

Institute *for* Climate, Water, *and the* Environment

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GONZAGA UNIVERSITY



Institute *for* **Climate, Water,** *and the* **Environment**

Our Vision

We envision a transition to integral Earth-human relations characterized by thriving, equitable human societies within flourishing ecological communities.

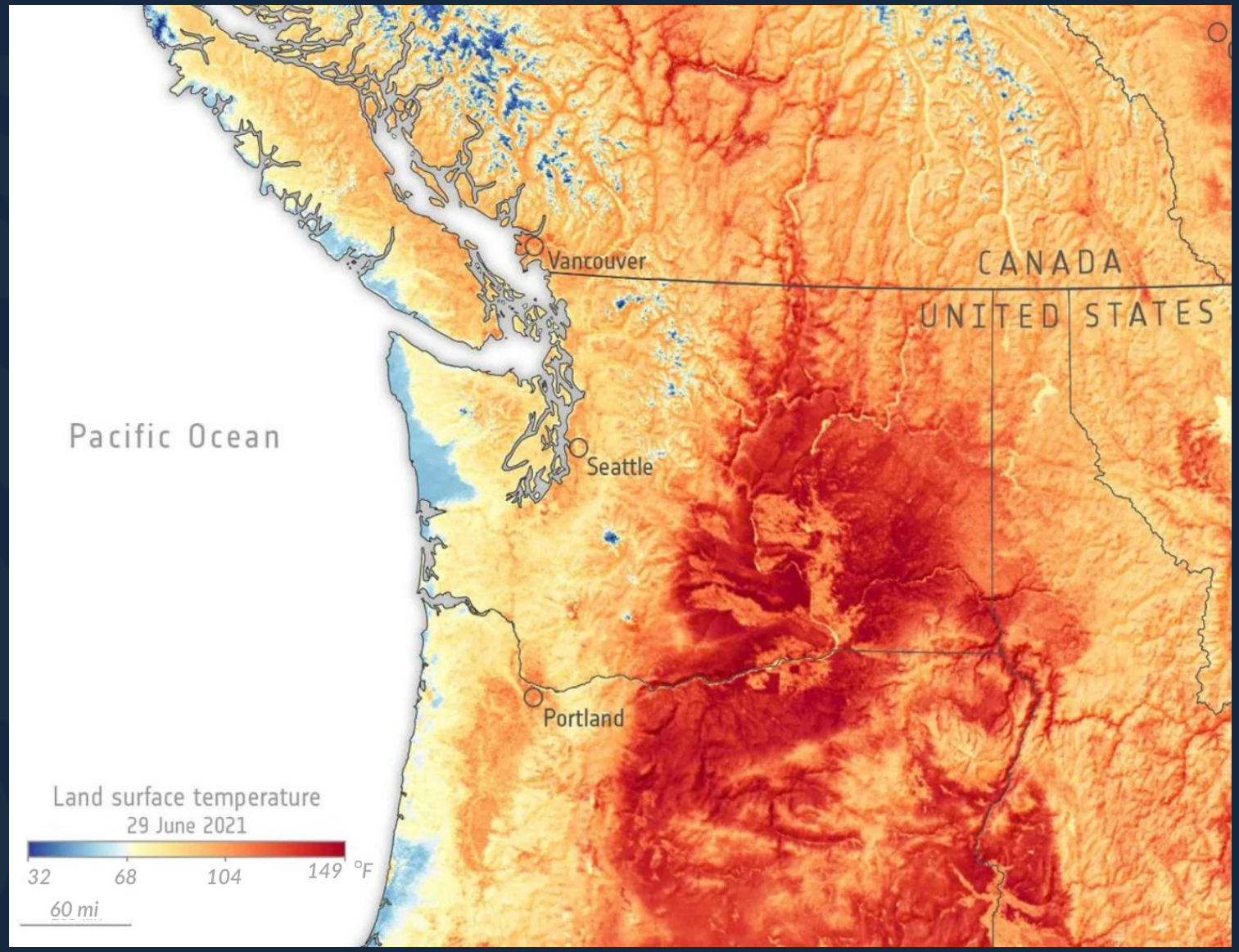
Community-engaged and community-led climate resilience planning in the Inland Northwest

