

Title of Intervention: Vertical Fall Arrest Standard

Website: <http://www.lni.wa.gov/wisha/rules/construction/HTML/296-155c1.htm>

Intervention Strategies: Environments and Policies

Purpose of the Intervention: To decrease falls from elevation

Population: Union Carpenter workers

Setting: Washington State; worksite-based

Partners: None mentioned

Intervention Description:

- Environments and Policies: Washington State enacted a change in their fall standard for the construction industry in 1991, which preceded the Safety Standard for Fall Protection in the Construction Industry set forth by Federal OSHA in 1994. This standard required, among other things, personal protective equipment and a fall protection plan identifying workers at risk for a fall of six feet or more. Residential construction was included.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Not mentioned
- Training: Not mentioned
- Technology: Not mentioned
- Space: Not mentioned
- Budget: Not mentioned
- Intervention: Policy change
- Evaluation: Data from various carpenter unions, statistical software, analysts

Evaluation:

- Design: Pre- and post-evaluation
- Methods and Measures:
 - Data was collected from the Carpenters Trusts of Western WA, the United Brotherhood of Carpenters and Joiners and the Washington State Dept of Labor and Industries to compare rates of falls before and after the standard changed.
 - Compensation claims data included the date of injury, codes describing the part of the body injured, the nature of the injury, the type of event causing the injury, the amount of lost work time associated with each injury and the costs associated with lost time, medical care and permanent impairment.
 - Person-hours of work as a union carpenter were used as the measure of time at risk.
 - Measures of the overall effect looked at rates at which falls occurred and severity of falls sustained.

Outcomes:

- Short Term Impact: There was a significant reduction in mean paid lost days per event. There was a significant reduction in mean cost per fall.
- Long Term Impact: There was a significant decrease in the rate of falls from height after the standard went into effect. The greatest decrease was seen between 3 and 3½ years after the standard went into effect.

Maintenance: The standard remains in effect.

Lessons Learned: Falls are a significant public health risk for carpenters and they are responsible for a significant burden of costs for work-related injuries. There is a need to prevent falls from both high and low elevations.

Citation(s):

Lipscomb, H. J., L. Li, et al. (2003). "Work-related falls among union carpenters in Washington State before and after the Vertical Fall Arrest Standard." *Am J Ind Med* 44(2): 157-65.

Lipscomb, H. J., J. M. Dement, et al. (1997). "Surveillance of work-related musculoskeletal injuries among union carpenters." *Am J Ind Med* 32(6): 629-40.

Lipscomb, H. J., L. Li, et al. (2003). "Falls among union carpenters." *Am J Ind Med* 44(2): 148-56. (plus one additional reference)