# Regional Pierce County

# Severe Weather After Action Review

# August 11, 2021

# Executive Summary and Improvement Plan

## Overview:

On Wednesday, August 11, 2021, Pierce County departments and community stakeholders convened virtually to conduct an After-Action Review of the June 2021 severe heat incident. The after-action review included a PowerPoint presentation and offered the opportunity for participants to ask questions, give feedback on the response, and provide suggestions for a more effective response in the future.

The after-action review began with an explanation of the overall after-action review process and ground rules, a high-level overview of the severe heat event and the timeframe the after-action review was focusing on. The attendees were instructed to focus on response successes that needed to be maintained for future responses and areas of the response that could be improved.

An additional survey was sent out on Monday, August 16, 20201, to gather further feedback regarding the severe heat event.

## Seminar Objectives:

* + - Identify aspects of the county’s and stakeholder’s response efforts to the severe heat events that were successful and need to be replicated and maintained for future severe heat events.
    - Identify specific tasks and aspects of the overall response that could be improved for future severe heat events.

## Key Findings:

Based on the ground rules of the after-action review, the participants discussed successes and identified areas of improvement for each of the following aspects of the severe heat event response:

* + - * Public Information
      * Operational Coordination: Water Distribution
      * Operational Coordination: Stakeholder Coordination

### *Key Findings – Public Information*

* ***Successes:***
  + *Interagency coordination and messaging* 
    - The collaboration and creation of the heat messaging flyer leading up to the heat event was very helpful and successful at assisting first responders while they were providing heat related information and resources to individuals out in the heat.
    - Law enforcement and fire personnel also assisted with providing cooling center information to the public.
  + *Public Transit Information*
    - Pierce Transit was able to communicate cooling center locations and how to get to those locations effectively.
* ***Recommendations/Improvements:***
  + *Unsheltered Populations*
    - Public information that was being distributed to communities did not reach a key population of people living unsheltered. Increase efforts to provide direct communications to individuals living unsheltered.
    - Current alert systems should be marketed to be best utilized by their target audiences.
    - Messaging being sent out regarding future severe heat events and available resources be more tailored towards unsheltered populations.
  + *Homebound or Medically Vulnerable Populations*
    - Public information needs to also be made accessible and tailored to homebound or medically vulnerable populations that have homes. Specifically, ones with no access to air conditioning or other cooling options and limited communications access. Different communication methods were discussed including working with Meals on Wheels, faith-based organizations, and other service organizations that interact with this population regularly.
    - Outreach should be conducted to see what form of communication this population prefers to use (talking points, flyers, etc.)
  + *Weekend Incident Causing Communication Gaps*
    - Communication should occur prior to the weekend, ensuring organizations have proper notice and planning time.
    - Improving communication of weekend transit schedules. Focusing on weekend/holiday schedule differences.
  + *Specific Heat Information from Health Professionals*
    - Concern was expressed for individuals who may be suffering from heat related illnesses and relating them to other things (medications, not eating etc.) Materials should be created with information from medical professionals describing heat related symptoms and what to do if individuals are experiencing those symptoms.
  + *Information accessibility*
    - Reading levels should be considered when creating messaging. Making sure to use plain and easy to understand language, even audio and narrative text, so the information remains inclusive and accessible. Also utilizing ADA review when possible.
    - Access to technology and social media isn’t a guarantee and we need to find a method of communication to reach individuals homebound without a phone or smart phone.
  + *Stakeholder Communication via PC Warn* 
    - Streamlining communication and information sharing by creating distribution lists of key stakeholders leading up to the severe heat event.
    - Establish regular conference calls during incident response for stakeholders to share current situation updates.
  + *Resource/Emergency Management Workshop*
    - Gathering stakeholders together on a regular basis to educate one another on what resources are available and overarching emergency management processes.
  + *Information Timeliness* 
    - Cooling center information needs to be sent out at the same time as the severe heat warning messages.

### 2. Key Findings – Operational Coordination: Water Distribution

* ***Successes:***
  + *Water was received and distributed*
    - Water locations were communicated effectively, picked up by volunteers and organizations, and distributed to individuals and unhoused encampments.
  + *Partnerships developed* 
    - Outreach and delivering water allowed organizations and groups to make connections to meet other need.
* ***Recommendations/Improvements:***
  + *Water Temperature*
    - Water was in the sun at pick up sites and distributed to populations hot. Suggestions to improve this aspect of response included investing in cooling resources, such as coolers and refrigerators, and keeping the water inside before it gets picked up.
  + *Transportation to water distribution locations and cooling centers*
    - There needs to be a customer centric innovative transportation option for parts of the county that have limited to no access to the transit system.
  + *Having to compete amongst each other for water*
    - Pre-identifying water sources.
    - Identifying water distribution systems.
    - Stakeholders asked for more assistance with acquiring large amounts of emergency water for heat events where stores and other resources may limit the amount you can purchase.
  + *Populated map via GIS* 
    - Up to date information about who has received water and who needs to receive water.
    - Shelter Committee for the County has a spreadsheet with county homeless population locations.
  + *Localized water distribution*
    - Minimizing the time and distance it takes to get water from a distribution site to the people who need the water.
    - Determining who is delivering water where.
    - Pre identify strategic water staging locations to reduce transportation need.
  + *Current Capability vs. Emergency Capability* 
    - Keeping enough of an emergency supply to be able to effectively meet the needs of the populations that were served
    - Identify day to day water capacity and what would be the emergency need using scenario base planning.

