



# Emergency Communication for the Hard of Hearing, Deaf and Deaf-Blind Populations

Ijeoma Agulefo, MPH  
Emergency Communication System, CDC,  
Atlanta, GA



**SAFER • HEALTHIER • PEOPLE™**



# Objectives of this Session



- To explain the different levels of deafness and cultural implications
- To explain the need to tailor emergency messages to suit the Deaf community
- To show the CDC Emergency Communication System's (ECS) response to this community's need

**SAFER • HEALTHIER • PEOPLE™**



# Deafness

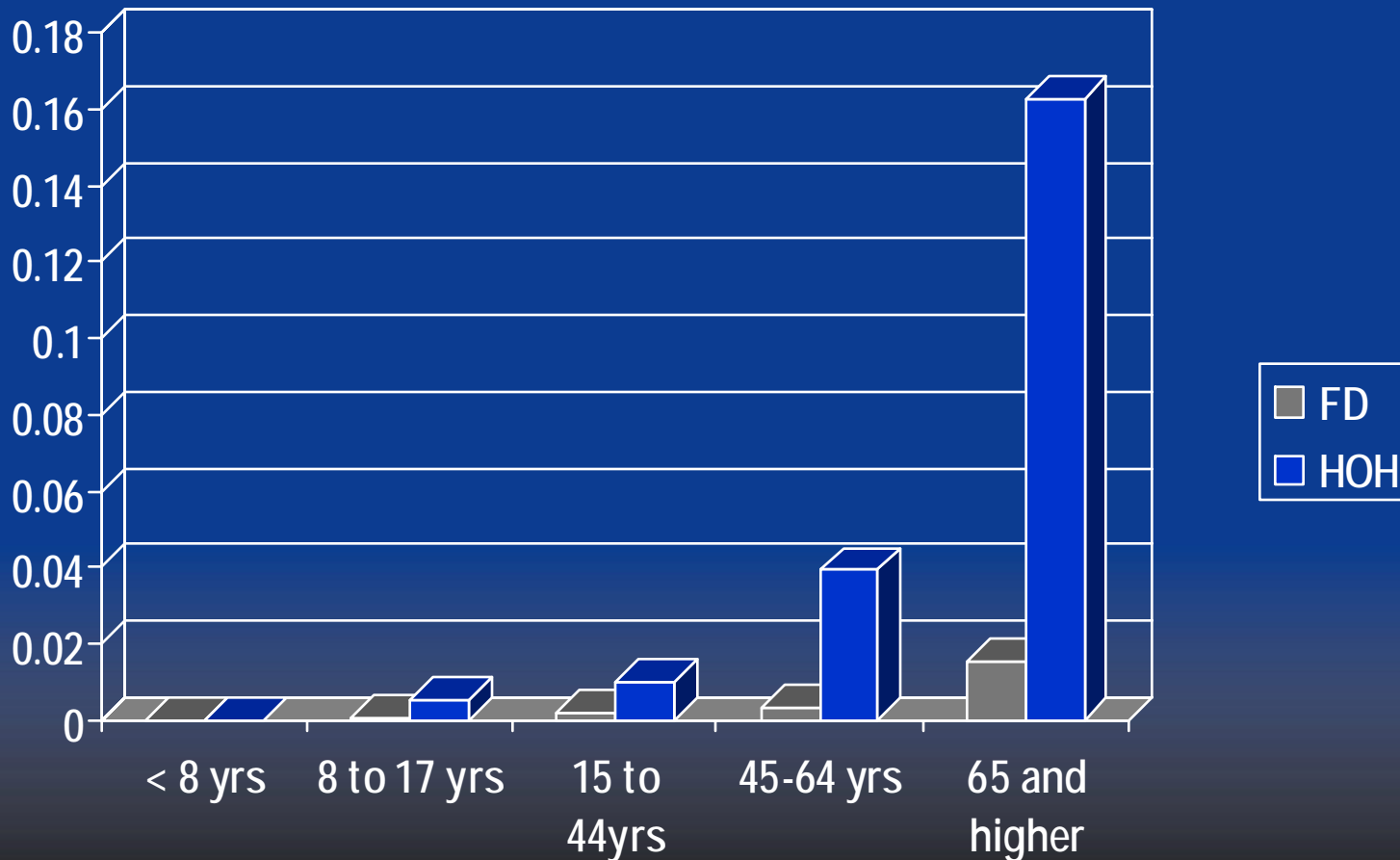


- Deaf-Complete loss of Hearing
- Hard of Hearing-Some hearing loss and use of hearing aid is helpful
- Late-Deafened-Become deaf later in life (Elderly population)
- Deaf-Blind-Combination of hearing and vision loss (varying degrees)

**SAFER • HEALTHIER • PEOPLE™**



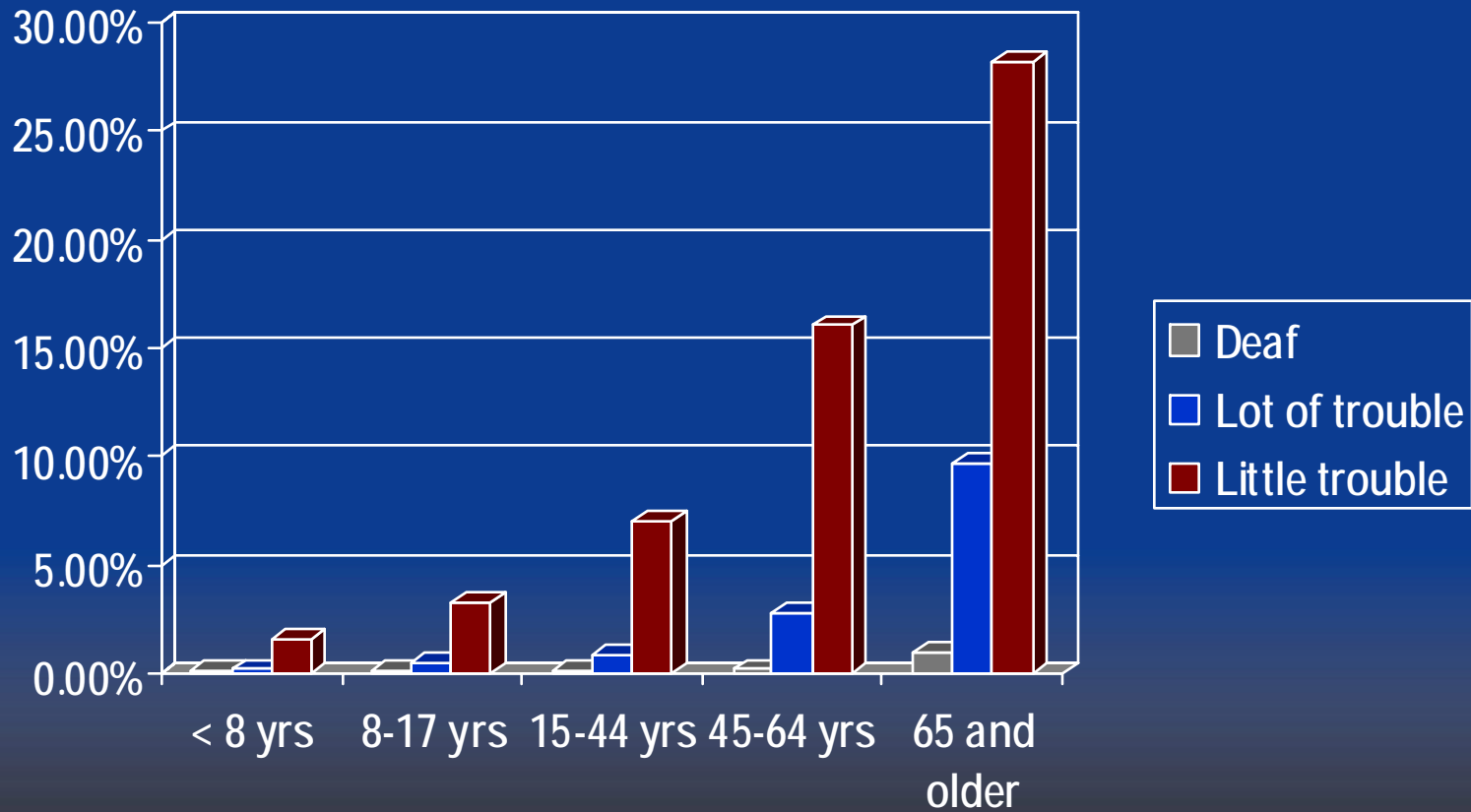
# Percentage of persons who report difficulty hearing normal conversation by age group in US, 2002 (GRI, 2005)



