

Emergency Preparedness for the Deaf

Linda Gelzer

Tornado This Month

- Tornado siren
- Resident Advisor
- Hallmates
- Emergency Texts
- Emails



For the Deaf...



More Vulnerable During Emergencies

More likely than hearing people to:

- Lose property
- Be injured
- Die



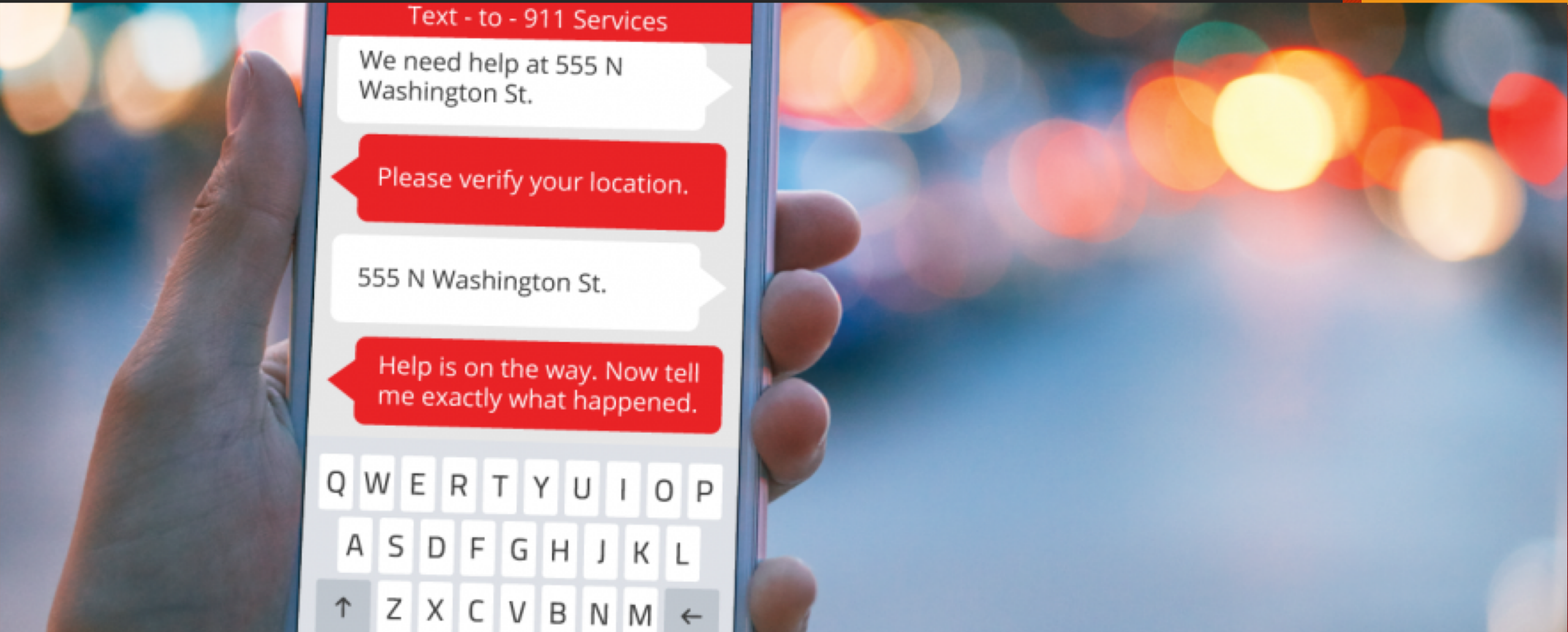
Technology Unusable for Some

- Power outages
- Other disabilities
 - Deaf-blind
 - Other physical

Tannenbaum-Baruchi, Off-the-Grid Missions



Text-to-911 Services



Text - to - 911 Services

We need help at 555 N Washington St.

Please verify your location.

555 N Washington St.

Help is on the way. Now tell me exactly what happened.

