

WHITE PAPER

SAFETY SAVES DOLLARS... AND MAKES SENSE!

here's a perception in some circles that financial resources allocated toward safety are basically insurance payments made to prevent Occupational Safety and Health Administration (OSHA) penalties. But an organization's investment in safety is much more than that. Tangible evidence exists that shows employers who invest in a top-down/bottom-up commitment to workplace safety and health can expect to reduce fatalities, injuries and illnesses; lower medical expenses and workers' compensation costs; and make significant improvements in productivity and financial performance. All while avoiding costly **OSHA** penalties!

Any way you view it, an investment in safety makes fiscal sense. Yes, a comprehensive safety program will reduce an organization's likelihood of incurring OSHA citations. Additionally, a thorough commitment to safety increases the likelihood of a reduced penalty should an OSHA inspection uncover violations. It will also help management to sleep better at night knowing their organization is prepared for the day an OSHA Compliance Officer shows up unexpectedly at the front desk.

This is all well and good, and perhaps reason enough for an organization to take a full-court press approach when it comes to safety. But when you take a step back and look at safety from a broader perspective, you'll see all of the other benefits. According to a 2014 article from the National Safety Council (NSC), various studies have shown \$1 invested in workplace injury prevention returns from \$2 to \$6. In addition to this return on investment (ROI) that's achieved through decreased workers' compensation premiums and increased employee productivity, ROI also comes in the form of employees with an increased level of job satisfaction and engagement.

Yes, Your Safety Investment Will Help if OSHA Comes Knocking

A company's investment in safety can help in a couple of important ways when it comes to OSHA compliance. According to OSHA statistics, when you consider that in fiscal year 2014 (the last year data was available) the average federal OSHA penalty for a serious violation was \$2046 and that the average willful violation penalty was \$40,358, non-compliance does come with One dollar invested in workplace injury prevention returns between two and six dollars.

1







some financial consequences.

An organization that cultivates a culture of safety through a commitment to a robust safety and health program is less likely to be visited by OSHA. Because there are so many more businesses than OSHA Compliance Officers to inspect them, OSHA prioritizes their workload between unprogrammed and programmed inspections. Programmed inspections are more structured events that are focused on certain industries. Unprogrammed inspections, on the other hand, are more ad hoc events that are triggered by workplace practices that are deemed an "imminent danger" to employees, reported workplace accidents and employee complaints.

Due to the time-sensitive nature of the unprogrammed inspections, they take a priority over the programmed inspections. It stands to reason that an organization with a solid safety and health program is going to be much less likely to create circumstances that would trigger an unprogrammed inspection.

Even if an organization is inspected and an OSHA violation is issued, a business with

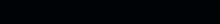
a documented safety and health program is in better shape for a couple of reasons. OSHA's penalty computation process builds in some standard penalty reductions, one of which is referred to as the "good faith" adjustment. The good faith adjustment provides the OSHA Area Director with the authority to reduce the financial penalty by 15% if the employer has a safety and health program in place. The good faith adjustment could not be applied in instances of high gravity serious, willful, repeat or failure-toabate violations. And that's the benefit of having an all-in approach to safety; those type of organizations should theoretically be way less likely to have dangerous work conditions that could result in a serious penalty, let alone willful, repeat or failureto-abate violation.

Costs of Workplace Injuries and Illness

When you take a more holistic view of what an investment in safety will do for a business, the first thing that stands out is how incredibly costly workplace injuries are, even relatively minor injuries. According to statistics from the NSC 2015 Injury Facts, the average workplace injury that



7:11:(c);;;



requires medical attention has a price tag of \$42,000. This total cost is comprised of both direct expenses (workers' compensation payments, medical expenses and costs for legal services) and indirect expenses (costs to train replacement employees, accident investigations and implementations of corrective measures, and repairs of damaged property and equipment). Indirect expenses, which occur as a result of the injury, often exceed the direct expenses when the final cost of a workplace injury is calculated.

OSHA has a powerful tool on its website called the "\$afety Pays Estimator" that was created to show small business employers how workplace injuries and illnesses can impact their profit margins. By selecting the type of injury and the number of those injuries, and then factoring in the business' profit margin, the tool will show the additional sales dollars needed to cover a specific workplace injury or illness.

