

After the Storm: Challenges in Infant Care, Healthcare Access, and Housing in Post-Hurricane Helene Recovery

Roni Fraser, Sydney Dyck, & Sarah E. DeYoung

#IAEM26 Competitive - Academic Division



Background

- Hurricane Helene made landfall in the Gulf Coast and panhandle region of Florida on September 26th, 2024. The rainfall from Hurricane Helene dumped nearly 10 inches of rain for two days in the mountains of North Carolina and Tennessee. The heavy rain caused massive flooding, and contributed to over 200 landslides in the region. Hundreds of roads were destroyed, and hundreds of people were killed in the floods and landslides.
- Water, power, and other critical infrastructure were completely demolished, along with homes and businesses. In the days following the hurricane, emergent groups throughout the state and region mobilized for rescue and relief efforts.
- Among the relief efforts, formula donations were collected and distributed en masse without clear protocols for following IYCF-E guidance (infant and young children in emergencies). Our research aims to identify key challenges related to the donation and distribution of infant formula, feeding supplies, and maternal support resources during and after Hurricane Helene.

Field Work



Major Themes

Barriers for families with infants and young children

- Families throughout western North Carolina experienced interruption of critical services. Many organizations within and outside of North Carolina mobilized to bring supplies to the hurricane victims. However, there was confusion and inaccurate information about the kinds of supplies that were urgently needed. When we arrived at the field sites, communities had just received access to potable water after six weeks after the hurricane.
- Many of the sites we visited had expired infant formula at distribution sites. Additionally, some government offices, such as the Women, Infants, and Children (WIC) program office were closed for autumn holidays without a clear notice to families of alternate service sites.
- Some groups coordinated effectively to provide IYCF-E training to relief workers. The collaborations were between public health academics, private birth centers, and other experts. This can be seen as a best practice in IYCF-E.

The State of Housing

- In Buncombe County, many people were still residing in tents, recreational vehicles (RVs), and other forms of temporary housing in November (six weeks after the hurricane). Some of the neighborhoods we visited were completely destroyed, and it was unclear if there were plans to rebuild in the same space. Some mobile home parks in Watauga County were marked as condemned but people were still living in them.

Donation Sites

- We visited various donation sites which ranged from county Children's Councils to churches and a YMCA. These sites were inundated with materials, most often having an overstock of infant formula, water bottles, clothing and blankets.
- As noted above, a wide variety of infant formula was often available, but we observed that many products were expired or close to their expiration date, and there was differential sorting and marking of these expiring bottles ranging from none at all to very organized.
- Individuals staffing donation sites were sometimes locals and sometimes not—we met a woman who had come up from Texas to volunteer without having a volunteer placement lined up. We observed gatekeeping of donation supplies by ad hoc volunteers, including instances of racial biases and stereotyping.



Key Findings

Prolonged Disruption of Critical services

- Many families lacked access to potable water for weeks, and lacked trust in the 'clean' water once restored in the City of Asheville.
- Unclear where families should go for government support resources due to closed or damaged buildings.

Inequities in Donation Distribution

- Follow IYCF-E protocols and best practices - the overabundance of donated formula and infant supplies led to mismanaged resources, such as expired formula and inconsistent labeling.
- Develop policies that support families after disasters - the lack of clear legal or policy guidance on safe infant feeding for response volunteers and officials was a challenge.
- The racialization, stereotyping, and gatekeeping of aid led to inconsistent access of relief resources for families in North Carolina.

Acknowledgement: This material is based upon work supported by the National Science Foundation under Grant No. 2209190.

Disclaimer: Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.