A. Tracking California

Link: Tracking California's Heat Related Illness Summary Table webpage
(trackingcalifornia.org/heat-related-illness/heat-related-illness-summary-tables)

Description: Tracking California is a program of the Public Health Institute, in partnership with the California Department of Public Health and the Centers for Disease Control's (CDC) National Environmental Public Health Tracking Program. Tracking California works to make environmental health data and information publicly available through the development of a web-based data query system, state-of-the-art data displays, and innovative web tools and services.

Suggested Steps:

To understand the race and ethnicity, gender, and age groups experiencing the most direct health impacts of heat in your jurisdiction, do the following:

1. Visit Tracking California's Heat Related Illness Summary Tables webpage.
2. Review Tables 5, 6, 7, and 8 for your county. (We recommend these tables of emergency department visits because these are more sensitive to changes in temperature than hospitalizations, though the Tables 1, 2, 3, and 4 with hospitalizations can be reviewed as well.)
3. Based on the tables reviewed, incorporate summary data on the most impacted race and ethnicity, gender, and age groups in your jurisdiction into your heat planning.
4. For more in-depth requests, select "Heat Related Illness Query Data" from the top of the menu on the left of the webpage, then:
    a. By selecting the "Change Data" button, you can choose the *Type of Event* (emergency department visits or hospitalizations), *Year*, *Race/Ethnicity*, *Age sub-group*, *Gender/sex*, and *How the event is measured* (age-adjusted rate per 100,000 or crude rate per 100,000).
    b. Click on "Time Trend" and select your county in the drop-down menu to show your selected data from 2005-2020.

For assistance with this tool: email info@trackingcalifornia.org

B. The California Healthy Places Index: Extreme Heat Edition

Link: California Healthy Places Index: Extreme Heat Edition webpage (heat.healthyplacesindex.org)

Description: The California Healthy Places Index: Extreme Heat Edition was developed by the Public Health Alliance of Southern California in partnership with the UCLA Luskin Center for Innovation. The tool provides datasets on projected heat exposure for California, place-based indicators measuring community conditions and sensitive populations. It also provides a list of state resources and funding opportunities that can be used to address extreme heat.

Suggested Steps:

This tool has many options for viewing and visualizing a variety of indicators. We suggest you start by mapping the intersection of one of the heat indicators and the Healthy Places Index indicator, which will show which areas are most vulnerable due to the combined effects of heat and community conditions. To do this, do the following:

1. Click on "Tools" in the upper left corner and scroll down to "Visualize Multiple Vulnerability Indicators" and click there.
2. Choose one of the extreme heat indicators by clicking the toggle button; we suggest using "Extreme Heat Days 2035-2064 (above historical baseline)"
3. Next, under "Place," check the box for the HPI index indicator -- "California Healthy Places Index 3.0 Score (Higher Value = Healthier Conditions)." There are many other vulnerability indicators to choose from, but this index is a good way to summarize multiple vulnerability indicators into one score.
4. The map will show each area's combined vulnerability based on *both* future extreme heat days *and* HPI score, with the darkest blue representing the areas in the highest risk quartile for both factors. Adjust the map based on your preferences. You can use the "Download map" button at the top right of the screen.

For assistance with this tool: email AskHPI@thepublichealthalliance.org

C. The California Heat Assessment Tool

Link: California Heat Assessment Tool (CHAT) webpage (www.cal-heat.org)

Description: As part of California's Fourth Climate Change Assessment, Four Twenty Seven, in partnership with Argos Analytics, Habitat Seven, and the Public Health Institute (PHI) developed this tool for local and state health practitioners to better understand dimensions of heat vulnerability driven by climate changes and where action can be taken to mitigate the public health impacts of extreme heat in the future. A Heat Health Event (HHE) is any event that results in negative public health impacts, regardless of the absolute temperature.

Suggested Steps:

To find the census tracts in your jurisdiction that are projected to have the most Heat Health Events in the future, do the following:

1. Visit the California Heat Assessment Tool (CHAT) webpage and click on the "Explore" button, or go directly to the CHAT Interactive Map webpage (www.cal-heat.org/explore), which shows a map of California.
2. Zoom in the map to your jurisdiction.
3. Use the scroll bar below the map to select a planning time period (e.g., 2021-2040 or 2031-2050.
4. At each time period, hover over census tracts in your jurisdiction to see the projected number of Heat Health Events for that time period. See the About CHAT webpage (www.cal-heat.org/about) for a more thorough definition of a Heat Health Event.
5. Screenshot and print the map to include in your heat planning, highlighting the areas where Heat Health Events are projected to be most frequent.

For assistance with this tool: email climatechange@cdph.ca.gov

D. UCLA Heat Maps Tool

Link: UCLA Heat Maps webpage (sites.google.com/g.ucla.edu/uclaheatmaps/map)

Description: The UCLA Heat Maps were created by researchers at the UCLA Center for Healthy Climate Solutions (C-Solutions) and the UCLA Center for Public Health and Disasters. The map shows the daily excess number of emergency room (ER) visits and rate of excess ER visits (number of visits per 10,000 persons per day) that occurred on extreme heat days in California from 2009-2018. Data can be viewed at the county or Zip Code level.

Suggested Steps:

To view the Zip Codes in your county that have historically had the highest rate of excess ER visits in extreme heat days, do the following:

1. On the lefthand side of the map, in the "Select an Outcome" dropdown menu, choose "Rate of Daily Excess ER Visits".
2. Then, also on the lefthand side, under "Optional," choose your county from the dropdown menu.
3. Download or screenshot the map, which shows Zip Codes with higher rates in the darker colors.
4. To view the data by Zip Code, click on each Zip Code on the map (one at a time) and they will populate a chart on the righthand side of the map, with the number and rate of excess ER visits. The chart will populate with additional Zip Codes as you click on them.

For assistance with this tool: email csolutions@ph.ucla.edu

E. Additional Resources

The following additional tools and resources may be helpful as you pursue heat planning.

Climate Change and Health Vulnerability Indicators for California webpage (www.cdph.ca.gov/Programs/OHE/Pages/CC-Health-Vulnerability-Indicators.aspx): The CDPH Climate Change and Health Equity Section developed climate change and health indicators, narratives, and data to provide local health departments and partners tools to better understand the people and places in their jurisdictions that are more susceptible to adverse health impacts associated with climate change, specifically extreme heat, wildfire, sea level rise, drought, and poor air quality. The assessment data can be used to screen and prioritize where to focus deeper analysis and plan for public health actions to increase resilience.

CalEnviroScreen 4.0 webpage (https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40): CalEnviroScreen identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution.

F. For General Assistance

For general assistance with data and tools related to the health impacts of climate change and priority populations, message the California Department of Public Health's Climate Change and Health Equity Section at climatechange@cdph.ca.gov.