



Heatwave Havoc 2025

After-Action Report/Improvement Plan

Prepared by Halcyon Northwest in collaboration with
Tacoma-Pierce County Health Department and
Metropolitan Development Council

Date: July 2025

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Exercise Overview

Exercise Name	Heatwave Havoc 2025
Exercise Dates	June 23, 2025
Scope	One-day tabletop exercise held at the Environmental Sciences Building in University Place, Washington
Focus Area(s)	Response, Mitigation, Protection
Capabilities	• Operational Coordination • Situational Assessment • Public Information and Warning • Planning
Objectives	• Identify challenges faced by homebound individuals during heat events. • Evaluate current resources and gaps in serving homebound populations. • Develop strategies to improve interagency communication and collaboration. • Propose actionable steps to enhance preparedness and response efforts.
Threat or Hazard	Natural Hazard – Extreme Heat Event
Scenario	An extended heatwave impacts Pierce County, putting homebound individuals at severe risk. The exercise focused on interagency coordination and preparedness for supporting vulnerable populations.
Sponsor	Tacoma-Pierce County Health Department (TPCHD) and Metropolitan Development Council (MDC), with a \$20,000 prize from the Heat Tabletop Exercise Planning Challenge, awarded by the National Oceanic and Atmospheric Administration (NOAA)
Participating Organizations	A mix of local and regional government agencies, non-profits, and community-based organizations. (see Appendix B).
Point of Contact	Tacoma-Pierce County Health Department – Sponsor • Jessica Hodgeson – jhodgeson@tpchd.org • Gabbie Hubbard – ghubbard@tpchd.org Metropolitan Development Council • Scott Schubert – sschubert@mdc-hope.org • Denise Wells – dwells@mdc-hope.org Halcyon Northwest – Facilitator • Katherine Boyd – katherine@halcyonnw.com • Amanda Zubia – amanda@halcyonnw.com

Executive Summary

Heatwave Havoc 2025 was a one-day tabletop exercise designed to foster collaboration and enhance preparedness for extreme heat events. This event brought together a diverse group of stakeholders from government agencies, non-profit organizations, and community groups to address the critical issue of supporting homebound individuals in Pierce County during extreme heat events. The exercise, which included presentations and group discussions, highlighted the significant risks faced by this vulnerable population and underscored the urgent need for a more coordinated and robust response.

Key themes included the increasing frequency of extreme heat days, the unique challenges faced by homebound individuals, and the critical need for interagency coordination and communication. Participants identified existing resources, significant resource gaps, and actionable steps for improvement. The event highlighted the importance of building strong relationships between agencies and community groups *before* an emergency occurs to ensure a more efficient and effective response.

Recommendations emerging from the exercise emphasized the creation of centralized, multi-agency registry to identify and support homebound individuals, the development of plain-language and multilingual public messaging, and the inclusion of homebound populations in formal emergency response plans. Additionally, participants advocated for sustained collaboration through working groups and the elevation of community voices, particularly those with lived experience, to guide future planning efforts. These actions aim to transform short-term improvements into long-term resilience for Pierce County's most vulnerable residents.

Presentations and Key Insights

The exercise agenda and slide deck, included in **Appendix A**, provide an overview of the structure and content presented during the day of the tabletop exercise. A list of participating organizations and stakeholders can be found in **Appendix B**.

Welcome and Introductions – Nigel Turner, Tacoma-Pierce County Health Department

The event began with opening remarks from Nigel Turner. He noted that the objective of the event is to examine the risks to the homebound community during heat emergencies, identify existing resources, and address gaps in meeting community needs. He emphasized that the value of such events lies not just in planning and objectives, but in building relationships, as these relationships are crucial during an emergency. He stressed the importance of proactively establishing these connections to enable quick action when needed.

Extreme Heat in Pierce County: Past, Present, and Future – Jacob Genuise, Washington State Climate Office, University of Washington

Jacob Genuise, an Engagement Climatologist from the Washington State Climate Office, presented on the historical trends and future projections of extreme heat in Pierce County.

- **Baseline Climatology of Extreme Heat:** Summer months in Washington typically include July and August, with hot weather also occurring in June and September. There is an observed expansion of summer months. The hottest hours are generally between 2 PM and 8 PM.

- **Historical Trends:** Statewide warming has been observed in both summer maximum and minimum temperatures since 1895, with minimum temperatures warming more than twice as much. An increase in atmospheric moisture is a key driver of nighttime heat events, and nighttime heat exposure adds stress to the human body. While a significant long-term increase in the frequency, duration, or magnitude of daytime heat waves regionally is not yet observed, trends are starting to emerge. Many extreme heat events have occurred since 2010.
- **Future Projections:** The 2021 heat dome was an extreme event for which the region was unprepared, emphasizing the need for future readiness. While another event of that intensity is not expected soon, more extreme heat events are anticipated. Between 1971 and 2021, Washington experienced an average of three extreme heat days per year. By the 2050s, this is projected to increase to 17-27 extreme heat days annually for Western Washington. The number of days with a humidex above 90°F (daytime) and minimum humidex above 65°F (nighttime) in Pierce County is also expected to increase.

Homebound Representative Perspective - Denise Wells & Victoria Chittenden, MDC

Denise Wells and Victoria Chittenden from Metropolitan Development Council (MDC) provided a vital perspective on the challenges faced by homebound individuals during heat events. Denise Wells, mother of a homebound child, discussed MDC's programs for low-income individuals in Pierce County, including care management and low-income housing that serves homebound clients. Victoria Chittenden, a caregiver for two homebound sons, shared a personal experience where her oldest son, with diminished lung function, required life support during a heat spike when their central heating system failed. She highlighted the reality for those with weak immune systems and mobility issues, emphasizing the importance of proactive measures. She also pointed out that caregivers can become homebound themselves when their clients are, and not everyone has a support system.

Homebound Clients – Kim Peterson, Pierce County Human Services, Aging & Disability Resources

Kim Peterson, ADR Case Management Director/Social Services Supervisor for Pierce County Human Services, provided data and insights on the homebound population served by her agency.

- **Client Demographics:** ADR serves 6,416 elderly and/or disabled clients in Pierce County, ranging in age from 18 to 108 years. They provide language capacity in 26 different languages, with clients speaking over 35 primary languages, highlighting the need for cultural competency. They serve clients across Pierce County, including rural areas, which present additional challenges. Clients are classified based on their care needs: Exceptional Care (241 clients), Complex Care Needs w/ Behaviors (339 clients), Clinical Complexity (3879 clients), Behavioral Challenges (1013 clients), and Minimal Assistance Needed (944 clients).
- **Homebound Client Challenges:** Key challenges include access to medical services, transportation, consistent caregiver support, ability to evacuate, and access to cooling centers.
- **Assistance Provided:** Pierce County Human Services is helping by distributing over 800 air conditioner units in 2024-2025, providing additional funding for homebound or bedbound clients, working with clients on preparedness and backup plans, emphasizing essential communication, and fostering partnerships with Emergency Management and Tacoma-Pierce County Health Department.

Module 1: Understanding the Community

Participants addressed questions related to organizations working with homebound individuals, existing resources, barriers to accessing these resources, resource gaps, and information sharing methods. Participants identified the following organizations that work with homebound individuals in Pierce County.

Aging and Disability Resources	Catholic Community Services	Community Health Worker Collaborative	Fire/EMS
Libraries	Faith based organizations	Human Services	Korean Women's Association
Lutheran Community Services	MDC	Parks and Recreation	Pierce County Health Care Providers
Pierce County Human Services	WA State DOH, DSHS	Schools	Senior Centers/Community Centers
Tribal Healthcare Agencies	WA Coalition on Inclusive Emergency Planning (WA CIEP)		

Overview of “Barriers and Gaps”

Significant barriers and gaps exist in supporting homebound populations during heat events.

- **Are all homebound individuals, particularly those not using services, accounted for?**
- **Financial limitations** are a major concern, including insufficient funding, increased costs for individuals to run air conditioning (AC) units, and the high cost of services. Uncertainty and cuts in federal funding also pose a challenge.
- **Transportation** is a critical barrier, with a lack of availability, not enough drivers for Paratransit, limited or lacking transportation options, and some rural areas remaining unserved. The ability to evacuate is particularly challenging for homebound clients.
- **Communication and information access** issues include lack of awareness about available resources, mistrust in government and responders, language barriers, poor translation tools, and difficulty disseminating messages to communities due to insufficient trusted partners. People without internet or electricity face significant hurdles.
- **Service provision and infrastructure** challenges include staff turnover leading to broken relationships with clients, insufficient staff/caregivers, service providers being at maximum capacity, confusing or disjointed services, outdated resource lists, and lack of consistent caregiver support. There are also

concerns about power outages, especially at night, and the strain on hospitals not equipped to shelter people during heat events. For those with medical needs, a lack of medical shelter planning is a gap.

