

WORKING P A P E R

The Pennsylvania Certified Safety Committee Program

An Evaluation of Participation and Effects on Work Injury Rates

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WR-594-PA

August 2008

Prepared for the Pennsylvania Department of Labor and
Industry

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EXECUTIVE SUMMARY

The Department of Labor and Industry in Pennsylvania requested that RAND conduct a study that would assess: 1) how effective the Certified Safety Committee (CSC) program had been in improving safety and health outcomes; and 2) how to increase the participation of firms in the program. To address these objectives, we answer the following questions in this report:

a) Program Impact

- Do CSC participants experience greater reductions in injuries compared to non-participants?
- Does the extent to which CSC participants comply with program requirements affect the changes in their injury rates?

b) Program Participation and Dropout

- Are firms with more employees more likely to join the CSC program?
- Are firms in high risk industries more likely to join the program?
- Are firms with higher injury rates within their industries more likely to join the program? Are firms whose injury rates just went up more likely to join the program?
- Are firms with labor unions more likely to join the program?
- Are firms with certain workers' compensation insurers more likely to join the program than firms with other insurers?

We asked the same questions about the determinants of dropping out of the program. In addition, we asked whether, among the audited firms, those which had poorer compliance with program requirements were more likely to drop out.

Our final sample consisted of 364,840 firms and 1,901,768 firm years and our analysis revealed the following findings.

Program Impact on Injury Rates

We found that firms that joined the CSC program did not, on average, experience reductions in injury rates compared to similar firms that did not join. In fact, there was evidence that injury rates actually decreased less for CSC participants. The injury rates for participants declined by an average of 0.06 per 100 employees, while the rate for the matched non-participants decreased by 1.01 per 100 employees. This unexpected finding

was strongest in the construction industry, where rates at non-participants declined by 1.5 per 100 workers more than rates at participants. The unexpected finding was found in other industries as well, although it was not statistically significant.

We also examined whether the variation in program implementation had any effect on injury rate change after program participation in about 500 audited firms. When a deficiency was cited for the requirements that an agenda be prepared for each safety committee meeting or that all committee members receive annual training in 3 specified areas, the unadjusted post-participation injury rate was significantly higher. After controlling for other factors, the injury rate of the 51 percent of firms that failed to train committee members increased 1.79 per 100 employees compared to the firms that complied with all the requirements or firms that were cited for other (apparently less important) requirements.

We should be clear that we do not doubt that, because of the CSC, some firms made considerable strides in injury prevention by establishing safety committees and carrying out the activities required by the CSC. Because over 80 percent of the audited firms had deficiencies, and an additional 5 percent had no operating committee at all, our findings suggest that the absence of an overall benefit was largely, although not entirely, due to non-compliance with effective program elements.

Program Participation

Firms with injury rates less than half of their industry average were about half as likely to join the certified safety committee program compared to those with injury ratios above that level. Firms with over 100 employees were almost 100 times as likely to join as firms with fewer than 25 employees. Participating firms were much larger than non-participants, with an average size of 167 versus 17. Firms with 2 to 5 workplace sites were 15 percent less likely to join than firms with a single site. Firms in western Pennsylvania were 20% more likely to participate than similar firms in eastern Pennsylvania. Most non-participating establishments had zero injuries during the observed time period. The mean injury rate of participants was 2.6 per 100 workers versus 0.9 for non-participants.

Compared to the firms in agriculture or mining industries, construction firms and manufacturing firms were more likely to join the program while those in the service industries were less likely to join the program. Firms with unionized workforces were

about 20 percent less likely to join. Holding firm characteristics constant, there were major differences among large workers' compensation insurers in the percentage of their clients who participated.

Overall participation in the program increased over time, growing from less than 0.5 percent in 1996 to nearly 2 percent in 2006. Rates of participation increased steadily, with relatively larger increases between 2001 and 2006. One factor that played a role in these increases were the statutory changes that allowed the premium discounts to be received in up to 5 years (in 1996) and indefinitely (in 2002). On average, participating firms in our sample participated in the program 6.5 out of the 13 possible years.

Program Dropout

For the most part, the features that made firms less likely to participate in the first places also made them more likely to drop out. This applied to small employment size and lower injury rates compared to the industry average. Firms with headquarters located outside of Pennsylvania were twice as likely to drop out. With the exception of manufacturing firms (which were 2.2 times more likely to drop out), industry did not have a significant impact on whether a firm remained in the program.

Firms with unionized workforces were about 50 percent more likely to drop out than non-unionized firms, which is consistent with what we found about the effect unionization on participation. Not surprisingly, firms which had one or more deficiencies cited in their state CSC program audits were about 40 percent more likely to drop out by the end of 2007. Firms with no deficiencies were 86 percent less likely to drop out.

Policy Options

To Improve Program Effectiveness

- One option is to continue the status quo. However, it seems improper that so many firms appear to be getting a discount without fulfilling their share of the bargain in terms of implementing the Safety Committee program.
- Program compliance could be better enforced, especially on some key program requirements such as that all committee members receive annual training in 3 specified areas. The downside is that a more extensive audit program would reduce participation, and more audits would require more staff, increasing public costs.
 - Given that the great majority of participants were cited for some audit deficiency and given the absence of knowledge about whether all of the requirements are important for safety, it seems

unwise to sanction participants simply because they have any deficiency. But to sanction firms that have no program at all or that fail to train their committee members is more reasonable.

- The State could require that firms that meet either of the two criteria above pay back any discount that they received that year from CSC program participation. This policy can be criticized for being too lenient; after all, a firm that never intended to comply is no worse off joining and being caught than it would have been if it had not joined. However, being forced to return the discount would provide more incentive for compliance than currently exists.
- Some of the funds received from non-compliant firms could go the Bureau of Workers' Compensation to compensate it for audit activities. However, this might be viewed as providing an incentive for the Bureau to cite deficiencies too often. Otherwise funds would be returned to the WC insurer.

To Increase Program Participation

Given our findings on effectiveness, it is not evident that increasing participation deserves a high priority until issues of compliance are addressed. However, the following could be employed:

- Raising the discount in WC premiums for participants would very likely increase participation, but it would shift some costs to insurers. It is possible to estimate what the increase in participation would be for a given increase in the discount. However, good estimates require using actual premium data, which we did not have for this study. The PCRB, however has this data and could carry out this study.
- Program requirements could be relaxed. A method to identify what provisions, if any, could be usefully dropped would require finding deficiencies which are not related to injury prevention, especially those that also increase drop-outs. The analyses that we conducted here could provide a first step, but a larger sample of audits is needed in order to make those judgments with more confidence.
- The BWC could consider adopting measures that would better assure that insurers did not unduly discourage firms from participating. Our results suggest that participation were associated with having different WC insurers.