Q W E R T Y U I O P

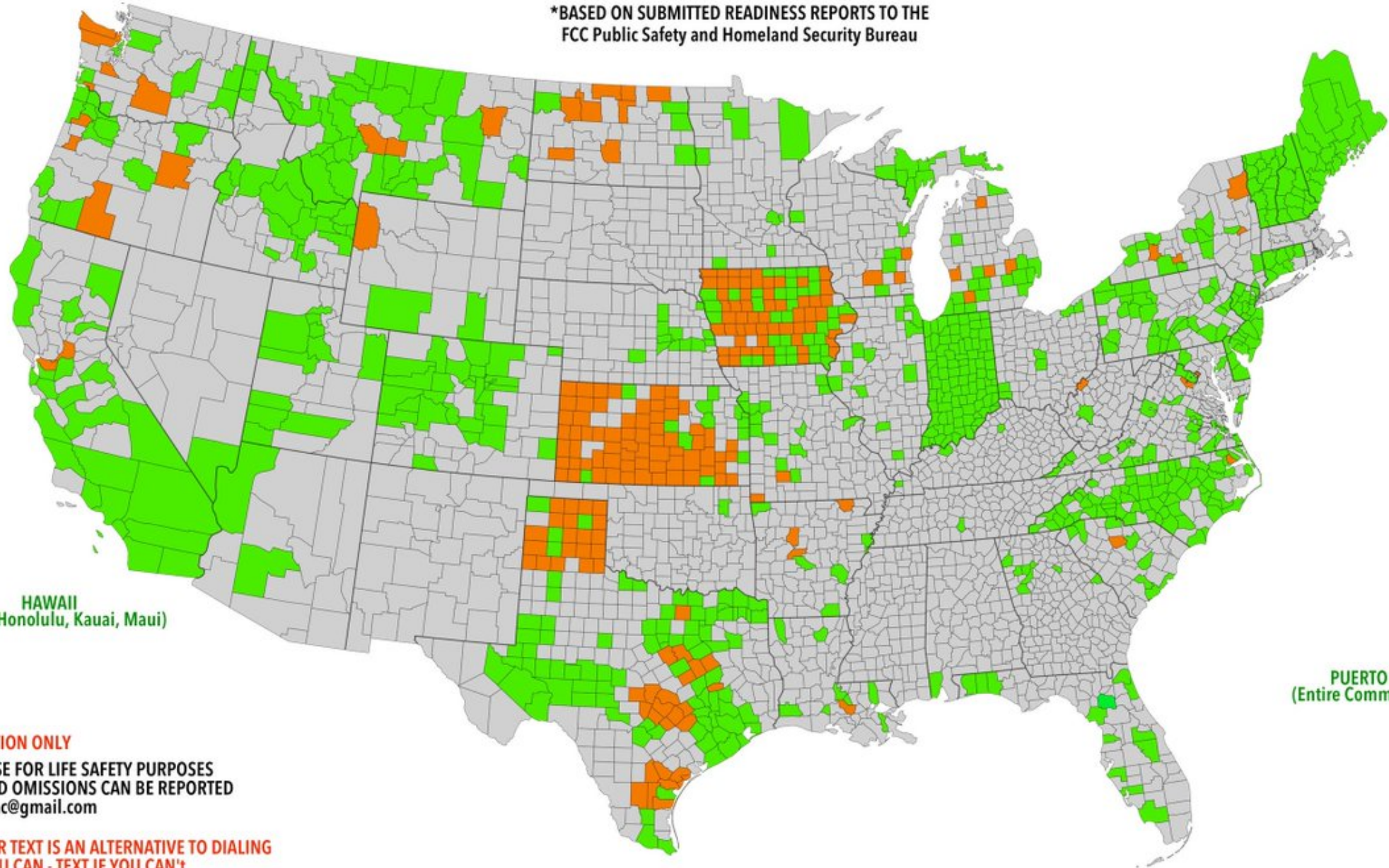
A S D F G H J K L

↑ Z X C V B N M ←

August 6, 2018

TEXT TO 9-1-1
PSAP READINESS REPORT - **CURRENT** and **FUTURE**
BY COUNTY AS OF June 6, 2018*

*BASED ON SUBMITTED READINESS REPORTS TO THE
FCC Public Safety and Homeland Security Bureau



HAWAII
(Hawaii, Honolulu, Kauai, Maui)

PUERTO RICO
(Entire Commonwealth)

INFORMATION ONLY

DO NOT USE FOR LIFE SAFETY PURPOSES
ERROR AND OMISSIONS CAN BE REPORTED
TO jbbymac@gmail.com

REMEMBER TEXT IS AN ALTERNATIVE TO DIALING
CALL IF YOU CAN - TEXT IF YOU CAN'T

Potential Reasons

- Diversity
- Failure to plan
- Insufficient programs
- Lack of information distributed
- Inadequate training

