

The Effect of DOSH Enforcement Inspections and Consultation Visits on the Compensable Claims Rates in Washington State, 2004-2005

SHARP Technical Report Number: 70-03-2006



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Keywords: DOSH, Washington State, compensable claims rates,
workers' compensation

December 2006

Executive Summary

The Safety & Health Assessment & Research for Prevention (SHARP) program of the Washington State Department of Labor and Industries (L&I) has conducted several analyses on the association between the consultation and enforcement inspection activities of the Washington State Division of Occupational Safety & Health (DOSH, formerly WISHA) and compensable claims rates using L&I data. Two of these reports were completed in 2001 and 2003, and both showed that DOSH enforcement inspections were associated with a decline in claims rates relative to those businesses that had no DOSH visits (Baggs et al. 2003; SHARP Technical Report 2003). No statistically significant change was found amongst businesses receiving only consultation visit(s) during the same evaluation periods.

In a continued effort to evaluate progress toward the DOSH strategic goal of “Reducing the State-Fund/Self Insured compensable claims incidence rate by 20% by 2010 from a baseline of 23/10,000 FTEs (DOSH Strategic Plan 2006-2010, Goal 1b), this analysis examined whether a similar decline in compensable claims rates occurred amongst the set of businesses receiving DOSH visits in a new cohort. Unlike the previous reports which excluded the employers with less than 10 full time equivalent employees per year (FTEs), this study included employers with 5-9 FTEs. The accounts with 5-9 FTEs constitute 16% of all accounts and were where about 22% of DOSH activities occurred. These additional observations allowed us to evaluate the impact of DOSH visits on smaller businesses.

Apart from the new sample selection criteria, the methods used in this analysis mirror those used in the previous studies, with the addition of an exploration of the impact of DOSH citations on changes in compensable claims rates.

The following inclusion criteria were used to select the group of accounts used for this study:

1. Only companies reporting hours each quarter in State fiscal years (SFY) 2002-2005.

2. State Fund companies.
3. Companies with a single business location.
4. Companies with at least 5 FTEs per year during SFY 2002-2005.
5. Companies with no prior DOSH activity during the pre-study period (SFY 2002-2003).

Major results:

The 16,934 sampled accounts (State Fund, single business locations reporting at least 5 FTEs per year and hours greater than zero in every quarter during SFY 2002-2005 and who had no DOSH activity during SFY 2002-2003) represented 6.2% of the 262,672 identified accounts during SFY 2002-2005. Among the fixed-site industries, 90 accounts had at least one DOSH consultation visit and 427 accounts had at least one enforcement inspection during SFY 2004. Among the non-fixed-site industries, 38 had at least one DOSH consultation visit and 205 had at least one enforcement inspection during SFY 2004. Of the 666 DOSH enforcement inspections during SFY 2004, 502 (75.4%) resulted in at least one DOSH citation.

The results of the analysis on the 2004 cohort of DOSH-visited businesses were consistent with the main findings of the 2001 and 2003 reports:

- Among the fixed-industry accounts, DOSH activity (either consultation, enforcement or both) was associated with a 20.4% greater decline in compensable claims rates from SFY2004 to SFY2005 than that for accounts without DOSH activity. Among the non-fixed-industry accounts, DOSH activity was associated with a 3.7% increase in compensable claims rates relative to non-visited businesses during the same period of time.
- Among the fixed-industry accounts, DOSH enforcement inspections were associated with a 16.3% greater decline in compensable claims rates from SFY

2004 to SFY 2005 ($p=0.0450$), after adjusting for average size of the accounts, and compensable rates in the pre-study period. The decrease in compensable claims rates was more evident among the accounts with 5-24 FTEs (31.5%, $p=0.0047$) and at least 50 FTEs (15.9%, $p=0.31$), although the latter was not statistically significant.

- Among the non-fixed-industry accounts, DOSH enforcement inspections were associated with a 9.2% greater decline in compensable claims rates for all accounts, although this was not statistically significant ($p=0.32$). The drop in compensable claims rates was more evident among the employers with 25-49 FTEs (17.8%, $p=0.29$) and those with at least 50 FTEs (13.6%, $p=0.34$).
- DOSH consultation visits were associated with a greater *increase* in compensable claims rates for both fixed-industry and non-fixed-industry accounts. There were insufficient numbers of consultations among the study accounts to determine the significance of this result.
- Among the fixed-industry accounts, the 97 accounts that experienced DOSH enforcement inspections but no citations were associated with a 34.7% decline in compensable claims rates from SFY 2004 to SFY 2005 ($p=0.0075$), after adjusting for average size of the accounts and compensable rates in the pre-study period. In contrast, the 349 accounts with citations did not have a statistically significant decline in compensable claims rates (10.5%, $p=0.25$).
- DOSH activities were generally not associated with a decrease in the survival of the accounts, except for the fixed-industry accounts with DOSH consultation visits where a 12.5% decrease in survival was observed ($p<0.0001$).