“When It Comes to Heat, I Retreat”: A Qualitative Exploration of Heat Impacts and Adaptation Practices among People with Cancer

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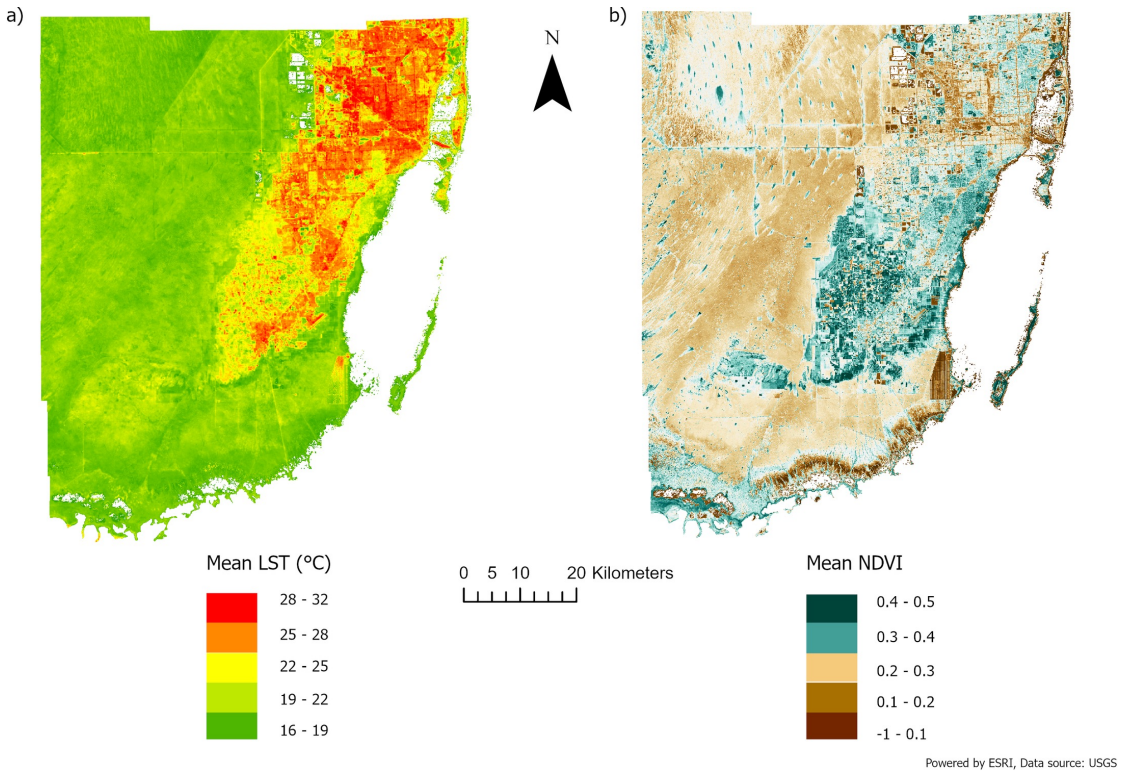

