

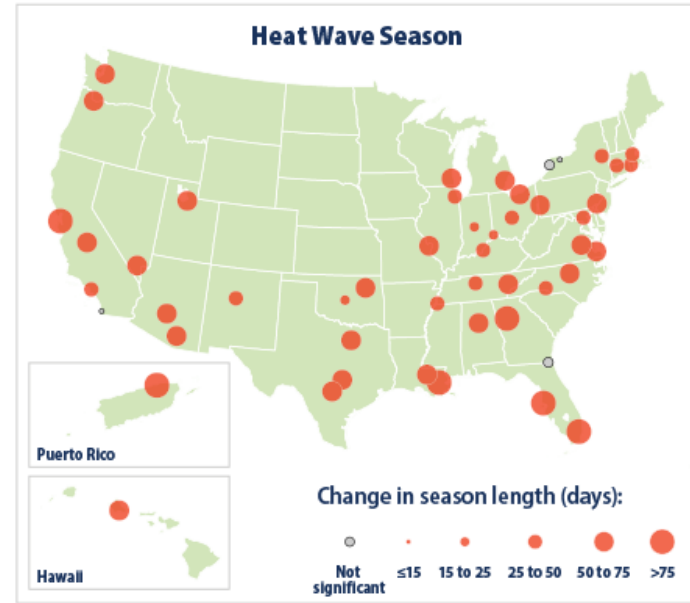
CalHeatScore

California Environmental Protection Agency
Office of Environmental Health Hazard Assessment



Extreme Heat

- Deadliest climate hazard, vulnerable groups impacted most
- Heat wave seasons in the US have lengthened in recent decades (bottom right)
- Longer, more intense heat seasons to come



An Early Warning System for Heat



Extreme Heat

causes more deaths each year than hurricanes, lightning, tornadoes, earthquakes and floods combined!



How CalHeatScore Works



Localized Alerts: Tailors heat warnings to each community's specific climate and vulnerability.



Daily & Forecast Updates: Provides daily heat scores and multi-day forecasts to support early action.



Protective Rankings: Reflects health risks using local ER data and regional climate conditions



Targeted Outreach: Provides general information on recognizing heat illness, who is generally at risk, and ways to keep yourself safe.

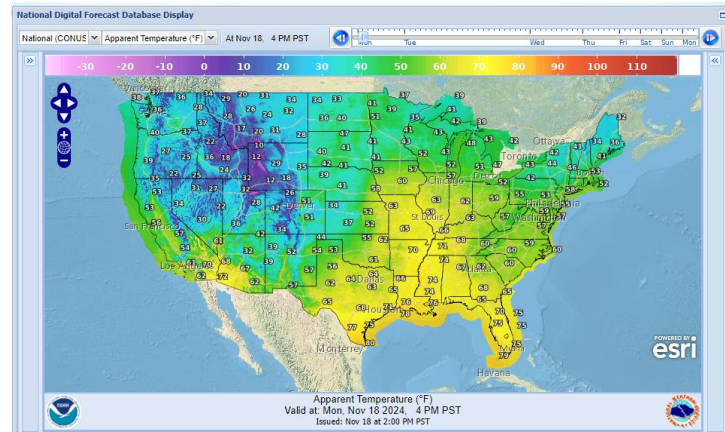
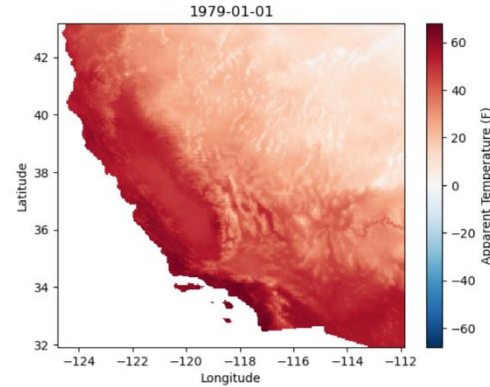


Resource Connections: Links users to cooling centers



Climate and Weather Data

- **Historical climate data**
 - Zip code level heat conditions
 - Connect temperature measurements to health responses
- **Daily weather forecasts**
 - Temperature forecasts for the upcoming week