- **Vulnerability-specific barriers** include stigma, executive functioning issues, traumatization/frustration from staff changes, and the denial of their situation by some individuals.
- **Housing-related issues** include low-income housing in unsafe areas and substandard housing stock in rural areas.

Overview of Communication Resources and Issues

Agencies and organizations share information through various channels, often relying on trusted community networks and leaders. This includes networking with organizations that speak different languages, such as the Korean Women's Association (KWA), working with schools and multigenerational families, and engaging faith-based groups. Community groups and social media groups are also vital.

Information is disseminated through public bulletins in community centers, stores, schools, and grocery stores. Digital and electronic means include social media, emails, texting, and opt-in emergency alerts. There's also reliance on radios and traditional media like TV.

Direct communication methods involve in-person interactions, phone calls (including phone lists), information packets, and client packets. Providers, case managers, and hospital worker reports also serve as conduits.

Challenges and areas for improvement in communication include:

- **Timeliness and Clarity** of information can be an issue. Information does not always come out in a timely manner, and there is a need for clear, factual, and standardized information.
- **Language and Accessibility Barriers**, as described above, can limit communicators' reach. Access to e-tools can be uneven, translation tools may not be accurate, and there is a shortage of translators/interpreters. Information needs to be in multiple languages and accessible for communication-limited individuals, including non-verbal persons or children, and those who are deaf or hard of hearing (e.g., braille materials, visual alerts instead of sound). There is a call for main-speak/plain-talk content at a 6th-grade reading level.
- **Mistrust in government agencies** can be an issue. Information needs to come from trusted sources within communities. There is a need for more proactive outreach and year-round messaging for heat preparedness.
- **Systemic Gaps** prevent a coherent response. A lack of robust infrastructure or networks to share and amplify information, especially between health departments/emergency management and community/grassroots organizations, is noted. There is a desire for better connectivity and standardized forms and channels.
- **Technology Access** is limited for some populations, and there is a reliance on phone/voice channels. Concerns exist about cell phone and power reliability during disasters.

To further illustrate the equity and access challenges raised during the exercise, **Appendix C**, includes a table summarizing identified barriers, available resources, and communication issues across various vulnerable populations.

Module 2: Improving the Response

Participants discussed how their agencies' roles change during a severe weather event, if their response plans address homebound populations, and how services change during extreme heat.

Agency Role Changes During Heat Events

Agencies reported increased public information efforts, engagement with state-level community organizations, increased info sharing, staffing up, and more weather briefings. Some organizations activate during inclement weather, operating extended hours and preemptively calling clients. The National Weather Service increases media calls and supports public organizations with information. The King County Executive Climate Office focuses on preparedness work prior to summer.

Inclusion of Homebound Populations in Response Plans

Several organizations indicated that their plans do not specifically address homebound populations, or it has only been informally discussed. Some plans refer to "socially isolated populations" rather than explicitly homebound. King County Executive Climate Office's strategy includes near-term plans for resourcing homebound people.

Service Delivery Changes During Extreme Heat

For organizations that provide direct services, their work becomes more difficult when it's hard to connect with clients. Some senior centers run AC units when it's warm and have water bottle supplies. Some agencies give free rides to cooling centers. The Department of Health implements seasonal strategies like cold water sheds for early season heat. West Pierce Emergency Management coordinates cooling centers and shares resources.

Unique Impacts on Homebound Individuals

Homebound individuals, especially the elderly and young, face higher rates of injury and mortality during heat events. The healthcare system experiences increased strain with more people needing cooling, sheltering, or power during outages. EMS call volumes also increase.

Adapting Safety Recommendations for Homebound

It was noted that common recommendations like "staying in a cool place" or "using fans" may not be feasible for homebound individuals. Messaging needs to be adapted to include specific guidance on fan usage and when fans are inadequate.

Communication with Homebound Individuals During Heatwave

Effective communication strategies include pre-planning messaging, setting up distribution lists, and making connections *before* an event to ensure quick dissemination of information. Using trusted voices in the community, faith-based groups, and community bulletin boards are effective. Alternative methods for communicating serious warnings are needed, with careful consideration of cultural relevance. It was also suggested to encourage individuals to have information cards about health conditions in case they become incapacitated.

Module 3: Planning for the Long-Term

Participants engaged in mapping exercises to identify "what needs to change" for improved coordination of responses to homebound people during heatwaves.

Key Ideas for Improvement

- **Government and industry should lead in designing heat-resistant infrastructure** that requires less active cooling and is robust to electric grid issues.
- **Communication Workshops** can be used to implement effective communication strategies and to help develop strategies for individuals stay safe at home.
- **Breaking down silos** so all sectors – government, industry, community – are empowered to identify at-risk individuals and build trust.
- **Equitable Access** to ensure individuals, regardless of their circumstance, have fair access to government and community services, with coordinated efforts across all partners.
- **Interagency collaboration** to build stronger partnerships that can help with resource sharing and collaboration.
- **Diversity in staffing** will help overcome language and culture barriers to improve communication and access.
- **Localized cooling resources** will add heat relief where people live, especially in low-income senior apartment buildings.
- **Continuous Improvement initiative** to build trust, get feedback, incorporate it into plans, and revise after events.
- **Advocate for funding** and demonstrate its value.
- **Elevating trusted voices and channels** for communication, ensuring timely and factual information from sources that homebound individuals will have confidence in.
- **Community Knowledge** – it is crucial to know the community and its specific needs.
- **Proactive Planning** for partnerships, connections, and resources (transportation, geographic mapping, fuel for generators, power) long before a heatwave event occurs.
- **Early detection and notification systems** for heat threats, feeding into community engagement.
- **Centralized provider list** to facilitate communication and understanding of services offered and populations served.

Key Themes and Actionable Recommendations

The Heatwave Havoc 2025 exercise surfaced a range of important insights regarding the needs of homebound individuals and the systems intended to support them during extreme heat events. Through scenario-based discussions, participant feedback, and post-event surveys, several recurring themes emerged that highlight both strengths and areas in need of improvement. This section summarizes the most critical findings and outlines recommended actions aimed at improving coordination, communication, and service delivery across agencies and community partners.

Collaboration & Stakeholder Engagement

- In-person gatherings and cross-agency sharing were seen as powerful.
- There is a strong call to include more diverse stakeholders to future planning events: DSHS, adult residential care, utilities (like Tacoma Public Utilities), schools, cultural organizations, and those serving developmentally disabled or homebound youth.

Homebound Population Identification

- Several participants raised the need to identify homebound individuals proactively.
- Suggestions included creating a centralized critical care list and tapping into existing utility or human service databases.

Public Education & Communication

- Push messaging before emergencies.
- Use trusted community messengers (e.g., Meals on Wheels, senior groups, churches, and seniors who are not homebound).
- Integrate health messages into utility assistance and public notices.

Infrastructure & Planning

- Align definitions of "homebound" across agencies.
- Formalize roles and responsibilities in emergency plans.
- Develop clear documentation and continuity plans.

Data Sharing & Resource Coordination

- Participants highlighted the need for shared tools and resource lists.
- Standardizing resource materials (e.g., infographics) and distribution channels is critical.

Centering the Experience of the Homebound Population

- Including the actual experiences of people who are homebound, or their caregivers, was a success and should be continued.
- Use stories and testimonials in training and planning materials.

Actionable Recommendations

Area	Recommendation
Stakeholder Engagement	Host follow-up events that include underrepresented sectors and lived-experience advocates.
Homebound Database	Create a centralized, multi-agency critical care list with clear opt-in procedures.
Communications	Develop pre-season, multilingual, plain-language campaigns. Leverage trusted messengers.
Planning & Coordination	Clarify each agency's role during heat emergencies; track corrective actions post-event.
Resource Access	Compile and maintain a live, accessible guide to services (cooling, transport, medical)
Human Impact	Build a story bank of testimonials to raise awareness and support funding advocacy.

A preliminary Improvement Plan has been developed and is provided in **Appendix D** for reference.

Conclusion and Next Steps

The "Heatwave Havoc 2025" event successfully brought together key stakeholders to address the growing threat of extreme heat in Pierce County, particularly for homebound populations. The presentations provided valuable scientific data and lived experiences, while the interactive modules facilitated the identification of existing strengths, critical gaps, and innovative solutions. The strong emphasis on interagency coordination, communication, and the importance of pre-establishing relationships will be crucial in building a more resilient community.