Muse et al., 2024

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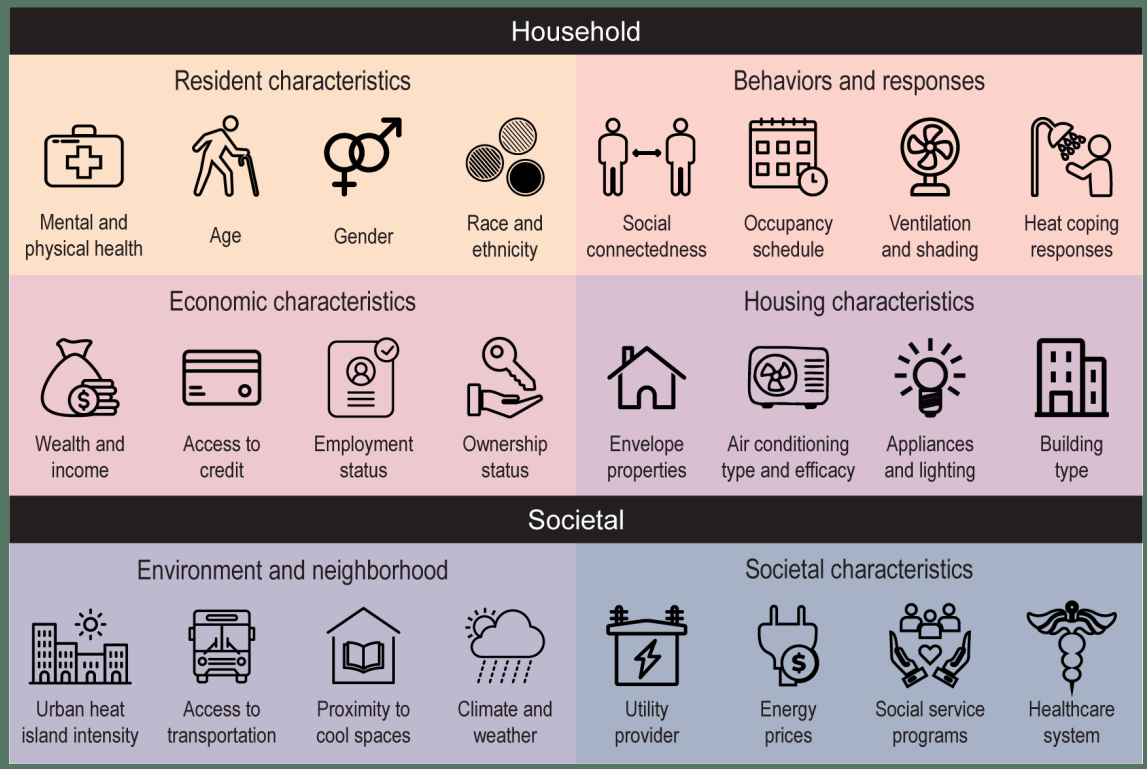

Turek-Hankins et al. (2025)

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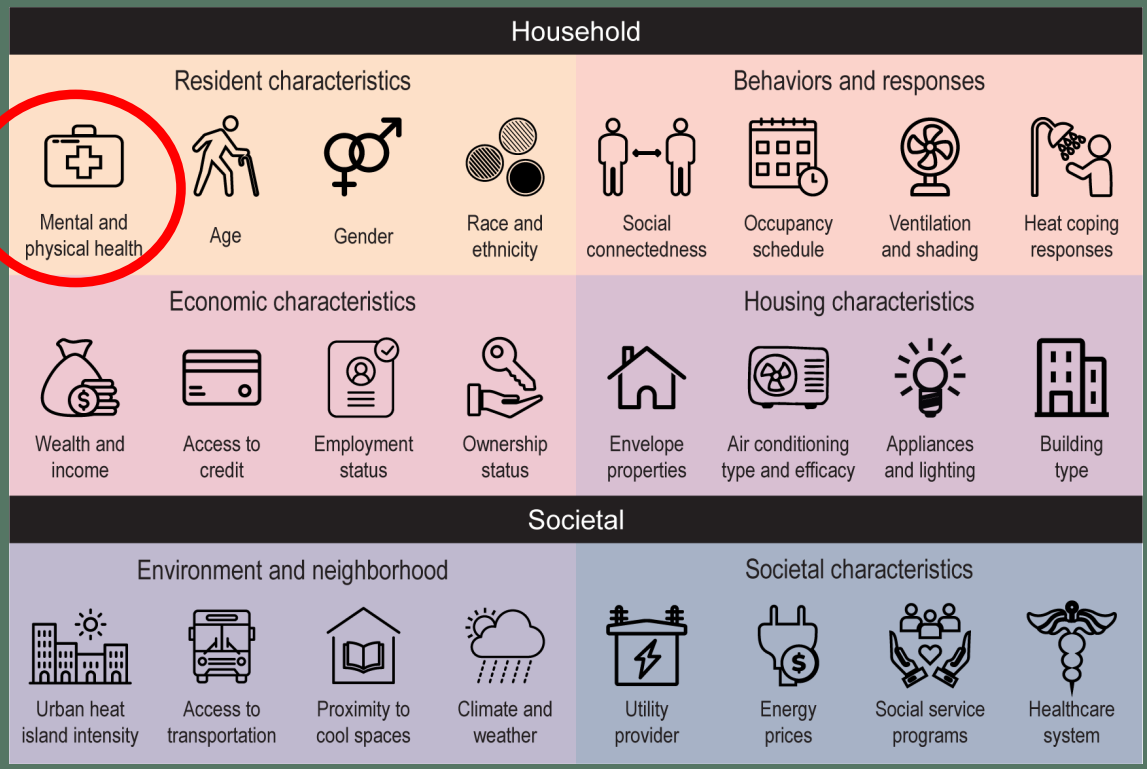

