



Vote YES

SB25-031

Single Point of Contact Wireless Services

Sen. Roberts, Rep. Velasco, Rep. Soper

The Problem:

- In emergencies, non-English speakers may struggle to respond effectively due to a lack of clear emergency alerting information. In Colorado, where natural disasters pose serious threats, this can be life-threatening. All Coloradoans deserve to access emergency alerts they can respond to.
- Colorado Emergency Alerting often depends on **opt-in systems**, but **participation rates in some communities are below 40%**. This means many individuals miss crucial information when it matters most.



In CO: Over 40 languages are spoken & nearly 1 million residents speak a language other than English at home.

This bill will enhance emergency alerting systems to improve accessibility for individuals with disabilities, ensuring that alerting agencies (AAs) comply with ADA guidelines.

1. Require Colorado Alerting Authorities (AAs) to issue multilingual emergency text alerts in plain language for any language spoken by at least 2.5% of the population affected by an emergency, as long as the system used to deliver alerts supports that language.

2. Establish a point person to assist AAs in applying for grants that can help implement accessible language.

3. Use the 911 Services Enterprise to help fund assistance to AAs and ensure compliance.

REPORT SUMMARY

Inclusive Emergency Alerts for Colorado: An Assessment and Recommendations for Language and Disability Considerations

Published: January 8, 2024

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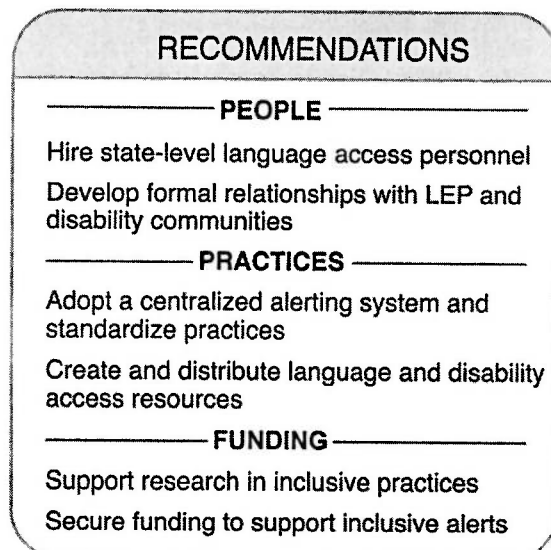
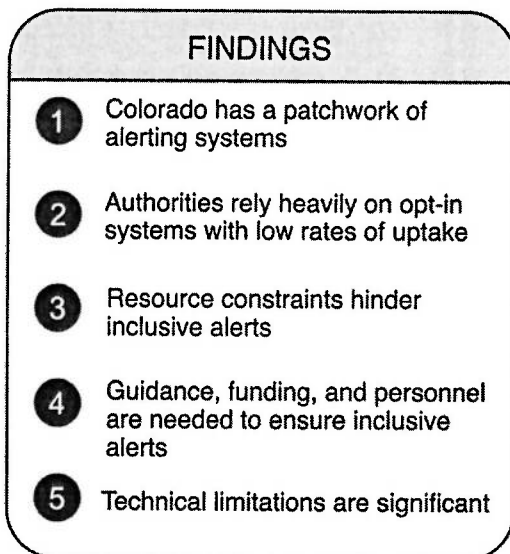
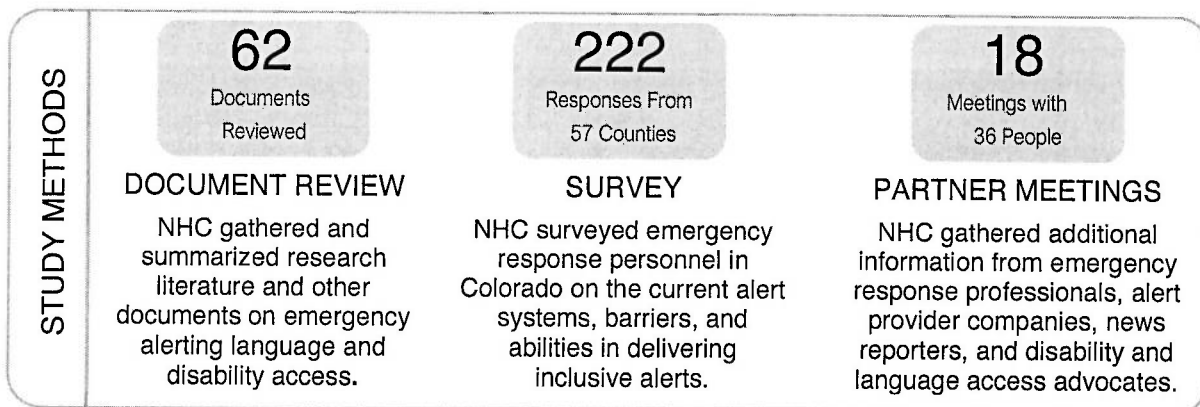
Full Report: hazards.colorado.edu/research-projects/colorado-inclusive-language-and-access-in-emergency-alerts

House Bill 23-1237: leg.colorado.gov/bills/hb23-1237



This report presents findings and recommendations from research conducted by the Natural Hazards Center (NHC) at the University of Colorado Boulder in accordance with House Bill 23-1237.

The study purpose was to identify best practices for inclusive alerting and offer recommendations to improve current alert systems in Colorado that address language and access needs. The study was conducted between August 2023 and December 2023.



HOW EMERGENCY ALERTS WORK

This section provides a basic summary of how emergency alerts work and context for the upcoming sections.

The **alerting process** starts when an **alerting authority** determines the need to send an alert. Next, they craft the **message** to be sent, and then that message is dispatched to the public through various **channels** using a range of **systems**. In Colorado, each step depends on the jurisdiction, so it's important to know all the parts of the process.