### 3. Key Findings – Operational Coordination: Stakeholder Coordination

* ***Successes:***
  + No successes were discussed during the after-action meeting.
* ***Recommendations/Improvements:***
  + *Weekend Coordination*
    - Share staffing and on call lists before going into the weekend.
  + *Water Buffalos*
    - Systems require to be tested 48 hours before water is accessible to the community.
  + *Joint Base Lewis McChord* 
    - Engage with JBLM and utilize their logistical knowledge and resources.
  + *Roles and Responsibilities* 
    - Establishing clarity regarding response level and responsibilities of DEM and Human Services
    - Establishing clear responsibilities for Pierce County, the City of Tacoma, and partners regarding who is providing what resources.
  + *Establishing an unsheltered emergency response plan for the county* 
    - Including the unsheltered population in already existing plans
  + *Emergency Declaration Triggers*
    - Currently, there are no universal triggers for declaring an emergency for heat emergencies.
    - Identify potential triggers be established and provide partners and stakeholders training on emergency proclamation processes.

## Review Summary

* *Priorities for sustaining success*
  + Keep enough water available for heat related responses
  + Continue to be effective when communicating and collaborating with partners
  + Continue providing communication regarding these incidents and resources available to the community and vulnerable groups
* *Priorities for areas of improvement*
  + A specific County wide emergency response plan for people who are unsheltered
  + Establish recommended heat emergency declaration triggers
  + Identify cooling center resources for homeless encampments
  + Identify accessible cooling resources for high risk and unsheltered people out of the heat
  + Sustain preplanning activities and improve stakeholder communication
  + Establish performance measures for knowing where resources are going and how they are being used. (Where is the water going? How much is going there? Are there people there benefiting from the resources provided?)
  + Learn who all the players are and invite them to a session to establish a severe weather plan
  + Prioritize clear communication with stakeholder and advocacy groups and not just a potential client base

***Next Steps***

* Please see Appendix A – Improvement Plan

***Point of Contact:***

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***APPENDIX A – Improvement Plan***

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| --- | --- | --- | --- |
| **Core Capability** | **Improvement** | **Action** | **Department** |
| **Public Information and Warning** | Provide public information to individuals living unsheltered. | 1. Market PC Alert. 2. Develop information flyers for distribution. 3. Provide information to advocates for distribution. | Emergency Management  Communications |
| Provide public information to home bound individuals. | 1. Market PC Alert. 2. Develop key information from medical providers on heat exposure. 3. Hold a workshop to learn how to best share information with home bound individuals. | Human Services  Emergency Management |
| Information Accessibility | 1. Review information for reading levels and plain language. 2. Utilize ADA review for written, audio, and video messaging. | Communications |
| Information Timeliness | 1. Start providing messaging earlier, don’t wait for excessive heat warning. | Communications  Emergency Management |
|  |  |  |  |
| Operational Coordination | Water Distribution | 1. Find strategic staging locations across Pierce County to reduce travel time. 2. Find ways to keep water cold. 3. Develop a GIS Map of water distribution sites. 4. Identify current water distribution capability(non-emergency) and identify water needs during and emergency. Develop strategies to close the gap. 5. Develop mitigation measures to provide plumbing for water distribution at shelters. | Human Services  Emergency Management  Information Technology |
|  | Water Resources | 1. During emergencies, agencies compete for limited water supplies. Identify streamlined water providers to increase capacity. 2. Track the amount of water distributed and what agencies receive water. 3. Work with water purveyors to determine what resources they have available. | Human Services |
|  | Stakeholder Coordination | 1. Establish regularly scheduled conference calls with agencies and jurisdictions during excessive heat wave emergencies. 2. Develop unsheltered emergency plan. 3. Identify and communicate roles and responsibilities. 4. Educate on the emergency proclamation process. | Human Services  Emergency Management |

