
Bree Collaborative | Health Impacts of Extreme Heat

July 10th, 2024 | 3-4:30PM

Hybrid

MEMBERS PRESENT VIRTUALLY

Chris Chen, WA HCA

June Spector, L&I

Kristina Petsas, United Healthcare

Kelly Naismith, DOH

LuAnn Chen, CHPW

Onora Lien, NWHRN

Amy Anderson, WSHA

Brian Henning, Gonzaga Institute

Jessi Kelley, UW Collaborative on Extreme Heat

Stefan Wheat, UW

June Spector, L&I

Seth Doyle, NWRPCA

LuAnn Chen, CHPW

STAFF AND MEMBERS OF THE PUBLIC

Beth Bojkov, MPH, RN, Bree Collaborative

Emily Nudelman, DNP, RN, Bree Collaborative

Karie Nicholas, MA, GC, Bree Collaborative

Ty Jones

WELCOME

Dr. Emily Nudelman, Bree Collaborative, welcomed everyone to the July meeting. Dr. Nudelman asked for a motion to approve the June meeting minutes.

Motion to approve June meeting minutes: **motion approved.**

CURRENT SYSTEMS ISSUES

Dr. Nudelman then invited Dr. Chen to open the session offering time to describe current issues workgroup members are experiencing in their systems. Some of the key topics discussed included:

- Hospitals discharging patients to a safe location during heat and wildfire smoke
- Awareness of OSHA protections for workers, and when working in the heat can be dangerous
- Ordinances prohibiting installation of portable AC's
- Guidance in clinical settings for patients impacted by heat and wildfire smoke
- Staff safety of healthcare workers during heat and wildfire smoke
- Medication management, and alerts when patients are low on medication stock
- Conflicting guidance around exercise during a heat/smoke event

KC HEAT AND WILDFIRE SMOKE PLANS

Dr. Nudelman invited JJ Edge from King Count Public Health to share King County's local plans for emergency preparedness and response. She reviewed the following material:

- Heat Response Plan
- Wildfire Smoke Response Plan
- Hazards and health impacts of heat and wildfire smoke
 - Direct impact from event (heat stroke, death, wildfire smoke inhalation) exacerbation of pre-existing conditions, and medication interaction
 - Special danger in long term care facilities thinking about not having appropriate air conditioning or HVAC systems on top of having preexisting conditions
- Broad buckets of recommendations

- Know your risk – some folks are at greater risk than others, key factors include age, medical conditions, use of medications, exposure levels
- Reduce exposure – shelter, especially difficult for those experiencing homelessness, and in extremely hot weather.
- Knowing signs and symptoms -> behavioral change and adaptation, encouraging checking on neighbors, communicating resources with each other
- Public health's role
 - Providing health guidance and information to response partners
 - Note direct outreach not on here – do that through partners. For example, street teams handing out water currently overseen by King County housing authority
 - Chris: Funding returning soon for PHSKC street med teams
 - Do a lot of this through healthcare coalitions (NWHRN)
 - Providing health guidance and information to the public directly
 - Data tracking and surveillance
 - Information management
 - Know what is happening externally, what external partners are doing, and align and amplify efforts across sections
 - Technical support – mostly to schools for air quality
- Work with partners to determine what to do when, and how to prioritize vulnerable populations
 - Cross walk heat objectives with their plans, align everyone to use the heat risk tool from the NWS
- Response activities are thresholds for when to do things for both heat and wildfire smoke – use the NWS heat risk tool, not just a flat temperature and takes into account the time of year and duration of heat, and overnight temperatures
 - Typically trust prediction 3 days out
 - NWS Heatrisk tool came out almost 3 years ago but just now being used – NWS finally felt ready to make it national recently
- Use AQI tool to monitor air quality thresholds
- Sonya: epi fellow with climate and health equity initiative at PHSKC
 - CDC has been putting together validation of heat risk index at state and local level and relationship between heat related illness using ED data and heat risk prediction tool
- Data and surveillance
 - Document that defines queries for ICD-10 codes that are recommended for these hazards, and aligned with WA RHINO data
 - Heat related illnesses, cardiovascular events, Ems incidents, medical examiner office data
 - DOH has dashboards available too, with some data lag
 - Might do active monitoring depending on severity of event, use AQI or heat risk tool to think about that
 - Take cumulative counts right after an incident to help inform future planning, give folks and understanding of what we saw
- Public health recommendations put together for response partners
 - Sheltering, outreach, messaging across the board so we need coordinated messaging from partners
 - Takes lots of resources to make sure messaging reaches the people most at risk

