

# Through a Mother's Eyes: The Compound Nature of the COVID-19 Pandemic and Hurricane Ida on Maternal-Infant Health

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Poster Showcase

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## Maternal-Infant Health & Disasters

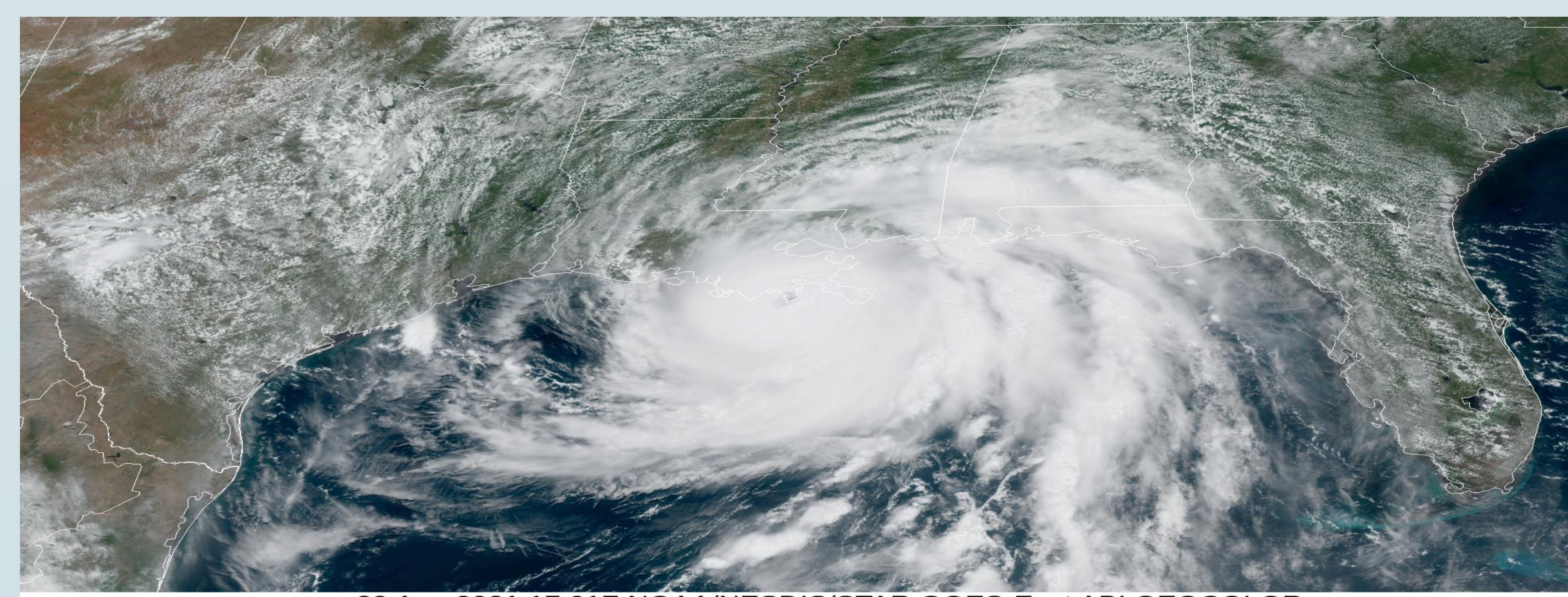
- The United States has the highest maternal mortality rate among developed nations, and it continues to rise (U.S. Centers for Disease Control and Prevention, 2021; Ahmad, 2023).
- The COVID-19 virus represents a threat to pregnant persons whose bodies have decreased lung capacity and a weakened immune system (Katella, 2023).
- Breastfeeding is safest for the caregiver and infant following disasters due to the risk of posed by contamination and associated illness among formula fed infants (Gribble et al., 2011).
- In case studies of the Fort McMurray Wildfire and 2015 Gorkha earthquake, families found it difficult to access clean bottles and infant supplies, had limited availability of nutritious foods for toddlers, and lacked private space for breastfeeding (DeYoung et al., 2018; DeYoung et al., 2018).
- Pregnant and post-partum persons and their partners have an increased risk of developing depression and anxiety, and stressful life events like disasters can increase that risk (O'hara and Swain, 2009).

## Research Question

How did the COVID-19 Pandemic and Hurricane Ida effect families with infants and toddlers in Louisiana?

## Southern Louisiana and Hurricane Ida

- Made landfall on August 29<sup>th</sup>, 2021, in Port Fourchon, Louisiana, south of New Orleans in the United States.
- Landfall date was also the 16<sup>th</sup> anniversary of Hurricane Katrina's landfall in 2005.
- Ida was rated as a category 4 storm, within maximum sustained winds of 150 miles or 241 kilometers per hour.
- The Louisiana Coast experienced storm surge as high as 10 feet or 3.04 meters.



