

2020 Severe Weather After Action Report

THE DAY WAS ENDINE





FINAL SEPTEMBER 2020

EXECUTIVE SUMMARY

This report captures data and activities for the spring and summer months where heat impacts may be present. The National Weather Service Sacramento Office issued twelve (12) days of Heat Warnings, of which four (4) days were identified as HeatRisk Magenta Days and ten (10) were HeatRisk Red Days. This report evaluates some of the successes of the activation as well as opportunities for improvement, some of the key successes and improvement opportunities are:

Key Successes

The Severe Weather Guidance was activated for unusually high temperatures which posed a risk to the general public for several days. Successes included coordination calls and coordination of logistical supplies for the efficient operation of cooling centers. Additionally, the coordination stakeholders were able to access newly identified resources during the pandemic – such as hand-washing stations at encampments – to conduct outreach and provide information regarding locations. Flyers were created for distribution in the senior meals Dine at Home program and were also provided to homeless advocates for distribution at encampments.

Key Improvement Areas

During activation of the cooling centers, California experienced additional historic wildfires. Smoke impacted Sacramento County, although not to levels seen in 2018. Using new draft guidance for cleaner air centers, some cities chose to keep cooling centers open for cleaner air needs. The region needs to review the draft guidance, include the remaining interested cities and finalize the guidance on activation of cleaner air centers.

ACTIVATION OVERVIEW

Incident Name	2020 Severe Weather Heat and Wildfire Smoke	ρ
Incluent Maine	2020 Severe Weather Heat and Whith E Shiok	Ե

Heat Wave I - August 14- 26, 2020

Incident Dates Heat Wave II – September 5 – 8, 2020

Wildfire Smoke – August 14 – September 25

Operational Sacramento County
Area

OES Region Inland Region IV

Hazards Severe Weather – Heat and Wildfire Smoke

Activation
Status

Level III due to COVID-19; Duty Officer for Severe Weather

Health Officer
Advisory

None due to Heat or Smoke
Health Order in place for COVID-19

Sponsor Sacramento County Office of Emergency Services

Participating Organizations

Located in the Appendix B

Point of
Contact

Mary Jo Flynn, MS, CEM
Emergency Operations Coordinator
Sacramento County Office of Emergency Services
flynnm@sacoes.org
(916) 874-4671 office

Contents

2020 Severe Weather After Action Report	ii
Executive Summary	i
Key Successes	
Key Improvement Areas	
Activation Overview	iii
Key Chronological Events	6
Plan Review	7
Activation Criteria Phase Two	7
Activation Criteria Phase Three	7
Activation Criteria Phase Four	7
Severe Weather Guidance Phase II	7
Severe Weather Guidance Phase III	8
Severe Weather Guidance Phase IV	8
Public Health Emergency Department Visits Tracking	9
Air Quality due to Wildfire Smoke	
Coroner Report	12
General Statistics	13
Cooling Centers Utilized	
Cleaner Air Spaces	15
Strengths	17
OES Duty Officer Program	
Adherence to Plan	
Simultaneous Emergencies	17
Wildfire smoke in combination with severe heat	
Areas for Improvement	19
Transportation Planning for Cooling Centers	
Power loss in combination with severe heat	
Reduce fatalities	
Wildfire smoke in combination with severe heat	
Media and Social Media Analysis	21
Twitter	
Facebook	

Earned Media	22
2-1-1 Call Volume	24
Appendix A: Improvement Plan	A-1
Appendix B: Participating Organizations	B-1
Appendix C: Social Media Posts	C-1
Facebook Posts	1
Twitter Posts	1
Appendix D: Past Air Quality Due to Smoke	D-1

KEY CHRONOLOGICAL EVENTS

May 25, 2020

Heat Advisory was issued by the National Weather Service and was upgraded to a Warning May 26-27.

June 20, 2020

Heat Advisory was issued by the National Weather Service and was upgraded to a Warning on June 3. The Warning was downgraded to an Advisory on June 4.

June 24, 2020

Sacramento Operational Area Coordination Call

August 13, 2020

Weather calls were coordinated with Operational Area (OA) Partners in accordance with the severe weather guidance. It was determined that due to the prolonged nature of the heat event (over 5 days) and potential for temperatures to increase above forecast conditions and recommend opening cooling centers. The National Weather Service issued a Heat Warning starting August 13.

August 14, 2020

Cooling centers were opened at 8 locations throughout the county.

August 16, 2020

Statewide coordination call

August 18, 2020

Inland Region Operational Area Coordination Call. The National Weather Service ended the Heat Warning.

August 19, 2020

Inland Region Operational Area Coordination Call

August 21, 2020

Inland Region Operational Area Coordination Call

September 4, 2020

Sacramento Operational Area Coordination Call

September 5, 2020

Sacramento Operational Area Coordination Call. The National Weather Service issued a Heat Warning and ended the warning on September 7.

September 8, 2020

Inland Region OA PSPS Conference Call

Plan Review

Activation Criteria Phase Two	Heat wave I (Aug 14-26)	Heat wave II (Sept 5-8)
NWS issues a weather watch indicating abnormal weather for a prolonged period of time	MET	MET
Abnormal animal mortality rates		

Activation Criteria Phase Three	Heat wave I (Aug 14-26)	Heat wave II (Sept 5-8)
Notification to or from Office of Emergency Services that local jurisdictions have issued a special notice, but EOCs have not been activated	MET	MET
Credible weather forecasts for three (3) consecutive days include nighttime temperatures of 75 degrees or more	MET	MET
Abnormal animal mortality rates		
CAISO Stage 3 electrical emergency	MET	
Severe weather accompanied by electrical blackouts or rotating blackouts	MET	

Activation Criteria Phase Four	Heat wave I (Aug 14-26)	Heat wave II (Sept 5-8)
NWS weather conditions with a heat index of over 105 degrees with excessively hot weather for more than three (3) consecutive days accompanied by night temperatures of 75 degrees or more	MET	MET
The NWS issues heat advisories or warnings for more than three (3) consecutive days	MET	MET
Abnormal animal mortality due to severe/extreme weather		
Abnormal human medical emergencies and mortality due to severe/extreme weather conditions		
CAISO Stage 3 electrical emergency and/or extended power outages due to severe/extreme weather conditions	MET	

