

Inclusive Emergency Alerts: Recommendations for Language and Disability Access

Carson MacPherson-Krutsky Ph.D., Research Associate Mary Angelica Painter Ph.D., Research Associate Melissa Villarreal, M.A., Graduate Research Assistant Lori Peek, Ph.D., Director

Natural Hazards Center
University of Colorado Boulder



nar March 12, 2024







Project Report SPANISH

HB23-1237: Inclusive Language in Emergency Situations

Objectives

- 1. Assess the state of emergency communications in Colorado and identify gaps in current systems as they relate to access and inclusion;
- 2. Identify best practices for developing and distributing inclusive emergency alerts;
- 3. Provide actionable recommendations to improve emergency communications systems that serve everyone, particularly those with limited-English proficiency (LEP) and people with disabilities.





Perry Will Senator, District 5



Tony Exum Senator, District 11





Motivation

Spanish translations of emergency alerts in Garfield County have room to improve

Aspen Public Radio | By Halle Zander Published October 25, 2022 at 11:23 PM MDT

HEALTH & ENVIRONMENT

'This is an emergency alert,' but for English speakers only

Despite the Bay Area's vast diversity and the frequency of natural disasters, Alameda and Solano counties only send out alerts in English, leaving more than 1 in 10 residents at risk of missing possibly life-saving information.

by Jasmine Aguilera

Oct. 25, 2023, 4:59 p.m.

'They were forgotten': For people with disabilities, few good options during disaster

Hurricane Ida's extended power outage exposed cracks in Louisiana's special needs response

BY EMILY WOODRUFF | Staff writer Sep 20, 2021 Updated Sep 20, 2021











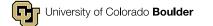
Colorado is Diverse

- More than 900,000 Coloradans speak a non-English language at home and over 250,000 have Limited English Proficiency.
- More than 500,000 Coloradans have a visual or an auditory disability.





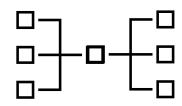


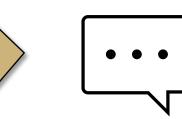


The Alerting Process

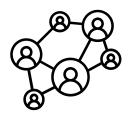












Alert Triggered

A threat causes an **alerting authority** to determine the need to send an alert

Alert System Selected

A range of alert systems determine the channels and message types that are used

Message Developed

Authorities craft the message to be sent

Message Sent

That message is dispatched to public audiences through various **channels**

In Colorado, each step depends on the jurisdiction







Methods

Review of Literature



Partners Meetings







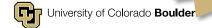
Public Comment Sessions

English | Spanish | ASL

93 attendees and 48 written comments





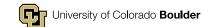


Report Findings

- 1. Colorado has a patchwork of alerting systems.
- 2. Authorities rely heavily on opt-in systems with low rates of uptake.
- 3. Resource constraints hinder inclusive alerts.
- 4. Guidance, funding, and personnel are needed to ensure inclusive alerts.
- 5. Technical limitations are significant.

