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EVIDENCE SUMMARY
August 2024[1]

What are the best strategies for emergency preparedness and emergency information dissemination among newcomers?

Suggestive evidence shows broad consensus on four necessary components for emergency preparedness and emergency information dissemination among resettled refugees:

- Preexisting partnerships among refugee communities, community-based organizations (CBOs), and local emergency planners can be an important entryway to newcomer communities.
- People who serve as social bridges between refugee communities and governmental and community-based organizations are important conduits of emergency information dissemination.
- Emergency messaging must be simple and consistent in refugees' native language and must be available through multiple communication channels.
- Refugees may meet disasters with resiliency.

Given the ethical and logistical challenges of conducting impact evaluation studies in disasters, the recommendations of these suggestive studies should be viewed as best practices at this time.

Purpose of this summary

This evidence summary is intended to identify the best strategies for emergency preparedness and emergency information dissemination to newcomer communities. The intended audience is resettlement service providers, government agencies, and other interested stakeholders. This evidence summary is meant to answer the following questions:

[1] This is an updated version of this evidence summary. The original was published in May 2020.

- What are strategies for helping resettled refugees prepare for emergencies?
- What are strategies for disseminating emergency information to resettled refugees?
- What is the strength of the evidence about the effectiveness of the above strategies?

What is meant by "emergency preparedness"?

Emergency or disaster preparedness encompasses the planning and response to disasters. A disaster is defined by the World Health Organization (WHO) as a sudden phenomenon of sufficient magnitude to overwhelm the resources of a hospital, region, or location, requiring external support.[2] The Federal Emergency Management Agency (FEMA) shares a similar definition that includes any "non-routine event that exceeds that capacity of the affected area," inhibiting the local area from being able to effectively respond on its own[3].

What is meant by "disaster risk reduction"?

United Nations Educational, Scientific and Cultural Organization (UNESCO) defines disaster risk reduction as "the concept and practice of reducing disaster risks through systematic efforts to analyze and reduce the causal factors of disasters."[4]

What does the evidence show?

Preexisting partnerships among refugee communities, community-based organizations (CBOs), and local emergency planners can be an important entryway to newcomer communities.

- Preexisting partnerships with organizations that have **long-standing, trusted relationships with immigrant communities** play an essential role in helping detect and respond to disease outbreaks (Koeller et al., 2020) and prepare for disasters (Wiley, 2012). Emergency preparedness approaches should be **community-based and participatory** (Carter-Pokras et al., 2007).
- An example is a community-university-labor union partnership to strengthen connections to disaster preparedness systems to increase community resilience among Latino immigrant communities in New York and New Jersey. The Immigrant Worker Disaster Resilience Workgroup was created to improve the capacity of CBOs to provide ongoing disaster preparedness for immigrant laborers and to improve CBOs' knowledge about and develop connections to disaster preparedness agencies, thus increasing their sustained participation in local disaster preparedness activities. The workgroup met monthly to develop disaster preparedness training and outreach materials and arrange meetings with governmental and nongovernmental disaster-related agencies. **Building ongoing ties that connect workers and community-based organizations with local disaster preparedness systems provided mutual benefits to disaster**

[2] Puryear B., & Gnugnoli D.M. (2023). Emergency preparedness. In: *StatPearls [Internet]*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK537042/

[3] De Anda, H. H., Freeman, C. L., Braithwaite, S. (2022). EMS criteria for disaster declaration. In: *StatPearls [Internet].* StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK539803/

[4] UNESCO. (n.d.). *Disaster risk reduction.* https://www.unesco.org/en/disaster-risk-reduction?hub=70951

planners and local immigrant communities and also impacted national disaster-related initiatives (Cuervo, Leopold, & Baron, 2017).

- Another example is programs called Ventanillas de Salud (VDS), created by Mexican consulates in the United States, which provide **appropriate outreach** to Mexicans residing in the U.S. regardless of immigration status. These programs have long-standing partnerships with other organizations in the communities that they serve. During COVID-19, they were able to rely on existing personal relationships to maintain communication and referrals for clients, even when lockdowns complicated interactions. However, during prolonged emergency situations, like COVID-19, the cycling of staff complicated some partnerships and outreach efforts (Gaitán-Rossi et al., 2023).