Using the tool to work through a specific scenario is an eye-opener. Choosing one case of dermatitis, the estimator calculates the direct cost at \$10.365 and the indirect cost at \$11,401 for a total expense of \$21,766 linked to this one event. If a company has a profit margin of 10%, it would need to generate an additional \$217,660 in sales to cover the total cost for this one case of dermatitis. For a laceration, the estimator calculates a total cost of \$40,023. This translates to an increased sales need of \$400,230, assuming a 10% profit margin. For an amputation, \$140,231 in total cost and \$1,402,310 in increased sales are needed to cover the expense.

The following simple formula can be used to calculate the true cost of a workplace injury:

Α.	Direct cost of the injury	\$
в.	Indirect costs of the injury	\$
(Per the International Safety Equipment Association, three to four times direct is a good rule of thumb.)		
C.	Total nominal cost of the injury	(A+B) \$
D.	Profit margin on job where injury occurred	÷%
E.	Added revenue company must generate to recover injury cost	(C/D) \$

The other thing that jumps out in terms of workplace injuries and illnesses is just how frequently they occur. In a June 2015 OSHA report entitled, Adding Inequality to Injury: The Costs of Failing to Protect Workers on the Job, statistics from the Bureau of Labor Statistics (BLS), show nearly three million serious occupational injuries and illnesses are recorded annually on legally mandated logs. This is roughly 8200 serious workplace events occurring each day. OSHA feels that this is a low-ball number as the same report references studies that indicate the majority of workplace injuries are not recorded so the real-world number is much higher than the BLS figure.

These cost and frequency statistics exclude the sobering numbers associated with workplace deaths. BLS statistics shows that approximately 4500 workers die annually as a result of accidents on the job. This averages out to over 12 workplace deaths daily. NSC estimates each of these tragic fatalities generates combined direct and indirect costs of \$1,450,000.

With the costs of these workplace events being so significant, reducing or better yet, eliminating these occurrences could have a tremendous impact on a company's bottom line. The average workplace injury that requires medical attention has a price tag of

- National Safety Council Injury Facts®, 2015 edition

\$42.000.





ROI Comes Through Risk Mitigation and Productivity Gains Too

When overall ROI for a comprehensive workplace safety program is being evaluated, reducing the number of injuries and illnesses is huge, but additional benefits are gained through lower workers' compensation insurance premiums and enhanced productivity.

Workers' compensation insurance covers the medical expenses and lost wages for victims of workplace injuries and illnesses, and just like an automobile insurance policy, the premium rates for workers' compensation insurance can go up or down based upon the frequency of accidents.

Workers' compensation premiums are based on the employer's industry classification and payroll. Premiums for the most dangerous enterprises, such as logging or construction, may be much higher than premiums for a retail sales business. Within the classification, premium rates can be bumped up or down based upon the claims history of a company relative to other companies in that industry category. Businesses with higher than average claims will pay a higher premium and those with lower claims will generally pay less.

To get a better idea of just how impactful excessive claims are on workers' compensation premium rates, it's important to understand how the experience modification rate (often just referred to as the MOD rate) is used in the premium rate calculation. The MOD rate is a factor applied to each employer's base premium rate (this comes from the industry classification) that is established by the past costs of their injuries. The MOD calculation is based upon the claims history of an employer over a three-year period. All new employers are assigned the industry base rate until they have three years of claims experience.

A MOD rate of 1.0 means an employer has an average safety record within its industry classification, while a business with a 0.8 MOD rate means the employer has a good safety record and will receive a 20 percent discount. On the other hand, a MOD rate of 1.2 means the company's accident rate is above the industry average and will increase the employer's workers' compensation premium costs by 20 percent.

To put this into perspective, if there are two businesses of relatively equal size and same industry classification doing basically the same thing (think of your competitors), Company A, with its low MOD rate brought about through a comprehensive safety and health program, could end up paying 40% less for its workers' compensation premiums than Company B with a 1.2 MOD rate. The actual dollar value of the savings is of course



Approximately 4500 workers die annually as a result of accidents on the job. This averages out to over 12 workplace deaths daily. - Bureau of Labor Statistics





predicated by many variables, but what business would want to pay 40% more than a competitor for the exact same coverage?

