



City and County of San
Francisco
Edwin M. Lee
Mayor

San Francisco Department of Public Health

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APPENDIX A: DEPARTMENT OF PUBLIC HEALTH RESPONSES

1. The National Weather Service predicted that San Francisco would be experiencing "severe" levels of heat as of August 29. What steps did DPH take to plan for this extreme weather? What is the temperature threshold for the City to have cause for concern and take emergency action based on a warning like this? (Does the City and the National Weather Service similarly define "severe"?) What are the criteria to warrant an emergency plan?

The Department of Public Health (DPH) developed and utilizes an Extreme Heat Annex that outlines the steps DPH takes when there is an excessive heat event in San Francisco. For the City and County of San Francisco (CCSF), an excessive heat event is defined as daytime temperatures at or above 85 degrees. This threshold is consistent with the 98th percentile of temperatures recorded over the past 10 years in the city. Additional factors (e.g. air quality humidity, night time cooling, etc.) are also considered when determining DPH action. While 85 degrees is considered excessive in San Francisco, DPH begins disseminating heat messages at 80 degrees. Messages about heat in San Francisco are sent out to DPH leadership, to CCSF agencies and to community partners (CBOs) that serve at risk and vulnerable populations. Information is also posted on the Department's website, Twitter, and Facebook, for use by the media and the public. These messages correlate with the Alert Type issued by the National Weather Service: Excessive Heat Outlook or Watch – low level activation/80-90 degrees; Excessive Heat Advisory – medium level activation/90-95 degrees; Excessive Heat Warning – high level activation/95+ degrees. Each level of activation identifies actions the DPH may take. All DPH messages to CCSF and community partners contain information about the health effects of heat and tips on how to stay cool. Health tips are in English, Spanish, Tagalog, Chinese, Russian and Vietnamese [See Attachment A Extreme Heat Annex and Attachment B "List of Lists" of CCSF/community partners].

In preparation for hot weather in San Francisco, on August 16th, prior to August 29th, DPH's Public Health Emergency Preparedness and Response branch (PHEPR) sent an e-mail to all our CCSF and community partners reminding them that warm weather was on its way, as it usually is this time of year. The e-mail outlined information about health and heat and tips to stay cool in multiple languages, provided a variety of links to this information on line, attached a PowerPoint presentation about extreme heat, and asked that the information be shared with staff and clients.

2. Which City department takes the lead in developing an emergency plan and what is the role that DPH plays? Does this vary given the nature of the emergency (weather, earthquake, terrorism)?

The mission of the San Francisco Department of Public Health is to protect and promote the health of all San Franciscans.

We shall ~ Assess and research the health of the community ~ Develop and enforce health policy ~ Prevent disease and injury ~
~ Educate the public and train health care providers ~ Provide quality, comprehensive, culturally-proficient health services ~ Ensure equal access to all ~

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DPH's Emergency Operating Plan (EOP) defines the actions and roles necessary to provide a coordinated public health emergency response. This plan provides guidance to DPH and supports the Human Services Branch of the City and County of San Francisco Operational Area Emergency Response Plan (ERP).

The EOP consists of three parts:

- EOP Base Plan, which provides a conceptual overview of DPH's approach to emergency planning;
- Functional Annexes, which provide operationally-oriented plans and details on essential emergency operations functions, such as continuity of operations, department operations center coordination of emergency response activities, and communications; and
- Hazard Specific Annexes, which focus on response needs generated by the subject hazard.

Hazard specific annexes encompass hazards that could occur in which DPH may play a response role. This includes hazards both natural and man-made, and range from planned events to large-scale disasters. Hazards for which DPH will likely play a critical response role include, but are not limited to: natural disaster (e.g., earthquake, tsunami, flood) requiring a public health response; possible or confirmed terrorism requiring a public health response; communicable disease outbreak and/or first or initial case(s) of an emerging infectious disease with potential for significant illness or death.

Coordination with other city agencies and with non-medical regional and state entities is primarily managed through the City and County of San Francisco Emergency Operations Center (EOC). The CCSF ERP addresses the roles and responsibilities during all-hazards emergency response. The Emergency Support Function (ESF) annexes to the plan describe in more detail response actions specific to each corresponding ESF. DPH is the lead agency for Emergency Support Function (ESF) #8 Public Health and Medical Services in the City and County of San Francisco.

3. On DPH's website, it states: "In 2010, the San Francisco Department of Public Health was awarded funding from the CDC to participate in the Climate-Ready States and Cities Initiative. The goal of the program is to help states and cities develop ways to anticipate health effects of climate change by applying climate science, predicting health impacts, and preparing flexible programs. The focus of our work for this initiative has been preventing heat stress morbidity and mortality from extreme heat events and associated air quality impacts, which are expected to increase in frequency and duration with climate change. For more information on our Climate and Health program, visit the Program on Health, Equity and Sustainability website." Unfortunately, the links do not work. What is the update on this plan and funding, and the reporting that was likely required for this grant? How was the plan used during the recent heat wave?

In 2010, DPH created its Climate and Health Program with funding from the Centers for Disease Control (CDC). To enhance public availability of this work and to increase awareness of the impacts of climate change on health, the Climate and Health Program consolidated all developed trainings, presentations, posters, information sheets, vulnerability assessments, emergency plans, and interactive maps and data tools onto the new program website <http://www.sfclimatehealth.org/> as of March 2017.

In the first round of funding (2010-2013), the Climate and Health Program created all its heat preparedness and response materials in coordination with DPH's Public Health Emergency

Preparedness & Response branch (PHEPR). This included the development of a heat vulnerability index, an emergency response plan, which can be found at <http://www.sfclimatehealth.org/> (Attachment C gives a summary of the materials and weblink; annual reporting and a final project report were submitted to the CDC pursuant to grant requirements.) The multilingual outreach materials for heat-related events were posted on the Department's website and were used in e-mail communication to CCSF and community partners during the Labor Day weekend.

The Climate and Health Program has continued to receive funding from the CDC and pending congressional appropriations, it will be funded through 2021. In 2017, the Program released its Climate and Health Adaptation Framework. The Framework marks a shift from assessment to action, provides a summary of the prior climate health vulnerability assessments, a menu of strategies and activities to improve public health through climate adaptation, indicators to measure climate risk, and a review of DPH's preparedness to address the rising health risks of climate change.

4. As part of the outcome of the CDC grant, which has been renewed for another 3 years, DPH was to engage in "Disaster Planning, in collaboration with San Francisco Department of Emergency Management Services (SFDEM) [and] convened and co-chaired an inter-agency task force to conduct strategic planning that developed a City and County of San Francisco heat wave disaster response plan, appropriate surveillance and health education/outreach activities to protect San Franciscans." Unfortunately this link also doesn't work. Has there been a "Heat Wave Disaster Response Plan" developed?

Through DPH's Climate and Health Program, a heat preparedness inter-agency taskforce was developed. The objective of the inter-agency taskforce was to guide the development of a City and County of San Francisco heat wave disaster response plan, including appropriate surveillance and health education/outreach activities to protect San Franciscans. The inter-agency taskforce included Human Service Agency (HSA), Department of Environment (DOE), Department of Emergency Management (DEM), and DPH. In addition to working with our heat preparedness inter-agency task force, DPH has worked with community organizations to gather insight and discuss strategies best suited toward planning and protecting San Francisco during a heat emergency.

Once heat related materials and plans were created, DPH's Climate and Health Program worked closely with community groups to support preparedness efforts. DPH has also worked closely with City departments and non-profit partners in support of vulnerable populations, presenting heat-related information and materials to numerous City department staff and a wide variety of community-based organizations that serve populations at risk for heat.

