



Improving Accessibility to Internet-based Public Health Information for Deaf Americans Matthew Starr, MPH; Christopher Lehfeldt, DDS; Colleen Evenstad, MS; Christina Kelley, CI/CT; Thomas Coughlan, MS; Greg Livadas, BS

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Background

The Internet is a growing medium for disseminating public health information, especially emergent situations. However, this type of dissemination have overlooked Deaf Americans who communicate primarily in American Sign Language (ASL).

- ▶ Spring 2009: Public notifications during H1N1 outbreak did not effectively reach Deaf ASL Users:
- Radio was not an option
- Captioning and printed media were partially effective
- No video-based ASL information was available
- ► March 2011: Snapshot search of accessible websites (excluding H1N1
- Accessible website: ASL videos and/or videos with captioning
- Used MacBook with Safari browser
- Five large state/city public health agencies
- Search key words used: "translate." "video." "American Sign Language" or "ASL," and "captioning"

	Translations Available	ASL Videos	Captioned Videos
Website #1	No	No	Yes. Unable to view: Unknown Player Type
Website #2	Yes, 30+ spoken languages	No	No
Website #3	Yes, Spanish only	No	No
Website #4	No	No	Yes. Could not be launched
Website #5	No	No	No

Internet-based ASL videos lauded by the Deaf Community

- NCDHR produced 22 H1N1 Vlogs (Video Blogging)
- Seasonal Flu Videos in ASL (CDC)
- ASL Video about a published article from PCD (CDC)



What can you do to minimize the risk of getting exposed to swine flu?



guidances at the CDC



Landmark ASL adaptation of CDC's Preventing Chronic Disease article (March 2011)

American Deaf Community

How many Deaf ASL Users in the U.S.?

- ▶ Approximately 17% (36 million) of American adults report some degree of hearing loss (www.nidcd.nih.gov)
- ▶ Approximately 360,000 to 517,000 are Deaf Americans who use ASL (www.research. gallaudet.edu)

Captions

ASL

Fluent

A person here will

tend to rely on ASL

American Sign Language is...

- A language not based on sound
- A visual-gestural language created by Deaf people
- A fully developed, natural language with no grammatical relationship with English
- Competence is ASL is a hallmark of Deaf ethnicity (Lane, H. Ethnicity, Ethics, and the Deaf-World. J. Deaf Stud. Deaf Educ. (Summer 2005) 10 (3): 291-310

Continuum of Bilingualism

Above Average English Skills Below Average English Skills *

* The average deaf individual has lower literacy skills than the average hearing person due to their limited exposure to an accessible language, educational issues, and other complex factors. However, the intelligence range of deaf individuals is identical to that of the hearing population. Therefore, the limited literacy skills of the average deaf individual is a reflection of their educational and language exposure experiences, not their intelligence.

A person here mostly on

Limited Langua

A person here will tend

to have limited language

proficieny

Recommendations

▶ The Internet is an effective media to inform the Deaf community about any public health issues and/or advisories

Policy

"The national standard set should include sign language(s)." Institute of Medicine (Race, Ethnicity, and Language Data: Standardization for Health

▶ 21st Century Communication and Video Accessibility Act (October 8,

Newly enacted federal law to ensure accessibility, usability, and affordability

• Improving access to services for persons with Limited English Proficiency

U.S. Attorney General reaffirmed this order Feb. 17, 2011

for citizens with disabilities of broadband, wireless, and Internet technologies

Care Quality Improvement, Recommendation 4.3, page 119)

► Acceptances of signed language(s) in the U.S.

▶ Presidential Executive Order 13166

- ▶ Internet-based information should be provided in both video-based ASL and captioning
- ► Collaborate with local Deaf organizations to assist your agency with ASL-English translations. Look for your local resources:
- Universities & colleges that offer ASL classes/Deaf Studies
- State agencies and/or commissions for Deaf & Hard of Hearing people
- Deaf clubs and/or churches
- ► Contact NCDHR for technical assistance ncdhr@urmc.rochester.edu

▶ Recommended Readings:

- Pollard R, Dean R, O'Hearn A, Haynes S. (2009). Adapting health education material for deaf audiences. Rehabilitation Psychology; 54(2), 232-238. http://www.ncbi.nlm.nih.gov/pubmed/19469615
- Barnett S, McKee M, Smith SR, Pearson TA. Deaf sign language users, health inequities, and public health: opportunity for social justice. Prev Chronic Dis 2011; 8(2). http://www.cdc.gov/pcd/issues/2011/mar/10 0065.htm.

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- Videophones (See FCC chart & picture below)
- Vlogs
- Smartphones with Facetime, etc.
- Social Media Networks (Facebook, YouTube, Twitter, etc.)
- Skype, ooVoo, iChat, Z4, P3, etc.







