

2026 Northwest Preparedness & Resilience Conference Agenda

September 16-17, 2026 | Seattle, WA

Wednesday, September 16, 2026				
8:00-9:00 AM	Registration HRC First Floor Lobby (Near Starbucks)		Breakfast HRC Lobby 280 (Above Starbucks)	
9:00-10:00 AM	Tribal Welcome , <i>Jeffrey Thomas, Muckleshoot Elder</i> Conference Welcome , <i>Resham Patel, University of Washington</i> <u>Advancing Disaster-Resilient Communities: Research, Partnerships, and Action</u> <i>Nicole Errett, Tania Busch Isaksen, Jeffrey Berman, Sarah Bliss Matousek</i> ARC Room 147			
10:15-11:00 AM	<u>Enhancing Regional Resilience: Evidence-Based Approaches to Public Health Preparedness</u> <i>Nicole Errett, Robin Soler, Resham Patel, Kevin deVoss, Jamie Donatuto</i> HRC 155	<u>Dam and Levee Mitigation Before and After the December 2025 Floods</u> <i>Andrew Dixon, Mercedes Stroeve</i> HRC 145	<u>Physical and Social Dimensions of Ground Failure</u> <i>Morgan Sanger, Daniel Acosta Reyes</i> HRC 135	<u>Response Roundtables</u> HRC 101
11:15 AM-12:00 PM	<u>Building Trust with LHJ Leadership: A Data-Informed</u>	<u>Primary Care Strategies and Health Care Sector Engagement for</u>	<u>Arctic Emergency Management: Alert and warning technology as a tool</u>	<u>Share Your Expertise: Inform Future CDRC Initiatives</u> <i>Cat Hartwell, John Choe</i>

	<u>Approach for PHEPR Programs</u> <i>Elizabeth Cox, Gabby Hadly</i> HRC 155	<u>Addressing Poor Air Quality, Extreme Heat, and Resilience</u> <i>Rose Gunn, Bradley Kramer</i> HRC 145	<u>for the protection and preservation of Indigenous Culture, Heritage, and Tradition across the Alaskan Arctic</u> <i>John Pennington</i> HRC 135	HRC 101
12:00-1:00 PM	Networking Lunch HRC First Floor Lobby The NIH's Health and Extreme Weather (HEW) Program: The Initiative, UW's HEW Activities, and Planning for the Future (<i>Space limited</i>) HRC 101			
1:00-2:00 PM	Keynote: <u>Beyond the Blueprint: How Experience Shapes Readiness for the Next Special Pathogen Response</u> <i>Angela Vasa, MSN, RN</i> <i>Director, Emergency Preparedness and Special Pathogen Programs, Nebraska Medicine</i> ARC Room 147			
2:15-3:00 PM	<u>Keeping the lights on when the power goes out: Advancing community-driven energy resilience work in Washington State</u>	<u>Equity, the Butterfly Effect, & Crisis Response in King County</u> <i>Mariel Torres</i> <i>Mehdipour, Roi-Martin Brown</i>	<u>Bicycles in Disaster Response: Case Studies and Preparedness Opportunities</u> <i>Andrew Dannenberg,</i> <i>Elizabeth Davis</i>	Rumor Playbook Workshop <i>(Invitation only)</i> HRC 101

	<i>Elizabeth King, Kate Pedersen, Dottie Metcalf-Lindenburger</i> HRC 155	HRC 145	HRC 135	
3:15-4:00 PM	<u>From Risk to Refuge: Advancing Tsunami Vertical Evacuation Structures Through Whole-Community Collaboration</u> <i>Maximilian Dixon, Dante DiSabatino, Cale Ash</i> HRC 155	<u>Reuniting When It Matters Most: Patient & Family Reunification – Progress and Path Forward</u> <i>Kathryn Quinn, Hannah Haakana, Shelby Frazier</i> HRC 145	<u>Determining Infiltration Risk from Wildfire Smoke Events: CVAT, A New Evidence-Based Assessment Tool</u> <i>Abby Nelson, Gillian Mittelstaedt</i> HRC 135	
4:15-5:00 PM	<u>Responsible AI for Preparedness and Resilience: Promise, Pitfalls, and Practice</u> <i>John Choe, Sarah Miller, Matt Green</i> HRC 155	<u>Engaging Hard-to-Reach Communities through Resiliency Partnerships</u> <i>Renee Curtis, Dan Trifone</i> HRC 145	<u>Cascadia Connections Dashboard: An Interactive Directory for Earthquake Resilience in the PNW</u> <i>Andy Clifford</i> HRC 135	<u>Career Connections: Linking Talent and Opportunity</u> HRC 101
5:00-6:30 PM	Networking Reception HRC 180 / 280			

Thursday, September 17, 2026				
8:00-9:00 AM	Breakfast & Networking HRC Lobby 280 (Above Starbucks)			
9:00-10:00 AM	Day 2 Plenary: <u>Beyond the Match: Lessons Learned from FIFA World Cup 2026 for Large-Scale Event Planning and Coordination</u> <i>Moderator: Sheri Badger</i> <i>Panelists: Alexa Bach, Kelly Hill, Nick Solari, Nicole Johnson</i> ARC Room 147			
10:15-11:00 AM	<u>Mental Models of Extreme Cold in King County, Washington</u> <i>Mary Hannah Smith, Juliette Randazza, Reid Wolcott</i> HRC 155	<u>The Hotel2Hospital Conversion Project: A Bold Solution for Prolonged Medical Surge</u> <i>Charlie Little, Amy Herron</i> HRC 145	<u>Community Health Workers: The Frontline of Climate Adaptation & Emergency Preparation</u> <i>Jessica Nischik-Long, Zoraya Uder</i> HRC 135	<u>Response Roundtables</u> HRC 101
11:15 AM-12:00 PM	<u>Advancing community-led resilience through direct funding: Case studies from the Pacific Northwest</u> <i>Noelani Villa, Jason Vogel</i>	<u>Imagine emergency healthcare being available within hours after a devastating earthquake. Help us make this a reality.</u>	<u>The Alaska Tribal Health System: Partnership, Preparedness & Response</u> <i>James Benzschawel, Nathan Wormington</i> HRC 135	<u>From Washington, D.C. to Washington State: Navigating Federal Policy Changes in Preparedness and Healthcare</u> <i>Onora Lien, Meghan Jernigan</i>

	HRC 155	<i>Maximilian Dixon, Kadrina Queyquep, Carl Misra, Reid Zimmerman</i>		HRC 101
		HRC 145		
12:00-1:30 PM	Networking Lunch & Poster Session HRC First Floor Lobby			
12:15-1:15 PM	NWPHEPR Center Steering Committee Meeting (<i>Invitation only</i>) HRC 250			
1:30-2:15 PM	Utilizing Social Media Indicators as an Early Indicator of Potential Foodborne Outbreak Events <i>Marion Fischer, Noël Hatley, Kollin Leisinger, Emily Reichley</i> HRC 155	Confluent Goal: From State MCI Plan to Statewide Exercise <i>Jennifer Lord</i> HRC 145	Community-engaged and Community-led Climate Resilience Planning in the Inland Northwest <i>Dante Jester</i> HRC 135	Exploring the RAPID Facility: Technologies for Post-Disaster Data Collection <i>Jeffrey Berman, Matias Korfmacher, Andrew Lyda, Maxwell Wondolowski</i> HRC 101 and outside
2:30-3:15 PM	Co-developing community-centered climate adaptation in the Duwamish Valley: the SASPER and Living With Water projects	ASPR – More Than Just DMATs: Expanding the Nation’s Health Security Enterprise <i>Jesus Reyna</i> HRC 145	Interpreting the Risk: Navigating the 2026–2027 El Niño and a Look at the New Era of the National Weather Service <i>Reid Wolcott</i>	

	<i>BJ Cummings, Paulina López, Alberto Rodriguez</i>		HRC 135	
	HRC 155			
3:30-4:30 PM	Keynote: <u>The Domino Effect: Climate Change, Infrastructure Disruption, and Population Health</u> <i>Joan Casey, PhD</i> <i>Associate Professor, Epidemiology, Environmental and Occupational Health Sciences, University of Washington</i> Conference Closing ARC Room 147			

Post Conference Programming (optional)

Friday, September 18, 2026 - Post-Conference Programming	
8:30 AM - 5:00 PM	AI Workshop HRC 101 Note: Separate registration required. Please click HERE to register.
8:45-11:00 AM	Meet the Mets: National Weather Service Seattle Tour Location details will be sent to registered participants. Note: Separate registration required; space limited. Contact cdrc-conference@uw.edu to register. Attendees must provide their own transportation, REAL ID required for access to NOAA Western Regional Center campus.

***Draft agenda is subject to change.** Additional sessions may be announced and timing is subject to change.

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Oral Presentation Abstracts

Advancing Disaster-Resilient Communities: Research, Partnerships, and Action

Nicole Errett, Tania Busch Isaksen, Jeffrey Berman, Sarah Bliss Matousek
University of Washington, Gonzaga University

The University of Washington Center for Disaster Resilient Communities (CDRC) advances a simple but powerful idea: resilient communities are built through partnership. As an applied scholarly center, CDRC works alongside public agencies, community organizations, and universities to ensure research responds directly to partner needs and real-world disaster challenges. This ethos shaped CDRC's response to the 2025 western Washington floods, when the Center convened listening sessions to identify urgent community priorities and inform recovery-focused inquiry. It also guided the Collaborative on Extreme Heat Events, launched after the 2021 heat dome to translate lessons learned into coordinated action, cross-sector learning, and practical adaptation.