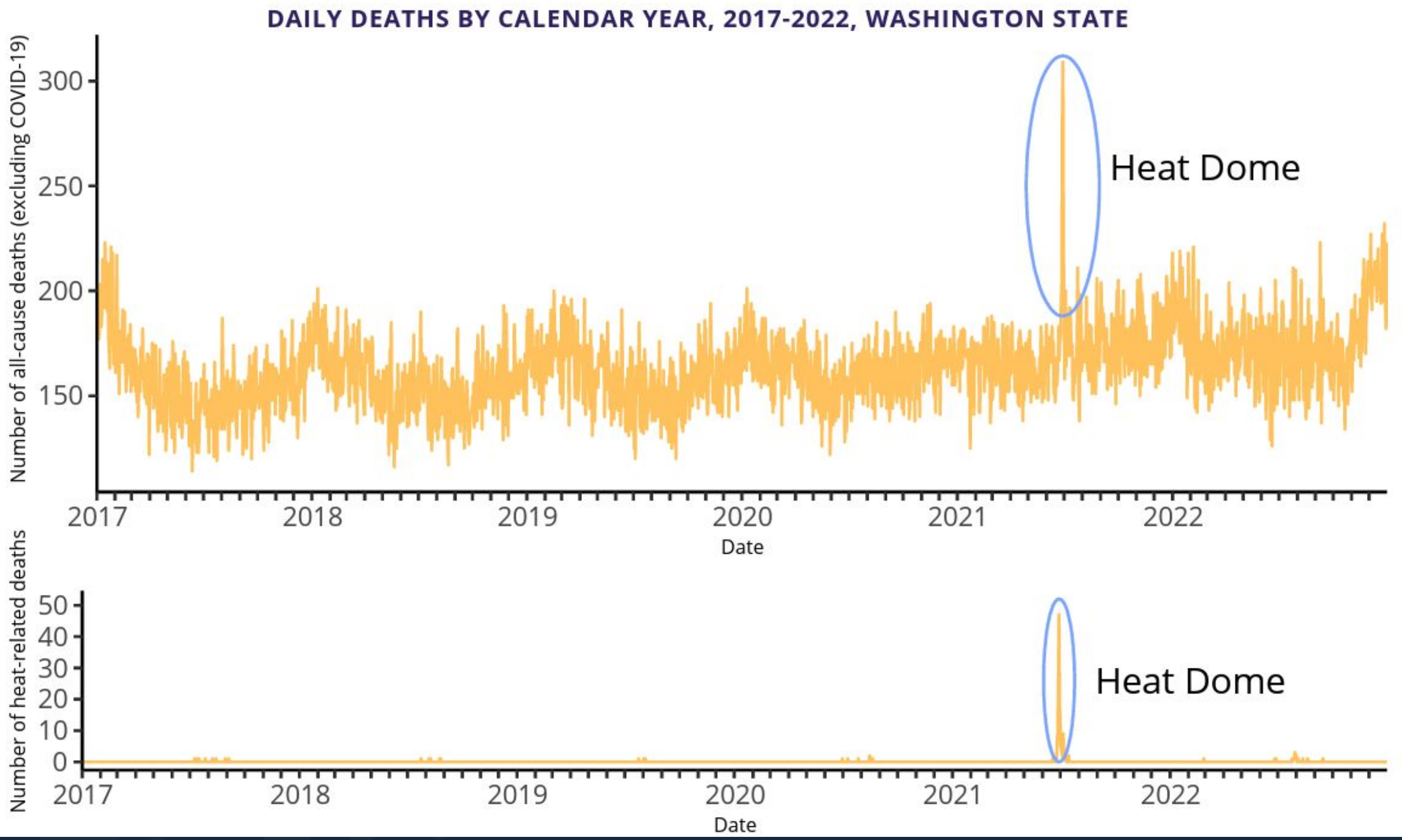
The Catalyzing Event

2021 Northwest Heat Dome

157 heat-related deaths in WA

19 heat-related deaths in Spokane County

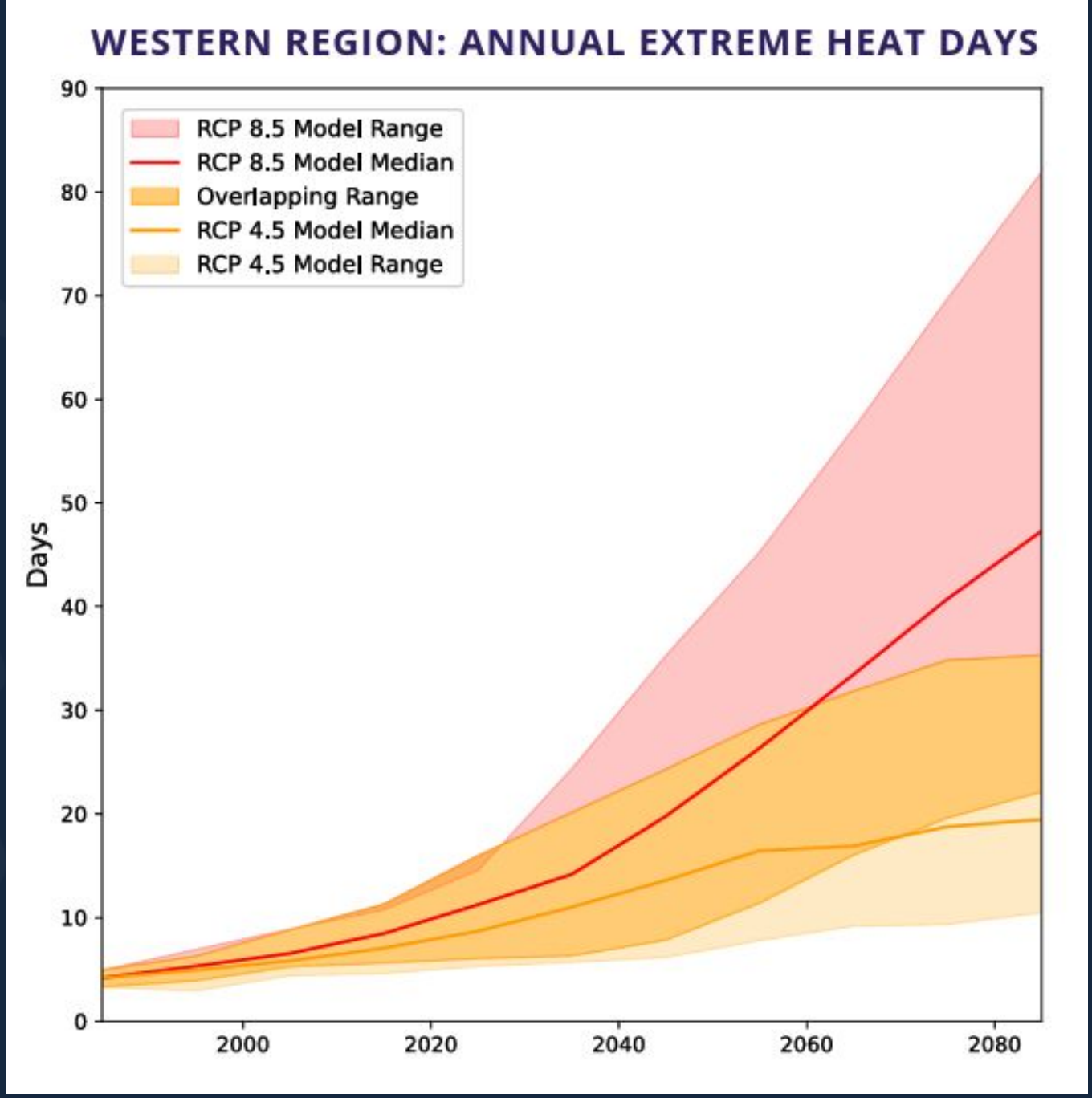




Source: ”In the Hot Seat: Saving Lives from Extreme Heat in Washington State”

