or an attendant, or something else. I may not say I'm someone with special needs, then emergency happens and that transportation or case manager is not available. Suddenly there is a gap and I don't have a Plan B. I suddenly become a person with a special need. Will that make me put my name on a registry? Who is holding this list? What is it used for? (Aaron Belisle, Special Needs Outreach Coordinator, NYC Office of Emergency Management, Brooklyn, New York)

[According to research with persons with disabilities who evacuated during Rita from Galveston], we found that the most vulnerable people knew they were vulnerable but didn't take a proactive stance to do something about it. People were unable to leave their homes without assistance. Most were receiving some kind of services, but didn't proactively enroll and they didn't enroll in a registry. They knew they were going to be a problem, but they didn't do anything (Gretchen Stone, PhD, Educational Psychology, University of Texas Medical Branch, Galveston, Texas).

[Registries] don't work. People don't register. We had over 3,000 who needed help with evacuation and only 300 registered [in Galveston]. [Registries] make people think someone is going to come help them and it puts fire and rescue at risk (Gretchen Stone, PhD, Educational Psychology, University of Texas Medical Branch, Galveston, Texas).

Registries don't work because people don't want to give their information and it's too difficult to maintain (Dan Varner, Special Needs Program Coordinator, Arizona DEMA, Phoenix, Arizona).

There are people in residential facilities licensed by the state, people who can afford private care, and they are on no one's registries. Emergency management needs to not use a registry. It's a nightmare to maintain and gives a false sense of security (Bob Vogel, Disaster Services Section, California Department of Social Services, Sacramento, California).

I think [registries] are working. The problem is that there are some people out there who are doing self-proclaimed registries and they are getting information, but giving no guarantee that the agency will keep their information confidential. I think they are a good thing, but maybe there needs to be tighter regulation (Doug Fowler, Executive Director, Visually Impaired Persons of SW Florida, North Fort Meyers, Florida)

Finding Alternatives to Registries

A few respondents experimented with alternatives to registries. Two suggested that instead of registries, emergency management could work through existing disability provider networks to

reach individuals with disabilities. Providers already keep current information on just what their consumers need for emergencies and non-emergencies. Instead of attempting to collect that information separately, perhaps emergency management can find a way to have the providers serve as liaisons with different disability groups.

A number of respondents stressed the importance of disability providers negotiating memorandums of agreement with other provider organizations to help them plan for emergency evacuation and shelter. Two respondents suggested neighbor-to-neighbor programs to help support preparedness among the disability communities. Finally, four respondents suggested that if emergency management in an area were to do a registry, they should work through disability provider organizations to help them get the word out about their registry.

The following section highlights some of the more promising practices related to alternatives to registries.

(1) Work through existing disability networks to reach individuals with disabilities

Leverage the existing providers who already keep their lists up-to-date to ascertain who might need additional evacuation assistance. Registries in an urban setting are irresponsible and short-sighted (June Isaacson Kailes, Disability Policy Consultant and Associate Director, Center for Disability Issues, Sacramento, California)

Our database includes blind, deaf or deaf/blind. Anyone with a sensory disability. [To maintain our list] we do outreach in the community, deaf groups, blind groups. Also, other state agencies do town hall meetings and encourage folks to sign up in the program. It's up to the individual to sign up and then they select the modality in which they receive the information (Dan Heller, Deaf Link, Austin, Texas)

(2) Disability providers should make mutual evacuation arrangements with similar providers in neighboring communities

Areas need to think regionally. When it comes to large populations of disability, there should be a regional plan. If shelter says there is no room for



the visually impaired or any particular disability, there needs to be options in the next county, region or state available (Doug Fowler, Executive Director, Visually Impaired Persons of SW Florida, North Fort Meyers, Florida)

Remember, if you're going to shelters, they aren't going to have what you need there. We have roll-aways and everything that we need when we go to our sister site. If you have to go to a shelter it's a whole other ball game. Bathrooms, showering, securing meds, it all becomes an issue with disability (Amy Matero, Bentley Village and two time evacuee, Naples, Florida)

Make relationships with other [like] organizations (Joseph Devore, Executive Director, Chateau at Moorings Parks, Naples, Florida)

Identify and establish relationships with other providers outside of their evacuation zone. People have to establish relationships with other providers outside of the state so they can help them. [These reciprocal relationships] could help those providers without a lot of discretionary funds (Donna Francis, Director, Metropolitan Human Services District, Developmental Disabilities Services, New Orleans, Louisiana)

(3) Neighbor-to-neighbor programs may be a way to promote preparedness in the disabilities community

Some kind of citizen network is a good idea. Call your neighbors and see what they need. The campaign, Don't Mess with Texas, was don't litter on the highway and it really tapped into our Texas culture. Maybe something like that for a neighbor-to-neighbor network, Don't Leave Anyone Behind or We're All in This Together. Every coastal town has a culture you can tap into. We have neighborhood associations, Neighborhood Watch, so we already have people connecting neighborhoods [we can tap into] (Gretchen Stone, PhD, Chair Department of Occupational Therapy, University of Texas Medical Branch, Galveston, Texas)

Neighbors assisting neighbors. Neighborhood based training in the basics of disaster preparedness could be an effective use of resources (Edwina Juillet, Consultant, Task Force

on Life Safety for People with Disabilities, Luray, Virginia).

See also, Alternatives to Registries: Neighbor-to-Neighbor Citizen Networking in Models of Best Practices.

(4) If a registry is initiated, ask disability service providers to a) invite the people they serve to register; and b) do outreach with other providers

We will have providers register their clients (Rochelle Ferguson, Executive Director, Palmetto Breeze, Low County Regional Transportation Authority, Blusston, South Carolina)

State law now requires home health and other service providers to let families know this registry exists. It worked in Gustav and Ike because it gave us broad planning numbers (Rick Bays, Director of Response and Recovery, Texas Department of State Health Services, Austin, Texas)

We'll advertise our registry through our evacuation brochure, do a press release about it, and whenever we go out and talk we promote it. We're also part of a huge human services network. We have a listing of all human service agencies in the county, region and state. We meet with these providers on a quarterly basis and do presentations to them. We also work with the Council of Government. They make contact with seniors and know who is alone. They encourage them to evacuate. (Rochelle Ferguson, Executive Director, Palmetto Breeze, Low County Regional Transportation Authority, Blusston, South Carolina)

The major thing I would encourage providers to do is work with those family members who don't have a plan. Help them get registered on local registries. Sometimes people just need support to get them registered (Donna Francis, Director, Metropolitan Human Services District, Developmental Disabilities Services, New Orleans, Louisiana).

See also Alternatives to Registries in Models of Best Practices.



Uniting Disability and Emergency Management Planning Efforts

The disability community has been calling for inclusion of people with disabilities in all aspects of planning, response, and recovery. Both disability and emergency management respondents echoed that sentiment, suggesting that uniting disability and emergency management efforts is critical to supporting the safety of persons with disabilities in disasters.

How to unite these often separate communities was the focus of much of the interview discussion. Promising practices for uniting disability and emergency management/response communities included having a person with a disability or disability background in every emergency operations center (EOC); fostering connections by key personnel who wear multiple hats on multiple boards and associations; holding meetings between disability organizations and emergency management at disability provider sites to give emergency personnel a better understanding of disability; and maximizing resources by combining efforts between disability providers and advocates and emergency management and responders.

Even if the foregoing recommendations were accomplished, other gaps would remain. For instance, it was noted that voluntary organizations that are regularly at the table during and immediately following disasters are rarely linked with local and national disability organizations. It may be an advantage for disability organizations wishing to connect with emergency management efforts to connect via volunteer organizations such as Catholic Charities, Lutheran Disaster Response, or the American Red Cross. And there has been some demonstrated success with linking, as demonstrated by Deaf Link (also featured in the Models for Best Practices for Supporting Evacuation for People with Disabilities).

Finally, the problem remains that too often emergency management and disability organizations and providers do not know one other. They can be in the same town, housed on the same road, but in too many communities they have not yet connected. The following section lists some

promising practices related to uniting disability and emergency communities.

(5) Disability and emergency management communities have a wealth of resources that are best maximized working together

New York City does not employ a special needs registry. Rather, when an event occurs the combined resources of the Advisory Group are leveraged. Conference calls are held with all members of the group, messages are relayed through their networks and in some cases agency resources are utilized to assist in evacuation. Any individual still requiring transportation assistance for evacuation is asked to self identify with the city via 311 or 911 calls. Under NYC's plan, emergency operators fielding these calls use a simple script that includes questions regarding the mobility of the evacuee. For instance: Can the evacuee sit up in bed, can they walk to the door, can they walk to the curb? Based on the responses, operators direct the appropriate type of city resource (or contracted carrier) to pick up the individual/s and transport them to a City Evacuation Center where they will be assessed for further needs and assigned to an appropriate shelter (Richard Devylder, in Evacuation of Special Needs Populations – Best Practices, CALEMA, Sacramento, California).

Both FEMA and the American Red Cross are very rigid in their procedures. FEMA provides a shelter such as a trailer, but no support services. The Red Cross only provides the basic supplies, but nothing for special needs. The Red Cross and FEMA ignores the local non-profits and NGOs and does not coordinate or utilize the local community organizations and their resources and expertise. Beyond contracting, there is currently little relationship between emergency management and disability service providers. [Emergency management needs to create] an active social network of inter-organizational practitioners. This will help coordinate services for those with special needs. Contracting with disability organizations is not enough. A network of organizational representatives needs to be in place [to respond to] important questions about what needs to be available (from the national FEMA and Red Cross perspective) and who is available in the local area to respond. Local capacity building should be the model for response to disaster (Barry Meyer,

Executive Director, The Arc of Baton Rouge, Baton Rouge, Louisiana).

Regional planning needs to come from emergency management because they are the only authority body that can dictate something like the San Diego model here. That works if you get everybody coordinating (Doug Fowler, Executive Director, Visually Impaired Persons of SW Florida, North Fort Meyers, Florida)

AZDEMA is working with disability agencies and advocacy groups trying to get with them to get them to plan for their own people. With HIPAA, I don't need medical information or diagnosis, I just need to know if he's got a respirator and whether he needs help evacuating. We believe it is important to promote getting the disability community involved. If we can get individuals to look at what support they require on a daily basis, then in case of an emergency are the support mechanisms going to be available, if not planning to get the support elsewhere is needed. The need will not go away, but we will all have to work to fulfill the need. Advocacy groups are essential in this process. (Dan Varner, Special Needs Program Coordinator, Arizona DEMA, Phoenix, Arizona).

Our disaster plans are always reviewed and approved by local emergency management folks.

I believe that since we are on higher ground and have safer buildings, EMS tends to operate off our campus when there is a disaster (Joseph Devore, Executive Director, Chateau at Moorings Parks, Naples, Florida).

I'm in direct contact with my Parish President, we know each other so they call me back. My sheriff, I have his number. I know emergency management, they are my friends (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

We agree with you and recommend working with disability providers. We can GIS where those licensed facilities are very quickly. We recommend that EM offices coordinate at the state level to map disability providers quarterly. County must set up a system to map where the licensed facilities providers are. Then their first responders get that information (Richard Devylder, CALEMA, Sacramento, California).

In the general community, Catholic Charities emergency management goes to each of the deaneries and discusses the sick and shut-in ministries. The ministries learn about the city plans and where pick-ups for special needs parishioners are [in the event of an evacuation] (Samantha Pichon, Associate Director of Emergency Management, Archdiocese of New Orleans, Catholic Charities, New Orleans, Louisiana).

For a working model of how disability providers and emergency management have teamed up to track the location and capacity of skilled nursing in San Diego county, California see also, San Diego Model for Locating Alternative Skilled Nursing Beds in Models of Best Practices.