Following the 2026 Spokane wildfires, CDRC again mobilized to coordinate research in service of affected communities. Through internal research response calls, issue identification and prioritization, and UW RAPID Facility support for perishable-data collection, CDRC helped organize timely, actionable scholarship. The Center also partnered with Gonzaga University, Washington State University, and other Washington institutions to establish and co-lead the Spokane Wildfire Academic Consortium. This opening plenary will explore how disaster scholarship can be most powerful when it is collaborative, responsive, and grounded in community needs.

Advancing community-led resilience through direct funding: Case studies from the Pacific Northwest

Noelani Villa, Jason Vogel
Climate Impacts Group

The University of Washington Climate Impacts Group (CIG) piloted two grant programs that advance community-led climate resilience in the Pacific Northwest: the Washington Coastal Resilience and Adaptation Funding for Tribes (WA-CRAFT), and the Northwest Climate Resilience Collaborative's Community Grants Program (NCRC CGP) for frontline community organizations. Together, these CIG-led programs direct flexible funding to Tribes, nonprofits and community-based organizations, across Washington and regionally, to support locally-led adaptation priorities such as capacity-building and hazard-specific planning. The first case study demonstrates how the WA-CRAFT awards center Tribal sovereignty by asking Tribes to define what climate resilience means in their own homelands. This approach resulted in a wide range of proposals- coastal flooding, erosion, tsunami risk, and riverine hazard assessments, to strengthening governance, expanding technical staffing, and improving energy and planning systems that underpin long-term resilience. Tribally led projects illustrate how small grants can support updates to climate adaptation plans for high-risk coastal villages, and advance other community specific priorities that fall outside traditional federal funding pathways. In the second case study, we highlight the NCRC Community Grants Program that funded five projects across Washington, Idaho, and Oregon. Projects were led by smaller, community-based non-profits that sought to advance grass-roots priorities of community-led research, urban agriculture, Tribal youth empowerment, policy change, and building traditional ecological knowledge among Indigenous community members. The NCRC grants program demonstrates the value of taking seriously grass-roots and community-based approaches to addressing climate challenges and the role university-based actors can play in affecting change at a local level. Taken together, these case studies demonstrate how small, community-centered grants administered by a regional climate science hub can catalyze hazard-specific analysis and systems-level change, while keeping Indigenous and frontline community leadership at the center of coastal, riverine, and multi-system adaptation across the Pacific Northwest.

Arctic Emergency Management: Alert and warning technology as a tool for the protection and preservation of Indigenous Culture, Heritage, and Tradition across the Alaskan Arctic.

John Pennington, Ph.D., CEM

University of Alaska Fairbanks - Center for Arctic Security & Resilience (UAF-CASR)

Emergency management in the Alaskan Arctic operates within a uniquely complex environment defined by geographic isolation, accelerating climate impacts, and the centrality of Indigenous culture, heritage, and tradition. This presentation examines how alert and warning technology—traditionally viewed as a life-safety tool—can also function as a culturally grounded mitigation strategy. Using the Iñupiat Community of the Arctic Slope Department of Emergency Management (ICAS-DEM) as a case study, this research highlights how modern systems such as FEMA’s Integrated Public Alert and Warning System (IPAWS) are being adapted to meet the needs of Alaska Native communities. ICAS-DEM has successfully integrated alert and warning capabilities into a broader emergency management framework across the entirety of the Arctic that prioritizes not only life safety, but also the protection of cultural lifeways, language, subsistence practices, and community cohesion. Through the incorporation of traditional communication pathways and community-centered decision-making processes, ICAS-DEM demonstrates how technology can complement Indigenous values rather than displace them. The presentation will explore operational successes, including real-world alert activations, coordinated emergency messaging, and community engagement strategies that reinforce trust and responsiveness. Ultimately, this session argues that alert and warning technology, when implemented through an Indigenous-led framework, can serve as a powerful tool for both disaster risk reduction and cultural preservation. The ICAS-DEM model offers a scalable approach for Arctic and other Indigenous communities facing similar challenges.

ASPR – More Than Just DMATs: Expanding the Nation’s Health Security Enterprise

Jesus Reyna

US Department of Health and Human Services / Administration for Strategic Preparedness and Response

This presentation provides a comprehensive overview of the Administration for Strategic Preparedness and Response (ASPR) and challenges the common perception that its role is limited to deploying Disaster Medical Assistance Teams (DMATs). While operational response assets remain a critical component, ASPR’s mission is far broader—focused on strengthening national health security through preparedness, response, recovery, and resilience across multiple systems. The session will highlight ASPR’s four strategic priorities: strengthening state and local resilience, executing rapid federal response, securing the medical supply chain, and addressing emerging health threats. Attendees will gain insight into key programs such as the Hospital Preparedness Program, Regional Disaster Health Response System, and ASPR TRACIE,

which collectively enhance healthcare system readiness and coordination. Beyond response teams, ASPR plays a central role in coordinating Emergency Support Function #8, managing the Strategic National Stockpile, and leading the National Disaster Medical System—integrating federal, state, and private sector capabilities to deliver medical care during crises. The presentation will also explore ASPR’s leadership in supply chain resilience, including domestic manufacturing initiatives and stockpiling strategies, as well as its investments in biomedical innovation through BARDA. Finally, the session will examine emerging challenges such as cyber threats, climate-driven disasters, and workforce strain, and how ASPR is adapting through new initiatives in telemedicine, data systems, and advanced countermeasure development. Participants will leave with a clearer understanding of ASPR’s role and practical insights into how its programs support whole-community preparedness and response.

Bicycles in Disaster Response: Case Studies and Preparedness Opportunities

Andrew L. Dannenberg, Elizabeth J. Davis

University of Washington

Bicycles can play an important role in disaster response and recovery, providing a flexible option for navigating damaged infrastructure, gathering and distributing critical information, and providing localized aid. But bicycles are rarely integrated into official disaster response protocols. We first systematically reviewed newspaper articles about bicycle use in disasters (n=179) and found the most mentioned disasters were hurricanes (27%), flooding (15%), wildfire (11%), terrorism (10%), tsunamis (10%), and earthquakes (9%). Bicycle use was mentioned for non-evacuation travel (62%), evacuation (18%), relief distribution (11%), and emergency response (10%). Next, we examined three case studies of bicycle use in disaster response: (1) 2011 earthquake and tsunami in Japan: bicycles were used for evacuation and reconnaissance, bicycles sales and donations increased, a company developed puncture-resistant tires to facilitate bicycle use, and several jurisdictions incorporated bicycles into their emergency plans. (2) 2012 Hurricane Sandy in New York and New Jersey: volunteers delivered supplies by bicycle, bicycle commuting rose, and bicycle-powered charging stations were set up. (3) 2017 Mexico City earthquake: cyclists assisted with aid distribution, cyclists verified reports of response needs to minimize misinformation, and a cycling group published a manual to guide cyclist response for future earthquakes. We also reviewed the advantages and disadvantages of electric and non-electric road, mountain, and cargo bicycles for disaster response. To

increase bicycle use in disaster response, we examined options such as Bicycle Emergency Response Teams and Disaster Relief Trials. Our results suggest disaster response plans could be improved by incorporating bicycles.

Beyond the Blueprint: How Experience Shapes Readiness for the Next Special Pathogen Response

Angela Vasa MSN, RN

Nebraska Medicine, National Emerging Special Pathogens Training and Education Center

Over the past decade, quarantine and isolation programs have been tested by some of the world's most consequential infectious disease events, including Ebola, SARS-CoV-2, and most recently, the United States' response to Hantavirus. While plans, protocols, and exercises provide the blueprint for preparedness, real-world responses reveal the critical lessons that truly strengthen readiness. This session explores how the Regional Emerging Special Pathogen Treatment Centers (RESPTC) and the National Quarantine Unit (NQU) have evolved through successive activations and operational experiences. Presenters will examine key lessons learned across each response, highlighting how investments in infrastructure, workforce development, partnerships, and operational flexibility translated into effective patient care and public health protection during the Hantavirus event. Through a retrospective analysis of three distinct infectious disease responses, attendees will gain insight into how experience drives innovation, informs decision-making, and builds sustainable capabilities for future threats. This presentation will offer practical strategies for healthcare organizations, public health agencies, and preparedness leaders seeking to transform lessons identified into lessons applied—ensuring readiness extends beyond the plan and into practice when the next special pathogen response occurs.

Beyond the Match: Lessons Learned from FIFA World Cup 2026 for Large-Scale Event Planning and Coordination

Moderator: Sheri Badger, King County Emergency Management

Panelists: Alexa Bach, Kelly Hill, Nicole Johnson, Nick Solari

Washington Emergency Management Division, Northwest Healthcare Response Network, King County Emergency Management, Public Health – Seattle & King County

The FIFA World Cup 2026 required an unprecedented level of planning and coordination across emergency management, public health, healthcare, transportation, public safety, and community partners. While large-scale events routinely involve multi-agency collaboration, the World Cup's scope, international profile, and operational complexity demanded new approaches to regional preparedness and cross-sector alignment. This panel brings together interdisciplinary perspectives involved in World Cup planning to share how diverse partners aligned around a common mission, what coordination looked like in practice, and how planning efforts differed from other major events. Presenters will discuss the structures, relationships, and communication strategies that enabled collaboration across organizations with distinct responsibilities and priorities, while addressing interconnected issues related to health, mobility, safety, and community services. The plenary will highlight lessons learned in building trust, navigating complex interdependencies, and developing shared planning and problem-solving frameworks. Panelists will also explore lasting outcomes, including stronger regional partnerships, improved information sharing, and new coordination mechanisms that can support future mass gatherings, disasters, and other complex incidents. Attendees will leave with practical approaches for strengthening cross-sector collaboration and community resilience, informed by experiences that extend well beyond the final match.