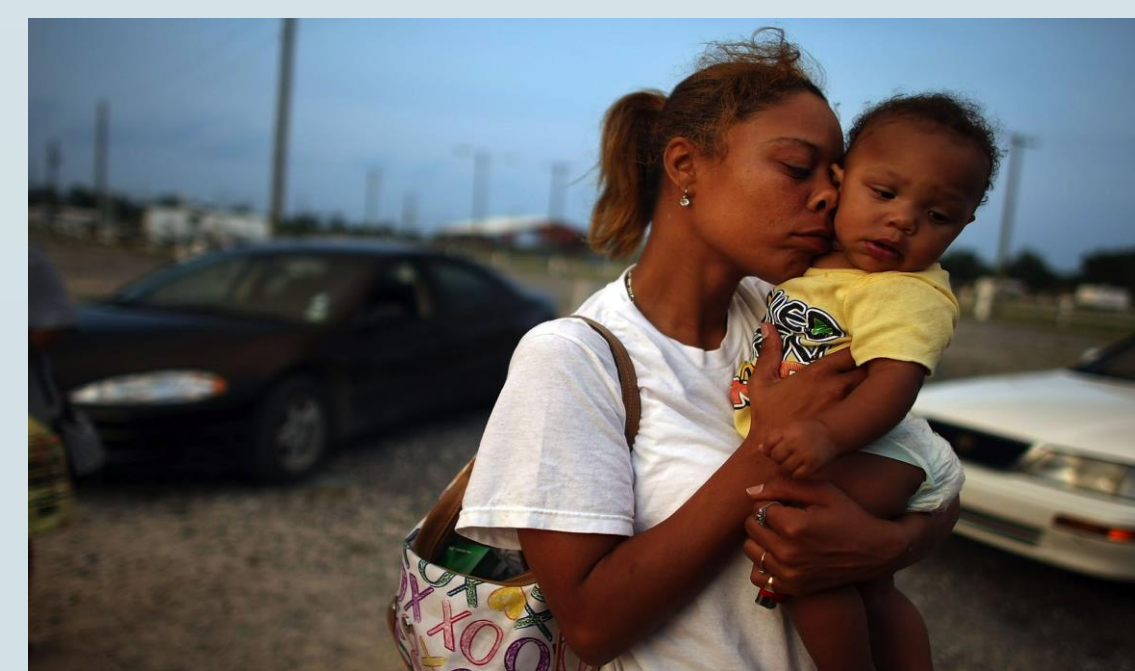
## Methodology

- Quantitative web-based survey on Qualtrics conducted in Fall 2021 following the landfall of Hurricane Ida.
- Conducted systematic social media recruitment on Facebook through open-and-closed groups related to parenting/childcare giving, Hurricane Ida, and infant and lactation support.
- Targeted Louisiana communities, including Baton Rouge, New Orleans, Hammond, Houma, Ponchatoula, Grande Isle, Slidell, Tangipahoa, and Covington.

Demographic Variable	Percentage of Sample (n=131)
White	86%
4-year degree or higher	59%
Had child newborn to 2 months old	15%
Had child 12 months or older	28%
Breastfed (at the breast only)	25%
Bottle fed with infant formula	20%
Fed solid or complimentary foods	39%

## Key Findings

- Many of the participants relied on one or more social support systems to meet daily needs for their family, such as Women, Infants, and Children (WIC) (33%), the Supplemental Nutrition Assistance Program (SNAP) (24%), and the Disaster Supplemental Nutrition Assistance Program (DNSAP) (17%).
- 98% of participants lost power due to Hurricane Ida, 77% of which lost power for at least 5 days.
- 40% of participants lost access to potable water due to Hurricane Ida, 69% of which lost potable water for at least 5 days.
- 74% evacuated, relocated, or sought shelter in another location due to Hurricane Ida.
- 51% of participants experienced disruptions to childcare, 80% of which had disrupted childcare for at least 5 days.
- 40% of respondents reported disrupted access to medical care and pharmacies for themselves and child(ren).



## Challenges During the Pandemic and Hurricane Ida for Families

"The hardest part of the hurricane was being under a lot of stress during pregnancy. I lost a previous pregnancy in 2020... and I believe this was at least partially due to stress."

"I wish there were more support groups for moms with babies. I need to socialize in person with other women going through what I am as a new mom." I couldn't even go to a post-partum check up because kids aren't allowed [due to pandemic restrictions]. Ida evacuation was hard on us financially, but we made it work so that my son had electricity for his medical supplies."

"I tested positive for COVID-19 before Ida hit. I was unable to shop for last minute items. It was stressful asking friends to gather extra formula and baby necessities. My husband quarantined, so he was able to care for the baby."

"The fact it [Hurricane Ida] was on the Katrina anniversary really messed me up. I am still not okay."

## Challenges for Infant Feeding Due to Hurricane Ida

"We evacuated to an Airbnb so that I could bring my frozen [breast] milk with us, otherwise I would have lost it all."

"My son has partial face paralysis, so I always have to pump feed him. I had to buy a car adapter to allow me to use a breast pump 5 times a day in the car to feed him."

"We had to start on baby formula due to a lack of electricity for pumping. [The storm] also affected my milk supply."

"We relied significantly on prepackaged and fast-food options."

"Decrease in solid foods due to low funds and loss of food [due to the storm]."

## Policy Implications for Emergency Management Practice

- Better integration between emergency management and maternal-infant health services.
- Targeted outreach to marginalized communities prior to storm seasons regarding safe infant feeding during and following hazard events.
- Prioritize comprehensive mental health services for new parents after disaster events.



Author Contact Information

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References