Selling Safety To The Executive Suite
Practical Guidance and Solutions for Safety Managers and Supervisors
3. Introduction

4. Investing In Safety
   Why Do Companies Spend Money on Safety

5. Building a Case For Safety
   5 Arguments That Worked, 5 That Didn’t

6. Building a Case For Safety
   How to Prove That Safety Actually Makes Money

9. Safety ROI
   Providing The Return on Investment on Safety

12. Poor Safety Is Costly
   Showing The True Financial Costs of Injuries & Illnesses

13. Calculator
   How to Calculate The Impact of Accidents on Profits & Sales

14. Insurance Doesn’t Mean You’re Covered
   Showing The Losses That Insurance Doesn’t Cover

16. Safety = Productivity
   Impact of New Regulation Documents Link Between Safety & Productivity

18. The Bottom Line
   How Putting Productivity Ahead of Safety Hurts The Bottom Line

22. Case Studies
   Criminal Charges in Gruesome California Fatality End in $6 Million
   The Value of Setting Long-Term EHS Goals
Introduction

There isn’t a company in North America that doesn’t claim to care deeply about the health and safety of its workers. But, as with anything else, when it comes to safety, talk is cheap. What matters isn’t what companies say but what they do to protect the people who work for them.

An effective safety program costs money. A lot of money. Your job, as a safety director, is to get the CEO and upper management to come up with the funds to build and maintain such a program. This report will show you how to do that.

THE OLD MOTIVES FOR SAFETY

Historically, safety directors have resorted to two kinds of appeals to get financial support from management:

Fear. One of the main reasons companies have been willing to invest in a safety program is fear of liability. This is still a compelling motive for many companies; but, as we’ll see later, it doesn’t carry the power it used to, at least in the U.S.

Altruism. Another reason companies spend money on safety is genuine concern for their workers and a desire to “do the right thing.” This view is essentially an altruistic one. The company feels that it’s “doing something nice” for its workers without expectation of a financial reward. Just like fear of liability, altruism is still a factor in the safety decision making of many companies.

THE MODERN MOTIVES FOR SAFETY

Although you can still get some mileage out of liability risks and the desire to do the right thing, the modern way of winning support for safety is to build a business case. Stated simply, the effective safety director of today is the one who can show the CEO that spending money on safety is essential to the company’s financial performance.

This isn’t easy to do. After all, safety doesn’t generate revenue and profits the way other parts of a business do. (Or, at least, that’s the accepted wisdom. At the end of this Chapter, we’ll show you why this is a myth and how to debunk it.) So, in a sense, safety directors are at a distinct disadvantage when it comes to competing against other business centers for funds.

But this shouldn’t be overstated. It’s become recognized that safety does in fact contribute to financial performance—and significantly so. In recent years, many safety directors have learned how to make the economic case for safety. Moreover, studies have shown that many CEOs recognize the importance of safety to profitability. So it’s not surprising that companies are spending more time, money and effort than ever before on programs to protect their workers.
Companies are spending much more on safety than they ever have in the past. Why is that? What got into the heads of the CEOs and directors of these companies? Knowing what motivated them to open their wallets may give you the necessary insight to build an effective case with your own CEO and board of directors.

### Top 10 Reasons The Executive Suite Increases an Investment In Safety Programs:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To cut workers’ comp costs (59%)</td>
<td>59%</td>
</tr>
<tr>
<td>The feeling that investing in safety is the “right thing to do”</td>
<td>51%</td>
</tr>
<tr>
<td>To increase profits</td>
<td>33%</td>
</tr>
<tr>
<td>To comply with safety rules</td>
<td>31%</td>
</tr>
<tr>
<td>The feeling that the company has had “too many accidents”</td>
<td>29%</td>
</tr>
<tr>
<td>To maintain/improve workers’ morale</td>
<td>26%</td>
</tr>
<tr>
<td>To maintain or improve productivity</td>
<td>23%</td>
</tr>
<tr>
<td>To avoid OSHA fines</td>
<td>20%</td>
</tr>
<tr>
<td>Responding to the recommendations of outside experts</td>
<td>13%</td>
</tr>
<tr>
<td>To address workers’ concerns</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Source: Survey by the National Federation of Independent Business, *Motivating Safety in the Workplace*
In a recent Industrial Safety and Hygiene News (ISHN) survey, 53 percent of responding health and safety managers said they were “satisfied” or “very satisfied” with their company’s financial support for safety.