Building Trust with LHJ Leadership: A Data-Informed Approach for PHEPR Programs

Elizabeth Cox, Gabby Hadly

Snohomish County Health Department

When Snohomish County Health Department's (SCHD) Director, Dennis Worsham, departed SCHD to become Washington State Secretary of Health, the Public Health Emergency Preparedness and Response (PHEPR) team faced a critical transition point. Establishing trust and buy-in from new leadership, Director Kim Van Pelt, and the existing Health Officer, Dr. James Lewis, became essential to sustaining and advancing preparedness capabilities in times of uncertainty. This session explores how the PHEPR program leveraged data-informed storytelling, evidence-based decision making, and strategic alignment with leadership priorities to build credibility and foster strong working relationships with executive leadership during a period of organizational change. By sharing program priority one-pagers, implementing tools such as a team SharePoint site and an AAR/IP tracking dashboard, building out an Incident Management Team, and assessing program performance, the PHEPR team was able to demonstrate clear program value, support leadership decision-making,

and position PHEPR as a trusted partner within the Health Department. Attendees will learn practical strategies for communicating data in ways that resonate with executive leadership, aligning program goals with broader organizational priorities, and proactively building trust before and during leadership transitions. The session will also highlight how tools and approaches used by SCHD, including readiness assessments, evaluation frameworks, and improvement planning tracking, reinforce transparency and accountability. Attendees will leave with adaptable approaches to strengthen leadership engagement, advocate for PHEPR programs, and ensure the continuity of critical public health capabilities during times of change.

Cascadia Connections Dashboard: An Interactive Directory for Earthquake Resilience in the PNW

Andy Clifford

University of Oregon, CRESCENT

The Cascadia Connections Dashboard is a prototype interactive directory designed to help practitioners, researchers, and other organizations discover and connect with the people, programs, and resources working to advance earthquake research and resilience across the Pacific Northwest. Developed by the Cascadia Region Earthquake Science Center (CRESCENT), the dashboard uses visual categorization and organizational roles to enable exploration of the regional seismic resilience ecosystem and promote partnerships and collaborative projects. The tool also allows users to explore relationships between organizations and is built around open-source graphing software that can support statistical network analysis using available relationship data.

This session will introduce the prototype and invite participants to identify potential use cases to help shape its development. Through hands-on exploration and small-group discussion, participants will consider how a tool like this could best support partner discovery, collaboration, and information sharing.

Career Connections: Linking Talent and Opportunity

Looking to take the next step in your career, fill an open position, or simply expand your professional network? Career Connections offers a welcoming space for informal networking and meaningful conversations. Job seekers can connect

directly with organizations and employers seeking talent, while hiring managers and recruiters can meet prospective candidates from across the preparedness, resilience, public health, healthcare, emergency management, and related sectors. Whether you're exploring new opportunities, recruiting for your team, seeking mentorship, or building professional relationships, this flexible networking space is designed to foster connections that support career growth and strengthen our professional community. Drop in, introduce yourself, and discover where new connections may lead.

Co-developing community-centered climate adaptation in the Duwamish Valley: the SASPER and Living With Water projects

BJ Cummings, Paulina López, Alberto Rodriguez

University of Washington, Duwamish River Community Coalition, Seattle Public Utilities

The Duwamish Valley is a diverse, low-income community in Seattle at the frontline of many environmental hazards, such as toxic pollution, sea level rise, and flooding. This session focuses on two community-engaged research projects in the Duwamish Valley, the Seattle Assessment for Public Health Emergency Response (SASPER) and the Living With Water (LWW) projects, which aimed to assess and enhance community resilience to climate-sensitive hazards. SASPER examined community strengths, needs, and priorities for climate change adaptation in the Duwamish Valley through applying an adapted Centers for Disease Control and Prevention methodology that involves randomized and representative door-to-door surveys. As the project concluded, the community was devastated by flooding from a 2022 King Tide, prompting the survey partner, Duwamish River Community Coalition, to request support from the University of Washington in identifying flood adaptation strategies that align with community values. The LWW project took a multimethods approach, including a literature review, community interviews, and community workshops. In engaging Duwamish Valley residents, both projects revealed a deep community commitment to being involved in planning for climate-sensitive hazards. They also affirmed that community members prefer nature-based solutions that aim to simultaneously protect natural ecosystems and human well-being over hardened infrastructural strategies for flood adaptation. A panel of project team members will discuss the importance of interdisciplinary, intersectional collaborations in community-engaged disaster research. The session will also cover logistical aspects of these partnerships, such as

distributing project resources and adjusting to shifting priorities, to offer real-world insight into building and maintaining sustainable research partnerships.

Community-engaged and Community-led Climate Resilience Planning in the Inland Northwest

Dante Jester

Gonzaga Institute for Climate, Water, and the Environment

Planning for resilience to climate hazards such as extreme heat and wildfire smoke is often led solely by centralized government agencies, such as offices of emergency management, sustainability/climate offices, or planning departments. Attendees in this session will learn about a novel, collaborative approach to climate resilience planning in Washington's second largest city, Spokane. Led by a private institution of higher education, Gonzaga University, the City of Spokane is developing city-wide climate resilience plans that involve the participation of city and county governments, but is not "owned" by them. Instead, Spokane's resilience plans are being developed by the Spokane Community Resilience Collaborative, a group comprised of representatives of organizations in diverse fields such as healthcare, education, government, and nonprofits who use their shared knowledge and expertise to support each other's work and jointly pursue new work to support a Spokane regional community that is prepared for and adaptable to change. Come to this session to learn about the Spokane Community Resilience Collaborative's community-engaged and justice-focused approach to climate resilience planning in a politically diverse region of the Inland Northwest.

Community Health Workers: The Frontline of Climate Adaptation & Emergency Preparation

Jessica Nischik-Long, Zoraya Uder

Familias en Acción

Emergencies driven by climate change are increasing in number and intensity resulting in increased health impacts that strain health and emergency response systems. Engaging with community members about how to prepare and respond is complicated by distrust of government and misinformation, particularly if language is also a barrier. One approach to meaningfully prepare the community is to employ community health workers (CHW). A CHW is a frontline public health worker who is a trusted member of and/or has a close understanding of the community served. This trusting relationship

enables the worker to serve as a bridge between health/social services, government agencies, and the community. CHWs are among the oldest community change agents and are known by different titles in various communities - promotores de salud, community health representatives, community health navigators, and auntie, are among a few of those titles. This presentation will introduce the CHW scope of practice, prompting partnership ideas, and share evaluation results and stories from three years of a CHW-based climate and health program serving Latiné community members in the Portland region. The program provides emergency preparedness workshops, a train the trainer course for other CHWs, and climate cafés that offer space to build community around climate and the environment. We will present using popular education principles and methods, which we use for all our work. The term popular education comes from romance languages and means “of the people.” This means attendees should be prepared to engage with the presenters and each other.

Confluent Goal: From State MCI Plan to Statewide Exercise

Jennifer Lord, MS, CEM, MEP

Northwest Healthcare Response Network

With preparations for the World Cup '26 games and fan activities in Washington State, the Northwest Healthcare Response Network (“Network”) undertook writing the WA State Mass Casualty Incident Annex, part of the Washington State Emergency Management Division’s Concept of Operation plan for the World Cup '26 activities. The Annex is part resource guide, part operational guide for state-level and healthcare partner coordination and resource management during large mass casualties. It includes roles, responsibilities, checklists, behavioral health support, EMS escalation and patient tracking for family reunification. The Network delivered three training sessions on the Annex across the state to healthcare and associated partners. The Network then designed and conducted a virtual tabletop exercise with the State MCI Annex as the central theme. Healthcare partners and others joined together for a 4.5-hour exercise which included breakout rooms for each of the regions in the Network’s service area and a breakout room for state, federal and other partners. Each region received an initial and then compounding mass casualty incident specific to their region. That was followed by report-outs by each breakout room, where other players learned about the various incidents going on within the state. Finally, there was a discussion with all players, given the broader situational awareness for coordination of resources and information when there are widespread impacts from incidents that have severely strained the healthcare

response. The exercise immediately identified some gaps that when addressed will increase the prompt delivery of care for significantly injured patients.

Dam and Levee Mitigation Before and After the December 2025 Floods

Andrew Dixon, Mercedes Stroeve

King County Office of Emergency Management

The December 2025 flooding event served as an opportunity for the King County Office of Emergency Management (KCOEM) to build the connection between preparedness, response, and mitigation. Prior to the event, KCOEM strengthened coordination and collaboration with dam owners and operators through training, exercises, and planning, establishing relationships and communication that supported response. Following the event, KCOEM worked directly with affected jurisdictions to identify flood vulnerabilities, gaps, and barriers to implementing mitigation strategies. This effort also focused on advancing projects toward being “shovel-ready” to better position jurisdictions for future grant funding. This panel will highlight lessons learned before and after the December 2025 flooding for translating those lessons into actionable risk reduction strategies.