(6) Every EOC should have someone with a disability background serving in the EOC

Put someone with disability background in your EOC. We have FAST, Functional Assessment and Service Team, coordinators who sit in EOCs now. We have counties doing this now in our state. In one county it is someone from the Center for Independent Living, in another it is someone from the Department of Aging (Richard Devylder, CALEMA, Sacramento, California)

Bring [people with disabilities] into the planning cycle. We brought people with disabilities into the planning process. They know my wife's parents who are deaf. They helped us define our plan and with that influence we understood that a lot of people are regular people with disabilities (Thomas Ignelzi, Operations Chief, New Orleans Office of Homeland Security, New Orleans, Louisiana)

In Lee County Florida, the one thing that's been successful is that emergency management has held meetings for providers of disability services. Emergency management would say, for example, "we have a problem, how do we reach people who are blind?" The provider of services would respond that we can reach them. We know who they are. So now in a disaster, emergency management will contact us and we can contact them and say we have a blind person at a particular location that needs specialized help (Doug Fowler, Executive Director, Visually Impaired Persons of SW Florida, North Fort Meyers, Florida)

In the San Diego Skilled Nursing Facilities model, the skilled nursing liaisons have been asked to join the local Departmental Operations Center, the medical side of emergency operations located in the county EMS office (Jocelyn Montgomery, RN, Director of Clinical Affairs, California Association of Health Facilities, Sacramento, California)

We have a guy in the EOC who sits in a wheelchair so we don't overlook those issues. Chip was a state employee in the Department of Elder Affairs, so they brought him over to EM. He is there to remind us (Michael Whitehead, Emergency Management Coordinator, Florida Department of Business and Professional Regulation, Tallahassee, Florida).

We have someone from the Council on Aging who works with and is an advocate for people with special needs. She sits in the EOC during disasters and evacuations (Samantha Pichon, Associate Director of Emergency Management, Catholic Charities, New Orleans, Louisiana)

Any mental health or disabilities organizations should be already pre-certified [to serve in a Red Cross shelter] before a disaster. FEMA will not allow anyone into shelters without it (Barry Meyer, Executive Director, The Arc of Baton Rouge, Baton Rouge, Louisiana).

(7) Foster partnerships by wearing multiple “hats” on multiple boards and associations

Catholic Charities has an active partnership with the city and public health. I am also vice chair of the state VOAD, so Catholic Charities works closely with the Red Cross (Samantha Pichon, Associate Director of Emergency Management, Catholic Charities, New Orleans, Louisiana).

(8) Foster partnerships by holding meetings between disability organizations and emergency management, ideally hold meetings at disability site

The California Association of Health Facilities holds outreach meetings in 10 counties, where we bring long term care representatives together with county emergency management to address the disconnect between disability and nursing homes and the

response community. We saw time and again nursing homes with no connection to emergency management and responder communities who were planning with no connection to nursing homes. We got them together and had one day events, Community Collaboratives. Not as successful as I would like, but at least they have all met each other and told each other of their needs (Jocelyn Montgomery, RN, Director of Clinical Affairs, California Association of Health Facilities, Sacramento, California)

(9) Disability and faith-based disaster relief organizations could pool resources by linking

We don't do anything with the disability [community] right now, although we do have [disaster relief] services that address the elderly and the disabled. (Jean Percy, Lutheran Disaster Response, Hillsboro, Ohio)

[Deaf Link] takes an alert, say a chemical spill and they need to evacuate and there is no time to go door-to-door. We geo-target by zip code, our database will pull up any person with disabilities in that area because we have been servicing people with disabilities for over 20 years. We take the alert, in Texas this is paid for by the state, and we put it in voice, sign, Spanish voice and text. We send it out to whichever equipment you ask us to. This could be a Braille reader, a computer, voice mail, whatever modality the individual requests. At the same time we send a broadcast quality [text and sign language] to tv stations (Kay Chiodo, Deaf Link, San Antonio, Texas).

[Why can't FEMA] come up with funding streams to address the rebuild? If someone comes to us 65 years old, it is hard to come up with the funding for ADA rebuilds, [accessible] bathrooms, hallway [expansion], [accessible] kitchen, doorway upgrades. If the disability community could become an active participant of the long term recovery group formed in the community after the event, then we could partner on projects. All of the sudden a project that costs \$25,000 we could reduce the cost of that project. We could have volunteers put in the trim, the doors, and let professionals upgrade the electrical. That partnering is a fantastic avenue (Jean Percy, Lutheran Disaster Response, Hillsboro, Ohio).

(10) The first problem to overcome is introducing the emergency management community with the disability community

Problem is you got to know who to talk to. There are probably 10 to 15 companies who provide the bulk of [disability] care in this state and I don't know who to talk to. I haven't made the in-roads yet (Dan Varner, Special Needs Program Coordinator, Arizona DEMA, Phoenix, Arizona).

Evacuation Planning for Disability Providers

Disability providers, most of whom had not just one but multiple experiences evacuating their consumers with disabilities, offered a number of good tips for evacuation. Providers suggested it is important to have a clear line of authority for deciding about whether to stay or go. Arrange ahead of time who will decide and what information from what sources they will use to make that decision. An important topic is timing: whether to try to leave early or to leave after the rush. One view expressed by the Transitional Learning Center in Galveston, Texas favored leaving later. They delayed leaving on their second evacuation and found that it allowed them to evacuate safely in much less time. Clearly the decision to leave early or later will need to depend on the provider's circumstances and the predictability of the particular hazard.

Most providers, particularly in hurricane prone areas, kept storage containers with non-perishable items they would need for evacuation and a list of items that to be added before evacuation. One respondent suggested packing not just necessary medications, but also bringing prescription bottles to help facilitate refills. Most respondents talked about the cost of evacuation, saying it is just a necessary part of living in certain hazard-prone areas, that you must have a budget set aside in case of evacuation.

The following details promising practices related to disability provider evacuation planning.

(11) It helps to have a clear plan about how to decided whether to stay or go

There is increased risk for morbidity or mortality if you evacuate as you know. It is an increased risk to evacuate. So we stand by and wait until there is a mandatory evacuation before we go (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas).

Only our administrator can give the order to evacuate. That authority allows us a consistent chain of command (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas).

(12) To spend less time in traffic, which can be difficult or life-threatening for persons with disabilities, providers must gauge whether to leave ahead of time or wait to leave after the rush

In Rita, we learned not to be the first to go because we got hung up in traffic. That also means more time away from the facility where we have to care for people out of their element. So in this last [evacuation], we got the notice to evacuate at 9:30 in the morning and we left the following morning, 22 hours after the notice to evacuate. As a consequence there was almost no traffic. It took us two hours. [When we left at the first notice to evacuate during Rita], we were on the road for 14 hours, unable to get off the freeway. We had people sitting in chairs, incontinent, unable to eat, fights broke out. We're not going to do that again (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

(13) Have containers packed with non-perishable goods and keep list for what needs to be added in the event of evacuation

We keep containers ready year round with sleeping bags and all of the things we need to take. We have buses and vans. We wind up taking up to 60 people when we evacuate, 40 people with disabilities and 20 staff. We keep a list for what we need to add to our containers (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

(14) When stockpiling your medications, stockpile your prescription bottles to facilitate refills

When stockpiling your medications, do not forget to include the prescription bottles to facilitate refilling (Edwina Juillet, Consultant, Task Force on Life Safety for People with Disabilities, Luray, Virginia).

(15) You just have to set aside money for the cost of evacuation

We take up to 60 people when we evacuate, 40 people with disabilities and 20 staff. We evacuated for [Hurricanes] Katrina and Ike. We've evacuated 20 times over the years. It costs us from \$60,000 to 100,000 to evacuate. Last time it was for 12 days. We know how to get reimbursed by FEMA we've done it so many times. [But the evacuation itself], we have to pay for (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

In your budget you need to have emergency funding for evacuations. If you are within 100 miles of the coast you need to have emergency funds (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

You have to have access to money for evacuation. Make sure you have access to money. That was tough and that was what the staff needed (Cliff Doescher, Executive Director, The Arc of New Orleans, Louisiana)

For model evacuation plans from disability providers and state/county planning, see also Model Evacuation Plans in Best Practices.

Building Evacuation

Two of our respondents have expertise on emergency preparedness specific to assisting building evacuation for people with disabilities. What has been standard practice to have staging areas where people with mobility impairments “wait for help” to be evacuated, became no longer viable following the building collapses during the World

Trade Center bombings in 2001. Now people with disabilities and employers of workers with disabilities need to work together to plan for safe exit in the event of a building evacuation. The following details some promising practices for supporting evacuation for people with disabilities from high-rise buildings.

(16) World Trade Center bombings in 2001 suggest that the “wait for help” strategy for people with disabilities evacuating buildings is not the best alternative

The inadequacy of the “wait for help” building evacuation strategy for persons with mobility impairments was confirmed in the attacks on the World Trade Centers on September 11, 2001. Although 125 evacuation chairs were purchased for individual building users following the 1993 bombing, only two persons with mobility impairments were successfully evacuated on September 11th using these chairs. We do not know how many people with disabilities died that day, but there were reports from those who did evacuate of at least one wheelchair user who along with his long-time friend waited for help and did not make it out. There were also many reports of persons who could not keep up during the evacuation of the Twin Towers. These were persons who were elderly, with respiratory conditions, and other limitations that prevented their getting out in time (Gerber, Norwood, and Zakour. 2010. Disasters, Evacuations, and Persons with Disabilities: An Assessment of Key Issues Facing Individuals and Households. Washington, DC; 13).

(17) Everyone in the office needs to be trained in how to operate an evacuation chair

Don't just drop the evacuation chair off at the employee's office. That individual and the office staff need to participate in both the selection of and training on the use of the equipment. During my work with the Port Authority after the first World Trade Center bombing, an attorney I worked with was a wheelchair user. One morning she called me into her office. She told me to look behind her office door. An evacuation descent chair had been placed there without her prior knowledge. She was furious. Now, I ask you, do you consider that a good strategy? Do you believe that she'll ever use

that device? (Edwina Juillet, Consultant, National Task Force on Life Safety for People with Disabilities, Luray, Virginia).

Make sure everyone in the office is trained to use evacuation chairs, not just a few people (June Isaacson-Kailes, Disability Policy Consultant and Associate Director at the Center for Disability Issues and the Health Professions at Western University, Playa del Rey, California).

(18) Best practices for building evacuation for people with disabilities

Representatives from the National Task Force on Life Safety and Persons with Disabilities, the City of New York Fire Department, and the Port Authority of New York and New Jersey, conducted interviews with 27 people with disabilities following the 1993 bombing of the World Trade Center, which killed six people and injured more than 1,000 others (Juillet 1993). Juillet identified several key lessons from this study. First, at least seven evacuees with disabilities experienced breathing problems related to asthma and smoke inhalation, suggesting that further training in how to deal with persons with breathing disorders during disasters is needed. Second, each flight of stairs had different numbers of steps and periodic “crossover” sections. Because these were not uniform, some people with visual impairments had difficulty exiting. Evacuation strategies that were successfully employed the day of the disaster included verbal cues from sighted evacuees and using a hand on the shoulder of the person in front to exit. Third, when the lights went out in the stairwell, it was no longer possible for people with hearing impairments to lip-read or use sign language. A flashlight would have been helpful for persons with hearing impairments to exit. Fourth, several persons with disabilities chose not to identify themselves when the original emergency evacuation plan for the building was developed, suggesting that not all persons with disabilities are comfortable identifying as such. Finally, many evacuees with disabilities did not wait for help to arrive. They chose to evacuate with the help of colleagues, suggesting that the “wait for help” strategy may not always be the best choice for persons with disabilities (Gerber, Norwood, and Zakour. 2010. Disasters, Evacuations, and Persons with Disabilities: An

Assessment of Key Issues Facing Individuals and Households. Washington, DC; 13).

(19) People with disabilities need to initiate discussions in their work and home environments to make sure they have a viable plan for evacuating from buildings

People with disabilities should not rely on someone else helping them. Have a plan (June Isaacson-Kailes, Disability Policy Consultant and Associate Director at the Center for Disability Issues and the Health Professions at Western University, Playa del Rey, California).

See also, Planning for Building Evacuation and Evacuating Places of Employment and Planning for Power Outages for Persons Dependent on Electricity in Models for Best Practices.



Transportation

Anyone without access to transportation in the event of an evacuation becomes someone with a “special need” as emergency management defines it. People with disabilities who need assistance in evacuation, in addition, may also have a number of other needs that make evacuation difficult. Planning for transportation for people with disabilities may include any number of additional needs, including planning for someone who requires oxygen, someone who is medically fragile, someone who cannot travel without an attendant or family member, someone who may react strongly to changes in routine, or someone who is made less independent when, for example, the powered chair must be left behind.