“The managers who said they were “satisfied” or “very satisfied” were asked to list the three biggest factors accounting for their company’s willingness to invest in health and safety. They were given a choice of 16 factors. The five factors most often listed were:

The 5 Best Arguments for Investing in Safety

```
Top 5 Arguments
1. The value of top leadership
2. The need to comply with regulations
3. The need to cut injury/illness rates
4. The emphasis on consistent corporate culture
5. The importance of maintaining good relations with workers
```

Source: Survey of 1,000 readers by Industrial Safety and Hygiene News (April 2001)
To make a successful case for increasing the investment in health & safety, safety managers need to frame their case around what motivates the executive case around what motivates the executive suite, and not necessarily what seems intuitive to themselves. Think about the overall impact to the bottom line and reducing sunk costs like comp rates, or improving culture and perception with can positively impact profit lines and stock prices.

Interestingly, two of the least persuasive arguments for safety managers to increase their investment in health and safety, were actually the top reasons for executives.

### The 5 Least Persuasive Arguments

<table>
<thead>
<tr>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>13%</td>
<td>12%</td>
<td>11%</td>
<td>11%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Top 5 Least Persuasive Arguments

1. Increase profitability/earnings
2. Reduce workers’ comp costs
3. Community relations
4. Need to protect brand image/equity
5. Need to protect quality

Source: Survey of 1,000 readers by Industrial Safety and Hygiene News (April 2001)

### Reduce Workers Comp Costs

<table>
<thead>
<tr>
<th>Manager</th>
<th>CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>12%</td>
<td>59%</td>
</tr>
</tbody>
</table>

### Safety is the “right thing to do”

<table>
<thead>
<tr>
<th>Manager</th>
<th>CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>11%</td>
<td>51%</td>
</tr>
</tbody>
</table>
In terms of economics, companies have historically regarded safety expenditures as a necessary evil rather than a profitable investment. In more modern times, a number of companies have begun to wise up and understand that spending money on safety “is good for business.” But even among the enlightened companies, the perception persists that safety doesn’t make money; it just helps prevent losses. In fact, most safety directors concede the truth of this argument and focus all of their attention on the loss side when advocating safety.

The safety-is-good-for-business-because-it-prevents-losses formula is fine as far as it goes. But, while preventing losses is powerful stuff, making money is even more potent. After all, it’s the very reason companies are in business. So if you could somehow show management that safety generates income, you’d be sitting pretty. Well, guess what? You can make that case and do it validly. Here’s how:

**The Link Between Safety and Productivity**

Productivity is the key to showing how safety makes a company money. Stated simply, there’s a direct link between safety and productivity. When safety improves, productivity increases; when safety decreases, productivity declines.

Any businessman worth his salt understands the value of productivity and its impact on financial performance. So linking safety to productivity is almost guaranteed to capture management’s attention. But how do you demonstrate the link between them?

**Answer:** Use both of the following approaches:

1. **Go for the Gut**

The link between safety and productivity is something most people feel in their gut. It just seems right to believe that workers work better when they’re protected against injuries and illnesses. Some explanations:

   - Workers who don’t get into accidents or contract illnesses can keep working.
   - Safety improves morale and makes workers more apt to show up for work on time and work harder once they arrive.
   - Companies with good safety records can
attract and retain the best workers.

- The discipline of assessing risks, identifying what can go wrong and taking measures to prevent occurrences not only improves safety but makes the production process more efficient.

