

# Municipal-Level Risk Communication Practices in Puerto Rico



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# Project Overview



## Previous Award

### **Risk Communication During Hurricanes Fiona and Ian in Puerto Rico and Florida**

The previous study explored risk and health communication policies and practices by news media and government officials during Hurricanes Fiona and Ian in Puerto Rico and Florida, respectively. The study identified lessons learned, needs and risk communication challenges experienced, and offered evidence-based recommendations to local authorities.

One of the main findings of this study was that the greatest challenges and most pressing needs for effective risk communication, especially regarding vulnerable populations, were at the municipal level.



## Continuation Award Purpose

This continuation project seeks to assess risk communication policies and practices of municipal government officials in Puerto Rico, who are responsible for reaching out to local populations during emergencies.

The data gathered in this study serves as the foundation for building a broader understanding of the health implications and emergency preparedness efforts of the Municipal Emergency Management Offices (MEMO's) policies and practices, and their impact on vulnerable population preparedness and emergency response from local authorities.

# Project Overview



## Research Site

The study comprised a sample of six coastal and six inland municipalities from Puerto Rico with high vulnerable population indexes. These indexes are:

Socioeconomic disadvantage  
Older adults  
Chronically ill  
Handicapped  
Homeless people  
Isolated communities  
High flood-risk communities

### Inland municipalities

- Adjuntas
- Ciales
- Comerío
- Jayuya
- Maricao
- Orocovis

### Coastal municipalities

- Arroyo
- Cabo Rojo
- Guánica
- Lajas
- Loíza
- Yabucoa



## Timeline

<u>Activity</u>	<u>week</u>	<u>(weeks)</u>
Total Research Activity	1 - 13	13
Literature review	1 - 4	4
Research design and development, Document production (letters, consent forms, etc.)	1 - 2	2
Questionnaire development	2 - 3	2
Subject recruiting	1 - 3	3
Data gathering: Interviews	2 - 4	3
Interview data analysis	5 - 6	2
Summarizing findings	7	1
Wrapping of pending data gathering	8	1
Lit. review and findings integration	8	1
Drafting of preliminary reports	9	2
Final elaboration of report	10 - 11	2
Report revision and final correction	12	1
Academic conference presentations	12 - 13	2



# Research Questions

Research has assessed risk communication practices that contribute to community resiliency (e.g., Guerra Velázquez 2022). However, questions have yet to address if and how any of those directives, guides, and plans are applied at the municipal level, regarding vulnerable populations.

The present study sheds some light on both these gaps by answering the following research questions:

1. What are the risk communication policies and practices used by municipal emergency management officials to safeguard their local communities — especially those constituents who are most vulnerable and isolated — before, during, and after disasters?
2. What are the most pressing needs and challenges of the municipal emergency management officials to improve their risk communication policies and practices—including the evaluation of their outreach efforts—with vulnerable populations?



# Methods

## RESEARCH DESIGN

Qualitative analysis research study about risk communication practices regarding vulnerable populations during emergency situations at the municipal level in Puerto Rico.

### Sample

Emergency management officials from six coastal municipalities.

Emergency management officials from six inland municipalities.

Risk communication protocols, plans and manuals.

### Procedure

Design and development of a mixed targeted and open questions interview.

Interviews via Zoom with MEMO officials from the selected municipalities.

Procedure manuals and interview data analysis.

Our qualitative design comprised a sample of twelve Puerto Rican municipalities' MEMO officials.

