California Department of Public Health (CDPH) -
Extreme Heat and Health - Recommendations and Resources for Local Health Jurisdictions (LHJs) and Local Responders / Service Providers:

As climate change is making our summers hotter, California is entering the hottest and longest heat wave this year. It’s important to stay informed and protect those most vulnerable from hot temperatures by providing guidance on how to stay cool at home or in place, finding other locations to stay cool, and being able to access resources and services to help stay safe in the heat.

Heat-related illnesses include cramps, heat exhaustion and, most seriously, heat stroke and death. Warning signs of heat-related illnesses vary, but may include heavy sweating, muscle cramps, weakness, headache, nausea or vomiting, paleness, tiredness, or dizziness.

- Learn more about signs and symptoms of heat-related illnesses here: https://www.cdc.gov/disasters/extremeheat/warning.html

What to Do:
Public health is centered on preventing negative health outcomes from occurring in the first place. But if you or someone you know is suffering from heat-related illness, below are steps for what to do (Source: CDC; Spanish version):

- **Heat Stroke:**
  - Call 9-1-1 right away – heat stroke is a medical emergency
  - Move the person to a cooler place
  - Help lower the person’s temperature with cool cloths or a cool bath
  - Do not give the person anything to drink

- **Heat Exhaustion:**
  - Move to a cool place
  - Loosen clothes
  - Put cool, wet cloths on body or take a cool bath
  - Sip water
  - Get medical help right away if: someone throwing up; symptoms get worse; or symptoms last longer than 1 hour

- **Heat Cramps:**
  - Stop physical activity and move to a cool place
  - Drink water or a sports drink
  - Wait for cramps to go away before you do any more physical activity
  - Get medical help right away if: cramps last longer than 1 hour; someone is on a low-sodium diet; or someone has heart problems

Preventing Heat-Related Illness:
Share information with your communities about how to stay safe, including sharing resources in the CDPH heat safety communications toolkit, extreme heat webpage, and tips posted on the CDPH social media accounts.

Below are additional resources and guidance recommendations for protecting your communities during extreme heat events.
Keeping Populations with Greater Vulnerability Safe:

Priority populations include (but are not limited to):
- People w/out electricity (if power goes out due to demand or other reason) - particularly those dependent on medical equipment, refrigeration (of medicines, etc.), living in under-resourced communities, etc.
- Unhoused people.
- Those living in single room occupancy (SRO) hotels.
- Those living in geographic areas where homes historically have not needed, and do not have, air conditioning (i.e., coastal communities).
- People with access and functional needs.
- Homebound individuals.
- Pregnant people.
- People who are socially and/or linguistically isolated.
- People with substance use disorder and/or mental illness.
- Infants and very young children.
- Elderly and aging population.

*For additional guidance and tips for ways to stay safe during an extreme heat wave, please see the CDPH extreme heat information here:  
https://www.cdph.ca.gov/Programs/EPO/Pages/Extreme%20Heat%20Pages/BI_Natural-Disasters_Extreme-Heat.aspx

If air conditioning is not available in someone's home:
- Provide information on how to stay cool at home:
  - Use a fan to stay cool.
    - Ceiling fans: setting fan to rotate counterclockwise will push air down. Check to see if your ceiling fan can do this.
    - REMINDER: While electric fans might provide some comfort, when temperatures are really hot, they won’t prevent heat-related illness.
  - Keep blinds and drapes closed.
    Freeze wet paper towels to put on your neck. Use other frozen items (e.g., bags of frozen veggies, etc.)
  - Take a cold shower or bath.
  - Close doors in unused rooms to keep cold air where you need it.
  - Turn on bathroom and stove top fans to suck hot air out.
    Avoid using your stove and oven to maintain a cooler temperature in your home.

