

Executive Summary for

Work-Related Traumatic Head and Brain Injuries in Washington State, 1990-1997

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Executive Summary

Objectives

Traumatic head and brain injuries (THBIs) are severe, life-threatening injuries. Their impact on the worker, the worker's family, the employer, and society can be great. To prevent future injuries from occurring, we must better understand the nature of these incidents, the situations in which they are occurring, trends over time, and their costs. Readers can use this report to help focus agency, employer and labor resources to reduce the number and impact of these injuries.

Methods

Accepted Workers' Compensation claims for traumatic head and brain injuries in the Washington State Fund system were used in this report. THBIs were defined as injuries that occurred between the years 1990 and 1997, where there was a fracture to the skull, a concussion, or other injury to the brain and the worker was hospitalized within 7 days of being injured. The occurrence of injuries and costs were described by occupation, industry and Washington Industrial Classification (WIC) codes. Various trends were also investigated over time.

Results

Workers with the highest risk of having a traumatic head or brain injury worked in logging, roofing, and road construction. The loggers were primarily being struck by wood items, the roofers primarily fell from elevations, and some of the road construction workers fell from elevation while others were involved in motor vehicle collisions. On average, the total workers' compensation claim cost was \$135,000/claim, the injured workers took nearly 400 days off work, and spent 67 days in the hospital. The annual workers' compensation cost of these injuries is approximately \$14 million. On average, there were 106 THBIs per year in this time period, which amounts to 9 THBIs per 100,000 workers each year in Washington State.

Conclusions

Traumatic head and brain injuries tend to occur in situations where work is being conducted on elevated surfaces, around/in vehicles moving at high speeds and in proximity to large objects elevated above the worker (e.g. trees and their limbs). In most cases, there are known methods to reduce the exposures or the energy involved in the incident. These methods include conducting work at ground level, reducing vehicle speeds, and increasing the distance between the worker and the hazard. Personal protective equipment can also be used (e.g. fall protection systems, seat belts, and hard hats). Like most workplace injuries, traumatic head and brain injuries are preventable. Work sites and conditions should be assessed for their potential to cause injury and hazards eliminated before an injury occurs.