***APPENDIX B – Registered Participating Agencies***

* Pierce County Department of Emergency Management
* Franklin Pierce Schools
* Edgewood Police Department
* Pierce County Human Services
* Pierce County School District
* Tacoma Pierce County Coalition to End Homelessness
* Bethel School District
* Pierce County Parks and Recreation
* University Place
* Pierce County Fire District 13
* Tacoma Pierce County Health Department
* White River School District
* University of Washington Tacoma
* Dieringer School District
* FOB Hope
* West Pierce Emergency Management Coalition
* VMFH
* Graham Fire & Rescue
* City of Tacoma Human Services
* CHI Franciscan
* Tacoma Public Schools
* Clover Park Technical College
* City of Tacoma Emergency Management
* Comprehensive Life Resources
* Pierce County Medical Reserve Corps
* Rebuilding Hope
* Next Chapter
* Tacoma Rescue Mission
* Greater Lakes Mental Healthcare
* Safe Streets Campaign
* Community member
* Valeo
* Shared Housing Services
* Safe Sites for All
* MOLINA

***APPENDIX C – Survey Results***

*A survey was sent out to all registered after-action report participants. A total of nine participants submitted surveys and all information below is provided as written by participants.*

**Please identify areas of success you believe should be sustained around Public Information during the June heat wave:**

* Centralized name & location of encampments
* PCWARN - It gave us advance notice
* Information to public about cooling centers
* Webpage updates/ Social media updates
* Homeless encampments were identified by outreach workers
* Joint meetings with agencies conducting support missions
* Communications Hub created by the TPC Coalition to End Homelessness for funded providers and volunteers; up-to-date information on water availability, status of distribution of water to all known encampments, immediate response via phone and email and text to outreach providers and volunteers
* Weather briefing notifications - it allowed us to plan ahead and make adjustments to operations
* Volunteers reached out to help
* Directing citizens to one website that holds all of the information
* Continually updated cooling center - both formal and informal - information provided on the TPC Coalition to End Homelessness website
* A share document where each agency has a representative that updates new encampment location with a name. Notations made about encampment. IE. Abandoned. Large dog. Building trust. Trust building with what agency etc.
* Stability site greed to be the staging area for bottled water
* Updated TPC Coalition to End Homelessness public list of 700+

**Please identify areas of improvement regarding Public Information during the June heat wave:**

* Try to release sooner to provide more saturation of info
* As much advance notice a possible
* More communication channels to reach those without internet access
* Central line of communication should rest within a government 24/7 agency
* Start putting the info out as soon as it is clear that a heat event is on the way
* More agencies on the calls/meetings to alleviate misinformation
* Provide information and messaging specific to people living in encampments with minimal links to find the information
* Heat/health education is applicable to all populations and their circumstances such as unhoused
* Easy to read doc sent to all outreach to hand out. Cooling centers, spray parks, free bus rides, etc. Clarify a return bus ride also
* Clearly defined roles
* Sites for Cooling Centers and bottled water should be identified before the emergency
* Have a text option for alerting people to the heat event and resources and contact info
* Getting the information to those that need it most (no social media)
* Include all informal cooling centers in PC DEM info - ie those set up by the faith community or volunteer organizations/groups; and both public and volunteer transportation to/from cooling centers
* Quicker/more ahead of time communication of messages and resources
* Earlier communication to give more people notice
* A recognized trigger should initiate the Incident Command System. All jurisdictions should agree on the trigger to activate a response
* Figure out how to reach vulnerable, isolated people at risk of health impacts from heat
* Create a text alert system specific to people living in encampments
* Paper handouts/health education for unhoused population outreach workers to help educate community members who are living outside

**Please identify three areas of success you believe should be sustained around Water Distribution during the June heat wave:**

* Personally, I felt successful
* Pierce County Emergency Management provided water for the cooling center
* Supplying water to the homeless
* The network of responders should be included in future emergencies
* Central distribution sites available 24/7 to funded outreach workers and volunteers to get water for distribution to people in encampments
* Partnering with volunteers and organizations to help with distribution
* The water supplies at the biggest food bank warehouses (Nourish and EFN) were sufficient to get the first response initiated
* Trust funded outreach workers and volunteers to take the water they needed for the day
* DEM allowed volunteers access to limited number of pallets
* Engaged Nourish Pierce County, the Emergency Food Network, Niagara Bottling

**Please identify three areas of improvement regarding Water Distribution during the June heat wave:**

* Stated earlier all teams need to know all encampments and names. Not just the ones we go to a lot. That way we will be able to ensure equal coverage and distribution to our precious peeps
* Pierce County Schools would be willing to serve as a distribution sites for water
* Better communication between those distributing – coordination
* Staffing on the weekends
* DEM had pallets of water stored out of county, with no plan for accessing
* County-level coordination of water effort (done in August)
* Coordination and overlap of resources
* Refrigerated trucks to transport water to people in the encampments
* Pierce County schools have summer meal sites that can also serve as water distribution centers
* More accountability to show water given to how many, to whom, exactly where, etc.
* DEM did not take the lead on water distribution. Hence government was absent at the beginning.
* Tee water up early (done in August)
* Identification of water sources
* Multiple distribution sites where water can be stored under shade for providers and volunteers to pick up. Mirror TPC Coalition to End Homelessness and City of Tacoma central distribution sites for water. 24/7 availability. Increased number of distribution sites minimizes travel time. Central Tacoma, Parkland/Spanaway area, Fife/Puyallup, and if requested, East Pierce and Key Peninsulap water without long travel times
* Getting water to other vulnerable populations (homebound, for example)
* No plan for staging pallets at one site was in place. I called Tacoma Rescue Mission, begging for a site that could be accessed by outreach workers
* Recognize the exceptional efforts of the mutual aid groups in being the delivery system to the encampments
* Include garbage bags for disposal of plastic water bottles with pallets of water when distributed. Schedule pick up daily in encampments