Adapted from Turek-Hankins et al. (2025)

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How does heat exposure among people with cancer impact their quality of life and access to care?

Study Recruitment

- Recruited from several cancer-related registries and longitudinal studies at the University of Miami Miller School of Medicine

- Inclusion Criteria:
  - 18+ years of age
  - Resident of South Florida (Miami-Dade, Broward, Palm Beach, or Monroe Counties)
  - History of cancer (diagnosis, active treatment, or remission)

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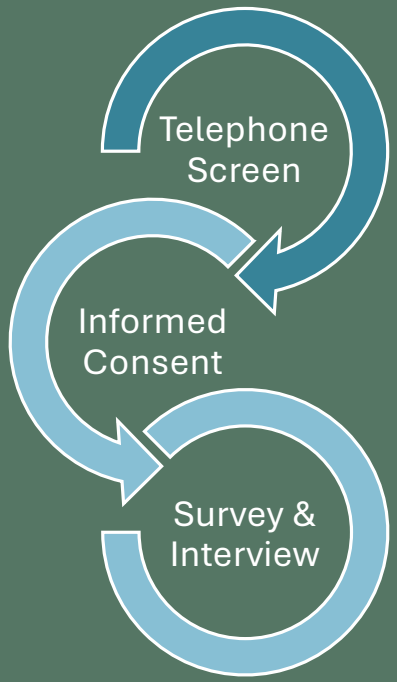
Data Collection & Analysis



- Quantitative survey data collected in RedCap
  - Analyzed in Excel and R
- Semi-structured interviews conducted virtually and recorded via Zoom
  - Interview data analyzed using rapid qualitative methodology and thematic analysis

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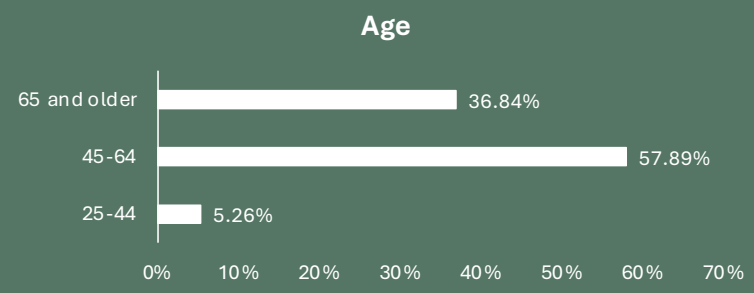
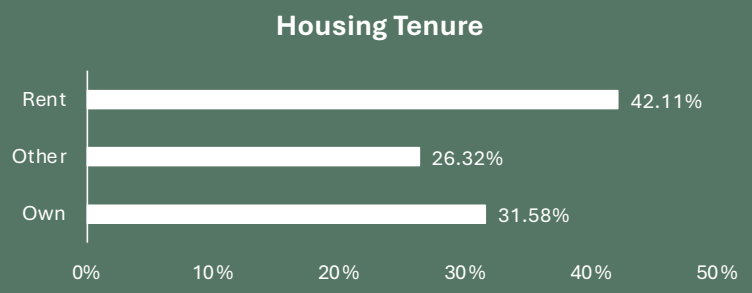
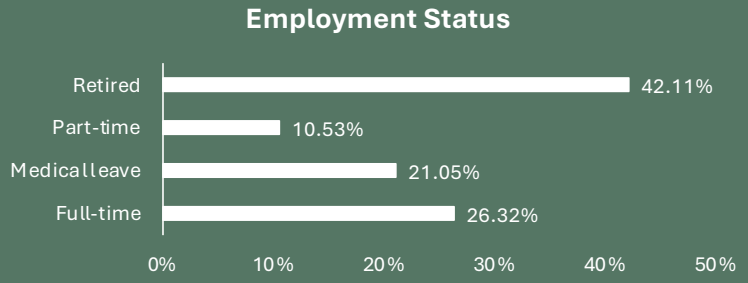
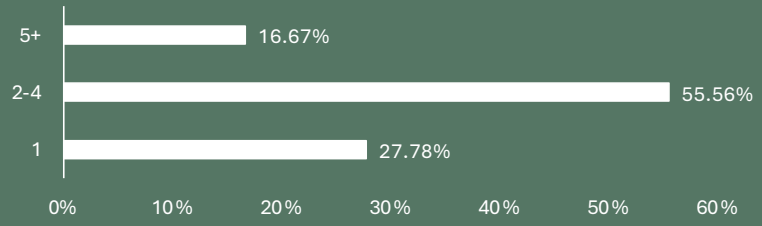
Participant Demographics

