



EXTREME HEAT INCIDENT PLAYBOOK

KING COUNTY EMERGENCY MANAGEMENT

AUGUST 2022

PLAYBOOK OVERVIEW

This Extreme Heat Incident playbook is designed to accomplish the following:

- Serve as a training aid to familiarize the reader with the roles and responsibilities of partners;
- Offer operational guidance to responsible partners and decision-makers by providing thresholds and checklists; and
- Outline the flow of information among partners.

PREPAREDNESS

During the late fall, winter, and early spring, and before the onset the portion of the year when heat incidents are most likely to occur, King County Office of Emergency Management (KCOEM) will lead enterprise partners in the conduct of preparedness activities. This phase includes critical tasks and activities necessary to build and improve KCOEM and Emergency Management Program operational capabilities to protect against, mitigate, respond to, and recover from heat-related events.

	ACTIVITY	ROLE/RESPONSIBILITY	COMPLETED	REQUIRED ACTION
PREPAREDNESS	Convene a pre-summer season planning session with appropriate Emergency Management enterprise partners and relevant partners to discuss issues and concerns for the upcoming season. Partners share anticipated actions and updates.	KCOEM – Operations, DCHS, PHSKC, FMD, DLS, RASKC, Cities		
	Conduct annual review of Extreme Heat Incident Playbook and make appropriate updates.	KCOEM – Operations		
	Conduct annual review of PIO Communications Smoke / Heat SOG and make appropriate updates. Validate 24/7 contact	KCOEM – PIO, KCOEM - Operations		



	information and communication resources.			
	Review and update plans / procedures for emergency notifications, information dissemination, and Continuity of Operations Plan (COOP) activation procedures.	KCOEM – Planning, King County agencies, Cities		
	Convene meeting to review strategies for opening cooling centers	KCOEM – Operations, DCHS, PHSKC, FMD, DLS, RASKC, Cities		
	Plan and facilitate Summer Hazards Seminar / summer outlook event to share situational awareness with partners	KCOEM – all sections		
	Facilitate review of and / or identification of potential shelter locations / cooling centers	ESF 6 (DCHS), FMD, DLS, KCOEM, RASKC, Cities		
	Review all relevant task force documents and contact lists including Extreme Heat Coordination call agenda, participants, and 24/7 contact information	KCOEM – Operations		
	Conduct annual review of ESF elements of Extreme Heat Incident Playbook	All ESFs		
	Review and update plans / procedures	All ESFs		
	Coordinate with Washington Department of Health regarding changes or updates to state guidance.	ESF-8 (Public Health)		
	Review heat event-related messaging and web content.	All ESFs		
	Share recommendations for public in advance of incidents	All ESFs		
	Connect with NWHRN on messaging for hospitals and long-term care facilities.	ESF-8 (Public Health)		



RESPONSE OPERATIONS

TRIGGER: NWS HEATRISK FORECAST SHOWS LEVEL 3/RED (HIGH RISK)

Every day, KCOEM Duty Officer checks the [NWS HeatRisk Forecast Map](#) for the upcoming week. **Level 3/Red (High Risk)** conditions may appear on the map in localized areas or widespread areas of the county and may appear in this forecast before the NWS issues a Heat Outlook.

		ACTIVITY	ROLE/RESPONSIBILITY	COMPLETED	REQUIRED ACTION
NWS HEATRISK FORECAST LEVEL 3/RED (HIGH RISK)	When localized/spot Level 3/Red heat conditions are predicted	Send monitoring message to regional PIO group	KCOEM PIO		
		Send monitoring message to King County partners (PHSKC, KCRHA, Metro, DLS, DCHS, FMD, RASK, DNRP, KCLS) and Seattle Emergency Management Duty Officer	KCOEM Duty Officer		
		Send monitoring message to emergency managers in areas with elevated heat prediction	Zone Liaisons		
		Forward resources (e.g., websites/sources with heat safety graphics/information) to emergency managers in areas with elevated heat prediction to use to create social media messages	Zone Liaisons		
	When localized Level 3/Red heat condition predictions become more widespread	Check in with KCRHA about planned actions	KCOEM Leadership/Ops and Admin Senior Manager		
		Check in with Seattle Emergency Management Duty Officer about planned actions (if Seattle is impacted)	KCOEM Duty Officer		
		If any partner requests, convene King County partner call (same partners as above) and share summary	KCOEM Duty Officer/Ops and Admin Senior Manager		
		Send updated monitoring message if no actions are planned	KCOEM Duty Officer		
	When widespread Level 3/Red heat conditions are predicted	Convene regional PIO call	KCOEM PIO		
		Convene/facilitate King County partner call and share summary (PHSKC, KCRHA, Metro, DLS, DCHS, FMD, RASK, DNRP, KCLS), include KCOEM PIO, Duty Officer, Ops Manager and Leadership	KCOEM Duty Officer/Ops and Admin Senior Manager		