Appendix A: Exercise Agenda and Slide Deck

EXERCISE AGENDA – JUNE 23, 2025

I.	Coffee and Networking	8:30 - 9:00
II.	Welcome & Introductions	9:00 – 9:30
III.	Summer Weather Hazards & Population of Focus Overview	9:30 – 10:30
IV.	Break	10:30 – 10:45
V.	Module 1: Understanding the Community Overview	10:45 – 11:30
VI.	Module 1: Group Discussion & Report out	11:30 – 12:00
VII.	LUNCH	12:00 – 12:30
VIII.	Module 2: Improving Response Overview	12:30 – 1:30
IX.	Module 2: Group Discussion & Report Out	1:30 – 2:00
X.	Break	2:00 – 2:15
XI.	Module 3: Planning for the Long-Term Overview	2:15 – 2:50
XII.	Module 3: Group Discussion & Report Out	2:50 – 3:10
XIII.	Final Discussion	3:10 – 3:25
XIV.	Wrap-Up, Participant Feedback, Networking & Closing Remarks	3:25 – 3:45

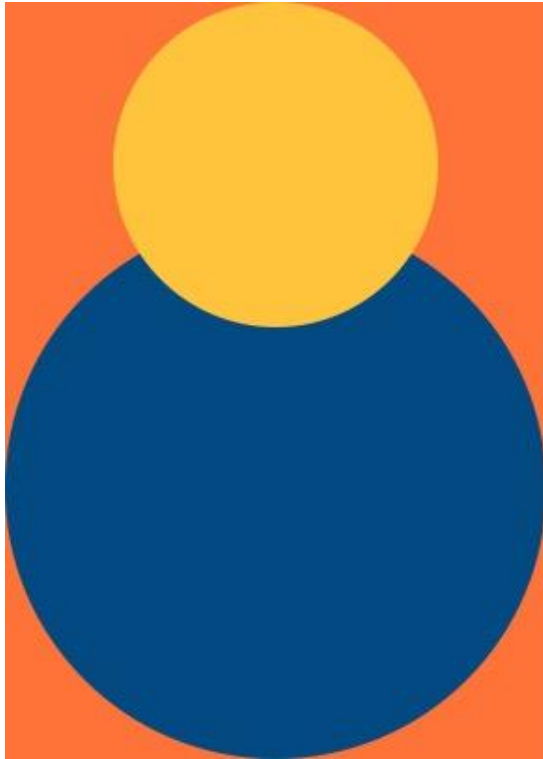
Appendix A: Exercise Agenda & Slide Deck

Heatwave Havoc 2025



Welcome & Introductions

Nigel Turner from Tacoma Pierce Health Department gave opening remarks.



Today's Discussion

Outline of Topics

- 01 Summer Weather Hazards & Population of Focus Overview
- 02 Module 1: Understanding the Community
- 03 Module 2: Improving Response Overview
- 04 Module 3: Planning for the Long-Term

Summer Weather Hazards & Population of Focus Overview





Extreme Heat in Pierce County: Past, Present, and Future

Heatwave Havoc

June 23, 2025

JACOB GENUISE

ENGAGEMENT CLIMATOLOGIST

WASHINGTON STATE CLIMATE OFFICE

UNIVERSITY OF WASHINGTON



Overview



01 Baseline Climatology of Extreme Heat

02 Historical Trends in Extreme Heat in Pierce County

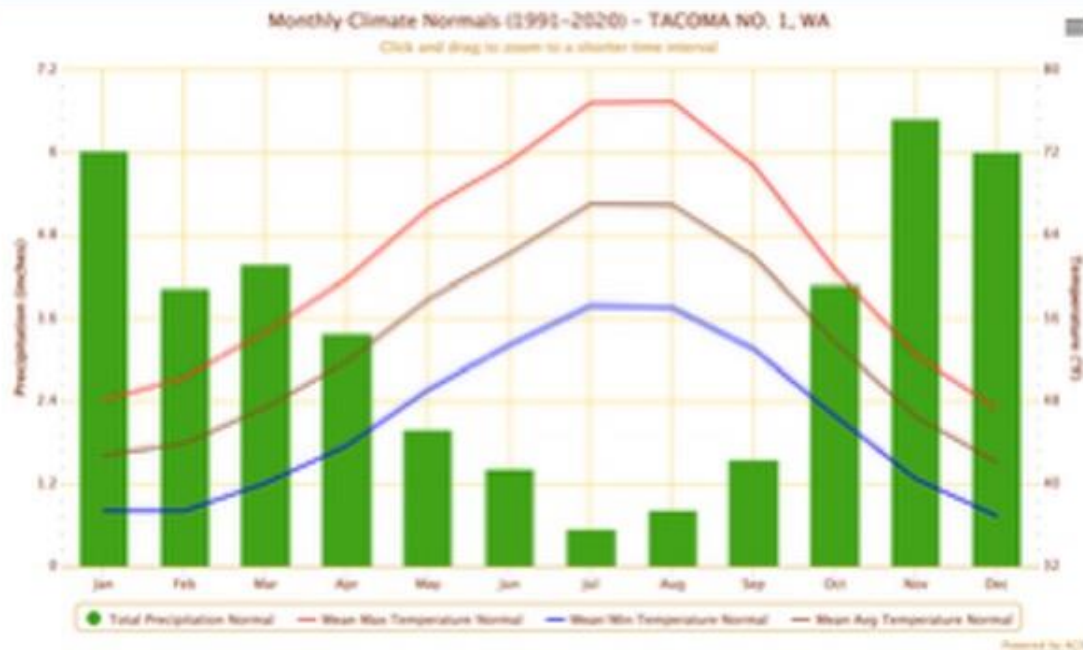
03 Future Projections

04 Questions



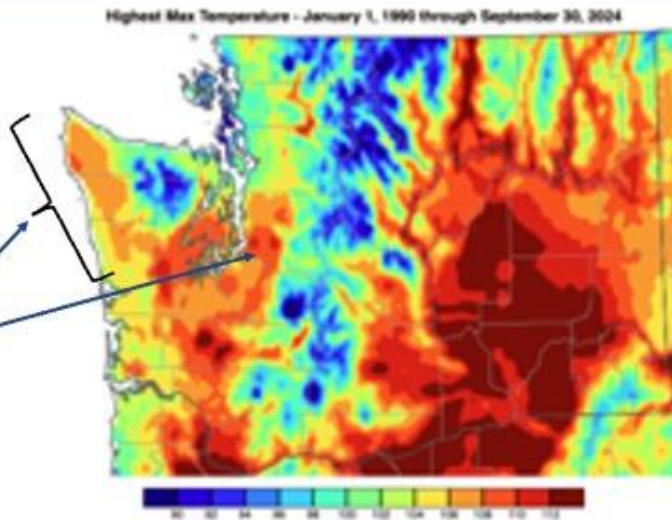
Baseline Climate

Tacoma Climograph (1991-2020 baseline period)



Extreme Maximum Temperatures since 1990 (PRISM)

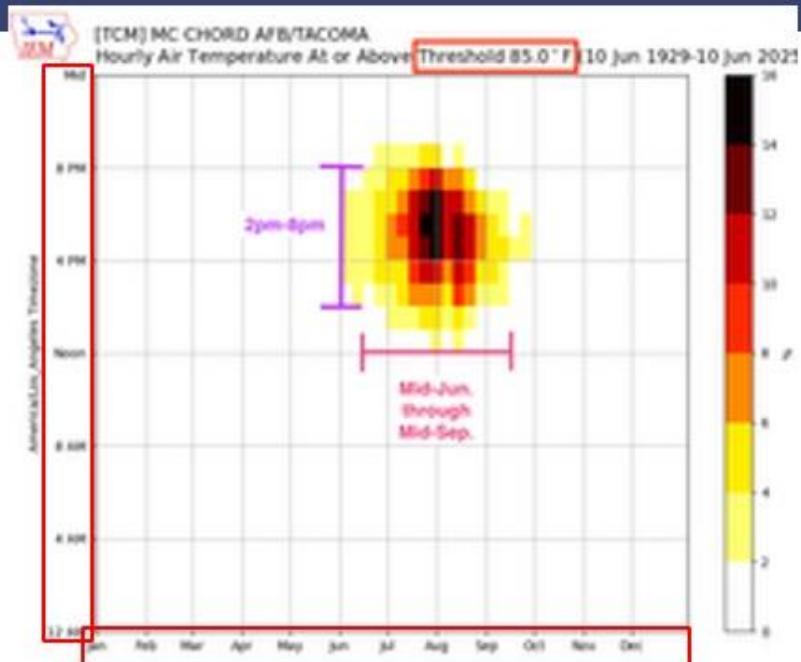
- Topography plays an important role
 - Maxima in Eastern Washington river basins, southern Puget Sound, and southern I-5 Corridor (Centralia)
- Key driver on the west side of mountain ranges: Easterly downslope (warming, drying) winds



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Data from PRISM model.