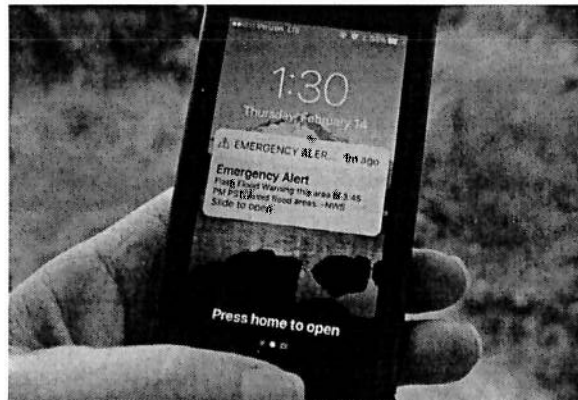
Alerting Authority: An organization designated to issue alerts during a disaster, emergency, or other threatening situations. Alerting authorities include county emergency management departments, 9-1-1 call centers, sheriff's offices, local police, fire departments, among other agencies.

Alert Message: This is the message sent to the public. Ideally, it includes clear information about the threat and what protective action to take. A challenge many alerting authorities face is ensuring these messages, typically composed in English, are also available to people who have LEP and those with disabilities.

Channels: Channels include all the various ways a message can be sent to the public. This can be through everyday means such as social media, news releases, radio or television broadcasts, sirens, or going door-to-door. They also include specialized, third-party systems that residents must sign up for. Channels determine the type of information, such as the number of words and character types, a message can contain.

People with disabilities sometimes subscribe to channels that deliver alerts tailored to their needs and those with LEP do the same to receive alerts in their preferred language. Jurisdictions may or may not be able to support the direct delivery of alerts through such channels.

Finally, Wireless Emergency Alerts, sometimes called WEAs, allow anyone with a cellphone in a specific



geographic area to receive an alert. These must be under 360 characters (under 90 characters for older phones) and are limited to English and Spanish.

Systems: A system is needed to issue most alerts. In most cases, alerting authorities contract with third-party alert vendors who have software systems in place to send a message through multiple channels, including different capabilities to serve people with disabilities or LEP.

Nationally, the Integrated Public Alert Warning System, or IPAWS, which is run through the Federal Emergency Management Agency (FEMA), allows authorities to send alerts directly through many channels, including the Emergency Alert System messages seen on television and radio. IPAWS must be used to issue a WEA. Alerting authorities must go through a series of steps to become designated to use IPAWS.

Given the many variables at play, alerting authorities can have challenges in reaching the general public. These issues are amplified for those with disabilities and limited-English proficiency. Careful consideration needs to be given to how messages are crafted and what channels they are sent through as many channels do not support multiple languages or other accessible formats. The systems chosen to send messages are also key, since not all systems or vendors can reach all populations.

DOCUMENT REVIEW SUMMARY: ALERTING SYSTEMS IN THE UNITED STATES

As of 2023, there are no U.S. mandates for emergency alert communication. Instead, message creators (alerting authorities) often rely on “intuition and hope that the message they pose delivers the right information to prompt quick and effective protective action” [26]. Additionally, systems and channels vary, with many existing pathways, mechanisms, and procedures being used to reach people rapidly when an emergency occurs (Table 1). Often, local jurisdictions determine their own protocols, which creates a patchwork of systems across the United States as well as within Colorado.

Table 1. Emergency Alerting System and Channel Options

Alert Options	Description
Wireless Emergency Alerts (WEA)	A system that uses cellular towers to send messages of 360 characters or less to cell phones in a distinct geographic area. Everyone physically in that area receives an alert unless they have opted out of receiving them. Authorities must have an alert vendor to send WEAs, as explained below.
Emergency Alert System (EAS)	Alerts are broadcast on radio and television. This technological system has been in place since 1997. Includes National Oceanic and Atmospheric Administration weather alerts, used most frequently for imminent and dangerous weather conditions.
Integrated Public Alert and Warning System (IPAWS)	Since 2012, the FEMA-provided system that allows alerting authorities to send emergency alerts through many channels at once including text, phone, WEA, EAS, and others. Alerting authorities must complete activities and trainings to become an authorized IPAWS user.
Alert Vendors	Third-party systems and software that support alerting across several channels that include proprietary services and IPAWS. Alerting authorities use these services on a contract basis. Examples include Everbridge and CodeRED.
Specialized Providers	Software, systems, and applications that can integrate into alert vendor platforms or be used alongside them. These are typically intended to fill a certain audience need (e.g., reach non-English speakers or the Deaf and Deaf-Blind). Examples include ReachWell and Deaf Link’s Accessible Hazard Alert Systems (AHAS).
Written or Visual Alerting	Websites, email listservs, and texting can be used to provide emergency information to people. Often the websites of alerting authorities will include active alert notices. Additionally, social media platforms may be used to distribute alert messages.
Sound-Based Alerting	Alerts can be sent through auditory means such as sirens, phone calls, or radio or television broadcasts.
Face-to-Face	This includes in-person alerting, such going door-to-door, and may be used for hyperlocal alerting needs, such as evacuations.

Social science disaster researchers have been studying multi-hazard warning systems for decades and have produced numerous recommendations for effective messaging and community engagement. For example Mileti and Sorensen [27] reviewed 200 publications on multi-hazard warning systems and found that variations in the warning message, the population being warned, and the alert method impact how the public responds. This foundational research revealed five crucial elements of multi-hazard emergency alert messages that promote understanding and trust in a message and inspire protective action: (1) the nature of the hazard, (2) guidance on