Preparing for Extreme Heat in Washington State

STORY TWO IN A SERIES HIGHLIGHTING WASHINGTON STATE-FUNDED WORK LED BY THE CLIMATE IMPACTS GROUP AT THE UNIVERSITY OF WASHINGTON

THIS POLICY- AND ACTION-ORIENTED REPORT WILL HELP COMMUNITIES UNDERSTAND HOW TO REDUCE HEAT-RELATED ILLNESS AND DEATH IN THE FACE OF CLIMATE CHANGE.

AT A GLANCE

> **THE CHALLENGE.** Many deaths and heat related illnesses caused by extreme heat events are preventable if Washingtonians better understand their role in the broader solution.

> **THE GAP.** We have found little funding support for a Washington-specific assessment connecting the science and policy on extreme heat events.

> **STATE SUPPORT.** Funding from Washington state supported an assessment of the risk factors that lead to illness and death from extreme heat, as well as relevant policy interventions.

> **THE IMPACT.** This assessment is the foundation for a collaboration between the Climate Impacts Group, the Washington State Department of Health, the Office of the Washington State Climatologist, and the UW Center for Health and the Global Environment that is developing statewide guidance on extreme heat to reduce illness and save lives.

**THE CHALLENGES OF EXTREME HEAT AND HEALTH**

 Extreme heat is the leading weather-related cause of death in the United States. In 2021, the Pacific Northwest region experienced a record-breaking heatwave that killed 157 people in Washington alone, according to the State’s Department of Health. However, Washington saw nearly 450 more deaths during that seven-day stretch than would be expected based on averages from prior years, making it one of the deadliest natural disasters in state history. Extreme events like the 2021 Heat Dome are expected to become more frequent and more severe due to climate change.
ADDRESSING A GAP WITH STATE SUPPORT

Many deaths and heat related illnesses are preventable, so why do people keep dying and getting sick? We need to understand the risk factors that lead to illness and death from extreme heat events to understand which interventions can make tangible progress in reducing illness and saving lives. But this kind of project does not conform to typical funding opportunities at the Climate Impacts Group. Much of our funding comes from collaborations with municipal governments, tribes, or state agencies focused on their context-specific needs.

Support from the state allowed the Climate Impacts Group to conduct a holistic assessment of the social- and climate-related drivers of extreme heat-related illness and death, which will prove useful across many communities looking to understand how to reduce the devastating impacts of heatwaves.

REDUCING ILLNESS AND DEATH IN EXTREME HEAT

We published our findings as a peer-reviewed article *Urban extreme heat, climate change, and saving lives: Lessons from Washington state*. This study increased understanding of extreme heat risks across Washington state, highlighted the challenge of coordinating across state and local governments and other actors and identified a portfolio of actions that could be implemented by a range of actors across Washington state.

This work has led to an ongoing collaboration with the Washington State Department of Health and other concerned and responsible parties to develop more meaningful and authoritative guidance for stakeholders and decision makers in a position to reduce illness and save lives from extreme heat in Washington State. We expect this partnership to identify and recommend specific measures and generate an ongoing collaboration intended to move beyond university research and focus on implementation of climate and health policies for a more resilient future.

Key takeaways:
- Economic disincentives, risk perception and misinformation complicate policy success.
- Community-wide reduction in heat-related death requires a suite of policy measures.
- Policy actors without formal public health mandates can improve resilience.
- Coordinating a diverse array of policy strategies is a governance challenge.