2. Cite Studies

The link between safety and productivity isn’t just a gut feeling. There are studies that demonstrate the link scientifically. The Foster Wheeler Study. A leading example is a 1999 study by the UK firm, Foster Wheeler (FW), entitled A Study into the Link Between Safety Performance and Business Performance. FW analyzed safety- and performance-related data from 19 construction projects during a 17-year period, focusing on four indicators:

- Cost Ratio: (Total project control budget cost/Actual project cost)
- Schedule Ratio: (Planned construction span in months/Actual construction span in months)
- Safety: (Actual or estimated exposure man-hours in millions/No. of lost-time injuries)
- Productivity Ratio: (Budget field man-hours/Actual field man-hours)

By grouping these four indicators into six pairs, FW was able to use a technique called regression analysis to measure the association between them (R-Square). Here were the results:

The key result is the second row. It shows a 63 percent degree of overlap between safety and productivity. Best of all, the FW study showed that cutting the frequency of injury in half results in a 10 percent increase in productivity. In a separate study of a single petrochemical plant, FW found an even stronger association between productivity and safety. In this case, halving injury frequency rates led to a 15 percent improvement in productivity!

Other Studies. There are a number of other studies scientifically demonstrating a link between safety and productivity, including “Survey on Relationship Between Productivity and Occupational Safety and Health,” Japan Industrial Safety and Health Association (1998) (finding a “positive correlation” between safety and productivity at large Japanese auto plants) and “Lost-Time Injuries, New South Wales Coal Mines” (1992-1993) (linking increases in productivity to declining injury rates in Australian coal mines).

Case Studies. The National Safety Council has also published a volume of 12 case studies from around the world examining

<table>
<thead>
<tr>
<th>PAIRING</th>
<th>ASSOCIATION</th>
<th>R-SQUARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity/Schedule</td>
<td>Positive</td>
<td>0.83</td>
</tr>
<tr>
<td>Productivity/Safety</td>
<td>Positive</td>
<td>0.63</td>
</tr>
<tr>
<td>Productivity/Cost</td>
<td>Positive</td>
<td>0.49</td>
</tr>
<tr>
<td>Schedule/Safety</td>
<td>Positive</td>
<td>0.43</td>
</tr>
<tr>
<td>Schedule/Cost</td>
<td>Positive</td>
<td>0.40</td>
</tr>
<tr>
<td>Cost/Safety</td>
<td>Positive</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Let’s now explain how safety affects productivity and why companies with safer workplaces tend to be more productive. Safety boosts productivity because it has a beneficial impact on three crucial business factors:

1. **Worker Output**

The most obvious way that safety boosts productivity is by its impact on workers. Stated simply, safe workers are more efficient. Since they don’t get hurt, they stay on the job. Safety also improves morale and makes workers less likely to miss work, show up late or slack off. A good safety record also makes it easier to recruit and retain the most productive workers.

2. **The Production Process**

The relationship between safety and productivity involves more than worker efficiency. Safer companies tend to be more efficient than unsafe companies.

**Explanation:** A company’s safety program is a reflection of its entire production process. In the words of a recent International Labor Organization study, “firms with dismal safety records often have loose, inefficient work processes as well, and for similar reasons. Workers—their skills and potential contributions as well as their bodies—are treated as disposable. High levels of waste, including the waste of human beings is tolerated. Insufficient control is exercised over the production process itself.”

The process of improving safety imposes the discipline companies need to clean up their act. It forces the company to take a good hard look at its work processes, identify risks and make improvements. Not surprisingly, the benefits of this often spill over from safety to business efficiency. As discussed below, studies have shown that many companies have made huge gains in productivity after new health and safety regulations took effect. Why? Because complying with the regulation forced companies to reconsider their production process which in turn created opportunities for reorganization and innovation.

3. **Technology**

The effort to protect workers often leads to technological improvements that improve productivity. Sometimes, this can lift not just a company but an entire industry.

