

# Roger Wong, PhD, MPH, MSW

## **Affiliation:**

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## **Research Interests:**

1. ADRD disparities and prevention
2. Aging and public health preparedness

# Research Objective

Examine age differences in perceived exposures to:

- Wildfire
- Heat wave
- Severe weather
- Drought
- Sea level rise

# Data Source

- 2022 American Trends Panel study
- Nationally representative U.S. sample of adults aged 18+
- 10,238 self-identified as either White, Black, Hispanic, or Asian

# Dependent Variables

“In the past 12 months, has your local community experienced the following?”

- Wildfire: “Major wildfires”
- Heat wave: “Long periods of unusually hot weather.”
- Severe Weather: “Severe weather, like floods or intense storms.”
- Drought: “Drought or water shortage”
- Sea Level Rise: “Rising sea levels that erode beaches and shorelines”

# Covariates

- Race and Ethnicity (White, Black, Hispanic, Asian, Other)
- Gender (Male, Female, Other)
- Marital Status
- U.S. Citizenship
- Political Ideology
- Education (<HS, HS, Some college, Undergrad, Grad)
- Income Tier (Lower, Middle, Upper)
- Census Region (Northeast, Midwest, South, West)
- Metropolitan Residence

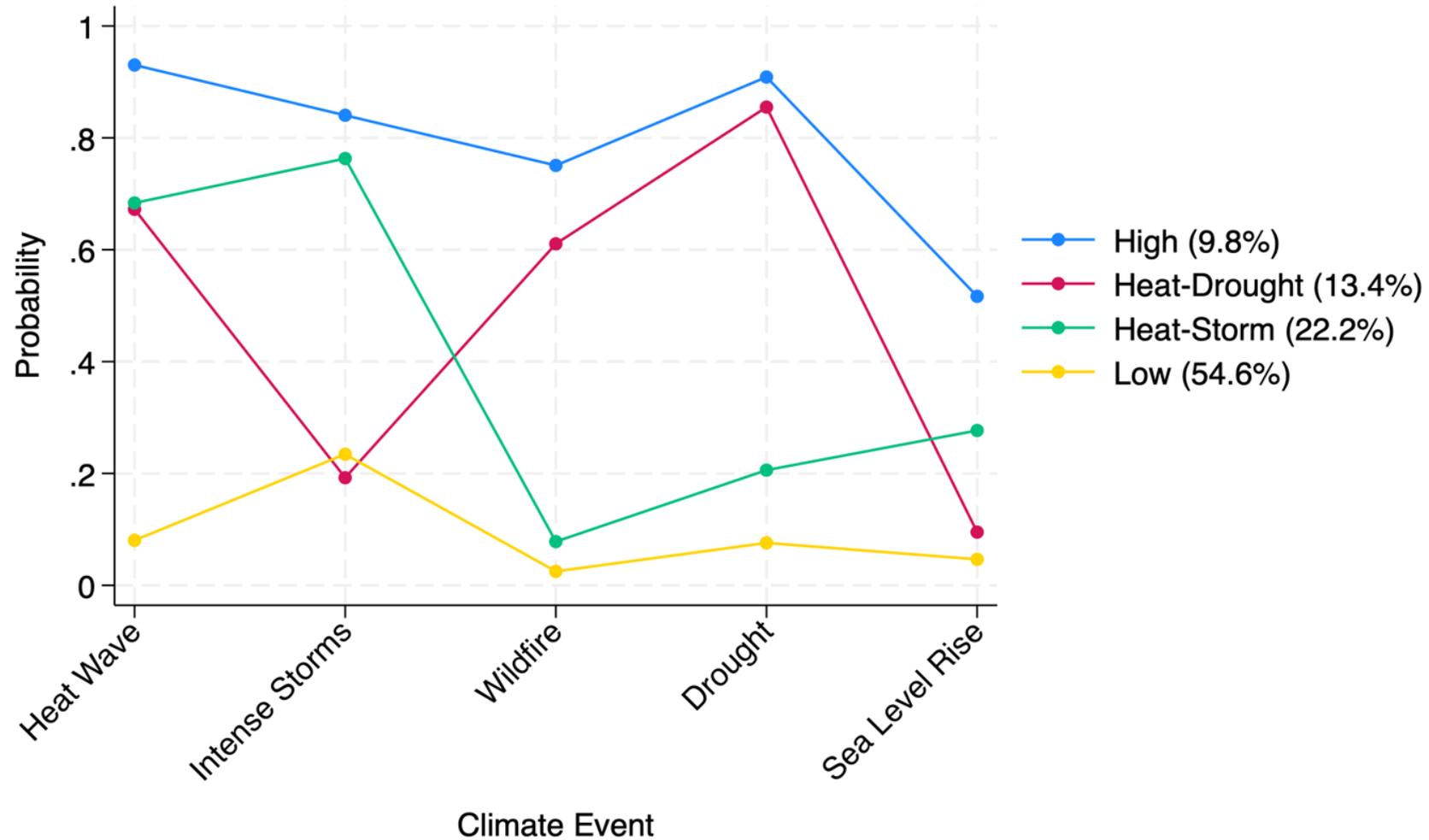
# Statistical Analyses

- Five separate multiple logistic regression models to examine odds of each climate event by age group
- Adjusted for demographic and geographic covariates
- Applied survey sampling weights

# Odds of Climate Event by Age Group

	Heat Wave	Severe Weather	Wildfire	Drought	Sea Level Rise
	aOR (95% CI)				
18-29	REF	REF	REF	REF	REF
30-49	0.80 (0.61-1.05)	1.06 (0.82-1.37)	0.69 (0.48-0.99)	1.16 (0.83-1.61)	0.73 (0.53-1.02)
50-64	0.72 (0.54-0.95)	0.95 (0.73-1.23)	0.55 (0.37-0.80)	1.08 (0.77-1.52)	0.77 (0.54-1.09)
65+	0.69 (0.52-0.91)	0.64 (0.49-0.83)	0.52 (0.36-0.76)	1.14 (0.81-1.59)	0.84 (0.59-1.20)

# Future Direction: Multiple Events



Wong et al. (2025) *Science of Total Environment*

# Community Support

- Linking objective measures of multiple climate events for aging outcomes