5. Also, on DPH's website, it states: "San Francisco showed specific vulnerabilities during the 2006 California heat wave, due to our lack of physiologic and technologic adaptations for extreme heat events. For this reason, the SFDPH Environmental Health Section developed the Heat Vulnerability Index, which geographically predicts high risk areas during an extreme heat event ...". How have lessons learned from the 2006 heat wave affected City response to subsequent heat waves, including our most recent one?

The July 2006 California heatwave helped climate health professionals better understand; 1) how heat-related morbidity and mortality is reported; 2) which populations are most vulnerable to heat-related health impacts and; 3) which geographic regions are most vulnerable to heat-related health impacts.

Based on this information, DPH applied for funding through CDC's Climate-Ready States and Cities Initiative and was one of two cities and 16 states that received this competitive award. The goal of this initiative is to develop ways to anticipate these health effects by applying climate science, predicting health impacts, and preparing flexible programs. This funding supported all of the heat related plans, tools and materials developed by SFDPH (see Attachment C).

6. Given that DPH has produced a map to chart heat vulnerability index by Census block group, how is this information used and shared with other City departments? Particularly, how is the Disaster Planning coordinated with the Department of Emergency Management Services?

The DPH Climate and Health Program embarked on its very first heat vulnerability index to pinpoint neighborhoods most susceptible to the health effects of extreme heat. The resulting map found that neighborhoods that already suffer from poor health are also most vulnerable to heat. The index was used in a variety of adaptation efforts such as creating DPH's Extreme Heat Annex, guiding where to designate cooling centers and where to conduct education and outreach efforts. Other City agencies are using the index, too. For example, the SF Planning Department used the index in the San Francisco Urban Forest Plan to determine where more trees should be planted to offer shade and boost cooling effects. The DPH Heat Vulnerability Index was included in San Francisco Climate Action Plan developed by SF Environment. The SFMTA also used it to inform mitigation efforts in its Transportation Sector Climate Action Strategy.

In addition to the inter-agency task force that was created for heat preparedness, DPH's Climate and Health Program has worked to strengthen collaboration across government agencies and support vulnerable communities. We have presented this work and sent out information to the following City agencies – SFPUC, SFMTA, SF Planning, SF Environment, the Human Services Agency, the Department of Emergency Management, San Francisco Mayor's Office, SF Office of Resiliency and Recovery, SF Port and Public Works. We have also collaborated on many City-wide efforts and used our heat planning materials for the following select projects: *Solar+Storage* is a collaborative project with the goal to advance electrical resilience by installing solar installations on key facilities including senior assisted living facilities and health care facilities. *Resilient SF* is part of the Rockefeller Foundation's 100 Resilient Cities. For this program, DPH has been a key city stakeholder that actively participates to ensure that the initiative has a strong social and health perspective.

7. What is the standard procedure for noticing public safety information for the general public? What is the standard procedure for translating safety information? Which City department is responsible for this? Why did it take until mid-day Saturday for the existing hours of operation of our libraries and pools to be disseminated to the Board of Supervisors? And why wasn't Tagalog included?

In general preparation for hot weather in San Francisco, on August 16, DPH's Public Health Emergency Preparedness and Response branch (PHEPR) sent an e-mail to all our CCSF health and community partners reminding them that warm weather was on its way, as it usually is this time of year. On Tuesday, August 29, DPH began notifying DPH staff, CCSF agencies, and health and community providers about expected heat increases forecasted for the Labor Day weekend. The following message was posted on its public website:

Much of the Bay Area will be hot over the next few days and through the Labor Day Weekend. San Francisco's temperature is currently predicted to be in the 70's during the day on Wednesday and Thursday, cooling down in the evening. Friday through Sunday will be the warmest days with temperatures in the low to mid 80's and cooling down to the 60's during the evening. See information below from the National Weather Service.

National Weather Service - San Francisco

Please note that weather predictions can change so listen for weather information on the radio or TV and check the link above for the most current National Weather Service information.

Remember to stay hydrated by drinking plenty of water, wear light clothing and a hat if you go outside, avoid strenuous activity, and check on your neighbors' friends and family members-especially those who live alone. Prepare for the heat by pulling the shades down during the day and keeping the windows open at night. For relief from the heat, consider visiting a community center, movie theater, congregation, public library, swimming pool, local recreation center or shaded park. For more information please refer to the following:

- [Extreme Heat FAQs](#)
- [Heat Wave Multilingual](#)

Have a safe and healthy Labor Day Weekend.

Based on increased temperature predictions, DPH contacted the Department of Homelessness and Supportive Housing and the Human Services Agency on Thursday Aug 31 to ensure awareness about the heat and that implementation of heat protocols was being considered. DPH also updated its website message to indicate a NWS heat advisory for San Francisco, with temperatures expected to be as high as 90 degrees. DPH contacted DEM that day to request assistance disseminating public health and safety information about the heat, and steps to take to stay cool. On Thursday, DEM circulated information via Next Door and on social media. Heat information was updated and sent out to key CCSF Departments, community organizations and the faith based community serving vulnerable populations. The information created by DPH consisted of prevention and cooling tips in 6 languages, and FAQs about heat waves and heat-related illness (see above links.)

On Friday Sep 1, dissemination continued in the morning, with DEM using social media, reaching 84,800 followers on Twitter, including the media, which monitors Twitter.

Later on Friday, the National Weather Service issued an excessive heat warning for San Francisco, prompting the DEM to escalate to a higher level the activation of the Emergency Operations Center, which had opened routinely at 7am. As part of that response, the City's policy team decided to open cooling centers and extend pool hours. The policy team met at 6:15pm via conference call and elected officials were informed immediately afterward, at 6:45pm.

The cooling center announcement went to all media, including ethnic media, in the form of press releases from DEM and the Mayor's Office, and was also sent via Twitter and Next Door. The information disseminated included information on pools, libraries, cooling centers, tips to cope with heat and stay cool, warning signs for heat-related illness, and a media contact number for the EOC.

On Saturday Sep 2, cooling centers opened. Another press release was sent by DEM and Mayor's Office. The DEM translation protocol was initiated, and the Office of Immigration and Civic Engagement provided translation into Spanish and Chinese of the cooling center announcement. Tagalog translation was not available at that time. While we are able to produce materials in multiple languages when there is time to plan ahead, we have identified rapid and comprehensive translation during emergency events as an area for improvement.

8. How does DPH use the press to disseminate vital information? What was the press plan to get out cooling station information on radio and TV, including ethnic media, in advance of the heat wave? What about public service announcements on our SFMTA vehicles? What about using the noon citywide emergency system loudspeaker alert? When is this system used? Were any of these options considered to notify constituents of the dangers of the heat wave and potential reprieves? Are there protocols about how and when to use media methods for information dissemination?

Please see the answer above for information about media and public notification of heat information. The use of SFMTA vehicles to broadcast information can be coordinated through the EOC, but was not discussed during this heat event. The DEM protocol for activating the citywide siren broadcasting system is reserved for cases of immediate danger. That protocol could be revisited, but was not considered for this heat event. The SF Alert system also was not used, but was discussed during after action briefings, and was used the following weekend (Sep 9) to notify San Franciscans about temperatures in the mid-80s and instruct them to check on older adults, pets and those who are ill; and to remember to drink water. The use of emergency alert systems has been identified as an area for further examination and improvement.

9. Why weren't there cooling stations set up prior to the heat wave? And, why weren't there extended hours of our air-conditioned public buildings, like libraries?