People who serve as social bridges between refugee communities and governmental and community-based organizations are important conduits of emergency information dissemination.

- **Identifying influential refugee community leaders** who can serve as bridges between agencies and the refugee population **is helpful in disseminating vital educational materials** (Lenz & Warner, 2011). These social bridges serve as trusted, effective communication channels (Truman et al., 2009). People who often serve or can serve such bridging functions include community religious or other leaders (Truman et al., 2009), promotores (community health workers in Spanish-speaking communities (Carter-Pokras et al., 2007; Eisenman et al., 2009; Demeke et al., 2022), medical interpreters, and bilingual school staff (Ike, 2015).
- **Refugee-led organizations (RLOs) can be an important piece to identifying social bridges.** Since they are generally grassroots organizations formed by refugees to assist their own communities, they are already deeply enmeshed in the community and have built trust over years by providing services. They are generally small in nature and volunteer run, lack formalized office spaces, and have limited funding, allowing them to be flexible and adaptable to new situations. They also have a history of operating with limited resources. During COVID-19, several RLOs were able to pivot multiple times and begin providing food and personal protective equipment (PPE) to hundreds of households in their communities, all while operating out of garages and vehicles (Gonzalez Benson et al., 2022).
- Young people from refugee backgrounds are an important resource for disaster risk reduction within their respective communities. The experiences of young people from refugee backgrounds during the 2010–2011 Canterbury earthquakes in New Zealand highlighted their capacities as cultural brokers and mediators, as they ensured that their respective communities had access to translated and interpreted disaster-related information. The authors concluded that **young people from refugee backgrounds represent a bridge that can connect people from their ethnic communities to key disaster information** through their linguistic capital, digital literacy, and social networks in support of the community's recovery process (Marlowe & Bogen, 2015).

Emergency messaging must be simple and consistent in refugees' native language and must be available through multiple communication channels.

- In communicating emergency information to refugee communities, **messages should use familiar terminology and provide clear, concise, prioritized information** (Eisenman et al., 2009). The information should be coordinated to **avoid overload**, and messages should be simple and consistent (Wiley, 2012). The use of small-group discussions and hands-on learning to deliver disaster preparedness education is also recommended (Eisenman et al., 2009). **Government messaging needs simplification and clarification** to avoid misinformation and misunderstanding (Demeke et al., 2022). Using trusted sources (individuals or organizations) can help improve message uptake among immigrant communities (Demeke et al., 2022; Roth et al., 2022).

- Mass media efforts need to be considered with local broadcasting companies, including the development of a radio or television program to **share news and information in the refugees' language** (Lenz & Warner, 2011; Wiley, 2012). Service providers should avoid over-reliance on web-based information; it should also be **available in hard copy** (Wiley, 2012; Demeke et al., 2022). For refugees who are not literate in their native language, information must be provided in **audiovisual or audio form** (Lenz & Warner, 2011). Finally, emergency planners should ask refugee community leaders and service providers what information they want to be translated (Wiley, 2012).
- COVID-19 complicated the ability of service organizations to provide in-person services, forcing many organizations to switch to **virtual platforms**. The VDS programs operating with Mexican Consulates discussed above reported that this switch allowed them to **increase the number and depth of topics covered** and that their **user base had greater reach and diversification** due to easier scheduling and reduction of in-person attendance barriers (Gaitán-Rossi et al., 2023). However, the ability to conduct these services was complicated by lack of access to necessary technology.
- **WhatsApp, Facebook, and Zoom can serve as critical communication channels** during emergency situations, especially when in-person services are made difficult like during the COVID-19 lockdowns. Facebook Live events allowed immigrants to hear the first-hand stories of community members who had tested positive as well as ask questions of a physician about the virus (Gonzalez Benson et al., 2022). Refugee-led organizations also indicated that WhatsApp was the primary method for sharing translated materials to relevant communities (Gonzalez Benson et al., 2022).
- **Emergency situation-specific phone lines** can also be an effective option to allow communities to contact organizations directly and receive tailored support. These can include hotlines and general phone communication allowing community members to gather information or access services. One Houston-based phone line was responsible for adding 45,000 individuals to a vaccine waitlist during COVID-19 (Demeke et al., 2022). Refugee-led organizations indicated that answering phone calls was one of the largest usages of their time during the early days of the COVID-19 pandemic, with one organization fielding approximately 4,000 calls in the first couple of months (Gonzalez Benson et al., 2022).