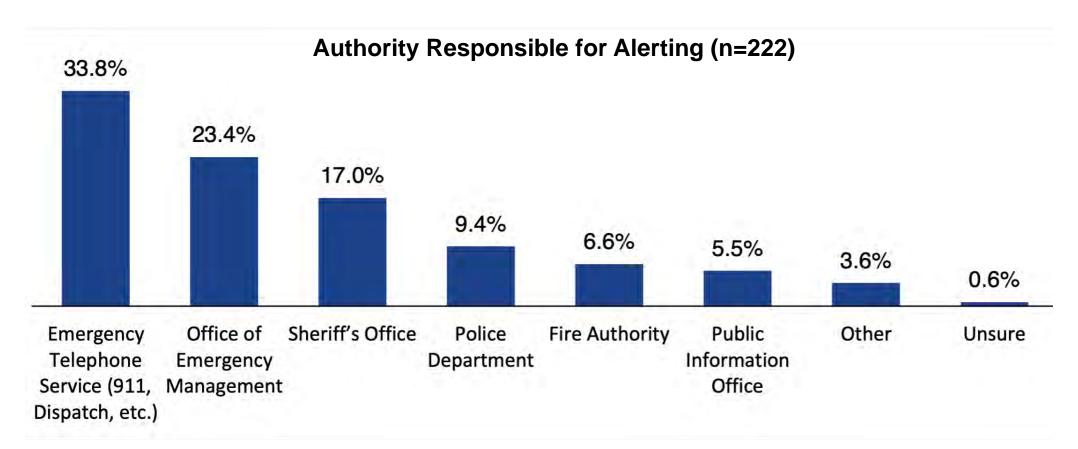






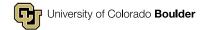


Finding 1: Colorado's alert systems and processes are a patchwork that, while flexible, makes it challenging to provide consistent and accessible emergency alerts. Community resources largely determine the level of access that can be provided. As a result, capabilities vary.



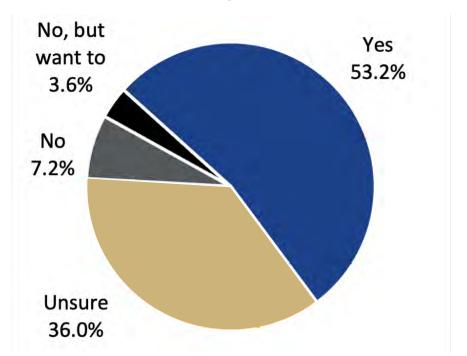




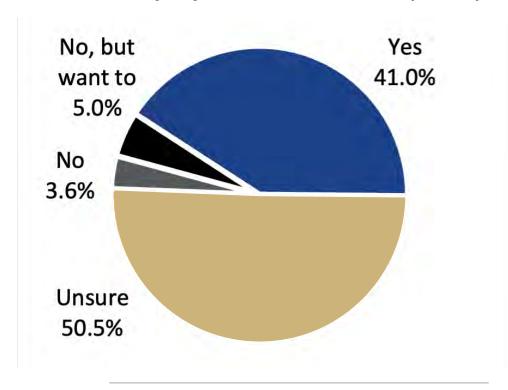


Finding 1 Cont'd: Colorado's alert systems and processes are a patchwork that, while flexible, makes it challenging to provide consistent and accessible emergency alerts. Community resources largely determine the level of access that can be provided. As a result, capabilities vary.

Does your alert system have the capability to send multilingual alerts? (n=222)

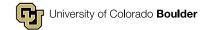


Does your alert system have the capability to send alerts to people with disabilities? (n=222)

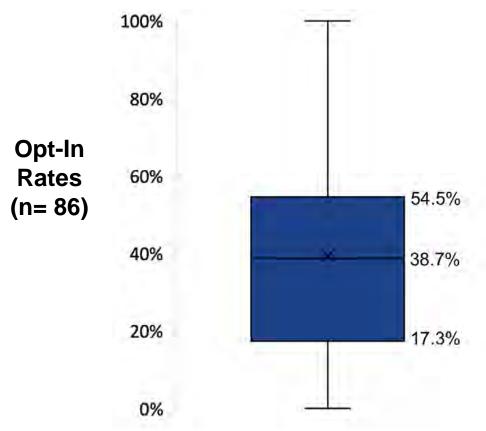








Finding 2: Colorado relies heavily on opt-in emergency alert systems but most localities report opt-in rates below 40%. These systems create barriers for everyone, but especially those who don't speak English or who have disabilities.





The success of these systems in an emergency relies on the community actively signing up for alerts.

-Delta County Survey Respondent









Finding 3: Given resource constraints, alerting authorities turn to resources that are available to provide alerts in other languages, but they may not align with best practices.

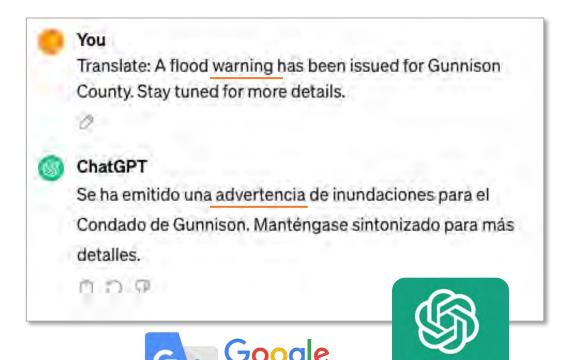


...we usually resort to online translation services, but they are rarely correct.