Severe Weather Guidance Phase II	Heat wave I (Aug 14-26)	Heat wave II (Sept 5-8)
Increase public awareness by providing general information about measures to reduce weather related risks and promote preparation efforts	COMPLETED	COMPLETED
Sacramento County Public Health Officer may issue a Health Advisory		

Public Health Division coordinates contact with those most vulnerable e.g. seniors, medical and care facilities and advises of potential health issues	COMPLETED	COMPLETED
Confirm details of agency or department participation (DHA outreach to homeless providers)	COMPLETED	COMPLETED
Public Health Division will coordinate with County PIO for media notification, press releases, updates to appropriate websites, etc.	COMPLETED	COMPLETED

Severe Weather Guidance Phase III	Heat wave I (Aug 14-26)	Heat wave II (Sept 5-8)
OES Duty officer will make appropriate internal OES notifications	COMPLETED	COMPLETED
Public Health Officer may issue a Health Alert		
Coordination calls are conducted with key agencies to provide/gather weather and power updates	COMPLETED	COMPLETED
Coordinate with PIOs to issue joint press releases increasing awareness of risks	COMPLETED	COMPLETED
Release critical pre-scripted and event-related public safety information	COMPLETED	COMPLETED
Develop criteria for warming/cooling centers	COMPLETED	COMPLETED

Severe Weather Guidance Phase IV	Heat wave I (Aug 14-26)	Heat wave II (Sept 5-8)	
Coordination calls amongst OES and responding departments and/or agencies will increase	COMPLETED	COMPLETED	
Public Health Officer may issue a Health Emergency			
Mobilization of warming/cooling centers, if necessary	COMPLETED	COMPLETED	
Emergency Operations Center (EOC) activated if	DUTY	DUTY	
necessary to support response activities	OFFICER	OFFICER	
Request Local Emergency Proclamation, if applicable			
Post warming/cooling center locations on websites and steps to take to alleviate risks of health impacts	COMPLETED	COMPLETED	
Request for mutual aid may occur			

Public Health Emergency Department Visits Tracking

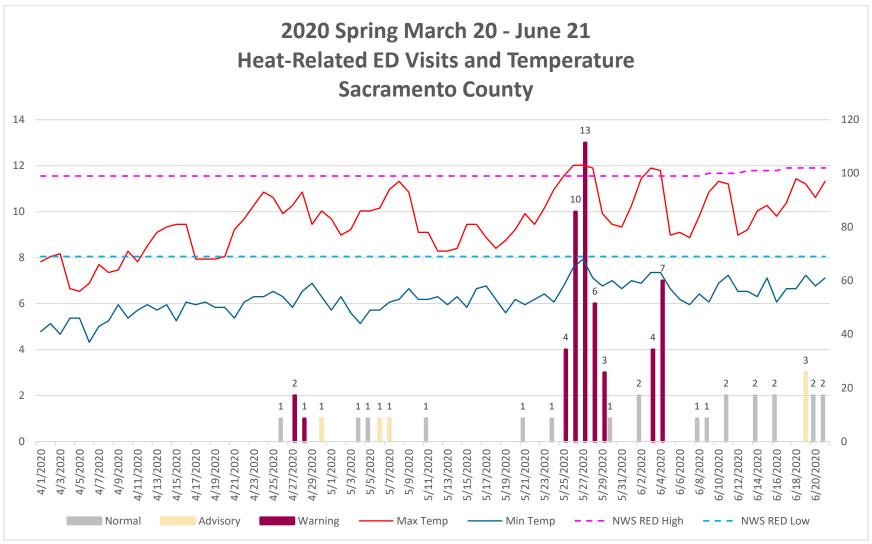


Figure 1: Chart depicting the NWS Sacramento Heat Risk highs and lows, actual temperatures, and Hospital Emergency Department (ED) visits during the spring of 2020 March 20 – June 21.

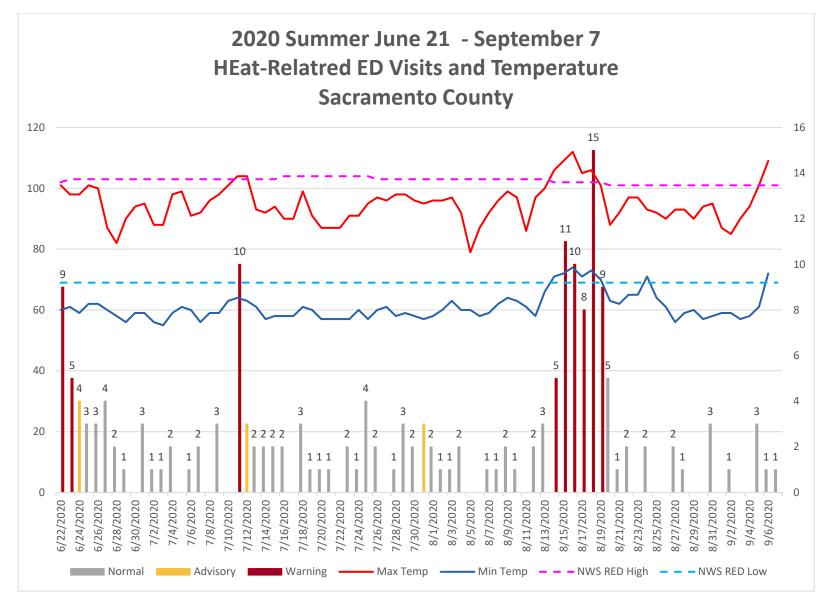
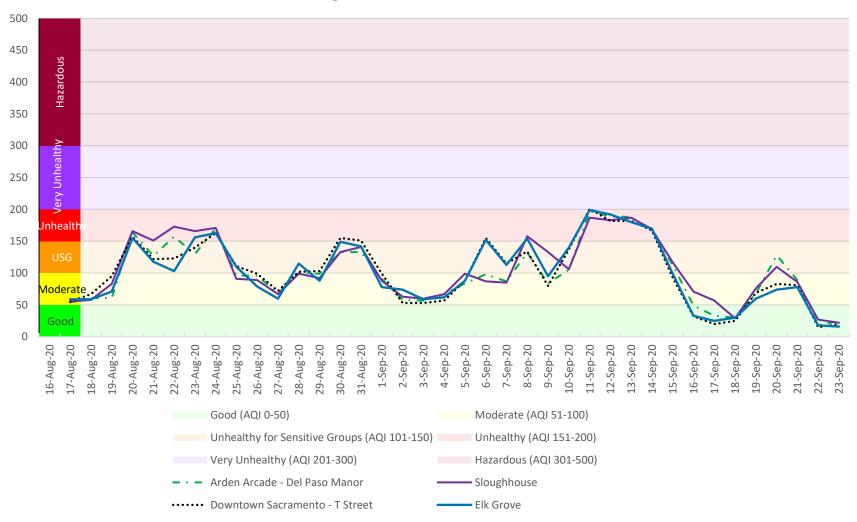