Tacoma/McChord AFB: Percent of hours above 85°F



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Recent and Historical Trends

11

Statewide Trends (1895-2023)



Statewide Summer (JJA) Temperature Trends

- Statewide warming exists for across both summer **maximums** and summer **minimums**
- **Minimums** have warmed more than 2x as much since 1895
- Warming trend in **minimums** is significant for nearly every station statewide

**Summer Maximums
(daytime)**

↑ **1.42°F**

**Summer Minimums
(nighttime)**

↑ **3.35°F**

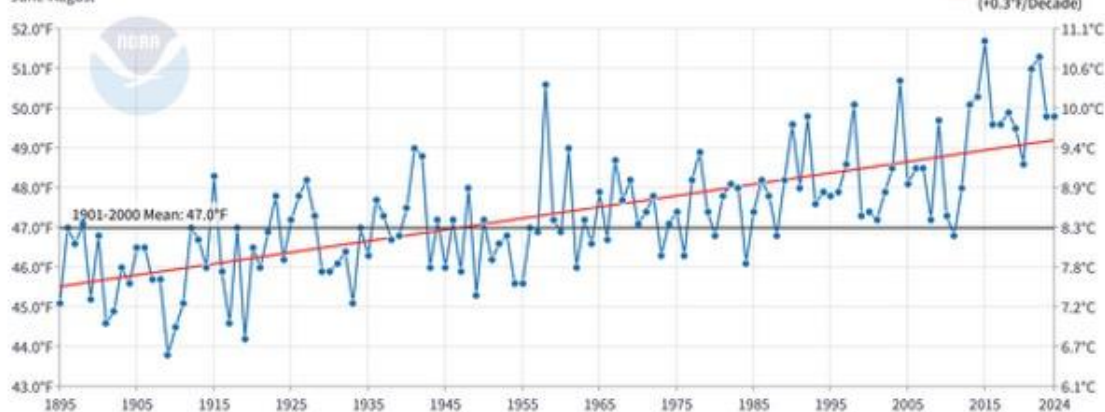


Pierce County: Historical Trends in Minimum Temperatures



Pierce County, Washington Minimum Temperature

June-August



Warming rate for summer minimum temperatures is significant in Pierce County.

Source: <https://www.ncdc.noaa.gov/access/monitoring/climate-at-a-glance/country/time-series>

Western WA and OR Nighttime Heat events

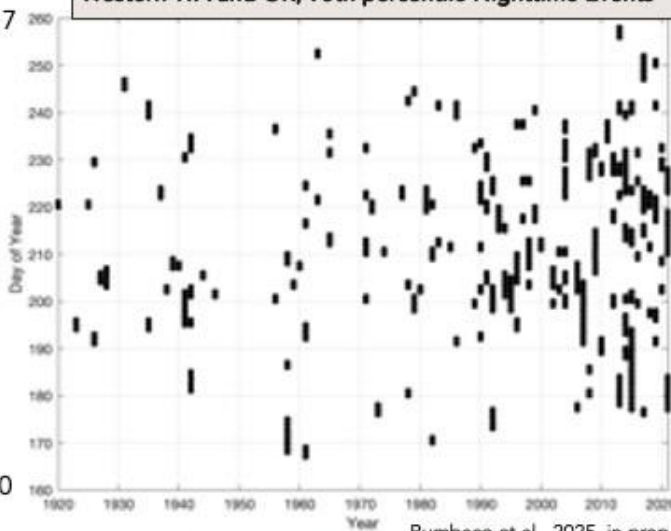


Frequency and duration of nighttime heat waves has increased

- Why? An increase in atmospheric moisture is a key driver of nighttime heat events globally.
- Nighttime heat exposure has been shown to add stress on the human body, even when controlling for daytime hot temperatures (Murage et al. 2017).

Sept. 17

Western WA and OR; 95th percentile Nighttime Events



June 10

Bumbaco et al., 2025, in prep

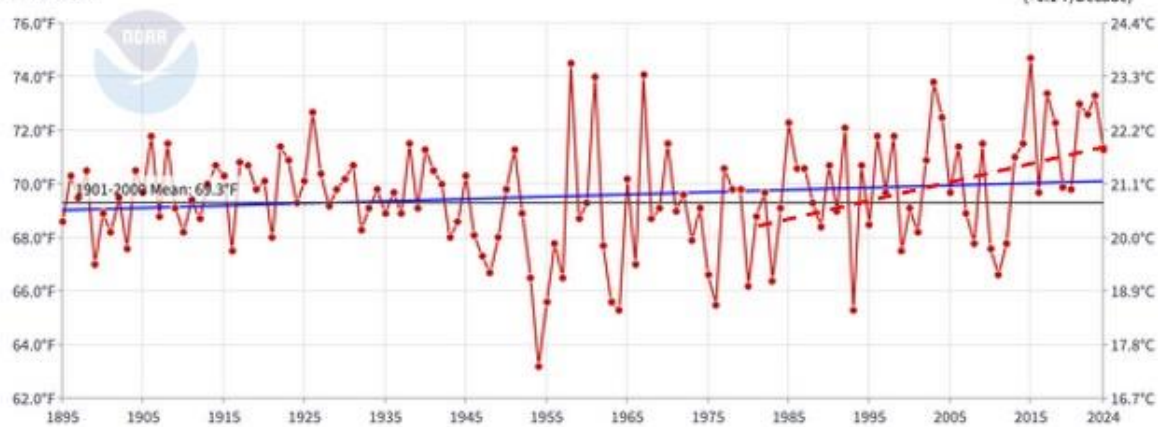
Threshold: 2 nights over the regional 95th percentile minimum temperature of 55.6°F (+5.6°F anomaly)



Pierce County: Historical Trends in Maximum Temperatures

Pierce County, Washington Maximum Temperature

June-August



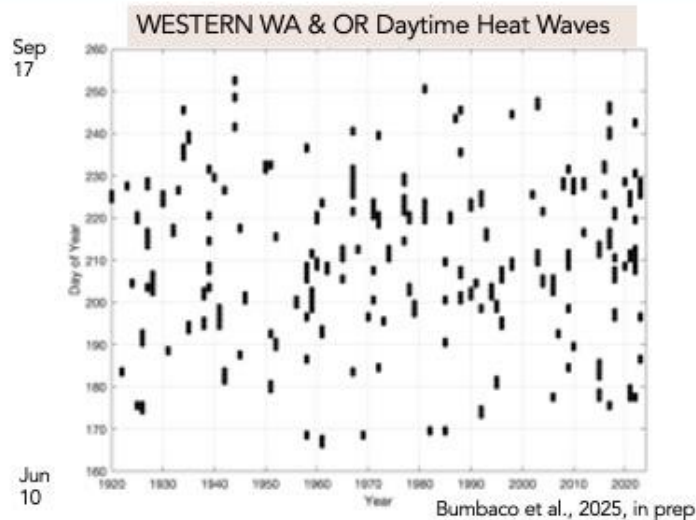
**No significant long-term trend in summertime maximums across Pierce County.
However, more recent trends may be emerging.**

Source: <https://www.nccl.nga.gov/access/monitoring/climate-at-a-glance/country/time-series>

Unclear Trend in Daytime Heat Waves Regionally

Daytime Heat Waves

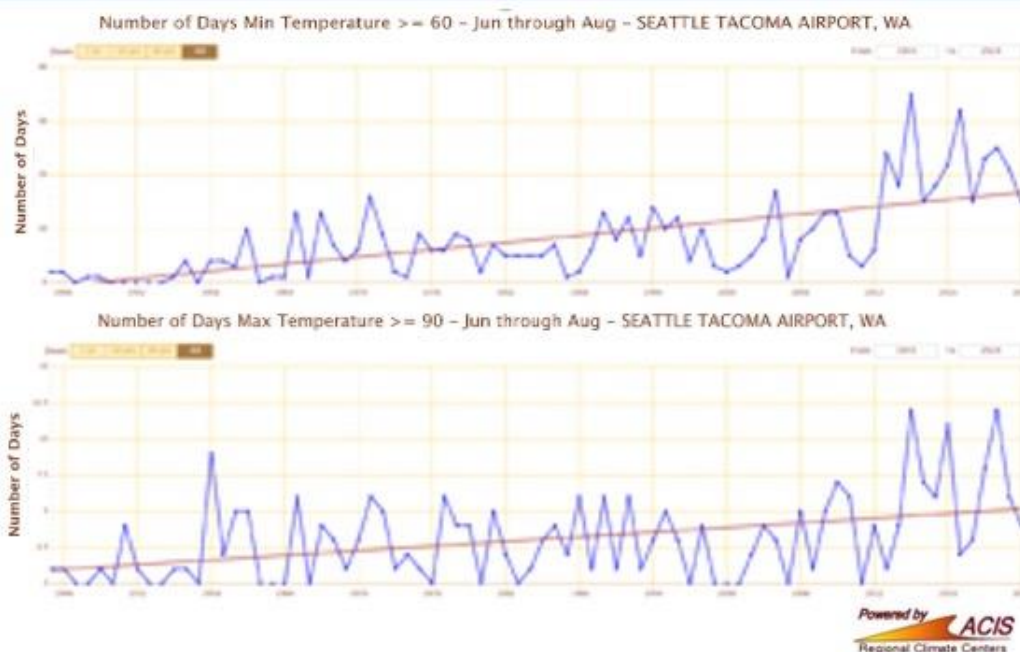
- There is not yet a significant, long-term increase in the frequency, duration, or magnitude of daytime heat waves when averaged regionally.
- **However, some local stations do show evidence of** increasing trends in frequency of hot days.