Deaf Population in America

- 48 million
- 1/20 or 5%
- Diverse
- Some methods of communication:
 - American Sign Language
 - Manually Coded English
 - Spoken English



American Sign Language (ASL)

- Definition from the North Carolina Division of Services for the Deaf and Hard of Hearing:
 - “A fully developed autonomous, natural language with a unique grammar, syntax, vocabulary, and cultural heritage”
- Not based on English
- Used by Deaf people in the United States and Canada



Manually Coded English (MCE)

A category of communication systems that includes several specific varieties

Borrows vocabulary from ASL

Uses these signs with English grammar

Spoken English

- Speechreading/lipreading
 - Under ideal conditions, 30% can be understood
- Residual hearing
- Hearing aids or Cochlear Implants
 - Not normal hearing
 - Dependent on the individual



One size
does **NOT**
fit all.



Failure to Plan

- 55 emergency preparedness plans nationally
- 31% mention Deaf and hard of hearing (D/HH)
- Inadequate planning



Insufficient Programs

Number of emergency preparedness programs in the United States: 15

- For the deaf: 7
- For emergency responders working with the deaf: 5
- For government agencies: 4
- For ASL interpreters: 2
- For deaf-blind citizens: 1

Lack of Information Distributed

- No published documents
- Organizations for the D/HH
 - Only 36% gave information



Inadequate Training

Emergency management agencies:

- 1 out of 2 offered training about D/HH



Improvements

- Apps instead of emergency calls
- Training
- Other private organizations

Apps to Call 911

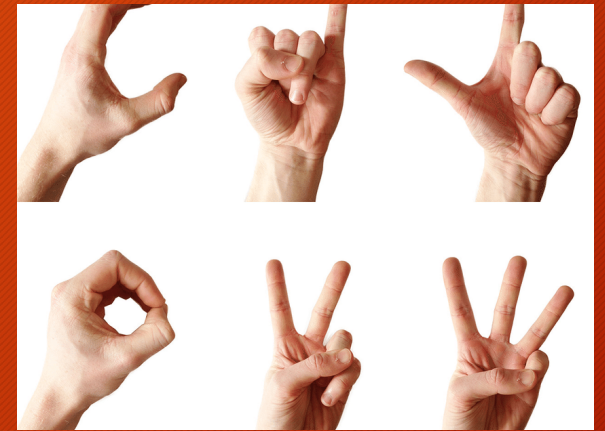
- RapidSOS
- Not designed specifically for D/HH
- Mentions equal access for D/HH in blog post
- Not helpful for those without a smartphone



Training for Law Enforcement

Palm Beach, Florida:

- ASL signs
- Fingerspelling
- Videophone use
- Picture cards



Training for the Deaf

Seattle, Washington

- Preparation for emergency situations
- Communication during those situations

This interactive workshop will be for anyone who wants to know more about how to prepare for different types of emergency situations and how to communicate with others that may not know sign language.

SATURDAY, MARCH 7, 2020
6 - 8 PM

HSDC

HANNAH GRUNBAUM CONFERENCE ROOM

1625 19TH AVE
SEATTLE, WA 98122

- LIGHT REFRESHMENTS WILL BE PROVIDED -

Please RSVP and contact Devin Myers at 206-428-3068 or dmyers@hsrc.org for reasonable accommodations or other considerations by February 25th 2020.

HSDC
Hearing, Speech & Deaf Center

hsrc.org

WASILC
Washington State Independent Living Council

EMERGENCY MANAGEMENT & PREPAREDNESS WORKSHOP

with Jim House,
Disability Integration
Manager CIEP



Training at Gardner-Webb University

- ASL Club
- For those who do not know ASL
- To communicate with ASL users
- Teach emergency signs
- 2 this year
- 2 next year

Emergency
Signs



WORKSHOP

C.E.T.L. Office in Dover Library

Thursday, October 10 @ 9:25 a.m.