- Make sure the focus on risk messaging, activating cooling centers or clean air sites and reducing outdoor activities the focus is on people most at risk
 - \in King County, unsheltered or seniors, or outdoor workers
- Trying to integrate tools into their own planning so everyone is on the same page
- Working on proactively planning with partners o they don't have to respond haphazardly when an event occurs
- CDC has new expanded page for heat risk with recommendations for clinicians
 - Helps with how to have a conversation with patients around heat risk and wildfire smoke risk
 - Questionnaire to ask patients with silly acronym
 - Not something similar for smoke
 - Incorporate these conversations when we know a heat or smoke alert is coming and having resources to share with clinicians and patients about ways to stay safe
- Questions
 - Do you coordinate with other agencies on public messaging?
 - Yes, just mapped it out this year
 - Work with environmental health folks and communications team to integrate messaging into what they are doing
 - Coordinate with event sponsors (i.e. FIFA world cup) when capacity allows
 - Mentioned ICD-10 codes recommend for heat and wildfire smoke, thinking about how clinicians can support appropriate documentation of adverse health impacts, are there document you can share for that?
 - JJ: think so, use to have to rely on notes, and that's a huge amount of data, some don't correspond to codes currently, but would love to have these codes coordinated across the board, make it easier to align and pull data
 - It's hard to communicate to folks we're seeing a general increase, but does that mean as an individual I'm at greater risk? It's hard to translate that data into response action or communicating with partners
 - Sonya: there is the national syndromic surveillance program across the country, our version called RHINO – ED data
 - nationally, most jurisdictions use heat related illness version two definition that queries the chief complaint history, the discharge diagnosis – KC also get triage notes
 - across the country, not extensive data, not full coverage, of all Eds like in WA state. WA state Eds are required to report within 24 hours. Relatively confident in heat related illnesses but less so in wildfire smoke related.
 - Could look at air quality related visits query that looks at noninfectious respiratory visits that was put together nationally, or look at increases above baseline but there are other reasons that would go up. Room for growth in some of this tracking and making sure clinicians are using these codes and not putting too much burden on clinicians to do so. Coding is nuanced and not just the provider that does it, so it's complicated.
 - Chris: for clinicians, they often will not put a heat related or wildfire smoke related code as the top condition, if someone

comes in for syncope during a heat wave I will code for syncope not heat related illness

- Have to think of other ways to identify population level impacts without imposing individual documentation burden
- Do you have building level plans available?
 - No, but that is something PHSKC is working on
 - King County mitigation plan coming out soon and some building recommendations from that potentially
 - Have an industrial hygienist working on it with us

RISK STRATIFICATION

Emily transitioned the workgroup to return to the conversation regarding risk stratification of highly vulnerable populations. Beth pulled together some resources from workgroup members and independent research to give a sense of populations at higher risk, and trying to identify the groups that experience the highest morbidity and mortality. Any suggestions on how to use some sort of stratification.

- Chris: outreach and care coordination mostly. Messaging to health care facilities is sparse, and same is true for clients. Is anyone aware of technical data specifications that support these different categories?
 - Luann: health plans can do this, filter members by condition or medication or zip code, but we run into the issue of people not knowing why we're calling them and not wanting to harass them
 - We need good communication between plans and providers as to why we are reaching out to our population
- Randy: there is some data to suggest that certain populations are clearly more at risk, most notably nursing home residents
- Chris: there may not be one data set that captures all the risk factors either, interesting to think about what data sets you need to thoroughly examine vulnerable populations
- Randy: there was a heat emergency in Chicago and elderly people that lived alone were some of the most affected because they didn't want people reaching out to them or strangers knocking on their door, so not sure if we can improve that process
- Kelly: lots of research on pregnant individuals and risk for pregnancy and birth outcomes

PUBLIC COMMENT AND GOOD OF THE ORDER

Dr. Nudelman invited final comments and thanks all for attending. At the next workgroup meeting, the group will hear from Washington department of health's office of resilience and health security and wildfire smoke epidemiology team on considerations specific to wildfire smoke and state level response and planning. The workgroup's next meeting will be on Wednesday, August 14th from 3-4:30PM.

- [Clearing the Air: Understanding Wildfire Smoke Impact on Pediatric Asthma in Washington State Webinar](#)
 - **August 8th 12-1:15 PM Pt**
- [Learning Lab: Insights into 1115 Waiver Updates, Community Hub models and Washington Healthcare's role towards better care](#)
 - **August 13th 12-1:15 PM PT (CME eligibl**