Threshold: 2 consecutive days above regional
95th percentile maximum of 88.5°F (+12.0°F anomaly)



SeaTac: Recent Trends in Daytime and Nighttime Heat



SeaTac: Longest Duration Daytime and Nighttime Heat Events



Number of Consecutive Days Min Temperature ≥ 60
for SEATTLE TACOMA AIRPORT, WA

Rank	Run Length	Ending Date
1	9	2004-07-25
2	8	2022-08-01
-	8	2013-08-30
4	7	2023-08-10
-	7	2021-07-01
-	7	2017-09-08
-	7	2013-09-07
-	7	2013-07-03
-	7	1996-07-29
10	6	2023-08-17
-	6	2021-08-15
-	6	2015-06-29
-	6	2013-08-20
-	6	2009-07-30
-	6	2008-08-18
-	6	1994-07-23
17	5	2024-07-10
-	5	2022-08-21
-	5	2019-08-17
-	5	2019-08-05

Last value also occurred in one or more previous years.
Period of record: 1945-01-01 to 2025-03-16

Number of Consecutive Days Max Temperature ≥ 90
for SEATTLE TACOMA AIRPORT, WA

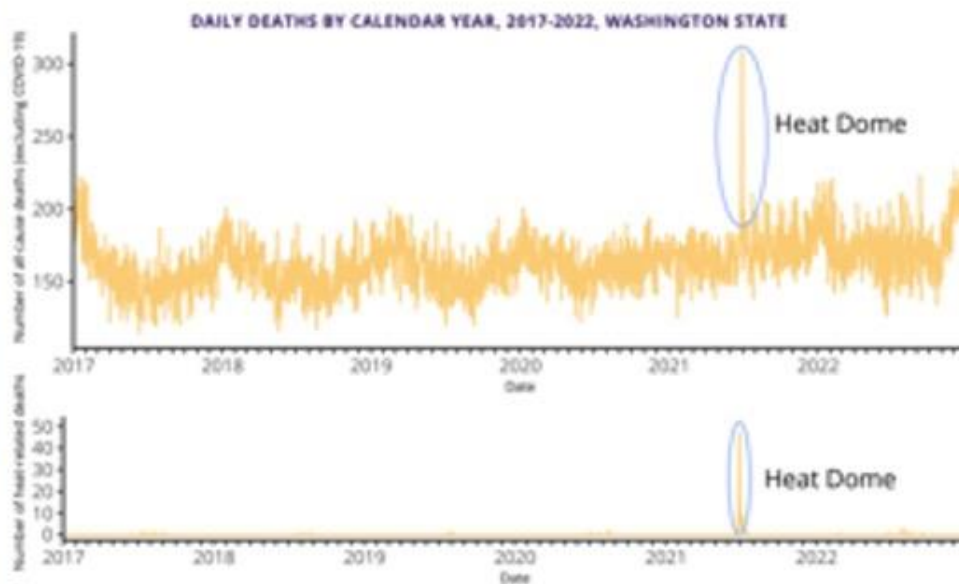
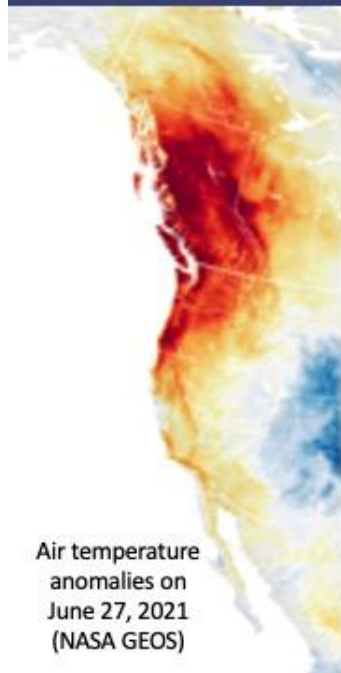
Rank	Run Length	Ending Date
1	6	2022-07-31
2	5	2015-07-05
-	5	1981-08-11
4	4	2024-07-09
-	4	2023-08-17
-	4	2018-07-26
-	4	2015-08-01
-	4	2009-07-30
-	4	2006-07-24
-	4	1979-07-19

Last value also occurred in one or more previous years.
Period of record: 1945-01-01 to 2025-03-16

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**Records that have occurred
since the year 2000**

2021 Heat Dome



Source: <https://ciq.uw.edu/projects/in-the-hot-seat-saving-lives-from-extreme-heat-in-washington-state/>

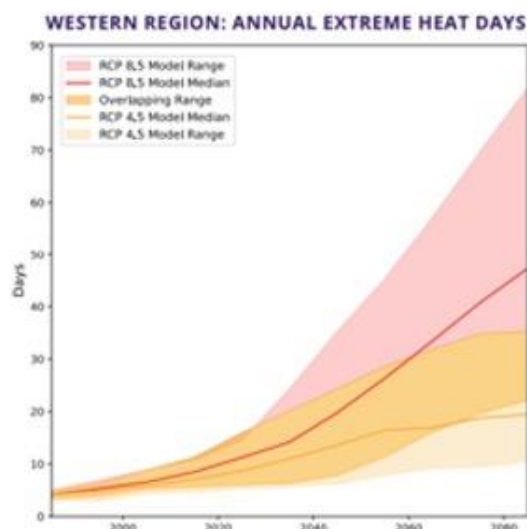
Projected Changes

Projected Changes: Extreme Heat Days in Western Washington

Graph: Number of extreme heat days per year (defined as days exceeding the 99th percentile using the 1971-2000 baseline) for western Washington.

Between 1971 and 2021, Washington experienced an average of **3** extreme heat days per year.

By the 2050s, there will be between **17-27** extreme heat days on average for western Washington.



Data from CMIP5.
Source: [In the Hot Seat \(CIG\)](#)

Projected Changes: Days with Humidex Above 90°F in Pierce County

30-year Period	Low Emissions (RCP 4.5)	High Emissions (RCP 8.5, graphed)
2030-2059	+9.8 days	+13.4 days
2050-2079	+13.9 days	+26.8 days
2070-2099	+17.6 days	+38.5 days

Interpreted as the change in number of days the humidex ("experienced" temperature) will reach 90°F in a given summer.



Historical 1980-2009 value: 6.1 Days

Source: [Climate Mapping for a Resilient Washington Tool \(CIG\)](#)

Projected Changes: Days with Min. (nighttime) Humidex Above 65°F in Pierce County



30-year Period	Low Emissions (RCP 4.5)	High Emissions (RCP 8.5, graphed)
2030-2059	+6.1 days	+9.0 days
2050-2079	+10.6 days	+21.8 days
2070-2099	+13.9 days	+38.4 days

Interpret as the change in number of nights the humidex ("experienced" temperature) will stay above 65°F overnight in a given summer.



Historical 1980-2009 value: 1.7 Days

Source: Climate Mapping for a Resilient Washington Tool (CIG)



WASCO



CLIMATE
IMPAIRMENTS
GROUP



EARTHLAB
UNIVERSITY of WASHINGTON

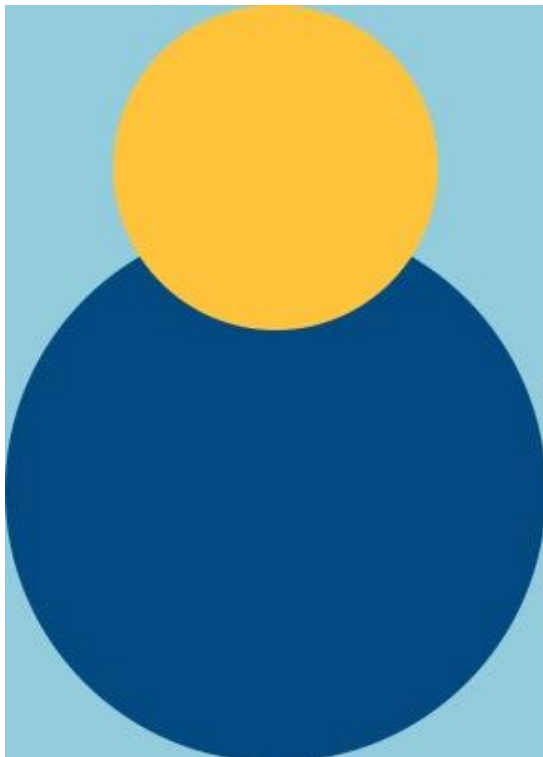
Questions?

