

The background is an abstract composition of vibrant, blurred colors ranging from deep reds and oranges on the left to bright yellows and blues on the right. Overlaid on this is a close-up, macro shot of a textured surface, possibly a leaf or a piece of fabric, covered in numerous small, glistening water droplets. The lighting creates a sense of depth and highlights the individual droplets.

EXTREME HEAT AND INSURANCE

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INSURANCE AND EXTREME HEAT

- Deadliest peril
- Significant economic impacts
- Disproportionate impacts on low-income and marginalized communities

CDI ACTIONS TO ADDRESS EXTREME HEAT

AB 2238: Sponsored legislation to

- create a heat-ranking system in California, and
- issue report on insured and uninsured costs of heat

Pilot projects

- urban forest insurance
- insurance protections for outdoor workers



RICARDO LARA
INSURANCE COMMISSIONER
California Department of Insurance



Impacts of extreme heat to California's people, infrastructure, and economy

Pioneering analysis measuring uninsured and insured costs of extreme heat events

Key Findings and Recommendations

INSURED AND UNINSURED COSTS OF EXTREME HEAT

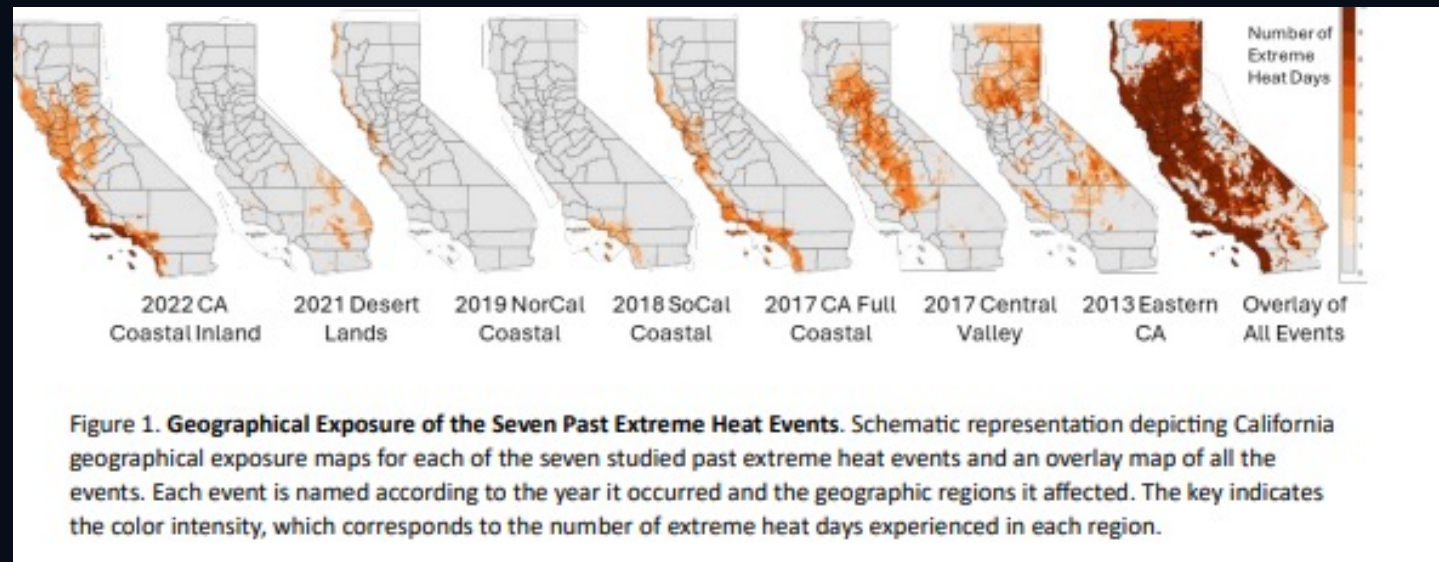
First report to link specific financial risks and losses to recent extreme heat events

Extreme heat events have far-reaching consequences, from increased mortality rates and adverse health outcomes to significant economic losses across various sectors.

Losses caused by extreme heat events, aside from some related to health, are generally not insured. Most are borne by individuals and public entities.