Western Washington

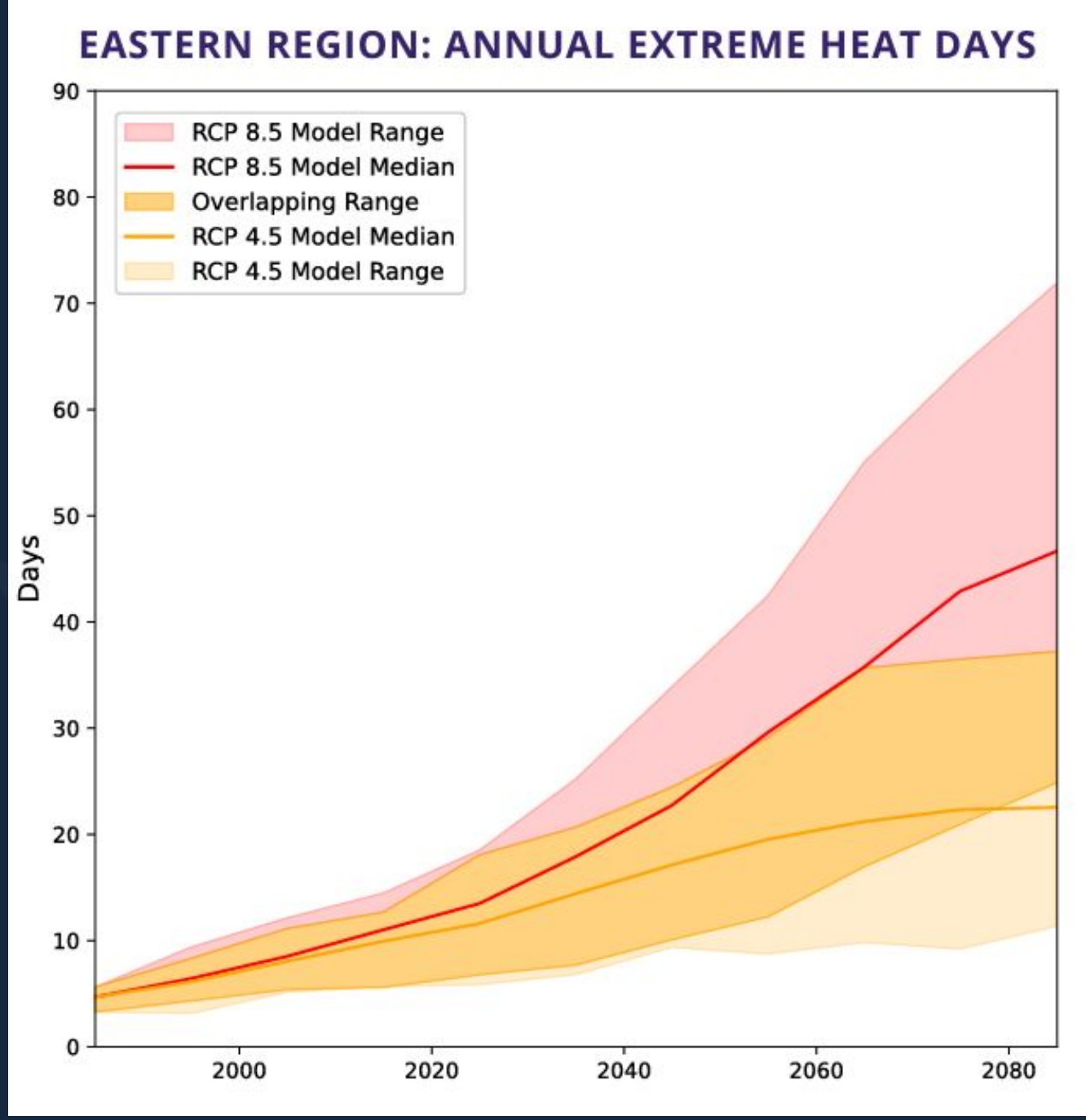
Average annual extreme heat days is projected to increase from historical avg of 3 days to 17-27 days of extreme heat by mid-century.



Source: ”In the Hot Seat: Saving Lives from Extreme Heat in Washington State”

Eastern Washington

Average annual extreme heat days is projected to increase from historical average of 3 days to 20-30 days by mid-century.



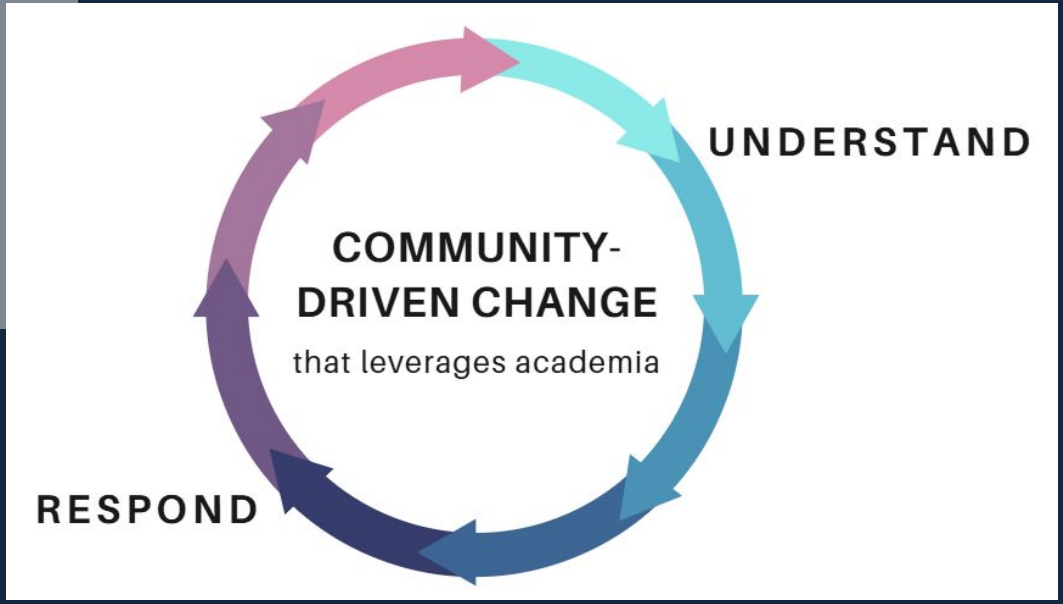
Source: ”In the Hot Seat: Saving Lives from Extreme Heat in Washington State”