*For example, in 1978, OSHA published new cotton dust exposure limits for textile workers. The industry complained that the costs of complying would drive them out of business. Actual compliance costs to the industry turned out to be only one-third of predicted levels ($83 million rather than $280 million in 1982). But that was only part of the surprise. In their efforts to comply with the new standards, companies discovered that it was cheaper to replace existing equipment than to retrofit it with new filtration devices. The new technology not only cut cotton dust but significantly sped up production and boosted productivity.*

**Other Case Studies**

There have been a number of studies demonstrating how companies made major improvements in productivity as a result of efforts to comply with regulatory changes.

**Conclusion**

Hopefully, all of this has caused you to question the all too common assumption that safety can only save and never make money. True, saving money is still the best argument to use for selling safety. But it’s not your only option. Open your mind to using the link between safety and productivity to show that safety can generate revenue. Admittedly, it takes some moxie and imagination to make this case to your CEO. But, as a safety director, you owe it to yourself and the workforce you represent to at least consider making the attempt.
In a perfect world, companies would invest in safety because protecting workers is the “right thing to do.” While some of you may be lucky enough to work for companies like that, most safety directors have to make their case in terms of return on investment (ROI) – that dollars invested in safety improve the company’s financial performance. Since safety doesn’t generate revenue, safety directors must show that it cuts company costs. But saying that “safety saves money” is a cliché. The real challenge is to back up the assertion with substantive economic arguments. There’s a 2001 report from Liberty Mutual Insurance that can help you do that.

**Safety and ROI**

Liberty Mutual, the nation’s leading provider of workers’ compensation insurance, interviewed 200 executives responsible for workers’ compensation at their companies—75 from mid-size companies with 100 to 999 workers, and 125 from big companies with over 1,000 workers. A whopping 95 percent of these executives said that workplace safety has a positive effect on financial performance.

**The really juicy stuff:** Of this 95 percent, 61 percent reported that they get an ROI of at least three dollars for every dollar they invest in safety. Understanding how the executives calculated this ROI should help you understand how your own officers think and thus enable you to make a stronger case for safety.

**Demonstrating the Economic Value of Safety**

When workplace injuries and illnesses occur, a company incurs two kinds of costs:
Direct Costs: This includes payments to injured workers, reimbursement of medical bills and other expenditures covered by insurance.

Indirect Costs: This includes loss of productivity, cost of training replacement workers, damage to the company’s reputation, increased future premiums and other losses.

Direct costs are the obvious things that companies look at when analyzing ROI on safety. Indirect costs are the hidden costs that tend to get overlooked. But as the Liberty Mutual report suggests, focusing on direct costs underestimates the real savings of injury prevention. Ninety-three percent of the executives Liberty Mutual surveyed say there’s a direct relationship between direct and indirect costs. Forty percent report that $1 of direct costs generates between $3 and $5 of indirect costs. Thirteen percent of respondents say that the relationship between indirect and direct costs is as high as 10 to 1.

Survey Results:

1. Safety positively affects financial performance
2. Safety has a substantial positive effect on performance
3. Safety has a positive ROI
4. Each $1 invested returns $3 or more
5. Each $1 invested returns $10
6. There’s a close relationship between direct and indirect costs of accidents
7. There are between $3 and $5 of indirect costs for each $1 of direct costs

Source: Liberty Mutual Insurance Co.: Executive Survey of Workplace Safety

The Second Finding

Demonstrating that CEOs recognize that safety has a positive ROI is only half the value of the Liberty Mutual Report. There’s another important finding of the report: The fact that most business executives, even the ones who understand the economic value of safety, don’t understand how best to invest their safety-related resources.

Liberty Mutual didn’t just want to know about the financial value business executives place on safety. It also asked them what they thought were the leading causes of workplace accidents. Liberty Mutual then compared the responses to an actual ranking of accident causes based on the direct costs to companies in 1998.

Result: The report found a big gap between business executives’ perceptions and reality as far as the cause of accidents is concerned.

For example, executives listed repetitive
motion as the most important cause of accidents and said they planned to focus most of their safety resources in preventing repetitive motion accidents.