Determining Infiltration Risk from Wildfire Smoke Events: CVAT, A New Evidence-Based Assessment Tool

Abby Nelson

Alaska Native Tribal Health Consortium

Outdoor air quality can significantly influence indoor air quality, particularly in environments affected by road dust, wood smoke, and wildfire smoke—factors largely beyond individual control. In contrast, indoor air quality can be improved through targeted interventions such as ventilation, filtration, and building retrofits. However, a key challenge remains: how can we identify which homes are most vulnerable to outdoor pollutant infiltration? Historically, there have been few accessible, evidence-based tools to identify the “leakiest” homes—those at greatest risk of allowing outdoor pollutants indoors. Since 2024, the Tribal Healthy Homes Network has been developing the Climate Vulnerability Assessment Tool (CVAT) to address this gap. The CVAT uses a short, questionnaire-based approach that does not require specialized monitoring equipment, enabling environmental health professionals to generate a relative risk score for individual homes.

Originally designed for homes in the contiguous United States, the CVAT is now being adapted for cold-climate housing in Alaska, with a particular focus on wildfire smoke events. This session will introduce the tool and highlight how the Alaska Native Tribal Health Consortium is applying it to support Tribal weatherization programs, helping prioritize homes for interventions that improve indoor air quality and reduce exposure to outdoor pollutants. Attendees will gain practical insights into using CVAT as a decision-support tool to enhance housing, health, and resilience outcomes in Tribal communities.

Engaging Hard-to-Reach Communities through Resiliency Partnerships

Renee Curtis, Dan Trifone

Multnomah County Department of County Human Services, Multnomah County Health Department

Given increased climate events and impacts on vulnerable communities, Multnomah County Health and Human Services departments have pursued climate and health resilience through professional and community partnerships with Traditional Health Workers (THWs), the multifamily housing sector, and social or human services. THWs - including community health workers, doulas, peer specialists, and health navigators - serve as trusted connectors, often acting as the first point of contact for communities disproportionately impacted by climate-related health risks. Public health departments in Multnomah, Washington, and Clackamas counties, in collaboration with community-based organizations, launched a tri-county THW capacity-building initiative funded through Health Share of Oregon's SHARE program. Building on lessons from COVID-19, this effort invests \$1.5 million in 11 organizations to expand access to services, strengthen workforce sustainability, and advance climate resilience strategies. Additionally, Multnomah County Department of Human Services expanded efforts to serve at-risk populations during extreme heat events, including human services program participants, and multifamily communities. Integrating climate data with vulnerability mapping, allows for direct coordination with property managers and caseworkers, to support tenants and clients. Participants will hear key lessons learned and explore practical strategies for cross-sector collaboration, data-driven outreach, and scaling community-led approaches to pursue heat resilience and health equity.

Enhancing Regional Resilience: Evidence-Based Approaches to Public Health Preparedness

Nicole Errett, Robin Soler, Resham Patel, Kevin DeVoss, Jamie Donatuto
University of Washington

The Northwest Center for Evidence-Based Public Health Emergency Preparedness and Response (NWPHEPR) is one of ten CDC-funded Regional Centers supporting evidence-based preparedness and response across Alaska, Idaho, Oregon, and Washington, in partnership with state, local, and Tribal health departments. This session will introduce the Center, the Regional Centers network, and shared goals for strengthening public health emergency preparedness. Presenters will describe the NWPHEPR Crisis Leadership Institute (CLI), a one-day training and mentorship program organized around five crisis leadership domains: communicating, sense making, facilitating learning, decision-making, and coordinating teamwork. The session will also introduce the CLI evaluation approach and the subsequent ECHO-based peer learning program, which provides an ongoing cycle of mentoring and support. Particular attention will focus on integrating Tribal communication and engagement throughout both components, including the process and goals for ensuring relevance to Tribal partners. The session will conclude with audience questions, feedback, and discussion about future directions.

Equity, the Butterfly Effect, & Crisis Response in King County

Mariel Torres Mehdipour, Roi-Martin Brown
Public Health - Seattle & King County Equity Response Team

Local health jurisdictions are responsible for ensuring that policies and practices are in place to protect the health and wellbeing of all residents assuring that resources are equitably available. However, traditional crisis response systems and policies are structures that are not anti-racist. They are informed by communications, culture and value systems grounded in white supremacy culture. Public Health - Seattle and King County and its Health and Medical Area Command (HMAC) has explicitly incorporated equity into its operational structures through the inclusion of an Equity Response Team (ERT). This innovative model for equitable and inclusive emergency response serves as an internal 'think tank,' providing HMAC leadership with recommendations and actionable information supporting communities most impacted by inequities and experiencing hate and bias. For over six years, ERT has implemented an equity-focused ethical framework that has guided its processes and decision-making and has been central to the operationalization of equity in response. This framework,

built within a targeted universalist context, is one that is: • Centered on equity and social justice • Community-centered, local contexts • Founded in virtue ethics • Understands that “good intentions” can create disproportionate impacts. ERT members will engage session participants in conversation reflecting on King County’s experience and how public health and local jurisdictions can reimagine their crisis response approaches into one that is community and equity centered. With the continued need to respond to a myriad of crisis events, it is more important than ever to explore our understanding of the essential role that equity plays in preparedness.

Exploring the RAPID Facility: Technologies for Post-Disaster Data Collection

Jeffrey Berman, Matias Korfmacher, Andrew Lyda, Maxwell Wondolowski
University of Washington

The ability to collect high-quality data immediately following disasters is essential for understanding impacts, improving models, and strengthening community resilience. The RAPID Facility at the University of Washington provides researchers with advanced reconnaissance technologies, technical expertise, and training to support the collection of perishable data from natural hazards and disaster events. RAPID's capabilities include aerial and terrestrial LiDAR, uncrewed aircraft systems (UAS), imaging technologies, environmental sensors, and other tools that enable rapid, high-resolution documentation of changing conditions in the aftermath of extreme events.

In this interactive session, participants will be introduced to the RAPID Facility and its role in advancing interdisciplinary disaster research. The session will feature demonstrations of selected reconnaissance equipment and examples of how RAPID technologies have been deployed to support research on hazards such as wildfires, flooding, landslides, and other disaster events. Participants will learn how these tools help capture critical data that inform science, engineering, public health, emergency management, and resilience planning. The session is designed for researchers, practitioners, students, and decision makers interested in innovative approaches to understanding and reducing disaster risk.

From Risk to Refuge: Advancing Tsunami Vertical Evacuation Structures Through Whole-Community Collaboration

Moderator: Maximilian Dixon, Washington Emergency Management Division

Speakers: Dante DiSabatino, Cale Ash

Washington Emergency Management Division, Degenkolb Engineers

A magnitude 9 Cascadia Subduction Zone (CSZ) earthquake and tsunami is one of Washington's greatest natural hazard risks, with an estimated 10–30% chance of occurring within the next 50 years. The Washington Emergency Management Division's (WA EMD) Cascadia Subduction Zone Tsunami Loss Estimate Study (2025) estimates that 50,000 to 65,000 casualties could occur within the first hour following a major Cascadia tsunami. For many of Washington's outer coast communities, there is insufficient time to reach natural high ground, or none exists at all, within the estimated evacuation time window. Where natural high ground doesn't exist in these communities, we must build high ground through tsunami vertical evacuation structures (VES).

Using the WA EMD's latest supported VES project in the City of Westport as a case study, this interdisciplinary panel demonstrates how science, engineering, emergency management, and community leadership can come together to address one of Washington's deadliest natural hazards through a practical, community-driven solution. Panelists from the Washington Emergency Management Division's Tsunami Program, structural engineers, and Westport community champions will share lessons learned from planning, funding, designing, and transforming ideas into action through intentional whole-community engagement to deliver Washington's next tsunami VES.

From Washington, D.C. to Washington State: Navigating Federal Policy Changes in Preparedness and Healthcare

Onora Lien, Meghan Jernigan

Northwest Healthcare Response Network, Washington State Department of Health

Federal funding, regulations, and policy decisions shape the preparedness landscape for public health, healthcare, and critical infrastructure organizations. As expectations, priorities, and funding streams continue to evolve, practitioners face increasing uncertainty about how federal actions will affect programs and services on the ground. This session will examine how federal policy influences preparedness initiatives, including the Healthcare Preparedness Program (HPP), and explore the tools available to state and local partners to engage in the policymaking process. Through real-world examples from Washington State, speakers will discuss federal affairs strategies, appropriations advocacy, rulemaking, and practical

approaches organizations can use to navigate change, communicate impacts, and strengthen resilience in an evolving policy environment.