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Population of Focus Overview



Homebound Representative Perspective

Denise Wells & Victoria
Chittenden from MDC



Human Services-Aging & Disability Resources- Homebound Clients

Kim Peterson, ADR Case Management Director/Social Services Supervisor

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Aging & Disability Resources (ADR)- Clients



- ADR currently serves 6416 elderly and/or disabled clients in Pierce County
- Clients range in age from 18-108 years of age
- We provide language capacity in 26 different languages
- Our clients speak 35+ primary languages
- Cultural Competency
- We serve clients across Pierce County, including rural areas
- Rural areas have additional challenges





Classification		Age Range	Total Clients
E Classification – Exceptional Care		18-108	241
D Classification – Complex Care Needs w/ Behaviors-		18-108	339
C Classification – Clinical Complexity		18-108	3879
B Classification – Behavioral Challenges		18-108	1013
A Classification – Minimal Assistance Needed		18-108	944
Total			6416 Clients

Homebound Client Challenges



- Access to medical services
- Transportation
- Consistent Caregiver Support
- Ability to Evacuate
- Access to Cooling Centers



How We are Helping

- Air Conditioner Units – More than 800 distributed in 2024-2025 via Pierce County Human Services-Energy Assistance
- Additional funding for homebound or bedbound clients
- Working with Clients on Preparedness and Back Up Plans
- Communication is Essential
- Partnerships with Emergency Management and Tacoma-Pierce County Health Department

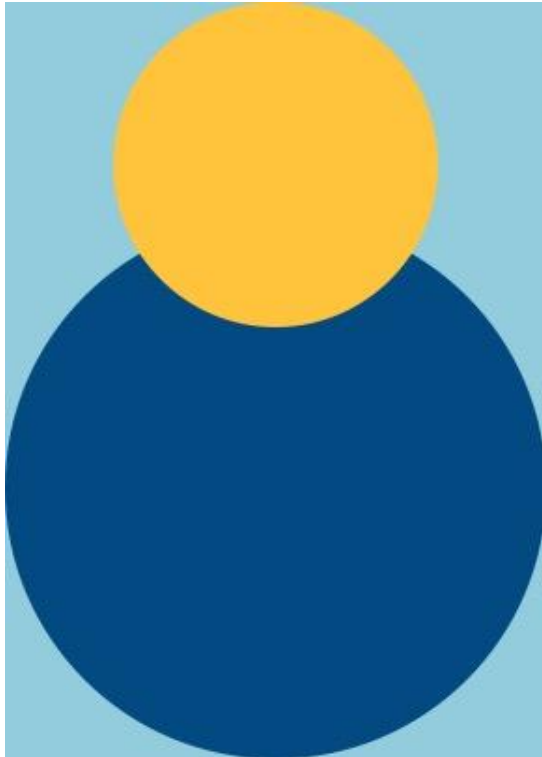


Questions?

Kim Peterson, Pierce County Human Services-ADR

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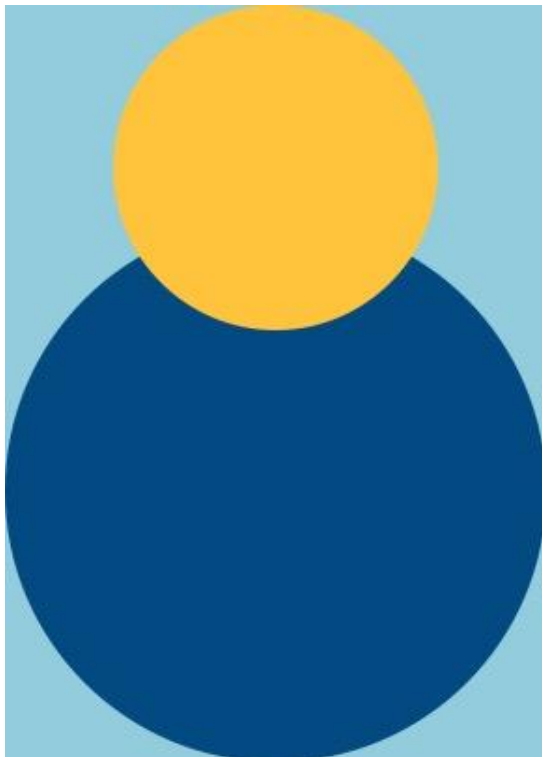




Slido Poll: Who in our community do you think is likely to be homebound?

(This list was generated from submitted answers.)

- Communication-Limited Individuals
- Transportation Limited Individuals
- Incarcerated Individuals
- People w/pets
- Undocumented Individuals
- Seniors
- Disabled- (physical/mental/social)
- Immune Deficient
- Low income
- Rural Areas
- People w/language barriers
- People w/special medical needs
- Care givers



Break

Take a moment to stretch & use facilities.

Please return by 10:45



Module 1: Understanding the Community

MODULE 1: UNDERSTANDING THE COMMUNITY

In emergency management, a whole community approach means that communities are better able to prepare for, respond to, and recover from emergencies when all the whole community is engaged in the planning process. An important step in the planning process is growing an understanding of the community: Who is in our community? What specific needs will they have in an emergency? What resources already exist in this community that can be called upon to help? What relationships can be built now, before an emergency happens?

For this module we will assume a typical late spring/early summer weather day when people in Pierce County are **not** impacted by extreme temperatures.



Key Issues

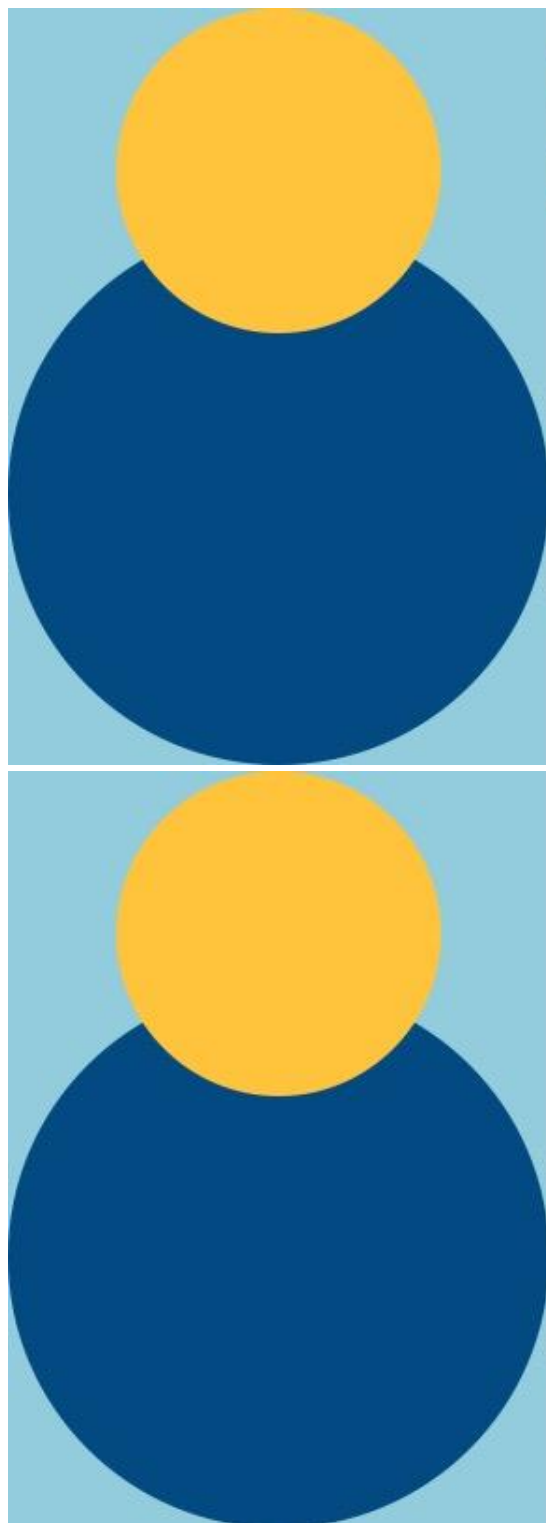
- Home bound is a broad term that can be defined differently by service providers, insurance companies, community organizations and more. In this discussion, we will consider anyone home bound if they are prevented from leaving their home frequently or on their own due to age, illness, disability, or another factor.
- If your home isn't healthy, you can experience negative health impacts. This is particularly applicable to people who spend all or nearly all their time in the home. Examples of issues that could impact your home include poor insulation (limits ability to keep home cool or warm), poor air quality (due to dust or smoke), mold, or others.
- Level of support (family members, community, paid caregiver) can make a big difference in the ability of home bound individuals to remain in their homes and stay health and safe year-round, in all types of weather.



Questions

These discussion questions represent a starting point for conversations in your group. Feel free to explore other topics based on your own knowledge and experience.