Other Private Organizations

- International Deaf Emergency
- YouTube channels for information in ASL



Remaining Problems

- No one-size-fits-all solution
- Remember the diversity
- Access is rarely universal
- No system is perfect



Specific Issues

- Unequal information through different mediums
- Literacy problems
- Technology inaccessible for some

Unequal Information Through Different Mediums

Potential Mediums:

- Captioning
- Emergency text alerts
- Sign Language Interpretation

Problems with Mediums:

- Delayed
- Incomplete
- Just summarizing
- Unclear/confusing
- Not shown on TV screen
- Missing altogether
- Too small to see
- Not evaluated for success

Another kind of “access”

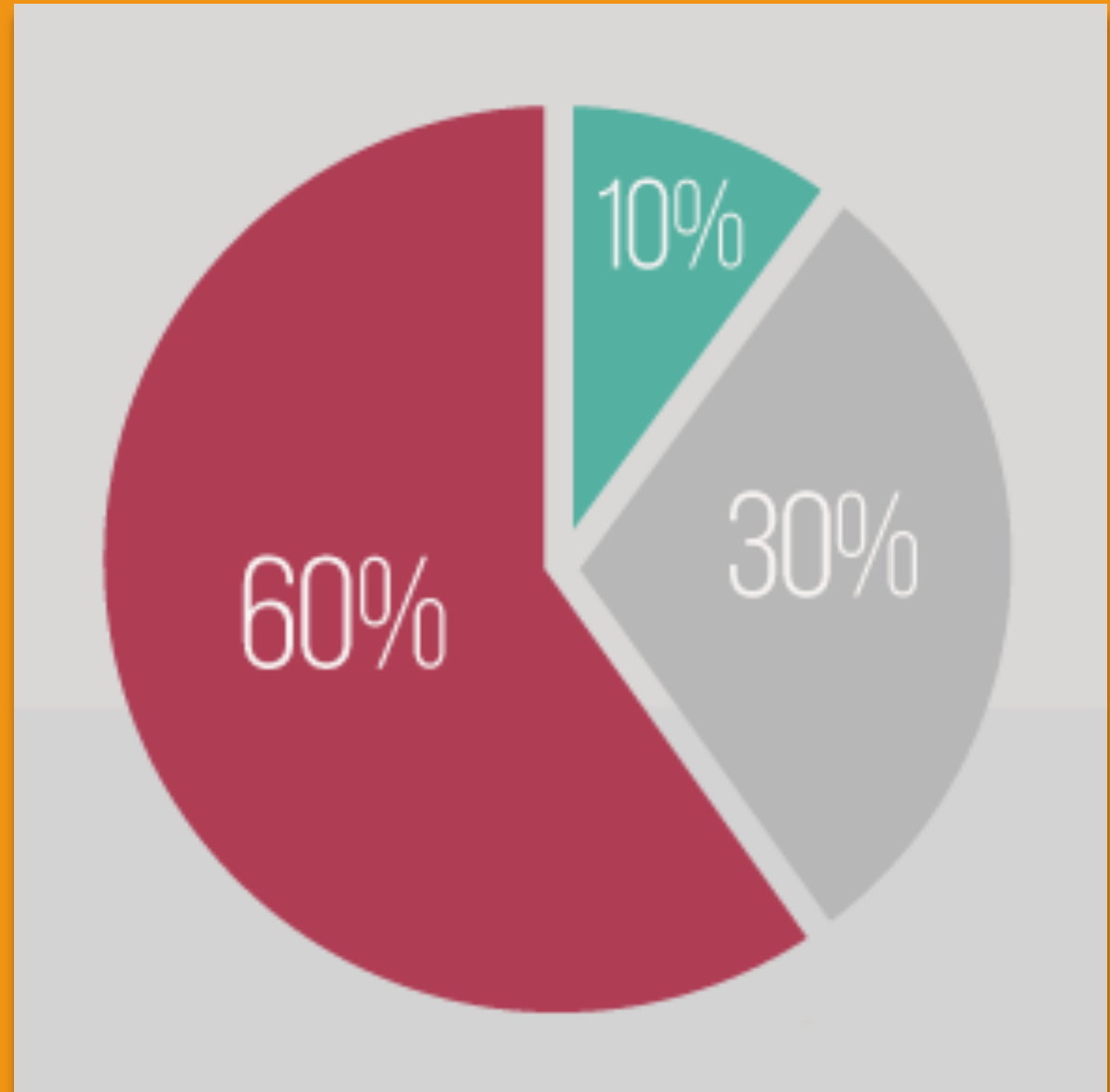
- Manatee County, Florida
- Hurricane Irma
- Unqualified and unprofessional interpreter
- “Pizza want you are. Need be bear monster.”