Climate Resilience Project

The Climate Resilience Project supports communities in the Inland Northwest in understanding, preparing for, and responding to climate-driven events. In collaboration with diverse regional partners and informed by intentional community engagement, we work to create equitable human societies within flourishing ecological communities in the face of a changing climate.



Art by Ricardo Levins Morales

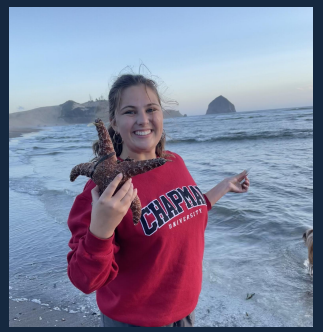


Our Climate Resilience Team

STUDENT COMMUNITY OUTREACH AND RESEARCH ASSISTANTS









+2

FULL-TIME STAFF



Program Manager



Program Coordinator

AFFILIATED FACULTY



Env. Studies



Sociology



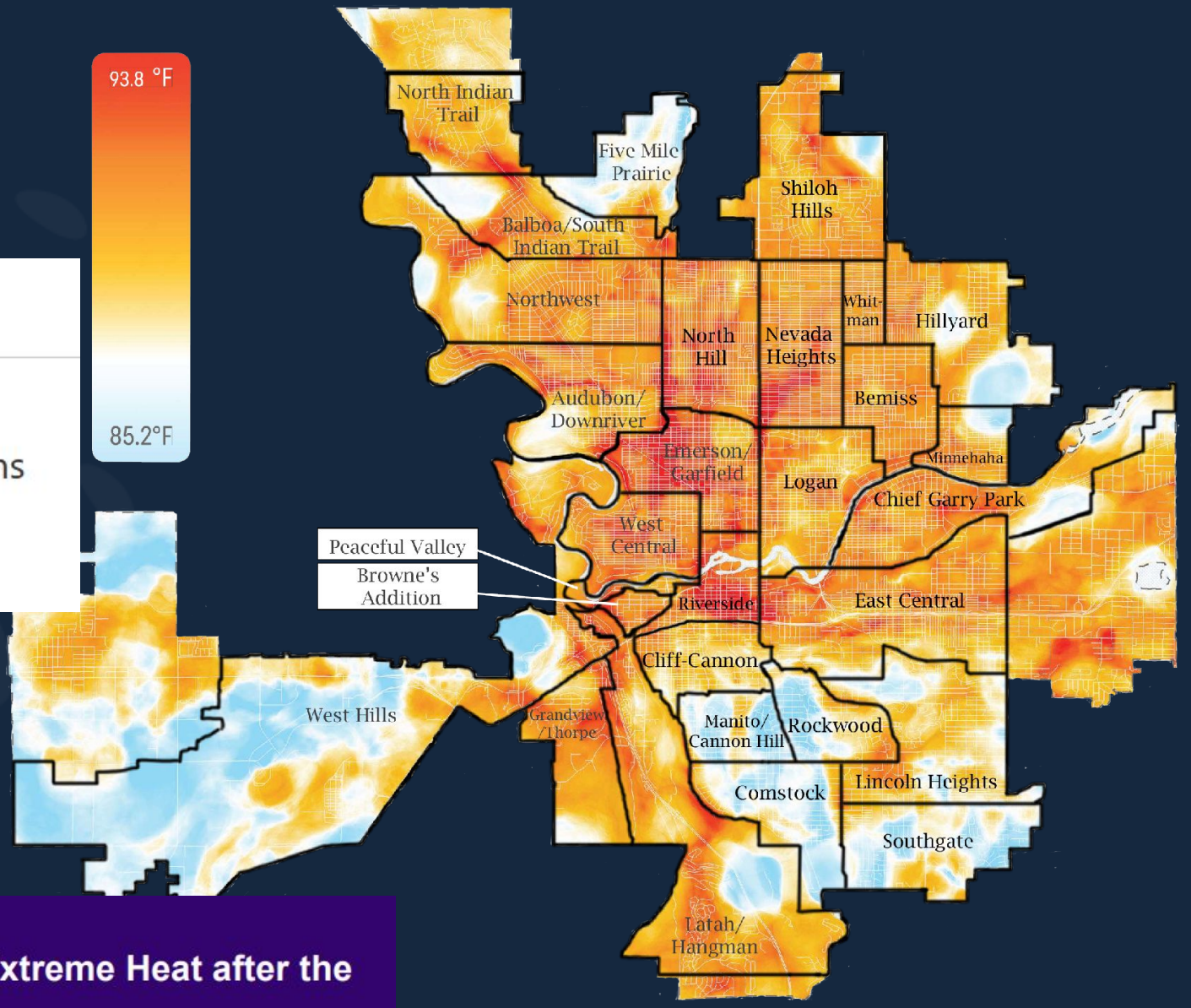
Public Health



Engineering

- Urban heat island mapping
- Community survey
- Stakeholder symposium

Afternoon Temperatures in Spokane from 3 - 4 PM



ENVIRONMENTAL RESEARCH
HEALTH

PAPER • OPEN ACCESS

Building community resilience to extreme heat: Lessons learned from Spokane, WA community conversations

A Reed*, B Henning, M Cortes Espinosa, H McKinley and T Busch Isaksen

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IN THE HOT SEAT:
SAVING LIVES FROM EXTREME HEAT IN WASHINGTON STATE

Beat the Heat:
Spokane, WA Community's Voices Around Extreme Heat after the 2021 Northwest Heat Dome.