It's a Catch-22 when we are expected to get warnings out as quickly as possible in every language possible but doing so isn't possible in a timely manner.

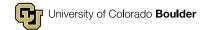
-San Miguel County Survey Respondent



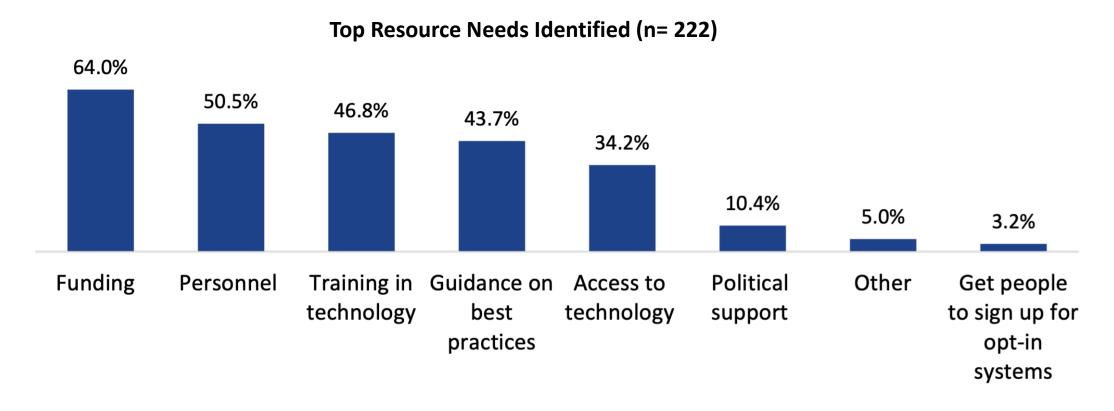






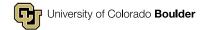


Finding 4: Many emergency response personnel are interested in incorporating systems and practices that would make alerts more inclusive, but need more guidance, funding, and personnel to adequately do so









Finding 4, Cont.: Many emergency response personnel are interested in incorporating systems and practices that would make alerts more inclusive, but need more guidance, funding, and personnel to adequately do so



We simply do not have the resources (both financial and people) to deploy all of these systems.

-Gunnison County Survey Respondent



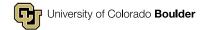
Everything has a cost, and we cannot afford to implement [inclusive alerting] to the degree that it needs. Our money goes to keeping the doors open.

-Public Information Officer









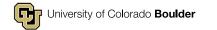
Finding 5: Technical and practical limitations of emergency alerts hinder most people and compound the challenges faced by those with disabilities and populations with LEP.

- Limited language options
- Delays in technology upgrades
- Pushback from private industry
- Enforcement of Federal Communications Commission is lacking









Findings Summary

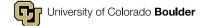
The status quo for emergency alerts creates unequal access to lifesaving information for populations with LEP and disabilities.

However, changes can be made to improve these systems to be more inclusive.









Recommendations

People

- Hire state-level language access personnel
- Develop formal relationships with populations with LEP and disabilities

Practices

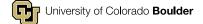
- Adopt a centralized alerting system and standardize practices
- Create and distribute language and disability access resources

Funding

- Support research on inclusive practices
- Secure funding to support inclusive alerts









Recommendations: People

Hire state-level language access personnel

- Can help standardize alerting practices at State level
- Can develop shared guidance
- Can be part of the existing access and functional needs office within Office of **Emergency Management**









Recommendations: People

Develop formal relationships with LEP populations and those with disabilities

- Communities have the lived experience necessary to provide guidance and need a seat at the table
- Formal agreements with communitybased organizations (e.g., MOUs) need to be developed before, during, and after disaster to improve operations







Recommendations: Practices

Adopt a centralized alerting system and standardize practices

- Reduces local cost burden
 - Rural and urban jurisdictions
- Promotes consistency that builds trust
- Expands resource sharing opportunities
- Other states have found success
 - Oregon and Florida









Recommendations: Practices

Create and distribute language and disability access resources

- Emergency response officials want guidance
- Regular training on language and disability access will strengthen community connections and response plans
- Shared resources can help standardize access







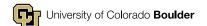
Recommendations: Funding

Unfunded mandates are unpopular and unlikely to address key issues.