	Convene regional emergency manager call and share summary	KCOEM Duty Officer/Ops and Admin Senior Manager		
	Activate at the enhanced level and produce one situation report per day	KCOEM Leadership/Ops and Admin Senior Manager		

TRIGGER: NWS HEAT OUTLOOK

The National Weather Service will issue a **Heat Outlook** when the potential exists for an extreme heat event in the next 3-7 days. A **Heat Outlook** provides information to those who need considerable lead time to prepare for the event.

NWS HEAT OUTLOOK	ACTIVITY	ROLE/RESPONSIBILITY	COMPLETED	REQUIRED ACTION
	Review weather briefings from National Weather Service and distribute to All-Hazards Notification List	KCOEM Duty Officer		
	Brief Duty Manager on potential actions	KCOEM Duty Officer		
	Contact NWS to gather more information on weather forecast trends and assess HeatRisk category/levels	KCOEM Duty Officer		
	Assess potential resource needs and start gathering vendor lists	KCOEM Duty Officer		
	Check containers for KCOEM water supply	KCOEM Duty Officer		
	Ask all departments and local jurisdictions opening shelters or cooling centers to send details and url to KCOEM PIO to post on the Emergency News Blog	KCOEM Duty Officer		
	Review staffing and make notifications to staff regarding possible activation	All ESFs		
	Coordinate with NWHRN on impacts to healthcare facilities – including activation of DMCC as needed	ESF-8 (Public Health)		
	Coordinate with HCHN regarding outreach to people living homeless	ESF-8 (Public Health)		



TRIGGER: NWS HEAT WATCH

A **Heat Watch** is issued when conditions are favorable for an extreme heat event in the next 24 to 72 hours. A Watch is used when the risk of a heat wave has increased but its occurrence and timing is still uncertain. A **Heat Watch** is a call to be prepared to act.

	ACTIVITY	ROLE/RESPONSIBILITY	COMPLETED	REQUIRED ACTION
NWS HEAT WATCH	Convene King County internal meeting to discuss potential for further actions (KCOEM, PHSKC, DCHS, DLS, RASKC, FMD)	KCOEM Duty Officer		
	Survey cities on potential actions	KCOEM Duty Officer		
	Make recommendation to KCOEM Leadership Team on KCOEM activation posture	KCOEM Duty Officer		
	Communicate EOC posture to PIO	KCOEM Duty Officer		
	Schedule PIO Coordination Call (refer to SOG)	KCOEM PIO		
	Update King County Emergency News Blog	KCOEM PIO		
	Coordinate updates to King County website (if necessary)	KCOEM PIO		
	Coordinate social media updates (if necessary)	KCOEM PIO		
	Evaluate need for additional homeless shelter capacity in a county-owned space or other community space	ESF-6 (DCHS-HHCDD)		
	Coordinate with DLS to discuss resources in place and needs in unincorporated King County	ESF-6 (DCHS)		
	Coordinate supplies with KCOEM	ESF-6 (DCHS)		
	Evaluate need for owned pet shelter capacity in a county-owned space (e.g. RASKC) or other community space.	ESF-6 (RASKC)		



	Consider activation of COOP Liaison to collect impacts to PHSKC services	ESF-8 (Public Health)		
	Coordinate with HCHN regarding outreach to people living homeless	ESF-8 (Public Health)		
	Assess potential impacts of communicable diseases circulating or outbreaks on response operations	ESF-8 (Public Health)		

TRIGGER: NWS HEAT ADVISORY/WARNING

The National Weather Service will issue a **Heat Advisory** within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this Advisory is when the maximum heat index temperature is expected to be 100 degrees or higher for at least 2 days, and nighttime air temperatures will not drop below 75 degrees, however these criteria vary across the country, especially for areas that are not used to dangerous heat conditions.

A **Heat Warning** is issued within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this Warning is when the maximum heat index temperature is expected to be 105 degrees or higher for at least 2 days and nighttime air temperatures will not drop below 75 degrees, however these criteria may vary across the country, especially for areas not used to extreme heat conditions.

Both the **Heat Advisory** and the **Heat Warning** are calls to act.