> "Unless emergency preparedness agencies take affirmative steps to overcome barriers such as language and distrust, low English Proficient families may not have access to important information and programs to help them prepare for and respond to emergencies."
>
> (Wang & Yasui, 2008)

Refugees may meet disasters with resiliency.

- A study of Spanish-speaking immigrants' knowledge and perceptions of emergency preparedness reported that **individuals' prior experiences with emergencies influence their response to a new one** (Carter-Pokras et al., 2007).
- A study of the Bosnian refugee community in St. Louis found that the community was capable of responding to a natural disaster because of **individuals' aggregated coping skills** learned from the Bosnian war. The community also had a strong capacity for social networking, social cohesion, coping, and economic development needed in case of a natural disaster (Xin, Karamehic-Muratovic, & Cluphf, 2016).

What are the implications for practice and research?

Refugee service providers should foster coalitions with other CBOs to collaborate with local and state emergency planners and responders.

- Resettled refugees are a small part of the larger vulnerable population of low-income immigrant and minority groups. While the unique situation of refugees must not be overlooked, broader coordinated collaborations with CBOs serving other similarly vulnerable populations are likely to foster more effective and efficient emergency planning and response.

Refugee service providers should identify and support members in the refugee community who can serve as social and communication bridges.

- Trust is a commonly cited key factor in the ability of an organization to pass along pertinent information to immigrant communities. Identifying and supporting community members who have already earned widespread trust in the community can make the process of message dissemination and outreach more efficient.
- Practitioners should consider supporting identified community members in achieving various certificates or training related to emergency preparedness. The Federal Emergency Management Agency (FEMA) has compiled a list of resources related to training and education.

Emergency preparedness should be added to existing assessments of refugee clients' vulnerabilities and resiliencies.

- Assessment of refugee clients' emergency preparedness should occur at intake and regular intervals thereafter. Individualized service plans should include goals and action steps related to emergency preparedness when indicated by the assessment.

Social media appears to be a key mode of information sharing during emergency situations.

- Research on information sharing during the COVID-19 pandemic highlighted the widespread use of social media platforms such as WhatsApp and Facebook as sources of information. Service providers should identify ways to reach clients through social media, as well as ways to discredit any misinformation that may be spreading on these platforms.
- Other forms of technology, such as formats needing consistent Internet connections, are not as accessible for many newcomer communities; therefore, it is important to maintain various modes of communication. Phone lines and radio messaging are options to reach community members with lower digital literacy.

Research is needed to prevent and reduce stigma due to disaster contexts and mitigate its effects.

- Certain disasters such as pandemics trigger stigma against groups believed by some to be the

source of the pandemic (Truman et al., 2009). More research is needed on prevention and mitigation of stigma against refugees in these contexts.

How did we identify evidence for this summary?

The Switchboard evidence database includes the following types of studies, categorized by their strength of evidence:

Strong Evidence

Meta-analyses: systematic analyses of sets of existing evaluations of similar programs.

Systematic reviews: syntheses of the best available evidence on specific research questions that use narrative synthesis focused on evaluations of the impacts of at least one specific policy, program, or intervention.

Moderate Evidence

Published individual **impact evaluations** using randomized controlled trials (RCTs/C-RCTs), natural experiments, quasi-experimental techniques such as difference-in-difference (DID), instrumental variables (IV), regression discontinuity (RDD), propensity score matching (PSM) or other forms of synthetic matching, as well as fixed effects techniques with interaction terms.

Suggestive Evidence

Published studies using methods including non-systematic literature review, uncontrolled before and after tests, post-test only, interrupted time series (ITS), cross-sectional regressions, longitudinal panels, cohort and case-controls, as well as purely qualitative techniques.

Excluded Studies

Case studies, unpublished suggestive research, opinion papers, descriptive studies, and unpublished literature reviews.

