

EXECUTIVE SUMMARY

The Safety and Health Assessment and Research for Prevention (SHARP) Program, at the Washington Department of Labor and Industries (L&I), has completed its study of the food processing industry. Food processing was the first industry to be studied as part of the Healthy Workplaces initiative, funded by the Washington State Legislature in 1999. The study showed that:

1. Companies that had higher “organizational health” also had lower workers’ compensation (WC) claims rates.
2. Companies with higher “organizational health” paid higher employee wages, on average.
3. Companies that used a systems approach to health and safety had lower WC claims rates.

The relationship between safety and performance is viewed as a balance of technology, organization, environment, tasks, and the people necessary to perform those tasks. When the relationship is out of balance, performance or quality may be affected and more injuries may occur.

Background on the Healthy Workplaces Initiative

The overall goal of the Healthy Workplaces initiative is to reduce work-related injuries in an industry by five percent. SHARP hypothesizes that:

1. Workplaces with high financial and organizational health will have a high level of employee health and safety,
2. The way a workplace is organized determines financial and worker health, and
3. Identifying “best practices” in the healthiest workplaces and promoting those practices throughout the industry will improve health and safety.

The SHARP program selected the food processing industry as the first to study because of its economic importance to Washington state and its above-average rate of work-related injuries. In 1996, the food processing industry accounted for \$9.83 billion in shipped product (13.7% of Washington’s total value of manufacturing production), and employed approximately 40,000 workers. However, this industry has one of the highest WC claims rates in the state (17.5 WC claims per 100 workers in 1999, 66% above the rate for all industries combined). For the period 1995 to 1999, there were 24,444 accepted Washington WC claims in the food processing industry. Cost information was available for 17,105 of those claims, resulting in \$67.2 million for the five-year period, an average of \$13.4 million each year.

The purposes of the study in food processing were to determine what factors make a workplace healthy and to identify health and safety strategies that companies have found to be successful in reducing work-related injuries.

Three Phases of the Study

The study period was from 1999 to 2001. There were three phases to the study: a telephone survey, company site visits, and an educational intervention.

Telephone Survey. An industry-wide telephone survey was conducted. A scoring system was developed to rate the companies “organizational health” according to their telephone responses. Organizational health included communication, productivity, quality, safety and health policies, injury tracking, and philosophy. A total of 142 companies participated in the telephone survey. The response rate was 37%.

Company Site Visits. Site visits were conducted at 19 companies. The purposes of the site visits were to understand health and safety hazards and how workers may be exposed; to determine what measures companies have taken to control exposures; to assess organizational factors including policies and procedures, safety training materials, and perceptions of organizational culture; and, to identify "successful strategies" used by companies that are effective in reducing work-related injuries and illnesses. "Best practices" we observed at the companies included:

- Workplace philosophies that incorporated health and safety from the top down;
- Adopting open door policies to improve communication between management and workers;
- Retrofitting machine guards for older machines and equipment;
- Eliminating contact with chemicals by using automatic mixing and dispensing equipment;
- Completely enclosing noisy processes; and
- Using lift assists to eliminate the manual lifting of heavy objects.

Educational Intervention: We identified hazards that were common among the companies we visited. We developed an educational booklet that described the various safety and health topics, such as organizational factors; hazards such as noise, slips, and falls; information on ways to improve organization, safety, and reduce hazards including successful strategies used by food processors. The educational materials were pilot tested with the 19 companies. Follow-up telephone interviews were completed with 14 (74%) of the company managers. Of the 11 who read the materials, six (55%) responded that the materials were useful, and three (27%) intended to implement some of the suggestions.

Findings and Conclusions

Findings from this study indicate that high levels of organizational health have a positive impact on WC claims rates. In addition, for companies with 11 or more employees, the larger the company the lower the WC claims rate. Also, the average organizational health score for smaller companies was lower than large companies, even after scores were adjusted for size. Companies with higher organizational health scores had a higher average employee wage. Companies that used a systems approach to health and safety had lower WC claims rates.

We were unable to determine financial health using administrative databases because the information was not available at the worksite level. On the advice of the industry association, we used health and safety management as a surrogate for overall organizational health. Having worksite-specific WC claims, hours and revenue data are critical for the accurate assessment of occupational safety and health problems in Washington state.

More attention needs to be focused on small companies to improve management systems and increase safety and health resources. Continued support for inter-agency occupational health and safety training is indicated, particularly for the Washington State Department of Agriculture and Department of Health inspectors who work with food processing companies.

The educational materials developed through this project are being distributed industry-wide. While educational materials can serve as vehicle for sharing successful strategies, using this method alone may not be enough to create change. To facilitate the transfer of successful strategies, a variety of incentives should be tried to motivate companies to change.