From Wildfires to Floods: A Cross-Hazard Framework for Community-Centered Disaster Planning and Resilience

Ahmed Abukhater

University of Washington, Digital Cities

Communities across the United States are increasingly exposed to multiple, overlapping hazards, yet disaster planning remains largely hazard-specific. This fragmentation limits the ability of public health and emergency management systems to effectively prepare for, and respond to, complex events such as wildfires and large-scale flooding, including hurricanes such as Hurricane Harvey. This work aims to develop and demonstrate a cross-hazard framework that integrates wildfire mitigation and flood resilience to support more adaptive, community-centered pre- and post-disaster planning and mitigation. The study synthesizes applied research from wildfire risk assessment and mitigation planning with pre- and post-disaster analysis of extreme hydro-events. Methods include geospatial analysis, review of infrastructure and land-use vulnerabilities, and evaluation of community engagement strategies used in both contexts. Findings highlight recurring gaps across hazards, including siloed planning processes, limited integration of local data, and insufficient engagement of vulnerable populations. The analysis identifies key strategies that improve resilience across hazard types, including risk-informed land use planning, incorporation of predictive analytics, and participatory governance models that strengthen community capacity. Attendees will gain a practical, transferable framework for multi-hazard planning that can be applied to diverse communities, including those in the Pacific Northwest. The presentation provides actionable approaches to integrate data, community input, and cross-sector collaboration into preparedness efforts, ultimately supporting more resilient and equitable disaster outcomes.

Imagine emergency healthcare being available within hours after a devastating earthquake. Help us make this a reality.

Maximilian Dixon, Kadrina Queyquep, Carl Misra, Reid Zimmerman

Washington Emergency Management Division, KPFF Consulting Engineers

There is a critical mismatch between community recovery needs post-earthquake and building performance requirements. As everyone knows, WA has the 2nd highest earthquake risk in the United States. Communities need essential services for life safety and sustainment to be available post-earthquake. This requires critical buildings to not only be safe but operational.

WA is the first state in the United States to undertake a state-focused Functional Recovery Building Code Standard Feasibility Study. This first-of-its-kind study is a multi-year effort in which WA state is working to strengthen community resilience by identifying the unique needs of communities in WA state to develop practical options for adoption of functional recovery provisions in the WA State Building Code. This effort includes direct outreach to communities across the state to gather input on the highest priority facilities and services for recovery. This session will go over Phase I of the study and Phase II efforts.

Interpreting the Risk: Navigating the 2026–2027 El Niño and a Look at the New Era of the National Weather Service

Reid Wolcott

National Weather Service

As extreme weather impacts grow more complex, translating raw weather and climate data into decisions and response actions is more critical than ever. You've likely heard terms like "Super El Niño" or "Godzilla El Niño" in recent months, but what do they truly signify for our region? This session provides a timely briefing on expected El Niño conditions for the winter of 2026–2027 and the potential implications for the Pacific Northwest. We will also re-introduce today's National Weather Service (NWS) and offer a glimpse into where our agency is headed. Attendees will leave equipped with actionable climate intelligence for this winter and a vision of how a more nimble, flexible, and mobile NWS will support partners across all sectors in the years ahead.

_uKeeping the lights on when the power goes out: Advancing community-driven energy resilience work in Washington State

Elizabeth King, CEM, CGCIP, Kate Pedersen, MPH, MUP, Dottie Metcalf-Lindenburger, M.S., L.G.

Washington State Department of Commerce, Ronald United Methodist Church

Government programs often use a top-down approach, providing funds to competitive projects that are shovel-ready or ready to immediately start planning activities. The Washington State Department of Commerce Energy Resilience and Emergency Management Office has taken a different approach. The Energy Resilience Technical Assistance Program, launched spring 2023, has been supporting communities across the state to individually define energy resilience, set goals to meet that definition, find workable energy systems to meet those goals, find funding to build those energy systems, and then apply to those funding sources to make their goals a reality. By adapting to each community's needs and pace, we have engaged with over 110 communities and helped communities bring in over \$45 million in funding. This session will tell the story of this work, why we do the work the way we do, and how it is impacting communities around the state.

Mental Models of Extreme Cold in King County, Washington

Mary Hannah Smith, Juliette Randazza, Reid Wolcott

University of Washington Center for Disaster Resilient Communities, National Weather Service Seattle Forecast Office

Despite a warming climate, the burden of illnesses, injuries, and deaths due to cold and extreme cold events is increasing in the United States. While extreme cold events (ECEs) are unusual in western Washington, they have the potential for significant impacts to human health and infrastructure. In addition, populations that face a higher risk of negative health impacts from cold, including people experiencing homelessness, people unable to afford adequate heating, and older adults, are growing. Evidence-informed planning and decision-making during extreme cold events, coupled with information provided by local NWS forecast offices, have the potential to aid in mitigating the health impacts of extreme cold. Yet research available to inform extreme cold response and risk communication strategies is lacking. Through a series of open-ended interviews with forecast meteorologists and response agency staff in and around King County, Washington, this study explores practitioners' "mental models" of extreme cold to understand how practitioner knowledge, experience, and beliefs influence their decision-making during response to extreme cold events. The ultimate goal of this convergent research is to improve early warning and response processes by describing the ways in which different agencies and organizations approach ECEs and information needs. Findings from this research will inform local extreme cold response and inform the development of decision support and forecast tools for use in Washington state to improve awareness of extreme cold impacts and response decision-making.

Physical and Social Dimensions of Ground Failure

Morgan Sanger, Daniel Acostas Reyes
University of Washington

The terrain and seismicity of the Pacific Northwest make its people and infrastructure susceptible to ground-failure hazards such as landslides and earthquake-induced liquefaction. Yet, regional assessments have relied on simplified screening methods that lack actionable resolution for decision-makers. This session brings together two studies that develop mechanics-informed, data-driven frameworks to quantify ground-failure hazard at scales relevant to mitigation, policy development, and emergency planning across the region. The first study quantifies landslide exposure at the building level using a novel multi-scalar adaptive framework to identify 1.7 million people in the Pacific Northwest living in high-susceptibility terrain. It finds that rural populations are markedly more vulnerable than urban ones, constrained by fewer settlement options and difficult terrain. The second study models liquefaction-induced road network disruptions from a magnitude-9 Cascadia earthquake, propagating high-resolution hazard predictions through the network to identify elevated probabilities of service reductions and road closures. It likewise finds rural coastal communities disproportionately at risk, where limited network redundancy leaves few alternative routes when roads fail. Together, these studies present standardized regional assessment frameworks to reveal systematic vulnerabilities and inform mitigation priorities throughout the Pacific Northwest and beyond.

Primary Care Strategies and Health Care Sector Engagement for Addressing Poor Air Quality, Extreme Heat, and Resilience

Rose Gunn, Rachel Gold, Bradley Kramer
OCHIN, Public Health - Seattle & King County

This session will present two perspectives on how primary care settings can act to minimize the health impacts of poor air quality and extreme heat. It will describe the development of a community-prioritized research agenda on interventions / strategies that community health centers can use to support their patients' health during extreme heat / poor air quality events, and preliminary findings from that process. Next it will describe how an implementation science-informed process

is being used to identify strategies for reducing preventable symptoms during smoke events in primary care settings. The conversation will include how climate action in one setting (i.e., primary care) can motivate resilience action across a health care setting or system, through a framework that includes: 1) decarbonization, 2) community benefit, 3) population health and primary care, 4) resilience and emergency management, and 5) quality/safety. Join us to find out how to work better with your health care systems to address preparedness and resilience.

Response Roundtables

Looking to connect with others who share your interests, challenges, or response experiences? Join a “Response Roundtable” - an informal and welcoming space to meet fellow conference attendees and exchange ideas. Gather around topics such as extreme heat, wildfires, earthquakes, tsunamis, or other issues that matter to you, and take part in open conversations about what's on your mind. Whether you're seeking practical insights, new collaborators, or simply a place to reflect and recharge, these participant-driven discussions offer an opportunity to learn from one another and strengthen regional preparedness in our communities.

Responsible AI for Preparedness and Resilience: Promise, Pitfalls, and Practice

John Choe, Sarah Miller, Matt Green

University of Washington, Pierce College, Green Emergency Management Services

AI is rapidly entering preparedness and resilience work, but for many practitioners, the key question is not whether AI is powerful — it is how to use it responsibly, safely, and effectively in high-consequence public-sector settings. This panel offers a practical, non-technical discussion of AI's emerging role in preparedness and resilience practice. Panelists will examine how AI and data-enabled tools can support information synthesis, decision support, risk communication, exercise and planning workflows, and workforce capacity. The discussion will also address critical risks, including hallucinated outputs, bias, privacy concerns, overreliance, procurement challenges, public trust, and the need for human oversight.

Designed for preparedness and resilience practitioners, the session will emphasize actionable lessons over technical detail. Audience members will be invited to share questions, concerns, and use cases. The panel will conclude with practical recommendations on where organizations can begin, what they should avoid, and what guardrails are needed before adopting AI in preparedness and resilience work.

Reuniting When It Matters Most: Patient & Family Reunification – Progress and Path Forward

Kathryn Quinn, Hannah Haakana, Shelby Frazier

Saint Alphonsus Health System - Trinity Health, St. Luke's Health System

Patient and family reunification is a core response capability for nearly any type and any size of complex community event. Even one organization responding to an event may have to operationalize a reunification effort. The impacts of the reunification process are far-reaching including direct patient care outcomes, psychosocial needs, and healthcare worker resiliency. In a real event, reunification can be a time and resource intensive process for response teams. In this presentation, leaders from the Western Idaho Healthcare Coalition (WIHCC) share specific experiences of the evolution of their reunification capability development including multi-agency coordination and what reunification looks like inside a hospital response. Key takeaways for participants will review: • Integrating reunification into the organizational response structure. • Describing interoperable systems and roles and responsibilities for reunification. • Illustrating plans, programs, and processes for ongoing capability improvements.