On August 31, DPH and the Human Services Agency discussed by e-mail and phone the need to set up cooling centers. Based on National Weather Service heat predictions at the time (lows at night in the 60s, a heat alert for two consecutive days of low 90s followed by one day of low 80s) the decision was made to not open cooling centers. However on September 1, in the early afternoon, the National Weather Service issued an extreme heat warning (90's and 100's over three days) and DPH asked the Human Services Agency to help open up cooling centers. ADA-compliant city-owned facilities and community partner organizations with air conditioning were identified on Friday late afternoon along with volunteer staffing. These cooling centers were opened Saturday morning September 2.

Having already approved and designated cooling centers can save critical time. Over the past few years, DPH, HSA and DEM have worked together to identify community based organizations and government facilities with air conditioning that are ADA compliant. Criteria and protocol were drafted for these cooling centers and discussions were held with some of these organizations and city departments with mixed results. For some city departments and organizations, opening up their facility, possibly on short notice, can be disruptive to their programs and services. Over the next several months CCSF agencies will work together to review criteria and protocols for cooling centers, contact and update the list of facilities with air conditioning that are ADA compliant and establish written MOU's for a minimum number of cooling centers in San Francisco.

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10. Given the fact that the Medical Examiner reports that the 3 people who died during the heat wave lived alone, died at home and none of them had called for medical help, how does DPH use its Vulnerability Index to work with other departments to do outreach to our most vulnerable residents? Is there a plan to reach particular vulnerable populations (because of disabilities, age, language, or isolation)? Are there "emergency information trees" that connect City departments to nonprofits that serve our most vulnerable residents?

The heat vulnerability index has aided in targeting population level planning and interventions and understanding neighborhoods and sub-populations that are most vulnerable to extreme heat. Visual tools and the use of a place-based approach has helped communicate to the community areas at risk and spur conversations on how community members can help each other. Although we have found the index to be a useful tool, it is only one part of our planning efforts. The best way to reach vulnerable populations is through the service providers and organizations that have already established trust and rapport with their respective populations. That is why DPH has strong relationships with these service providers and organization because they can translate the information in a cultural context and are most knowledgeable about the populations they serve.

Given this, DPH has worked closely with the Mayor's Office on Disabilities, Disaster Preparedness Committee to identify key city departments and community based organizations that serve people with disabilities, people with access and functional needs, and vulnerable populations. This list of government and community service providers is called "The List of Lists." It contains over 50 organizations and over 90 e-mail addresses and contact persons. The purpose of the list is to send critical information about emergent climate issues, such as an extreme heat event. These organizations are then asked to share this information with their staff, customers, clients and the public through e-mail blasts, Twitter, Facebook, etc. The information in the List of Lists is updated every 6 months or as needed. We exercised the List of Lists a year ago as part of a DEM exercise and know that the contacts on the list receive information. We are continuing to work on efforts to ensure that the information gets out fully to the organizations staff, customers, and clients. DPH is currently following up with each of the List of List contacts to get feedback on how the information DPH sent them prior to and during the Labor Day Weekend extreme heat event was disseminated and how we can improve this alert system.

11. What kind of feedback loop and reflection is there after a disaster happens? How does DPH (with other City departments) assess response and coordination so as to improve on it next time? Is there a performance matrix that is used to measure response?

After a disaster, DPH organizes a meeting called a Hot Wash. A Hot Wash was held on September 8 and included all the staff in the department that played a role in the department's response during the heatwave. The purpose of the meeting is to identify strengths in the response and discuss areas for improvement. From this hot wash, an After Action Report/Improvement Plan (AAR) is developed to identify gaps and corrective actions to remediate these gaps. The lessons learned from disasters can be used to revise plans, improve deficiencies, and provide a basis for training to improve execution of plans for future activations.

The following questions were included in the list of questions posed to the Department of Emergency Management. Given the transition of the Emergency Medical Services Agency functions to the Department of Public Health as of July 2017, DPH is responding to these questions.

4. Who makes the decision to call in Mutual Aid? Is there a threshold or criteria that has to be met to consider this action?

Mutual aid within the emergency response system is a tool to complement local efforts during times of unusually high demand. The California Emergency Service Medical Authority's disaster medical services division provides ambulance strike teams when needed as an essential part of California's emergency response system.

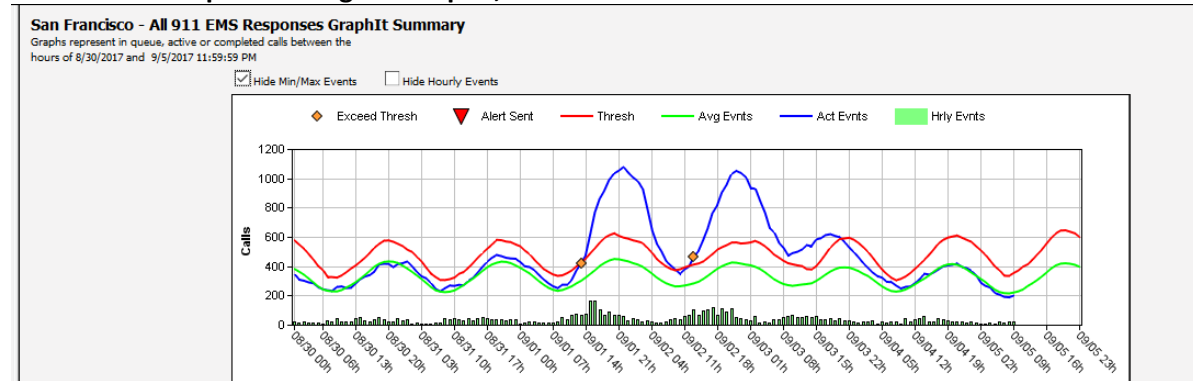
The decision to request EMS mutual aid resources is made jointly by the DPH EMS Medical Director, DPH EMS Administrator and the SFFD EMS Chief when the demand for resources outstrips the day-to-day system's ability to supply them. The DPH EMS Medical Director has the final authority as the medical director for the EMS System. There are defined thresholds that have to be met before calling in additional resources such as an above-average 911 call volume, a high number of Code 3 and /or Code 2 calls holding; response units on scene with a patient awaiting a transport ambulance; and continued ambulance shortage despite the addition of extra units.

During the Labor Day weekend response, mutual aid was an orderly process that worked well to respond to increased call volume for ambulance. Our emergency response system was proactive in monitoring call volumes and took immediate steps to respond as those volumes rose.

Everyday units are in the system to meet the ebb and flow of the call volume with built in capacity for increased call volume. When the threshold is reached and call volume is continuing to climb, the first line of defense is to go to our 911 partners to see if they can reallocate their private ambulances to the 911 system, which they did on Friday and Saturday. If the call volume continues to increase the system's next step is to call in the BLS (Basic Life Support) resources and allow them to respond to 911 calls, which needs the authority of the Medical Director, which also took place on both Friday and Saturday. If the call volume still continues to outrun the system capacity to respond the next option is to call an ALS (Advanced Life Support) strike team, which are ambulances from surrounding communities. Strike teams are made up of four to five ambulances plus a supervisor to be added into the system, which happened on both days also. Once the need is over the units are returned back to their previous assignments.

San Francisco - All 911 EMS Responses	
8/25/17 comparison	570
9/1/17	1342
9/2/17	1413
9/3/17	994

All 911 EMS Responses: Aug 30 – Sept 5, 2017



5. What was the coordination with the hospitals? Were additional resources allocated to hospitals to prepare them for the influx of people?

On August 31, DPH provided hospitals with information on the heat advisory, as well as general heat information. On September 1, as EMS call volume increased, a hospital conference call was conducted to provide information on the situation and to assess hospital status, including resource needs. Subsequent conference calls were made to discuss patient volumes, equipment issues and overall operations. Hospitals were provided with fans on Saturday morning as a number of them were having issues with cooling their facilities.

