

Health Impacts of Extreme Heat & Wildfire Smoke Guideline Checklist Clinician Level 2



The current state of the issue

Exposure to extreme heat, or summertime temperatures that are much hotter and/or humid than average, [i] is a serious threat to population health and well-being. 2024 was the warmest year on record, with global temperatures 2.30 degrees Fahrenheit (1.28 degrees Celsius) above the National Aeronautics and Space administration's (NASA) 20th century baseline. [ii] The number and length of heat waves has increased significantly since the 1960s. [iii] These trends are projected to continue and worsen in the coming decades, exposing more people to the harmful consequences of heat. Higher air temperatures increase wildfire likelihood, posing a serious threat to human health, ecosystems, and infrastructure. Wildfire smoke exposure increases all-cause mortality, impacts respiratory health, and may co-occur and interact with heat exposure to impact cardiorespiratory morbidity and mortality. [iv] [v] [vi] [vii]

Planning & Preparedness

- Co-develop an individualized action plan with the patient and their support system to prevent exposure to heat and wildfire smoke.** Example action plans can be found [here](#).
 - Delegate counseling to most appropriate members of the interdisciplinary team. (*E.g., if available, involve community health workers/promotoras for patients who primarily speak Spanish*)
 - Involve the patient's support system in planning as able with patient consent.
 - Make a plan for patients who live alone or with cognitive impairment to have someone to check on them.
 - For patients with chronic conditions, (E.g., heart disease, diabetes, kidney disease, stroke, dementia, asthma, COPD)** consider condition specific considerations for action planning such as medication management and adjusting fluid intake. See **Appendix D** for resources.
 - Make a plan for safe attendance at dialysis sessions for patients with kidney disease or other necessary appointments.
 - Parents of young children should know signs and symptoms to watch for in heat and wildfire smoke and how reduce exposure. Determine when to restrict [outdoor activities](#).
 - Ensure pregnant patients or patients who may become pregnant understand their risk
- Pharmacists or prescribers: As part of their individualized action plan, discuss with patients and support system how to manage medications in extreme heat.** See [here](#).
 - Counsel patients and/or their family on increased risk and, as applicable, symptoms that may indicate drug interaction with heat.

- Consider adjustments to doses for medications most likely to [interact with heat, especially \[EN\]](#) for older patients taking multiple medications, patients on diuretics and patients on psychiatric medications.
- If taking medications that may lead to dehydration or affect electrolyte balance, consider evaluation of baseline hydration status, discuss monitoring at home (blood pressure, weight, hydration) and adjustment to fluid restriction or intake during periods of extreme heat.
- Document action plan in medical record and make copy easily accessible for patients and their support system** using appropriate language and reading level.
- Use code G0136 when screening for social needs to document screening

Equity

- Refer patients to programs/staff** (e.g., social worker, case manager, community health worker) that assist with health-related social needs. Follow the Foundation for Health Care Quality's reports and guidelines on [Social Need Screening](#) and [Social Need Intervention](#).
- If patient has FSA/HSA, consider writing note of medical eligibility for an air conditioning unit as needed.

Resources

- The Bree Report is meant to supplement these resources.
- Full Bree Report: <https://www.qualityhealth.org/bree/wp-content/uploads/sites/8/2025/01/Draft-Guidelines-EHWS-24-0131-Final.pdf>
- CHILL'D OUT Questionnaire: <https://www.qualityhealth.org/bree/wp-content/uploads/sites/8/2025/02/CHILLD-Out-Questionnaire-H.pdf>
- Quick Start Guide for Clinicians on Heat and Health: <https://www.qualityhealth.org/bree/wp-content/uploads/sites/8/2025/02/Heat-Quick-Start-Guide-Clinicians-H.pdf>
- How to use the Heat Risk Tool and Air Quality Index: <https://www.qualityhealth.org/bree/wp-content/uploads/sites/8/2025/02/How-to-use-the-HeatRisk-Tool-and-Air-Quality-Index--Heat-Health--CDC.pdf>
- WA DOH Portable Air Cleanser: <https://doh.wa.gov/community-and-environment/air-quality/indoor-air/portable-air-cleaners>
- WA Air Quality Map: <https://enviwa.ecology.wa.gov/mobile/>

Read the full Bree Report on Health Impacts of Extreme Heat and Wildfire Smoke for online by scanning the QR code:



Connect with the Bree Collaborative at bree@qualityhealth.org

References:[i] Centers for Disease Control and Prevention. (n.d.). Extreme heat and your health. Retrieved from <https://www.ready.gov/heat> [ii] National Aeronautics and Space Administration (NASA). (n.d.). Temperatures rising: NASA confirms 2024 warmest year on record. Retrieved from <https://www.nasa.gov/news-release/temperatures-rising-nasa-confirms-2024-warmest-year-on-record/> [iii] National Oceanic and Atmospheric Administration. (2021). Heat wave: A major summer killer. Retrieved from Severe Weather Awareness - Heat Waves [iv] Liu, Y., & Sinsky, E. (2020). Mortality associated with wildfire smoke exposure in Washington State, 2006-2017: A case-crossover study. Environmental Health. Retrieved from <https://link.springer.com/article/10.1186/s12940-020-00682-5> [v] Gan, R. W., Ford, B., Lassman, W., Pfister, G., Vaidyanathan, A., Fischer, E., Volckens, J., Pierce, J. R., & Magzamen, S. (2017). Comparison of wildfire smoke estimation methods and associations with cardiopulmonary-related hospital admissions. GeoHealth, 1(3), 122-136. <https://doi.org/10.1002/2017GH000073> [vi] Chen C, Schwarz L, Rosenthal N, Marlier ME, Benmarhnia T. Exploring spatial heterogeneity in synergistic effects of compound climate hazards: Extreme heat and wildfire smoke on cardiorespiratory hospitalizations in California. Sci Adv. 2024 Feb 2;10(5):eadj7264. doi: 10.1126/sciadv.adj7264. Epub 2024 Feb 2. PMID: 38306434; PMCID: PMC10836726.[vii] Ma Y, Zang E, Liu Y, Wei J, Lu Y, Krumholz HM, Bell ML, Chen K. Long-term exposure to wildland fire smoke PM2.5 and mortality in the contiguous United States. medRxiv [Preprint]. 2024 Jun 11:2023.01.31.23285059. doi: 10.1101/2023.01.31.23285059. PMID: 36778437; PMCID: PMC9915814.