Respondents offered a number of promising practices related to planning for transportation either at the state or county level or planning for transportation by disability providers. The State of California is currently working on a way to track and identify accessible vehicles for use in emergencies. A number of provider respondents offer great tips for how to transport a facility with staff and consumers in the event of evacuation. New York City is testing a project to track transportation contracts to prevent multiple providers contracting for the same vehicles, a common problem identified

in the gulf coast storms. Finally, respondents from New Orleans and Texas report some lessons learned using a train for large-scale evacuation.

The following details promising practices related to planning for transportation of people with disabilities in evacuation.

(20) Identify where accessible vehicles in your area are located

State DOT (Caltrans) and California Emergency Management Agency (CALEMA) are working together on a metrics project to better understand the type of vehicles that are available and vital for evacuations/transportation during a disaster. As part of the application process for Section 5300 (i.e., 5310, 5311) funding, applicants submit their inventory of vehicles. Caltrans and CALEMA are working on establishing a database that the information would go on a secure/password protected website that providers can keep updated and accessed during disaster response (Richard Devylder, CALEMA, Sacramento, California).

(21) Have enough room to bring people and all the equipment and supplies

We purchased a trailer to haul stuff, equipment, etc. (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

(22) If there is a potential for property damage, arrange to use vehicles that would otherwise be left behind, this may include school buses and staff vehicles

We had a lot of lost cars, 18 personal staff vehicles were lost, under water, parked at TLC during the evacuation (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas).

We learned don't leave your vehicles. We lost 16 to 18 vans due to flooding (Cliff Doescher, Executive Director, The Arc of New Orleans, Louisiana).

(23) Make sure you have enough staff trained to drive the vehicles, use the lifts, etc., if necessary

Some staff get trained to use lifts on vehicles. Someone needs to know how to drive the vehicle pulling the big trailer. Everybody is trained in CPR and prevention and management of aggressive behavior, but this is for normal operations too (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

The Sacramento City Department of Utilities supports emergency transportation operations during an evacuation using staff in the Solid Waste Division. They have about 150 trained drivers, all of whom have been trained on the refuse, disposal and recycling trucks. These drivers are certified for operating vehicles with air brakes and have class B driver's licenses. They may be tasked with operating any kind of commuter bus (school or regional transit) in the event transit providers are lacking personnel resources (Richard Devylder, Evacuation of Special Needs Populations – Best Practices, CALEMA, Sacramento, California).

(24) Ensure your transportation provider does not have multiple contracts for the same vehicles

While most State and local authorities have passed legislation requiring licensed health care facilities to develop an evacuation plan, not all include requirements that the facilities provide transportation for evacuation. Even when they do, statutes are not always enforced, and often the same vendors are used for multiple facilities, severely limiting the actual ability of these facilities to conduct their own evacuations. NYC statutes require that all health care facilities, public or private (e.g., hospitals, nursing homes, senior living facilities) must develop their own evacuation plans which includes transportation. To support these endeavors, the City Health and Medical Unit, part of OEM's Planning and Preparedness Division, is setting up a vendor coordination sector to review/cross reference the evacuation plans of licensed health care facilities and ensure there is not overlap in transportation vendors that would create gaps. More information can be obtained on NYC OEM's website at http://www.nyc.gov/html/oem/html/get_prepared/ready.shtml or by calling 718-422-4800, Dina Maniotis, Director of Human Services, Planning and Preparedness Division (Richard Devylder,

Evacuation of Special Needs Populations – Best Practices, CALEMA, Sacramento, California).

(25) Using the train to move people or not?

Our plan was to put people with special needs on the train. It's more comfortable, but first Amtrak changed the location at the last minute and said the train had to go to Memphis, and Memphis said you're sending us your walking wounded. When it came time to load the train, we had a certain time frame to load, so we ended up not having time to get special needs people on the train. [We learned in Gustav that] maybe the train was not the best way to move people. We ended up putting our special needs people on selected buses and moving them to Baton Rouge that way (Thomas Ignelzi, Operations Chief, New Orleans Office of Homeland Security, New Orleans, Louisiana)

What's good about trains is there is space for people to move about, you can feed people, and move lots of people at one time. The bad part of about trains is sending a lot of people without a medical manifest to one location. Shelby County in Memphis had no idea that people from New Orleans were so sick. Also, it's hard to discharge people who cause trouble on a moving train (Evangeline Franklin, Director of Emergency Preparedness and Special Projects, City of New Orleans, Department of Health).

The biggest problem is understanding how rail works. Amtrak doesn't own all that rail, so access to rail is an issue. Amtrak is a national passenger company and other rail companies have trainers and may subcontract the rail. Everyone owns the interstate highway, but rail is not the same as highway. [Cities like Chicago and Washington, DC should obviously use the rail system for evacuation] (Evangeline Franklin, Director of Emergency Preparedness and Special Projects, City of New Orleans, Department of Health).

Sheltering

Evacuations cannot be successful without identifying and planning for accessible shelter at your destination location. Whether these are

shelters arranged by disability providers who evacuate their consumers or a local or American Red Cross shelter, the call by many respondents was for how to make shelters more inclusive and accessible for people with various kinds of disabilities. Promising practices for sheltering included both key tips from providers who had undergone one or often more evacuations and tips for “shelters of last resort” to be more inclusive.

The following details promising practices related to sheltering persons with various kinds of disabilities.

Sheltering for Disability Providers

(26) Pick a place that can accommodate your special needs ahead of time

We evacuated to another facility during Rita, but space was limited. We evacuated 25 patients and about that many staff, so we had 50 people scattered all over three campuses because [the facility we evacuated to] still had their regular program to accommodate (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

Many [skilled nursing providers] don't have well-planned re-location sites. Because they are dealing with people who are extremely fragile, nursing homes in particular, they can't cope just anywhere. That's been a big problem. [One solution has been the San Diego model, see below]. (Jocelyn Montgomery, RN, Director of Clinical Affairs, California Association of Health Facilities, Sacramento, California)

(27) Make a variety of MOAs for short-term and long-term shelter, short-distance and long-distance

What we did not plan on was the level of devastation and what to do if we couldn't come back. We now have sister facilities we can go to if we can't go back to Galveston (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

We are now entering into an agreement with an agency two hours away for a category 3 or 4 hurricane. The church in northern Louisiana [where we already have our agreement] is good for a

category 5 evacuation. The agreements spell out what each of us are responsible for and how much we will pay them (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

Have a contract or agreement for places to go. I like to go to churches, because they open their arms and they will take care of us. It needs to be at least 100 miles from where you live depending on the severity of the storm. We have an agreement for a short and long haul location (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

(28) Establish a familiar routine at your shelter location as soon as possible

[Once we got to our shelter location], we implemented the same kind of program we had here, with daily activities scheduled. First evacuation we didn't have a good routine for caring for patients and staff. Now we establish a daily routine around meals, meds, and activities for daily living so even though we are displaced we have a predictable and comfortable routine. This is good for both patients and staff (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas).

Local and American Red Cross Shelters

(29) Make all shelters inclusive for persons with disabilities

All shelters should have proper refrigeration, special dietary foods, sleeping accommodations. Cots are not good for persons who are quadriplegic. All shelters should have alternative sleeping accommodations for people with disabilities (David Gallegos, Program Director, Advocacy Center, New Orleans, Louisiana)

We have our FAST project, Functional Assessment and Service Teams. It's teams of people who come from disability communities to assess needs to see what types of transportation, what types of supports are needed [during an evacuation or shelter event]. We have 6 to 8 members on each team and eventually have state level teams when counties get overwhelmed. So all members have a disability background and include a spectrum of

people with physical, blind, mental, cognitive, elderly disabilities. We are generally attempting to make every shelter accessible for people with disabilities (Randy Linthicum, Chief, Disaster & Client Services Bureau, California Department of Social Services, Sacramento, California)

See also California FAST Teams for Accessible Evacuation and Shelter and Making All Shelters Disability-Friendly in Florida in Models of Best Practices.

(30) Use disability providers in the community to provide advice and needed services for people with disabilities in shelters

People with disabilities had a real problem with the Katrina evacuation. People [who live on their own in the community] need help in shelters because they don't have support staff with them during the shelter stay. The Arc had to respond to shelters for people with the need for supports until permanent professional supports came (Barry Meyer, Executive Director, The Arc of Baton Rouge, Baton Rouge, Louisiana).

(31) Notify community ahead of time about shelter locations or not?

Maybe announce where special needs shelters are sooner, so people who need it can get there (David Gallegos, Program Director, Advocacy Center, New Orleans, Louisiana)

Posting shelters ahead of time is not realistic for certain events. Problem is you'll have people going to the wrong place. We can't be hurricane-centric about our advise, but we should survey potential shelters ahead of time so they can make any needed accessibility fixes ahead of time (June Isaacson Kailes, Disability Policy Consultant and Associate Director, Center for Disability Issues, Sacramento, California)

RESEARCHER'S NOTE: We found that in Florida a number of counties will post shelter information at the start of hurricane season. In Louisiana in the aftermath of Hurricanes Katrina and Rita, they now post emergency shelter information points in their [Louisiana Citizen Awareness & Disaster Evacuation Guide: Southeast](#) and [Louisiana Citizen](#)



[Awareness & Disaster Evacuation Guide:
Southwest.](#)

(32) Each shelter should have a quiet room

In the shelter I was at there were several mental health patients who showed up, so we actually ended up segregating them from the main gym. Was that the best thing to do? We thought it was because it kept them safe. As well as elderly people, we had them in other rooms. We had one gentleman with dementia. He attached his wife, but luckily we had him separated already so we were able to diffuse [the situation] better. It is good for people who are more vulnerable (David Gallegos, Program Director, Advocacy Center, New Orleans, Louisiana)

(33) Find a way to track who has entered shelters to better connect those who shelter to their families and social networks

Sahana is an open source software that any jurisdiction could adapt for their use. It is used for two things, first to register and track people at shelters when there is an evacuation and second we use it for staff deployment. Sahana can identify staff for a particular shelter and is connected to Somewhere Now, a notification system that either calls people or emails them telling them where they have been assigned. That often has to be manually, but we are working on fully automating that process through Sahana (Aaron Belisle, Special Needs Outreach Coordinator, New York City Office of Emergency Management, Brooklyn, New York)

During Hurricanes Rita and Katrina, we placed people on planes and we had no way of tracking them. We had no idea where they went. The importance of tracking is not only do I know that John Smith got on the bus in Corpus Christie and is now at Fort Worth, but I also know where Mrs. Smith, their kids and dog are. [Texas SNET] is a web-based system, so this is real time information. Now you can see what is coming. If I'm in Houston, I can see my bus going to Dallas and Dallas can see us coming. This is a state-wide shelter system, so now we know where they are (Rex Ogle, Preparedness Section Administrator, Texas Division of Emergency Management, Austin, Texas).

[South Carolina transportation company, Palmetto Breeze], working in conjunction with the county emergency management office, six different color-coded evacuation routes have been established that buses will travel during an emergency evacuation. Residents needing transportation to a shelter during an evacuation can be picked up at any bus stop along these routes, or at several designated "pick up locations" on the routes which provide an option at which people can congregate (park and ride option). Before boarding the bus, each evacuee is asked to sign a manifest and provide some basic information. They are then provided a colored wrist band, matching the color of their evacuation route. A number on each wrist band corresponds with the number of the evacuee on the manifest list. The wrist bands are made from heavy duty, water resistant paper that can withstand wear for several days. Evacuees are then taken to shelters as designated by the city. (Shelter designation is fluid depending on the type and magnitude of the event.) Evacuees with like colored wrist bands are grouped together in the shelters to aid in keeping neighborhoods together. It also aids in the distribution of information regarding specific geographical areas. The bus drivers remain with evacuees at the shelter until return transportation is approved. They maintain the manifests collected on their own bus, and transport the same evacuees they brought to the shelters back to their homes or pick-up locations (Richard Devylder, 2009, Evacuation of Special Needs Populations – Best Practices, CALEMA, Sacramento, California)

See also Tracking People during Disaster in Models of Best Practices.