The 911 dispatch center, ambulance providers and hospitals also use an internet-based communication system called Reddinet. This system allows for monitoring emergency department status and inpatient hospital beds along with direct messaging capabilities for information exchange. This was used throughout the event to monitor hospital status and communicate information to the hospitals.

6. How much did the Mutual Aid cost; who did we pay, and where does that money come from?

The state's system of mutual aid is structured by region. The majority of counties in the Bay Area are in Region 2. A mutual aid agreement is in process where counties could ask for payment when services have been deployed. Fees for ambulances would likely adhere to the state rates:

<http://www.emsa.ca.gov/Media/Default/PDF/RateandfeestructureAmbStrikeTeam.pdf>

To date there has been no request for payment.

7. How many ambulances were eventually called in and at what times? At what point was the decision made to do so? How many private ambulances were deployed and where and when?

The decision to call in a strike team was made on Friday around 330pm after all city resources were committed into the system including private ambulance surge units and BLS ambulances that were authorized to be used in the system. Given that the request for transports continued to accumulate, it was decided that an ambulance strike team would be needed to deal with current and predicted call volume to handle the heat event.

HEAT SURGE INCIDENT 9/1/17 - Mutual Aid Ambulances

ALS						
County	Company	Unit	SF CAD	Arrival	Status	Departure
Contra Costa	AMR	72	200	1800	Field	
San Mateo	AMR	53	202	1900	Field	
Marin	St. Joseph	116	116	1900	Field	
Santa Clara	Rural Metro	71	204	1915	Field	
Santa Clara	Rural Metro	66	205	1915	Field	
Santa Clara	Rural Metro	65	206	1915	Field	
Contra Costa	AMR	74	201	1930	Field	
San Mateo	AMR	661	207	1930	Field	
Yolo	AMR	312	208	1940	Field	

BLS						
County	Company	Unit	SF CAD	Arrival	Status	Departure
	St. Joseph	112	112	1800	Field	
San Mateo	AMR	230	203	1900	Field	
San Mateo	Falck	752	209	1940	Field	
Alameda	AMR	287	210	2015	Field	

Other						
DMSU	AMR			1900	EOC	

Total ALS: 9
Total BLS: 4
First ALS Arrival: 1800
First BLS Arrival: 1800

HEAT SURGE INCIDENT 9/2/17 - Mutual Aid Ambulances

ALS						
County	Company	Unit	SF CAD	Arrival	Status	Departure
Yolo	AMR	142	AMR142*	1450	Field	2030
Solano (ST1)	Solano (Medic)	18	SO18*	1415	Field	2300
Solano (ST1)	Solano (Medic)	50	SO50*	1415	Field	2300
Solano (ST1)	Solano (Medic)	19	SO19*	1500	Field	2200
Contra Costa (ST1)	AMR	99	AM99*	1530	Field	2300
Alameda	Sutter AMR			ER	1615 ETA	Cancelled - Sent to San Mateo

BLS						
County	Company	Unit	SF CAD	Arrival	Status	Departure
San Mateo	Falck	753	FA753B*	1350	Field	2300
Contra Costa (ST1)	AMR	97	AM97B*	1415	Field	2150
Contra Costa (ST1)	AMR	98	AM98B*	1415	Field	2120
Alameda	Sutter AMR	275	ST275B*	1630	Field	2330
Alameda (ST1)	Paramedics Plus	2300	PP400B*	1615	Field	2145
Contra Costa	Falcon	461	FC461B*	1830	Field	2130
Contra Costa	Falcon	269	FC269B*	1830	Field	2145

Other						
DMSU	AMR	160		1420	EOC	
Solano SO1*	Solano (Medic)		SO1*	1415	Field	2115

Total ALS 5
Total BLS 7
First ALS Arrival : 1415
First BLS Arrival : 1350

HEAT SURGE INCIDENT 9/2/17 - Mutual Aid Ambulances

ALS						
County	Company	Unit	SF CAD	Arrival	Status	Departure
Yolo	AMR	142	AMR142*	1450	Field	2030
Solano (ST1)	Solano (Medic)	18	SO18*	1415	Field	2300
Solano (ST1)	Solano (Medic)	50	SO50*	1415	Field	2300
Solano (ST1)	Solano (Medic)	19	SO19*	1500	Field	2200
Contra Costa (ST1)	AMR	99	AM99*	1530	Field	2300
Alameda	Sutter AMR			ER	1615 ETA	Cancelled - Sent to San Mateo

BLS						
County	Company	Unit	SF CAD	Arrival	Status	Departure
San Mateo	Falck	753	FA753B*	1350	Field	2300
Contra Costa (ST1)	AMR	97	AM97B*	1415	Field	2150
Contra Costa (ST1)	AMR	98	AM98B*	1415	Field	2120
Alameda	Sutter AMR	275	ST275B*	1630	Field	2330
Alameda (ST1)	Paramedics Plus	2300	PP400B*	1615	Field	2145
Contra Costa	Falcon	461	FC461B*	1830	Field	2130
Contra Costa	Falcon	269	FC269B*	1830	Field	2145

Other						
DMSU	AMR	160		1420	EOC	
Solano SO1*	Solano (Medic)		SO1*	1415	Field	2115

Total ALS 5
Total BLS 7
First ALS Arrival : 1415
First BLS Arrival : 1350



ATTACHMENT A

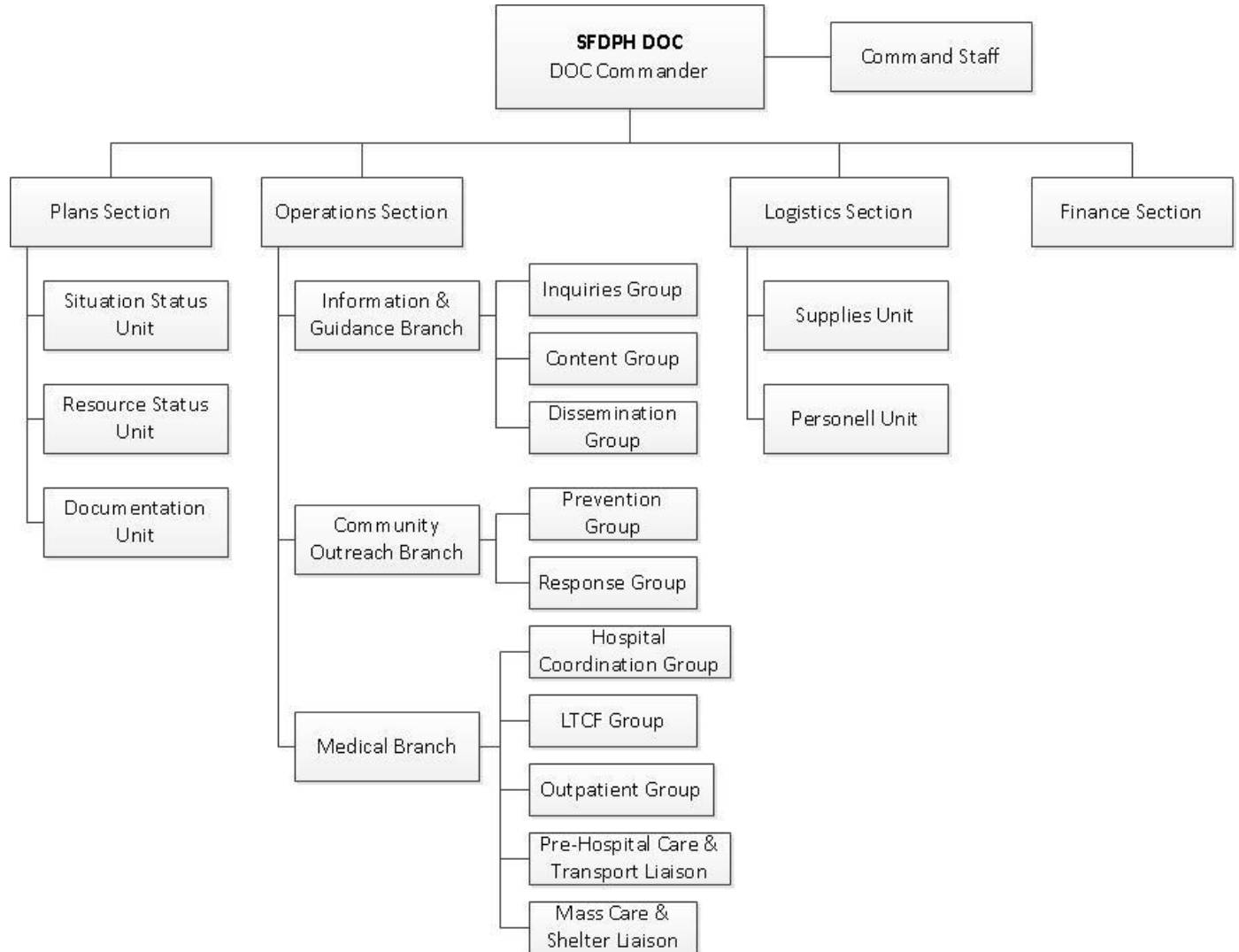
San Francisco Department of Public Health Extreme Heat Annex