Share Your Expertise: Inform Future CDRC Initiatives

Facilitator: Cat Hartwell

Center for Disaster Resilient Communities

Help shape the future of the Center for Disaster Resilient Communities (CDRC) by participating in this interactive discussion session. Attendees will have the opportunity to share perspectives on emerging preparedness and resilience challenges, identify priorities for research, training, and partnership development, and provide feedback that will help inform future CDRC initiatives. Whether you work in public health, emergency management, Tribal government, healthcare, academia, or

community-based organizations, your insights will help strengthen regional collaboration and advance a more disaster resilient Northwest.

The Alaska Tribal Health System: Partnership, Preparedness & Response

James Benzschawel, Nathan Wormington

Alaska Native Tribal Health Consortium, State of Alaska Department of Health - Division of Public Health, Health Emergency Response Operations

This session provides an overview of the Alaska Native Tribal Health Consortium & the Alaska Tribal Health System (ATHS) - a statewide network of Tribal health organizations working together to provide health services across some of the most remote and geographically challenging communities in the United States. Participants will learn about the structure of the ATHS, the roles of Tribal health organizations and statewide partners, and how relationships across the system support emergency preparedness and response. A recap of their role during the response and recovery from Ex-Typhoon Halong will also be provided.

The NIH's Health and Extreme Weather (HEW) Program: The Initiative, UW's HEW Activities, and Planning for the Future

Jeremy Hess

Extreme weather events are increasing in frequency and severity, creating urgent challenges for public health, healthcare systems, and communities. The National Institutes of Health (NIH) is investing in research focused on understanding and addressing the health effects of extreme weather (HEW). In this interactive session, Dr. Jeremy Hess will introduce the HEW Program and highlight the University of Washington's HEW-related activities, including a planning grant (P20) focused on building resilience to climate-sensitive extreme weather events across the Pacific Northwest.

Following a brief overview, participants will engage in a facilitated discussion on emerging priorities for research, practice, policy, and community action. Attendees will be invited to identify key challenges, opportunities for collaboration, and future directions for advancing health resilience in the face of extreme weather. Researchers, practitioners, Tribal and

community leaders, public health professionals, emergency managers, and other partners are encouraged to share their perspectives and help shape priorities for future work.

The Domino Effect: Climate Change, Infrastructure Disruption, and Population Health

Joan Casey, PhD

University of Washington

As climate change drives more frequent and severe heat waves, storms, wildfires, and flooding, the consequences extend far beyond the initial hazard. Critical infrastructure systems, including electric power, transportation, communications, and healthcare services, face growing strain, creating cascading disruptions that can amplify risks to health and well-being. Drawing on emerging research linking extreme weather, power outages, and health outcomes, Dr. Joan Casey explores how climate impacts ripple through communities, disproportionately affecting vulnerable populations and widening existing inequities. Join us as Dr. Casey highlights the interconnected nature of climate, infrastructure, and health, and how resilience-focused planning can help communities anticipate, withstand, and recover from increasingly complex climate-driven threats.

The Hotel2Hospital Conversion Project: A Bold Solution for Prolonged Medical Surge

Charlie Little, Amy Herron

University of Colorado Anschutz, University of Colorado Hospital, All Clear Emergency Management Group

The Hotel2Hospital (H2H) Conversion Project provides a novel solution for prolonged medical surge: convert a suitable hotel into an integrated alternate care facility (ACF) capable of hospital-level care (both intensive and medical-surgical) within 4 weeks. This is not theoretical; it is a proven solution that can improve medical surge planning. With grant funding from the Defense Health Agency and in support of the National Disaster Medical System (NDMS) pilot program, Team Colorado (centered at the University of Colorado) assembled a project team to research and prove this concept. In July 2025, after a year of research and planning, Team Colorado rapidly converted hotel rooms into an intensive care unit (ICU), two medical/surgical rooms, a nurses' station, a lab, a pharmacy/medication room, a radiology room, and other support spaces. A hotel conference room was also converted into an ICU. Additionally, Team Colorado fully integrated the H2H with existing

IT and electronic medical record systems and equipped spaces with necessary clinical and non-clinical supplies and equipment. Once built, Team Colorado tested the functionality of the H2H in a series of functional Day-in-the-Life activities to test patient care activities. The results of Team Colorado's research are included in the Hotel2Hospital Conversion Guidebook, the instruction manual for hotel conversion. In this interactive presentation, Team Colorado will present the results of their research and conversion that prove a hotel is a viable solution for a large-scale, prolonged medical surge. Attendees will be provided with access to all project materials and have an opportunity to provide feedback.

Utilizing Social Media Indicators as an Early Indicator of Potential Foodborne Outbreak Events

Marion Fischer, Noël Hatley, Kollin Leisinger, Emily Reichley
Washington State Department of Health

The Office of Communicable Disease Epidemiology (OCDE) within the Washington State Department of Health is responsible for statewide surveillance and investigation of over 60 notifiable conditions. The office's mission centers on the tracking, analysis, and dissemination of information regarding foodborne, waterborne, vaccine-preventable, and emerging infectious diseases to identify and mitigate disease trends. To support this mission and in preparation for the 2026 FIFA World Cup we developed a pilot event-based public health data monitoring system to detect potential communicable disease outbreaks using public posts, comments, reviews and other informal reports on social media. This was done by creating specialized search criteria to identify foodborne illness clusters in real-time and conducting retroactive analysis to validate the tool's sensitivity. Search criteria were refined and adjusted based on our retroactive findings based on known past food-borne outbreaks. Results are pending regarding our findings during the FIFA World Cup timeframe. This large event disease monitoring tool serves the organization's mission to integrate innovative informatics into existing surveillance systems for earlier outbreak detection. This project also highlights the system's potential use for early identification of health and infectious disease-related rumors, enabling public health to rapidly develop content to address potential public health threats or public health mis or disinformation.

Poster Presentation Abstracts

Addressing Extreme Weather Vulnerabilities Among People Who Use Drugs Utilizing Syringe Service Programs in Washington State

Yuna Ong

University of Washington

People who use drugs (PWUD) are increasingly recognized as a population disproportionately affected by extreme weather events, yet their specific needs remain underexplored in emergency preparedness planning. Anecdotal and emerging evidence suggest heightened vulnerability due to unstable housing, stigma and discrimination, limited access to resources and emergency communication systems, and underlying health risks. At the same time, extreme weather events are becoming more frequent and severe as a result of climate change. Washington State, which has a well-established network of Syringe Service Programs (SSPs), provides an important context for examining how harm reduction organizations can support PWUD during these events. This project aimed to better understand existing resources and gaps for PWUD who utilize SSPs, develop recommendations for SSPs to improve preparedness and response, and identify opportunities for emergency management systems to better address the needs of this population. We conducted qualitative interviews with SSP staff and clients, along with key informant interviews and a targeted literature review. Data were analyzed using thematic analysis. Findings show that many PWUD who utilize SSPs are unhoused or unstably housed, increasing their exposure to extreme weather and limiting access to protective resources. Compared to the broader population of PWUD in Washington State, SSP participants may experience higher levels of housing instability and related vulnerabilities. Regardless of housing status, SSP participants also face additional risks during extreme weather events, including stigma, barriers to resources, and underlying health concerns. SSPs play a critical role in supporting clients; however, they face limitations in capacity and resources. These findings highlight opportunities for SSPs to strengthen preparedness efforts and for emergency management systems to more effectively incorporate the needs of PWUD who utilize SSP services into planning and response efforts.

City Rezoning Changes Pedestrian Heat Exposure and Inequality in Seattle

Tzu-Hsin Karen Chen

University of Washington

Shading is a crucial component of human heat exposure. Although urban densification driven by zoning policy is often associated with the urban heat island effect, the extent to which taller buildings may increase sidewalk shading remains understudied. This study aims to measure summertime shading before and after Seattle's housing affordability and zoning policy. We also examine whether these planning changes have shifted the sociodemographic characteristics of areas with pedestrian shading. We simulate the duration of shade provision between June and August from 9 a.m. to 3 p.m. at a height of 1.5 meters along sidewalks across Seattle. Simulations are based on building footprint and height datasets from 2010 and 2020, representing conditions before and after the Mandatory Housing Affordability (MHA) Program and its associated rezoning. Income, race, and ethnicity data at the block group level from the American Community Survey are used to analyze sociodemographic patterns across different levels of shade provision. Shading duration increased by one hour or more along 163 km (4%) of sidewalks between 2010 and 2020, primarily following the construction of new buildings. Citywide results indicate that Black residents and homeowners experienced greater increases in shade provision. However, sociodemographic patterns continue to shift: Hispanic populations experienced further decreases in shade provision as of 2024. Rezoning and vertical development may contribute to increased shade provision and reduced heat exposure. Although the policy's intent was to expand housing for lower-income households, gentrification may dilute its effects.

Dam Strong Partnerships: Advancing Readiness Through Dam Owner Collaboration

Andrew Dixon

King County Office of Emergency Management

Dam-related incidents, ranging from controlled releases to catastrophic failures, can significantly impact downstream communities, yet dam owner coordination is often underdeveloped in local emergency management. Without pre-established relationships, communication delays and misaligned expectations can hinder timely, effective response. In

2025, the King County Office of Emergency Management led a regional effort to strengthen coordination with dam owners and operators affecting the county. Through training, workshops, and exercises supported in part by FEMA's Dam Technical Assistance Program, the County built operational relationships and established shared communication protocols before an incident occurred. Key partners included Seattle Public Utilities, the U.S. Army Corps of Engineers, the Washington State Department of Ecology, and local dam owners. Collaboration focused on joint exercises, site visits, and coordinated planning that clarified roles, improved information-sharing pathways, and aligned decision-making processes across agencies. These efforts were tested during the December 2025 winter weather event, when rapidly changing conditions stressed regional dam systems. This session will highlight how proactive engagement with dam owners can close a critical preparedness gap. Attendees will gain practical, scalable strategies to initiate partnerships, integrate dam stakeholders into planning and exercises, and build communication systems that function effectively during real-world incidents.