(34) Service animals are not pets and in shelter and evacuation situations should be considered a device just like a wheelchair

We had to change the whole mindset here. Service animals are not pets. [Service animals are] part of that disabled person. It was hard to get our transportation providers to understand that [service animals] are just like wheelchairs. They just didn't understand that. They would say, what about the pets? (Thomas Ignelzi, Operations Chief, New Orleans Office of Homeland Security, New Orleans, Louisiana)

(35) Family members or caregivers are also often key supports for persons with disabilities, do not separate them

Shelters need to be ready for people with disabilities. [During Katrina], they separated people on the way out of town. You can't do that. And the people who were manning the shelters, needed better general awareness [of what people with various disabilities need] (Cliff Doescher, Executive Director, The Arc of New Orleans)

(36) Must find a way to accommodate pets, otherwise many pet owners won't come to the shelter

We don't take pets [in our shelters], so they won't leave their homes. Everyone is struggling with this. Most shelters are in schools built to 496 hurricane standard, which can withstand the winds. Now school boards say no pets in schools, so we are arguing about this (Michael Whitehead, Emergency Management Coordinator, Florida State Department of Business and Professional Regulation, Tallahassee, Florida).

Following Hurricane Katrina, I heard they brought in trucks and cages and each animal was tagged and matched with their owner, then an animal shelter was created specifically for this situation. I think that was in the Louisiana and Mississippi area. But most shelters are churches or schools so they are not set up to take animals. And a lot of seniors don't want to leave their pet or their home behind (Rochelle Ferguson, Executive Director, Palmetto Breeze, Blusston, South Carolina).

RESEARCHERS NOTE: According to the *Louisiana Citizen Awareness & Disaster Evacuation Guide: Southeast*, "animal shelters will be set up in various parts of the state on an 'as-needed' basis. The Louisiana Department of Agriculture & Forestry works year round with the Louisiana State Animal Response Team (LSART) to provide sheltering opportunities. Species-specific disaster preparedness advice is available at <http://lsart.org/>.

See also, *Accommodating Pets in Shelter Environments in Louisiana in Models of Best Practices*.

Communications and Outreach

Communications and outreach with families, authorities and staff is a critical part of any evacuation. Fires, storms, and various disasters tend to flood or disrupt both cell service and land lines, making it important to have a plan for diverse ways of communicating. Some of the other promising practices related to provider communication and outreach include connecting with local emergency management ahead of time to be sure you know where to get the most up-to-date information during disaster and using cell phones with text messaging capabilities. Suggesting for local emergency management include allowing recipients of emergency notification systems to limit the type of messages they receive, making emergency notification more viable for more people and using go-kits as a best practice for disseminating emergency preparedness information and effecting change in preparedness behavior with families. The following details promising practices related to communication and outreach in disaster.

(37) Connect with local emergency management ahead of time so you can be sure to get the most up-to-date information during a disaster

Having up-to-date information is number one. Make a connection with local authorities [prior to disaster] so you can have up to the minute advice [during the disaster] (Jocelyn Montgomery, RN, Director of Clinical Affairs, California Association of Health Facilities, Sacramento, California)

(38) Have multiple ways to get and receive information from family, staff, and authorities

Hurricane phones work better than others during an evacuation, but these were very expensive so we discontinued them. Now Catholic Charities has reverse 911 for employees. Information goes out to phones, cell phones, email, and fax all at the same time (Samantha Pichon, Associate Director of Emergency Management, Catholic Charities, New Orleans, Louisiana).

Our MIS guy now puts information on a webpage. We have a phone number on the mainland for recordings pre-recorded for staff and families and developed a communications officer position to call families once we evacuate. He sets up a communication schedule so that residents can talk to their loved ones regularly (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

Text messaging was important for directly speaking to staff. The website was critical for getting messages to families. When phone lines are up we have an information line, but phone lines were not up. Today it is a different system, everything we do we try to do off-site, like Medicaid billing, payroll, communications. We have a third party so you can access it from anywhere (Cliff Doescher, Executive Director, The Arc of New Orleans, Louisiana).

We use walkie talkies, because with cell phones [in a disaster] you just don't know (Joseph Devore, Executive Director, Chateau at Moorings Parks, Naples, Florida).

We set up a central emergency number [where family and staff can call to get our evacuation information]. The central phone number was an idea following [Hurricane] Katrina (Samantha Pichon, Associate Director of Emergency Management, Archdiocese of New Orleans, Catholic Charities, New Orleans, Louisiana).

(39) Staff should use cell phones with text messaging

What we require today [post-Katrina] is that all personnel have cell phones with text messaging. Everything else was just jammed, dropped calls, etc. It was the most frustrating thing to deal with. Nextel two ways also worked (Cliff Doescher, The Arc of New Orleans, Louisiana)

Communication devices can be plugged into car lighters. If all of the power is out in New Orleans, then Catholic Charities could go to another area with power to contact Baton Rouge (Samantha Pichon, Associate Director of Emergency Management, Catholic Charities, New Orleans, Louisiana).

(40) City-wide emergency notification systems work best if recipients can limit the type of information that they receive

We have Notify NYC, a city-wide public messaging system. It's for individuals who want to receive emergency information by text. Based on your zip code and what you request, you can get a variety of information (Aaron Belisle, Special Needs Outreach Coordinator, New York City Office of Emergency Management, Brooklyn, New York).

The complaints that I have heard working with vulnerable populations in the DC area are that too many text messages go out about traffic and any number of things that are not emergency information. People on limited incomes may not have unlimited texting plans, which means they cannot afford to receive so many of these non-emergency messages. Others just don't want to be getting so many text messages. Offering a choice to limit information is what will make these kinds of services more effective for more people with disabilities (Frances Norwood, PhD, Director of Research, Inclusion Research Institute).

(41) Go-kits distributed through community providers are a great way to get emergency preparedness information in the home for disability and other special needs populations

In 2006, Inclusion Research Institute under contract with the Maryland Department of Disabilities conducted an emergency preparedness information campaign and evaluation with persons with disabilities and persons for whom Spanish is their main language. We found that distribution of go-kits with items like water bottles, energy bars, and culturally relevant, icon-based messages was the most effective way to get emergency preparedness information into the home. Using providers to distribute the kits, we were able to distribute 5,000 Spanish-language kits in Latino communities throughout the state of Maryland. Compared to a radio campaign, posters in local businesses, and a brochure distribution, we found that go-kits scored highest in terms of recipients recalling key emergency preparedness information, shifting attitudes in support of preparedness, and an increase in preparedness behaviors, such as initiating a family discussion about a emergency

plan. Having the kits come from established community providers was key to gaining trust particularly in migrant communities and other low income communities that may be suspicious of information coming from a government entity (Frances Norwood, PhD, Director of Research and Evaluation, Inclusion Research Institute)

See also, Effecting Preparedness Behavior Through Distribution of Go-Kits in Maryland in Models of Best Practices.

Staffing and Maintaining Operations While Away

A number of study respondents were disability providers, all of whom had recent experience evacuating consumers with disabilities. Providers detailed a number of tips for maintaining operations and supporting staff during and immediately following evacuation.

According to two time evacuee Gary Seale with Transitional Learning Center for people with traumatic brain injury in Galveston, Texas, “staff will work themselves into exhaustion if you let them. They have transportation needs, cash flow needs, needs for reassurance, and stress management which must be addressed [during and in the aftermath of evacuation].” The following section details promising practices related to staffing and maintaining operations in evacuation.

(42) Put staff and other key bills on direct deposit so that you can arrange payments while away from the office through your bank and are not reliant on paper checks.

(Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

(43) Back up your computers and have laptops you can bring with you

(Cliff Doescher, Executive Director, The Arc of New Orleans, Louisiana)

(44) Tips for business interruption liability insurance

What we learned about business interruption is that it's by building. In our business, we keep everything on the books by program, not by building. So we've learned in our risk management and record keeping to be a little different. Business interruptions liability goes by building. I would recommend getting someone to review your business interruption clauses on your liability insurance (Cliff Doescher, Executive Director, The Arc of New Orleans, Louisiana)

(45) Create a team approach to staffing evacuation

TLC developed a team approach to hurricane preparedness, evacuation, and recovery involving all facility personnel. Three evacuation/response teams were proposed, each with distinct responsibilities. Team A was responsible for packing and transporting patients to the designated evacuation site, developing a care and activity schedule, and engaging the patients for 24-48 hours following the evacuation. When the emergency resolved, patients were transported back to TLC. If it was necessary to remain away from the facility for an extended period of time, Team B relieved Team A. Team B was responsible for continuing to engage the patients in the care and activity schedule for the next 24-48 hours. Once the “all clear” was given, Team B was responsible for packing the patients and returning to TLC facilities. Team C was engaged when the “all clear” was given. Team C prepared TLC facilities for resumption of normal operations. Team C was responsible for cleaning and organizing the facility, ensuring basic services were restored and operational (i.e., power, water, computer systems, alarm systems, etc.), and receiving the patients when Team B returned (Seale and Masel 2009:8).

See also, TLC Galveston Team Approach to Staffing Evacuation in Models of Best Practices.

(46) Bring families of staff on evacuation

[Texas] state law requires that specialized care facilities such as hospitals, nursing homes, and group homes have the legal responsibility to



evacuate individuals in their care to equivalent care facilities and must bring their own specialized equipment, staffing, and caregivers. The State of Texas' Hurricane Evacuation and Mass Care Plan goes a step further and states that caregivers can bring their families with them during evacuation (Richard Devylder, *Evacuation of Special Needs Populations – Best Practices*, CALEMA, Sacramento, California).

[Staff at] Catholic Charities can bring their families with them during evacuation, but not pets. There are limitations on the ages of family members, but generally if people are willing to help out then they are able to evacuate with staff (Pichon, Associate Director of Emergency Management, Catholic Charities, New Orleans, Louisiana).

(47) Staff may need help with transportation

We had two vehicles going around Baton Rouge and one around Lafayette [picking up] employees. People had cars, but you couldn't get gas easily, so we tried to make it easy for them to work. I gave one of my staff the van to use and pick up a few people. Anything to accommodate our staff (Cliff Doescher, The Arc of New Orleans, Louisiana)

[During Ike] we had a lot of lost cars, 18 staff vehicles were lost under water parked at TLC during the evacuation. So we arranged special financing and rates with a local dealership for our staff. In the interim we used TLC vehicles to do staff car pools (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

(48) Find a way to pay staff during recovery

We had a lot of staff that needed something to do during the month we were out of our facility following Hurricane Ike. Once we got back on the island, we had staff participate in inventory losses, pulled out broken furniture, clean up. Even when we finished work at TLC, our staff went to other homes to do the same. We learned that staff needed a lot of reassurance that they weren't going to lose their jobs. We paid everybody during that entire month. We also did a lot of debriefing and team building right after the storm (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)



Practicing your Plan

A number of respondents argued that the most effective way to get people to evacuate when disasters occur is to have them practice or drill. Several providers offered innovative tips for how to incorporate practicing your plan a part of your normal operations and to make it cost effective as well. The following details promising practices for disability providers to practice their emergency plans.

(49) Practicing an evacuation with persons who have disabilities is one of the most effective ways to get people to evacuate when disasters occur

Too often employees with disabilities are not even asked to participate in evacuation training. This is a big weakness in the system. They use the excuse of liability, but you'll have more problems if your employees die and don't know what to do in an evacuation. It's just not good PR for the company (Edwina Juillet, Consultant, Task Force on Life Safety for People with Disabilities, Luray, Virginia).

In Galveston, we practiced walking homeless to the pick up spot to help them get to the evacuation spot. I had a relationship with them which helped too. Someone cares if I live or not. That meant something. It also helped that we had refreshments for the walk (Gretchen Stone, PhD, Educational Psychology, University of Texas Medical Branch, Galveston, Texas).

What is most helpful is drills and exercises before evacuation occurs. Residents [with cognitive disabilities] are told they are going camping. There have been three drills. This is a big help for when the actual thing happens (Samantha Pichon, Associate Director of Emergency Management, Archdiocese of New Orleans, Catholic Charities, New Orleans, Louisiana).

