Access Alerts Project  
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Introduction

The WGBH National Center for Accessible Media (NCAM) conducted a national, web-based survey during two weeks in late June/early July 2008, for its “Access to Emergency Alerts for People with Disabilities” grant project (Access Alerts), funded by the U.S. Department of Commerce’s Technology Opportunities Program.1

The survey was designed to identify existing and planned practices to make emergency notifications accessible to people with sensory disabilities (PWSD - consumers who are deaf, hard of hearing, blind, visually impaired, or deaf-blind).

Of note: the survey was completed just prior to back-to-back Hurricanes Gustav and Ike; After Action Reports for those events will likely bring to light additional information on this topic.

The Survey and its Respondents

The Emergency Management Survey queried diverse stakeholders about challenges and opportunities in policies, roles and practices for accessible message development and dissemination. The 22-question survey was developed with input from the Access Alerts national working group and was widely distributed to national emergency management professional associations, as well as national, state and municipal government offices of emergency management. People who either work directly in emergency management or who have involvement with accessibility initiatives related to emergency notification practices were invited to participate.

Within a two-week period, the survey attracted participation across public and private sectors, in nearly every facet of the emergency notification arena and beyond. The survey attracted over 200 respondents but not all respondents answered all questions. While the majority of respondents represented 911 call centers and emergency operations centers, there was significant representation from state, county and local offices of emergency management. Others included: state and municipal governors and mayors offices; first responders; consumer advocacy agencies and non-profit organizations; college and university emergency management representatives; public health agencies; vendor hardware representatives; and emergency management analysts and consultants.

Results convey a broad sampling of the state of accessible notification, and indicate opportunities to fill in known gaps and identify effective practices. Where possible, answers have been parsed for relevance to different disability groups.

1 Access to Emergency Alerts for People with Disabilities: http://ncam.wgbh.org/alerts
Delivery Methods for Notifications to People with Sensory Disabilities (PWSD)

By far, television and radio are still the most predominant ways of getting emergency warning messages directly to people at risk, followed by the NOAA/National Weather Service emergency warning systems and the Emergency Alert System (EAS).

**Question:** What systems are used in your jurisdiction for getting emergency warnings directly to people at risk? (Check all that apply.)

When asked which methods are used for getting emergency warnings to people with disabilities, approximately a third of respondents listed family and friends and approximately 16% listed co-workers, indicating that senders of emergency alerts depend on interpersonal communications to take care of part of the notification process.² Other person-to-person methods cited by respondents included caregivers and door-to-door canvas by local fire departments or other local emergency personnel.

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Question: How are most people who are deaf, hard-of-hearing, blind or have low vision alerted to emergencies in your jurisdiction? (Check all that apply.)

Alerting people who are deaf or hard of hearing

More than a third of respondents do not know how most adults who are deaf or hard of hearing are alerted to emergencies in their jurisdiction. Of those who knew, over half of respondents listed captioned television, and approximately a quarter listed TTY. A smaller percentage of respondents cited the use of video relay and relay services and indicated their notification equipment/service has speech-to-text capability.

Alerting people who are blind or who have low vision

More than a third of respondents do not know how most adults who are blind or who have low vision are alerted to emergencies in their jurisdiction. Of those who knew, nearly half listed radio, more than a third listed television, and approximately a quarter listed landline telephone.
A smaller percentage of respondents cited the use of cell phones, and indicated their notification equipment/service has text-to-speech capability. Several listed voluntary consumer registries, sirens and public address systems.

**Awareness of accessibility features or requirements**

More than a third of respondents do not know if their agency/organization uses notification equipment or services that offer accessibility features, and more than half of those who responded to this question do not know if they require vendors to offer these capabilities.

**Question:** Does your agency/organization require vendors of notification equipment/services to provide specific accessibility features? (Check all that apply.)

![Bar chart showing the percentage of respondents who do or do not require specific accessibility features for notification equipment and services. The chart includes options such as 'Sec. 508-compliant website', 'Text-to-speech capability', 'Speech-to-text capability', 'CAP-compliant', 'Specialized phone ring-tone', 'Specialized mobile phone vibration', 'Information in large print', 'Information in Braille', 'Information in ASL', and 'Other'. The chart indicates the percentage of respondents who 'Currently Using Features' versus those who 'Vendors Required to Provide Features'.]
Message Content Development

County/local offices of emergency management, and emergency operations centers/911 call centers led the list of entities cited as responsible for compiling emergency messages. Other entities charged with compiling emergency message content include: public safety departments; public information officers; communications department; campus emergency personnel; police/fire/incident commanders; and a local speech and hearing agency.

Nearly half of respondents said alert messages instructed consumers to check their local TV or radio station for more information, followed by websites, hotlines, and other phone numbers.

A quarter of respondents do not know if their jurisdiction’s emergency messages advise consumers to check other sources for more information. More than a third of respondents do not know if other organizations or persons add more information to the original message but those who did know cited localized information about shelter locations, instructions, evacuation routes, and sources for more information as additional message components.

Question: What kind of localized or enhanced information is provided in your jurisdiction? (Check all that apply.)
Nearly three-quarters of respondents do not know if specific content for PWSD is provided in messages sent within their jurisdiction. The inclusion of TTY numbers was cited most frequently by those who are aware of specific content included in emergency messages.

**Question:** Tell us if any content has been added to emergency alert messages in your jurisdiction that is specifically relevant to people who have hearing and/or vision loss. (Check all that apply.)