NWS HEAT ADVISORY/WARNING	ACTIVITY	ROLE/RESPONSIBILITY	COMPLETED	REQUIRED ACTION
	Determine activation objectives	KCOEM Duty Officer/Ops Senior Manager		
	Determine operational periods	KCOEM Duty Officer/Ops Senior Manager		
	Determine schedule of information collection and confirm method for Essential Elements of Information reporting	KCOEM Duty Officer/Ops Senior Manager		
	Prepare EOC staffing plan for activation	KCOEM Duty Officer		
	Submit EOC staffing plan for approval	KCOEM Duty Officer		



Obtain mission number from WA EMD	KCOEM Duty Officer		
Notify staff and provide staffing plan, mission number, objectives, and schedule	KCOEM Duty Officer		
Notify King County Departments and Regional Partners regarding activation status	KCOEM Duty Officer		
Create incident in Web EOC	KCOEM Duty Officer		
Conduct Regional Coordination Call and brief out on KCOEM posture	KCOEM Duty Officer		
Update King County Emergency News Blog	KCOEM PIO		
Coordinate updates to King County website	KCOEM PIO		
Coordinate social media updates	KCOEM PIO		
Coordinate regular calls with Public Health (HealthCare for the Homeless and Environmental Health), jurisdictions implementing a homeless-specific response, and key providers to coordinate and share information and resources.	DCHS-HHCDD		
Activate additional shelter beds as possible in coordination with Facilities and Maintenance Department (FMD), the Department of Local Services and the City of Seattle.	DCHS-HHCDD		
Evaluate shelter system for strain caused by heat event	DCHS-HHCDD		
Make resources available as needed to maintain or expand existing shelter operations in shelters outside the City of Seattle	DCHS-HHCDD		
Activate owned pet shelter capacity in a county owned space (RASKC) or other community space	RASKC, WASART		
Determine emergency activation operational periods and establish staffing	All ESFs		
Coordinate and disseminate heat-related messaging and post information to web and social media	All ESFs		



	Monitor forecasts	All ESFs		
	Coordinate with the Northwest Healthcare Response Network to monitor impacts to healthcare – including activation of DMCC as needed	ESF-8 (Public Health)		
	Assess availability of and access to cooling centers	ESF-8 (Public Health)		
	Assess potential impacts of communicable diseases circulating or outbreaks on response operations	ESF-8 (Public Health)		

KC EMERGENCY OPERATIONS CENTER (EOC) ACTIVATION LEVELS:

- **Steady-State:** Regular day-to-day KCOEM operations and monitoring by the Duty Officer.
- **Enhanced:** Incident or event will be monitored by Duty Officer, the Duty Manager and additional KCOEM staff (as needed). May require additional staff in the EOC or equipment and supplies from another department or jurisdiction for the incident.
- **Partial:** Incident or event will require staffing of the Emergency Operations Center by KCOEM staff and activating of select Emergency Support Functions. Requires additional staff in the EOC or equipment and supplies from another department or jurisdiction for the incident.
- **Full:** Incident or event will require KCOEM staffing the Emergency Operations Center fully and activation of many Emergency Support Functions. May require response or recovery efforts and resources.

	ACTIVITY	ROLE/RESPONSIBILITY	COMPLETED	REQUIRED ACTION
EOC OPERATIONS ACTIVITIES	Send Code Red alert notifying partners that the EOC is activated	KCOEM Duty Officer/Ops Chief		
	Send Code Red alert notifying the public of key information such as the Emergency News Blog	KCOEM Duty Officer/Ops Chief		
	Prepare Snapshot Template	KCOEM Duty Officer/Plans Chief		
	Contact ESFs/ King County Departments daily for situational awareness (if enhanced)	KCOEM Duty Officer/Plans Chief		
	Gather situational awareness from all partners (ESFs, cities, King County Departments (if partial or full))	KCOEM Duty Officer/Plans Chief		
	Update King County Emergency News Blog	KCOEM PIO		



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	Coordinate updates to King County website	KCOEM PIO		
	Coordinate social media updates	KCOEM PIO		
	Coordinate and disseminate heat-related messaging and post information to web and social media	All ESFs		
	Monitor forecasts	All ESFs		
	Coordinate with the Northwest Healthcare Response Network to monitor and respond to impacts to healthcare	ESF-8 (Public Health)		
	Monitor and disseminate surveillance data related to heat-related illness and drowning incidents	ESF-8 (Public Health)		
	Monitor and disseminate information on heat-related deaths	ESF-8 (Public Health)		
	Coordinate with ESF-6 partners on cooling centers and outreach to people experiencing homelessness	ESF-8 (Public Health)		
	Coordinate with deployed liaisons	ESF-8 (Public Health)		
	Produce HMAC IAP and snapshots	ESF-8 (Public Health)		



ESSENTIAL ELEMENTS OF INFORMATION

KCOEM will ask cities and jurisdictions impacted or threatened by extreme heat incidents to report on Essential Elements of Information.