International Adult Literacy Survey

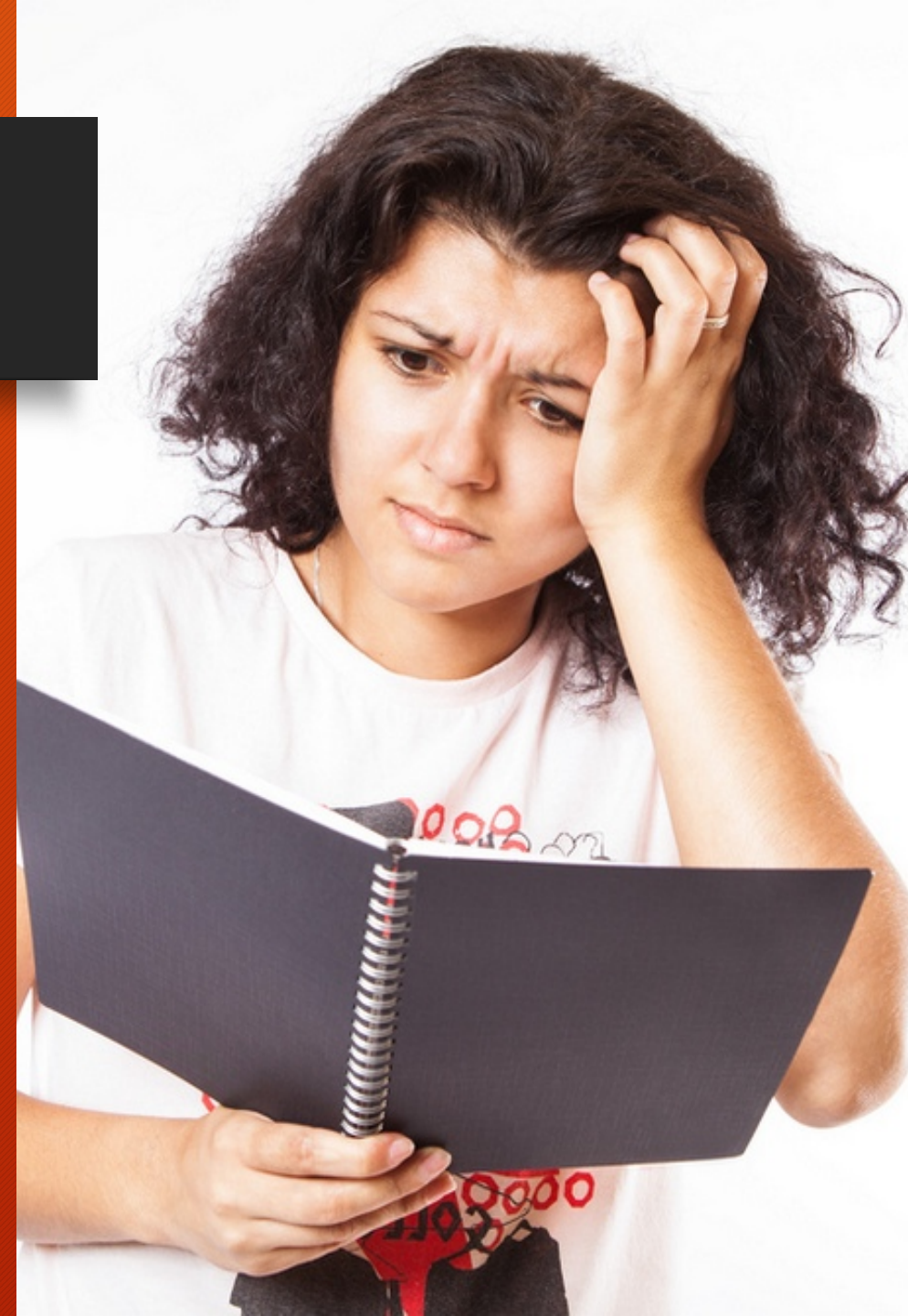
Deaf Adults in the US:

- 60% fluent in ASL but not written English
- 30% not fluent in either
- 10% fluent in both



Reading Level

- Average Deaf reading level: 4th grade
- Average hearing reading level: 8th grade
- Emergency preparedness material: 11th grade



Use of Certified Deaf Interpreters (CDI's)

- Certified Deaf Interpreters
- Education level/vocabulary
- Other signed communication methods



Goal: Redundancy

- *“Emergency communication systems should be ‘redundant’ - the message should be sent out to as many people and in as many formats as possible.”*
- *The National Association of the Deaf*