Jason J Lau[1], Tania Busch Isaksen[2], Kaitlan Ducken[3], Kate Tokareva[4], Brian G Henning[3]

Insights from Community-Engaged Research:

- Engage in proactive planning
  - Prioritize nature-based, long-term solutions
- Health risk and exposure reduction education
- Financial assistance for home weatherization, HVAC improvements, and energy bills
- Establish safe locations for information sharing and resource distribution during extreme weather
- Improved coordination and collaboration across Spokane organizations

Extreme Heat Health

Risk and Prevention

Mark R. Vossler, MD



WASHINGTON PHYSICIANS FOR SOCIAL RESPONSIBILITY

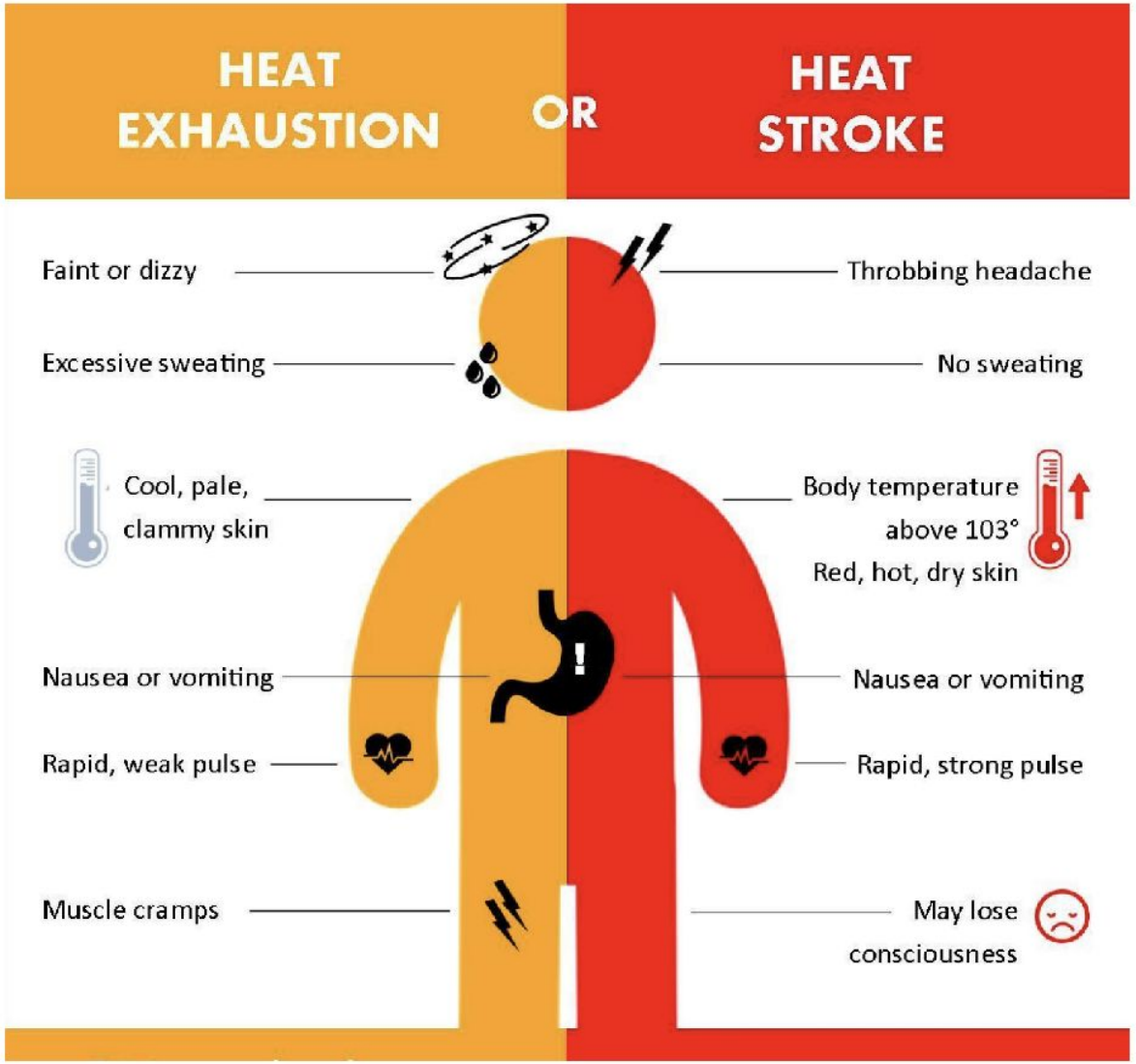
Washington Physicians for Social Responsibility

- 3000 plus health professionals and other public health advocates across WA
- Major focus on health impacts of climate change and environmental pollution
- Also work on reducing impacts of economic inequity on health and abolition of nuclear we