**Policies and Procedures**

Nearly 40% of respondents do not know if there are specific provisions for PWSD in their jurisdiction's Emergency Operations Plan or Standard Operating Procedures. About 30% of respondents said there were specific provisions included in their plan. About 30% of respondents said there were none.

Almost half of respondents do not know if a specific person/entity is responsible for compliance with federal mandates, statutes, and laws on emergency information access. A third said there is a person/entity
responsible. Several listed ADA staff while others cited varied emergency management offices and other state/local government agencies.

More than a third of respondents do not know of programs or initiatives in their jurisdiction to provide accessible information. Only a small sampling of respondents know of their organizations’ participation in disability-focused private sector efforts for accessible notification, or whether their jurisdiction has participated in disability-focused government-sponsored training programs.

**Specific Practices and Programs**

A number of respondents reported ongoing efforts to educate first responders to needs of PWSD and to coordinate with local media. A number of respondents mentioned the work of the National Weather Service and the CEPIN project. One respondent mentioned a CERT curriculum specifically developed to train people of all disabilities. A handful of respondents reported working with local media to address the need for varied messages in different formats to reach consumers with disabilities. Similarly, a few respondents cited work underway to define shelter needs for vulnerable populations or to develop special needs transportation plans. Other existing programs and practices cited include:

- Use of sign language during emergency telecasts
- Reverse 9-1-1
- Email alerts
- Mass notification telephone systems
- TTY training
- Brailled emergency preparation materials
- 211 Service
- Evacuation registry
- Buddy system
- Providing equipment recommendations and discounts
- Providing first responders with accessible support materials
- Meeting with/involving people with disabilities in emergency drills
- Developing voluntary special needs registries for people to receive customized information (though a smaller amount have actually used them, others plan to use them).

When asked about programs or services respondents would like to replicate, initiatives in a number of states (Ohio, South Carolina, Oklahoma, Los Angeles County, Illinois, New York, Florida, Washington and Texas) were cited. Respondents’ recommendations include:

- A robust email, text, PDA, cell, landline alerting system at a reasonable cost that allows self registration for varied messages of the receiver’s choice (i.e., NYAlert, OK-WARN and Kent County CityWatch) were among the systems mentioned that offer some of these options.
- Special pagers that receive alerts based on geographic locations, i.e., weather alerts based on where the pager is instead of a statewide broadcast
- A vision/hearing directory and outreach program
- Evacuation registry
- Televised and Web-based ASL alerts and video instructions
- Brailled emergency information distributed to support groups and public libraries
- Car visor cards for people with disabilities to alert responders of their special needs.
- Alpha-Numeric Flip Charts to communicate with deaf consumers.
• Map services such as the Map-Your-Neighborhood (MYN) in Washington State
• Tactile maps for emergency notification and evacuation guidance for the blind.

**Challenges Related to Creating Programs for Accessible Information**

When asked to list challenges related to serving PWSD, the majority of respondents listed insufficient funding, staff resources, system capabilities and training.

*Question: Identify challenges in your jurisdiction to creating or maintaining a program that provides accessible emergency information to people who are blind, low-vision, deaf, hard-of-hearing, or deaf-blind. (Check all that apply.)*

Comments included:

*There is never enough funding to provide equipment to those with disabilities and to give adaptive equipment to first responders.*

*Currently we do not have any type of emergency alert information systems for disabled or anyone in our county to be notified or where to go or what to do in an emergency situation. I would say it needs to be mandated as the improvement [is] needed in our*
community. As far as I am aware there are no funding sources for this. With current lack of funding, we find it extremely difficult to support present operations, never mind expanding where we want to go. Lack of funding has resulted in using traditional methods such as television text and TTY.

We would like to hear of an affordable system solution that covers all mixes of vulnerable populations. System costs range annually from $10K to $120K per year which are very cost prohibitive for smaller counties.

There is little funding. All of the initiatives thus far have been from the Office of Emergency Preparedness staff and donated studio time from Cox Communications and persons from the deaf action center.

We have a limited capability to reach such people in an emergency, however, we [are] constantly trying to improve and expand the City's capacity to serve people with all forms of disabilities. The primary constraint is directly related to budget, which impacts staffing and the number of programs we can manage and sustain.

More than a third noted lack of sufficient knowledge about the need, or how to implement such a program. Others noted insufficient access to ASL interpreters, lack of cooperation from related agencies, and insufficient access to demographics. Several noted challenges in developing voluntary registries including low participation and low prioritization.

**Going Forward**

The broad range of respondents and their willing participation in the survey indicates a national awareness of the importance of accessible notification. Findings indicate significant differences and gaps in messaging and delivery practices, training and funding, all of which support the need for shared criteria and consistent implementation of universal design considerations within emergency alert systems. Respondents noted greater opportunities for accessible alerting in integrated emergency information systems.

*It would be great if the various communities affected by disabilities would combine with organizations and leaders who want integrated emergency information systems. There are common solutions, but they are not being pursued. I.e. the registration of an attribute for routing messages or invoking special IT treatment could be "deaf" or it could be "hazmat". The use is very different, the underlying plumbing is the same.*

A number of respondents also indicated that the survey itself will influence their work.

*... this survey has led me to seriously think about our position in this regard and do some further investigation into who might have a plan in place that we could duplicate.*

*This survey has spurred interest in checking our policy and procedures and also our equipment capabilities that deal with such notifications.*

*Our agency is hoping to purchase a notification system for emergencies and community notifications. The process has not started yet and with these questions, it has brought many more questions for the RFP to mind. Thank you.*
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For more information and additional reports, we encourage you to visit the Access Alerts Web site at http://ncam.wgbh.org/alerts.