

Citation

Nelson, N., Kaufman, J., Kalat, J., & Silverstein, B. (1997). Falls in construction: Injury rates for OSHA-inspected employers before and after citation for violating the Washington State fall protection standard. *American Journal of Industrial Medicine*, 31(3), 296–302.

Highlights

- The study's objective was to determine the effect of receiving an OSHA citation for violating the Washington State Fall Protection Standard on injury claim rates among construction employers.
- The study used a regression model to compare injury claim rates for construction employers that had received a citation for violating the Washington State Fall Protection Standard between 1991 and 1992 to rates for those that had not received a citation for violating this standard during this time period.
- The study found that being cited for violating the falls in construction standard was associated with a statistically significant increase in the likelihood of experiencing a subsequent reduction in injury claim rates compared to construction employers that were not cited.
- The quality of the causal evidence presented in this study is low. This means we are not confident that the differences in the likelihood of experiencing a reduction in injury rates between employers that received a citation for violating the Washington State Fall Protection Standard and employers that did not receive such a citation are attributable to the citations.

OSHA Enforcement Activities and Outcomes

The study examined the effect of receiving an OSHA citation for violating the Washington State Fall Protection Standard on injury claim rates in construction employers. The study analyzed the likelihood of employers experiencing a reduction in injury claim rates, as opposed to not experiencing a reduction (that is, experiencing either no change or an increase) in injury claims.

Features of the Study

The study used a regression model to compare injury claim rates for construction employers that had received a citation for violating the Washington State Fall Protection Standard between 1991 and 1992 to rates for those that had not received a citation for violating this standard during this time period. The model accounted for differences between the types of establishments that received inspections by including controls for firm size and type of business.

The authors used data on workers' compensation claims and employment from the Washington State Department of Labor and Industries for 9,085 construction employers that were insured for workers' compensation through the state fund between 1990 and 1992.

Findings

Being cited for violating the falls in construction standard was associated with a statistically significant increase (2.3 times) in the likelihood of experiencing a reduction in injury claim rates compared to construction employers that were not cited.

Considerations for Interpreting the Findings

In this study, the estimated differences between employers in the likelihood of experiencing a reduction in injury rates may reflect underlying differences in safety levels or other factors, rather than the impact of receiving a citation for violating the Washington State Fall Protection Standard. Citations are assessed when an inspection uncovers OSHA violations; therefore, the firms that received a citation may have had more egregious safety violations that management would have addressed, even without the citation.

Causal Evidence Rating

The quality of the causal evidence presented in this study is low. This means we are not confident that the differences in the likelihood of experiencing a reduction in injury rates between employers that received a citation for violating the Washington State Fall Protection Standard and employers that did not receive such a citation are attributable to the citations. To provide more convincing causal evidence that meets CLEAR criteria, the study would have to examine only firms that received citations at random or use some underlying random variation in the receipt of citations. This would give us confidence that the differences in outcomes between the firms that received citations and those that did not was attributable to the citation and not underlying safety or other factors at the firm.