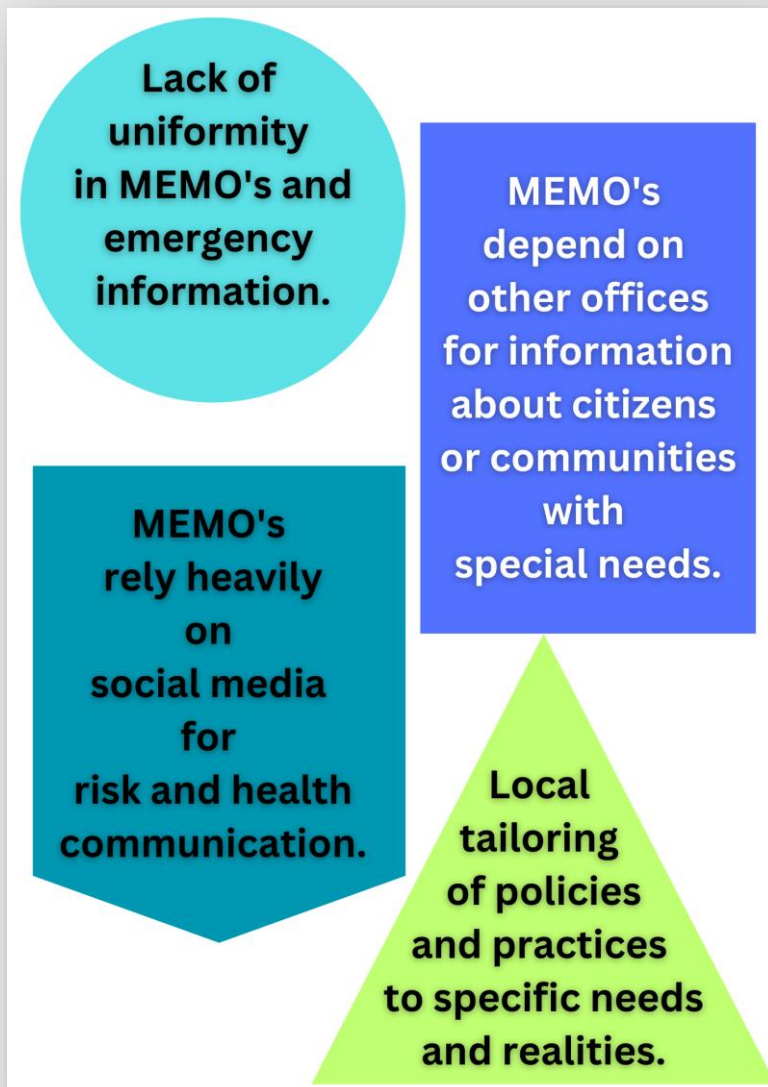
Interview guides included a mix of targeted and open questions about risk communication policies and practices, especially regarding vulnerable populations.

Risk communication protocols, plans and manuals were revised to determine protocol adherence.

Qualitative analysis methods were applied to data, creating topics and categories, and comparing interviewees answers.

Recommendations were drafted according to findings and were presented to both central and municipal emergency management officials and other stakeholders.

# Preliminary Findings



- Not all local MEMOs follow policies and practices of the central government's emergency plan. Most of them tailor the plan to their specific realities and needs.
- Although they all recognized that vulnerable populations have limited access to the Internet, most MEMOs rely heavily on social media for their risk and health communication practices.
- There is a lack of uniformity in all municipalities' emergency contact information.
- All MEMOs depend on another municipal office, typically the Citizen's Assistance Office, for information and contact of citizens with special needs and/or mobility challenges.