- Funding is needed to:
 - Support personnel
 - Develop and implement novel practices
 - Close the gap on data needs
- Grant writing assistance may be needed.
- There may be opportunities to reallocate existing funds to advance inclusive alerting.









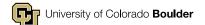
Recommendations: Funding

Support research to fill information gaps to support inclusive alerts

- More research and data are needed to offer further evidence-based recommendations.
- We don't know:
 - Community awareness of opt-in systems
 - How people are responding to alerts
 - Best practices for developing working agreements
 - What the specific funding needs are









Next Steps

We have more to do!

The Natural Hazards Center received a small grant (\$10,000) from CU Boulder to move this work forward and are looking into additional funding avenues to expand it.

Other funding opportunities...

- National Science Foundation (Research)
- Federal Emergency Management Agency (Practice)









Next Steps

Get involved!

Opportunity to provide comments on recent multilingual alert templates developed by the Federal Communication Commission!

https://www.fcc.gov/multilingual-wireless-emergency-alerts









deral Communications Commission Street, NE gton, DC 20554

News Media Information 202 / 418-0500 Internet: http://www.fcc.gov TTY: 1-888-835-5322

Comments Due: April 9

DA 24-137 Released: February 15, 2024

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU SEEKS COMMENT ON IMPLEMENTATION OF MULTILINGUAL WIRELESS EMERGENCY ALERTS

PS Docket Nos. 15-91 and 15-94

Comment Date: (30 days after publication in the Federal Register)
Reply Comment Date: (60 days after publication in the Federal Register)

TABLE OF CONTENTS

H	eading	Paragraph #
I.	INTRODUCTION	1
II.		
III	I. DISCUSSION	5
	A. Identifying Alert Types for Templates	
	B. Incorporating Event-Specific Information into Fillable Alert Templates	16
	C. Considerations for American Sign Language	20
	D. Supporting Additional Languages	25
	E. Future Updates to Alert Types, Templates, and Languages	30
	F. Assessing the Benefits and Costs	31
	G. Promoting Digital Equity and Inclusion	36
IV	/ PROCEDURAL MATTERS	37
	A. Providing Accountability Through Transparency Act	37
	B. Regulatory Flexibility Act	
	C. Paperwork Reduction Act Analysis	39
	D. Deadlines and Filing Procedures	40
V.	ORDERING CLAUSES	45
A	PPENDIX A – Proposed Rules	
A	PPENDIX B – Supplemental Regulatory Flexibility Analysis	
A	PPENDIX C – Static Alert Templates	
	PPENDIX D - Form-Fillable Alert Templates	
	PPENDIX E – Alert Template Translations	

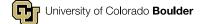
https://docs.fcc.gov/public/attachments/DA-24-137A1.pdf

Throughout this study, it was clear that emergency officials, alert providers, and community representatives share a united vision to provide lifesaving emergency information to those who need it.











Acknowledgements

Representative Velasco and Team, Garry Briese (Fire), Jennifer Kirkland (9-1-1), Micki Trost, Mike Willis, Sadie Martinez (OEM), Shirl Garcia, Natural Hazards Center Team, Specifically Lori Peek, Jolie Breeden, Jennifer Tobin, and Jeffrey Gunderson.

Thank you to the Colorado State Legislature for providing funding to do this important work.



Visit Project Page to Download Report in English or Spanish



Questions? Contact: Carson MacPherson-Krutsky Carson.M-K@Colorado.edu

hazards.colorado.edu



NSF Award #1635593 and #1841338

