

# Surveillance of Injuries and Illnesses in the Residential Wood Frame Construction Industry

Washington State, 1993-1999

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## **Executive Summary**

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This report summarizes injuries and illnesses in the Residential Wood Framing Industry as available from the Washington state Department of Labor and Industries workers' compensation claims management database. Occupational acute traumatic injuries are an important cause of significant morbidity, mortality and disability in Washington workers. Tracking injuries in different occupations and work environments can help us better understand the mechanisms and circumstances leading to injury occurrence. This descriptive study characterizes work-related injuries and illnesses in the wood frame construction industry. It also establishes baseline data to monitor the effectiveness of an initiative by the Washington State Department of Labor and Industries reduce injuries in the residential wood frame construction industry.

Workers' compensation claims for injuries and illnesses occurring in wood frame construction workers are coded according to insurance risk class in the Washington State Department of Labor and Industries' database. Claims filed between January 1, 1993, and December 31, 1999, were identified in the database and used in this analysis. For each claim, we extracted details of the injury using the American Standard Method of Measuring and Recording Injury Experience of the American National Standard Institute (ANSI). We obtained and examined both the total and median cost of the claims. The number of worker-hours reported to the workers' compensation system, by state fund wood frame industry employers, was used to calculate injury rates.

A total of 33,021 claims were filed for work-related injury and illness. The rate for all accepted claims was 45 claims per 100 full-time equivalent employee-years (FTEs-YR). The claims rate decreased from 52 to 41 claims per 100 FTEs-YR over the study period. The rate of work-related compensable claims was 13 claims per 100 (100 FTEs-YR), with rates decreasing from 15 to 12 claims/100 FTEs-YR over the study period. Counts by nature of injury were highest for cuts, 10,350 (32.0%), followed by sprains, 8,919 (27.5%) and scratches, 2,884 (8.9%). Fasteners were the most frequent source of injuries 4395 (13.5%), followed by timber/slab, 3,257 (10.0%) and particles, 2,254 (6.9%). Pneumatic nail guns accounted for over one-third (1720/4395) of claims involving fasteners as the source of injury. Fingers were the most common body part injured accounting for 17.5% of the claims, followed by the back (14.0%), eye (10.4%) hand (10.4%), knee (5.4%), foot (5.3%) and wrist (4.3%). These body parts accounted for the majority (65%) of the cases. There were 84 amputations and fingers were involved in 98% of amputation claims. A saw or power-saw was the most common source (95%) of the amputations. Amputations involved the highest median claim cost (US \$ 12,297). The median cost for all non-fatal injuries and illnesses was \$ 244. There were 11 fatal claims and 1,070 (3.2%) injury related hospital admissions.

In summary, work-related injuries in residential wood framing are costly and severe. The information in this report can be used to monitor claim trends and to evaluate the effectiveness of the residential wood framing initiative in reducing injury and illness rates.