- What organizations work with home bound individuals in Pierce County?
 - What resources exist to support home bound people? (Could be governmental programs, volunteer programs, financial supports, etc.)
 - What barriers can prevent people from accessing these resources?
- Where are the resource gaps for this population?
- How do agencies, supporting organizations, and others share information to and receive information from home bound individuals?
 - Are there specific communication channels that work better than others for distribution of information? (Social media, traditional media, postal mail, etc.)
 - Are there language access needs to consider when communicating with home bound people in Pierce County?



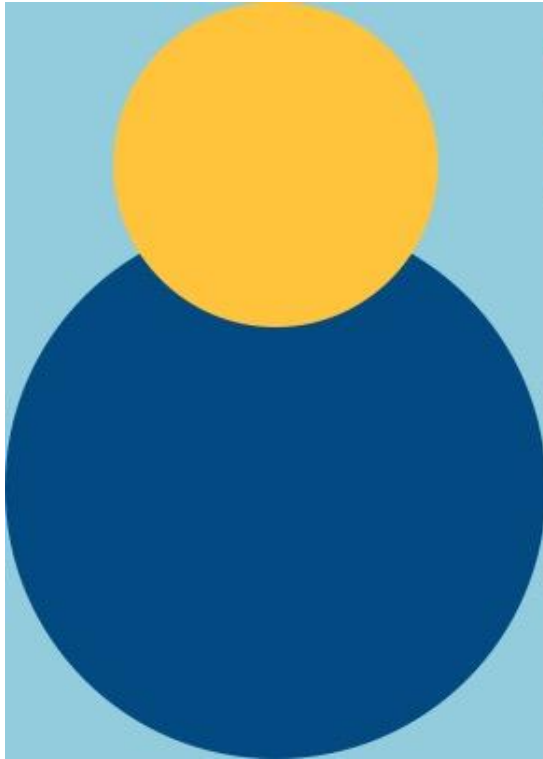
(Using this list that was generated from the Slido poll, participants answered the questions on from Module 1 from the handout. (also slide 38)

- Communication-Limited Individuals
- Transportation Limited Individuals
- Incarcerated Individuals
- People w/pets
- Undocumented Individuals
- Seniors
- Disabled- (physical/mental/social)
- Immune Deficient
- Low income
- Rural Areas
- People w/language barriers
- People w/special medical needs
- Care givers

Post-It Color Codes

- **Question 1a- Light Pink**
- **Question 1b- Dark Pink**
- **Question 2- Turquoise**
- **Question 3- Purple**

Lunch Time



(These questions were projected on the screen and participants answered on post-its and then placed them under their organization name on the butcher paper)

- How does your work change during a heat event, if at all?
- Do you have an extreme weather response plan? If yes, does it include homebound populations?

Module 2: Understanding the Community



Key Issues

- Home bound individuals may fall into one or more of the groups identified as being especially vulnerable to the impacts of heat.
- Outdoor temperatures in our region peak around 5pm. During the 2021 Heat Dome, temperatures indoors were reported peaking at night, sometimes as late as 10 or 11pm.
- Stores may run out of supplies like ice, fans, bottled water, and portable AC units before the heat wave begins as people try to prepare.
- Extreme heat may stress power grids, hospital systems, and emergency services.

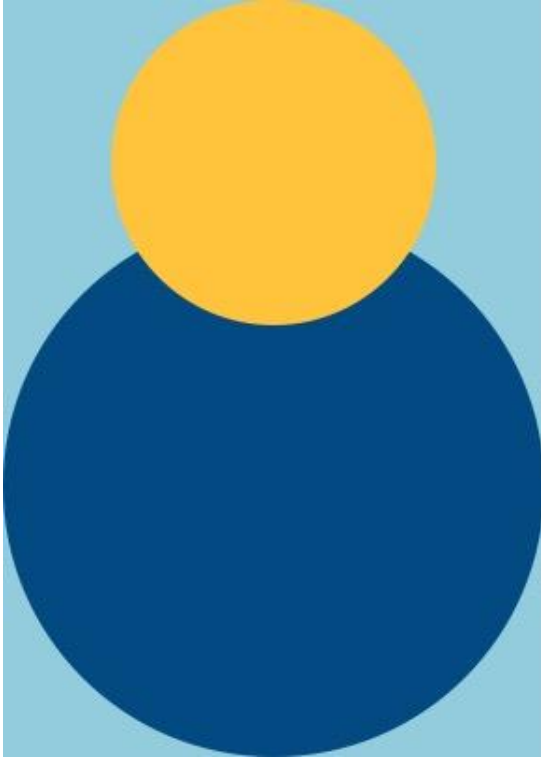
Module 2: Improving the Response

1. From your agency's perspective, how does your role or operations change during a severe weather event like this one?
 - a. Does your response plan address homebound or other vulnerable populations?
 - b. If you serve homebound individuals, do your services or delivery methods change during extreme heat?
2. How are homebound individuals uniquely affected by a heat wave?
 - a. What risks do they face, and how might healthcare or EMS system strain affect them?
 - b. Are they able to follow typical safety recommendations? What barriers exist, and should the guidance be adapted?
3. How should communication with homebound individuals differ during a heat wave?
 - a. What are effective ways to quickly share warnings and safety info with them or their caregivers?

Participants answered the Module 2 questions (above) while keeping in mind the recommended actions. (right)

Effective action, taken early, can reduce the health impacts of exposure to extreme heat. Commonly recommended actions include:

- Try to avoid being outdoors in the sun between 10am and 4pm.
- Stay hydrated. Eat and dress light.
- Stay in a cool place: visit a movie theater, a shopping center, a library, or other public space with air conditioning.
- Use air conditioning at home if you have it. Fans may not be adequate.
- Be familiar with the signs of heat exhaustion and heat stroke.



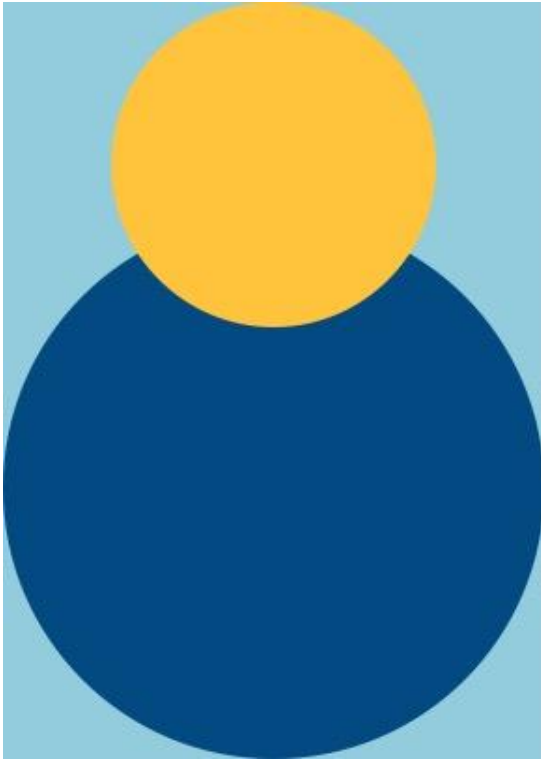
Break

Take a moment to stretch & use facilities.

Please return by 2:15

Module 3: Planning for the Long-Term

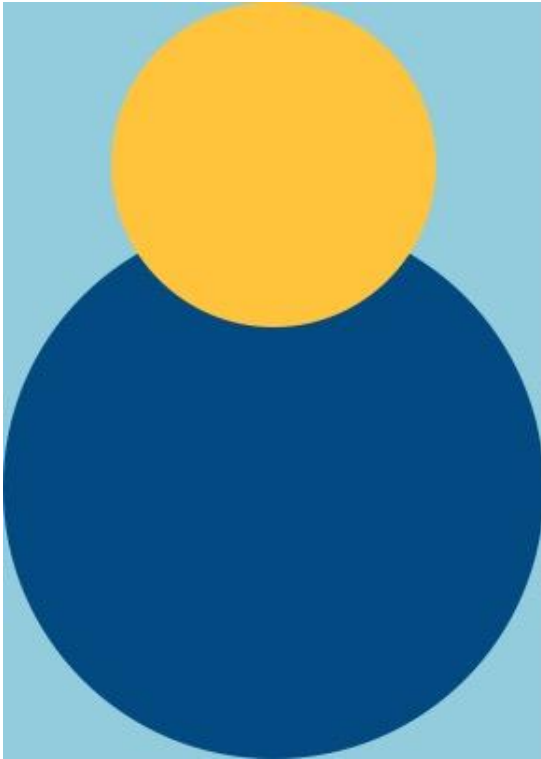




- Draw a map or diagram of “what needs to change” in order to improve coordination of responses to homebound people during heatwaves. There can be multiple “destinations” identified in the map/diagram.

