EMERGENCY ALERT

Real-Time Warnings and Alerts for Non-English Speaking Communities

Evaluation of Best Practices in Community Outreach and Engagement in the Minnesota Multi-Language Messaging Initiative

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Summary

The Minnesota Multi-Language Messaging Initiative

The Minnesota Multi-Language Messaging Initiative (MLMI) is a partnership of ECHO Minnesota (*E*mergency, *C*ommunity, *H*ealth, and *O*utreach) and Twin Cities Public Television (***tpt***), together with technology, emergency management, communications, and cultural community partners, and funded by the Corporation for Public Broadcasting. ECHO led the community engagement processes of this initiative, whose purpose is to develop standardized alert and warning messages, tailored for the 54 standard weather and civil emergency situations in the mainstream emergency broadcasting system, in the languages spoken by Hmong and Somali immigrants and refugees in Minnesota.

The evaluation addresses the initial phases of the work (initial outreach to the cultural communities and development and community approval of the translations), and includes some recommendations based on study findings for the fourth phase (further outreach to cultural communities about how to respond to the alerts when they are broadcast). The study's findings are based on review of documents, observations of meetings, focus groups and interviews with initiative participants. Through these sources, the study documents the extent to which the MLMI used previously-identified best practices in helping non-English-speaking people prepare for and recover from emergency events, and it offers insights about how engagement activities can be adapted to different communities.

Findings

Findings address best practices already identified in the literature, which formed the basis for the community engagement efforts of the project. Study findings give examples of how the project's activities illustrate use of the practice and offer insights into how the practices can be implemented in varying cultural contexts.

1. Know the populations that are in the area and design strategies based on their characteristics, numbers, and needs

ECHO built on its 10-year history of working closely with immigrant and refugee communities, employing bilingual community leaders as Ambassadors to help develop ongoing, two-way communications with the communities. According to many of the stakeholders interviewed for this study, this history has given ECHO a level of familiarity with the community that is both deep and current. Working with its Ambassadors, ECHO developed an engagement process that was based on cultural norms and practices, and

planned for distribution of messages in forms and through media that community members are most likely to be able to access easily.

2. Build trust and use trusted messengers

ECHO's history of work with the communities provided a basis for recognition and trust before this project began. Its Ambassadors are well-known and trusted in the communities. Effective elements of the initiative included working with the Ambassadors in the design of the outreach strategy and reaching out through elders first. Participation and trust were also increased by holding meetings in locations within the community.

3. Involve community members in planning

ECHO's efforts were an outstanding example of the authentic involvement of community members in planning. Forms of involvement included holding a series of community meetings to discuss the project itself, review and assess the initial translations, and vote on voices for recording. The process succeeded in engaging the participation of many different perspectives in the community, and those involved felt that their involvement was not merely symbolic, but was genuinely influencing decisions that would have, literally, life and death consequences for their communities.

Noteworthy practice: Include public safety representatives, linguists/translators, and cultural community members in decisions about the content, translation, and delivery of information

One element of MLMI's process not mentioned in any of published sources was the involvement of linguists – in addition to translators – on the team to help prepare translations of the standard phrases. The purpose is to assure that the translation goes beyond simply the use of common words, but also takes into account the deeper connotations and associations of those who will hear them. The involvement of linguists was also important in the development of the Hmong messaging due to the tonal nature of the language, which makes it harder to assemble mix-and-match messages from phrases recorded separately. Participants reported that the three-way cooperation of emergency professionals, linguists and translators, and community members was effective in producing translations that can be easily understood by most people in the community. This was particularly important because emergency messaging, and knowledge of how to respond to emergencies, are not generally at the tops of people's minds in cultural communities (or mainstream communities), and it is therefore important that messages requiring quick response be easy for people to comprehend and react to – a consideration that is often not addressed even for English-speaking communities.

4. Tailor messages to the full cultural context of the communities

This principle goes beyond simply translating words, and requires the messages to retain their accuracy and acceptability in the new cultural context. In MLMI, messages were reviewed by community members not only for the literal accuracy of the words but also for the way in which the words would have meaning more broadly, for people from different dialects and/or generations. The process described above, involving a broad cross-section of ages, genders, and clans, ensured that the voting at the meetings identified the translations that participants agreed have most meaning for the most members of the community. The process also ensured the community was consulted about the choice of the voice to be recorded speaking the messages.

5. Build community capacity to respond to emergency messages and participate in recovery

Many of those who were interviewed emphasized the importance of the final stage of the project, about to be launched. This would educate the community about the kinds of emergencies the messages warn about, and the kinds of precautions to take to be safe. Nearly all of those who were interviewed felt that the first stages had laid the groundwork for this subsequent level of understanding to take place. Many also strongly underscored the importance of continuing the strong community participation through this final stage, as is planned.

6. Train public and nonprofit emergency responders to anticipate and address needs of minority communities

It is not enough to say that communities must be educated to respond to emergencies. It is also necessary for organizations that have responsibility for emergency response and recovery to be trained to better understand the needs of under-served communities. Such agencies must often begin by building trust, offering substantial information about the kinds of emergencies that may occur, how emergency messages can be accessed, how people should respond in the immediate emergency, and how they can assist in recovery.