Figure 2: Chart depicting the NWS Sacramento Heat Risk highs and lows, actual temperatures, and Hospital Emergency Department (ED) visits during the summer of 2020 June 22 – September 7.

Air Quality due to Wildfire Smoke

2020 Wildfire Smoke
AQI readings at each of the Sacramento stations



Coroner Report

After completion of all testing and at the time of publication, the following causes of deaths were determined for deaths that occurred summer of 2020 are listed in the table below. Additional deaths may be verified by the Coroner at a later date. The Coroner remains the official source of death reporting for Sacramento County.

Case Number	Date	Description
20-03762	7/14/2020	Confirmed heat related death. Exposure was on 7/11/2020 when temp was 102. Decedent was transient male outside in the hot sun with evidence of drug use on scene. He was recently released from prison and had been homeless since his release. Cause of death is: Multi-Organ Failure due to Heat Stroke OSC: Presumed drug abuse and Hepatitis C.
20-04909	8/14/2020	Confirmed heat related death. Decedent was a transient male that was found down at a light rail station on 8/14/2020. He was taken to Kaiser and died on 9/2/2020. He tested positive for methamphetamine. His cause will be distributive shock due to heat stroke due to methamphetamine overdose.
20-04478	8/16/2020	Confirmed heat related death. Transient male found on Bradshaw Rd, died at Methodist.
20-04732	8/22/2020	Confirmed heat related death. Decedent was doing yard work in heat. Taken to Kaiser and died 3 days later. He also tested positive for methamphetamine.

GENERAL STATISTICS

	Total	Operational	Days	Hours	Total	Total	Volunteer
	Location	Costs	Open		Visitors	Staff	Hours
Cooling	8	\$11,135	10		680	416	292
Clean Air	3						

The Independent Sector Value of a Volunteer Hour of \$31.51 for 2019 in California.

Cooling Centers Utilized

Total Operational Cost among all reporting facilities: \$11,135 Total Volunteer value among all reporting facilities: \$9,690

Overall total cost of all reporting facilities: \$20,825

City of Sacramento

Operational Cost: \$9,875.58 Volunteer value: \$489.14

Location	Days	Hours	Total	Total	Total	Total
	Open		Unique	Pets	Staff	Volunteer
			Visitors		Hours	Hours
Tsakopoulos Library Galleria	8/14-	Noon-8	390	0	31	48
828 I St.	8/19	p.m.	390	U	31	40
	9/5-	1-8	5	0	14	14
	9/8/20	p.m.	3	U	14	14
Hagginwood Community	8/14-	1-8	101	0	42	0
Center	8/19	p.m.	101	U	42	U
3271 Marysville Blvd.	9/5-	1-8	43	0	28	0
	9/8/20	p.m.	43	U	20	U
George Sim Community	8/14-	1-8				
Center	8/19	p.m.	33	0	42	0
6207 Logan St.						

Citrus Heights

Operational Cost: \$1,260 Volunteer value: \$0

Location	Days	Hours	Total	Total	Total	Total
	Open		Unique	Pets	Staff	Volunteer
			Visitors		Hours	Hours
Community Center 6300 Fountain Square Dr.	8/14- 8/20	Noon-6 p.m.	38	1	42	0

9/5-	Noon-6	4	0	24	0
9/8/20	p.m.	4	U	24	U

Elk Grove

Operational Cost: not reported

Volunteer value: \$0

Location	Days	Hours	Total	Total	Total	Total
	Open		Unique	Pets	Staff	Volunteer
			Visitors		Hours	Hours
Wackford Center	8/14-	2-8	12	0	42	0
9014 Bruceville Rd.	8/20	p.m.	12	U	42	U
	9/5-	2-8	1	0	24	0
	9/8/20	p.m.	1	U		

Galt

Operational Cost: not reported

Volunteer value: \$0

Location	Days	Hours	Total	Total	Total	Total
	Open		Unique	Pets	Staff	Volunteer
	_		Visitors		Hours	Hours
Chabolla Community Center	8/14-	11 a.m.	10	1	5.4	0
600 Chabolla Ave.	8/19	-8 p.m.	10		54	U

Folsom

Operational Cost: not reported Volunteer value: \$9,200.92

Location	Days	Hours	Total	Total	Total	Total
	Open		Unique	Pets	Staff	Volunteer
			Visitors		Hours	Hours
Folsom City Sr & Arts Center	8/14-	noon-7	55	2	0	196
48 Natoma St.	8/20	p.m.		3	U	190
	9/5-	noon-7	2	0	0	96
	9/8/20	p.m.		U	U	90

Rancho Cordova

Operational Cost: not reported

Volunteer value: \$0

Location	Days	Hours	Total	Total	Total	Total
	Open		Unique	Pets	Staff	Volunteer
			Visitors		Hours	Hours
City Hall	8/14-	noon-6	26	0	42	0
2729 Prospect Park Dr.	8/20	p.m		U	42	

General Logistics	Quantity	Cost
Pounds of Ice	n/a	
Cases of Water	\$256	\$2050.73
Purchases (fans, coolers, food)	1500 snacks 6 coolers	\$373.07
Rentals (fans, air conditioners, hand washing)		
Personnel Time	416 hours	incomplete
Volunteer Time	292 hours	\$9200.92

Cleaner Air Spaces

As the heat event ended, multiple wildfires around northern California were ignited by dry lightning. Sacramento County received smoke into the valley that was not pushed out by light winds. The cities of Folsom and Sacramento converted their cooling centers to cleaner air spaces to serve the public unable to get into an indoor space to escape the smoke.