Productivity is the other significant category of ROI when it comes to safety. A separate 2005 Liberty Mutual Insurance Group survey of 231 chief financial officers (CFOs) of large and mid-sized companies showed that



increased productivity ranked as the number one benefit of an effective workplace safety program. Of that group, 42.5% rated productivity most important, with 28.3% of CFOs feeling cost reductions were the biggest benefit followed by employee retention and employee morale at 7.1% and 5.8%, respectively. When you look at the results of the survey, it could easily be argued that employee retention and morale also fall under the umbrella of productivity.

On the surface, the productivity benefits of a safe work environment seem obvious. A reduction in workplace injuries and illnesses means fewer interruptions to the work being performed. Production downtime doesn't benefit the bottom line. In addition to the production delays created when the assembly line stops, the ramifications continue if a new employee is needed to fill the void left by a worker whose injury or illness causes him to miss work. Think of the costs associated with training that new employee or cross-training an existing employee to temporally fill the gap as well as the learning curve of getting someone



new to a task performing as efficiently as a seasoned veteran.

Productivity gains are also achieved through employers investing in equipment or technology that removes hazards from a task. This investment allows those performing the function to work more confidently and efficiently, with efficiency gains potentially allowing the employer to shift the labor saved elsewhere.

While these are all relatively direct examples of how safety ROI shows up in productivity, a safer workplace can also foster positive productivity impacts through a more engaged workforce. (This is a more indirect but equally important productivity impact.)

Workers who feel that their employer values, and is willing to invest in maintaining, a safe and healthy work environment are more likely to have higher morale. Employees who feel happier on the job are going to work harder, be less likely to leave and also act as goodwill ambassadors for their employer within the community, helping to build the image of the employer as a destination for talented new employees. Retaining quality workers and being viewed as a place employees at other companies would love to work helps drive long-term productivity.

What Makes an Effective Safety and Health Program?

With all the examples of how a comprehensive safety and health program can add value back to a business, just what are the keys to an effective program? A robust safety and health program requires a top-down/bottom-up commitment within a business in order to be successful. Leadership needs to embrace safety as a core competency of the business and foster awareness and commitment through words and actions throughout all levels of When safety and health are part of the organization and a way of life, everyone wins.

"

5



the organization. Posters and clever safety slogans lose their impact quickly if frontline workers don't feel the importance of safety is reinforced consistently during their interactions with leadership.

As OSHA states, "the best safety and health programs involve every level of the organization, instilling a safety culture that reduces accidents for workers and improves the bottom line for managers. When safety and health are part of the organization and a way of life, everyone wins."

In addition to a total organizational commitment to nurturing a culture of safety, OSHA views worksite analysis, hazard prevention and control, and training for employees, supervisors and managers as the fundamental building blocks for a successful safety and health program.

Conclusion

Ever since President Nixon signed the Occupational Safety and Health Act into law back in 1970, complying with the government's safety standards has been viewed in some circles as a bit like taking that preventative medicine with the bad aftertaste. You take the medicine because you know it's supposed to keep you from getting sick, not realizing the additional upsides to the medicine such as longer life expectancy and a higher quality of life as you age. For those who view their investment in safety as strictly a way to keep OSHA happy, they're missing out on all the additional upsides that a comprehensive commitment to safety brings: lower injury and illness rates, lower workers' compensation premiums, and higher levels of employee productivity and engagement. It's "safe" to say that an investment in safety really does save dollars and makes financial sense.

About the Authors

Sally Smart has over 25 years of applied environmental, health and safety experience. Prior to joining Grainger in 1997, she was the Director of Quality Regulations and Safety for a major chemical manufacturer and gas repackager. Sally is a Board Certified Safety Professional[®] (CSP), Qualified Safety Sales Professional (QSSP) and OSHA-Authorized Outreach Trainer for General Industry. She is HAZWOPER 40-hour trained and OSHA 30-hour trained for both Construction and General Industry.

Mike Stearns has been with Grainger for over 29 years. Prior to his current role with Grainger, Mike managed Grainger's Technical Product Support Safety Team for 14 years. He earned his Bachelor's of Arts degree from the University of Wisconsin-Whitewater. Mike has completed his OSHA 30-hour General Industry certification.

Grainger has over 30 safety product technical support professionals, here to support you **Monday through Friday**, 7 a.m. to 7 p.m. CT. Call your local Grainger branch or drop us an email at safetysupport@grainger.com.



Sally Smart Grainger Technical Safety Specialist



Mike Stearns Grainger Technical Safety Specialist

©2016 W.W. Grainger, Inc. W-YSAE608