Development of a Climate Change and Natural Hazard Resiliency Plan for Washington Department of Corrections Facilities

Beck Kiely, Esmma Almousa

University of Washington DEOHS – Sklar Lab

With the increasing severity of climate hazards, Hazard Mitigation Plans (HMPs) are often used to guide community mitigation and preparedness, but the risk to some populations may be unaccounted for in these plans. People who live and work within carceral facilities are particularly vulnerable to climate events yet are often absent from HMPs. These facilities also tend to rely on aging infrastructure, and due to security concerns and limited autonomy may be unable to leverage protective behaviors to reduce hazard risk (e.g., cold rooms, evacuation) during disaster events. The aim of this work is to 1) estimate the frequency and magnitude of climate and natural hazards in Washington State Prisons, 2) assess associated health risks to people who live and work within those carceral facilities, and 3) co-develop interventions with the Washington Department of Corrections (DOC) to reduce exposure and vulnerability to these hazards. To produce the Washington DOC Climate Change and Natural Hazard Resiliency Plan (CCNHRP), we are using a mixed-methods approach

including direct environmental monitoring, interviews with incarcerated individuals and staff, quantitative risk assessment modeling, and climate projections to assess risk across 19 DOC facilities.

Exploring Social Connection as a Strategy for Fostering Neighborhood-Level Climate Resilience

Genevieve Conley

University of Washington Research and Engagement on Adaptation for Climate and Health Center

Across the country, climate-sensitive hazards—extreme heat, wildfires, flooding—that adversely impact ecosystems, infrastructure, and community health are intensifying. Strengthening social connections including trusted relationships, mutual support, and information sharing, as well as supporting community-led resilience efforts, are important strategies for improving health outcomes. This qualitative study explored community engagement models across the U.S. and Canada that are attempting to build climate resilience by strengthening social connections through proactive community support, neighbor-to-neighbor relationships, and hyper-local organizing. Guided by the CFIR 2.0 implementation science framework, we conducted interviews with 10 organizers from city governments, community-based organizations, and mutual aid groups engaged in resilience work. Through qualitative analysis, we assessed how this work has been successful, what barriers exist for implementation, how strategies differ across communities, and what supports sustainability. Findings suggest that neighborhood groups are unique in their approaches to the needs of their communities through place-based and empowerment strategies, such as neighbor checking and building social connections for safety and support. All interviews emphasized the role of community members as first responders, with the most successful initiatives strengthening neighbor relationships through locally hosted activities. These groups bridge formal and informal preparedness and resilience networks, helping build local trust in resilience hubs so communities can better prepare for, respond to, and recover from climate-sensitive hazards. Overall, these findings highlight the importance of investing in community-led resilience strategies that are locally grounded, support essential connections, and strengthen community capacity for long-term climate resilience.

From Crisis to Capacity: Mapping Community Resilience in Broome County

Divya Gupta

Binghamton University

Broome County's recent history of recurrent crises including the 2006 and 2011 floods and the COVID-19 pandemic provides a critical case for understanding how community resilience develops over time. These events exposed deep social and institutional inequities while simultaneously catalyzing dense networks of community-based organizations (CBOs) that mobilized resources, coordinated response efforts, and sustained care for vulnerable populations. This project examines how resilience emerges through networks of connectedness among civic actors, how institutional memory is formed and shared through repeated crisis response, and how these experiences can inform more equitable and adaptive preparedness strategies for the future. The urgency of this work has intensified in the current context of growing uncertainty, as federal funding for social support programs has become increasingly unstable and, in some cases, dismantled placing greater pressure on local civic organizations to respond to rising community needs with fewer resources. Despite the critical role these organizations play in sustaining community well-being during crises, the adaptive knowledge and institutional learning generated through their efforts remain insufficiently documented and theorized. Drawing on the case of Broome County, this project highlights how resilience is not simply an outcome of formal planning but a socially embedded process shaped by local relationships, collective action, and community knowledge. By documenting how crisis responses evolve into long-term community capacity, the study identifies key mechanisms through which local networks sustain support systems, preserve institutional memory, and strengthen preparedness. The findings offer important insights for policymakers and practitioners seeking to build more equitable, locally grounded, and adaptive systems of community resilience.

From Listening to Action: Co-Designing a Household Flood Resilience Program in a Front-Line California Neighborhood

Sarah Fendrich

Stanford University

For many frontline households, flooding is a chronic stressor that damages property, breeds mold and health risks, disrupts daily life, and generates anxiety even between storms. While large-scale flood infrastructure remains essential, it is often costly, slow to implement, and insufficient to address household-specific vulnerabilities, creating a need for immediate,

household-level resilience strategies. This presentation shares lessons from a multi-year research-practice collaboration in Belle Air, a disadvantaged, majority non-white neighborhood in San Mateo County, California, to co-design and evaluate a household flood resilience program. In partnership with OneShoreline, the San Mateo County flood agency, and community-based organizations Climate Resilient Communities and Rise South City, we conducted over 60 door-to-door conversations, 11 semi-structured interviews, and two bilingual community workshops to understand residents' flood experiences and preparedness constraints. These insights informed a flood resilience grant program that offered households up to approximately \$1,000 in flood risk reduction resources (e.g., sump pumps, flood barriers, and dehumidifiers) through a tailored case-management process. In the pilot phase, 26 of 99 eligible households participated (26%), indicating strong early uptake. We present insights from an ongoing, mixed-methods evaluation drawing on participant observation, administrative records, a resident survey, and interviews. Preliminary findings highlight how adaptive capacity, prior flood experience, and response efficacy influenced resource selection. We identify lessons for equitable program design, including targeted outreach, iterative case management, and tailoring support to household flood conditions, housing tenure, and implementation constraints. These findings offer actionable insights for community-centered resilience programs that align preparedness resources with residents' lived realities and decision needs.

King County December 2025 Flood After Action Report

Cristina Conde, Clara Harding

King County Office of Emergency Management and University of Washington Center for Disaster Resilient Communities

In December 2025, multiple atmospheric river events resulted in extensive flooding across Western Washington, causing significant infrastructural and agricultural damage throughout the region. In King County, flooding and landslides prompted mass evacuations, caused power outages and sewage overflows, and forced closures of critical highway routes and local roads for extended periods of time. Recovery efforts are ongoing, and the flooding event marks one of Washington State's costliest disasters in terms of public infrastructure damage in four decades. Practicum students from the University of Washington (UW) Master of Public Health program are working with the King County Office of Emergency Management and the UW Center for Disaster Resilient Communities to evaluate countywide response and recovery efforts to the

December 2025 flood event. Through analysis of post-event response documents and a series of focus group discussions with county partners, incorporated cities, and state agencies active in the response, this study explores response strengths and areas for improvement perceived by King County response partners. Our project poster will describe the process for conducting this response evaluation, as well as key lessons learned during flood response. Complete project findings will be published as a summary report for decision-makers, and as King County's official After-Action Report.

King County 2025 Community Wildfire Protection Plan and Home Hardening Capacity Building.

Kaili Morikawa

King County Office of Emergency Management

More than 351,800 people live in the Wildland Urban Interface (WUI) in King County, WA. Due to a “low frequency, high severity” fire regime, many residents do not realize just how at risk they are from wildfires. King County faces a long-standing misconception that “fires don’t happen on the west side of the Cascades.” However, recent events in Los Angeles, CA, and Lahaina, HI, show the immense danger of wildfires that turn into urban conflagrations especially for people with limited English proficiency, the elderly, and those with mobility limitations. In addition to investing in preparedness education, evacuation awareness, and emergency communications, public education programs must provide communities with accessible, impactful actions that they can take to build wildfire resilience and increase understanding of wildfire risk in western Washington to proactively address this hazard. A public education program specific to Wildfire was one of the recommendations of the 2021 King County Wildfire Risk Reduction Strategy, and reiterated in the 2025 King County Community Wildfire Protection Plan, -specifically working with community members to conduct home hardening activities, creating defensible space, and understanding vegetation resistant to wildfire. By offering training to first responders and community educators, the King County Home Hardening Capacity Building Program aims to boost the regional ability to deliver home assessments and work with residents on tangible steps to make spaces less vulnerable to wildfire. This will help to build resilience and help our communities in the WUI adapt to living with the threat of wildfire.