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I SUGGESTED DEPARTMENT OPERATIONS CENTER (DOC) ORGANIZATION





II OVERVIEW

A. Extreme Heat Emergencies

Climate change is expected to increase temperatures, change precipitation patterns, increase the frequency and severity of extreme weather events, and increase sea-level rise—all of which will have significant impacts on San Francisco’s environment, health, and economy. California is already experiencing the effects of climate change. Since 1920, average annual temperatures have been increasing across California, including the San Francisco Bay Area.

The July 2006 California heat wave—which was felt in San Francisco—was the largest heat wave on record since 1948. While typical summer temperatures in California contribute to the untimely demise of 20 people on average per year, the heat wave experienced by California in July 2006 caused the death of at least 140 people statewide over a 13-day period. In San Francisco, the temperature during this period peaked at 95°F. Scientists predict that, due to climate change, extreme heat waves will become more frequent and more intense.

Heat emergencies are often slower to develop, taking several days of continuous, oppressive heat before a significant or quantifiable impact is seen. Heat waves do not strike victims immediately, but rather their cumulative effects slowly take the lives of vulnerable populations. Excessive temperatures greatly impact the elderly, the sick, and the very young due to vulnerabilities or pre-existing health conditions.

“Any individual, regardless of age, sex or health status can develop heat stress if engaged in intense physical activity and/or exposed to environmental heat (and humidity). Physiologic mechanisms maintain the core body temperature (i.e., the operating temperature of vital organs in the head or trunk) in a narrow optimum range around 37° C (98.6° F). When core body temperature rises, the physiologic response is to sweat and circulate blood closer to the skin’s surface to increase cooling. Over a period of one-to-two weeks, exposure to conditions that elevate body temperature – physical activity and/or environmental heat results in a process of physiological adaptation – “acclimatization”. When acclimatized, the body produces more dilute sweat, and heart rate and body temperature increase less than when not acclimatized.

If heat exposure exceeds the physiologic capacity to cool, and core body temperature rises, then a range of heat-related symptoms and conditions can develop – from relatively minor treatable heat cramps to severe life threatening heat stroke, which is always an extreme medical emergency. Even when acclimatized, adequate hydration is critical to avoid the development of heat-related illness.”

(Governor’s Office of Emergency Services, State of California Contingency Plan for Excessive Heat Emergencies, April 2010).



B. Heat-Related Health Conditions

The physiological consequences of extreme heat emergencies can present themselves in stages as described below:

Heat Cramps. Heat cramps are muscle pains or spasms—usually in the abdomen, arms, or legs—that may occur in association with strenuous activity. Heat cramps usually affect people who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture. The low salt level in the muscles may be the cause of heat cramps. Heat cramps may also be a symptom of heat exhaustion. If you have heart problems or are on a low-sodium diet, get medical attention for heat cramps.

Heat Exhaustion. Heat exhaustion is a milder form of heat-related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids. It is the body's response to an excessive loss of the water and salt contained in sweat. Those most prone to heat exhaustion are elderly people, people with high blood pressure, and people working or exercising in a hot environment.

Heat Stroke. Heat stroke occurs when the body is unable to regulate its temperature. The body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. Body temperature may rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided.

C. Vulnerable Populations

While everyone is at-risk of developing heat-related illness, certain populations are more at risk, such as people in highly dense neighborhoods, as well as the elderly and the homeless.

It typically takes human biology two weeks to adapt to temperature extremes. Since San Franciscans historically have not experienced extreme heat events for extended durations, the population – in particular the vulnerable groups mentioned above – 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 is also less likely to have central air conditioning both because of its age and because of the typically cooler climate.

D. Temperature Thresholds

According to historical weather and mortality data gathered by the National Weather Service (NWS) and the California Department of Public Health, there appears to be a significant increase in health risk - particularly to vulnerable populations - when temperatures “spike” for two or more consecutive days without an adequate drop in nighttime temperature to cool the outdoor and indoor environments. ***For the City and County of San Francisco, an excessive heat event will be defined as daytime temperatures at or above 85°F¹. This threshold is***

¹ The DSHS Homeless Outreach Team (HOT) activates at a temperature threshold at or above 80°F.



consistent with the 98th percentile of temperatures recorded over the past 10 years. However, additional factors (e.g. air quality, humidity, night time cooling, etc.) will need to be considered when determining further DPH action, as described below.

E. Activation & Notification Phases

The San Francisco Department of Emergency Management (DEM) Duty Officer is the designated individual to receive and monitor National Weather Service (NWS) and temperature forecasts for the City and County of San Francisco. The Public Health Emergency Preparedness and Response (PHEPR) Director, Manager, and Coordinator also receive NWS alerts.

In accordance with the DPH DOC Activation and Notification Protocol, DPH will follow a tiered-level response for extreme heat events. Activation and Notification for the Extreme Heat Annex and checklist is initiated based on NWS alert type. In general, a DPH LOW Level response is activated with a NWS ‘outlook’ or ‘watch’, a DPH MEDIUM Level response is activated with a NWS ‘advisory’, and a DPH HIGH Level response is activated with a NWS ‘warning’.

NWS alert and/or temp prediction	PHEPR Activation Level
Outlook/Watch, 80-90 degrees	LOW Level
Advisory, 90-95 degrees	MEDIUM Level
Warning, 95+ degrees	HIGH Level

Optional Outreach Activities*

*these may or may not occur throughout the year dependent on available resources and needs

- Send an email reminder to local community based organizations to initiate awareness campaigns: implement Train-the-Trainer Extreme Heat curriculum to educate staff and clients/constituents regarding heat illness and prevention methods
- Encourage DPH Units and Branches (i.e. CHIPPS, MCAH, WIC) that regularly conduct home visit services to conduct heat education outreach – distribute heat brochures to nurses and other providers that conduct home visits
- Orient and train pre-identified DPH Department Operations Center (DOC) staff to this Extreme Heat Response Annex, and other related protocols and/or procedures

LOW Level – Correlates with National Weather Service (NWS) Excessive Heat Outlook or Watch

LOW Level actions may be implemented within 1 week prior to a forecasted extreme heat event. **Moderate to Strong Heat: 80-90 degrees projected over 2-3 days.**



DPH DOC and City EOC WILL NOT BE ACTIVATED. Inclement Weather Incident Management Team likely activated for a NWS 'outlook' or 'watch', but may vary per event.