Traditional insurance does not cover the full spectrum of extreme heat-related losses, prompting the need to develop innovative insurance mechanisms.

METHODOLOGY



Assessed economic costs of seven selected extreme heat events between 2013 to 2022.

Selected for different geographic coverage, magnitude and intensity, number of people living within the area of the extreme heat event, and impacts

Focused on five specific sectors of interest: Health and Safety, Economy, Infrastructure, Energy, and Governance

Explored range of impacts experienced during these events, and the extent to which insurance provides compensation for these losses

RESULTS

The cumulative cost of the seven heat events was \$7.7 billion. Together they affected nearly the entire population of California

Adverse health outcomes disproportionately affected Black, Hispanic, and Native American communities

Most impacts were in the Health and Safety category. For hospitalizations and emergency department visits, fewer than 30% had private insurance, with Medicare and Medi-Cal covering 60-79% of these patients

Extreme heat decreased labor productivity, with lost work time valued between \$7.7 million and \$210 million per event. Lost wages are uninsured.

Across all examined economic measures, losses in the manufacturing sector were the largest, ranging from around \$3 million to \$300 million per event.

Costs related to power outages were substantial. The 2022 Coastal Inland event had the highest cost at \$230 million

Infrastructure losses were generally borne by government entities without the buffer of insurance.

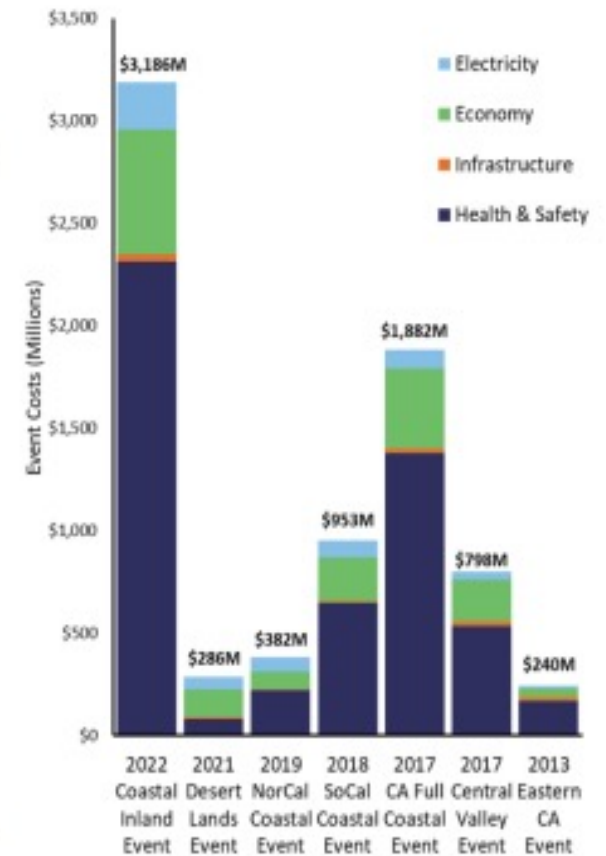


Figure 2. **Quantified Costs by Category for the Seven Extreme Heat Events in 2022 dollars.** A bar graph presenting the quantified costs by health and safety, electricity, economy, and infrastructure categories for the seven events.



INSURED AND UNINSURED COSTS OF EXTREME HEAT

Across all sectors, only a small portion of the costs are covered by insurance.

- Health and Safety: Premature deaths may be covered by life insurance.
 - BUT, less than half of individuals nationwide have life insurance
 - AND, the average life insurance payout is only \$160,000
- Direct costs of health and workplace injuries are typically covered by medical insurance.
 - BUT, the indirect costs (loss of income during illness or injury) are frequently not covered by insurance.
- For the economy, infrastructure, energy, and governance sectors, insurance coverage is mixed.
 - Often coverages exist for the type of impact, such as business interruption
 - BUT, extreme heat is typically not a covered peril



Urban Forest Insurance

CDI and UCSC have conducted a feasibility assessment for urban forest insurance. We are now opening the design phase of an urban forest insurance pilot project

Protecting Outdoor Workers from Heat

CDI is collaborating with partners to create business interruption insurance for outdoor workers during extreme heat events





Thank you!

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