- 20 participants across 18 zip codes in two South Florida counties









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Key Themes

- Heat Interacts with Health Status to Adversely Affect Quality of Life Among People with Cancer

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"I can't have heat exposure with my medications. Some of them bring out hives, rashes, so I can't, that's the first thing they told me [after the incident]. So, if you like to be outside in the sun, you can't. So, I haven't."

-Anita, Miami-Dade County

Key Themes

- Heat Interacts with Health Status to Adversely Affect Quality of Life Among People with Cancer
- Increased Cooling Needs Result in Significant Lifestyle Adjustments

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"I know the side effects of heat stroke can be very serious and with my co-morbidities I don't want to fool with it, so I stay out of the heat as much as possible.“

-Leon, Miami-Dade County

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"Sometimes I want to do something or buy something to eat, but I have no money left because I have to cover the expenses related to my illness."

-Marian, Miami-Dade County

Key Themes

- Heat Interacts with Health Status to Adversely Affect Quality of Life Among People with Cancer
- Increased Cooling Needs Result in Significant Lifestyle Adjustments
- Patient-Provider Communications Are Underutilized Opportunities to Discuss Heat Risks and Heat-Responsive Health-Promoting Behaviors

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"They [the doctors] sent me to walk everyday but to tell you the truth of where I live there's no parks close by and the heat, it doesn't let me, so I don't get no exercise."

-Anita, Miami-Dade County

Key Themes

- Heat Interacts with Health Status to Adversely Affect Quality of Life Among People with Cancer
- Increased Cooling Needs Result in Significant Lifestyle Adjustments
- Patient-Provider Communications Are Underutilized Opportunities to Discuss Heat Risks and Heat-Responsive Health-Promoting Behaviors
- Social Support Facilitates Heat Adaptation

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"She [my wife] would tell you that she's literally freezing. You know it's uncomfortable for her, but it's very comfortable for me."

-Ray, Miami-Dade County

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Conclusions

- In South Florida's tropical climate, people with cancer report heat exposure as an unavoidable burden and staying cool as a necessity despite financial and social costs.

- Patients initiated lifestyle changes such as limiting time spent outdoors, moving doctor-recommended physical activity indoors, and tradeoffs to manage elevated costs of medical treatment and cooling.

- Conversations with healthcare providers shift the burden of avoiding heat exposure to the patient.

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Future Directions

- Participants reported most of their day spent indoors
  - Indoor Air Quality
- How can we provide physicians with digestible neighborhood-level environmental data to guide clinical recommendations?
- Advancing and evaluating the impact of energy policy that considers medical vulnerability

Acknowledgements

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