Folsom

Operational Cost: not reported

Volunteer value:

Location	Address	Days Open	Hours	Total	Total	Total
				Unique	Staff	Volunteer
				Visitors	Hours	Hours
Folsom City	48 Natoma	August 21	noon-7			
Senior &	St.	– August	p.m.			
Arts Center		25				

City of Sacramento

Operational Cost: \$6,544.34 Volunteer value: \$5,040

Location	Address	Days Open	Hours	Total Unique Visitors	Total Staff Hours	Total Volunteer Hours
Tsakopoulos Library Galleria	828 I St.	August 21 – August 25	1-8 p.m.	180	96	160
Hagginwood Community Center	3271 Marysville Blvd.	August 21 – August 25	10 am-8 p.m.	59	46	0

General Logistics	Quantity	Cost
Pounds of Ice	n/a	
Cases of Water	incomplete	59.84
Purchases (fans, coolers, food)		
Rentals (air cleaners)		

STRENGTHS

OES Duty Officer Program

The OES Duty Officer in coordination with county partners were able to identify, establish and support the operation of eight cooling centers within the community.

Strength 1.1:

Coordination between the OES and cities. Daily weather briefing calls were scheduled to ensure everyone had accurate information on the conditions, status according to the plan and activities each agency was engaging.

Regional Transit was able to participate in providing 150 ride passes to Sacramento County OES for distribution to those who needed to get to cooling centers but lacked adequate transportation. These passes were delivered to DHA for Navigators to distribute to those in need. Passes were stamped so that use of the passes could be tracked.

Strength 1.2: Coordination with Regional Transit to provide transportation services.

Adherence to Plan

Procedures set out in the plan were followed by OES. Weather coordination calls were convened and information distributed to 2-1-1, Public Information Officers and Media.

Strength 2.1:

Public Information Officers created flyers for distribution to homeless encampments as well as to seniors. Both documents were translated into Spanish, Russian and Chinese. Documents were distributed using the Home for Dinner program established for COVID-19 related food distribution as well as Great Plates at the cities. Sacramento Steps Forward distributed flyers at encampments that focused on education about the cooling centers that were open.

Simultaneous Emergencies

Coronavirus Response

Staff responded to simultaneous emergencies including the utilization of criteria for response to the COVID-19 disease following restrictions in place for cooling centers requiring social distancing. The state had placed Sacramento County on its watch list which kept malls and libraries from opening, places traditionally available for cooling during heat events.

Strength 3.1: Cities participating in cooling centers observed CDC and

CDPH Guidance regarding cooling center operation to screen visitors and provide opportunity for social distancing.

California Wildfires and Smoke

Due to the excessive heat, severe thunderstorms developed throughout California. The majority of these storms created dry lightning, igniting over 500 fires in a short period of time. Fires active in nearby county jurisdictions caused smoke to enter into Sacramento County. The draft guidance for wildfire smoke was activated by Sacramento County Public Health.

Strength 4.1: The Sacramento Metropolitan Air Quality District followed

draft guidance and made notifications to Sacramento OES

and Public Health.

Strength 4.2: The Cities of Folsom and Sacramento were proactive in

leaving cooling centers open and allowing them to be used

as "cleaner air centers" for respite from smoke.

Wildfire smoke in combination with severe heat

On Friday, August 14 during the heat event, weather conditions changed to include severe thunderstorm activity. This thunderstorm activity ignited over 500 fires throughout California into the weekend. Smoke from the wildfires made its way into Sacramento County and impacted the local air quality and the temperatures. The layer of smoke blocked sunlight and accelerated cooling in the region. However, with a reduction in surface winds, smoke continued to pool in the area. The Wildfire Smoke guidance was activated and notification was received via the Duty Officer email. While centers did open, smoke levels in Sacramento County did not reach levels seen in 2018 during the Camp Fire in Butte County.

Two cities decided to leave their cooling centers open as cleaner air centers for those needing to get out of a smoky environment.

Strength 5.1: The Sacramento Metropolitan Air Quality Management

District activated the draft Wildfire Smoke guidance and

provided timely notification to contacts.

AREAS FOR IMPROVEMENT

Transportation Planning for Cooling Centers

Regional Transit provided 150 bus passes for single trips (75 round trip fares) to Sacramento OES for distribution. Additionally, Public Information Officers provided flyers with locations, however, flyers lacked information on bus lines and stops that were nearest each cooling center. While the Sac OES did provide an ArcGIS Online Map of the cooling center locations overlaid with transit route options, having that information available for individuals on the flyers would be helpful.

Improvement 1.1: Provide bus stop and route location information for each of

the Cooling Centers. Ensure bus stop location information is

communicated to 2-1-1.

Improvement 1.2: Evaluate the success of the pass distribution and use

through the HOT Team. Update Severe Weather Guidance for procedures or guidance on any future pass use and

distribution.

Power loss in combination with severe heat

Due to the extent of the heat wave, CAISO declared a Stage 3 Power Emergency and caused rotating power outages to the surrounding area. While Sacramento County is serviced by SMUD who does not participate with the ISO, there were minor power outages experienced by some residents.