WASHINGTON PHYSICIANS FOR SOCIAL RESPONSIBILITY

Acute Heat Illness Spectrum

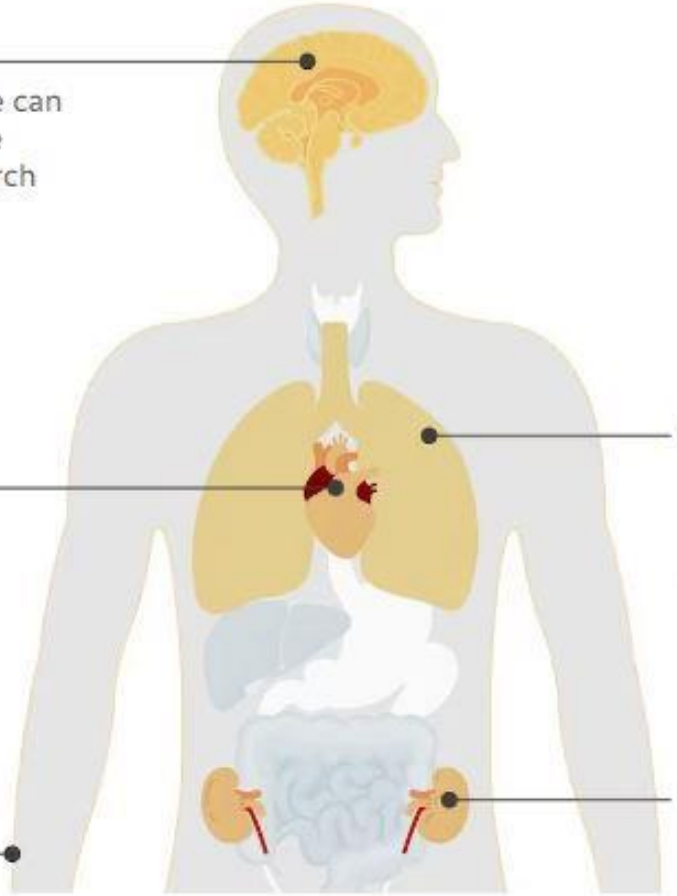


How extreme heat affects the body

Brain
Scientists say high heat exposure can lead to cognitive dysfunction, like confusion or memory loss. Research shows it can also worsen some mental health conditions.

Heart
Extreme heat puts strain on the heart by making it work harder — and can lead to heat exhaustion or heat stroke if your cardiovascular system can't properly regulate your internal body temperature.

Skin
Extreme heat conditions can cause an itchy skin rash. More critically, a combination of high heat and humidity makes it harder for your body to properly sweat to cool itself — which can hike your risk of overheating.



Lungs
Breathing in high heat can affect lung function, causing inflammation, while also flaring up any existing lung conditions, like asthma or COPD.

Kidneys
If you get dehydrated because of extreme heat, that can lower your kidney function and puts you at a higher risk of kidney injury.

WASHINGTON PHYSICIANS FOR SOCIAL RESPONSIBILITY

(CBC)

Vulnerability to Extreme Heat

- Physiologic Vulnerability
  - Elderly
  - Very young
  - Chronic diseases: heart, lung, diabetes, psychiatric meds
- Temporal Vulnerability
  - Nocturnal heat worse
  - Spikes over baseline temperature worse
- Socioeconomic Vulnerability
  - Low income
  - Racially redlined



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↑ Mortality with Northwest Episodic Heat Events

- People don't know the danger of heat, how to stay safe. We are not adapted to heat (physiologically or our built environment)
- often don't have A/C. Homes built to retain heat.
- Risk for Mass Casualties: The 6/2021 h
  - over the Frazier River Valley in BC
  - BC Coroner determined that 619 deaths were caused by extreme heat just during the week of the event. Total mortality: thousands
  - 98% died in their own home
  - Paramedics not even called in 28% of deaths