If someone is unhoused, or living somewhere that does not provide adequate cooling or does not have power:

For Those Who Can Travel To Another Location:
- Provide information on locations to stay cool:
Cooling centers:
- CalOES 2022 Cooling Center Explorer mapping tool: https://www.caloes.ca.gov/cooling-centers/
- CPUC Cooling Centers webpage (including links to cooling centers in utility territories): https://www.cpuc.ca.gov/consumer-support/cooling-centers
- Check with other local county or city agencies on available resources
  - Search for Cooling and/or Community Centers (i.e., use Google Maps or other tools -- search "community centers near me")
  - Search for Clean Air Centers/Shelters
  - Search for city or other government buildings that can provide relief
- CONSIDERATIONS:
  - Ensure that pets are allowed at the cooling centers (indoors - not just kenneled outside)

Other public places with air conditioning:
- Public libraries:
  - California State Library - "Find Your Local Library" mapping tool: https://www.library.ca.gov/branches/
- Shopping malls and other commercial facilities open to public:
  - Search for shopping malls nearby
  - Starbucks stores: https://www.starbucks.com/store-locator
    - Public can use store spaces whether or not they purchase anything
  - CONSIDERATION: Those who are 'visibly homeless,' regardless of what the law may say, are often aggressively hassled by staff and security guards for even just entering most mainstream businesses such as grocery stores, malls, restaurants and bars that have A/C. There may be additional strategies needed to address this (e.g., locating businesses or places that are more open or welcoming).

Public parks, fairgrounds, and other public areas with shade or other cooling measures:
- Search for local public parks and other shaded public spaces (i.e., use Google Maps or other tools -- search "parks with shade near me")
- Search for public pools or water access
- Search for local / regional fairgrounds that have been activated as cooling centers
  - California Department of Food and Agriculture (CDFA) – List of State-Designated Fairs: https://www.cdfa.ca.gov/taxes-and-fees/state-fairgrounds-list.htm
- Search for regional and/or state parks
  - California State Parks mapping tool: https://www.parks.ca.gov/?page_id=862
- Search for online mapping tools that show where shade will occur throughout the day (e.g., Shademap, Shadowmap -- please note, these specific tools have not been thoroughly vetted by CDPH, and CDPH does not necessarily endorse using these tools -- they are included here as examples)

Call 2-1-1 to find essential community services
- Call to find locations and resources for staying safe during extreme heat (e.g., call to find local cooling center; for San Diego County, seniors, people with
disabilities or those on limited incomes can request a free electric fan from the county at no cost by calling 211*)
  - REMINDER: While electric fans might provide some comfort, when temperatures are really hot, they won’t prevent heat-related illness.
    - 211 can provide information in different languages
    - Call to request transportation services information (see more below)

- Provide transportation information and services for accessing cooling centers and other places to stay cool
  - Call 5-1-1 to find real-time traveler information: [https://dot.ca.gov/programs/traffic-operations/traveler-information/511](https://dot.ca.gov/programs/traffic-operations/traveler-information/511)
    - Regional 511 Links:
      - Bay Area 511: [http://www.511.org/](http://www.511.org/)
      - Sacramento Region 511: [https://sacregion511.org/#/](https://sacregion511.org/#/)
      - Inland Empire 511: [http://www.ie511.org/](http://www.ie511.org/)
      - Santa Cruz 511: [http://cruz511.org/](http://cruz511.org/)
      - Southern California 511: [http://go511.com/](http://go511.com/)
      - San Joaquin Valley 511 (search online)
  - Check with local / regional transit agencies for public transit access, including free or discounted rides during heat waves
    - Transit Link: California Public Transportation Maps: [https://www.transitlink.org/ca/](https://www.transitlink.org/ca/)
  - CONSIDERATION: Public transit can even provide temporary cooling and relief within the air-conditioned vehicles.

For Those Who Cannot Easily Travel To Another Location:

- Activate and deploy programs to check on people and provide relief where they are
  - This can include In-Home Supportive Services (IHSS) workers, asthma home visitors, Black Infant Health home visitors, community health workers / promotores, Meals on Wheels, WIC, or any other local health and human services or programs (including Child, Family, and Adult Services)
  - Partner with local / regional community-based organizations, religious organizations, mutual-aid networks, and other community service organizations to check on priority populations and provide services and assistance
  - Provide water, fans, portable shade and other protective measures (e.g., hats, umbrellas, fabric shade coverings, clothes that are looser / more breathable, etc.), food and medication (especially if power is out)

- Unhoused Populations:
  - Provide suggestions for people unhoused and living in tents on strategies to stay safe and cool, for example, simple instructions on how to string up tarps or other coverings in such a way that provides shade and ventilation while reducing heat build-up.
If you have a pet or a companion animal:

Pets and companion animals feel the heat just as much as humans do and they can also suffer from heat-related illnesses. Know the symptoms of overheating for animals, including excessive panting or difficulty breathing, increased heart and respiratory rate, drooling, mild weakness or lethargy, stupor or even collapse, excessive thirst, and vomiting. Help protect the health of pets and other companion animals during an extreme heat event by taking these steps.