**Please identify three areas of success you believe should be sustained around Cooling Centers during the June heat wave:**

* We enjoyed the partnership with Pierce County Emergency Management
* Partnering with multiple agencies to have access for many
* Eventually there seemed to be enough...but it took a while for them all to be identified
* Opening of one in each city was a benefit
* Emergency Shelters accommodated COVID with shade pop ups on parking lots
* TPCHD website link to DEM cooling centers website
* We were allowed input on the rules and operations for our facility
* Communicating if pets are allowed
* Faith-based organizations set up informal cooling centers
* Updating the website consistently with new information
* Volunteer transportation to cooling centers for people living in vehicles in central parking lots in east Pierce County

**Please identify three areas of improvement regarding Cooling Centers during the June heat wave:**

* As much advance notice as we can get to allow the facility to be operational
* More options for pets
* Longer hours that cover the entire high heat period (until 9pm)
* Take Cooling Centers TO people living in encampments and to Emergency Shelter locations, air-conditioned buses, cooling tents, misters
* For all emergency management agencies to coordinate locations and make available on their sites
* Longer hours
* Logistically, how do people get from encampment or home to the bus to the cooling center?
* Standardize operational hours and requirements for official Cooling Centers; operate though the highest heat - ie until dusk
* Identify site requirements, open times, etc. to include if locations take pets
* Storage for peoples' belongings
* Pre-authorize use of public buildings even if it is a week-end, engage faith community and volunteer organizations in pre-planning so they know what to do and how to get resources
* Emergency management agencies to broaden the site locations to include schools, university gyms, and locations that are geographically dispersed evenly throughout the county

**Please identify your top three priorities for sustainment and improvement:**

* Education - What do you need from us and what can we offer
* Better communication/ networking with partners assisting the public with needs
* Partnership and communication across departments and with outside agencies
* One trigger to initiate action, across the county, with a plan in place for a declaration of emergency
* County-wide coordination of the water distribution process
* Learning how to get the word out to the people that need it most
* Formally include the response to people living unsheltered in DEM Emergency Response Plan
* Communication among stakeholders and jurisdictions
* Planning - Understanding what the trigger points for a cooling center are
* Plan to be inclusive of all stakeholders: churches, volunteers, school districts, libraries, cities and T-PCHD
* Plan for isolated vulnerable people who are housed
* Finding out which other agencies are providing the same services in my area
* Identify PC DEM point of contact for response to people living unsheltered
* Cooling centers and more of them across the county
* Communication channels need to open now: websites of T-PCHD, Pierce County, the cities, libraries, schools, etc, on what to do in severe weather
* Have a regular framework in place to activate, don't reinvent the wheel each time. Ditto for cold and smoke emergencies
* Engage the Tacoma Pierce County Coalition to End Homelessness in planning and response