Overall effectiveness of the initiative

The MLMI engagement practices described in this report are deemed effective not because participants reported a high level of satisfaction with them, but because they are likely to increase the community's capacity to respond promptly and safely to an emergency. The initiative participants were almost unanimous in finding the initiative's efforts "very effective" in producing a way to get emergency information quickly to people when needed.

Issues to consider

The experience of MLMI bears out the merit of best practices already identified in published literature on emergency messaging for under-served groups, while adding contextual detail to our understanding of how these can be implemented in different cultural contexts. The two most fundamental principles are:

- Building on-going relationships – or working with a partner who already has them

- Designing a process that puts as much of the decision making as possible squarely and visibly in the hands of the community itself

Professionals and grassroots community members truly partnered in this initiative. The overall Emergency Messaging System and interoperable technologies were designed by public safety and communications organizations. Based on that framework, ECHO staff designed the overall outreach and message development process and the process for rating translations and voices, and Ambassadors from the community led the community meetings and helped manage the discussion to ensure a balance between full participation and efficiency.

In the final stages of the Minnesota Multi-Language Messaging Initiative, and any replications of the outreach, translation, and voice recording process that may be undertaken by others, four recommendations stand out for consideration.

Study and learn from existing sources of effective practices

The MLMI confirms the merit of previously-identified best practices in emergency planning for under-represented communities, and extends our understanding of how to make these effective.

Continue the model of high community engagement in the final stage of the MLMI

The high level of engagement has built trust and begun to acquaint members of the Hmong and Somali communities with some of the standard terms (such as "shelter in place") for ways to respond to emergencies. It is important to continue this education process so that community members can react quickly when needed.

Use intermediary organizations to bridge between emergency response agencies and grassroots communities

This study reinforces prior literature on the importance of relationships between emergency planning organizations and the communities. There is often a large gap between these

groups, and the MLMI illustrates the value that intermediaries can provide to bridge that gap. ECHO has fulfilled this connecting role at two levels:

- **ECHO as an organization** is the primary bridge between the public safety organizations and the Somali and Hmong communities

- **ECHO's Ambassadors,** in turn, serve as a bridge between ECHO itself and the broader community and greatly expand ECHO's reach and relationships

Base emergency preparation activities on ongoing, trusting relationships

Potential replicators should note that this work requires ongoing building and maintenance of consistent and genuinely two-way relationships; it cannot be done equally successfully out of the blue by someone with no prior community presence.

Introduction

Background on the Minnesota Multi-Language Messaging Initiative

The Minnesota Multi-Language Messaging Initiative (MLMI) is a partnership of ECHO Minnesota and Twin Cities Public Television (***tpt***), together with technology, emergency management, cultural communities, and communications partners. It is funded by the Corporation for Public Broadcasting. Its purpose is to develop standardized alert and warning messages, tailored for the 54 standard weather and civil emergency situations in the mainstream emergency broadcasting system, in the languages spoken by Hmong and Somali immigrants and refugees in Minnesota.

The work is based on the Common Alerting Protocol, or CAP, which the Federal Communications Commission has said "will allow the Federal Emergency Management Agency (FEMA), the National Weather Service (NWS), a State Governor, or any other authorized initiator of a public alert and warning to automatically format and geo-target a particular alert simultaneously to the public over multiple media platforms such as television, radio, cable, cell phones, and electronic highway signs. **CAP will also allow an alert initiator to send alerts specifically formatted for people with disabilities and for non-English speakers**."[1] It also takes advantage of the existing Integrated Public Alert and Warning System (IPAWS) infrastructure that provides a single interface for multiple emergency alert systems using multiple technologies and modalities.

According to published reports of practices in the field of emergency preparedness planning, best practices when working with diverse populations include education work with communities in advance of any emergency or disaster, to ensure that people know where to find emergency information and know how to respond to it when they receive it. ECHO Minnesota (***E***mergency, ***C***ommunity, ***H***ealth, and ***O***utreach) has ten years of experience working closely with cultural communities to develop and implement multi-language health, safety, civic engagement, and emergency readiness communication. ECHO has led the community engagement efforts of the Multi-Language Messaging Initiative to build this base of knowledge about emergency response, as well as to develop the Hmong and Somali language emergency messages themselves. This has included several stages of activity:

- Initial engagement and outreach to inform cultural community leaders about the emergency warning and alert system and its messages

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[1]   Public Notice, EB Docket No. 04-296, DA 10-500 (released March 25, 2010).

- Coordination with a group of linguists to develop translations of the 54 standard "event codes" from which the emergency messages are built (see sidebar)

- Presentation of the preliminary translated phrases to cultural community members for review and approval, along with review and selection of the voice to be used for recording the messages

- Community engagement and outreach to teach new concepts about the emergencies themselves (such as teaching new refugees from a desert climate what a blizzard or a tornado is) and about the appropriate safety responses (such as what "shelter in place" means)

The evaluation addresses the first three of these phases, and includes some recommendations based on study findings for the fourth phase.