LOW Level actions may include the following:

1. PHEPR Director, Manager, and Coordinator will be alerted by NWS and/or the DEM Duty Officer of impending weather conditions and will keep key stakeholders apprised of weather conditions.
2. PHEPR designee (typically Coordinator, may be Manager if lack of personnel) for extreme heat activation will inquire and receive PHEPR Director's approval to implement LOW Level actions.
3. PHEPR Director will disseminate information to DPH ISC members regarding extreme heat information
4. PHEPR designee will request DPH IT and DPH PIO to post extreme heat health information on the DPH website and on DPH social media.
5. PHEPR designee will disseminate information to the public via partners regarding extreme heat health information.
6. PHEPR designee will disseminate information to internal DPH facilities staff to assess DPH facilities and review plans in the event of a power outage. Facilities include 30 VN, 25 VN, 1380 Howard, 1390 Market, 101 Grove, DPH clinics, ZSFGH, and LHH.
7. The Inclement Weather Incident Management Team may be activated by DEM and a conference call may take place. PHEPR Director, Manager, and Coordinator may participate in this call. IMT typically consists of representatives from PHEPR, DEM, HSA, MTA, PG&E, DBI, DPW, PUC, SFFD, Rec & Parks, among others.
8. PHEPR designee provide information and frequently asked questions to San Francisco 311 in anticipation of questions from the public. Consider use of 311 as an information phone line that can be used to inquire about heat-related health concerns.
9. PHEPR designee obtain access to pre-existing databases/lists with concentrations of high-risk individuals in order to facilitate notification activities for MEDIUM or HIGH Level activities (e.g. childcare centers, residential care facilities, etc.)

MEDIUM Level – Correlates with NWS Heat Advisory

MEDIUM Level actions may be implemented when NWS makes credible predictions of extreme heat within the next 24 hours or of power outages during warmer than normal weather conditions. During this phase, coordination with regional and state agencies increases. **Strong to Extreme Heat: 90-95 degrees projected over 2-3 days.**

DOC MAY BE PARTIALLY OR FULLY ACTIVATED. CITY EOC MAY ALSO BE ACTIVATED. Both dependent on event.



MEDIUM Level actions will be initiated when one or more of the following exists:

- ✓ The NWS issues a special weather statement for the City and County of San Francisco operational area predicting an **Excessive Heat Advisory**.
- ✓ There are credible predictions of power outages, electrical blackouts, or rotating blackouts during periods of high heat (**refer to Power Outage Annex**).

MEDIUM Level actions may include the following in addition to steps 1-9 above:

1. PHEPR Designee contacts DEM Duty Officer to confirm whether or not the City's Emergency Operations Center (EOC) will be activated.
2. PHEPR Director or designee (Manager or Coordinator) convenes a DPH Incident Management Team:
 - a. DPH Incident Management Team includes, but is not limited to, the following: DPH Leadership, PHEPR, Environmental Health, Ambulatory Care, and Facilities
3. Determine whether DEM and/or other agencies will assist in disseminating information to public meeting areas, including but not limited to: churches, recreation centers, libraries, & school.
4. In collaboration with Emergency Management System (EMS), PHEPR Healthcare Manager or Coordinator notify hospitals and other healthcare facility partners of Excessive Heat Advisory and possible increase in heat-related illness

HIGH Level – correlates with NWS Excessive Heat Warning (Extreme heat event will occur within next 24 hours)

High Level actions are taken as a result of credible predictions by the NWS of extreme heat within the next 24 hours or of power outages during warmer than normal weather conditions. During this phase, coordination with regional and state agencies increases. **Strong to Extreme Heat: 95-100 degrees projected over 2-3 days.**

DOC MAY BE PARTIALLY OR FULLY ACTIVATED. CITY EOC MAY ALSO BE ACTIVATED. Both dependent on event.

High Level actions are taken when one or more of the following exists in the City and County of San Francisco:

- ✓ The NWS issues a special weather statement for the City and County of San Francisco operational area predicting an **Excessive Heat Warning**
- ✓ Abnormal human medical emergencies and mortality due to excessive heat
- ✓ Extended power outages during expected excessive heat conditions (**refer to Power Outage Annex**)



High Level efforts include urgent and comprehensive actions by the DPH DOC to complement and support local actions during the most severe heat event. High Level efforts may include the following, in addition to the above Low and Medium Level actions.

- DEM coordinate periodic or daily calls as needed among the key San Francisco agencies (e.g. DEM, HSA), state agencies (California Department of Public Health, California Emergency Management Agency), and Region 2 constituents with weather and power updates as deemed necessary.
- PHEPR Healthcare Manager or Coordinator provide resource and communications support to hospitals and other healthcare facilities.
 - Resources may include water pallets, medical supplies, and equipment to treat heat-related health conditions.
 - Receive situation status updates from hospitals to help assess potential patient surge due to heat related illness.
- Provide resource and communications support to local community based organizations. Resources may include provision of Train-the-Trainer curriculum, brochures.
- In cooperation with Mayor's Office and/or DEM, PHEPR Director may consider suspending/rescheduling large public events, to avoid outdoor gatherings during peak hours (10 am -4 pm).
- EOC to support DOC operations, especially in arranging extra staffing for emergency support services.

E. Potential City Wide Impacts

Potential city wide impacts of an extreme heat emergency may include:

- Thousands of exposed and/or affected persons.
- Social activities, day-to-day business, and school may be interrupted due to voluntary or recommended closures.
- Widespread public concern.
- Overload of 911 system.
- Excess Emergency Department visits and excess hospitalizations due to heat-related causes.
- Increased respiratory and cardiovascular illness due to degraded air quality.



III SAN FRANCISCO RESPONSE OVERVIEW

A small extreme heat event may only require activation of a public health response. For complex and/or larger extreme heat emergencies that affect many people, coordination of local, regional, state, and federal agencies may be required.

A. Lead Response Agencies

In an extreme heat emergency, DPH will be the lead response agency and activities will be coordinated through the DPH Department Operations Center (DOC) in coordination with the city Emergency Operations Center (EOC), if activated. If other events are also occurring (e.g., earthquake response), DPH may share unified command with other partners.

Department	Responsibilities during an Extreme Heat Event
DPH	<ul style="list-style-type: none"> Assess medical impact of heat event Identify/inform city officials, medical community, responders, and the public of appropriate health precautions Provide informational messages for, and outreach to, community based organizations and the public to protect and promote health Coordinate with health care partners regarding medical surge related to heat

B. Partner Agencies

City & County of San Francisco

In an extreme heat event, support may be required from other City departments, agencies and non-profit organizations, as well as local organizations. Key agencies include:

Department/Agency/Organization	Responsibilities
Human Services Agency (HSA)	<ul style="list-style-type: none"> Co-lead with DPH to coordinate communication and events related to extreme heat. Open, staff and operate emergency cooling centers Communication with clients especially via the Department of Aging and Adult Services
Department of Emergency Management	<ul style="list-style-type: none"> Coordinate calls and assist in dissemination of public information. Act as liaison between The National Weather Service and CCSF agencies

Support may also be required from additional City departments and agencies, including:

- Fire Department
- Police Department
- Animal Care & Control
- 3-1-1
- Small Business Assoc.
- Neighborhood



- Department of Public Works
- Public Utilities Commission
- Recreation & Parks Dept.
- SF CARD – Community Agencies Responding to Disaster
- Mayor’s Office on Disability
- SF Unified School District
- Emergency Response Teams (NERT)
- Medical Reserve Corps
- Other local CBOs

Regional/State/Federal Agencies

Coordination with regional, state, and federal agencies may initially occur via the EOC. Close ongoing communication and coordination may occur through the DOC. Key agencies may include:

- Local Health Departments
- Bay Area Air Quality Management District
- California Department of Public Health (CDPH)
- The Centers for Disease Control and Prevention (CDC)
- National Weather Service (NWS)
- National Oceanic and Atmospheric Administration (NOAA)

C. Scale and Scope of the Response

Extreme heat emergencies have the ability to cause significant morbidity and mortality in the population. Further, the emergency can escalate when contributors to heat vulnerability – described below – have not been addressed and/or are exacerbating the event. An aggressive public health response should attempt to address these contributors.

