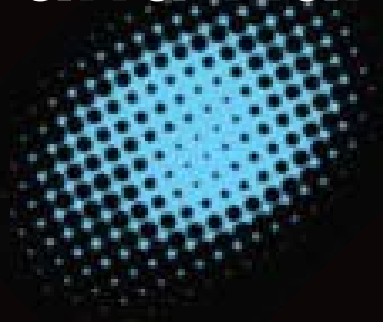

Public Warning: The Top Priority for Deaf and Hard of Hearing Persons



Cheryl Heppner
Executive Director
Northern Virginia Resource Center
for Deaf and Hard of Hearing Persons



MY HATS FOR TODAY:

- Director of Northern Virginia Resource Center for Deaf and Hard of Hearing Persons (NVRC)
- Advocacy Chair of international Association of Late-Deafened Adults
- Vice Chair of national Deaf and Hard of Hearing Consumer Advocacy Network coalition (DHHCAN)
- Supporter of independent living and universal design



PEOPLE WITH DISABILITIES AND EMERGENCY WARNING: WHY IS IT IMPORTANT?

50 million people with disabilities

**Everyone else is a 'TAB'
(Temporarily Able Bodied)**

**Temporary disabilities are common--
broken leg, ear infection, flare-up of
arthritis.**



THE IMPACT IS GREAT

28 million are deaf or hard of hearing

- The stakes are high as the number grows rapidly (baby boomers, noise)**
- Many are parents, caregivers, supervisors with great responsibility (Tom Ridge)**



ACCESS HELPS EVERYONE

- Ramps for wheelchairs are great for people with baby strollers and bicycles
- Pagers/phones that vibrate for deaf and hard of hearing people give a discreet alert to others



HOW EFFECTIVE ARE PUBLIC WARNINGS FOR THE DISABLED COMMUNITY?

The current public warning system gets a failing grade from individuals who are deaf and hard of hearing

Audible information without visible reinforcement of text can be difficult to impossible to understand



SOME CHALLENGES

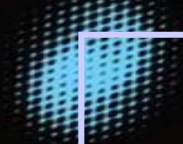
**Radio, TV, telephone, PA system
announcements**

Sirens, smoke detectors

**Cost of specialized telecommunications
equipment and reliance on electricity**

**Wireless telephone options not
uniformly compatible w/hearing devices**





Today's public warning system also poses many problems for individuals with other disabilities – blind and visually impaired, limited upper body movement or mobility.



RESEARCH BY NVRC AND DHHCAN

Deaf and hard of hearing individuals reported a wide range of sources for first receiving information about the emergency

They also reported many different preferences for how they would like to be informed of an emergency



OTHER FINDINGS

Of 62 individuals responding to a 2003 survey by NVRC and Community Resilience Project, 54 felt they did not have the same access to emergency information as people without a hearing disability.

Regardless of the method in which they first learned of an emergency, the vast majority reported that their next step was to turn to television for more information.

Television with captions was cited most frequently as the area in which they most wanted to see improvements for receiving information in an emergency.



NATIONAL RECOMMENDATIONS FOR AN EFFECTIVE EMERGENCY COMMUNICATION NETWORK

A report is now being finalized

An overall vision drives DHHCAN
recommendations



TELEVISION

Turns on when crucial emergency info is broadcast.

Accurate captioning from moment emergency is reported, in realtime.

Accessible via antenna, cable, satellite.

Captioning equipment and phone lines for remote captioning secure from power outages, loss of dial tone.

Captions transmitted in both analog and digital format.

Monitored at all times to be sure feeds and technical problems are eliminated.



TEXT DEVICES

First responders, PSAPs, others immediately transmit and receive emergency messages with complete reliability.

Smart broadcasting of an area's emergency messages to devices with location-finding (GPS or terrestrial) within the area, regardless of residence or where device account was set up.

Devices have features such as Braille and large print capability, backlit displays and keys.

Devices and messaging systems are user-friendly, with easy battery replacement and simple steps to receive and send information.



RADIO

Digital radio fully developed, with ability to send emergency text to radio displays, and such transmission mandated.

Radio display turns on automatically.

Weather radios broadcast non-weather emergency information, not just for preparation but during and in the aftermath of an emergency, equal to all voice information.

Radios with displays available as standard equipment on all new vehicles; aftermarket add-ons available at low cost for older vehicles.

Ability to utilize other vehicle text displays, e.g. Toyota Prius screen: OnStar with text display.



PUBLIC DISPLAYS

Buses, subways, airplanes, trains, other transportation options have audio announcements with simultaneous text display; also in their stations, airports, terminals and on highway message boards for those in personal vehicles.

Highway emergency call boxes, weigh stations, rest areas, etc. are equipped with latest technology to provide updates.

Text display signs provide thorough information on the nature of an emergency and instructions on actions to take.



Telephone Communication

- Compatibility/interference problems solved.
- Specialized equipment developed to offer longer battery life or ability to use common off-the-shelf batteries.
- Emergency personnel fully trained to take calls from various telephone options.
- R-9-1-1 widely available, able to send messages in format best received by individuals who are deaf or hard of hearing.
- Text telephone and messaging communication given the same level of priority as voice communication.



Telecommunication Relay Services

All TRS providers have backup power for minimum 72 hours, contingency plans to transfer calls from centers unable to operate due to catastrophic damage or volume of calls.

TRS given priority for restoration by carriers.

TRS staff named essential personnel.

Emergency calling databases accurate and frequently updated.



Internet

Live video streaming of news with highly accurate, verbatim captioning.

VoIP features readily accessible to deaf and hard of hearing persons and remain operable and effective.

Internet relay services have location identification and 9-1-1 access, secure system in place to prevent interruption.

Pop-up alerting software prioritized to allow emergency messages override of user settings and pass through.



WHAT IS NEEDED #1

Make these recommendations a reality, using the guiding principle of K.I.S.S.



WHAT IS NEEDED #2

Continue development of standards for features to meet the requirements of individuals with disabilities



WHAT IS NEEDED #3

Involving individuals with a wide range of disabilities in **EVERYTHING**, from the idea stage –

Product and service development, design, testing, instruction materials, marketing, trouble shooting



Cheryl's Law

Retrofitting or adapting equipment that has already been designed without taking into account needs of individuals with disabilities, or trying to modify a program or service after it is already set up, is always more expensive and rarely as effective.



WHAT IS NEEDED #4

Education

- Industry
- Service providers
- Public



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