The evaluation

In civil, weather, and other kinds of public health emergencies, many studies show that low-income, minority, and non-English-speaking people are disproportionately at risk of harm during the event and also have the most difficulty recovering afterwards. Reasons are as diverse as the people affected, but often include language, culture, trust, perceptions of risk, access to information, and access to resources to avoid or recover from harm. A few recent studies, listed below and in the bibliography, have documented some best practices in addressing some of these issues.

This current study, though small in scale, offers insights into how these general principles are applied in practice, showing how actual activities may vary in different communities while still embodying the same underlying principle. It also offers some additional principles and practices to be considered for replication and for further testing as best

> The **Emergency Alert System (EAS)** is a national public warning system. To ensure the broadest possible immediate dissemination of emergency information when needed, it requires broadcasters, cable television systems, wireless cable systems, satellite digital audio radio service providers, and direct broadcast satellite providers to provide communications capability to the President in case of a national emergency.
>
> More relevant to this study, the EAS system may also be used by state and local authorities to quickly delivery important emergency information, such as weather alerts or civil emergency alerts, to specifically targeted local areas through multiple communications channels.
>
> A standard Emergency Alert System message is constructed with the following components:
>
> <ORIGINATOR> HAS ISSUED A <EAS EVENT CODE> FOR THE FOLLOWING COUNTIES/AREAS: <County, State Name>; AT <TIME, Month, Day, Year> EFFECTIVE UNTIL <Time>. MESSAGE FROM <Source>.
>
> There are 54 standard phrases used to fill in these components. Each of these phrases must be pre-recorded so the appropriate message can be assembled when an emergency message is needed.

practices in the development of emergency messaging to reach non-English-speaking communities.

This report presents the findings of a small-scale external evaluation, which examined the community engagement portion of the initiative. Its purpose was to identify the extent to which this process employed already-known best practices, and to identify any additional effective or promising practices that should be drawn to the attention of others who may replicate this work elsewhere. Practices are considered effective or promising if they are considered likely to result in communities having access, during emergencies, to messaging that they can understand with minimal delays. This includes their understanding of how they can both access and respond to the messaging. Effectiveness also includes emergency management experts having understanding of cultural and linguistic nuances and challenges to receiving and responding appropriately to emergency messages.

The evaluation findings are based on the following sources of data:

- Background briefings from ECHO staff

- Review of project proposal

- Review of published literature on best practices in public health and civil emergency preparedness

- Structured observation at two community meetings (one Hmong, one Somali)

- Focus groups with community meeting participants

- In-depth, semi-structured interviews with ECHO Ambassadors, linguists/ translators, community leaders, ECHO staff, and one county emergency preparedness official[2]

Due to the limited scope of the evaluation, it was not possible to conduct the interviews with community members in their own languages. However, the study's interviewers have considerable experience communicating with people with limited English proficiency and were able to complete interviews in English with some of the community members as well as with Ambassadors, linguists and translators, and some community leaders. In addition, with the help of the ECHO's translators, researchers were able to observe community meetings conducted in Somali and Hmong. Following these meetings, they conducted brief focus groups in English with community participants.

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[2] In the tables presenting the responses to closed-ended questions in the interviews, only Somali and Hmong participants' responses are included, not those of ECHO staff or the county emergency manager.

Findings

The use of best practices in the Multi-Language Messaging Initiative

The best practices already identified in the literature, which formed the basis for the community engagement components of the emergency messaging project, can be briefly stated as follows: (Numbers in parenthesis refer to the sources listed in the bibliography.)

1. Know the populations that are in the area and design strategies based on their characteristics, numbers, and needs (1,2)

2. Build trust and use trusted messengers (1,2)

3. Involve community members in planning (1,2,3)

4. Tailor messages to the full cultural context of the communities (1)

5. Build community capacity to respond to emergency messages and participate in recovery (1,2,3)

6. Train emergency responders to anticipate and address needs of minority communities

Each of these is addressed below, with examples of how the project's activities illustrate the practice, as well as additional insights from observations and interviews about how the practices can be implemented in varying cultural contexts.

1. Know the populations that are in the area and design strategies based on their characteristics, numbers, and needs

The design of strategies to fit community needs includes not only use of the native language but also such additional social and cultural considerations as what media people most often use and can best comprehend. For example, this may include audio/video, pictograms in print materials, interpreters, and other communication modalities and strategies.

> The ongoing relationship with the community allows ECHO to recognize the evolution that is constantly occurring within the culture as the group adapts to its new environment over time, such as changes from generation to generation in who or what organizations people look to for information in an emergency, or changes in the understanding of the meanings of words.

ECHO's work for this initiative builds on its 10-year history of working closely with immigrant and refugee communities to connect them with public health and safety agencies to address health, safety, and other emerging civic issues. From the start they have hired bilingual community leaders as Ambassadors, or community spokespeople, to help develop ongoing, two-way communications between ECHO and the communities.

According to many of the stakeholders interviewed for this study, this history has given ECHO a level of familiarity with the community that is both deep and current.

In addition, ECHO used its engagement process to collect additional specific information important to the emergency messaging project, such as consultation with community representatives about the extent of smart phone use, and built that information into the planning for the project.

