

[View this email in your browser](#)



Dear PHEER Network,

Welcome to the **Spring/Summer 2024** edition of the PHEER Network newsletter, your source for updates, events, and stories from the community of public health disaster researchers.



Public Health Extreme Events Research (PHEER)

is a public health researcher-led network that mobilizes rapidly, informs evolving disaster research agendas and funding decisions, and advances the field of public health disaster science.

PHEER is part of the broader [CONVERGE network](#), which strengthens relationships between disciplinary communities and advances the scientific rigor and ethical conduct of hazards and disaster research.

In This Issue:

- I. Network Updates
- II. Community Spotlight
- III. Featured Publication
- IV. Featured Event
- V. Upcoming Events
- VI. Funding Announcements
- VII. Hiring Opportunities

Network Updates

CDC Tabletop Exercise and Lessons Learned

PHEER is one of eight interdisciplinary extreme events research and reconnaissance (EER) networks, supported by the National Science Foundation (NSF) and coordinated through the NSF-funded [CONVERGE](#) facility housed at the Natural Hazards Center at the University of Colorado Boulder. This EER ecosystem is designed to facilitate interdisciplinary integration, data collection, and information sharing in disaster settings.

In April 2024, CONVERGE organized a tabletop exercise hosted at the Centers for Disease Control and Prevention (CDC) in Atlanta to discuss how PHEER can better coordinate with other EERs and federal agencies to conduct rapid disaster research. This exercise used the ‘the Big One’ scenario, where a megathrust (9.0+ magnitude) earthquake and tsunami ruptures along the Cascadia Subduction Zone, running from Vancouver Island, Canada to Northern California, USA.

PHEER took away several key lessons.

1. PHEER needs to develop processes for quick and reliable communications with other EERs, CONVERGE, and our members to promote any mobilization of the PHEER Network. Communications plans and messaging templates can facilitate rapid information sharing with the PHEER membership.
2. PHEER needs job action sheets that outline roles and responsibilities to streamline PHEER deployments. PHEER is going to explore how the PHEER

Steering Committee can be more involved in deployment decision making and field leadership.

3. PHEER is going to explore opportunities to promote synergy with other EERs, including coordinated deployments.

Overall, this was a very useful exercise to highlight PHEER's current strengths and capabilities, as well as to identify areas for improvement. PHEER was lauded for having well developed ideas for its incident command structure, while recognizing a need to further refine our Concept of Operations Plan (CONOPS). The tabletop exercise and subsequent lessons learned are informing the development of a Communications Standard Operating Procedure, alongside forthcoming CONOPS updates.

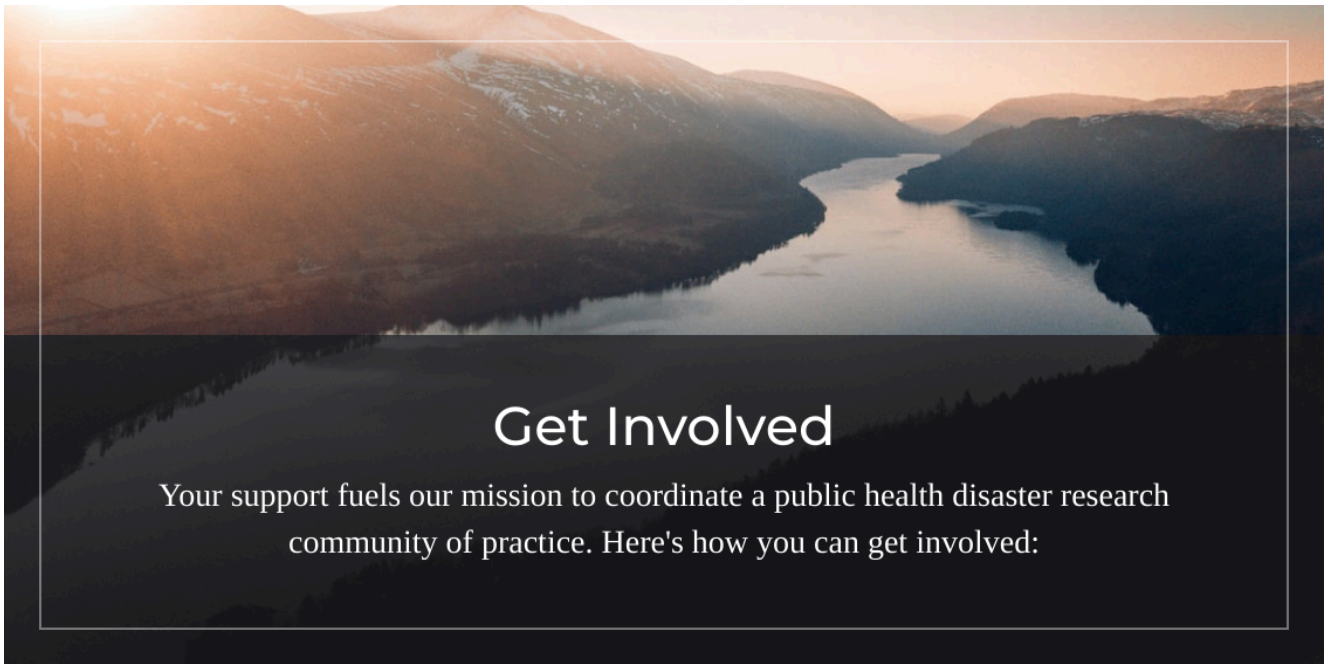
Collectively, PHEER is building a community of public health disaster researchers, practitioners, and agency partners. Our work has never been more important for the support of healthier, more resilient communities in the face of disasters.