In a study of human behavior in emergencies, John Bryan, the granddaddy of human behavior and fire protection engineering, went into healthcare

institutions when fire alarms went off and found that no one was injured or died when employees had had at least one day of fire safety orientation. The only time injuries occurred was when no orientation had occurred. In Toronto, there was a nursing home fire with deaths. A resident was smoking, fire ensued and no one had any training about what to do. Two people died and others were injured. No one had thought to close the door and the nurses aid ran away because she didn't know what to do (Edwina Juillet, Consultant, Task Force on Life Safety for People with Disabilities, Luray, Virginia).

(50) Don't let evacuation be a total surprise: take the element of surprise out of evacuation by letting people (consumers and family) know ahead of time what the general plan is

What is most helpful is drills and exercises before evacuation occurs. The residents are told they are going camping. There have been three drills. This is a big help for when the actual thing happens (Pichon, Associate Director of Emergency Management, Catholic Charities, New Orleans, Louisiana)

One of the best practices is notifying the people and their family and caregivers what the overall plan is ahead of time. The biggest problem is lack of information and fear of the unknown. Just telling them the plan ahead of time... keeps them calmer and more focused (Fowler, Executive Director, Visually Impaired Persons of Southwest Florida, North Fort Meyer, Florida)

(51) Plan drills as part of an activity that you already have scheduled periodically

Twice a year we practice evacuation when we go to camp. [Camp is also one of our selected evacuation sites, so it is familiar to residents which is an added bonus]. We started doing that in 2003 and now we practice our evacuation twice a year with all residents and staff when we regularly go to camp (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

See also, TLC Galveston Team Approach to Staffing Evacuation in Models of Best Practices.

Suggestions for FEMA and Other Governmental Agencies

A number of respondents had suggestions specifically for FEMA or other state and local government agencies who coordinate emergency planning and response. The following details suggestions for promising practices by FEMA and other governmental agencies.

(52) Tap more of the local resources for a holistic approach to recovery

The OEP people need to have a strong connection with the disability services organizations during evacuation. Lately the governmental agencies are even less connected. A holistic approach is needed for recovery, not just a FEMA trailer. Beyond contracting, there is currently little relationship between emergency management and disability service providers. [Emergency management needs to create] an active social network of inter-organizational practitioners. This will help coordinate services for those with special needs. Contracting with disability organizations is not enough. A network of organizational representatives needs to be in place [to respond to] important questions about what needs to be available (from the national FEMA and Red Cross perspective) and who is available in the local area to respond. Local capacity building should be the model for response to disaster (Barry Meyer, Executive Director, The Arc of Baton Rouge, Baton Rouge, Louisiana).

(53) Provide funding for disability organizations to do emergency planning

I recommend to emergency management and responders that you have to get the disability people to the table. We need to put funding out there for the community, to have disability organizations receive funding. Then they can invite the emergency management to come (Richard Devylder, Special Advisor to the Secretary, CALEMA, Sacramento, California).

[Here we can go to the emergency management meetings because with hurricane season, we know



we have to go.] Areas not known for disaster would be harder to coordinate between emergency management and disability organizations. You could tie it to the funds and have mutual funding bring them together (Doug Fowler, Executive Director, Visually Impaired Persons of SW Florida, North Fort Meyers, Florida).

should waive that prohibition (Edwina Juillet, Consultant, Task Force on Life Safety for People with Disabilities, Luray, Virginia).

(54) Cut the FEMA paperwork

FEMA made you list every single thing you lost and you had to have some kind of proof of purchase. People spent time trying to do paperwork when they should have been recovering. Many were not capable of filling out that paperwork. Even when there's money, they can't get it. Most of the FEMA money went to people who didn't have anything, but it came at the expense of those who were just kind of making it. This group didn't get any resources. The richest people had their homes paid for, because they were now on public property because their homes were the [houses on the first row at the beach] (Gretchen Stone, PhD, Educational Psychology, University of Texas Medical Branch, Galveston, Texas).

(55) Fund ADA-enhancing rebuilds in areas impacted by disaster

[Why can't FEMA] come up with funding streams to address the rebuild? If someone comes to us 65 years old, it is hard to come up with the funding for ADA rebuilds, [accessible] bathrooms, hallway [expansion], [accessible] kitchen, doorway upgrades. If the ADA community would recognize the long term recover group formed in a community after the event, become an active participant at the table, then we could partner on projects. All of the sudden a project that costs \$25,000 we could reduce the cost of that project. We could have volunteers put in the trim, the doors, and let professionals upgrade the electrical. That partnering is a fantastic avenue (Jean Peercy, Lutheran Disaster Response, Hillsboro, Ohio).

Those on Medicaid or other government funding should be allowed to get their refills across state lines. In [Hurricane] Katrina, it was discovered that the evacuees on Medicaid or Medicare and displaced to another state could not get their prescriptions filled because of [some rules about] not crossing state lines. The [powers that be]



Lessons Learned

We asked our disability provider respondents what lessoned they learned in supporting evacuation for people with disabilities in disaster and this is what they had to say:

[In our evacuation from Hurricane Rita], we learned about waiting to evacuate, not being in a hurry to leave [which helped us avoid most of the traffic] and we learned about the inadequacies of our plan. We thought we had a pretty good plan until we found out our shelter facility was not large enough; we left too early [and sat in traffic which was not easy for our consumers with brain injury]; we didn't go far enough inland and away from the storm; we had enough vehicles for people, but not enough for equipment, food, and records; and we didn't have a good communication plan with staff and families. We had to move further inland so we went to a different evacuation site. Communication with staff over that change was a problem (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas).

[In our subsequent evacuation from Hurricane Ike], we found all of our changes resulted in an almost flawless evacuation. We waited 22 hours after the evacuation order to leave and it only took us two hours to get to our destination. The trailer we purchased was really useful for hauling equipment food, etc. Our new communications system worked. What we did not plan on was the level of devastation and what to do if we couldn't come back. Lots of lessons were learned from Ike: we now have sister facilities we can go to if we can't go back to Galveston. We also now have financial support for staff who were displaced from their homes. We rent space for staff to live. We also lost a lot of cars, 18 personal vehicles lost under water, which were parked at TLC during the evacuation. We arranged special financing and rates on cars with local dealership and in the interim we used TLC vehicles to do staff car pools. We had a lot of staff that needed something to do

during the month we were out of our facility following Hurricane Ike. Once we got back on the island, we had staff participate in inventory losses, pulled out broken furniture, clean up. Even when we finished work at TLC, our staff went to other homes to do the same. We learned that staff needed a lot of reassurance that they weren't going to lose their jobs. We paid everybody during that entire month. We also did a lot of debriefing and team building right after the storm (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

Basically, have a plan. One thing that happened during Rita and Katrina was they didn't have enough vehicles to transport folks, but what people didn't know is that several nursing homes contacted the same transportation company. Those are the kinds of details to think all the way through in your plan. Secondly, having a single line of authority is important. Third, it is important to practice your plan as part of the normal course of business at least annually. Fourth, the size of your group, accessibility, where you are going etc. – think through your plan to make sure it is adequate. Fifth, communicating with families is important. Meals, meds, and activities of daily living (ADLs) schedule will help people not get burned out. In chaos, they will still know what is happening next. Next, if you have a sister facility to work with think about worse case scenarios, like what if you couldn't go back where would you go? Finally, you have to take care of your staff. They will work themselves into exhaustion if you let them. Staff have transportation needs, cash flow needs, needs for reassurance, and stress management. These must be addressed (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

[What we learned from Hurricanes Katrina and Rita] is you are on your own. You don't get any assistance from anybody. You have to be prepared. You're on your own baby, when you have disabilities and children with disabilities. The government doesn't provide for you because we aren't considered special needs. We are not medically fragile. There are no shelters for individuals with disabilities if you don't have a medical need (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

Just try to think of every scenario that can happen. But you still won't know until you walk it. Having a written manual is helpful, knowing how to contact your radio station is helpful, knowing how to contact your Office of Community Development and your case management company (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

We learned don't leave your vehicles. We lost 16 to 18 vans due to flooding (Cliff Doescher, Executive Director, The Arc of New Orleans, Louisiana).

[In recovery, we learned that] often persons with a disability who are evacuated lose their social support and social capital which they relied on to function in the community. Beyond contracting, there is currently little relationship between emergency management and disability service providers. [Emergency management needs to create] an active social network of inter-organizational practitioners. This will help coordinate services for those with special needs. Contracting with disability organizations is not enough. A network of organizational representatives needs to be in place [to respond to] important questions about what needs to be available (from the national FEMA and Red Cross perspective) and who is available in the local area to respond. Local capacity building should be the model for response to disaster (Barry Meyer, Executive Director, The Arc of Baton Rouge, Baton Rouge, Louisiana).



Promising Practices by Type of Disability



Promising Practices Specific to Disability

Maintaining key supports can be the difference between ability and disability in disaster. Respondents familiar with disability emphasized “don’t separate people with disabilities from their key supports.” These could be a mobility device, a service animal, refrigerated medications, or a family member or caregiver. The following details promising practices discussed by respondents that are specific to type of disability.

All Disability

(56) People working in shelters need better awareness of disabilities

We learned that shelters need to be ready for people with [various kinds of] disabilities. They separated people with disabilities from their families on the way out of town and you can’t do that. The people manning the shelters need a better general awareness of disability (Cliff Doescher, Executive Director, The Arc of New Orleans, Louisiana).

Cognitive/Intellectual Impairments

(57) Some people with cognitive intellectual disabilities can seem capable, but are not. Don’t assume it.

[There needs to be improvement in the general understanding of intellectual disabilities and what that looks like. Our folks seem pretty capable, but they can be at most risk (Cliff Doescher, Executive Director, The Arc of New Orleans, Louisiana).

Deaf/Hearing Impairments

(58) People who are deaf mainly need access to information

People in wheelchairs need special care. People who are deaf need no special care. They need access to information prior to the storm. Prior to Hurricane Charley, we found the live news agencies weren’t close captioned. The scrawl was national and was giving different information than the verbal broadcast. The storm took a turn at the last minute, so verbally they said you need to hunker down. The deaf audience was not getting the latest information (Lori Timson, Executive Director, Deaf Service Center of SW Florida)

(59) Make sure closed captioning is always done in real time. This is what deaf and HOH rely on to get their disaster information.

(Lori Timson, Executive Director, Deaf Service Center of SW Florida)

(60) People who are deaf and HOH need both captioning and a sign language interpreter bubble on television alerts

(Kay Chiodo, Deaf Link, San Antonio, Texas)

English is not a deaf person’s first language. Often our deaf and HOH will graduate high school with a 3 to 4th grade reading level in English, but remember this is their second language. We have to remember that in sign language, they graduate at a 12th grade level in their first language (Lori Timson, Executive Director, Deaf Service Center of SW Florida, Fort Meyers, Florida).

Captioning works for people who are hard of hearing because most people who are latent deaf or hard of hearing when they become older, captioning makes a huge difference. Most of our elderly don’t take the time to learn sign language. Sign language interpreters aren’t going to help this group (Lori Timson, Executive Director, Deaf Service Center of SW Florida, Fort Meyers, Florida).

(61) If you need an interpreter in an emergency situation, you can use a company like Deaf Link to feed an interpreter via video from outside the disaster area

When a storm is coming, interpreters need to be with their families too. I say feed in an interpreter

from Ohio who doesn't have to respond to the disaster themselves. If there is no power, nothing is going out anyway (Lori Timson, Executive Director, Deaf Service Center of SW Florida, Fort Meyers, Florida).

See also, Deaf Link Emergency Information Alert Services in Models of Best Practices.

Blind/Visual Impairments

(62) Give persons who are blind an orientation to the shelter

The thing that makes responding to visual impairments difficult is when they assume the blind person is totally helpless and that is the wrong part. A blind person may need to be led, but they are not helpless and you should not assume that. If you can give them an orientation to the building [shelter], like here's your bed, to the right of the bed is this, the bathrooms at the north end of the room, the information table is at the south end (Doug Fowler, Executive Director, Visually Impaired Persons of SW Florida, North Fort Meyers, Florida)

Mental Health and Mental Illness

(63) Offices of Emergency Management should have lists of mental health counselors who are trained in post traumatic stress

We have the Mental Health Association of Collier County and they put out a directory. Each year we have to enroll in that directory. We are asked whether we will provide disaster help. The emergency management offices should know how to contact mental health counselors for people in their area (George Drobinski, Licensed Mental Health Counselor, Treatment Works, Naples, Florida).