KCOEM uses FEMA’s Community Lifelines to organize the collection of information and analysis processes. A lifeline enables the continuous operation of critical government and business functions and is essential to human health and safety or economic security.

Essential Elements of Information reports will enable KCOEM to track the status of each lifeline and coordinate responses to stabilize lifelines as needed.

COMMUNITY LIFELINES



Safety and Security – Law Enforcement/Security, Fire Services, Search and Rescue, Government Service, Community Safety



Food, Hydration, Shelter – Food, Hydration, Shelter, Agriculture



Health and Medical – Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management



Water Systems - Potable Water Infrastructure, Wastewater Management



Energy – Power Grid, Fuel



Communications - Infrastructure, Responder Communications, Alerts Warnings and Messages, Finance, 911 and Dispatch



Transportation - Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime






Hazardous Materials - Facilities, HAZMAT, Pollutants, Contaminants







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KCOEM will ask cities and jurisdictions impacted or threatened by heat events to report on the following Essential Elements of Information

Community Lifelines	Essential Elements of Information
 Safety and Security	Availability and resources of fire services
	Safety hazards affecting first responder operations
	Personal protective equipment requirements for responders
 Food, Hydration, Shelter	Status of supermarkets, neighborhood markets, and grocery stores
	Impacts to the food supply chain
	Availability of fans
	Requirements for shelters and cooling centers
	Number and location of open shelters and cooling centers, including pet shelters
	Current population in shelters and capacity of shelters
	Potential future sheltering requirements, including pet shelters
	Availability of bottled water and food at shelters
 Health and Medical	Status of hospitals and acute medical care facilities
	Status of long-term/chronic medical care facilities
	Status of primary care and behavioral health facilities



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	Status of home health agencies
	Status of pharmaceutical supply chain
	Status of EMS systems
	Public health advisories
 Water Systems	Status of public and private water supply systems
	Status of Wastewater systems
 Energy (Power and Fuel)	Status of electrical power generation and distribution facilities
	Availability of temporary power resources
 Communications	Status of telecommunications, internet, and cellular service
	Status of emergency alert systems
	Options for dissemination of information to the whole community
	Status of external affairs and media communication
	Status of Emergency Operations Center(s), dispatcher and field responder communications
 Transportation	Status of major roads, highways, and bridges in case of heat-related damage to roadways
	Status of road and bridge maintenance and emergency repairs
	Status of public transit systems
	Status of railways and stations
	Status of airports and runways



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Hazardous Materials

N/A



REFERENCES

HEATRISK

The NWS prototype [HeatRisk](#) forecast provides a color and numeric value that places forecast heat for a specific location into an appropriate level of heat concern, along with identifying groups potentially most at risk at that level. The HeatRisk is accompanied by recommendations for heat protection and is a useful tool for planning for upcoming heat and its associated potential risk. This product is supplementary to the official NWS heat watch/warning/advisory program and is meant to provide continuously available heat risk guidance for those decision makers and heat sensitive populations who need to take actions at levels that may be below current NWS heat product levels.

Category	Level	Meaning
Green	0	No Elevated Risk
Yellow	1	Low Risk for those extremely sensitive to heat, especially those without effective cooling and/or adequate hydration
Orange	2	Moderate Risk for those who are sensitive to heat, especially those without effective cooling and/or adequate hydration
Red	3	High Risk for much of the population, especially those who are heat sensitive and those without effective cooling and/or adequate hydration
Magenta	4	Very High Risk for entire population due to long duration heat, with little to no relief overnight



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ACRONYMS AND DEFINITIONS

COOP = Continuity of Operations Plan

DCHS = Department of Community and Human Services

DLS = Department of Local Services

DMCC = Disaster Medical Control Center

DNRP = Department of Natural Resources and Parks

EOC = Emergency Operations Center

ESF = Emergency Support Function

FEMA = Federal Emergency Management Agency

FMD = Facilities and Maintenance Department

HCHN = Healthcare for the Homeless Network

HCDD = Housing, Homelessness and Community Development
Division

HMAC = Health and Medical Area Command

IAP = Incident Action Plan

KCLS = King County Library System

KCOEM = King County Office of Emergency Management

KCRHA = King County Regional Homelessness Authority

NWHRN = Northwest Healthcare Response Network

NWS = National Weather Service

PHSKC = Public Health – Seattle & King County

PIO = Public Information Officer

RASKC = Regional Animal Services of King County

SOG = Standard Operating Guidelines

WA DOH = Washington State Department of Health

WA EMD = Washington Emergency Management Division

WASART = Washington State Animal Response Team