> *ECHO asked us how many people in the Somali community use a landline vs cellphones. It was almost 99.9% mobile phones. Then we knew that was a very important avenue for the message. – Somali participant*

They also consulted their Ambassadors to help develop the strategy for identifying the right mix of community members to provide input and advice about translations and voices, and to help develop the strategy for recruiting that mix of people to come to the community meetings.

Our observation of community meetings, and comments from participants' interviews, shows that ECHO's familiarity with the communities, and leadership from community members, allows the meetings for the project to be structured and incorporate cultural norms and practices. These go much deeper than the use of people's native language for conducting the meeting (with translation for American staff not from these communities), and also included food, prayer or other ceremonial observances, suitable recognition of the importance of the occasion (through much photo-taking in the case of the Hmong community), and even the recognition that the meaning of time differs for some communities. Thus, although the Somali meeting was nominally set to begin at 6:00 p.m., ECHO was prepared for the actuality that most participants were not assembled until 7:00. Community members who stayed to participate in the brief focus group after the meeting confirmed that they felt welcomed and comfortable at the meeting.

Recognize variation within cultures

It is easy to focus on what is in common within cultures that are different from the mainstream, and prepare messages that are designed for the members of the group that most often interact with mainstream institutions. However, like the mainstream culture, immigrant populations also differ within their culture based on gender, age, clan, and other within-group differences. The outreach work in the MLMI recognized and included this diversity by working with Ambassadors to recruit community members of diverse ages and backgrounds and both sexes to participate in the planning process.

Knowing the population, and tailoring strategies to fit their characteristics, should result in emergency messages that reach people effectively. Community members who were part of the ECHO process all agreed that this is the likely result of the project, although a

handful were not willing to commit themselves to an opinion because the messages had not yet actually been aired (Figure 1).

1. Appropriateness of planned media for the community

	N	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
The messages are being distributed through media (such as radio, TV, smart phones, etc.) that most people in the community usually pay attention to	10	5	4	0	0	1
People who do not read can easily get and understand the messages	10	3	5	0	0	2

Source: Wilder Research survey of community participants.

2. Build trust and use trusted messengers

Examples of trusted messengers might include media that are controlled by the community; faith-based and other community-based organizations; community leaders; and community-based outreach workers.

ECHO's history of working closely with the immigrant and refugee communities in Minnesota provided it with a basis for recognition and trust before this project was launched. Several community members who were interviewed were very familiar with the "ECHO TV" programs that have been broadcast for many years on topics of importance to their community. Its Ambassadors are also well-known and trusted in the communities. Interview responses showed that the use of Ambassadors to help ECHO recruit community participants was effective (Figure 2). There was also mention of the appropriateness of reaching out through elders first, and of ECHO's collaboration with the Ambassadors in the design of the outreach strategy.

> *They are very community based. They involve the community members … they have very good people … who work in the field as organizers, as community leaders [and] are now a part of ECHO, so that gives them access to anything [regardless of the topic to be addressed]….The people who work for them that would outreach to me … have a tremendous amount of respect in the community, that's why they were effective in outreaching, not just outreaching but also getting the right people in the community.*
> *– Somali participant*

The county emergency manager who was interviewed for this study also pointed out that holding community meetings in locations within the community itself – not at a government or agency location – is a practice that not only increases participation but also helps to build trust.

Survey respondents verified that the processes used by ECHO were effective in reaching community members and building trust in the messages that the project was developing.

2. Use of trusted community contacts, and trust in the resulting product

	N	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
ECHO and its ambassadors have used connections in the community to be sure that people are aware of these messages	9	6	1	1	0	1
People in the community are likely to trust the messages	10	3	6	0	1	0

Source: *Wilder Research survey of community participants.*

3. Involve community members in planning

As identified in the literature, involvement in planning allows people from the community to bring their knowledge and insights about the community into the planning, including particular concerns or priorities, guidance about the appropriate content and format of communications, and what the community may need to be able to respond effectively. Involvement also adds credibility to the planning and helps build trust, which in turn can increase participation in responding to emergencies.

Given the role of community involvement in establishing a knowledge of the population (principle #1) and building trust (#2), it will come as no surprise that ECHO's efforts were an outstanding example of the authentic involvement of community members in the planning. For this study, we are defining "planning for preparedness" as the first three steps of the process described in the introduction: Initial engagement, coordination with linguists, and presentation of messages and voices for discussion.

Forms of involvement included the use of Ambassadors for two-way communication between the community and ECHO (and thereby the overall initiative); involvement of native linguists and translators to translate the 54 standard phrases; and holding a series of community meetings to discuss the project itself, review and assess the initial translations, and vote on voices for recording. Evaluation staff observed and conducted a focus group at one such meeting, and interviewed participants involved in all stages for their perceptions about their involvement. There was consensus on two important points: the process had succeeded in engaging the participation of many different perspectives in the community, and those involved felt that their involvement was important and was having a genuine impact on the planning (Figure 3).

