

RESEARCH BRIEF SERIES

HEALTH AND EXTREME WEATHER

This research brief is part of an award program designed to address gaps in knowledge related to extreme weather disasters—such as wildfires, floods, extreme heat, and severe storms—that pose significant health risks, particularly for populations already experiencing health challenges.

AWARD RECIPIENTS

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AWARD AMOUNT:
\$20,000

ASSESSING HEALTH AND ENVIRONMENTAL IMPACTS OF 2023 MAUI WILDFIRES ON ASIAN AMERICANS

OVERVIEW

The August 2023 Maui Wildfires devastated Maui County, consuming over 2,200 structures and claiming at least 102 lives. This study explored the health and environmental impacts of these wildfires, with a particular focus on the Asian American community. The mixed-methods approach involved conducting 37 semi-structured interviews with Asian American wildfire survivors and implementing a hypothetical soil contamination analysis using existing environmental data.

KEY FINDINGS

- Interviews revealed significant mental health challenges among survivors, including elevated stress, anxiety, and depressive symptoms.
- Participants noted many challenges to recovery, including Maui's geography as a remote island in the South Pacific, economic downturn due to Maui's reliance on tourism, and the Federal Emergency Management Agency's inability to address local needs.
- The hypothetical soil analysis suggested there was potentially high contaminant levels in urban and residential areas, with lead concentrations estimated to reach up to 500 mg/kg and increased levels of polycyclic aromatic hydrocarbons in comparison to pre-fire baseline data.



Photo Credit: Shutterstock.

RESEARCH IMPLICATIONS

To address the wildfires' impact on mental health, culturally sensitive mental health services that are tailored to the unique needs of the Asian American community are needed. These services could be delivered in native languages and designed to address the cultural stigmas associated with mental health. Due to the potential for contaminated soil, local and state environmental agencies should conduct soil sampling and analysis in affected areas to guide public health interventions and land use decisions.

Full Report: Choi, S., & Kim, J. L. (2025). *Assessing Health and Environmental Impacts of 2023 Maui Wildfires on Asian Americans*. (Natural Hazards Center Health and Extreme Weather Report Series, Report 2). Natural Hazards Center, University of Colorado Boulder. hazards.colorado.edu/health-and-extreme-weather-research/assessing-health-and-environmental-impacts-of-the-2023-maui-wildfires-on-asian-americans