(64) Consider in larger shelters including a "Quiet Room" for persons who may be agitated by the noise and chaos of a large shelter environment

When people with mental illness are brought into a shelter, give them a place they can go within the shelter that is like a quiet room or a safe place. If things get tough for them in the general population, you can ask them to go to that designated area. A quiet area is ideal but many times that is not possible (Doug Fowler, Executive Director, Visually Impaired Persons of SW Florida, North Fort Meyers, Florida)

(65) There is a difference between the immediate psychological impact of disaster and post-traumatic stress

Usually the immediate needs get addressed first in disaster. Initially, it's just about getting that person to resources, triage, getting them stable and getting them to someone for the long term. Post-traumatic stress can be a delayed onset. [The signs are] irritability, insomnia, nightmares, depressed affect, aggression. Kids show depression a little more aggressively, adults are more sad and feeling down (George Drobinski, Licensed Mental Health Counselor, Treatment Works, Naples, Florida).

Elderly/Medically Fragile

(66) Make shelters familiar because people are comforted by what is familiar to them

One thing we learned is that it is very difficult for the elderly to evacuate. The elderly are taken to Madre Dolorosa where they feel more comfortable when they see the familiar Catholic names (Samantha Pichon, Associate Director of Emergency Management, Archdiocese of New Orleans, Catholic Charities, New Orleans, Louisiana).

(67) Evacuate your residents by level of need

We really encourage providers to evaluate their entire census and divide them into levels – most complex people level one, level two fragile but not all that technology and level three maybe physically less fragile but with Alzheimer's, still ambulatory but needs supervision. Divide population into levels so most critical people you get out early, go to a hospital in an ambulance (Jocelyn Montgomery, RN, Director of Clinical Affairs, California Association of Health Facilities, Sacramento, California)



Promising Practices by Type of Disaster

Promising Practices for Persons with Disabilities Specific to Type of Disaster

Respondents in different regions of the country were asked to offer promising practices specific to type of hazard or disaster. Due to the study focus on evacuation, tornado-prone areas (which typically require shelter-in-place strategies) were not included in this search for promising practices. The following details promising practices specific to type of disaster for hurricanes, flooding, and fires.

Hurricanes and Flooding

(68) Update plan and contact information every year before hurricane season

We have a complete manual we follow beginning in May we update it and make sure contact information is all complete. If we provide services to someone we contact the family [each year at this time] to find out who is coming with us or who they are going with and to where. For the individuals who live with their families, we are not responsible for them but we do update their information so we can contact them after the event and tell them we are open again (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

(69) With hurricane season, it works to notify the community ahead of time about location of shelters

[Information about the location of shelters is put out at the beginning of hurricane season in some Florida localities]. It varies by locality. Some put [shelter information] out on their websites or advertise it in newspapers. It must work because they keep doing it (Michael Whitehead, Emergency Management Coordinator, State of Florida Department of Business and Professional Regulation, Tallahassee, Florida).

May be announce where special needs shelters are sooner, so people who need it can get there (David Gallegos, Program Director, Advocacy Center, New Orleans, Louisiana)

(70) Leave ahead of time or wait to leave to miss the traffic

In Rita, we learned not to be the first to go because we got hung up in traffic. That also means more time away from the facility where we have to care for people out of their element. So in this last [evacuation], we got the notice to evacuate at 9:30 in the morning and we left the following morning, 22 hours after the notice to evacuate. As a consequence there was almost no traffic. It took us two hours. [When we left at the first notice to evacuate during Rita], we were on the road for 14 hours, unable to get off the freeway. We had people sitting in chairs, incontinent, unable to eat, fights broke out. We're not going to do that again (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

(71) When building new or re-building damaged property, make it hurricane ready

We just recently built a brand new community home for \$800,000. It will be our safe house. During the year six men live in it. It is built to withstand 150 mile winds and it is built 10 feet above sea level with solid concrete walls. It's got 3 roofs on it and has an emergency gas generator that powers the whole house with electricity. [We built it] so we don't have to travel outside our community until it becomes a category 3 storm. [Our evacuations typically cost between \$60,000 and \$100,000.] Now I can house 40 to 50 people in our new home for category 1 or 2 storms (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

(72) System for tracking individuals in evacuation and shelters is most useful in an event, like a hurricane, with advance notice

[Our Special Needs Tracking System (SNET)] tends to be best in something like a hurricane with some advanced notice. We have some kits always ready to go and the rest we can have ready in 24 hours. It's best in areas where you have some notice and time to move things forward. Flood is an immediate local disaster [so this is not meant to respond to that]. Maybe this would be feasible for an earthquake. For a catastrophic hurricane event,

this is a very necessary system. See also SNET, Sahana in Model of Best Practices in the next section (Rex Ogle, Preparedness Section Administrator, Texas Division of Emergency Management, Austin, Texas).

Fires/Wild Fires

(73) Employees benefit from fire safety training

Project People II Health Care (1977) a study of human behavior in fires, conducted by Professor “Prof” John L. Bryan, considered by some as the granddaddy of human behavior and fire protection engineering. In a nutshell, that comprehensive study demonstrated the most successful outcomes, no injuries/fire deaths, occur when the healthcare employee received even the minimum of fire safety training, as in their initial orientation. Outside that study, I recall an example of a very bad outcome was in a nursing home fire. The fire ignition source was a lighted cigarette dropped by the resident in his room. The nursing aide who was walking by the room saw the fire and she was frightened, did not take any action but to run away. Two residents died and others were injured. That nursing aide had just been hired and had been placed on duty before attending the orientation classes (Edwina Juillet, Consultant, Task Force on Life Safety for People with Disabilities, Luray, Virginia)

(74) Being ready to shelter in place is important for wildfires

Being ready to shelter in place is important for wildfires. First, make sure you have a defensible position. Clear combustible stuff 100 feet away from your buildings. Second, make sure your buildings are equipped with the best fire prevention materials. This means roofing, etc. Third, know how to shut off the outside air. Air quality is part of the reason our facilities get threatened, so know how to cut off the HVAC. Get air scrubbers, filter devices, and be ready for power outages with a generator or electricity back-up (Jocelyn Montgomery, RN, Director of Clinical Affairs, California Association of Health Facilities, Sacramento, California).

(75) Getting up-to-date information on the fire is important

You have to have good communication so that you can make that decision to stay or go. That means being plugged into the best information, a connection to the local authorities with up to the minute advice so you get put on alert (Jocelyn Montgomery, Director of Clinical Affairs, California Association of Health Facilities, Sacramento, California).

(76) Work on how to get information about homes impacted to those who are sheltering

The thing that provides the most anxiety [for people sheltering] is the state of the home. It’s always hard to get information about that in a shelter. Good information flow would be better for this type of disaster (Bill Vogel, Disaster Services Section, California Department of Social Services, Sacramento, California)

(77) Important to make your own plan in case fire

[Advice specific to wild fires?] We’re not coming. Families need a plan (Richard Devylder, Special Advisor to the Secretary, CALEMA, Sacramento, California).



Models of Best Practices for Evacuating Persons with Disabilities

Models of Best Practices from Across the United States for Evacuating Persons with Disabilities

Research reveals a number of best practice models. These are models that have been developed and tested in disaster situations to support evacuation for persons with disabilities. The following details some of the best models from communities across the nation, and includes supporting documentation and contacts to help you initiate similar models in your community.

For more information contact Gary Seale, Transitional Learning Center at 409-797-1477 or gseale@tlcgalveston.org

See also Seale, Gary and Brent E. Masel. (2009). Hurricane preparedness, an oxymoron: Are you ever really prepared? *Brain Injury Professional* 6(4):8-14.

Seale, Gary S. 2010. Emergency preparedness as a continuous improvement cycle: perspectives from a post-acute rehabilitation facility. *Rehabilitation Psychology* 55(3):247-254.

Model Evacuation Plans

TLC Galveston Team Approach to Staffing Evacuation

On June 1, the hurricane evacuation plan is reviewed with the entire staff, including roles and responsibilities of each department and staff within those departments. All staff are asked to provide us with their evacuation destination and a good number where they can be reached. At that time we also ask them to select an evacuation team that fits their current situation. Team A is responsible for packing the residents with three days of clothing, medicines, medical records, adaptive equipment, etc. They help load them into vehicles and travel with them to the evacuation site. Someone calls families at the evacuation site and sets up call system so the family can regularly contact residents during the evacuation. Team B relieves Team A about 48 hours after the evacuation. Sometimes members of Team A will choose to stay. Team B is responsible for the next 48 hours to maintain activities and care schedules. When the storm passes, Team C comes to clean the facility, clean out the refrigerator, clear downed trees, make sure power is on, computers are working, etc. then they call Team B to return. Team B packs up residents and returns, passing them to Team C. Next day, we are back to business as usual (Seale, Director of Clinical Programs, Transitional Learning Center, Galveston, Texas)

The Arc of Terrebonne, Houma, LA

We are 30 miles from the Gulf, so just a strong SE wind from the gulf will bring water into our community. Even with a tropical storm we can get flooding of 8-10 feet in the bayou. I've been Executive Director for three years and we have evacuated once for Ike. For Katrina they evacuated to Pineville, and over the years we've evacuated a total of 20 times.

We have a complete manual we follow beginning in May we update it and make sure contact information is all complete. If we provide services to someone we contact the family [each year at this time] to find out who is coming with us or who they are going with and to where. For the individuals who live with their families, we are not responsible for them but we do update their information so we can contact them after the event and tell them we are open again

We get into an open agreement with a church in north Louisiana in west Monroe, which is about a four to five hour drive. During evacuations, it is an 8 to 12 hour drive. When there is a storm predicted in the Gulf we monitor it five days out and we make a decision three days prior to the storm hitting the coast to get everything together.

We keep containers ready year round with sleeping bags and all of the things we need to take. We have buses and vans. We wind up taking up to 60 to 70 people when we evacuate, around 40 are people with disabilities and about 20 are staff. We keep a list for what we need to add to our containers. We are now entering into an

agreement with an agency two hours away for a category 3 or 4 hurricane and also the church in northern Louisiana if it's a category 5. The agreement spells out what each of us are responsible for and how much we will pay them.

We are on our own. We have to pay for it. We know how to get reimbursed by FEMA we've done it so many times. It costs from \$60,000 to 100,000 to evacuate. Last time was for 12 days.

For Ike we evacuated, for Gustav we didn't. For category 1 or 2 hurricanes, we just recently built a brand new community home for \$800,000. It will be our safe house. During the year, six men live in it. It is built to withstand 150 mile winds and it's built 10 feet above sea level with solid concrete walls. It's got three roofs on it. It's a home in a subdivision and it makes it so that we don't have to travel outside our community until it becomes a category 3 storm. I can house 40-50 people there for an emergency. It has an emergency gas generator to generate the whole house without electricity (Mary Lynn Bisland, Executive Director, The Arc of Terrebonne, Houma, Louisiana).

For more information, see The Arc of Terrebonne Community Homes/Supported Independent Living Emergency Plans and other supporting documents.

New Orleans City Assisted Evacuation Plan

The Superdome was the shelter of last resort. It was always called that. In the framework of disability, we had to make a position. The Health Department had always led the staffing in the Superdome so our position [post-Katrina] was we are not staffing it. The generators are on the ground, so we spent eight days in the Superdome in the dark with no functioning toilets. [Once] we got out of there, we really had to push that position. We were a lead advocate in a [city-wide evacuation plan as an alternative to a shelter of last resort] (Evangeline Franklin, Director of Emergency Preparedness and Special Projects, City of New Orleans, Department of Health).

We contracted with transportation agencies that had to move their equipment out of the city anyway, so we contracted with Amtrak, cruise ships, paddle boats. We have an evacuation map [with set pick up points throughout the city] for people who are ambulatory. I have another registry for everyone who is not ambulatory. Is our list the be all and end all? Absolutely not. There are some people with no connection. Evacuation plan is to pick up at [set] locations. RTA buses pick up at the pick up points and take them to Amtrak, other buses, or trains to get them out. We probably transported 20,000 during Gustav, including 40 people who needed ambulance transport (Evangeline Franklin, Director of Emergency Preparedness and Special Projects, City of New Orleans, Department of Health).