Improvement 2.1: Conduct a workshop or tabletop exercise with partners to discuss the impacts of cascading and simultaneous events (in this case quadruple event; pandemic, power shortages

(in this case quadruple event: pandemic, power shortages, heat, and wildfire smoke). Identify additional stakeholders

and cooperators.

Reduce fatalities

Of the four fatalities attributed in some portion to the effects of heat, three had evidence of drug use that contributed to their death.

- Improvement 3.1: Work with Public Health public information officers to share information with advocates to help unhoused individuals understand the risks of drug use and severe weather, and take protective action.
- Improvement 3.2: Work with homelessness advocates to encourage those who are unhoused to register for Sacramento Alert and subscribe to the Severe Weather Heat/Cold list.
- Improvement 3.3: Conduct an email test of the Sacramento Alert subscription group for Severe Weather Heat/Cold

Wildfire smoke in combination with severe heat

The draft wildfire smoke guidance recommends discussing opening cleaner air centers at levels of "Very Unhealthy" and "Hazardous" however centers were opened early at "Moderate" and "Unhealthy for Sensitive Groups." The conditions present during this week were not as severe as they were in 2018 when conditions from the Camp Fire caused a level of "Hazardous" throughout much of the area.

- Improvement 4.1: Convene the guidance committee and invite all city jurisdictions to review the guidance and contribute their recommendations. Thus far the guidance has been established between the County and City of Sacramento only.
- Improvement 4.2: Review conditions for the creation and dissemination of a Health Advisory from the Public Health Officer, and whether reliance on that advisory triggers openings of cleaner air centers.
- Improvement 4.3: Assemble a list of potential cleaner air centers and evaluate the building facility for air leaks as well as HVAC capacity and MERV rating. Older buildings may not provide as much respite from smoke, and buildings should be evaluated and prioritized for their use.

General administration needs

WebEOC was utilized to share information and notes from the calls. There were requests made to improve the sharing of information as it relates to the cooling center/cleaner air center data such as demographics and numbers using those centers. In previous years a draft field operations guide had been created for staff running cooling centers, this document was not circulated in this event.

Improvement 5.1: Upgrade the documentation of the

> cooling/warming/cleaner air centers so that attendance and demographics of use are tracked so future improvements

may be made.

Improvement 5.2: Update the field operations guide for

cooling/warming/cleaner air center staff

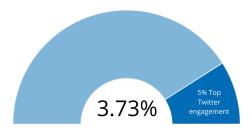
Improvement 5.3: The Severe Weather Guidance is dated 2012, however,

> internal pages are dated 2018. A comprehensive update to the plan should be made so publishing dates for the plan are

clear.

MEDIA AND SOCIAL MEDIA ANALYSIS

Twitter



118,429 31 Impressions Tweets

Twitter Engagement Rate

Number of Tweets between May 1 and September 30, 2020	1
Impressions	10,108
Potential Reach Total followers multiplied by the average number of followers (707).	11.13
Extension Rate The sum of retweets divided by the sum of impressions	.0010
Engagement Rate The sum of all actions divided by the sum of impressions	.7%
Median Engagement Rate	1.8%

Facebook

Number of Posts	1
between May 1 and September 30, 2020	1

Impressions	2778
Potential Reach Total followers multiplied by the average number of followers (155).	2,105,210
Daily Total Reach	2.4K
Percent of Potential Reach	.11%
Median Engagement Rate	107.5

Earned Media

- (ABC10), A. S. (2020, August 12). Bracing for a heatwave, how safe are ACs, misters, and cooling centers during pandemic? Retrieved from https://www.abc10.com/article/news/health/how-safe-are-air-conditioners-misters-and-cooling-centers-during-pandemic/103-e74d0351-294d-4f0b-b9c5-7e0eab61eea6
- Amor, M. (2020, August 17). COOLING CENTERS OPEN TO BEAT THE HEAT IN SACRAMENTO.

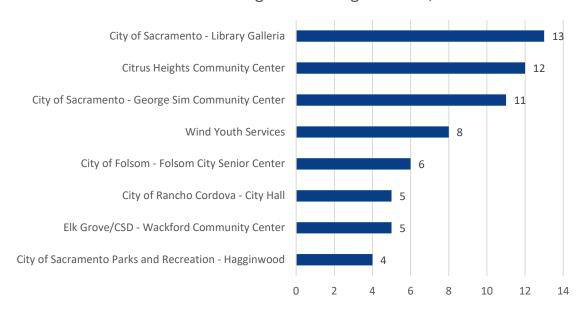
 Retrieved from https://ksfm.radio.com/blogs/mia-amor/cooling-centers-open-to-beat-the-heat-in-sacramento
- Byer, R. C. (2020, August 14). Watch Sacramento mayor open new cooling center to help residents escape the extreme heat. Retrieved from https://www.sacbee.com/news/local/homeless/article244974725.html
- Caiola, S. (2020, August 18). Triple-Digit Heat Poses Major Health Risk, Especially to Sacramento's Most Vulnerable. Retrieved from https://www.capradio.org/articles/2020/08/18/triple-digit-heat-poses-major-health-risk-especially-to-sacramentos-most-vulnerable/
- City of Folsom to open cooling center during heatwave. (2020, August 14). Retrieved from https://goldcountrymedia.com/news/175759/city-of-folsom-to-to-open-cooling-center-during-heatwave/
- City of Folsom Newsletter. (2020, August 21). Retrieved August 21, 2020, from <a href="https://myemail.constantcontact.com/City-News--Air-Quality-and-City-Facilities-Update--Cooling-Clean-Air-Center-Open--Free-COVID-19-Testing--Safe-and-Socially-Dista.html?soid=1110153107503&aid=95Br oah2c8
- Heeter, M., & Hunt, D. (2020, August 15). Safety is top of mind: How officials are balancing heat danger, COVID-19 at cooling centers. Retrieved from https://www.sacbee.com/news/local/article244962730.html
- McGough, M. (2020, August 17). Will California cool down soon? Was it really 112? Answers to your heat wave questions. Retrieved from https://www.sacbee.com/news/weather-news/article245024035.html

- Prepare for Higher Temperatures Over the Next Week. (2020, August 17). Retrieved from http://sacobserver.com/2020/08/prepare-for-higher-temperatures-over-the-next-week/
- Record-Breaking California Heat Wave, How To Cope In Amid COVID-19. (2020, August 17).