3. Effectiveness of efforts to involve community members in planning

	N	Very effective	Somewhat effective	Not really effective	Don't Know
How effective was ECHO in getting input from a lot of different parts of the [Hmong/Somali] community?	12	7	4	0	1
Do you feel the process genuinely involved members of your community to help make decisions about the emergency messaging?	11	9	1	1	0

Source: *Wilder Research survey of community participants.*

Many participants mentioned the fact that there were multiple meetings, and sometimes the meetings were long, because of the variety of views that were represented and the need for consensus to make decisions that would be best for the most people.

> *This is not an easy task…. The best way to deal with it is to have a number of people come in, and that's what happened, from a variety of backgrounds. It's good … that there were meetings after meetings to narrow down the issues or the misunderstandings. I think that's very effective. – Hmong participant*

The amount of time required by the process could have discouraged participation, but people were energized by the fact that that their participation was not merely symbolic, and that they were making decisions that would have, literally, life and death consequences for their communities. The way in which the meetings were held made it clear to participants that they were in charge of this process.

> *They [ECHO] were shaping the discussion, but we were leading the discussion. If it went off topic … we would be reminded, but at the end, we were leading ourselves. … So you know, it was easy for us to come up with the right product, because the environment, the platform that we have been given, was absolutely a platform that we owned. – Somali participant*

The overall process was designed for a balance between inclusion and efficiency. Inevitably, different people perceive the pivot point for such a balance in different places. Although most participants who were interviewed felt the process was satisfactory on both of these measures, a few expressed a wish that more members of the community could have been involved, although they typically also realized that beyond a certain point it becomes counter-productive to include more people. The Hmong participants especially leaned toward an even more broadly inclusive process.

4. Tailor messages to the full cultural context of the communities

In their origin, the messages to be communicated are the 54 phrases dictated by the Emergency Alert System. To be effective in reaching non-English-speaking cultural communities, it is vital to go beyond simply translating the words of these communications. This principle also requires the adaptation of the messages to retain their accuracy and acceptability in the new cultural context.

In both the translations stage, and in the community review stage, messages were reviewed by community members not only for the literal accuracy of the words but also for the way in which the words would have meaning more broadly. Since many of the conditions subject to the warnings – such as tornadoes or blizzards – are not part of the emergency experience in either the Hmong or Somali homelands, and since both communities now include a mix of older, non-English speakers and younger, partially "Americanized" second-generation members, the choice of words to communicate accurately, clearly, and immediately was complicated. The process described above, involving a broad cross-section of ages, genders, and clans, ensured that the voting at the meetings would identify the translations that would have most meaning for the most members of the community, as was supported by all those who were interviewed (Figure 4).

> **Emerging promising practices:**
>
> This level of community engagement merits calling out as a best practice in its own right. Interviews with participants make it clear that their awareness of the community's decision-making role not only added energy to participation but also deepened their trust for the entire project. Other design aspects of the engagement process that should be highlighted include:
>
> - Maximizing the use of face-to-face communications
>
> - Conducting meetings not only in the community's own language but also in its full cultural context, including location, food, approach to time, and customs

4. Appropriateness of messages to the community who will hear them

	N	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
The messages use words and dialect that are easily understood by most people in the community	10	6	4	0	0	0

Source: *Wilder Research survey of community participants.*

The effectiveness of the message depended not only on the translation of the standard phrases, but also on the qualities of the voice that is recorded to speak those phrases. Once the message components are appropriately translated, it is necessary to record each one for broadcast. The community was consulted about the most desirable qualities for the speaking voice. ECHO arranged for multiple examples to be recorded for the community members to listen to, discuss, and vote on. At the review meeting they were asked to listen and vote on four examples, two male and two female. The selection was

made by the community participants, based on which would be best to capture the attention of those who would hear it and communicate an appropriate sense of urgency. In both the Hmong and Somali groups, the vote was for a male voice, which was felt to carry more authority (Figure 5).

5. Effectiveness of the process for choosing a voice for the recording

	N	Very effective	Somewhat effective	Not really effective	Don't Know
How effective was ECHO in arranging for the messages to be spoken by people whose voices would get people to pay attention and take the messages seriously?	12	10	2	0	0

Source: *Wilder Research survey of community participants.*

Other elements of the discussion that participants commented on included the different dialects (among the Hmong clans) or accents (among the different parts of Somalia); the emotive connotations of different synonyms for the same concept; and the different vocabularies that the different generations were familiar with.

> *It was not just translating these things, like [using an expert interpreter], … it's putting the work between leaders of different backgrounds, female, male, Northern, Southern, Central, and Eastern to argue about and come up with something that's compatible for young people and the elderly, for female and male to understand. – Somali participant*

> *The other way we looked at language was, okay, sometimes we will find two identical words [and ask], "Does this make you listen and take the message seriously, or it just scares the hell out of you to run?" We will look at different angles, not just on the language, but also on the psychology, how would you hear it? – Somali participant*

> *There are some situations, weather or issues … that are not common in my home country, for example thunderstorm or blizzard, those are things that do not exist in my native country…. I have to use three or four words to explain what a blizzard is, there's no equivalent word in my culture or language. – Somali participant*

Noteworthy practice: Include public safety representatives, linguists/translators, and cultural community members in decisions about the content, translation, and delivery of information

One element of the process for developing communications that has not been mentioned in any of the sources consulted for best practices is the involvement of linguists – in addition to professional translators – on the team to help prepare translations of the standard phrases. The reasoning for this, as described by ECHO staff, is to assure that the translated messages connect with the community at multiple levels. Especially for communications that require rapid comprehension and response, the translation must go beyond simply the use of common words, but also take into account the deeper

connotations and associations likely to be part of the filter through which community members will process what they hear.