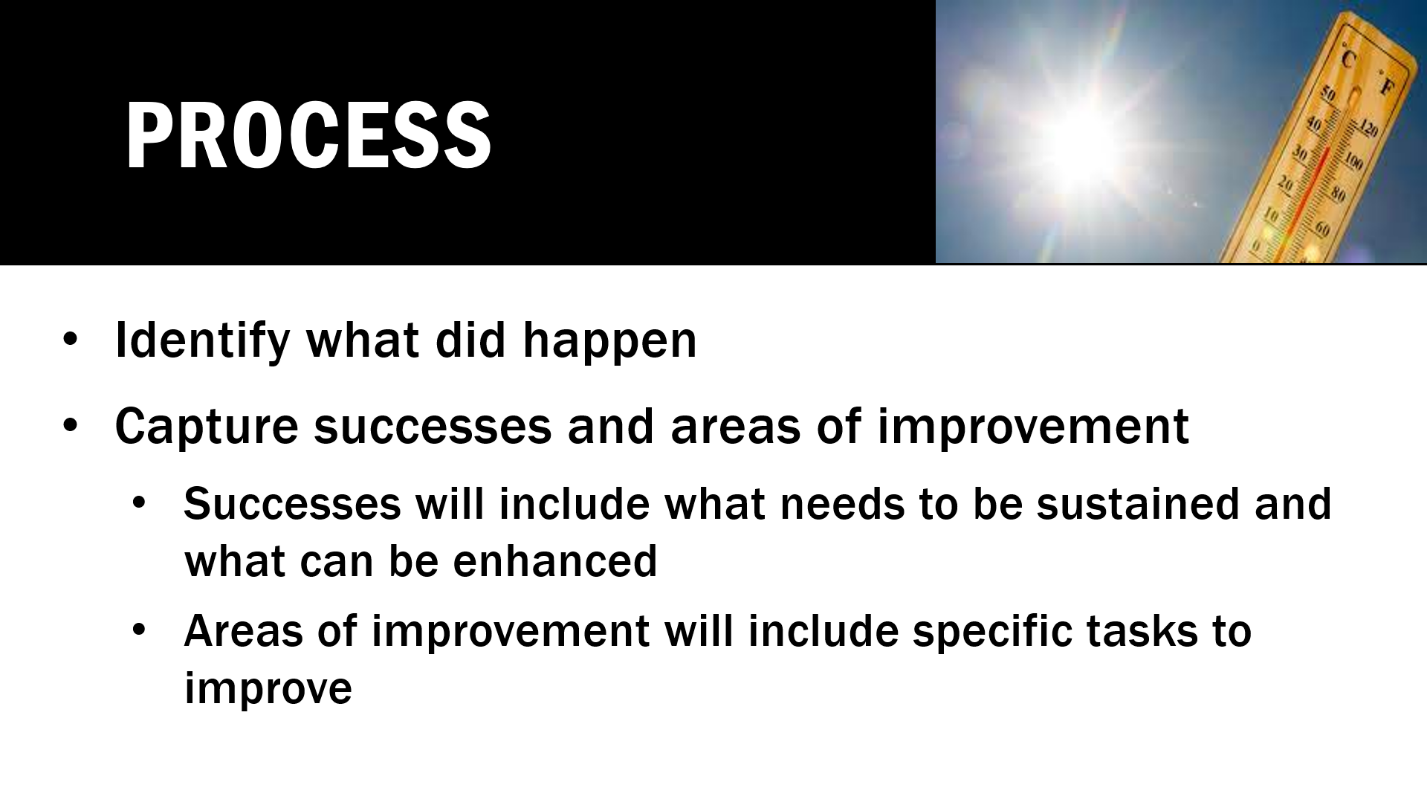
**What is your top area of improvement and what is your specific solution?**

