Reaching People with Disabilities: Wireless Emergency Alerting and Accessibility

Georgia Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults

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Research Projects
Why?

- Emergency information is critical
- FCC requires disability access to warn the public
- 91% of American adults own a cell phone (Pew Research)
- 95% of people with disabilities use wireless products (our survey)
- Many U.S. federal and state websites are inaccessible
- Information is posted online on websites or social media platforms
Accessible WEA Messages
Wireless Emergency Alerts (WEA)

- Sent to your cell phone
- Appear as child abduction, weather emergencies, or presidential alerts
- No need to subscribe
- The messages are free
- 90 character limit
- Does not include internet links
Wireless Emergency Alerts (WEA), Part 2

**AMBER Alert**
Acworth, GA AMBER Alert: LIC/ (GA) White Range Rover

**Severe Alert**
Flash Flood Warning this area til 3:15 AM EDT. Avoid flood areas. Check local media. -NWS

Emergency Alert
Flash Flood Warning this area til 3:00 AM EDT. Avoid flood areas. Check local media. -NWS
2014 Survey

- The purpose of the survey is to assess awareness, use, and subsequent protective action after receipt of a WEA message.
- Over 1800 respondents
- 18% persons with disability
- 24% caregiver for person with disability

<table>
<thead>
<tr>
<th>Participant Profile</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,830</td>
</tr>
<tr>
<td>With Disability</td>
<td>321</td>
</tr>
<tr>
<td>Caregivers</td>
<td>202</td>
</tr>
<tr>
<td>Age Range</td>
<td>18-92</td>
</tr>
<tr>
<td>Average Age</td>
<td>50</td>
</tr>
</tbody>
</table>
WEA Survey Highlights

- No previous knowledge of WEA*
- Learned about WEA after receipt of message
- Took protective action after receiving alert
- Alert not applicable
- WEA messages are an improvement over other forms of alerts

*p-value less than .05
## Additional Features (all respondents)

<table>
<thead>
<tr>
<th>Feature</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icons, graphics, and maps</td>
<td>1150</td>
<td>73%</td>
</tr>
<tr>
<td>Internet Link</td>
<td>1056</td>
<td>67%</td>
</tr>
<tr>
<td>Live Video/Audio Streaming</td>
<td>651</td>
<td>41%</td>
</tr>
<tr>
<td>ASL</td>
<td>178</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>151</td>
<td>9%</td>
</tr>
</tbody>
</table>
## Top 4 sources for alerts

<table>
<thead>
<tr>
<th>GENERAL POPULATION</th>
<th>PEOPLE WITH DISABILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Email – 30%</td>
<td>1. Email – 14%</td>
</tr>
<tr>
<td>2. Subscription-based Emergency Text – 26%</td>
<td>2. Television – 13%</td>
</tr>
<tr>
<td>3. Television 25%</td>
<td>3. Social Media – 11%</td>
</tr>
</tbody>
</table>

24% did not receive alert from another source

9% did not receive an alert from another source
The purpose of the survey is to assess awareness, use, and subsequent protective action after receipt of a WEA message.

- 1334 respondents
- 55% persons with disability
  - 18% caregiver for person with disability

### Participant Profile

<table>
<thead>
<tr>
<th>decrypt</th>
<th>1334</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Disability</td>
<td>55%</td>
</tr>
<tr>
<td>Caregivers</td>
<td>16%</td>
</tr>
<tr>
<td>Age Range</td>
<td>19-94</td>
</tr>
<tr>
<td>Average Age</td>
<td>51</td>
</tr>
</tbody>
</table>
Alert Authorities Use of WEA

- 139 respondents of 425 alert authorities.
- 68% county-level representation.
- Multiple Regions
  - Rural, suburban, urban or coastal.
- 91% public information non-accessible.
- 7% send messages in another language.
Alert Authorities Use of WEA

- Prepared after IS-247.a courses?: 27.4%
- Practice sending out WEA messages?: 58.9%
- Sent an actual WEA message?: 91.8%
Other Methods Used to Disseminate Public Alerts

- Accessible subscription-based...
- Other
- Loudspeaker
- Apps on Smart phone
- Word of mouth
- Email
- Sirens
- Landline phone call
- Subscription-based emergency...
- Television
- Radio
- Websites
- Social Media
The Paradigm has Changed
WEA Findings (public)

• Barriers to access were similar among people with and without disabilities

• WEA messages are an improvement over other means of emergency alerts

• Prior to taking our survey not everyone was aware of WEA

• Additional features are needed

• Social media is increasing in importance among people with disabilities

• No significant difference between the groups regarding protective action
WEA Findings (Alert Authorities)

• Majority of authorities are not using IPAWS for WEA
  • Require additional training
  • Would like the ability to test the system
• Additional features are required
• Significant rise in the use of Websites and Social Media for alerting
• Often not considering the needs of people with disabilities for alerting
For More Information

- **Handouts online** ([www.cacp.gatech.edu](http://www.cacp.gatech.edu))
  - 12 Considerations for Accessible Emergency Communications
  - Common Misconceptions Regarding People Who are Deaf and Rely on ASL
  - Accessibility Guidelines for Print and Electronic Documents
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