> *Linguists are different [from translators] in that they bring the history of the language. …*
> *In an emergency … there isn't time to debate, just time to react. That is why making sure*
> *everyone understands the system from word all the way to action can [help them] help*
> *themselves in a crisis until responders get them. – ECHO staff*

The involvement of linguists was also an important consideration in the development of the Hmong messaging due to the tonal nature of the language. English, as a non-tonal language, adapts reasonably well to being cut up into pre-fabricated sets of phrases that can be combined in many different ways depending on the message that needs to be constructed – although we typically recognize such recordings when we hear them, because even English has natural sentence-level inflections that cannot always be replicated in such a patchwork way. (For example, consider how a telephone number at the beginning of a sequence is said differently than the same number that occurs at the end of a sequence.) For a far more tonal language, such as Hmong, the challenges are greater, and the involvement of linguists was important in helping to address this challenge (as was the availability of new and more sophisticated electronic equipment).

The decisions about translations thus depended greatly on the involvement of three separate perspectives:

- ECHO staff, who understood the emergency system, the standard format for constructing messages, and the constraints that the translations would need to observe

- Linguists and translators, who brought deep native-speaker familiarity with the language and the larger culture within which it resides, as well as the ability to understand the meaning of the messages and their component phrases in the original English

- Diverse community members who represent the ultimate audience for the messages and who can anticipate what will and will not be readily understood and receive the level of attention required

According to participants interviewed for the study, each of these perspectives was important to the process followed for the MLMI, and the initiative was effective in blending them into one overall process of developing the final messages (Figure 6).

6. Effectiveness of producing messages that are appropriate for the diversity of the community

	N	Very effective	Somewhat effective	Not really effective	Don't Know
How effective was ECHO in arranging for translations that can be easily understood by most of the people in the community?	10	9	1	0	0

	N	Very important	Somewhat important	Not really important	Don't Know
How did the translation team decide how to handle the variety of dialects? …					
How important was the perspective of the community members?	7	5	2	0	0
How important was the perspective of the linguists' and translators' professional judgment?	7	6	1	0	0
How important was the perspective of the staff at ECHO?	7	6	1	0	0

	N	Yes	No		Don't Know
Would you recommend other communities follow a similar process [for handling the variety of dialects]?	7	7	0		0

Source: *Wilder Research survey of community participants.*

The attention to the meaning of the underlying message, and the readiness of community members to understand the meaning easily when they hear it, is a step not often covered even for English-speaking audiences. For example, in the civil emergency following the Boston Marathon bombing, community members were asked to "shelter in place" during law enforcement's manhunt for the suspects. However, many people did not know what they were supposed to do when they heard this instruction. In the MLMI initiative, the full meaning of each message was fully explored in the original English as a precursor to developing the best possible translation.

5. Build community capacity to respond to emergency messages and participate in recovery

Many of those who were interviewed, including ECHO staff, community members, and a county emergency manager, emphasized the importance of the fourth stage of the project, which was not yet launched. This stage would include further community outreach to educate the community to understand the nature of the kinds of emergencies about which the messages would alert them, and understand the instructions for taking precautions well

enough to be able to follow them rapidly in an emergency. Nearly all of those who were interviewed felt comfortable predicting that the first three stages had laid the groundwork for this subsequent level of outreach and understanding to take place (Figure 7).

7. Likelihood that community members will understand what to do when they hear the emergency messages

	N	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
People in the community will know what they have to do when they hear the messages	10	2	6	1	0	1

Source: *Wilder Research survey of community participants.*

The need for the fourth stage of the project is supported by the community participants who were interviewed, all of whom agreed with the following statements:

- It is important for the government to tell people if there are weather or civil emergencies in the area (6 strongly agree, 4 agree)

- It is important for the government to tell people what they should do to be safe when there is an emergency (7 strongly agree, 3 agree)

While people supported the importance of government-led communication about impending emergencies and what to do to be safe, community members felt it was individuals' responsibility to know how to respond. Most interview respondents agreed with the statement:

- It is up to each person to know how to take shelter, or evacuate, or respond in other ways when they hear an emergency message (3 strongly agree, 4 agree, 2 disagree)

One of the people who disagreed with the last statement amplified on the response to explain that he or she felt it is the responsibility of the government first to train people to know how to respond when they hear an emergency message; only then is it the individual's responsibility to act on that knowledge.