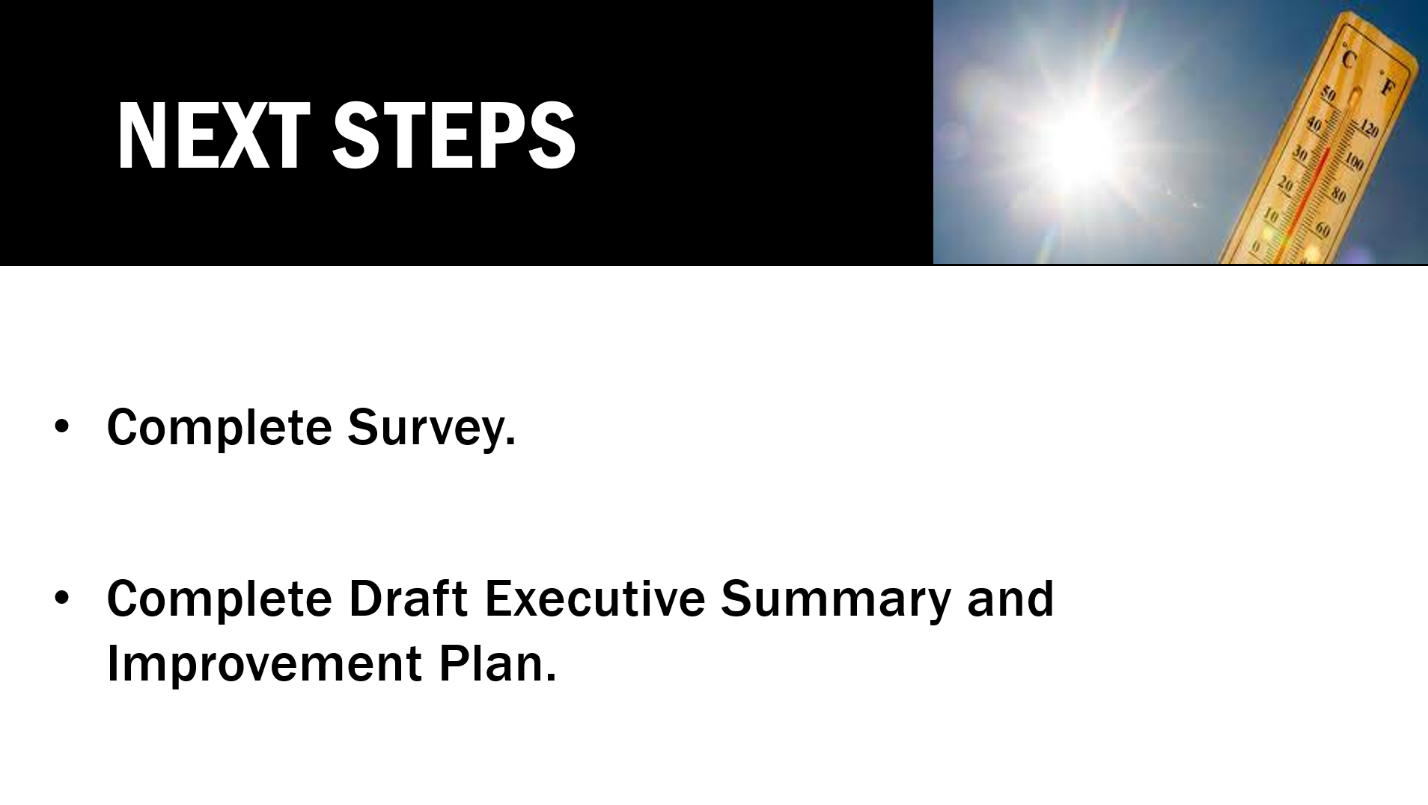
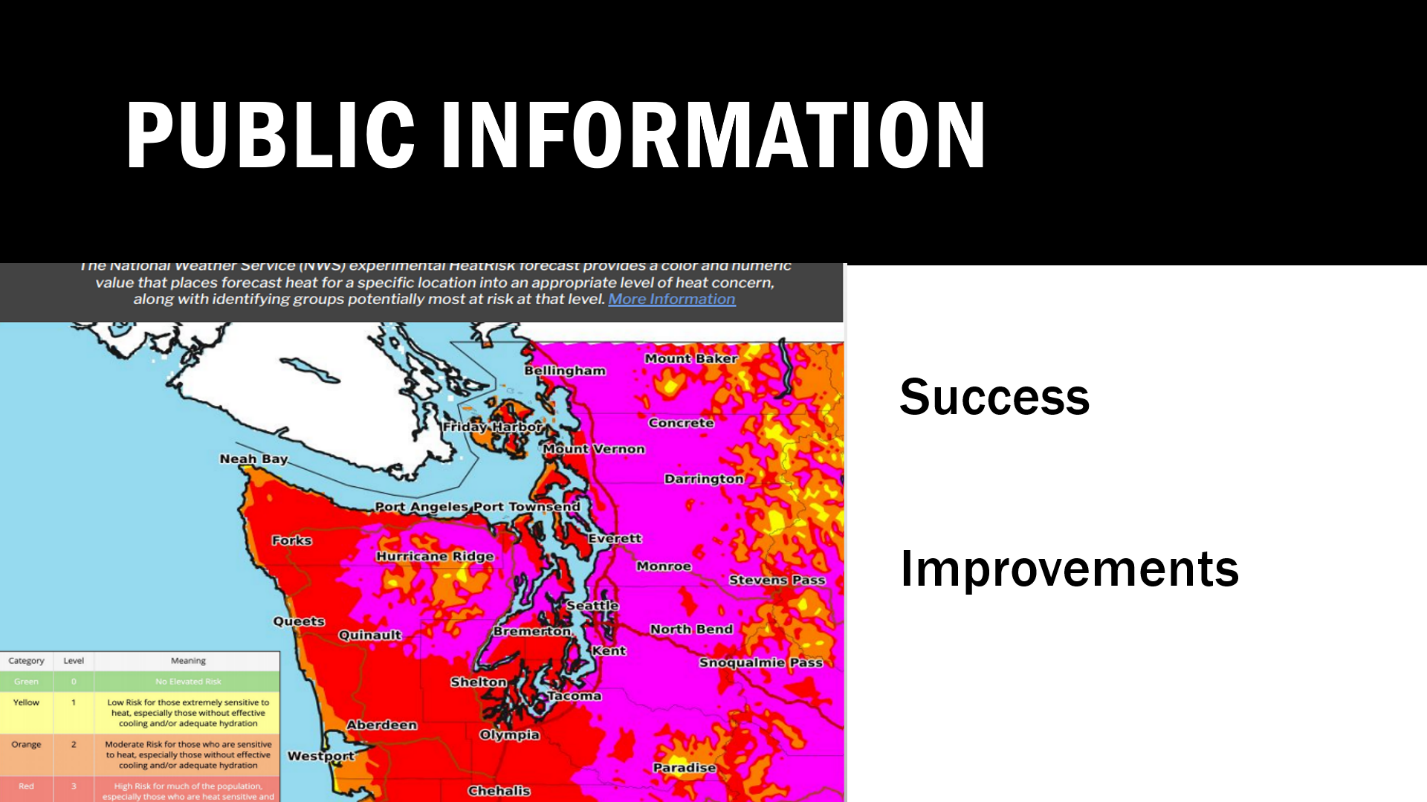
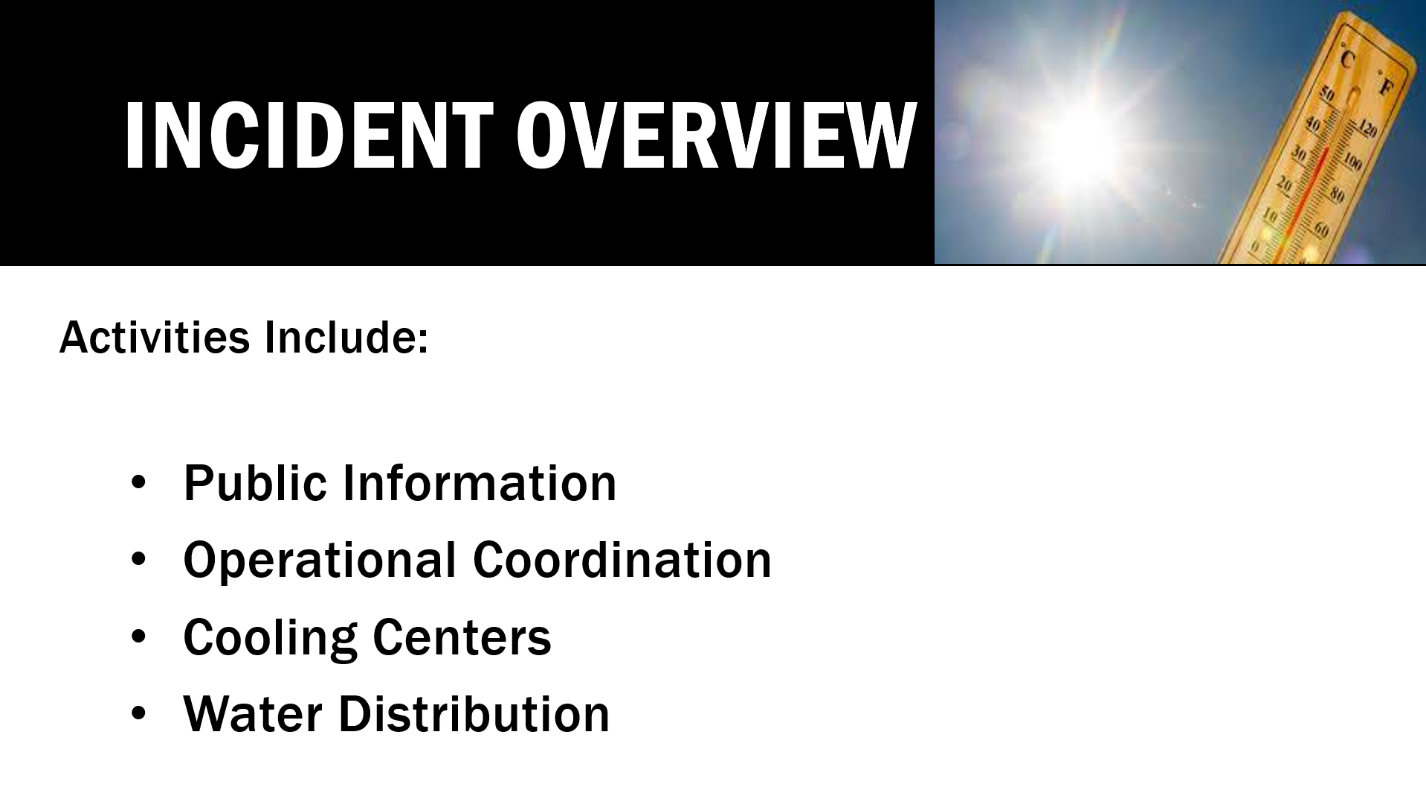
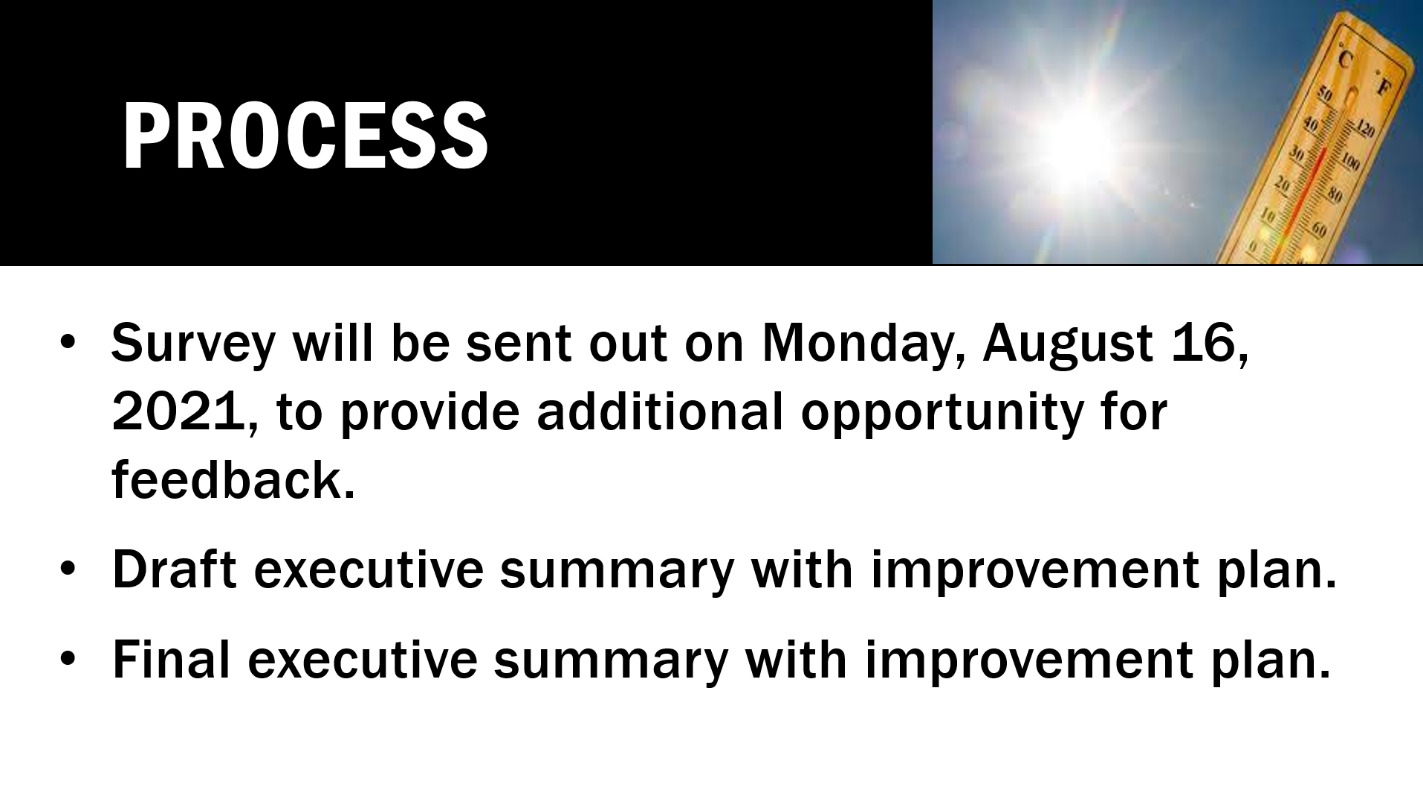
* Planning - What resources are available and how can we maximize them. For example, the summer meal sites for schools and the school’s knowledge of their families (who might need assistance)
* Better networking/ communication with service providers. Solution: PC DEM could provide more opportunities to network outside of a disaster so we all can know each other
* A single, cross-county plan to declare a weather emergency, to include all stakeholders needs to be in place by end of August 2021. What are we waiting for?
* I would defer to Jeffrey at the County, who coordinated the recent August heat emergency. How did his solution/process work for him and what would he improve further? What do the "on the ground" people say about the August response? Can we CQI it?