Lessons Learned from Integrating Participatory Frameworks into Coastal Resilience Projects

Nadia Hare

Washington State Department of Ecology

Intensifying natural hazards along Washington's coastlines pose serious risks to coastal Tribes and communities, underscoring the urgent need for equitable community engagement that enriches decision-making. Coastal resilience projects at the Washington State Department of Ecology exist across a community engagement spectrum with varied opportunities for community influence. Drawing from three case studies that represent low and high community engagement, I will share lessons learned from integrating participatory frameworks into coastal resilience work. I will first describe best practices for facilitating zine-making activities in virtual community forums. I will then discuss the tradeoffs and opportunities of meeting Washington's Environmental Justice Law for a community-driven project along Washington's Pacific Coast. Afterwards, I will highlight the process and outcomes of co-developing an intergenerational water justice workshop with frontline communities in the Puget Sound. These experiences build on decades-long community and Tribal-led initiatives that laid the foundation for the \$73.6M NOAA-funded Washington State Coastal Climate Resilience Partnership, emphasizing the importance of sustaining authentic relationships to support thriving coastal futures. Finally, carrying this work forward during a time of unprecedented social upheaval can feel exhausting and requires nurturing a community of care. To that end, I will provide a series of reflexive practices that have informed my community engagement approach as I grow as a multiracial, early-career professional.

Mapping precipitation-triggered landslide risks in global human settlements: a hazard-exposure-vulnerability framework

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Precipitation-triggered landslides represent a major hazard to human settlements, yet their risks remain unevenly distributed across regions. However, existing studies often lack accurate modeling of precipitation-induced landslide hazards and remain largely hazard-centric, with limited consideration of exposure and socioeconomic vulnerability. This study develops a spatially explicit framework to assess global landslide risks by integrating hazard, exposure, and vulnerability dimensions using multi-source satellite data. Landslide susceptibility was first modeled using extreme precipitation indices, terrain, vegetation, and soil variables within a Max Entropy framework. We then incorporated

population density as a measure of exposure, together with indicators of socioeconomic vulnerability, including accessibility to healthcare and transport, economic development, and built-environment quality, to construct an integrated risk index. Results show pronounced spatial disparities: risk hotspots are concentrated in South and Southeast Asia, parts of sub-Saharan Africa, and regions of South America, where rapid urban growth coincides with limited adaptive capacity. In contrast, risks in Europe and North America are characterized by mixed drivers, reflecting both hazard conditions and relatively lower vulnerability. These findings highlight the uneven geography of landslide risks and provide spatial evidence to inform land-use planning, infrastructure investment, and disaster risk reduction strategies. By demonstrating the value of combining hazard, exposure, and vulnerability in a globally consistent framework, this study contributes to the applied geography of natural hazards and offers insights for risk-sensitive planning in diverse settlement contexts.

Queering Emergency Preparedness: Advance Care Planning for Transgender Adults

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Transgender adults face elevated risks to discrimination and violence, yet emergency preparedness often overlooks gender diversity. Advance Care Planning (ACP) allows adults to document their medical and end-of-life wishes and can serve as an essential protective measure and preparedness tool for transgender adults to preserve their wishes. However, only 13.1% of the transgender and gender-diverse community has completed ACP legal documents, indicating a lack of preparedness in the community. Legal protections for transgender people, including ACP, can reduce exposure to violence and ensure protections in the case of discrimination. ACP is an essential preparedness intervention for transgender adults as they navigate increasing political violence. We conducted a qualitative needs assessment with transgender adults to inform a forthcoming community-based workshop to support ACP uptake in transgender adults. Participants reported barriers to engaging with ACP, including distrust of clinicians and fears of discrimination. Participants also noted having taken little action in preparation despite recognizing importance and perceived hostility and danger in the current social climate. Our findings suggest that ACP is a preparedness intervention as much as it is a legal and clinical strategy to support transgender adults as they navigate human-made hazards, including anti-transgender violence and discrimination. This study expands the lens of emergency preparedness to include social and political threats that affect community's

vulnerability and resilience to these threats. Our findings suggest that community-informed ACP interventions and increased ACP uptake may reduce risk and increase resilience among transgender adults in an increasingly hostile environment.

Reimagining Hazard Mitigation Efforts Following the 2025 December Flood Events

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King County Office of Emergency Management (KCOEM) hosted a collaborative discussion with jurisdictions impacted by the December 2025 flood events, examining their existing mitigation strategies from the 2025 King County Regional Hazard Mitigation Plan and determining what lessons learned can be used to reduce future flood risk. Traditionally, after disasters, emergency managers conduct After Action Reports evaluating response efforts—what went well and what needs improvement. However, it's not standard practice to apply that same structured evaluation to mitigation. Yet, we know that an investment in mitigation will minimize the demand for response. Following this disaster, KCOEM assessed multiple phases of emergency management (response, recovery, preparedness, and mitigation) leveraging data that's already been collected minimizing duplicate siloed efforts. The goal was to build a more holistic picture of risk, helping to identify both gaps and opportunities across emergency management activities.

Revealing Potential Hidden Risks: Pediatric Poison Exposures During NFL Game Days as a Public Health Preparedness Challenge

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Introduction National Football League (NFL) games boast extensive viewership with approximately 18% of Americans watching six or more hours weekly. Watching NFL games is not a public health emergency, but it can produce predictable shifts in risk-related behaviors, like those seen during planned disasters. We explore whether large, televised events can inform surge staffing strategies by examining changes in pediatric poisoning exposures on NFL game days. Methods This retrospective study utilized the National Poison Data System. We queried exposures from 3/2/2014 through 2/8/2026 and

evaluated the number of exposures per day on NFL gamedays (n = 720) to the number of exposures per day on non-gamedays (n = 1,145). We analyzed changes over time using a simple linear regression and an interaction model to isolate the gameday effect from global seasonal shifts. Results There were 1,475 exposures per gameday and 1,533 exposures per non-gameday across years with a ratio of 0.96 exposures per gameday. This increased in 2014 to 1.0 and to 0.88 in 2015 before slowly increasing to 1.06 in 2026 ($r^2 = 0.4156$, $p = 0.174$). After controlling for shifts in seasonal exposures, the analysis revealed that gamedays increased at a greater rate than non-gameday ($p < 0.001$). Conclusion We identified a statistically significant increase in pediatric poison exposures during NFL gamedays compared to non-gamedays within the same year. This pattern underscores the potential value of incorporating major televised events into public health surge planning, including targeted prevention messaging to improve pediatric safety during high-attention events.

Strategic Artificial Intelligence: Pilot Testing the Effectiveness of AI SEO, GEO and AI Media Assets

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This project aimed to test the effectiveness of public health traffic safety campaign efforts through the use of artificial intelligence (AI) tools for search engine optimization (SEO) and generative engine optimization (GEO). Research on AI-generated media content was also conducted through A/B testing, a focus group, AI digital personas and psychophysiological measurements. Results indicate the use of AI in public messaging can potentially distract from core safety messages and erode trust. Insights from this project can inform public health outbound and inbound marketing and communications strategies, build public trust and create a healthier information environment.

Towards Pandemic-Resilient Cities: Multi-Disciplinary Academic-Practice Linkages to Build City-Level Immune Systems

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The current structure of built and social environments amplify pandemic threats. To prevent and attenuate spreading events like the COVID-19 pandemic and to protect the vulnerable city residents, a new kind of “Pandemic-Resilient City” must emerge that integrates research with community-level relationships. Our objectives were to: 1) Engage diverse community partners to co-create systems for pandemic resiliency; 2) Prototype a “city-level immune system” model with Oregon cities; and 3) Refine and scale pandemic-resilience systems. In 2023, multi-disciplinary research teams from Oregon State University hosted day-long workshops with local leaders and decision-makers in three Oregon counties, to characterize preparedness infrastructure, clarify city needs, and prototype feasible and relevant city-level immune systems. Workshops employed adult-learning/participatory approaches and emphasized learning and listening, facilitated bi-directional sharing of information, creative discussion and game play. Following the workshops, we launched wastewater sampling pilots in all three locations to measure infectious disease prevalence (RSV, Flu, COVID-19), integrating predictive data systems into current response systems. Workshops that utilized interactive partner engagement clarified community needs and enabled the development of a forecasting model built on local data streams. Feasibility and scalability of the model were tested with city partners. This system is built to support informed decision-making and empower communities to stay safe and healthy, leading to city-led resilience. Relationship building and co-creation were essential to build effective systems for communities with unique needs, perspectives, and local contexts. As of this writing, we continue to scale this model to other Oregon cities.

Who Is at Risk During Extreme Heat? Metric and Threshold Choices Matter

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Extreme heat preparedness depends on how agencies define heat risk. Different heat metrics and threshold choices can change which places are identified as hotspots and which populations appear most exposed. This study examines how heat metric and threshold choices affect population heat exposure mapping, hotspot identification, city prioritization, and exposure-inequality interpretation. Using summer 2022 across the Mediterranean, we quantified one-kilometer population exposure with four metrics: land surface temperature, air temperature, heat index, and wet-bulb globe temperature. Each metric was evaluated under absolute fixed thresholds and relative local 90th-percentile thresholds. We compared exposure

duration, hotspot agreement, city rankings, and exposure patterns across deprivation levels. Metric and threshold choices acted as practical decision rules. Under absolute thresholds, total exposure differed by more than two orders of magnitude across metrics, and hotspots varied substantially. Wet-bulb globe temperature emphasized humid coastal North Africa, while air temperature and land surface temperature identified broader hot regions. Under relative thresholds, exposure totals converged, hotspot agreement increased, and high-burden areas shifted toward densely populated southern Europe. Exposure-inequality signals also changed across threshold frameworks. Attendees will learn why relying on one heat metric or threshold can miss important hotspots or change preparedness priorities. Dual reporting of absolute and relative exposure can help distinguish chronic high-heat burden from locally unusual heat and support more transparent heat-risk monitoring, communication, and intervention planning.