



**Heat-related Illness in Washington State, State Fund Workers'
Compensation Claims, 1995 – 2004**

Technical Report Number 59-1-2006

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January 2006

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Executive Summary:

We performed a descriptive study of the 446 accepted state fund workers' compensation claims for heat-related illness (HRI) over the 10-year time period from 1995 -2004. The average claim incidence rate for accepted state fund HRI claims over the study period was 3.2 per 100,000 FTE. Thirty-three claims (7.4%) involved greater than three days of lost work time and one fatality occurred. The average cost of a state fund HRI claim was \$1,287 which was well below the average cost of a state fund claim, \$5,953, for the ten-year period.

Industry sectors accounting for the most number of claims were Construction - 150 claims (33.6%), Public Administration – 71 claims (15.9%), Manufacturing – 43 claims (9.6%) and Agriculture, Forestry, Fishing and Hunting – 31 claims (7.0%). All but eight of the 43 claims in the manufacturing sector were in an indoor environment.

Over 83% (n = 373) of the HRI claims occurred during June, July and August, of which approximately 80% occurred in an outdoor environment. Claims occurring in an indoor environment were also more common during the summer months. During the ten-year period, there were eighty five days in which multiple HRI claims occurred. These days accounted for 250 HRI claims or 56% of the total HRI claims. The largest number of HRI claims filed in a single day was 15. The estimated average maximum temperature for the business location of the employer for all outdoor HRI claims was 87°F. Although 22% of the employed population lives in Eastern Washington, approximately 47% of the HRI claims occur there.

Review of the medical records in the claim files revealed evidence of the presence of individual risk factors for HRI inclusive of medication use, co-morbid medical conditions and workers poorly acclimatized for the physical demands of work in hot environments.