Heat-Health Response Data

- Measure risk of daily ***heat-related*** Emergency Department (ED) visits per zip code, 2016-2018
- Includes heat illness, heat stroke, dehydration, acute renal failure
- Source: Department of Healthcare Access and Information (HCAI)

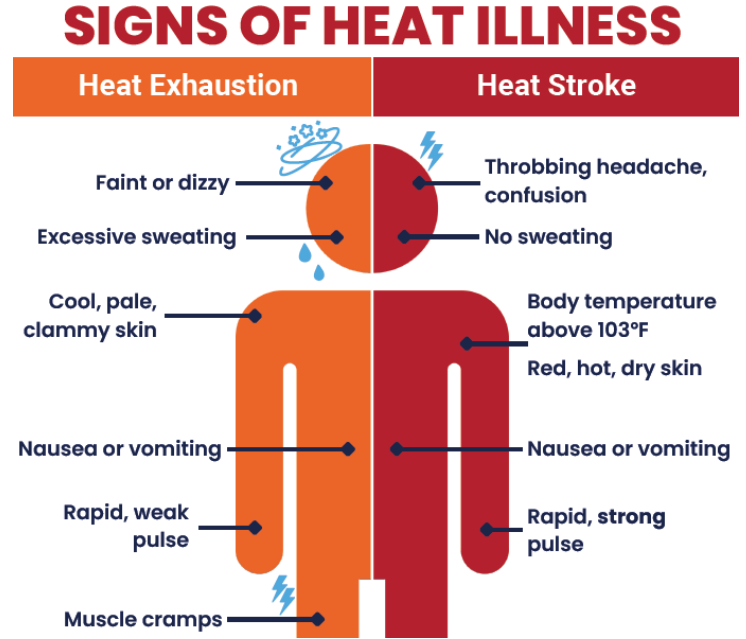
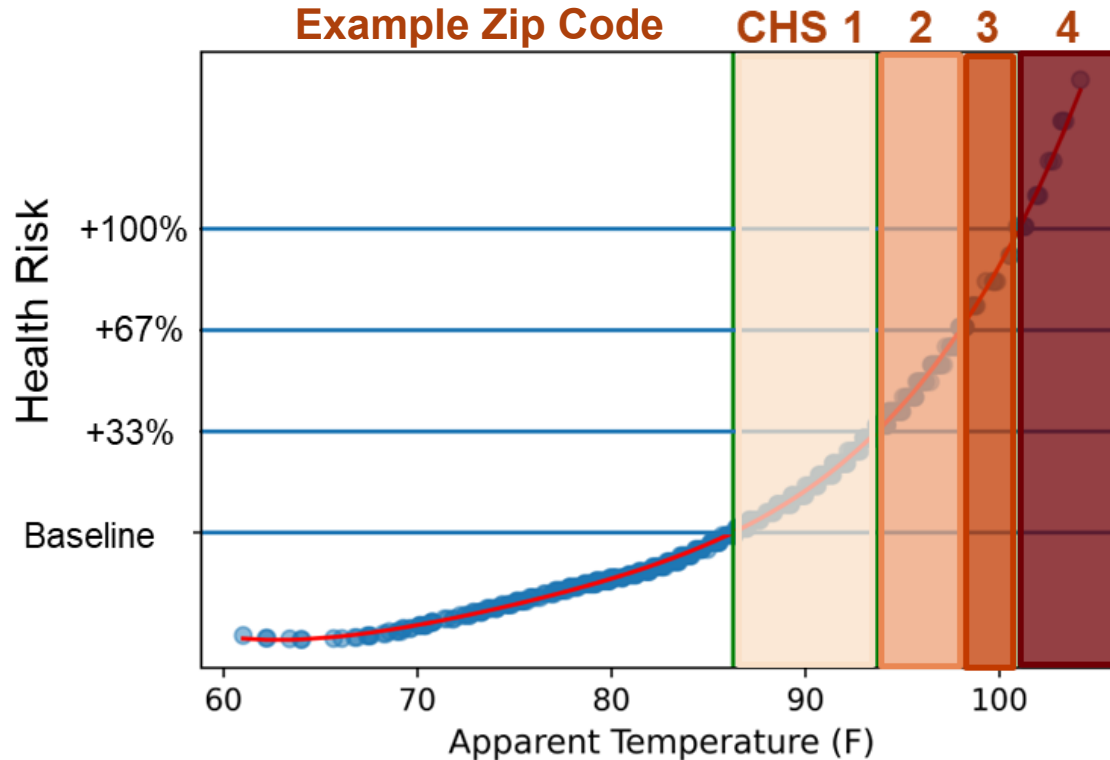