According to the *City Assisted Evacuation Plan (CAEP)*, CAEP is a program designed to help people who have no means of evacuating on their own. This may be due to financial need, unreliable or no transportation, or homelessness. Citizens may contact the City's 311 hotline or the 800 numbers to answer a phone survey to determine eligibility for CAEP. For those who are eligible, they will be notified via postcard and their information will be kept in a database for registration during evacuation.

Resources:

[City Assisted Evacuation Plan \(CAEP\): A Guide to Accessing the CAEP](#)

[Louisiana Citizen Awareness & Disaster Evacuation Guide: Southeast](#) and [Louisiana Citizen Awareness & Disaster Evacuation Guide: Southwest](#). These guides are also available in Spanish and Vietnamese.

For more information, see also <http://www.cityofno.com/pg-162-9-caep.aspx> and <http://gohsep.la.gov/evacinfo/stateevactres.htm>.

California Emergency Management Agency Office of Access and Functional Needs, Sacramento, CA

In January 2008, OES Director Henry Renteria created the Office for Access and Functional Needs (OAFN). The purpose of OAFN is to identify the needs of people with disabilities before, during and after a disaster and to integrate disability needs and resources into all aspects of emergency management systems. OAFN, under the leadership of Richard Devylder, Special Advisor to the Director, was created to strengthen the method and planning of emergency management for people with disabilities.

According to the OAFN website, OAFN was created to revise how emergency preparedness in the state of California is done, shifting from old paradigms to new:

Old PLANNING paradigm:

- Not Enough Emphasis Placed on People with Disabilities & Service Organizations
- Not Enough Emphasis Placed on Accessible Transportation Providers
- Segregation of Needs and Resources in Emergency Management Plans

New PLANNING paradigm:

- Inclusion of People with Disabilities & Service Organizations
- Inclusion of Accessible Transportation Providers
- Integration of Needs and Resources in Emergency Management Plans

Old SERVICES paradigm:

- Medical only
- Functional Needs Viewed as Medical Problems

New SERVICES paradigm:

- Prepared to Address Functional Needs
- Expert Assessments
- Meet Essential Needs

Old RESOURCE MANAGEMENT paradigm:

- Wheelchair Accessible Vehicles Not in Evacuation Plans

- Durable Medical Equipment, Consumable Medical Supplies, and Accessible Cots Not in Cache

New RESOURCE MANAGEMENT paradigm:

- Wheelchair Accessible Vehicles Incorporated in Evacuation Plans
- Durable Medical Equipment, Consumable Medical Supplies, and Standard Accessible Cots in Cache

Old SHELTERING paradigm:

- Sheltering people with disabilities and activity limitations in Special Needs/Medical Shelter
- Facilities & Temporary Structures Not Accessible

New SHELTERING paradigm:

- Sheltering people with disabilities and activity limitations in General Population Shelter
- Facilities & Temporary Structures Required and/or Retrofitted to become Accessible

Old LANGUAGE:

- Special Needs
- Vulnerable Populations

New LANGUAGE:

- Functional Needs
- People with Disabilities and Activity Limitations

Old OUTCOMES paradigm:

- Increased number of deaths, medical problems

New OUTCOMES paradigm:

- Improved ability to maintain independence, health and safety

Old VALUES paradigm:

- People with Disabilities are Viewed as Collateral

New VALUES paradigm:

- People with Disabilities and Activity Limitations Recognized as a Significant Part of the Population, and Valued as a Person

Old COMPLIANCE WITH CIVIL RIGHTS LAW paradigm:

- Communication, Facilities, Materials and Services Are Not Accessible



New COMPLIANCE WITH CIVIL RIGHTS LAW paradigm:

- *Communication, Facilities, Materials and Services Are Accessible* (Devylder, Richard. 2010. The Changing Paradigm in Emergency Management Preparing for People with Disabilities)

For more information, contact Richard Devylder, CALEMA at 916-845-8288 or Richard.devylder@calema.ca.gov

See also, www.calema.gov/ (search for OAFN) or <http://www.calema.ca.gov/WebPage/oeswebsite.nsf/Content/7CC19449AF7EEC028825748E0059F8BE?OpenDocument>

Alternatives to Registries

Neighbor-to-Neighbor Citizen Networking

Some kind of citizen network is a good idea. Call your neighbors and see what they need. The campaign, Don't Mess with Texas, was don't litter on the highway and it really tapped into our Texas culture. Maybe something like that for a neighbor-to-neighbor network, Don't Leave Anyone Behind or We're All in This Together. Every coastal town has a culture you can tap into. We have neighborhood associations, Neighborhood Watch, so we already have people connecting neighborhoods [we can tap into] (Gretchen Stone, PhD, Chair Department of Occupational Therapy, University of Texas Medical Branch, Galveston, Texas)

Neighborhoods have to look out for each other. If neighborhoods had helped each other during Katrina, we wouldn't have lost what they did. If there could be some grassroots for neighborhood preparedness that would be fantastic (Edwina Juliet, Consultant, Task Force on Life Safety for People with Disabilities, Luray, Virginia).

Howard County pilot tested N2N, a neighbor-to-neighbor program that focused on building community resilience through individual and family preparedness. A volunteer in the neighborhood

would convene their neighbors to address special needs among individuals on their block or special concerns that would assist in coordinated efforts in that neighborhood to survive in a disaster. The critical component of N2N is to build social support networks within neighborhoods and communities to help build resilience (Pat Heineman, former CERN Coordinator, Community Emergency Response Network, Howard County, Maryland). For more information, see <http://www.bepreparedbeready.org/ht/d/sp/i/215/pid/215>

Advance Warning System through Provider Networks NYC OEM

In NYC, we have the Advance Warning System. It started out as our coastal storm plan in case a hurricane would hit NYC, but we've turned it into an all-hazards communication tool. We engage service providers, 1500 service providers with 500 to 600 points of contact about potential emergencies [or disasters]. We connect with service providers because they know their clientele. [People with disabilities] are better in touch with who their service providers are, so we get information to them and ask them to put it to the providers they use and their consumers. We do a conference call with just the big service providers, departments of health, social service providers, etc. I also email service providers and put information on the website (Aaron Belisle, Special Needs Outreach Coordinator, New York City Office of Emergency Management, Brooklyn, New York).

For more information, contact Aaron Belisle, New York City Office of Emergency Management at 718-422-8431 or abelisle@oem.nyc.gov

See also the *Emergency Preparedness Guide for Agencies Providing Services to Individuals with Special Needs* and the *Special Needs Advance Warning Systems Plan* fact sheet.

San Diego Model for Locating Alternative Skilled Nursing Beds

The San Diego model is the best take away best practice I can speak to. Basically what we did post-[2007 San Diego wild fires] was I got loud with community supervisors and said this was not working. There were residents of skilled nursing facilities evacuated to a fairgrounds. They were okay and safe, but they had various needs and the location was not ideal. There were hundreds of [skilled nursing] beds available in the community, but no way to know which ones were where. We put together San Diego County Skilled Nursing Facility Disaster Preparedness Task Force spearheaded by Pauline Thomas, a nurse with background in EMS and bioterrorism. I wrote a letter to the County Board of Supervisors for some help and they put me with Pauline. She took us in and some other nursing home administrators who had experience during the wild fires. Pauline suggested a model, dividing the county into six areas based around hospitals. With 90 skilled nursing facilities in San Diego county and well over 10,000 beds, bottom line is we needed something workable. So we put a liaison for each of the six areas, but then decided to split the largest area to make it seven areas, seven SNF liaisons total. SNF liaisons [administrators themselves] called each of the nursing home administrators in their area and said this is what we are doing. We want a better opportunity to speak with each other and have a viable bed count [when needed]. With heavy support and involvement through the county emergency management office, we were able to deal with the issue of facility operators being competitive. We said all we are looking for is information that can be used in a disaster. Now we have 74 percent of all SNFs signed into an MOA for this project and within [13 minutes] our liaisons can call their facilities to find out how many skilled nursing beds are available to shelter patients in the San Diego area (Scott J. Tarde, Executive Director, The Remington Club in Rancho Bernardo, San Diego, California)

I asked three participants (two of the key principles who helped develop the San Diego model) what makes this work.

Scott Tarde (nursing home/independent living administrator and founded of the San Diego model) replied:

1. Must mobilize your most active individuals, your grassroots people. Identify passionate

individuals to be your point person for building the network and to sell your idea

2. Get tied to local EM – OEM did a letter for us that we could use [to help with buy-in], also got supplies and resources through OEM
3. A certain percentage just won't engage, but the rest will
4. Keep the information flow going to maintain the project. We contact them at least quarterly to make sure the connection stays open

Pauline Thomas, RN, County of San Diego EMS replied:

1. Having buy-in from the local government plays a big role (County Supervisors)
2. Being prepared well in advance with all the information [the providers] will need to be successful. We had access to GIS map planners, stats for everything, government websites, everything they needed to help sell the reality
3. Finding the right people to help launch and spread it.

Jocelyn Montgomery, RN, Director of Clinical Affairs, CA Association of Health Facilities replied:

1. Leadership. A few committed leaders who were willing to put the time in and pester people and not give up.
2. The wild fires. The incentive of going through this event was key. There were evacuations in 2003 and large-scale evacuations again in 2007. The threat [of it happening again] was real.
3. Also, it's a low tech solution.

I asked two of the key principles how they sustain this model over time. Scott Tarde and Pauline Thomas stressed the importance of keeping the information flow going with participating SNF providers. Thomas said, "during the pandemic, our public health officer created a video for SNF about how to avoid infections. They loved it. Then we offered fit test training for free. When we do an exercise, we invite them, so we stay in contact with the [SNF liaisons], not too much, but enough to keep it going."

For more information, contact Pauline Thomas, County of San Diego Emergency Management Services at 619-285-6445 or Pauline.thomas@sdcountry.ca.gov



See also *The San Diego Model – A Skilled Nursing Disaster Preparedness and Response Plan* and other supporting documents.

California FAST Teams for Accessible Evacuation and Shelter

We have our FAST project, Functional Assessment and Service Teams. It's teams of people who come from disability communities to assess needs to see what types of transportation, what types of supports are needed [during an evacuation or shelter event]. We have 6 to 8 members on each team and eventually have state level teams when counties get overwhelmed. So all members have a disability background and include a spectrum of people with physical, blind, mental, cognitive, elderly disabilities. We are generally attempting to make every shelter accessible for people with disabilities (Randy Linthicum, Chief, Disaster & Client Services Bureau, California Department of Social Services, Sacramento, California)

The Functional Assessment Service Teams (FAST) came out of the 2007 wild fires. We deployed people who had disability expertise to shelters and it worked, so we developed FAST after the fires. This is what our FAST teams need to know to be effective:

1. Basics of shelter operation – the Red Cross helps us with that.
2. How to interact with Red Cross staff – for example, when a person shows up at a shelter and does the intake form that triggers our focus on specific individuals. Question 8 on the intake form says, do you need additional assistance with health or mental health?
3. How to assess [needs] quickly – some may have needs that don't necessarily want to share that so we train on how to identify people who may need [additional assistance] by walking around the shelter.
4. The resource request process – people at shelters show up without everything they need, including medication, the right wheelchair. We talk about how to get those kinds of things through the government process.

5. Administrative things – we teach them time keeping, etc.
(Bill Vogel, Disaster Services Section, California Department of Social Services, Sacramento, California)

For more information, contact Bill Vogel, California Department of Social Services at 916-651-8861 or bill.vogel@dss.ca.gov

See also Functional Assessment and Service Teams (FAST) and the City of Oakland Mass Care and Shelter Plan: Functional Needs Annex.