* Better coordination with other agencies. Create a map of the area where services are most needed and coordinate with other organizations
* Provide water, medical support, and cooling centers to people living unsheltered across Pierce County - tents, cars, vans, RVs. Solution: PC DEM creates a county-wide emergency response system that mirrors what is available to people who are housed and recognizes that information, water, and services must be delivered TO people in the encampments
* Need more locations to take pets. Identify responsibilities and who communicates about livestock concerns. PCHS and school districts need to be more operational, prepare, mitigate, prevent, and respond

**Please add any additional feedback below:**

* We truly enjoyed working with Emergency Management. The staff are understanding and flexible. They addressed all of our concerns and understood our limitations. They stayed in contact with us through the entire process.
* Because my husband, Mike Mowat, is connected to Nourish and EFN, he was able to get immediate response to mitigate the poor outcomes of health emergencies by those who are unsheltered. Whose job should it have been?
* Appreciate your willingness to do the after-action work. Appreciate your willingness to receive new information and apply it.
* It was a very thoughtful AAR. I think it went really well. Thanks!
* The Tacoma Pierce County Coalition to End Homelessness appreciates the opportunity to participate in the Aug. 11 After Action Review. We want to work with PC DEM to recognize and address the response to people living unsheltered. We don't want anyone else to die for lack of water or protection in extreme heat. We will separately provide our notes for the Aug. 11 AAR.

***APPENDIX D – After Action Review Presentation***

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