



City of Calistoga

**Power Outage and Cooling
Center Guidelines 2022**

1. PURPOSE

This guideline is to establish a protocol for the opening of a cooling center in the City of Calistoga in response to a heat emergency, a power outage coupled with a heat event, and a power outage without the presence of a heat event. This protocol is intended to be a guideline that should be followed but the uniqueness of a situation present would determine how the guidelines would be applied. The City Manager and /or their designee can update how, when, and where the cooling center and charging stations would operate given the situation.

2. BACKGROUND

Heat waves do not elicit the same immediate response as floods, fires, earthquakes, and typical disaster scenarios. They destroy less but have claimed more lives over the past fifteen years than all other declared disaster events combined. Heat waves are obviously less dramatic and more deadly.

Heat emergencies are often slower to develop. It may take a number of days of oppressive heat for a heat wave to have a significant or quantifiable impact. Heat waves do not strike victims immediately; rather, their cumulative effects slowly take the lives of vulnerable populations.

Additionally, power outages occur frequently during the year, especially in the hotter months. The combination of a power outage and a heat event can cause significant challenges for residents. Even when a power outage occurs without the presence of a heat event, there are significant challenges for residents. Heat emergencies, power outages with heat events, and power outages create impacts that need to be addressed.

3. SCOPE

The scope of this guideline is to identify a plan for when cooling center resources will become available to residents and surrounding residents in the time of a heat emergency and/or in the time of a heat event coupled with a power outage. Additionally, the scope of these guidelines is to identify a plan for residents to have access to charging stations in the event of a power outage without a concurrent heat emergency.

4. ACTIVATION THRESHOLDS

Based on guidance from the Napa County Office of Emergency Services, cooling centers should be activated when a Heat Alert is issued, when the local heat index is forecast to reach 105F for three consecutive days. The heat index is a numerical value that is reached by factoring in both the temperature and relative humidity. To determine the heat index, the linked calculator through the National Weather Service is utilized

<https://www.wpc.ncep.noaa.gov/html/heatindex.shtml>.

Calistoga is faced with power outages that occur most often during the hotter months. Subsequently a power outage lasting over four hours coupled with a heat emergency where the heat index is forecasted or is at 105F will result in a cooling center opening (or being opened).

In the event of a stand-alone power outage without the presence of a heat event, charging stations will also be available to the public. Charging stations will become available approximately two hours after the start of a power outage

5. COOLING CENTER AND CHARGING STATION LOCATIONS AND HOURS

- Cooling Center: Calistoga Community Center, 1307 Washington St.; open 12 PM-9 PM upon activation or as otherwise directed (signs posted if relocated to a different facility at the CC or Nixle, etc).
- Charging Stations: Calistoga Police Department, 1235 Washington St.; Calistoga Fire Department, 1113 Washington St. 8 AM-4:30 PM, M-Sun; Calistoga City Hall, 1232 Washington St, 8 AM-4:30 PM, M-F

6. HEAT INDEX READINGS & ASSOCIATED HEALTH RISKS

The heat index (see charts 1 & 2) is how hot the heat-humidity combination makes it feel. As relative humidity increases, the air seems warmer than it actually is because the body is less able to cool itself via evaporation of perspiration.

As the heat index rises, so do health risks. When the heat index is 90°F, heat exhaustion is possible with prolonged exposure and/or physical activity. When it is 90°- 105°F, it is probable with the possibility of sunstroke, heat cramps, or heat exhaustion with prolonged exposure and/or physical activity. When it is above 105°F, sunstroke, heat cramps or heat exhaustion is likely, and heatstroke is possible with prolonged exposure and/or physical activity. When it is 130°F and above, heatstroke and sunstroke are highly likely with continued exposure. Physical activity and prolonged exposure to the heat increase the risks.

7. THE HEAT INDEX

The following charts show the health risks as temperature and relative humidity increase:

Chart #1

<i>The Heat Index</i>													
Air Temp (° F)	Relative Humidity												
	40	45	50	55	60	65	70	75	80	85	90	95	100
110°	136	143	152										
105°	123	129	135	141	148								
100°	111	115	119	124	129	135	141	147					
95°	101	104	107	110	114	117	122	126	131	136	141		
90°	92	94	96	98	100	103	106	109	112	115	119	127	132
85°	84	85	86	88	89	91	93	95	97	99	102	104	107
80°	80	80	81	81	82	82	83	84	84	85	86	86	87

Exposure to full sunshine can increase Heat Index values by up to 15° F.

Chart #2

Heat Index	Category	Possible heat disorders for people in high-risk groups
130°F or higher	Extreme Danger	Heatstroke risk extremely high with continued exposure.
105° - 129°F	Danger	Sunstroke, Heat Cramps and Heat Exhaustion likely, Heatstroke possible with prolonged exposure and/or physical activity.
90° - 104°F	Extreme Caution	Sunstroke, Heat Cramps, and Heat Exhaustion possible with prolonged exposure and/or physical activity.
80° - 90°F	Caution	Fatigue possible with prolonged exposure and/or physical activity.