

What can syndromic surveillance data tell us about occupational heat-related illness?

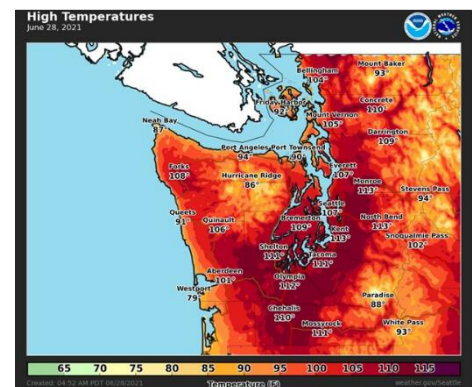
As global temperatures rise, so does the risk of occupational heat exposure. We used syndromic surveillance data to identify workers at greatest risk of heat-related illness and help inform prevention efforts.

The Challenge

Few data sources capture the information needed to characterize the risk of occupational heat-related illness (HRI) by industry and occupation. Washington's syndromic surveillance data captures free text descriptions of employer name and occupation for emergency department (ED) visit records, but the data are not coded in manner that facilitates analysis.

The Response

The Washington Occupational Health Surveillance Program assigned standard industry and occupation codes to free text descriptions of employer name and occupation captured in syndromic surveillance data to estimate HRI ED visit rates by industry and occupation. Industry codes were assigned by linking syndromic surveillance data to administrative employment records. Occupation codes were assigned using the NIOSH Industry and Occupation Computerized Coding System (NIOCCS).



Industries with the highest rates of HRI ED visits for workplace heat exposure were agriculture, forestry, fishing, and hunting, and transportation and warehousing. Occupations with the highest rates of HRI ED visits for workplace heat exposures were construction and extraction occupations and transportation and material moving occupations.

The Impact

Working in heat can be life-threatening in some cases. Having good data on which workers are most affected by heat can help policymakers and employers better understand the risks and craft solutions to keep people safe at work. This study improves our ability to understand—and thereby address—the heat risks involved in different jobs and industries.

For more information, refer to the full report: Wuellner S, Turner K, Spector JT. Emergency department visits for heat-related illness among workers: Occupational health surveillance using Washington syndromic surveillance data. *Am J Ind Med*. 2024 Nov;67(11):994-1005. doi: 10.1002/ajim.23650. Epub 2024 Sep 2. PMID: 39221707.