**SAFER • HEALTHIER • PEOPLE™**



# Percentage of persons who report some level of hearing trouble by age group in US, 1997-2003 (GRI, 2005)



**SAFER • HEALTHIER • PEOPLE™**



# Deaf Culture

- *Deaf* refers to a particular group of deaf people who:
  - Share a language: American Sign Language (ASL)
  - Share a culture
- *deaf* refers to the audiological condition of not hearing

**SAFER • HEALTHIER • PEOPLE™**



# Why is it so important to reach out to the Deaf during an emergency?



- Hearing loss has a major impact on communication in emergencies
- September 11/01 and Hurricane Katrina exposed many glaring weaknesses in the preparedness infrastructure
- DHHCAN and NVRC Survey (2003)

**SAFER • HEALTHIER • PEOPLE™**



# Why is it so important to reach out to the Deaf during an emergency?



- DHHCAN and NVRC Survey Goals:
  - Qualify and quantify problems encountered by deaf and hard of hearing persons
  - Ascertain extent of the problems
  
- DHHCAN and NVRC Survey Major Finding:
  - The Deaf need accessible and effective communication during an emergency

**SAFER • HEALTHIER • PEOPLE™**





# What is ECS?

- An all-hazards response unit comprised of 11 teams with resources and structures to provide emergency information through appropriate channels and to multiple audiences.

**SAFER • HEALTHIER • PEOPLE™**



## Community Health Outreach and Education Team (CHET)



- Works directly with affected communities to identify & address specific needs
- Assures messages are accessible to key audiences
- Provides emergency translation services
- Develops and maintains communication channels with Faith-based, Community-based and non-for profit orgs for message dissemination.

**SAFER • HEALTHIER • PEOPLE™**



# Developing Emergency Messages for the Deaf, HOH and DB



- ECS formed a workgroup: Deaf, Hard of Hearing and Deaf-blind (DHHDB) Workgroup
- Purpose:
  - To seek guidance on how to develop emergency messages that would be suitable for deaf, hard of hearing, late-deafened and deaf-blind populations.

**SAFER • HEALTHIER • PEOPLE™**



# Developing Emergency Messages for the Deaf, HOH and DB



- DHHDB includes an array of external partners; specialists working in the Deaf Community:
  - Atlanta Area School for the Deaf (AASD)
  - Georgia Council for the Hearing Impaired (GACHI)
  - Postsecondary Education Programs Network (PEPNet)
  - Helen Keller National Center (HKNC)
  - American Association of the Deaf-Blind (AADB)

**SAFER • HEALTHIER • PEOPLE™**



# Translating Messages into American Sign Language (ASL)



- Workgroup recommended translation of emergency messages to ASL to reach Deaf community
- ECS and NCEH identified 10 Public Service Announcements (PSAs) related to EH emergencies to translate into ASL.
- PSAs were tailored to suit the Deaf population



**SAFER • HEALTHIER • PEOPLE™**



# Translating Messages into American Sign Language (ASL)



- May 2007, 10 emergency messages were signed in ASL using Deaf and Hearing ASL interpreters
- ASL pilot video clips were taped-available with feedback form at <http://emergency.cdc.gov/disasters/hurricanes/psa.asp>
- Each video clip includes voice over and written script