- **Never leave pets in a parked vehicle.** Even cracked windows won't protect your pet from suffering from heat stroke, or worse, during hot summer days.
- Provide your pet with fresh, cool water every day in a tip-proof bowl.
- Don’t force animals to exercise when it is hot and humid. Exercise pets early in the morning or late in the evening when temperatures are cooler.
- Bring pets inside during periods of extreme heat.
- Ensure pets have plenty of shade and shelter if kept outside. Remember, the shade pets have in the morning will either change or diminish as the sun moves throughout the day and may not protect them.
- Asphalt and concrete can get very hot and cause severe burns on the pads of your pet’s feet.
- Older and overweight pets are more likely to overheat during hot weather.
- Animals with flat faces are more susceptible to heat stroke since they cannot pant as effectively. These pets, along with older and overweight pets, should be kept in an air-conditioned environment as much as possible.
- Keep your pet well-groomed, but resist the temptation to shave off all of their hair to keep them cool. A pet’s coat will protect it from getting sunburned and acts as a cooling insulation for most animals.

It is important to work with your local cooling centers to allow pets and other companion animals inside, since many people may not want to or are not able to leave their pets behind.

Protecting farm animals:

- **California Department of Food and Agriculture (CDFA):**
  - Staff at the CDFA Division of Animal Health and Food Safety Services (AHFSS) is closely monitoring heat impacts on farm animals in the dairy and poultry sectors over the next week, and staff are ready to step in to help coordinate any necessary response. More info about AHFSS here: [https://www.cdfa.ca.gov/ahfss/](https://www.cdfa.ca.gov/ahfss/)
- **Center for Food Security and Public Health – Iowa State University:**
  - Excessive Heat and Your Pets and Livestock – Guidance:
Local Examples: Extreme Heat Response Measures

Madera County:
- Pushing out information via:
  - Social media
  - Exploring other direct push messaging through OES text system and school district parent messaging (a really strong messaging platform now – parents in jurisdiction got used to looking at it all the time during COVID)
- Sheriff’s Program: [https://www.maderacounty.com/government/sheriff/elder-orphans-program](https://www.maderacounty.com/government/sheriff/elder-orphans-program)
  - "Elder Orphans is a telephonic messaging service which stores subscriber’s name, telephone number, address, emergency contact information, and call times. The program was created by the Madera County Sheriff’s Office to meet the needs of Madera County’s Senior Citizens who live alone. Elder Orphans is a free house check calling program for people who want daily contact by receiving a pre-recorded message on their home phone. You select when you want us to call you and how often."

Trinity County:
- Local protocol: Maintain open lines of communication with our utility providers to know whether they expect disruption to their systems. In this case, local utility, PG&E, is very good at communicating with their customers directly if there are any concerns. Trinity County distributes messaging via social media about staying cool and limiting outdoor activity during excessive heat. Currently, due to the fires, Trinity County also has ‘clean air centers’ that can double as a cooling center for the public and these are also advertised to the community.

Yuba / Sutter Counties:
- Ensure that pets are allowed at the cooling centers (indoors - not just kenneled outside)
- Transportation is very important so ensure that local transit is open (especially during holidays and weekends)
- Outreach to Access and Functional Needs clients and IHSS clients is important to ensure they have all the information and assistance that they need
- Consider having specific cooling options for unhoused clients separate from general population

San Francisco City / County:
- Developed Extreme Heat public health response guidance document for the Department
- Provides information on extreme heat emergencies, heat-related health conditions, vulnerable populations, temperature thresholds, activation and notification phases, potential city-wide impacts, lead response and partner agencies, and more.
- Key Consideration for Vulnerable Populations: Guidance for San Francisco population (and other populations and geographic locations) that have historically not experienced extreme heat events for extended durations:
“the population – in particular vulnerable groups -- has greater difficulty acclimating to long durations of extremely high temperatures. This causes an increased risk of heat stress and of heat related illness, which could subsequently result in death. Furthermore, the housing stock in San Francisco is also less likely to have central air conditioning both because of its age and because of the typically cooler climate.”