The scale and scope of the response will depend on the duration of the heat emergency, which could be a few days to several weeks. Key factors that could impact the scale and scope of the response include:

- Access to health care
- Ability to receive and understand educational/prevention information regarding heat emergencies
- Social isolation
- Underlying health conditions in the population (e.g. mental illness, chronic health conditions)
- Air quality
- Significant morbidity and/or mortality



IV PUBLIC HEALTH RESPONSE OVERVIEW

A. DPH DOC Activation

The DPH DOC should be activated when the extreme heat emergency requires a response that exceeds (or has the potential to exceed) the management capacity of DPH designated staff and meets at least one of the following criteria:

- Extreme heat event (NWS Heat Advisory) with potential for significant illness or death
- High profile public health situation or event
- Assessment by DPH that hospitals are impacted and DPH can support

B. Proposed DOC Structure

It is recommended that the DOC Functions checked in the table below be activated immediately. See the guidance below regarding additional functions to consider activating:

DOC Activation Priorities for an Extreme Heat Event – High Level Activation

Function	Activate Immediately	Function	Activate Immediately
COMMAND	✓	Containment Branch	
• DOC Commander	✓	• Community Mitigation Group	
• Information Officer	✓	• Restriction, Exclusion, & Clearance Group	
• Safety Officer	✓	• Mass Prophylaxis Group	
• Liaison Officer	✓	• Isolation & Quarantine Group	
POLICY GROUP	✓	Medical Branch	✓
PLANS SECTION	✓	• Hospital Coordination Group	✓
• Situation Status Unit	✓	• LTCF Group	✓
• Resource Status Unit	✓	• Alternate Care Group	<i>consider*</i>
• Documentation Unit	✓	• Outpatient Group	✓
• Technical Specialist Unit		• Pharmacy Group	
• Demobilization Unit		• Pre-Hospital Care & Transport Liaison	✓
OPERATIONS SECTION	✓	• Mass Fatalities Liaison	<i>consider*</i>
Information & Guidance Branch	✓**	• Mass Care & Shelter Liaison	✓
• Inquiries Group	✓	Epidemiology, Surveillance, & Data Branch	<i>consider*</i>
• Content Group	✓	• Investigation Group	



• Dissemination Group	✓	• Surveillance Group	consider*
Environmental Health Branch	consider*	• Data Group	consider*
• Hazmat Group		Lab Branch	
• Food Group		• Lab Testing Group	
• Sanitation Group		• Lab Receiving/Documentation Group	
• Water Group	consider*	LOGISTICS SECTION	✓
Community Outreach Branch	✓	• Personnel Unit	consider*
• Prevention Group	✓	• Supplies Unit	✓
• Response Group	✓	• Facilities Unit	
		• Communication Equipment Unit	consider*
		• Info Technology Unit	consider*
		FINANCE SECTION	✓

* Consider activation if the response is large and/or requires coordination with city agency partners.

** Consider staffing Information & Guidance Branch with EH staff as subject matter experts in extreme heat events.

C. Operational Goals, Objectives and Activities

Primary DPH DOC operational goals and objectives include:

Goals

- Assess the situation and threat
- Determine strategies to mitigate the threat and protect and promote health

Objectives & DOC Lead

Activities

Support provision of medical care
 Medical Branch

- Respond to requests for information, resources, and logistical support from medical providers.
- If hospital and/or other facility surge plans have been activated and cannot meet population medical needs, activate field treatment sites.
- Support cooling center medical needs.

Provide information and guidance
 Information and Guidance Branch

- Provide guidance to the medical community on diagnosis, treatment, and prevention.
- Provide guidance to city officials, responders, and the public on the situation, prevention, treatment, and when to seek health care.
- Provide information to the public regarding location of cooling centers.



Disseminate information & educate
Community Outreach Branch

- Implement outreach and education strategies recommended by Information & Guidance Branch in community, with focus on most vulnerable neighborhoods & populations

Assess & provide technical expertise
Environmental Health Branch

- Assess temperature and weather forecasts for City/County of San Francisco
- Provide guidance on water usage
- Collaborate with Bay Area Air Quality Management District to provide guidance on air quality

Investigate and survey
Epidemiology, Surveillance, & Data Branch

- Conduct surveillance to obtain information about the extent of the heat emergency.
- Determine the morbidity and mortality of high risk populations.

Logistics Section

- Support medical resource requests.
- Support personnel needs and requests.

V ADDITIONAL RESPONSE CONSIDERATIONS

The DPH Emergency Operations Plan (EOP) is the primary functional response guide for all DPH emergency response activities. However, because of the unique nature of an extreme heat event, the following modifications and/or considerations should be considered and applied when necessary to the appropriate operational section of the EOP.

A. Command Staff

- Liaison Officer should be the single point of contact to American Red Cross (ARC), HSA, and other key stakeholders and partners outside of DPH. As appropriate, the Safety Officer should provide recommendations on prevention of heat-related health conditions for responders and DPH staff who may be exposed to high temperatures for extended periods of time during the extreme heat event.

B. Policy Group

- As much as possible, policies should be similar across the City and County of San Francisco, as well as the region. Work with other City Departments such as the Department of the Environment and regional policy groups such as the Association of Bay Area Health Officials (ABAHO) to develop guidelines.
- Policy Group should consider the following critical issues:
 - School/daycare closures
 - Possible reassignment of City employees who work outdoors
 - Cancellation of outdoor events



C. Operations Section

Information & Guidance Branch

- If the extreme heat event is occurring regionally, coordinate information and guidance regionally.
- Consider that most heat-vulnerable populations will have limited access to health care, are socially isolated, and/or have an impaired ability to receive and/or understand heat information and guidance.
- Educate medical providers on providing ICD-9 code documentation pertaining to heat-related illness.

Environmental Health Branch

- It may be necessary for the Water Group to provide guidance on water usage to the public.
- It may be necessary for this Branch to provide guidance on air quality issues.

Community Outreach Branch

The Community Outreach Branch may be used to assist in efforts to visit the City's SRO's and most vulnerable neighborhoods to promote heat reduction strategies.

Medical Branch

- The Mass Care and Shelter Liaison may serve as a link to receive and report situation status updates and resource requests.

Data Branch

- Consider conducting an analytic study to determine the impact of the heat event locally by receiving data from hospitals, clinic, and EMS ambulances.

E. Logistics

- Consider transportation needs to transport seniors or others
- Anticipate resource requests from healthcare facility partners for water and other cooling supplies.

F. Plans

- No additions to the core EOP.