 Retrieved from https://www.capradio.org/news/insight/2020/08/17/record-breaking-california-heat-wave-how-to-cope-in-amid-covid-19/
- Staff, K. (2020, August 16). List: Here are some cooling centers opening in the Sacramento area. Retrieved from https://www.kcra.com/article/list-here-are-some-cooling-centers-opening-sacramento-area/33600307#
- Sullivan, M. (2020, August 15). Sacramento weather forecast: Will this weekend see a repeat of Friday's record temperatures? Retrieved from https://www.sacbee.com/news/local/crime/article244986395.html
- Sycamore, K. (2020, August 14). Where To Find Cooling Centers And How To Stay Safe During The Northern California Heat Wave. Retrieved August 17, 2020, from https://www.capradio.org/articles/2020/08/14/where-to-find-cooling-centers-and-how-to-stay-safe-during-the-northern-california-heat-wave/
- Wingo, M. (2020, August 17). Rancho Cordova's virologist mayor explains importance of cooling centers. Retrieved from https://www.kcra.com/article/rancho-cordovas-virologist-mayor-explains-importance-cooling-centers/33613136

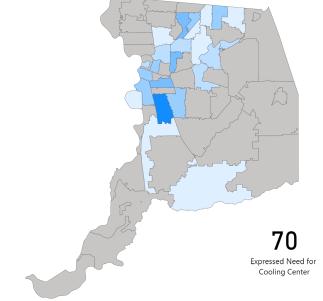
2-1-1 Call Volume

Referrals to Cooling Centers August 1 - 26, 2020



A total of 70 calls expressed need for a cooling center with a total of 64 referrals made.





City	Postal Code	Count
Sacramento	95823	7
North Highlands	95660	4
Sacramento	95820	4
Sacramento	95825	4
Citrus Heights	95610	3
Sacramento	95816	3
Sacramento	95818	3
Sacramento	95822	3
Sacramento	95828	3
Sacramento	95842	3
Gold River/Rancho Cordova	95670	2
Sacramento	95814	2
Sacramento	95815	2
Sacramento	95821	2
Sacramento	95827	2
Carmichael	95608	1
Citrus Heights	95621	1
Galt	95632	1
Citrus Heights/Orangevale	95662	1
Elk Grove	95758	1
Sacramento	95831	1
Sacramento	95838	1
Sacramento	95841	1

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for Sacramento County as a result of the 2020 Severe Weather. All corrective actions are entered into WebEOC for tracking over time.

	Issue/Area for Improvement	COFFECTIVE ACTION	Primary Responsible Organization	Organization POC	Start Date	Completion Date
1.1	Transportation	Provide bus stop and route location information for each of the Cooling Centers. Ensure bus stop location information is communicated to 2-1-1	County GIS	R. Richards	Aug 2020	Aug 2020
1.2	Transportation	Evaluate the success of the pass distribution and use through the HOT Team. Update Severe Weather Guidance for procedures or guidance on any future pass use and distribution.	Sac OES	J. D'Alessio	Aug 2020	Jan 2021
2.1	Power Outage	Conduct a workshop or tabletop exercise with partners to discuss the impacts of cascading and simultaneous events (in this case quadruple events: pandemic, power shortages, heat, and wildfire smoke). Identify additional stakeholders and cooperators	Sac OES	M. Flynn	Aug 2020	Aug 2021
3.1	Fatalities	Work with Public Health, Public Information Officers to share information with advocates to help unhoused individuals understand the risks of drug use and severe weather, and take protective action	Public Health	B. Bongiorno	Aug 2020	Aug 2021
3.2	Fatalities	Work with homeless advocates to encourage those who are unhoused to register for Sacramento Alert and subscribe to the Severe Weather Heat/Cold list.	Sac OES	J. D'Alessio	Aug 2020	Aug 2021
3.3	Fatalities	Conduct a test of the Sacramento Alert Severe Weather Heat/Gold Group	Sac OES	J. D'Alessio	Aug 2020	May 2021

	Issue/Area for Improvement	COFFECTIVE ACTION	Primary Responsible Organization	Organization POC	Start Date	Completion Date
4.1	Wildfire Smoke	Convene the guidance committee and invite all city jurisdictions to review the guidance and contribute their recommendations. Thus far the guidance has been established between the County and City of Sacramento only.	Sac OES	M. Hawkins	Aug 2020	May 2021
4.2	Wildfire Smoke	Review conditions for the creation and dissemination of a Health Advisory from the Public Information Officer, and whether reliance on that advisory triggers openings of cleaner air centers.	Public Health	B. Aiello	Aug 2020	Aug 2021
4.3	Wildfire Smoke	Assemble a list of potential cleaner air centers and evaluate the building facility for air leaks as well as HVAC capacity and MERV rating. Older buildings may not provide as much respite from smoke, and buildings should be evaluated and prioritized for their use.	Sac OES and Cities	Logistics Section Facilities Unit	Aug 2020	Aug 2021
5.1	Administration	Upgrade the documentation of the cooling/warming/cleaner air centers so that attendance and demographics of use are tracked so future improvements may be made.	Sac OES	J. D'Alessio	Aug 2020	Aug 2021
5.2	Administration	Update the field operations guide for cooling/warming/cleaner air center staff	Sac OES	J. D'Alessio	Aug 2020	Aug 2021
5.3	Administration	The Severe Weather Guidance is dated 2012, however, internal pages are dated 2018. A comprehensive update to the plan should be made so publishing dates of the plan are clear.	Sac OES	M. Flynn	Aug 2020	Aug 2021

