

National Integrated Heat Health Information System

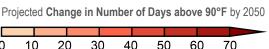
Building a Nation free from heat-related illness and death.

Extreme heat is the deadliest weather event in the U.S.¹

Our **summers** are **getting hotter**, and July 2021 was no exception as the hottest month ever recorded on Earth.² Increasing summer temperatures put people at **higher risk of heat related illness and death**; as climate change worsens, summers will continue to get hotter and more deadly.³ Risk of heat's impacts is not shared equally. Rural, urban, and tribal communities, outdoor workers, as well as critical infrastructure are at increased risk.

The map on the right shows the projected change in the **number of days above 90°F** by the mid 21^{st} century, in the higher emissions scenario (RCP8.5). Global annual average temperatures are projected to rise by 3°F - 12°F this century.³ People's exposure to extreme heat is most acute in cities, where temperatures in neighborhoods mere miles apart can differ by 20°F.⁴





Source: NCA 2018

NIHHIS is an integrated information system supporting equitable heat resilience.

Heat-related impacts are preventable with planning, education, and action. The **National Integrated Heat Health Information System (NIHHIS)** was created by NOAA and CDC as an interagency integrated information system to develop and provide actionable, science-based information to help decision protect people from heat.



The elements of an Integrated Information System (IIS)

References:

- NWS Weather Related Fatality and Injury Statistics
- 2. NOAA NCEI Global Climate Report
- 3. 4th National Climate Assessment (NCA 2018) USGCRP

Heat Watch Seattle, Summary Report, CAPA Strategies, 2020.

Examples of at risk communities

Heat is a danger to all, but some groups are more vulnerable, e.g.:



American Indian or Alaska Native persons



Older adults & people with chronic illnesses



Outdoor workers, athletes, & military

Recent Accomplishments & Future Plans

NIHHIS has improved heat-health decision-making since launching in 2015. Recent accomplishments include:

- 1. In April 2022, NIHHIS held the inaugural **NIHHIS National Meeting**, reaching 987 participants with sessions on heat-safe housing, heat action planning, cascading impacts, and worker safety.
- 2. In the summer of 2022, NIHHIS held two heat season awareness social media campaigns with NIHHIS partner agencies. The campaign provided audiences with information about preparedness and actions to reduce the risks of heat-related illness and death.
- In July 2022, NIHHIS launched Heat.gov, a new website to provide the public and decision makers with clear, timely and science-based information to understand and reduce the health risks of extreme heat. Heat.gov serves as the premier source of heat and health information for the nation.



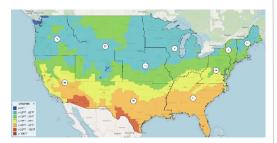
How is NIHHIS building equitable resilience to heat?

Understand Decision Context



NIHHIS Decision Calendar Workshop in MA Through multi-disciplinary regional pilots and workshops, as well as the NIHHIS National Meeting, NIHHIS builds understanding of how decisions are made to protect people from heat, and what information is useful at each timescale (from planning to responding) to informing decisions. See workshop reports from the Southwest, Northeast.

Co-develop Products and Tools



Heat & Health Tracker (operationalized at CDC)

Working through the U.S. Global Change Research Program, NIHHIS developed, prototyped, and operationalized a new heat and health tool that integrates environment and health information: recent observations from NOAA and syndromic surveillance from CDC are combined to monitor health outcomes from recent heat events.

Visit the Heat and Health Tracker >>

Improve Obs. & Predictions



Citizen Science Urban Heat Island Field Campaigns

NIHHIS applies modern approaches to observing heat inequities in urban areas. Through a public-private partnership with CAPA Strategies, we engage citizen scientists and use machine learning to reveal where heat is impacting some neighborhoods more than others and to support innovative community solutions. See **UHI Mapping**.

Support Planning - Response



OCCHE + NIHHIS Climate and Health Outlook

NIHHIS worked with the new HHS Office of Climate Change and Health Equity to develop a first-of-its kind monthly heat outlook that combines climate and health information from NOAA and CDC, as well as advice and guidance from OSHA, EPA, and other agencies to support heat planning, preparedness, and response.

View the latest Outlook >>

Enhance Solutions w/ Research



APA released a NIHHIS-funded report for planners

In FY21, the Extreme Heat Risk Initiative of NIHHIS piloted an applied research program to support the use of applied climate science to inform community decisions to mitigate heat risk. Five awardees received a total of \$1.25M over two years to develop solutions in Austin, Baltimore, Boston, Ft. Lauderdale Houston, Seattle, and across Vermont.

Communicate; Build Capacity



2022 NIHHIS Interagency Heat Awareness Infographic

The NIHHIS Interagency **Communications Working Group** developed a new, shared heat infographic and ran a coordinated federal awareness campaign for the 2022 heat season. Messages were distributed via web and social media posts, emails, and other platforms to reach the heat-vulnerable public. Learn more >>

Who is in the NIHHIS federal partnership?



















U.S. Department of Veterans Affairs



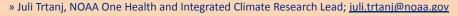












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