Cost Benefit Analysis of
Safety Incentive Programs - Industrial Code Rule 60

Starting a workplace safety and loss prevention program lowers the cost of doing business. The program:
- lowers an employer’s workers’ compensation insurance costs
- leads to better worker morale and productivity
- reduces accidents and
- makes workers safer

National Accident Statistics and Costs

- 10,000 U.S. workers have injuries or illnesses on the job every day
  - 14 die from an injury suffered at work\(^1\)
- The average cost per work-related injury was $43,000 in 2007\(^2\)
- Disabling injuries cost US employers some $50 billion each year in direct wage replacement and medical payments
- The Liberty Mutual Insurance 2009 Workplace Safety Index estimates that employers spent $52 billion in 2007 on wage payments and medical care\(^3\)
  - On-the-job injuries also have indirect annual costs of $80-$200 billion
- In 2007, 4 million U.S. workers had work-related injuries or illnesses\(^4\)
- The Workplace Safety Index charts the 10 most common causes of workplace injuries:
  - Injuries caused by overexertion cost $12.5 billion in direct costs in 2007, or almost one-quarter of the total
  - Falls on the same level cost employers $7.7 billion
  - Falls to lower levels cost employers $6.2 billion

The Effect of Safety Programs on Business

By paying attention to safety issues, employers of all sizes and types can:
- Avoid legal penalties
- Raise worker morale
- Increase productivity
- Improve retention

Good safety programs can also help lower the cost of workers’ compensation.

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An employer’s workers’ compensation premium is based on:
- Classification
- Payroll
- Accident history

Insured employers also often get an experience modification rating (EMR). The EMR compares an employer’s accident rate to that of other similar businesses. Companies with a higher accident rate than the industry average pay higher premiums. Employers that cut their accident rates have lower EMRs.

Workplace safety programs can take many forms and cover many problem areas. Employers must design a safety program that works for their business.

Here are some basic elements that make up a successful safety program:\footnote{Whiting, Meredith Armstrong and Charles J. Bennet, Ph.D. \textit{Driving Toward “0”: Best Practices in Corporate Safety and Health}. The Conference Board, Inc. 2003.}:
- Executive leadership
- Workers believe that safety and health is important to the company
- Workers understand how to achieve expected results
- Creating a safety and health program that is right for the company
- Regular performance monitoring and feedback

Other best practices include:
- Management visibility and leadership
- Engaging and empowering all workers
- Making everyone accountable
- Acknowledging positive and negative comments
- Sharing knowledge and information
- Putting safety into practice in all company operations
- Actively looking for ways to improve safety and health

\textbf{Cost Savings through Safety Programs}

The Occupational Safety and Health Administration (OSHA) runs the Voluntary Protection Program (VPP). This is a safety and health program that a business can choose to join. Companies with a VPP have a 52\% lower rate of “injury with days away” than the average for their industry.\footnote{http://www.osha.gov/dcsp/vpp/success_stories.html}

- OSHA: “Workplaces that establish safety and health management systems can reduce their injury and illness costs by 20 to 40 percent. In today’s business environment, these costs can be the difference between operating in the black and running in the red.”\footnote{Safety and Health Add Value. United States Department of Labor Occupational Safety and Health Administration.}
An OSHA study showed how Ritrama lowered their workers' compensation premiums with a good safety and health program. The entire company saw benefits:

- Premiums fell $44,000 from 2000 to 2003
- Average sales rose 7.5%
- Manufacturing defects and waste dropped from $2.7 million in 2001 to $435,000 in 2005

Lockheed Martin's Maritime Systems facility joined OSHA’s VPP in 1999. Their Workers' Compensation Costs:

- Before VPP: Over $740,000 average per year by 1999
- After VPP: $188,869 for 2000
  an almost 75% decrease from previous $94,000 for 2006

This is the impact that safety programs can have.

Other Documented Gains

The VPP at Clean Harbors followed OSHA guidelines to create a useable safety and health management system. It increased:

- worker involvement and decision-making in safety
- safety and health training

Over five years, Clean Harbors' program slashed illness and injury rates. Their EMR dropped by 45%.

The L'Oreal plant in Solon, OH worked out a "Cultural Evolution Plan." They planned to build a safety culture that would make workers feel more confident about safe work behavior. The plan used broad worker input and trained staff to recognize hazards. In October 2005, the site’s injury and illness rates were above the Bureau of Labor Statistics’ (BLS) national average. As of 2007, they have dropped well below the BLS national average:

- Days Away, Restricted or Transferred rate: 60% below BLS national average
- Total Case Incident Rates: 89% below BLS national average

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United States Department of Labor Occupational Safety and Health Administration. [Ritrama Invests in Safety and Improves its Bottom Line](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=15617#).  