Final Discussion





Self-reflective activity:

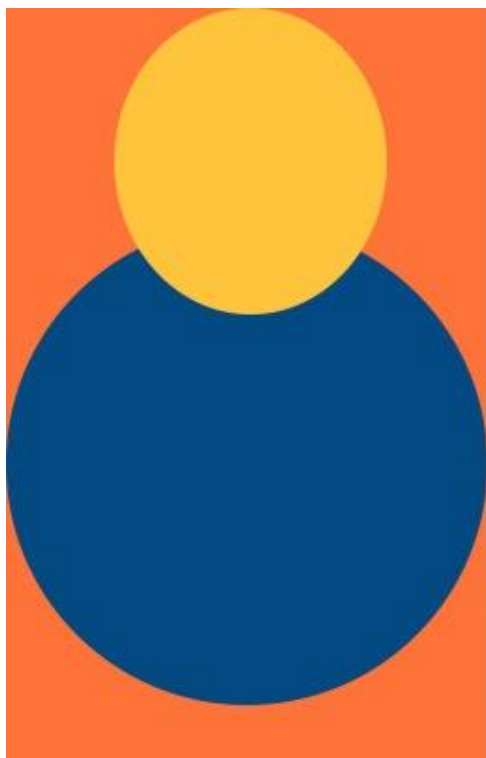
What are 3 things you learned today?
What action will you take after today's exercise?

Wrap-Up

Jessica Hodgeson & Gabbie Hubbard from

Tacoma Pierce Health Department





Questions?

Contact Us



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Amanda Zubia- amanda@halcyonnw.com



Appendix B: Exercise Participants

Participating Organizations	
ASL Professionals	King County Executive Climate Office
Center for Independence	Metropolitan Development Council
City of Buckley Fire Department	National Weather Service
City of Lakewood	Pierce County Emergency Management
City of Puyallup	Pierce County Human Services
Coalition on Inclusive Emergency Planning	Pierce Transit
City of Tacoma	Point Defiance Ruston Senior Center
City of Tacoma Fire Department	State of Washington Emergency Management Division
City of Tacoma Sustainability Office	Tacoma-Pierce County Health Department
Halcyon Northwest	Washington State Climate Office
Key Peninsula Community Services	Washington State Department of Health
King County Emergency Management	West Pierce Emergency Management

Appendix C: Community Resources and Barriers

Name	Resources	Barriers and Gaps	Communication: sharing and receiving information
SENIORS	- Neighbor Feeding Neighbor program. - Model for other programs? - Home delivered meals - Agencies distribute items directly to home bound people	- Staff turnover = broken relationships - Honing in on resources at right time & needs - Stigma - Lack of advocacy/service providers - Cost-of-living - Low-income housing located in crime-ridden or unsafe places	- Anxiety around answering the phone
PEOPLE IN RURAL AREAS	- Human services, community action agencies, alert & warning systems (PCAlert or local) WEA/ - Faith groups/churches - First responders - Social media - There are some mobile services that serve rural areas	- Red cross mass sheltering capabilities - Resources located far from people's homes - Not enough drivers for paratransit - Transportation lacking or limited - Substandard housing stock - Larger population of seniors living alone - Transportation - Funding for services	- Bulletins-community centers, feed stores, school, grocery store, etc. - Community groups, faith-based groups, social media groups
LANGUAGE BARRIERS		-Transportation - Language - Office hours - Not knowing what's available/awareness - Mistrust in government/responders - Government agencies are not embedded in community - Lack of trust in information/source - Affordability/cost barrier to language services and caregivers - No/lack of access to language resources or language barriers - New to community - E-tools not clear to users (translation) - Access to e-tools limited or lack of training - Accurate language translation - Access to information - Information in languages other than English	- Access to e-tools uneven. Translation tools not good at translating - Using trusted voices in the community

PETS		- Not enough outreach provided/developed regarding pets	
UNDOCUMENTED INDIVIDUALS		- Enough trusted partners/messengers to disseminate, get messaging to communities	- ASL - Literacy - Faith based leaders - Community Leaders
INCARCERATED INDIVIDUALS		- Confusing/disjointed/disconnected services	- Stigma - Lack of access to get information
IMMUNE DEFICIENT		- Shelters that can adequately serve people with medical needs - How do agencies, supporting organizations, and others share information to and receive information from homebound individuals?	
LOW INCOME	- St. Leo's Food Connection (and similar)	- No internet/electricity - No Transportation - Cost of Services - How do agencies, supporting organizations, and others share/receive information from homebound individuals? - Alert and warning systems like PCAalert or other local A&W System - Poor relationships between agencies and landlords - Need year-round messaging for heat (preparedness)	

DISABLED: PHYSICAL, MENTAL, SOCIAL	- Using networks of organizations & cascading information through those organizations to the individuals they serve. - Coalitions for agencies and organizations to work together on key issues. - Welcome centers have integrated information sharing systems with care/service providers.	- Not enough staff/caregivers to care for everyone - Executive functioning issues-losing phones, forgetting appointments - Traumatization/frustration for clients when staff changes - Capacity - Buildings that are not accessible (and don't/won't be renovated) - Evacuation planning - Lack of residential options that meet people's needs - Untrained/unqualified staff/agencies to shelter - Patchwork programs or challenging quality/continuity programming - Transportation-especially medically complex - Enough (cooling) shelter locations, supplies, staff - Hospitals not meant to board or shelter people during heat - Homebound people may be medically dependent on power - Transportation or access to transport	- Info. packets and/or client packets
COMMUNICATION- LIMITED INDIVIDUALS	- App Translators - Translator services - Community Groups - KWA etc. - Public information sent out in multiple languages - Signage/Docs in Braille - Universal symbols - Virginia Mason's digital equity program - Opt-in emergency alerts/protective education/word of mouth/community resource sharing - Braille materials for people who are blind/read Braille - Tacoma Community House - Interpreters/staff	- A/C Units etc. are sold out when needed - Shortage of translators/interpreters	- Non-verbal adults or children unable to communicate - Have adaptable templates of better information - Main-speak/plain-talk/6th grade reading level - AI Translations-both good and bad - Word of mouth - Trusted voices network - Phone lists

CAREGIVERS		- Some service providers are maxed out/can't do more	- Providers - Need infrastructure (or better) - Network to share/amplify) - National weather service - Better connectivity between health department/emergency management to community centers/groups - We need a better communication/information sharing network (specifically with community and grassroots organizations)
PEOPLE WITH SPECIAL MEDICAL NEEDS (INCLUDING CANCER)	- Agencies are prioritizing better/more equitable emergency planning - Local independent living center - Center for Independence staff (peer-led service providers)	- Medical shelter planning	
ALL	- Pierce County Health Care Providers Org. - Utility Companies-Medical needs priority list Utility assistance - Emergency management - Transportation-Pierce Transit - People for People - Catholic Community Services - Private companies. - Around the sound - Go Go Grandparent Senior Center - Programs available to people to purchase equipment etc. - Resilience Hubs - The Rehab Act-Workforce labor/Education development -Resilience Hubs - The ADA-To ensure people with disabilities get access to opportunity - Wireless Emergency alerts (WEA)	- Pride/independence - Lack of knowledge of resources for homebound person and caregivers - Mistrust of government/political impact - Federal funding being uncertain/cut - Increase cost for individual to run AC units - Mobility - Computer literacy/access to technology - Language - Early education resources - Knowing where to go/access to resources - Personal network fear/trust - Lack of interpretation - Financial stability - Gaps due to requirements - Denial of situation - Only heat events that are considered emergencies may mobilize/open resources late or never	-Networking with organizations that speak different language, i.e. KWA -Educating seniors and people with disabilities prior to becoming homebound -Working with schools and multigenerational families -Partnerships county wide-trusted messenger -Reliance on voice/phone need to incorporate video/relay -Social media - Emails - Templates on websites, - Microsoft products - Radios - Texting - HRM systems - In person

	Reverse 911 alerts Funding TPCHD, Victim Services through courts, state office for deaf and hard of hearing (ODHH), Human services, Deaf/blind service center, home healthcare associations, first responders, transportation services	Outdated resource lists, who's who and trust Knowledge gaps--Where do I go? Funding Relationships between EM, Human Services, local organizations (not us though!) Are all homebound individuals accounted for? What about those who don't use services? Loss of 1 stop shot--example 211, where to start, location, road conditions, cell phone/power reliability, multi-disaster, water sources/food, assistance-special connections, environmental safety Mistrust of government, political impact Difficult to scale up workforce to push out messages Critical Information Funding cuts	- Standardized forms in writing - Different channels at the same time - Equity in receiving information - Trusted community groups - Different languages - Deaf/HOH - Read/write
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Appendix D: Preliminary Improvement Plan

Capability	Issue/Area for Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Operational Coordination	Fragmented communication network	Establish cross-sector coordination working group				
Situational Assessment	Unknown full scope of homebound population	Create multi-agency critical care registry				
Public Information and Warning	Inconsistent messaging for vulnerable populations	Develop plain-language, multi-lingual materials				
Planning	Lack of formalized homebound inclusion	Update regional emergency plans with homebound provisions				