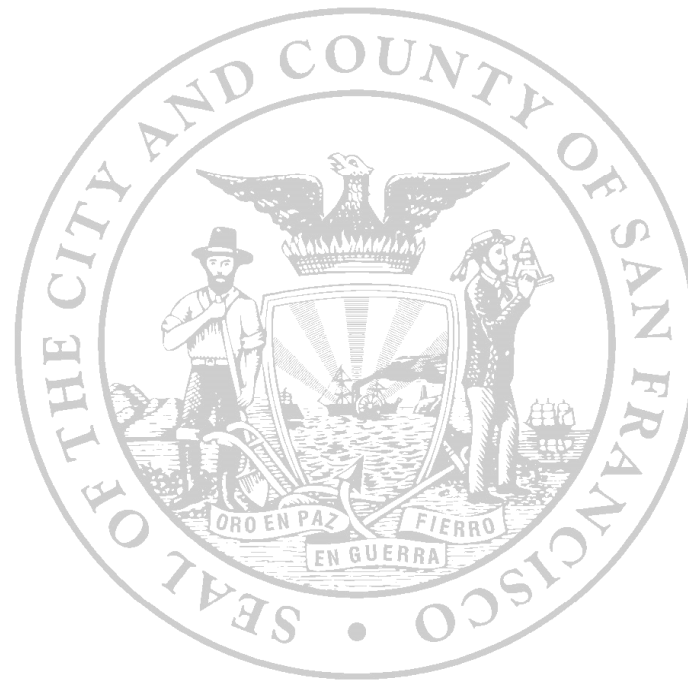
G. Finance

- No additions to the core EOP.

H. Resources



Items	Location
Lists/Maps	
Heat Vulnerability Index Map	Full document: http://sfgov.maps.arcgis.com/apps/StorytellingTextLegend/index.html?appid=87e184e8ee7e47e6a21379c85b149aed
Communications List for Vulnerable Populations	S:\Logistics\DOC\Emergency Response_Master Communications List_2016.12.12
Extreme Heat Education/Outreach Materials	
Train-the-Trainer Extreme Heat Presentation	S:\Community Planning\Climate & Health Preparedness\Extreme Heat\Preparedness Presentation_Extreme Heat_2016.08
<i>Extreme Heat in San Francisco</i> Tip Sheet (multilingual)	S:\Community Planning\Climate & Health Preparedness\Extreme Heat
Extreme Heat Info Guide (multilingual)	https://extxfer.sfdph.org/gis/ClimateHealth/CommunityResilience.Education.Outreach/DPH_Heat_Waves_Multilingual.pdf
Relevant Annexes & Plans	
DPH Power Outage Annex – 12/2015	S:\~Red Tag Archive\Emergency Plans\SFDPH Plans\EOP\EOP Revision 2012-2014\Annexes\Power Outage Annex\Power Outage Annex 2015 dw edits - GP_Comments
DEM Extreme Weather Annex - 8/2016	S:\Emergency Plans Library\DEM Extreme Weather\DEM Extreme Temp Annex 20150709.doc
SF HOT Heave Wave Protocol - 9/2015	S:\Activations\2015\Extreme Heat\SF HOT Protocol\SFHOT Heat Wave Protocol final.pdf



ATTACHMENT B

The “List of Lists”: A list of City Departments and community based organizations contacted by DPH during a public health emergency. These organizations serve persons with disabilities, people with access and function needs, vulnerable populations. This list is reviewed and updated every 6 months.

Contact Groups	Recipients
Primary Partners	Integration Steering Committee, Help Desk, DPH Facilities, PIO (Twitter/Facebook), DPH Healthcare Coalition contacts, Medical Respite & Sobering, 311, Dept. of Homelessness & Supportive Housing, DAAS, Human Services Agency, Emergency Medical Services, Department of Emergency Management, Neighborhood Empowerment Network, Interfaith Council, Housing Authority, Office of Civic Engagement and Immigrant Affairs, Dept. of Children Youth & Families, Dept. Aging and Adult Services, Mayors Office on Disability.
Secondary	DPH Business office, Planning Dept. SF Unified School District, California Department of Social Services, Coalition of Agencies Serving the Elderly, Golden Gate Regional Center, Golden Gate Village, Independent Living Resource Center, Lighthouse for the Blind, Meals on Wheels, Next Village, Childcare Council, SF Village, HIV provider Network, Human Services Network, Homebridge, In Home Support Services, Positive Resource Center, The ARC of San Francisco, Golden Gate Village.
Independent Senior & Disabled Housing Management Companies*	Self Help for the Elderly, John Stewart Company, On Lok, House, Urban Pacific Properties, Tenderloin Housing Clinic, Swords to Plowshares, Tenderloin Neighborhood Development Corporation, EPMI (A Bayside Company), Mercy Housing, Nor. Cal. Presbyterian homes & Services, PK management, Alton Management Corporation, Episcopal Senior Communities, Christian Church Homes of No. Cal, Menorah Park Corporation, Progress Foundation, Seventh Ave Presbyterian Church.
Health Care Service Partners**	Hospitals, UCSF, DPH Clinics, Adult Residential Care Facilities, Skilled Nursing Facilities, In Home Care Service Providers, Long Term Care Admin Partners, Dialysis Centers, Medical Equipment, Blood Banks.

ATTACHMENT C
San Francisco Department of Public Health
Climate and Health Program

HEAT RELATED MATERIALS

Community Planning and Adaptation	
Document Name	Description
Climate and Health Adaption Framework	The Climate and Health Adaptation Framework is a planning tool that reviews San Francisco Climate Health vulnerability assessments, proposes draft adaptations and interventions, proposes draft climate risk health indicators, and assesses health department preparedness to the health impacts of climate change. There is a section on Extreme Heat.
Emergency Management Plans	
Document Name	Description
Extreme Heat Emergency Plan	The Extreme Heat Emergency Plan is an annex to the Public Health Emergency Operations Plan (EOP) and sets criteria activation and notification, and organizes response.
Cooling Shelters	A package of material on cooling centers which contains cooling center activation protocol(draft), stakeholder Input on cooling centers, cooling center outreach questions, requested RPD cooling centers, libraries with cooling criteria, potential cooling center list, draft MOU with cooling centers and shelter analysis of heat.
Reports	
Document Name	Description
Climate Change Vulnerable Populations Exposure Report	The Climate Change Vulnerable Populations Exposure Reports uses extreme heat, flood health, and air quality exposure maps and local population growth projections to predict the concentration of vulnerable populations in high risk exposure zones.
Temperature and Health Report	The Temperature and Health Report uses temperature and hospital admissions data to analyze the relationship between extreme heat and illness in San Francisco.
Stakeholder Engagement Report- Heat	The Stakeholder Engagement Report summarizes the results of focused interviews of seven community-based organizations and two disaster preparedness organizations to assess extreme heat and climate change preparedness at the community-level.
Vulnerability Assessments	
Document Name	Description
Heat Vulnerability Assessment	The Heat Vulnerability Assessment uses socioeconomic and demographic data, health data, exposure data, and infrastructure data to identify communities and neighborhoods most vulnerable to the health impacts of extreme heat.
Heat Vulnerability Map Atlas	The Heat Vulnerability Map Atlas contains maps for all indicators used in the in the Heat Vulnerability Assessment.
Education and Outreach	
Document Name	Description
Heat Training Presentation	The Extreme Heat Preparedness Training is a train-the-trainer engagement tool to help residents understand the health impacts of extreme heat and how best to prepare for this hazard event.
Public Information for Heat Events – multilingual	The Extreme Heat Preparedness Public Information includes pertinent information on how to identify heat-related illness, and what to do in the event of an extreme heat event. This material has been translated into Spanish, Chinese, Russian, Vietnamese

San Francisco Department of Public Health
Climate and Health Program

HEAT RELATED MATERIALS

	and Tagalog.
Heat Information with Cooling Centers	This document is not publically available. Map of heat information and map of cooling centers.
Public Service Information for Heat	Public service announcements and social media.
Data, Indicators, and Online Tools	
Document Name	Description
Interactive Heat Vulnerability Map	An interactive map of Heat Vulnerability in San Francisco