

Heat Related Illness in Washington State

Overview

Heat related illness (HRI) is a significant burden for workers, and climate change will likely increase the risk for HRI in workers. The purpose of this study was to better understand the characteristics of Washington workers who suffered from HRI from 2006 to 2017.

Washington State workers' compensation claims for HRI were identified using Occupational Injury and Illness Classification System (OIICS) codes, International Classification of Diseases (ICD) 9/10 codes, and medical review. Claims were linked with temperature data from local weather stations.

Rates of HRI were estimated by industry and patterns were evaluated by ambient temperature.

Heat related illness among workers in Washington State: A descriptive study using workers' compensation claims, 2006-2017

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Key Findings

- From 2006-2017, there were 918 confirmed Washington workers' compensation HRI claims; 654 accepted and 264 rejected.
- Workers in the Public Administration industry sector had the highest third quarter rate (131.3 per 100,000 full time employees [FTE]), followed by Agriculture, Forestry, Fishing, and Hunting sector workers (102.6 per 100,000 FTE).
- Farmworkers and Laborers had the highest number of accepted HRI claims followed by Firefighters.
- The median maximum daytime temperature was below the Washington heat rule threshold for 45% of the accepted HRI claims.
- Spanish speaking workers were overrepresented in HRI cases.

Impact

The results of this study can help inform the monitoring and prevention of work-related HRI. In addition, the WA heat rule threshold may not be adequately protecting workers, and racial disparities are present in occupational HRI. Employers should take additional precautions to prevent HRI depending on the intensity of heat exposure. States without heat rules and with large industry sectors disproportionately affected by HRI should consider regulations to protect outdoor workers in the face of more frequent and extreme heat waves.

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Research for Safe Work

The SHARP Program at the Washington State Department of Labor & Industries partners with business and labor to develop sensible, effective solutions to identify and eliminate industry-wide hazards. Learn more at www.Lni.wa.gov/Safety/Research

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