Search Protocol

Studies included in the database focused on high-income or upper middle-income countries, including but not limited to the United States. Studies included must have been published since 2000. To identify evidence related to emergency preparedness among refugees, we searched the following websites and databases using the following population, methodology, and target problem terms:

Websites and Databases	Population Terms	Methodology Terms	Target Problem Terms
Campbell Collaboration Cochrane Collaboration Mathematica Policy Research	refugee OR immigrant OR	evaluation OR impact OR	“disaster prepared*” OR “emergency prepared*” OR

Evidence Aid Urban Institute Migration Policy Institute HHS OPRE Medline ASSIA Social Services Abstracts Social Work Abstracts ReliefWeb ALNAP GoogleScholar EBSCOhost	"unaccompanied minor" OR asylee OR "temporary protected status" OR "victims of traffick*" OR "traffick* victims" OR T-Visa OR U-Visa OR Cuban OR Haitian OR Amerasian OR parolee	program OR intervention OR policy OR project OR train* OR therapy OR treatment OR counseling OR workshop OR review OR meta-analysis OR synthesis	pandemic

For databases or websites that permitted only basic searches, free-text terms and limited term combinations were selected out of the lists above, and all resultant studies were reviewed for relevance. Conversely, for databases or websites with advanced search capability, we made use of relevant filters available. All search terms were searched in the title and abstract fields only to exclude studies that only made passing mention of the topic under consideration.

After initial screening, evidence mapping was prioritized as follows: Priority was given to meta-analyses and systematic reviews, followed by individual impact evaluations when no meta-analyses or systematic reviews were available. Evaluations that were rated as impact evidence were considered before those rated as suggestive, with the latter only being included for outcomes where no evidence was available from the former.

Studies Included

Database and website searching identified 639 studies. After removing duplicates, 598 studies were then screened. Of these, 535 were determined to be irrelevant to this search. Sixty-three full-text articles were assessed for eligibility. Forty-five full-text articles were excluded due to not meeting one or more of the inclusion criteria pertaining to resettlement country, year of publication, population, methodology, or target problem. Eighteen studies were eligible for inclusion. They are listed below, with hyperlinks to the abstracts or full text (when available).

Meta-Analyses and Systematic Reviews

None.

Impact Evaluations

None.

Suggestive Studies

Carter-Pokras, O., Zambrana, R. E., Mora, S. E., & Aaby, K. A. (2007). Emergency preparedness: Knowledge and perceptions of Latin American immigrants. *Journal of Health Care for the Poor and Underserved 18*(2), 465–81. Full text.

Cuervo, I., Leopold, L., & Baron, S. (2017). Promoting community preparedness and resilience: A Latino immigrant community–driven project following Hurricane Sandy. *American Journal of Public Health, 107*(S2), S161–S164. Full text.

Demeke, J., McFadden, S. M., Dada, D., Djiometio, J. N., Vlahov, D., Wilton, L., Wang, M., & Nelson, L. E. (2022). Strategies that promote equity in COVID-19 vaccine uptake for undocumented immigrants: A review. *Journal of Community Health, 47*, 554–562. Full Text.

Eisenman, D. P., Glik, D., Maranon, R., Gonzales, L., & Asch, S. (2009). Developing a disaster preparedness campaign targeting low-income Latino immigrants: Focus group results for Project PREP. *Journal of Health Care for the Poor and Underserved 20*(2), 330–345. Abstract.

Gaitán-Rossi, P., Vilar-Compte, M., & Bustamante, A. V. (2023). Adaptation of a community health outreach model during the COVID-19 pandemic: The case of the Mexican consulates in the United States of America. *International Journal for Equity in Health, 22*(138), 1–12. Full Text.

Gonzalez Benson, O., Routte, I., Pimentel Walker, A. P., Yoshihima, M., & Kelly, A. (2022). Refugee-led organizations' crisis response during the COVID-19 pandemic. *Refuge: Canada's Journal on Refugees, 38*(1), 62–77. Full Text.

Ike, B. R., Calhoun, R., Angulo, A. S., Meischke, H., & Senturia, K. D. (2015). Medical interpreters and bilingual school staff: Potential disaster information conduits? *Journal of Emergency Management, 13*(4), 339–348. Abstract.

Koeller, S., Meyer, D., Shearer, M. P., Hosangadi, D., Snyder, M., & Nuzzo, J. B. (2020). Responding to a mumps outbreak impacting immigrants and Low–English-Proficiency populations. *Journal of Public Health Management and Practice, 26*(2), 124–130. Abstract.