# Preliminary Findings (cont.)

**MEMO's have personnel and funding needs.**

**MEMO director post is a politically appointed position of trust.**

**Risk communication is carried out from the Mayor's office and not from MEMO's.**

**Most MEMO directors hold other unrelated positions.**

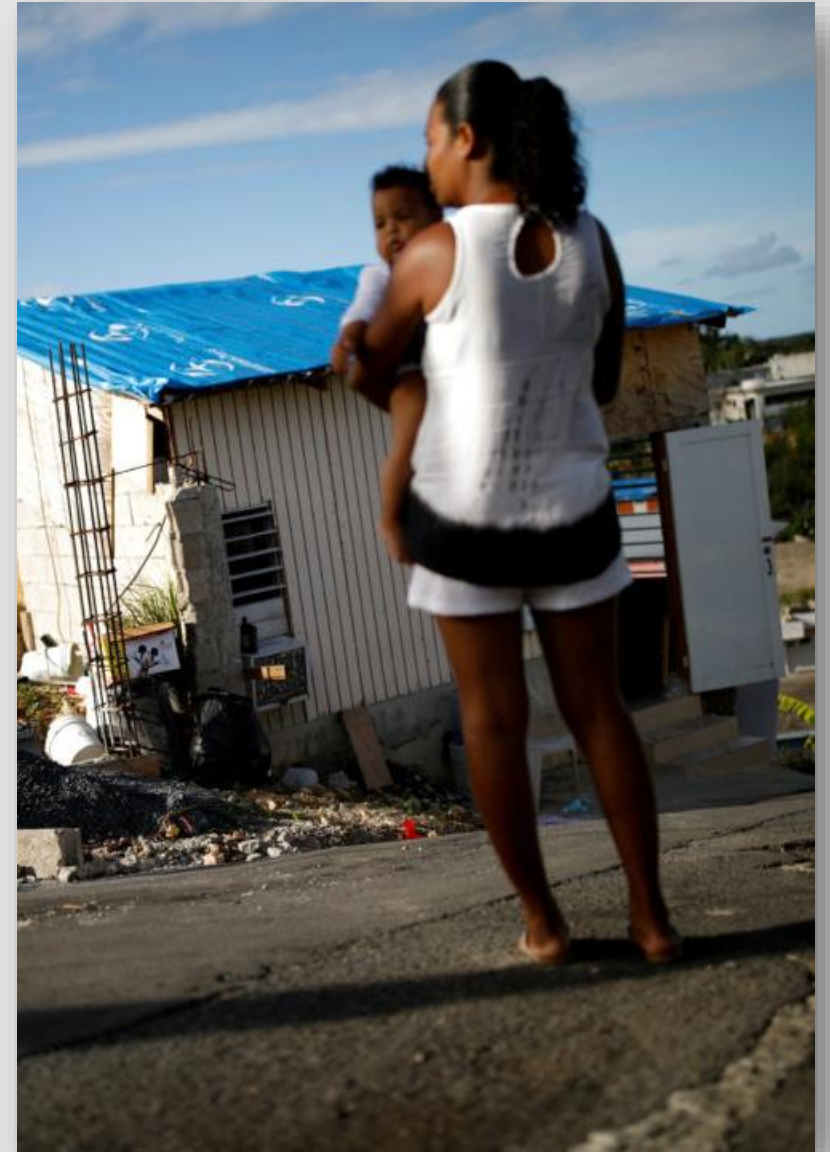
- Most MEMOs need more personnel and more funding for their emergency management practices, as well as risk communication training.
- Risk communication in almost all municipalities is carried out from the Mayor's communication office and not from MEMO. In fact, interviewees referred to emergency management practices when asked about risk communication. Their perspective seems to be more of crisis communication.
- The MEMO director post in all municipalities is a Mayor appointed, position of trust, thus very politically influenced, and not a career position.
- Many MEMO directors hold other posts or activities in the municipal government, some of them completely unrelated to emergency management. For example, some MEMO directors also preside the Municipal Bid Board.

# Public Health Implication

1

The study confirms that Puerto Rican authorities are dealing with so called «cumulative vulnerabilities».

It also identifies factors that make older populations more vulnerable to negative health effects during disasters.





# Public Health Implication

2

The study also points to the need to reduce social disparities and inequalities in access to health services.

There is a perceived increase in health vulnerabilities associated with geographic isolation of older and of economically disadvantaged communities.



# Public Health Implication

3

It also contributes to the understanding of how risk and health communication is carried out in the municipalities, regarding vulnerable populations, and its impact in public health and wellbeing.

It points to the urgent need to develop a competence in risk and health communication that can effectively safeguard certain care and services for these populations.



# Acknowledgements



Researchers wish to thank Meghan Mordy, Lori Peek, Rachel Adams, Jennifer Tobin and the Natural Hazards Center team for their continued support during this continuation award process, as well as Robin Soler and the CDC Office of Applied Research and Disaster Preparedness for making this research project possible.

Special thanks to Mr. Ángel Vázquez, Regional MEMO director, and to Mr. Félix García, communications and federal liaisons official, for their support in identifying and contacting the research subjects, and also to Cristina Miranda Palacios, executive director of the Liga de Ciudades de Puerto Rico for her special interest in our research and aid in the divulgation efforts of our findings and recommendations.

Researchers are especially thankful to Julia Subervi for her constant and unconditional support and assistance in all of our research activities.



*The Public Health Disaster Research Award Program is based on work supported by the Centers for Disease Control and Prevention through supplemental funding to the National Science Foundation (NSF Award #1635593). Any opinions, findings, conclusions, or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of NSF, CDC, or the Natural Hazards Center.*