Image source: Signs of Heat Illness



Calculating Heat Rankings

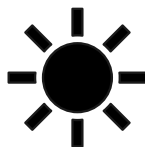


Example

Example Zip Code

CHS	Temperature Range
0	Temp =< 87 F
1	87 – 93 F
2	93 – 98 F
3	98 – 101 F
4	101+ F

Forecasted Temperature



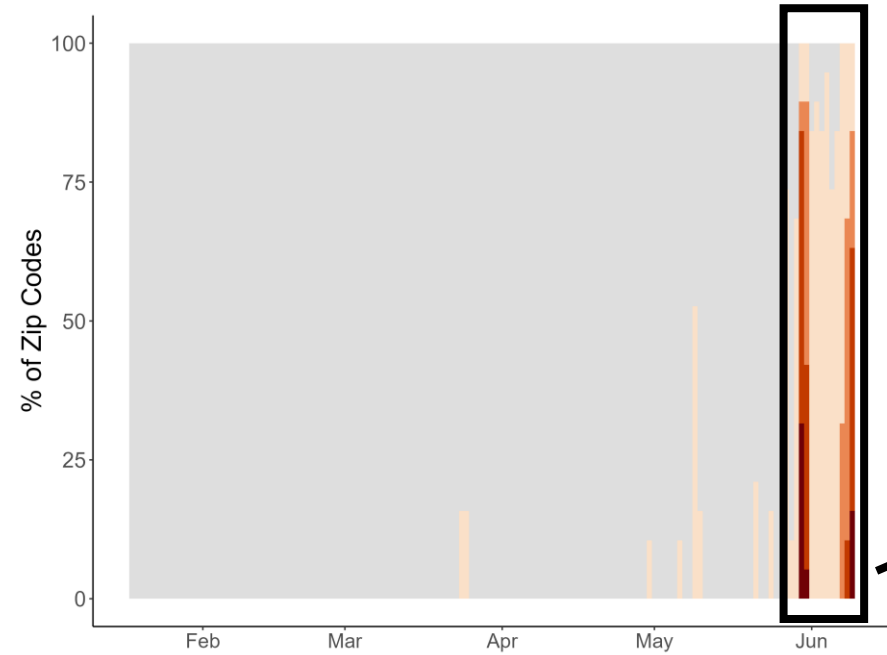
100 F

CHS 3





Clear Lake Region



January – June 2025

May 26, 2025

CHS
0
1
2
3
4

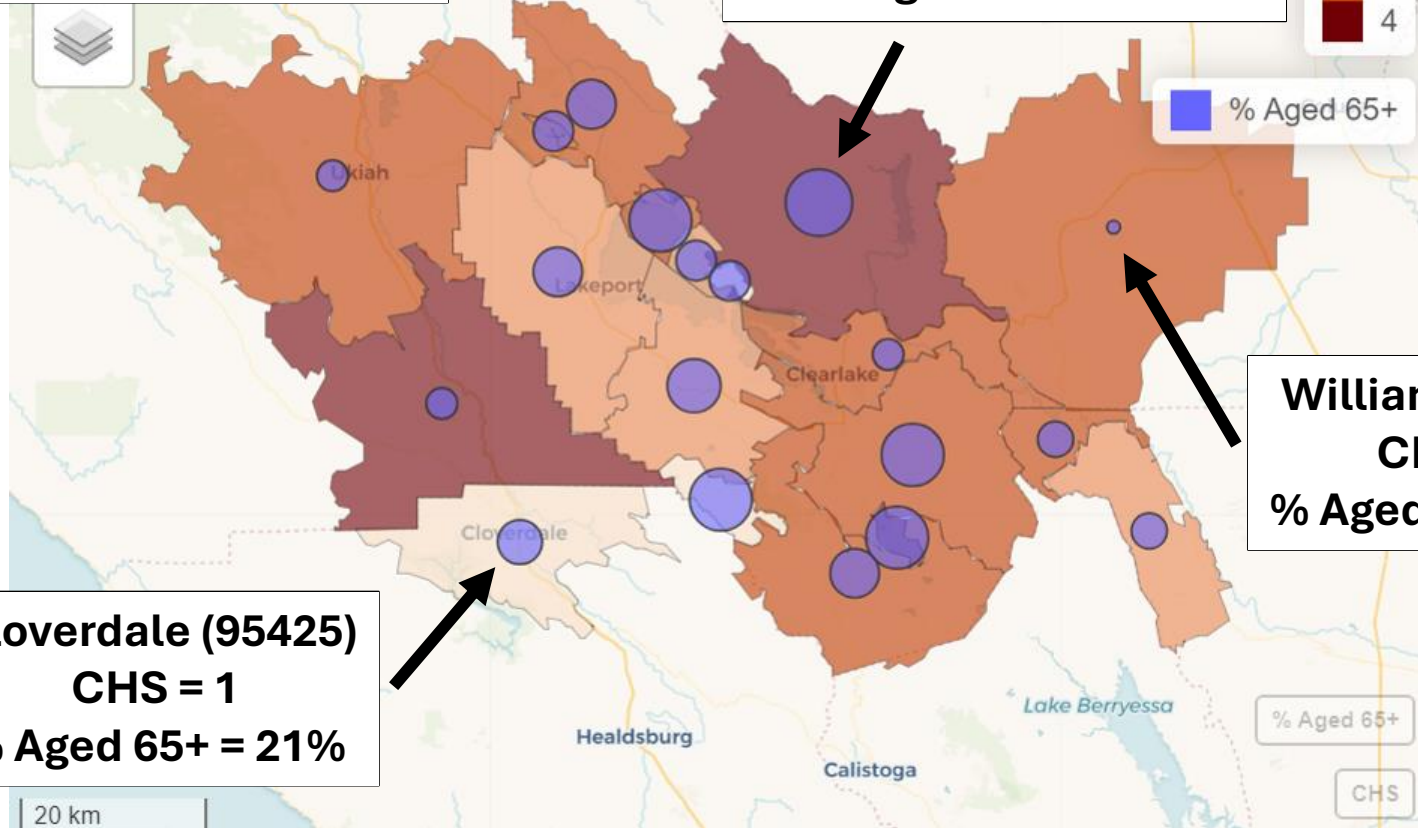


CHS
0
1
2
3
4

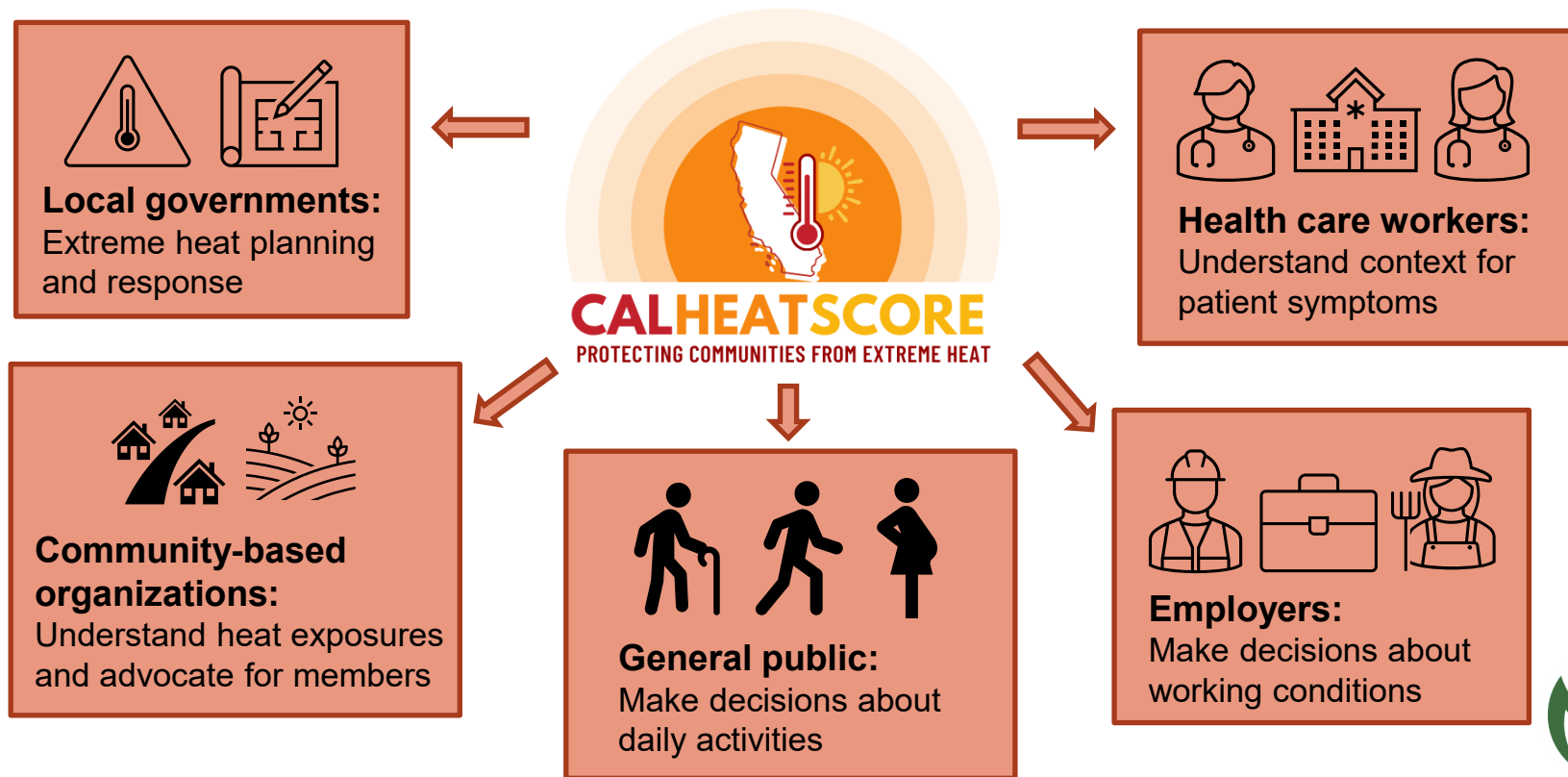
May 26 – June 9

Clear Lake Region

June 9, 2025



CalHeatScore Users and Applications



Stakeholder Engagement

- Public Workshops: small group discussion and validating through lived experience
- Local Government Outreach: Local relevance and mapping of local heat mitigation resources



Cohort Opportunity

OEHHA is currently recruiting for CalHeatScore cohort members for the following institutional affiliations:

- Tribes and Indigenous People
- Outdoor and Warehouse Workers
- Elderly People

Please share recommendations with

CalHeatScore@oehha.ca.gov

Cohort Opportunity (cont.)

- **Goal:** create a space for experts to share ideas on how CalHeatScore can be improved to represent on-the-ground experiences, and how the tool could be integrated into extreme heat and public health practices and better serve heat-vulnerable communities.
- Stipend offered for participation
- Cohorts run July – Fall 2025

Next Steps

**OEHHA public
engagement:**
ongoing through
Summer






**Research and
Development:**
Ongoing

**CalHeatScore User
Cohorts:** July -
December

**Next Version of
CalHeatScore**



Future Directions (cont.)

-  Mobile App (notifications)
-  Broader representation of heat and health response
-  In depth demographics
-  Expansion of locally relevant resources
-  Language expansion



How to Get Involved

- Join listserv **CalHeatScore.calepa.ca.gov**
- Register for upcoming webinars
- Email us with comments: **CalHeatScore@oehha.ca.gov**
- Try out CalHeatScore for yourself!