In reality, however, repetitive motion was only sixth on the list of actual leading causes of accidents, generating $2.3 billion in direct costs to companies in 1998, or less than 25 percent of the $9.8 billion in direct costs generated by the leading accident cause—overexertion. We’ve listed all of the numbers below so you can see the disconnect between perception and reality.

What It Means

Showing that safety has a positive ROI for other companies can help you get your executives to open their wallets and invest in safety. But that’s only half the battle. It’s incumbent upon safety directors to see to it that the dollars invested generate a positive ROI for your company. As the Liberty Mutual report shows, the business executives can’t necessarily be relied on to make the most prudent investments in the safety realm. They need your help identifying the company’s needs and directing resources to where they’ll do the most good.
Poor Safety Is Costly

Showing the True Financial Costs of Injuries & Illnesses

Keeping workers safe and healthy saves the company money. Making this statement to your CEO and upper managers won’t provoke any arguments. But it won’t win you much influence, either. “‘Safety saves money’ is a truism, like ‘buy low and sell high,’” notes safety consultant Richard Hawk. To win support for your safety program, you must provide management tangible proof of the economic gains the company accrues when it invests in safety.

How do you demonstrate the economic benefit of safety? Hawk recommends a two-pronged strategy:

1. Document the real monetary losses companies incur from workers’ compensation cases;
2. Then show how those losses affect profitability.

Here’s how to make that case.

The Real Costs of Injuries

Chances are your CEO and board of directors already understand that workplace accidents and injuries cost the company money. But they probably don’t realize just how much. “The real costs of workers’ comp cases is often a fuzzy area in managers’ minds,” notes Hawk. “The money for compensation is generally hidden in various budgets and is thus hard to monitor,” he explains.

Safety directors who can lay bare the true costs of injuries have a much better chance of getting through to management. To do this you must pull together the direct and indirect costs and present them to management in specific dollar values. “There’s a dramatic difference between saying ‘safety saves us money’ and documenting the actual costs of an accident,” adds Hawk.

The worksheet on the next page shows you how to calculate costs of injuries and illnesses. It’s a three-step process:

**Step 1:** Calculate total direct costs.

**Step 2:** Calculate indirect costs by multiplying total direct cost by a multiplier.

**Step 3:** Add direct and indirect costs to get your total costs.

**Impact on Profitability**

Showing the total costs of injuries and illnesses is only the beginning. To make an even more dramatic impact on management, show how those costs affect profitability. The point of this exercise is to explain how much money in sales your company would have to generate to pay for the total costs of an injury or illness. This is a real eye-opener, says Hawk. “Using the formula below a modest compensation claim of $4,000 would require a company with a profit margin of 5 percent to sell $208,000 worth of product,” Hawk explains. “A nasty $100,000 claim would take $4.2 million in sales to make up!”

Again, you can use the worksheet on the next page to calculate the impact of an injury or illness on your company’s profitability. Take two steps:

**Step 1:** Calculate your company’s profit margin by dividing its total profits by total sales.

**Step 2:** Divide the total cost of an injury or illness by your company’s profit margin. This will show you how much money in sales your company would have to generate to make up for the loss of the injury or illness.
How to Calculate the Impact of Accidents on Profits & Sales

Use this worksheet to determine the total costs of injuries and illnesses and their financial impact on your company’s business operations.

**STEP 1: Direct Cost**

To calculate direct cost of accidents/injuries, enter the following information:

Total value of insurance claim for injury/illness $__________________

(consists of medical costs and indemnity payments)

**STEP 2: Indirect Cost**

To calculate direct costs of injury/illness, multiply the direct cost by a cost multiplier. The cost multiplier you use will depend on amount of direct costs.

Direct Costs X Cost Multiplier - Indirect Cost

$__________ x $___________ = $___________

If Direct Cost Is: Use This Multiplier

$0-$2,999  4.5
$3,000 - $4,999  1.6
$5,000 - $9,999  1.2
$10,000 or more  1.1

**STEP 3: Total Cost**

Direct Cost + Indirect Cost = Total Cost

$__________ + $___________ = $___________

**STEP 4: Impact on Profitability**

To calculate an injury/illness’s impact on profitability, use your company’s profit margin to determine sales your company would have to generate to pay for the injury/illness.