Thank you for being a vital part of the PHEER Network.

Help Us Grow

We are always eager to welcome new members. Please consider connecting your colleagues engaged in public health and disaster research to our network by directing them to the PHEER Membership Application:

[PHEER Membership Application](#)



Get Involved

Your support fuels our mission to coordinate a public health disaster research community of practice. Here's how you can get involved:

Keep Us Updated

Send us any recent publications or news features so that we can highlight your work to our community. Please mail updates to pheernetwork@gmail.com

Attend Events

Join us at our upcoming events and engage with fellow network members.

Join Us on Slack

Join the PHEER community on the **#pheer** thread within the [DesignSafe Slack channel](#). Members will first need to sign up for a Design Safe account (register [here](#)).

Community Spotlight

Would you like your work featured in our next newsletter? [Send us your updates!](#)



In this issue, we shine the spotlight on **Kristina Kintzinger, PhD**, Associate Professor in the Water, Climate, and Health Program at the University of Nebraska Medical Center (UNMC). She has an appointment with the CDC's Disaster Epidemiology & Response Team to develop methodological approaches and guidance for post-disaster settings where traditional rapid needs assessment methods do not work (e.g., when disasters affect smaller areas, rural/frontier communities, targeting specific populations, etc.). She and her colleagues at UNMC are working closely with local and state public health agencies to develop and conduct rapid needs assessments in two tornado-impacted communities in Nebraska. Two alternative methodological approaches were applied in these assessments: a simple random mail-based sample in an urban county where field data collection was denied and a combination of 1- and 2-stage cluster sampling in a rural county. These assessments focus on local emergency response, emergency communications, household-level preparedness, and mental and physical health impacts. Assessments are ongoing, and results will be used by local public health emergency preparedness staff to support ongoing response efforts and improve future emergency communications and disaster responses.

Featured Event

July 18, 11am - 1pm PT / 2 - 4pm ET: PHEER x RAPID Workshop

Join the Public Health Extreme Events Research Network to learn about the public health applications of the RAPID Facility.

The PHEER Network is hosting a virtual workshop with our members to understand how our network can better partner with the NHERI Natural Hazards Reconnaissance (RAPID) Facility. The RAPID Facility houses instrumentation and equipment for use by researchers in time-sensitive hazard and disaster investigations. Join PHEER to learn about the public health applications of such resources.

Through a short presentation and small group discussion, this session will:

- Identify potential public health applications of existing equipment (e.g., Streetview, LIDAR, and/or drone imagery) and instrumentation (e.g., RApp mobile data collection application).
- Identify additional equipment that could be acquired to support the public health research community's data collection needs.

[REGISTER HERE](#)

Thank You for Contributing

Thank you for your interest and valuable feedback. Stay updated on our activities and resources at www.pheernetwork.org and www.uwrapid.org.

Upcoming Events

Don't miss these exciting opportunities to connect, learn, and grow together! PHEER Leadership and Steering Committee members will be presenting at and hosting the following events:



- **July 8 - 9: Strengthening Indigenous America: Building Resilience through Disaster Preparedness, Response, and Recovery** - Washington D.C. & Virtual
The NASEM Forum on Medical and Public Health Preparedness for Disasters and Emergencies will host a public workshop to explore opportunities to support the capacity of Indigenous American and Tribal communities to prepare for, respond to, and recover from disasters and public health emergencies. Workshop participants will share stories of strength and resilience, highlight tools and best practices, and identify priorities and gaps where partners can strengthen and support the capacities and capabilities of Indigenous American and Tribal communities. Workshop discussions will examine public health authorities and agreements, innovative research collaborations with Indigenous American and Tribal communities, data sovereignty, and data governance within the context of disasters and public health emergencies. Full event details [here](#).

- **July 14 - 17: 49th Annual Natural Hazards Research and Applications Workshop** - Boulder, CO
Since 1975, the Natural Hazards Center has hosted the annual Natural Hazards Research and Applications Workshop. Today the Workshop brings together federal, state, and local mitigation and emergency management officials and planning professionals; representatives of nonprofit, private sector, and humanitarian organizations; hazards and disaster researchers; and others dedicated to alleviating the impacts of disasters. The theme of the 2024 Workshop is **The Stories We Tell: Creative Strategies for Understanding and Communicating Disaster Risk**. Join us to share how you are contemplating the deep interconnections between facts and values as we work to express our ethical obligations to the people and communities we study and serve. Full event details [here](#).