Making All Shelters Disability-Friendly in Florida: Special Needs Task Force

We are working on [inclusive shelters]. We used to not have cots in our shelters, but now there is no reason that someone in a wheelchair needs to go to a special needs shelter. In 2006, the legislature made a Special Needs Task Force and brought in all the advocacy groups for every type of disability. They came up with definition of who would go into Special Needs Shelters. They figured out they needed generators in these shelters, so they gave state money so people in SNS could have A/C and power up their wheelchairs. Out of 67 counties, 55 counties got generators. In 2008, we resurrected the Task Force, this time called it the Vulnerable Populations Task Force, and came up with tools and information which we posted on the Department of Health website. We did population profiles for each of the counties of vulnerable populations. We did fact sheets, which give fundamental issues that need to be addressed for each disability group. Now if you're a shelter, you can know the basics (Michael Whitehead, Emergency Management Coordinator, Florida Department of Business and Professional Regulation, Tallahassee, Florida).

For more information contact: Colonel Michael Whitehead, Florida Department of Business and Professional Regulation at 850-410-2496 or michael.whitehead@dbpr.state.fl.us.



See also <http://www.doh.state.fl.us/DEMO/php/VulnerablePopulations.html>



Accommodating Pets in Shelter Environments in Louisiana

According to two study respondents accommodating pets in evacuation and shelter is a problem that many states have yet to resolve. Many shelters are in schools and churches where pets typically are not allowed, yet many pet owners with and without disabilities will not leave their pets behind in the event of an evacuation.

We don't take pets [in our shelters], so they won't leave their homes. Everyone is struggling with this. Most shelters are in schools built to 496 hurricane standard, which can withstand the winds. Now school boards say no pets in schools, so we are arguing about this (Michael Whitehead, Emergency Management Coordinator, Florida State Department of Business and Professional Regulation, Tallahassee, Florida).

Following Hurricane Katrina, I heard they brought in trucks and cages and each animal was tagged and matched with their owner, then an animal shelter was created specifically for this situation. I think that was in the Louisiana and Mississippi area. But most shelters are churches or schools so they are not set up to take animals. And a lot of seniors don't want to leave their pet or their home behind (Rochelle Ferguson, Executive Director, Palmetto Breeze, Blusston, South Carolina).

According to the *Louisiana Citizen Awareness & Disaster Evacuation Guide* and the *City Assisted Evacuation Plan (CAEP)* in New Orleans pet owners with and without disabilities can safely evacuate with their pets to city run shelters. Pets are accepted for evacuation at CAEP staging points as long as they have ID, collar, leash, are up-to-date on vaccinations, and arrive at an evacuation staging site or shelter with any necessary medications.

The *Louisiana Citizen Awareness & Disaster Evacuation Guide* states that not all shelters will

accept pets, so it is important to call ahead. The Louisiana Department of Agriculture & Forestry works year round with the Louisiana State Animal Response Team (LSART) to provide sheltering opportunities. Animal shelters will be set up in various parts of the state on an "as-needed" basis.

For more information see <http://lsart.org/>.



Tracking People during Disaster

Sahana, NYC OEM

Sahana is an open source software that any jurisdiction could adapt for their use. It is used for two things, first to register and track people at shelters when there is an evacuation and second we use it for staff deployment. Sahana can identify staff for a particular shelter and is connected to Somewhere Now, a notification system that either calls people or emails them telling them where they have been assigned. That often has to be manually, but we are working on fully automating that process through Sahana (Aaron Belisle, Special Needs Outreach Coordinator, New York City Office of Emergency Management, Brooklyn, New York)

For more information, contact Aaron Belisle, New York City Office of Emergency Management at 718-422-8431 or abelisle@oem.nyc.gov

See also <http://sahanafoundation.org/>

Texas SNET

Any evacuee transported by the State is tracked by the state. To do this, the state employs its Special Needs Tracking System (SNET) which is contracted through AT&T and Radiant. The system uses evacuee bracelets which are bar-coded. Evacuees are tagged at State identified embarkation points, then the wristbands are used to record the location of the evacuee as they enter shelters at the debarkation. The system was tested during Hurricanes Ike and Gustav, and did present some problems because the two events were so

close together in time. For instance, there were not enough trained operators to run the system several days in succession. There was also not enough time to recharge the batteries for the handheld barcode readers by the time the second storm approached. While there are some bugs to be worked out, overall, Texas Emergency Management Officials are pleased with the system and anticipate fully successful implementation (Richard Devylder, *Evacuation of Special Needs Populations – Best Practices*)

I went out and got with AT&T and Radiant and they put in a system for us using RFID bands. It's a scan like you use in stores. It's a wrist band that can go on equipment, people or pets. We have handheld scanners, badges, and printers that we deploy. There is also a large scanner kit that you can walk through like a metal detector that picks up the chip in the band for large shelters. It also has a GPS tracking device on the bus and a cell phone for each driver. We have a television screen that shows dots for each person, each bus, so we know where everyone is.

[We can also get messages to individuals.] On each band is a 1-800 number and family members can either get a message to that person or they can give that number out.

During Rita and Katrina, we had people get on planes and we had no way of tracking them. We had no idea where they went. The importance of tracking is not only do I know that John Smith got on the bus in Corpus Christie and is now at Fort Worth, but I also know where Mrs. Smith, their kids and dog are. This is a web-based system, so this is real time information. Now you can see what is coming. If I'm in Houston, I can see my bus going to Dallas and Dallas can see us coming. This is a state-wide shelter system, so now we know where they are.

[Downsides] is there is a lot to manage – keeping the equipment maintained, updates to software. There is also a big value in being able to communicate with other systems. That is what we are working on. This whole tracking system is a work in progress. (Rex Ogle, Preparedness Section Administrator, Texas Division of Emergency Management, Austin, Texas)

For more information contact: Rex Ogle, Preparedness Section Administrator, Texas Department of Public Safety, Division of Emergency Management, 512-424-7051, rex.ogle@txdps.state.tx.us

See also *Texas Special Needs Evacuation Tracking System* at http://www.txdps.state.tx.us/ftp/dem/plan_state/hurricane_plan_attachment10.pdf.

Palmetto Breeze Color Coded Bands and Evacuation Routes by Neighborhood, Beaufort, SC

Palmetto Breeze provides bus transportation within Beaufort County, South Carolina. It is a standalone agency not affiliated with government, however, they are very involved in emergency planning in Beaufort County, and have become an integral part of the county's evacuation plan. During a mandatory evacuation within the county, Palmetto Breeze is responsible for providing transportation of county residents to public shelters. (They have also provided this service during voluntary evacuations.) When needed, their fleet is augmented by school buses and human service agency vehicles.

Working in conjunction with the county emergency management office, six different color-coded evacuation routes have been established that buses will travel during an emergency evacuation. Residents needing transportation to a shelter during an evacuation can be picked up at any bus stop along these routes, or at several designated "pick up locations" on the routes which provide an option at which people can congregate (park and ride option). Before boarding the bus, each evacuee is asked to sign a manifest and provide some basic information. They are then provided a colored wrist band, matching the color of their evacuation route. A number on each wrist band corresponds with the number of the evacuee on the manifest list. The wrist bands are made from heavy duty, water resistant paper that can withstand wear for several days.

Evacuees are then taken to shelters as designated by the city. (Shelter designation is fluid depending on the type and magnitude of the event.) Evacuees



with like colored wrist bands are grouped together in the shelters to aid in keeping neighborhoods together. It also aids in the distribution of information regarding specific geographical areas. The bus drivers remain with evacuees at the shelter until return transportation is approved. They maintain the manifests collected on their own bus, and transport the same evacuees they brought to the shelters back to their homes or pick-up locations (Richard Devylder, 2009, *Evacuation of Special Needs Populations – Best Practices*, CALEMA, Sacramento, California)

By keeping communities together, it's easier on the return trip. The bus pulls up and says everyone with a red wristband (Rochelle Ferguson, Palmetto Breeze, Blusston, South Carolina)

For more information contact: Rochelle Ferguson, Palmetto Breeze, 843-757-5782, llrta@hargray.com.

See also www.palmettobreezetransit.com

modality to receive the information (Dan Heller, Deaf Link, San Antonio, Texas).

A lady picked up her daughter who was deaf and blind and her daughter said we need to go do this and this and we need to do this. And mom said how did you know that? She knew it because we sent it to her on her Braille reader. Her mother came to our office and brought us Krispie Cream Donuts (Kay Chiodo, Deaf Link, San Antonio, Texas)

We sent out the boil water alert and this mom with her premie baby said she knew now what E Coli was and had since found out that those who would have been most susceptible to this was her newborn. So in that instance, we may have saved the child's life (Kay Chiodo, Deaf Link, San Antonio, Texas)

For more information contact: Kay Chiodo, Deaf Link, (210) 590-7487, or go to website: <http://www.deafink.com/ahas/ahas-in.php>



Deaf Link Emergency Information Alert Services

[Deaf Link] takes an alert, say a chemical spill and they need to evacuate and there is no time to go door-to-door. We geo-target by zip code, our database will pull up any person with disabilities in that area because we have been servicing people with disabilities for over 20 years. We take the alert, in Texas this is paid for by the state, and we put it in voice, sign, Spanish voice and text. We send it out to whichever equipment you ask us to. This could be a Braille reader, a computer, voice mail, whatever modality the individual requests. At the same time we send a broadcast quality [text and sign language] to TV stations (Kay Chiodo, Deaf Link, San Antonio, Texas).

[Our database is based on] outreach in the community, deaf groups, blind groups, and other state agencies do town hall meetings and encourage folks to sign up in the program. You could be blind, deaf or deaf/blind. It's up to the individual to sign up and then they select the



Effecting Preparedness Behavior through Go-Kit Distribution in Maryland

In 2006, Inclusion Research Institute under contract with the Maryland Department of Disabilities conducted an emergency preparedness information campaign and evaluation with persons with disabilities and persons for whom Spanish is their main language. We found that distribution of go-kits with items like water bottles, energy bars, and culturally relevant, icon-based messages was the most effective way to get emergency preparedness information into the home. Using providers to distribute the kits, we were able to distribute 5,000 Spanish-language kits in Latino communities throughout the state of Maryland. Compared to a radio campaign, posters in local businesses, and a brochure distribution, we found that go-kits scored highest in terms of recipients recalling key emergency preparedness information, shifting attitudes in support of preparedness, and an increase in preparedness behaviors, such as initiating a family discussion about a emergency plan. Having the kits come from established

community providers was key to gaining trust particularly in migrant communities and other low income communities that may be suspicious of information coming from a government entity (Frances Norwood, PhD, Director of Research and Evaluation, Inclusion Research Institute)

Norwood, Frances, Luis Hurtado. 2006. "Prepárese para un Desastre. Proteja su Familia 1-2-3," a Maryland-state emergency preparedness campaign with Latino migrant workers and others who speak Spanish and do not have access to emergency information in English. Under contract with the Maryland Department of Disabilities, Baltimore, MD.

Planning for Building Evacuation and Evacuating Places of Employment

A guide to assist workers with disabilities in addressing evacuation preparedness at their place of work or high rise residence.

[FEMA and USFA. \(1994\). Emergency Procedures for Employees with Disabilities in Office Occupancies](#)

The purpose of this guide is to provide information for facilities managers and may be useful for those individuals who might need special assistance as to the notification of an emergency situation and/or in the evacuation of a building. The information includes examples of equipment available as well as suggestions on procedures and comments on some of the advantages and the disadvantages.

[Isaacson Kailes, June. \(2002\). Emergency Evacuation Preparedness: Taking Responsibility for Your Safety. A Guide for People with Disabilities and Other Activity Limitations. Center for Disability Issues and the Health Professions.](#)

Planning for Power Outages for Persons Dependent on Electricity

This emergency power planning checklist is for people who use electricity and battery dependent assistive technology and medical devices. Electricity and battery-dependent devices include breathing machines (respirators, ventilators), power wheelchairs and scooters, and oxygen, suction or home dialysis equipment.

[Isaacson Kailes, June. \(2009\). Emergency Power Planning for People Who Use Electricity and Battery Dependent Assistive Technology and Medical Devices. Edition 2.0.](#)



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Appendix B: Additional Resources

Additional Resources

Bloodworth, Donna M, C.G. Kevorkian, Edith Rumbaut, and Faye Y. Chiou-Tan. 2007. Impairment and Disability in the Astrodome after Hurricane Katrina: Lessons Learned About the Needs of the Disabled after Large Population Movements. *American Journal of Physical Medicine & Rehabilitation*, September.

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