Divide total profits by total sales to get your profit margin

\[
\frac{\text{Total profits}}{\text{Total Sales}} = \text{Profit Margin} \\
\frac{\$ \ldots}{\$ \ldots} = \text{Profit Margin}
\]

**STEP 5:**

Divide total cost of injury/illness by profit margin to calculate how many sales your company must generate to pay for injury illness. Keep the profit margin in decimal form.

\[
\text{Total Cost of Injury} \quad \text{Profit Margin} = \quad \text{Sales Needed to Pay injury} \\
\frac{\$ \ldots}{\$ \ldots} = \quad \text{Sales Needed to Pay injury}
\]
Most senior officers realize that accidents cost money; but few understand just how much. One reason so many officers underestimate the cost of accidents is that they assume that insurance covers all losses. A worker gets hurt? No problem, they think. Workers’ compensation will pay for the medical bills and cover the worker’s wages during recovery.

If only things were that simple. When an accident occurs, a company incurs all kinds of losses. Insurance covers only a small percentage of them. Most of the costs of an accident are from losses not covered by insurance. So to win support for your safety program, you need to explain the real impact of uninsured losses on the company’s bottom line. Here’s how to make that case.

**The Costs of Accidents**

When an accident happens, a company incurs two kinds of losses:

**Losses Covered by Insurance.** These are the direct costs a company pays for an accident, including the victim’s medical bills and wages for lost work time.

**Losses Not Covered by Insurance.** These are indirect, or hidden costs of an accident and may include:

- The costs of finding and training a replacement for the victim.
- Overtime and extra wages the company must pay other workers to make up for the victim’s lost production.
- Medical costs and payments to the victim not covered by insurance.
- Increases in insurance premiums.
- Delays in production which may also lead to loss of contracts and/or reputation.
- Damage to equipment and other capital assets.
- Damage to morale and decline in productivity that inevitably follow on the heels of serious accidents.
- Time spent investigating the accident.
- Legal costs and fines.

Uninsured losses are generally at least three times and up to 50 times greater than insured losses, depending on the industry. But senior officers typically overlook these losses. Consequently, they overestimate the financial protection of insurance.

**Use Case Study to Shatter Complacency**

You need to demonstrate the impact of uninsured losses to your officers so they understand that insurance isn’t enough to protect the company. Here’s a case study you can use to drive home the point:

A skilled machine operator at a company employing 100 workers averaging $15 per hour gets his sleeve caught in the moving part of an unguarded press machine and hurts his right arm. The machine is shut down, completely stopping production for two hours. All workers get full wages accrued during the two-hour shutdown ($3,000). Morale is shattered and production drops in the two weeks following the accident resulting in a loss of $2,000. The machine is damaged and needs $10,000 in repairs, slowing production even...
further. The company must pay 10 workers 10 hours of overtime ($2,250) to make up for the lost time. But it still misses a delivery date causing an angry customer to cancel a contract worth $40,000.

Meanwhile, the victim undergoes extensive surgery. After a 10-day hospital stay, he’s released. But he can’t return to work for six months. It costs the company $1,000 to find and train somebody to replace the victim. Insurance covers all medical bills (say, $50,000) and 50 percent of lost wages (say, $7,700). When the victim gets back his productivity is 50 percent of what it was before the injury. It takes him another six months to get back up to speed. Let’s say this loss in productivity costs the company $7,700.

The government investigates the accident and charges the company with failing to guard the machine. The charge is later dropped because of a technicality, but only after the company runs up $30,000 in legal fees. The company incurs another $10,000 in administrative costs to defend itself.

Moreover, the accident and prosecution damage the company’s reputation and ability to compete for contracts. Although hard to value, this loss of good will costs the company at least $30,000.