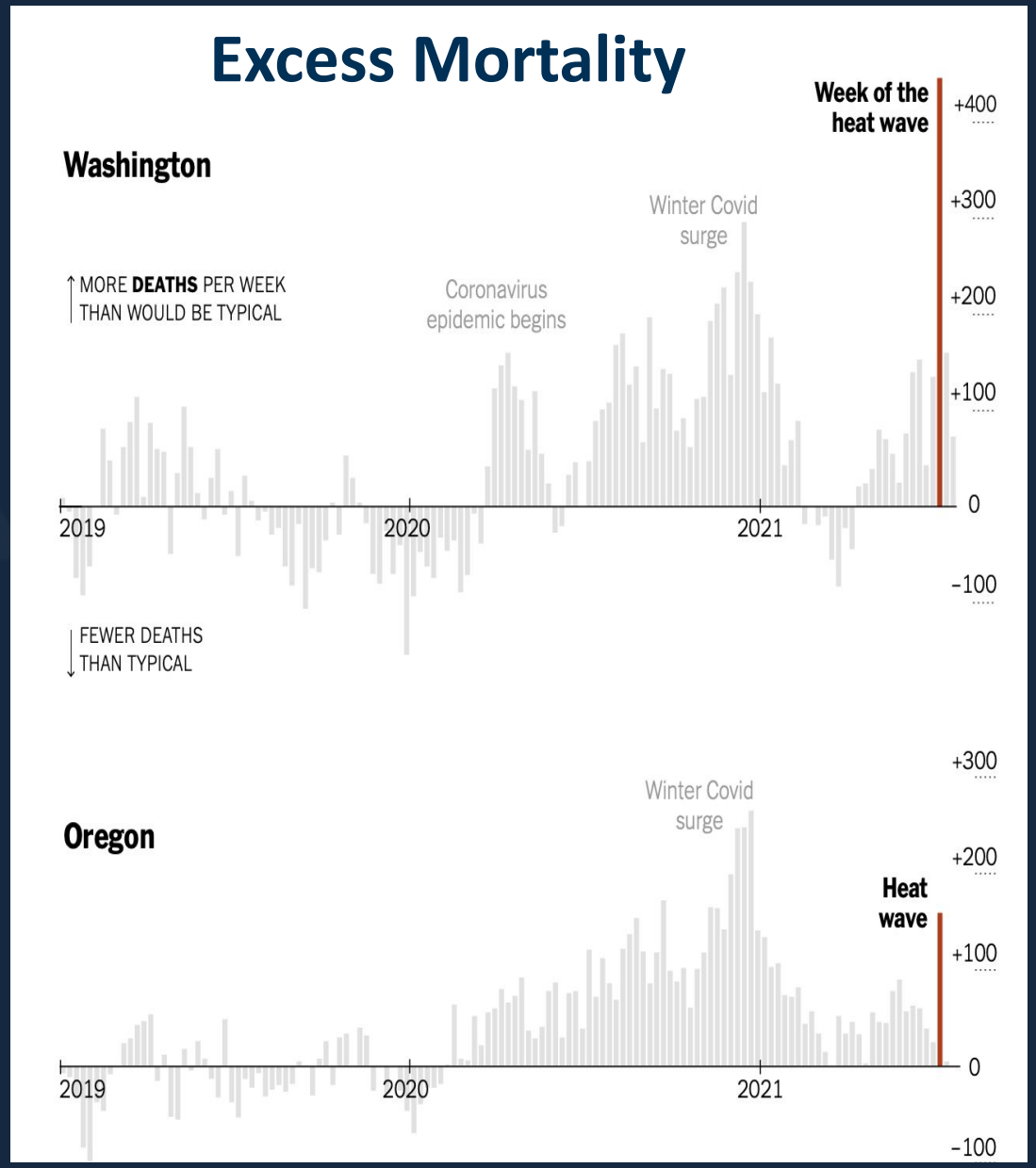
WASHINGTON PHYSICIANS FOR SOCIAL RESPONSIBILITY

Total Mortality much higher than the official count of heat event deaths

- Official Heat Deaths mostly the heat stroke deaths
- BC: 619 deaths
- Total: thousands
- Washington Dept. of Health: 157 deaths :

Deadliest event in WA State History

Heart attacks most common cause
- not coded as heat related deaths



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Paramedics, ERs and ICUs all overwhelmed

- In Vancouver, the Paramedics increasingly delayed, then unable to respond, even with delays
- 83% of the victims were already dead or died at the scene
- Paramedics not able to follow the standard of care for heat stroke
- EMS overwhelmed in All North
  - Valley Medical Center ER received 56 heat event victims in 8 hours {6/28/21)

- Kent Auburn Valley is a heat island, covered in asphalt, and also where low resource population in King County lives



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Spokane Community Resilience Collaborative

Founded in April 2024; 18 active member organizations

- Goal 1: Develop city-wide extreme heat and wildfire smoke resilience plans for Spokane
- Goal 2: Develop a network of climate resilient community buildings with supportive programming and infrastructure throughout Spokane
- Goal 3: Create and maintain digital tools that provide educational resources to build household-level resilience



A climate resilience plan for the community, by the community

- 7 Goals
  - 33 strategies
    - Progress report
    - Responsible actors
    - Committed actions
      - Accountability metrics
    - Timeline

Annual progress reporting



To be released soon!

Spokane Resilience Plan Goals:

1. Expand and improve community education on extreme heat and wildfire smoke safety
2. Improve accessibility to residential cooling and air filtration infrastructure
3. Implement neighborhood programs that build trust, social cohesion, and connection to services during extreme events
4. Update policy and public infrastructure to minimize negative impacts from extreme heat and poor air quality

Spokane Resilience Plan Goals:

5. Prioritize green infrastructure throughout urban development projects
6. Utilize regional research partnerships to explore emerging climate resilience solutions
7. Periodically adapt Spokane Resilient Futures in collaboration with the community



How we support extreme heat policy

- Summer 2024 Spokane city law
  renters' right to install cooling
- Spring 2026 WA state law
  ESSB 6200 renters’ right to *install* cooling
- Summer 2026 Spokane city law
  Renters' right to cooling (first in the Northwest!)

Spokane Renters' Right to Cooling

- Passed with a 5-2 city council vote on 7/29/2026
  - After five months of partnership (or three years, depending how you're counting)
- Mayor Lisa Brown signed into law on 8/3/2026