APPENDIX B: PARTICIPATING ORGANIZATIONS

- 2-1-1 Sacramento
- American Red Cross
- Cal OES
- City of Citrus Heights
- City of Folsom
- City of Folsom Fire
- City of Galt
- City of Rancho Cordova
- City of Sacramento
- Cosumnes Community Services
 District
- Cosumnes Fire District
- Medical Reserve Corps
- National Weather Service,
 Sacramento Office
- Rancho Cordova Police Department
- Regional Parks
- Wilton Fire Department

- Regional Transit
- Sacramento County Department of Health and Human Services
- Sacramento County Department of Human Assistance
- Sacramento County Department of Technology 3-1-1
- Sacramento County Sheriff's Office
- Sacramento Food Bank
- Sacramento County OES
- Sacramento Metro Fire
- Sacramento Metropolitan Air Quality Management District (SMAQMD)
- Sacramento Municipal Utility District (SMUD)
- VOAD

APPENDIX C: SOCIAL MEDIA POSTS

Facebook Posts

Permalink	Post Message	Туре
https://www.facebook	City Cooling Center	Photo
.com/CityofCitrusHeig		
hts/photos/a.1894198		
887518330/27259383		
17677712/		

Twitter Posts

Tweet permalink	Tweet text
https://twitter.com/Sac CountyCA/status/13030 00077280014336	We want to remind you to take precautions as temperatures climb and to keep yourself, your family, your neighbors and your pets cool, and remember to check on seniors and those with mobility issues at least twice a day. For heat safety tips, visit: https://t.co/cE19on7d2I https://t.co/3hCnqSMR8S
https://twitter.com/Sac CountyCA/status/13026 67885060317185	We know it's hot out, but we hope you're having a great holiday weekend! Don't forget to protect yourself and others from COVID-19 by wearing a face covering, social distancing, and avoiding gatherings. https://t.co/765HLUEh2D
https://twitter.com/Sac CountyCA/status/13026 52787784810503	These hot temps are here through Tuesday, & Damp; there are several cooling centers open throughout the county. For the latest Cooling Center info dial 2-1-1 or go to https://t.co/m7QJ21fPrl. You can also find bus routes/stops to cooling center locations here: https://t.co/34M0ljxq95 https://t.co/S9vEGQM7w7
https://twitter.com/Sac CountyCA/status/13026 37684834398211	Keep as cool & Description of the day as much as possible. Cooling down a few hours a day will allow the body to recover and tolerate the heat better for the rest of the day. https://t.co/u6bOtkOMtn https://t.co/d3vLw3W5rk
https://twitter.com/Sac CountyCA/status/13022 75301192458240	Do you need a place to go to escape this heat? You're in luck! Cooling centers are available throughout the county. For the latest Cooling Center info, dial 2-1-1 or visit https://t.co/m7QJ21fPrl. Find bus routes/stops to cooling center locations here: https://t.co/34M0ljxq95 https://t.co/L60nhkyU0u
https://twitter.com/Sac CountyCA/status/12983 40682478714885	The #Sacramento area has been surrounded by wildfires and the effects have been smoky skies and falling ash. Breathing the bad air has been tough enough, but what's been falling from the sky is adding another environmental problem for our waterways.

	https://t.co/R2QbzGYDFp https://t.co/g8XInk1fil
https://twitter.com/Sac CountyCA/status/12983 08963859968004	Too hot and smoky to play outside? https://t.co/ypvpQzIYPK offers plenty of games and activities that will help children learn and prepare for emergencies as they play! #SummerSafety #BeatTheHeat https://t.co/0oWFzmAmkG
https://twitter.com/Sac CountyCA/status/12969 53359446839296	The Sacramento region will likely continue to experience significant smoke particle pollution impacts from wildfires burning throughout Northern California at least through Tuesday, Aug. 25.
	Learn more: https://t.co/m1btCYNeuL https://t.co/vOJNqHO4wG
https://twitter.com/Sac CountyCA/status/12969 02836769312769	Between the high temps and the smoky air, go ahead and take a cheat day or two. If you do need to work out, you can take care of yourself, reduce your risk of heat-related illness, and limit your exposure to wildfire smoke by working out inside your house. https://t.co/jD8DjvoceA
https://twitter.com/Sac CountyCA/status/12965 19092388519937	The California Heat Illness Prevention Standard (GISO 3395) protects all workers from heat, regardless of immigration status. Learn about education and training to meet this standard, and can be downloaded in a variety of languages. https://t.co/bAPPuu3cXM https://t.co/OQfcGbS7cQ
https://twitter.com/Sac CountyCA/status/12964 99633733083136	Wildfires are affecting air quality in Sacramento County. Consider creating a clean room to protect indoor air quality. Learn how to create a clean room here â†' https://t.co/EjEW6vUjsW https://t.co/GFEqv0AEwO
https://twitter.com/Sac CountyCA/status/12962 25271222157312	The @AQMD, in conjunction with @SacPublicHealth, is advising residents to take precautions and minimize outdoor activities if they see or smell smoke coming from the current wildfires burning over a wide area in Northern California.
	Learn more: https://t.co/67IsNlwvrM https://t.co/VZZUcWcmZW
https://twitter.com/Sac CountyCA/status/12961 46004329132032	As our region is in an extreme heatwave, it is important to know how to identify heat illness. Early symptoms include fatigue, heavy sweating, headache, cramps, dizziness, high pulse rate and nausea or vomiting. Remember to hydrate and seek shelter when you can! https://t.co/JdyI0YLQ7X
https://twitter.com/Sac CountyCA/status/12954 98451501817859	Our region is currently experiencing an extreme heatwave. Cooling centers are more important than ever to help residents escape the heat. Call 2-1-1 or visit their website to find out which centers are open: https://t.co/m7QJ20Ye2L https://t.co/baGSPQN2Xb
https://twitter.com/Sac CountyCA/status/12950 68646167855104	Check out threes tips from @BradshawShelter and help protect your pet from the heat? ðŸ'‡ðŸ'‡ https://t.co/aaHDyDZwaM
https://twitter.com/Sac CountyCA/status/12950 35089458470917	Keep as cool & Damp; hydrated as possible; drink plenty of water, avoid activities during the hottest part of the day as much as possible. Cooling down a few hours a day will allow the body to recover and tolerate the heat better for the rest of the day.