According to one bilingual participant, even for people who understand English, the translated messages will increase comprehension and responsiveness in emergencies:

> *I love information, searching for it, finding out about everything that is going on…But you know, absolutely, when you hear it in your own language, it absolutely makes a difference. It kind of changes the seriousness of the situation. … I hear it every day in English on TV, radio, or whatever, but hearing it in Somali I think would be even more serious. – Somali participant*

However, it is important to take the next step to continue to educate the community to understand how to respond when they hear the messages.

> *With all the work that we have done with translations, it's going to need the next step, which is to educate the Hmong community. The languages that we used in the translations, the words that we use, some of those are not heard every day … I did not know there was a Hmong term for snow, and there was, so … when you translate it into Hmong, I wouldn't know what it is, so it's going to take some time to educate the Hmong community. – Hmong participant*
>
> *Once we get rolling on this thing, we really want to make sure that people are aware of it and buy in. [Being] tied into the community leaders … will be the anchor point for moving this forward deeper into the community. … We got to spend time working in the other more specialized areas that are harder -- that involve folks that speak other languages, folks that have functional needs, maybe impairment…. This would make the result better. – County emergency manager*
>
> *I would really like to see [ECHO] partner with other agencies or organizations that are key to communities to broaden that scope of influence and project. … So if this project becomes replicated in other communities, … I would recommend making sure that there are local nonprofit organizations that provide social services to different organizations to be involved, because you have refugee services, social services, daycare providers, those are the communities that really need to understand more, at their community level, [about who] the emergency preparedness needs to reach. – Hmong participant*
>
> *The community has asked for [an effort to] go to the regions and educate about … what it means, then, when you hear [for example] shelter in place, or a marine warning, or tornado, or anything else. – ECHO staff*

Published best practices stress that the community must be involved in this stage also. This stage of the initiative was outside the scope of Wilder's study; however, the document analysis and interviews with staff make clear that this is planned for in the Multi-Language Messaging Initiative.

6. Train public and nonprofit emergency responders to anticipate and address needs of minority communities

It is not enough to say that communities must be educated to respond to emergencies. It is also necessary for organizations that have responsibility for emergency response and recovery to be trained to better understand the needs of under-served communities. Such agencies must often begin at the most basic level by building trust. However, they must also offer substantial information about the kinds of emergencies that may occur, how emergency messages can be accessed, and how people should respond in the immediate emergency and how they can assist in recovery.

This evaluation took place before the final stage of the Multi-Language Messaging Initiative, which is when this training was planned to be done. However, from multiple

sources of documents and interviews it was evident that this is part of the plan, and that the plan involves continued leadership from the community in the implementation.

> *We are also going to be impacting the system that delivers messages. – ECHO staff*

This is borne out by the county emergency manager who was interviewed, who was very impressed with the project design that placed the community in a leadership position, and who was looking forward to the next phase of training community members to understand what to do when they receive the messages. The emergency manager stressed that this is a step that is particularly needed for communities with limited English proficiency:

> *Reaching folks that don't speak English, either at all or very well, is a challenge for public warning. This will really help us perform something that I don't think has either been done at all or not very well currently. – County emergency manager*

The emergency manager foresees an emergency readiness education component that will be on-going, not simply done once at the roll-out of the new system:

> *The other component, and ECHO will be part of this, will be [that the **tpt** channel will change] from an aviation weather channel now to more of a public safety one. From time to time, mixed in with [the weather] will be short messages on public health or public safety about how to prepare for something. Let's say … you're a new immigrant, maybe we have a two minute segment on there in various languages on how you should prepare your car for this, those kinds of things. It becomes more of a full service thing than simply having a scroll on the bottom telling you there's a blizzard warning. We're trying to create more of a public safety presence that's continuous on the broadcast air waves.*
> *– County emergency manager*

This professional emphasized a point that was also evident from the study's observational and participant interview findings – the importance of two-way communications between community members and emergency response agencies, with each recognizing the other's role as experts:

> *We seldom hear directly from folks from [immigrant] communities. It would be really neat [at professional conferences] to have people come and talk about their experience with emergencies or disasters and how they hope to be treated and what they want to know, … hearing it from folks that actually lived the experience of moving here from somewhere else would be really popular and really informative. It wouldn't be the entire answer, but there's stuff that we know, that [immigrants] don't and we want them to know, and then there is stuff that they know that we don't know that we want to learn from them. So it will be a give and take. – County emergency manager*

The emergency manager expressed doubts that such two-way conversations were likely to occur as much as needed without the help of an intermediary who had – or is able to

build – relationships with both constituencies, as ECHO has done and will continue doing for the MLMI.

> *The emergency response community as a whole would be developing these messages [about the way weather works up here, the way emergencies work]. ECHO's services are to essentially take what is in our context and put it into forms and present it in ways that these other communities can understand, which is really, really important for us to do. And I think maybe it will give a sense to these communities that their government really cares about them, and that it is willing to make investments and to take the time to actually present something to them that it will be easier for them to understand and not require them to come so far over our way to be able to understand these vital things.*
> *– County emergency manager*

Note that the best practices employed in the first three stages – including in-depth community engagement – are also part of the MLMI's plans for the final stage, and this approach is strongly endorsed by the emergency manager.