Featured Publication

Would you like your work featured in our next newsletter? [Send us your updates!](#)

Do social vulnerability indices correlate with extreme heat health outcomes?

[Sahar Derakhshan](#)^{a b}, [David P. Eisenman](#)^{c d}, [Rupa Basu](#)^e, [Travis Longcore](#)^a  

[Show more](#) 

[+](#) [Add to Mendeley](#) [🔗 Share](#) [🗒 Cite](#)

<https://doi.org/10.1016/j.joclim.2023.100276> 

[Get rights and content](#) 

Under a Creative Commons [license](#) 

 [open access](#)

Abstract

Introduction. Several frameworks exist to measure vulnerability to extreme heat events using a health equity approach, but little evidence validates these measures and their applications. We investigated the degree to which social vulnerability measures and their constituent elements correlate with excess emergency room visits as an outcome measure. **Methods.** The relationship between six commonly used social vulnerability indicators and measured excess emergency room visit rates (processed by including heat-related illnesses and all-internal causes diagnosis, with considerations for age and heat days) was tested through geospatial analytics and statistical regressions, for both California and Los Angeles County. **Results.** The vulnerability indicators and the outcome measure were significantly positively associated at the census tract-level but weaker ($\sim 0.2 r_s$) at the scale of California and stronger ($\sim 0.6 r_s$) at the scale of Los Angeles County. Hazard-specific vulnerability indicators showed stronger relationships with outcome measures regardless of scale. A Poisson regression model showed a significant inter-county variation, indicating the importance of localized assessments for equitable environmental policies. **Conclusion.** The findings identify communities that are overburdened by heat and pollution and highlight the need for use of both social vulnerability and indicators of adverse outcomes from excessive heat. Patterns are found across all measures that suggest that populations facing accessibility barriers may be less likely to visit emergency rooms. This suggestion needs to be tested in other environmental settings to draw broader conclusions but has direct implications for environmental scientists and mitigation planners who use these methods.

This month we highlight a recent publication in the Journal of Climate Change and Health authored by **Sahar Derakhshan, David P. Eisenman, Rupa Basu, and Travis Longcore**. Read the full paper on the correlation of social vulnerability indicators with excess emergency room visits during extreme heat days in California and Los Angeles County: <https://doi.org/10.1016/j.joclim.2023.100276>.

Dr. Longcore also shared his thoughts in an X/Twitter thread on the study's findings and implications: <https://x.com/travislongcore/status/1796371759677256144>.

Funding Announcements

Natural Hazards Center

The [University of Colorado Boulder Natural Hazards Center](#) will provide rapid awards to eligible grantees to get into the field quickly after an extreme climate event to work with communities to start health-related research. PI: [Lori Peek](#)

[Call for Quick Response Research Awards](#). Applications now being accepted.

Available funds will support award amounts of \$10,000 to \$50,000 each.

Applications for this new call will be accepted on a rolling basis until funds are exhausted.

[Special Call for Health Outcomes and Climate-Related Disaster Research](#).

Applications are now being accepted for a special call for quick response research focused on health outcomes among groups disproportionately affected by climate disasters. Available funds will support award amounts of \$10,000 to \$50,000 each. Applications for this new call will be accepted on a rolling basis until funds are exhausted.

University of Washington RAPID Facility

The [University of Washington Natural Hazards Reconnaissance \(RAPID\)](#) Facility will soon offer technical instrumentation, training, and resources to researchers collecting perishable exposure and health data.

For more information contact uwrapid@uw.edu.

Hiring Opportunities

Extreme Heat Research Scientist

The [California Office of Environmental Health Hazard Assessment \(OEHHA\)](#) is hiring a Research Scientist (RS) IV (Epidemiology/Biostatistics (E/B)) to serve as a senior team member of the Extreme Heat Ranking System Development Section (EHRSDS) and provide direction during the development and maintenance of the extreme heat ranking system for California. The development of this system uses the most recent scientific and health data that identify risk drivers for heat impacts across California. In addition, strong public, state, and federal agency engagement is needed to ensure the tool is effective.

The RS IV (E/B) will conduct research regarding the underlying scientific and public health assumptions within the ranking system. The RS IV (E/B) will lead analysis of meteorological and epidemiological datasets related to extreme heat, represent the EHRSDS during public workshops and discussions associated with the ranking system, and create public-facing materials on the extreme heat ranking system that are transparent and easy to follow. Please find more information and application instructions [here](#).

**Warm regards,
The PHEER Leadership Team**



© 2024 by Public Health Extreme Events Research (PHEER).

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe](#)