https://twitter.com/Sac CountyCA/status/12950 19988412227586	Do you need a place to go to escape this heat? You're in luck! Cooling centers are available throughout the county. For the latest Cooling Center info, dial 2-1-1 or visit https://t.co/m7QJ21fPrl. Find bus routes/stops to cooling center locations here: https://t.co/34M0Ijxq95 https://t.co/R8OB1cM5KO
https://twitter.com/Sac CountyCA/status/12946 80011228590081	While temps are high, families will be enjoying the water, & amp; we'd like to remind parents how important it is to teach their kids to swim safely. Before letting your kids jump in, please show them these fun and short videos from @RedCross.
	https://t.co/heXWTP1wb2
https://twitter.com/Sac CountyCA/status/12946 72701001367552	We want to remind you to take precautions as temperatures climb and to keep yourself, your family, your neighbors and your pets cool, and remember to check on seniors and those with mobility issues at least twice a day. For heat safety tips, visit: https://t.co/cE19on7d2I https://t.co/AXYCoyP7MQ
https://twitter.com/Sac	These hot temps are sticking around, & Damp; there are several cooling centers open throughout the county.
CountyCA/status/12946 57602157256704	For the latest Cooling Center info, dial 2-1-1 or go to https://t.co/m7QJ21fPrl. You can also find bus routes/stops to cooling center locations here: https://t.co/34M0ljxq95 https://t.co/RqJ08wLZGz
	Extreme heat can be deadly! If you feel faint, weak or nauseous, dial 9-1-1
https://twitter.com/Sac	for help. For cooling center locations, dates and hours, call 2-1-1. Check out
CountyCA/status/12943 99619946823680	these heat safety tips and stay safe Sacramento County!
	https://t.co/cE19on7d2I https://t.co/rbMn8OSNQc
https://twitter.com/Sac CountyCA/status/12943 26913700229122	Did you know during #pregnancy, most women have higher body temperatures, making them more sensitive to heat in hot weather? For this reason, pregnant women need to take extra steps to make sure they and their unborn babies do not overheat. Learn more https://t.co/Czj0exBAMa https://t.co/IAsks496vw
https://twitter.com/Sacr	It is going to be hot through Tuesday. Call 2-1-1 for cooling centers near you.
amentoOES/status/1302 280728357429248	Use your air conditioning, close drapes or blinds to keep the sunlight from heating your home, and try some of these ideas to stay cool. https://t.co/JVtzieaPpD
harman //harita a a a a l'O	Donations of money can help more people faster with what they actually need than donated items or goods.
https://twitter.com/Sacr amentoOES/status/1298 720922786885634	Visit https://t.co/uWbCz904Ge for a list of places receiving donations for wildfires.
	https://t.co/uWbCz904Ge

https://twitter.com/Sacr	Information and locations of fires within CA. Smoke is affecting Sacramento
amentoOES/status/1296	County from nearby fires. Visit https://t.co/FTW92fx6G5 for details on air
867645300420608	quality. https://t.co/zC1qDNOEfx
807043300420000	Wildfires burning outside of Sacramento County may bring smoky air into
https://twitter.com/Sacr	our county this afternoon. Do your best to stay indoors and use air
amentoOES/status/1296	, , , , , , , , , , , , , , , , , , ,
121512773091334	conditioning. Change your air filters to help keep your indoor air cleaner or
1 // /6	use a portable air cleaner for a clean-air room. https://t.co/nZlzstBhMC
https://twitter.com/Sacr	Sign up for our Alert Notification system and subscribe to the Severe
amentoOES/status/1294	Weather Heat/Cold for additional information.
732566247829504	https://t.co/kV6Yz4itH6 https://t.co/vaaXzD9dnA
	Call 2-1-1 or visit online https://t.co/ifNpPcElBi to find a cooling center near
https://twitter.com/Sacr	you.
amentoOES/status/1294	
<u>341101751398400</u>	Stay indoors and use your air conditioning. Drink water and stay hydrated.
	https://t.co/rLGPDdHibo
	Cool your home:
	1. Use your air conditioning. Check with your utility provider if you are
https://twitter.com/Sacr	concerned about costs
amentoOES/status/1294	2. Use fans to help move air
071420406775808	3. Draw shades or blinds to keep the sun from heating the inside of your
	home
	4. Lower your body temperature with a cool shower or bath
	Tips for beating the heat:
	1. Stay hydrated
	2. Limit sun exposure
https://twitter.com/Sacr	3. Check on loved ones, friends and neighbors
amentoOES/status/1294	4. Wear lightweight, loose fitting clothing
071418682974209	5. Look before you lock (for pets and kids)
071418082974209	6. Avoid the hottest part of the day
	7. Keep pets cool
	8. Use sunscreen and hats
	Extreme Heat Warning was issued by the @NWSSacramento earlier today.
https://twitter.com/Sacr	Call 2-1-1 for a list of locations open as cooling centers starting on Aug 14
amentoOES/status/1294	or visit their website https://t.co/TjseljuNSk
071416283750403	
	Take actions to stay cool this week.
	#CAwx #HeatWave https://t.co/l52aHt9o1e
	We want to remind you to take precautions as temperatures climb and to
https://twitter.com/Sac	keep yourself, your family, your neighbors and your pets cool, and
CountyCA/status/13030	remember to check on seniors and those with mobility issues at least twice
00077280014336	a day. For heat safety tips, visit: https://t.co/cE19on7d2I
	https://t.co/3hCnqSMR8S
https://twitter.com/ci	City Cooling Center
trusheightspd/status/	
129433282125577420	
9	
<u> ~</u>	

APPENDIX D: PAST AIR QUALITY DUE TO SMOKE

As a comparison to 2020 Air quality, smoke from the 2018 Campfire was more severe for more days than in 2020.

2018 Wildfire Smoke
AQI readings at each of the Sacramento stations