Lenz, B. K., & Warner, S. (2011). Global learning experiences during a domestic community health clinical. *Nursing Education Perspectives, 32*(1), 26–29. Abstract.

Marlowe, J., & Bogen, R. (2015). Young people from refugee backgrounds as a resource for disaster risk reduction. *International Journal of Disaster Risk Reduction, 14*, 125–131. Abstract.

Roth, B. J., Woo, B., & Doering-White, J. (2022). Brokering resources during a pandemic: Exploring how organizations and clinics responded to the needs of immigrant communities during COVID-19. *Social Work, 68*(1). 57–67. Abstract.

Truman, B. I., Tinker, T., Vaughan, E., Kapella, B. K., Brenden, M., Woznica, C. V., Rios, E., & Lichtveld, M. (2009). Pandemic influenza preparedness and response among immigrants and refugees. *American Journal of Public Health, 99*(S2), S278–S286. Full text.

Wang, T., & Yasui, L. (2008). *Integrating immigrant families in emergency response, relief and rebuilding efforts*. The Annie E. Casey Foundation and Grantmakers Concerned with Immigrants and Refugees. Full text.

Wylie, S. (2012). *Best practice guidelines: Engaging with culturally and linguistically diverse (CALD) communities in times of disaster.* Community Language Information Network Group (CLING). Full text.

Xin, H., Karamehic-Muratovic, A., & Cluphf, D. (2016). A Bosnian refugee community's hidden capacity in preparation for a natural disaster in the United States. *Global Journal of Health Education and*

Promotion, 17(1). Full text.

Supplemental Resources

The following studies did not meet the criteria to be included in the evidence summary but may provide additional context, guidance, or understanding of the topic.

Abbas, S. (2022). Balancing resettlement, protection, and rapport on the front line: Delivering the resettlement assistance program during COVID-19. *Refuge: Canada's Journal on Refugees, 38*(1), 78–87. Full Text.

Alam, F. & Haider, S. (2024). The role of first-line managers in a pandemic in reducing the spread of infections and promoting the health and well-being of Rohingya refugees. *Human Service Organizations: Management, Leadership & Governance, 48*(3), 323–339. Abstract.

Betts, A., Easton-Calabria, E., & Pincock, K. (2021). Localising public health: Refugee-led organizations as first and last responders in COVID-19. *World Development, 139,* 1–6. Full Text.

Castro, V. (2020). *Project Prepared: Building community through disaster preparedness in San José's Japantown and Hensley Historic District.* [Master's Thesis, San José State University]. Full Text.

Dudley, M. J. (2020). Reaching invisible and unprotected workers on farms during the coronavirus pandemic. *Journal of Agromedicine, 25*(4), 427–429. Abstract.

Hoefer, A., Pampaka, D., Castrillejo, D., Luengo-Cabrera, J., Paisi, M., Herrera-León, S., López-Perea, N., & Diego-Salas, J. (2022). Considerations for COVID-19 management in reception centers for refugees, asylum seekers, and migrants, Spain 2020. *International Journal of Infectious Diseases, 116*, 108–110. Full Text.

Kholina, K., Harmon, S. H. E., & Graham, J. E. (2022). An equitable vaccine delivery system: Lessons from the COVID-19 vaccine rollout in Canada. *PLoS ONE, 17*(12), 1–18. Full Text.

Klabbers, R. E., Muwonge, T. R., Pham, P., Mujugira, A., Vinck, P., Borthakur, S., Sharma, M., Mohammed, N., Parkes-Ratanshi, R., Celum, C., & O'Laughlin, K. N. (2023). Leveraging interactive voice response technology to mitigate COVID-19 risk in refugee settlements in Uganda: Lessons learned implementing "Dial-COVID" a toll-free mobile phone symptom surveillance and information dissemination tool. *PLoS ONE, 17*(1), 1–17. Full Text.

Pădurariu, P. (2022). Considerations about engaging volunteers in crisis management. *Journal of Public Administration, Finance & Law,* (24), 193–197. Full Text.

Piao, M., Kondo, A., & Qian, H. (2024). Factors related to immigrants' disaster preparedness: A scoping review. *Health Emergency and Disaster Nursing.* Full Text.