**SAFER • HEALTHIER • PEOPLE™**



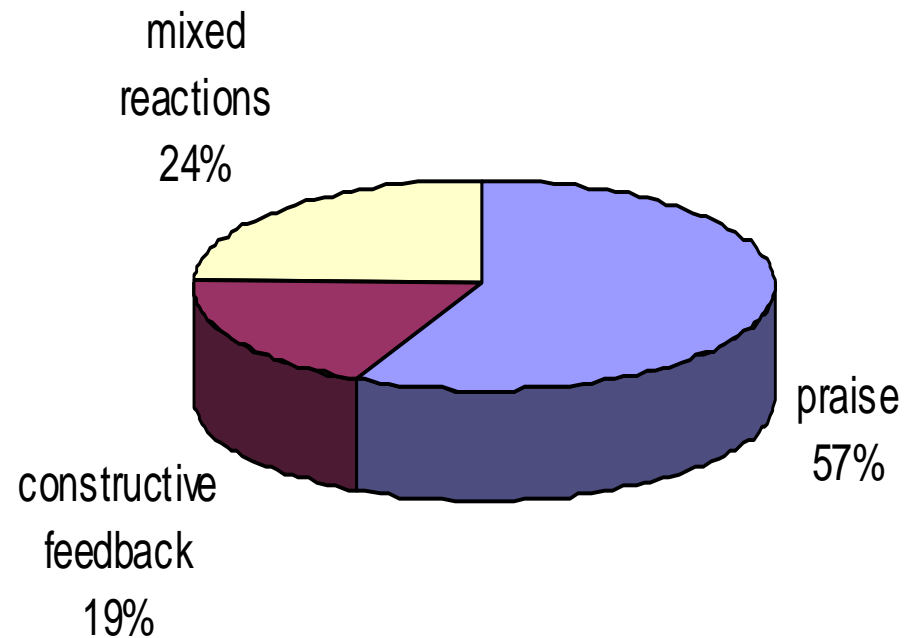
# Evaluation

- Focus Groups to be conducted by AASD
- Groups will include members of:
  - the big 'D' Deaf community
  - the little 'd' deaf community
- The participants will range in age from 18 years old to 50+ and include wide range of ethnicities and educational backgrounds.

**SAFER • HEALTHIER • PEOPLE™**



# Feedback on ASL Video Pilot Project (94 comments as of 10/26/07)



**SAFER • HEALTHIER • PEOPLE™**





# Feedback on ASL Pilot Project



## ➤ Quotes on CDC Website:

- *Thank you for thinking to interpret these messages into sign language.*
- *I watched all the ASL videos. Thank you. They are very clear, and explained the information in an easy to understand way. I sent this information on to deaf friends.*
- *Absolutely fantastic. the guy did AWESOME job interpreting. i understood everything!*
- *Very nicely done. May want to consider captioning this video as well, because not every deaf/hard of hearing person is fluent in sign language. Good work.*

**SAFER • HEALTHIER • PEOPLE™**



# Recommendations

- To Caption or not to Caption-That is the question!
  - Will caption current and next videos-in response to feedback and to meet 508 compliance
- Change background and shirt color of interpreter to suit Deaf-Blind
- More facial expressions from interpreter
- Add visual imagery to ASL translation

**SAFER • HEALTHIER • PEOPLE™**



# Topics for next set of ASL video clips



- Pandemic Flu: vaccination and use of face masks and respirators
- Coping with Traumatic Events
- Mass Casualties
- How to develop a Disaster Kit
- How to prepare for Wildfires

**SAFER • HEALTHIER • PEOPLE™**



# Acknowledgements

- External Partners
  - Faith Powell (AASD)
  - Elizabeth Spiers (AADB)
  - Monika McJannet Werner (HKNC)
  - Tom Galey (GACHI)
  - Katherine Bruni (PEPNet)



**SAFER • HEALTHIER • PEOPLE™**



# Questions and Suggestions?????



- Primary contact person:
  - ◆ Ijeoma (EJ) Agulefo, MPH at [iaa1@cdc.gov](mailto:iaa1@cdc.gov) or 404-639-2653

**SAFER • HEALTHIER • PEOPLE™**