Los Angeles County
- Ready LA County – Extreme Heat: https://ready.lacounty.gov/heat/
- Comprehensive / centralized website for providing locations of cooling centers, guidance on staying safe during extreme heat, and more.

Heat Safety Tool App (OSHA-NIOSH)
https://www.cdc.gov/niosh/topics/heatstress/heatapp.html
The OSHA-NIOSH Heat Safety Tool is a useful resource for planning outdoor work activities based on how hot it feels throughout the day. It has a real-time heat index and hourly forecasts specific to your location. It also provides occupational safety and health recommendations from OSHA and NIOSH.

The OSHA-NIOSH Heat Safety Tool features:
- A visual indicator of the current heat index and associated risk levels specific to your current geographical location
- Precautionary recommendations specific to heat index-associated risk levels
- An interactive, hourly forecast of heat index values, risk levels, and recommendations for planning outdoor work activities
- Location, temperature, and humidity controls, which you can edit to calculate for different conditions
- Signs and symptoms and first aid for heat-related illnesses


Key considerations for using the app (from CDC webpage):

- Heat index (HI) values were created for shady, light wind conditions, so exposure to full sunshine can increase heat index values by up to 15°F.
- The simplicity of the HI makes it a good option for many outdoor work environments (if no additional radiant heat sources are present, such as, fires or hot machinery). However, if you have the ability, NIOSH recommends using wet bulb globe temperature (WBGT)-based Recommended Exposure Limits (RELs) and Recommended Alert Limits (RALs) in hot environments.
- Use of the HI or WBGT is important, but other factors such as strenuous physical activity also cause heat stress among workers. Employers should have a robust heat stress prevention program that ensures workers are protected.
- NIOSH and the Occupational Safety and Health Administration (OSHA) are considering new scientific data related to the HI levels, and considering how to best incorporate the evolving science. It is important to regularly download updates to ensure you are using the latest version of the app.

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Working Together to Keep the Power On: Conserve Energy

To minimize discomfort, help with grid stability, and ensure the power stays for helping communities stay cool, consumers are encouraged to conserve energy. The power grid is usually most stressed from higher demand and less solar energy between 4 p.m. and 9 p.m. During this time, consumers are urged to conserve power by:

- Setting thermostats to 78 degrees or higher, if health permits.
- Avoiding use of major appliances and turning off unnecessary lights.
- Avoid charging electric vehicles while the Flex Alert is in effect.

Consumers are also encouraged to pre-cool their homes and use major appliances and charge electric vehicles and electronic devices before 4 p.m., when conservation begins to become most critical.

Consumers can sign up for Flex Alerts and participate in conserving energy when Flex Alerts are issued. A Flex Alert is typically issued in the summer when extremely hot weather drives up electricity use, making the available power supply scarce. Reducing energy use during a Flex Alert can help stabilize the power grid during tight supply conditions and prevent further emergency measures, including rotating power outages.

Sign up to receive Flex Alerts here: https://participate.flexalert.org/register

Learn more about Flex Alert here: https://www.flexalert.org/

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**During a Flex Alert**

- Set thermostat to 78°+, if health permits
- Avoid using major appliances
- Turn off all unnecessary lights
- Use fans for cooling
- Unplug unused items

Visit FlexAlert.org for more conservation tips
**Identifying and Prioritizing Communities with Greater Climate Change and Health Vulnerability**

Utilize the CDPH Climate Change and Health Vulnerability Indicators (CCHVIs) for California and data visualization platform (CCHVIz) to help define the scope of climate impacts and identify the populations and locations that are most vulnerable to those impacts, including for extreme heat.

**Tool Description:**
The indicators are grouped into three types: 1) Environmental or Climate Exposure Indicators, including for heat, air quality, drought, wildfires, and sea level rise. 2) Indicators that speak to a community’s capacity to adapt to climate exposures, including things like air conditioning ownership, tree canopy, impervious surfaces, and public transit access. And lastly, indicators that account for populations with greater sensitivity to climate exposures – including children and elderly, those living in poverty, and data on race and ethnicity, linguistic isolation, disability, and more. The data can be downloaded from our website, along with a description of why each indicator is relevant to climate change and health equity.

**Access the tool here:** [https://www.cdph.ca.gov/Programs/OHE/Pages/CC-Health-Vulnerability-Indicators.aspx](https://www.cdph.ca.gov/Programs/OHE/Pages/CC-Health-Vulnerability-Indicators.aspx)