Works Cited

- “Access to 911 Emergency Services.” National Association of the Deaf, 27 Aug. 2018, www.nad.org/resources/technology/access-to-911-emergency-services/.
- Bridgett, Tiffany. Emergency Management Systems Neglect Deaf Citizens. YouTube, Lydia Callis, 6 Nov. 2017, www.youtube.com/watch?v=u_Cwc5E9bDk.
- Cahn, Michelle. “Spotlight Partner Edition: CHC.” RapidSOS, 3 Aug. 2016, info.rapidsos.com/blog/spotlight-partner-edition-chc.
- Camp, Cindy. “Modes of Communication.” *Jacksonville State University*, www.jsu.edu/depart/dss/resource-vr/communication.html.
- “Communication Options for a Child Who Is Deaf or Hard of Hearing.” *California Department of Social Services*, www.cdss.ca.gov/cdssweb/entres/pdf/ODA/CommunicationOptionsDHOH_Child.pdf.
- “Communicating With Deaf Individuals.” *National Deaf Center on Postsecondary Outcomes*, 2019, www.nationaldeafcenter.org/sites/default/files/Communicating%20with%20Deaf%20Individuals.pdf.

- Ellenbogen, Romy. "When Words Fail: Police Try to Bridge Gap with county's Deaf Residents." ProQuest, May 24, 2018, <http://ezproxy.gardner-webb.edu/login?url=https://search.proquest.com/docview/2063650284?accountid=11041>.
- "Emergency Preparedness." National Association of the Deaf, 2018, www.nad.org/resources/emergency-preparedness/.
- Engelman, Alina, et al. "Responding to the Deaf in Disasters: Establishing the Need for Systematic Training for State-Level Emergency Management Agencies and Community Organizations." BMC Health Services Research, vol. 13, 2013, pp. 84. ProQuest, <http://ezproxy.gardner-webb.edu/login?url=https://search.proquest.com/docview/1347003493?accountid=11041>, doi:<http://dx.doi.org/10.1186/1472-6963-13-84>.
- Friedmann, Daniela, et al. "Prehospital and Disaster Medicine Volume 23 (2008) Author and Subject Index." Prehospital and Disaster Medicine, vol. 23, no. 06, 30 Oct. 2008, pp. 438-446., doi:10.1017/s1049023x00006427.
- Gaul, Kaileen. "Florida Sign Language Interpreter Called out for Gibberish." *Daily Mail Online*, 15 Sept. 2017, www.dailymail.co.uk/news/article-4890014/Sign-language-interpreter-called-gibberish.html.
- Gannon, Jack R, et al. *Deaf Heritage : A Narrative History of Deaf America*. National Association of the Deaf, 1981.

- Ivey, Susan L et al. “Assessment of state- and territorial-level preparedness capacity for serving deaf and hard-of-hearing populations in disasters” Public health reports (Washington, D.C. : 1974) vol. 129,2 (2014): 148-55.
- Mitchell, Ross E. “How Many Deaf People Are There in the United States? Estimates From the Survey of Income and Program Participation.” Journal of Deaf Studies and Deaf Education, vol. 11, no. 1, 21 Sept. 2005, pp. 112-119., doi:10.1093/deafed/enj004.
- Neuhauser, Linda et al. “Availability and readability of emergency preparedness materials for deaf and hard-of-hearing and older adult populations: issues and assessments” PloS one vol. 8,2 (2013): e55614.
- Off-the-Grid Missions. Deaf & Hard-of-Hearing in PUERTO RICO Need Help. YouTube, AngelamariaOTG, 11 Oct. 2017, www.youtube.com/watch?v=gwtsMkgt5Nw.
- Snow, Shane. “This Surprising Reading Level Analysis Will Change the Way You Write.” *Contently*, 28 Jan. 2015, contently.com/2015/01/28/this-surprising-reading-level-analysis-will-change-the-way-you-write/.
- State of North Carolina. “Communication Methods Used by Individuals Who Are Deaf or Hard of Hearing.” *N.C. Division of Services for the Deaf and Hard of Hearing*, Apr. 2015, files.nc.gov/ncdhhs/documents/files/Communication%20Methods%20Used%20by%20Individuals%20Who%20are%20Deaf%20or%20Hard%20of%20Hearing.pdf.
- Tannenbaum-Baruchi, Carolina et al. “Emergency situations and deaf people in Israel: Communication obstacles and recommendations” *Disaster health* vol. 2,2 106-111. 31 Dec. 2014, doi:10.4161/21665044.2014.989131