Spokane Renters' Right to Cooling

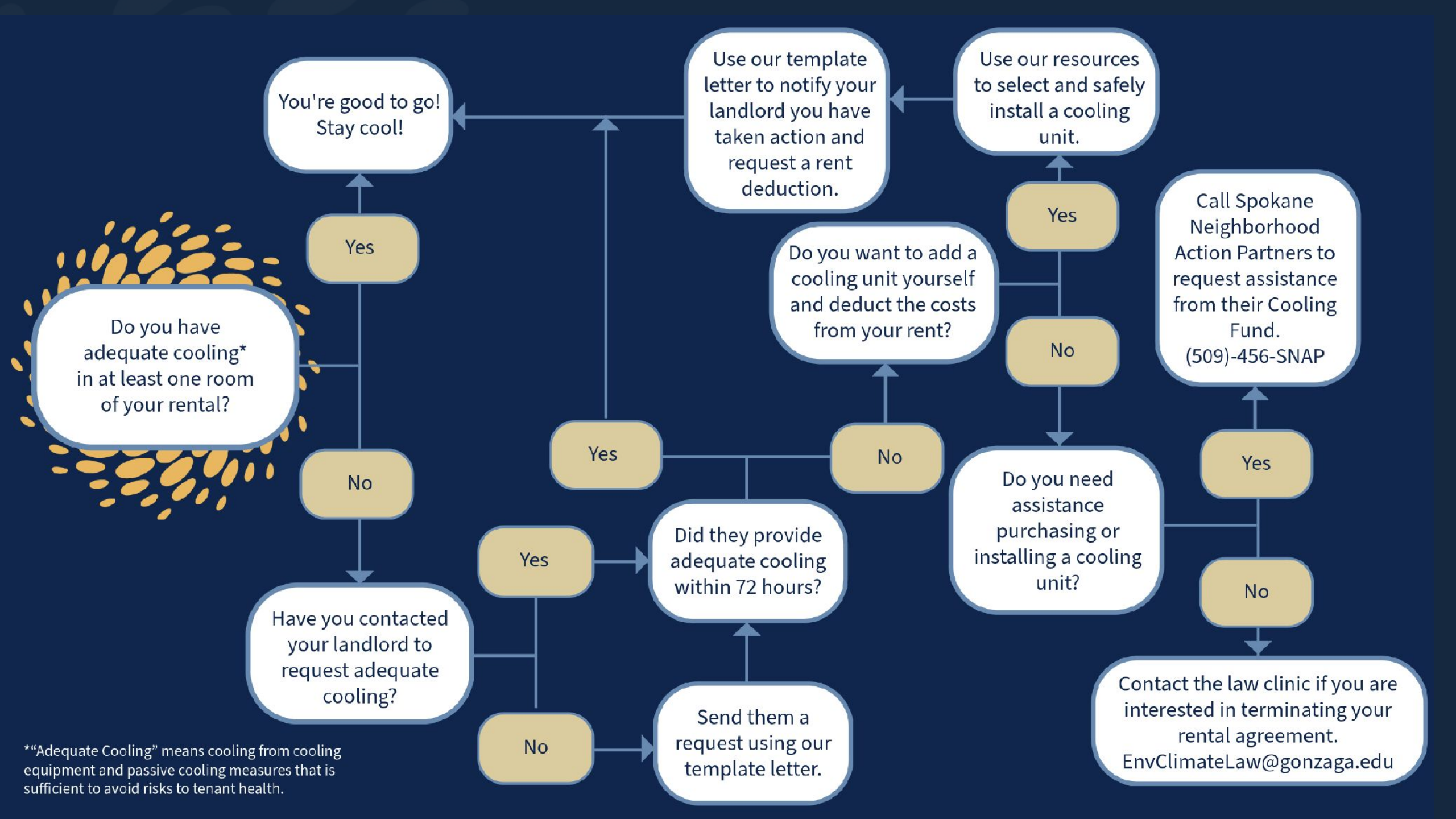
Effective immediately, "at least one room in a dwelling unit shall be provided with cooling equipment that achieves adequate cooling"

- "Adequate cooling" means cooling that is "sufficient to avoid risks to tenant health"
- All leases "shall be accompanied by a separate and prominent notice to tenants of their rights, responsibilities, and restrictions related to installation and operation of cooling equipment."
- Compliance extension of up to two years is possible

Spokane Renters' Right to Cooling

If tenant does not receive adequate cooling within 72 hours of a written request:

- Tenant may arrange for installation of adequate cooling and deduct the cost from rent (up to $500, inflation adjusted). (A/C purchased remains the property of the landlord.)
- OR tenant may terminate rental agreement


Do you have adequate cooling* in at least one room of your rental?
Yes
You're good to go! Stay cool!
No
Have you contacted your landlord to request adequate cooling?
Yes
Did they provide adequate cooling within 72 hours?
No
Send them a request using our template letter.
Yes
Use our template letter to notify your landlord you have taken action and request a rent deduction.
No
Do you want to add a cooling unit yourself and deduct the costs from your rent?
Yes
Use our resources to select and safely install a cooling unit.
No
Do you need assistance purchasing or installing a cooling unit?
Yes
Call Spokane Neighborhood Action Partners to request assistance from their Cooling Fund. (509)-456-SNAP
No
Contact the law clinic if you are interested in terminating your rental agreement. EnvClimateLaw@gonzaga.edu
*"Adequate Cooling" means cooling from cooling equipment and passive cooling measures that is sufficient to avoid risks to tenant health.

Implementing renters' right to cooling

- Education campaign with Tenants Union of Washington State
- Advocating for more resources for the Department of Code Enforcement
- A second ordinance was passed by City Council directing some 1590 funds to be eligible for heating, cooling, or weatherization

What if your landlord doesn't respond?

If you request cooling and do not receive a response within 72 hours of notifying you landlord, you may take the following actions:

- Notify your landlord you will be purchasing and installing a device yourself.
- Deduct up to $500 from that month's rent to cover purchase and installation costs. Keep your receipt from purchase.

Helpful Tips!

- Document indoor temperatures.
- Communicate with your landlord in writing.
- Keep copies of all notices and responses.

For more information contact:

SNAP

(509) 456-7627

Tenants Rights Hotline

(206) 723-0500

Office of Code Enforcement

Call 311

Gonzaga Law Clinic

EnvClimateLaw@gonzaga.edu

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Right to Cooling Guide for Renters



GONZAGA UNIVERSITY | Institute for Climate, Water, and the Environment

Here's what you need to know!

- The Renters' Right to Cooling Legislation passed, which means renters have a right to a cool and safe home!
- All rental homes must have an air conditioning unit in at least one room that is not a bathroom or kitchen.
- Cooling provided should be adequate for your health as a resident.
- If your landlord doesn't provide proper cooling, you should submit a request in writing. (See back for a template landlord letter.)

What cooling device do I need?

Everybody's cooling needs are different, so it's important to consider what would work best for you and your home when picking a unit!

Window Unit

Pros:

- Good for larger rooms
- Conserves floor space
- More efficient cooling

Cons:

- Difficult Installation
- Requires proper window structure and durability



Portable Unit

Pros:

- Easy installation and storing
- Can be used in just about any room

Cons:

- May need to be drained more frequently



Other features to consider:

→ Energy Star certification (Save on utility bills!)

→ Air filtration features (For safety during wildfire smoke!)

→ Noise level

ENERGY STAR

Safety Information for Device Installation

- Never connect your unit to extension cords!
- Follow device instructions during installation process

Safe and Cool Washington

- Coalition of advocates, activists, experts with backgrounds in tenants' rights, affordable housing, public health, clean energy and more
- Simple Mission: Ensure all Washingtonians are safe and cool during extreme heat events
- Goal: translate the right to cooling into actual access to cooling
- Method: use the Spokane ordinance as a template f actions in other cities and statewide.

SAFE + cool WA