Overall effectiveness of the initiative

The MLMI engagement practices described in this report are deemed effective not because participants reported a high level of satisfaction with them, but because they are likely to increase the community's capacity to respond promptly and safely to an emergency. Evidence for this likelihood comes from prior research that found these practices contribute to safer responses, and also from the perspective of the initiative participants, who were almost unanimous in finding the initiative's efforts "very effective" in producing a way to get emergency information quickly to people when needed (Figure 8).

8. Effectiveness of the overall project in getting emergency messaging to the community quickly

	N	Very effective	Somewhat effective	Not really effective	Don't Know
Do you think the project has resulted in an effective way to get the most useful information to the most people quickly in case of emergency?	8	7	0	1	0

(Asked of Ambassadors and translators/linguists, but not other less specialized community participants)
Source: *Wilder Research survey of community participants.*

The respondent who said "not really effective" clarified, in open-ended responses, that he/she felt more diverse people (including him/herself) should have been included earlier, resulting in initial translations that would have been more acceptable to a higher proportion of the people at the broader community meeting where they were reviewed.

However, other than in this particular respect, this respondent fully endorsed the overall process of community-based planning.

Participants believe the Hmong and Somali messages will get critical information to more people in their communities faster, when speed is important.

> *This [process] is like giving people the tools that they need, because information is power. There are a lot of older people that live by themselves. So this would be perfect. They don't need an interpreter if they are watching Somali programming. The message will just come on whether it's on telephone or TV, they don't have to call to anyone or ask anyone. They don't have to risk their lives because there have been individuals that went out when the weather was really bad. – Somali participant*

Issues to consider

The experience of MLMI bears out the merit of best practices already identified in published resources on emergency messaging for under-served groups. Interviews and observation of the engagement process add contextual detail to our understanding of how these can be implemented in different cultural contexts. The two most fundamental principles are:

- Building on-going relationships – or working with a partner who already has them

- Designing a process that puts as much of the decision making as possible squarely and visibly in the hands of the community itself

Professionals and grassroots community members truly partnered in this initiative. The overall Emergency Messaging System and interoperable technologies were designed by public safety and communications organizations. Based on that framework, ECHO staff designed the overall outreach and message development process and the process for rating translations and voices, and Ambassadors from the community led the community meetings and helped manage the discussion to ensure a balance between full participation and efficiency.

Besides the role of the Ambassadors, the use of linguists in the translation process is another example of how the community can be placed in the lead. Public safety representatives (through ECHO) brought their knowledge of the messages in need of translation, and of the technical aspects of how the emergency alert system works; linguists and translators brought an expert level of understanding of how to communicate not only the words but the full meanings of the messages in the context of their own cultures; and a diverse group of community members of different clans, dialects, genders, professions, and generations brought the "ground-truthing" expertise of how ordinary people would likely hear and understand the translated messages.

In the final stages of the Minnesota Multi-Language Messaging Initiative, and any replications of the outreach, translation, and voice recording process that may be undertaken by others, four recommendations stand out for consideration.

Study and learn from existing sources of effective practices

The MLMI confirms the merit of the previously-identified best practices in emergency planning for under-represented communities. It also extends our understanding of why and how those practices work, by illustrating common principles that hold true regardless

of specific differences in cultural settings. Examples cited in this report illustrate some concrete examples of ways to apply those general principles in quite different contexts.

Continue the model of high community engagement in the final stage of the MLMI

The high level of engagement to date has built trust and begun to acquaint members of the Hmong and Somali communities with some of the standard terms (such as "shelter in place") for ways of taking action in response to emergency. These terms, like some of the kinds of emergencies in Minnesota, are relatively new to these immigrant communities. It is vitally important to continue to educate people about the actions they need to take in response to different kinds of emergencies so that they can react quickly when needed. In all the communities where these messages will be disseminated, emergency managers need to be in dialog with community members so they can be familiar with their priorities and needs during this ongoing planning process.

Use intermediary organizations to bridge between emergency response agencies and grassroots communities

The experiences documented in this study reinforce prior published literature on the importance of building and strengthening relationships between emergency planning organizations and the communities to be alerted. There is often a large gap between the emergency planning organizations and non-English-speaking communities, and the Minnesota Multi-Language Messaging Initiative illustrates the value that intermediaries can provide to bridge that gap as well as many of the principles and practices to make such bridging effective. In the MLMI, we observed ECHO fulfilling this connecting role at two levels:

ECHO as an organization was the primary bridge between the public safety organizations and the Somali and Hmong communities, with a multi-year history of providing important and trusted information on public health and safety topics, as well as ongoing relationships with community leaders.

ECHO's Ambassadors, in turn, serve as a bridge between ECHO itself and the broader community and greatly expand the reach and relationships that ECHO as an organization is able to have.

Base emergency preparation activities on ongoing, trusting relationships

Potential replicators should note that this work requires ongoing building and maintenance of consistent and genuinely two-way relationships; it cannot be done equally successfully out of the blue by someone with no prior community presence.

Bibliography

The following publications, provided by **tpt** and ECHO and used by them in the design of the emergency messaging project, were consulted for best practices in emergency preparedness:

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