Finally, adding insult to injury, as a result of the accident, the workers’ comp carrier raises the company’s annual premium $5,000. Let’s consider the total costs of this accident to the company:

<table>
<thead>
<tr>
<th>Approximate Costs to Company</th>
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</thead>
<tbody>
<tr>
<td>1. Victim’s Medical Bills</td>
</tr>
<tr>
<td>2. Lost Wages</td>
</tr>
<tr>
<td>3. Wages to Workers During Shut down</td>
</tr>
<tr>
<td>4. Lost Productivity</td>
</tr>
<tr>
<td>5. Overtime</td>
</tr>
<tr>
<td>6. Costs to Replace Worker</td>
</tr>
<tr>
<td>7. Lost Productivity When Victim Returns</td>
</tr>
<tr>
<td>8. Repairs to Machine</td>
</tr>
<tr>
<td>9. Value of Lost Contract</td>
</tr>
<tr>
<td>10. Legal Fees/Admin. Costs</td>
</tr>
<tr>
<td>11. Increase in Workers’ Comp Premiums</td>
</tr>
<tr>
<td>12. Loss of Good Will</td>
</tr>
<tr>
<td><strong>TOTAL COSTS:</strong></td>
</tr>
<tr>
<td>Insured Costs:</td>
</tr>
<tr>
<td>Uninsured Costs:</td>
</tr>
</tbody>
</table>
New environmental, health and safety regulations generally require industries to reassess current operations and make changes to ensure compliance. Industries often complain that this will drive up their costs and ruin their business. But in many cases, the predictions of doom and gloom don’t pan out; on the contrary, the effort to comply with the new regulation causes industry to make innovations that actually cut costs, improve productivity and increase profits.

The graph below sets out six documented examples in which this has happened. This is dramatic evidence that you can use to demonstrate the link between improving workplace health and safety (or environmental performance) and rises in productivity.
<table>
<thead>
<tr>
<th>Regulation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA Benzene Standard</td>
<td>Companies discovered a new and cheaper process for manufacturing chemicals without using benzene</td>
</tr>
<tr>
<td>EPA Chlorofluorocarbons (CFC) Standard</td>
<td>Industry scientists invented a new pump spray (that didn’t use CFCs) that was actually cheaper to produce than aerosol cans</td>
</tr>
<tr>
<td>Vinyl Chloride Standard</td>
<td>Vinyl chloride producers made at least six production changes that eliminated worker exposure and dramatically reduced production costs</td>
</tr>
<tr>
<td>Powered Platforms for Building Maintenance</td>
<td>Allowing greater flexibility in the choice of stabilization systems enabled building owners to save $3.1 million per year</td>
</tr>
<tr>
<td>Powered Platforms for Building Maintenance</td>
<td>3D Manufacturing, Inc., a company with 150 workers, saved more than $16,000 per month by changing its painting and finishing operations</td>
</tr>
<tr>
<td>Foldcraft Company</td>
<td>Foldcraft Company increased transfer efficiency 29 percent, cut varnish use by 33 percent and saved $9,500 per year after buying air assisted airless guns and a high volume/low pressure gun to cut volatile organic compounds and hazardous air pollutants</td>
</tr>
</tbody>
</table>
Many industries, particularly in the manufacturing sector, are essentially driven by production. The name of the game is to produce as many widgets as quickly and cheaply as possible using existing production resources. So it’s no surprise that some companies stress productivity to the detriment of quality and worker safety. The assumption these companies make is that every dollar spent on safety instead of production reduces profits. Of course, that assumption is wrong. Stressing safety and quality can reduce the company’s costs, while stressing productivity can actually increase them. So how do you convince senior management that setting aside its single-minded obsession with productivity and concentrating more of its resources on safety will improve financial performance?

A study of the relationship between “corporate climate”—that is, how values are prioritized in a particular company—and safety at four U.S. wood product manufacturers can help you. The study shows that companies with strong safety climates have fewer safety incidents and injuries and thus lower associated costs than companies with strong productivity climates that de-emphasize safety and quality. Here’s a look at what the study says and how you may be able to use it if you perceive that your company isn’t placing enough value on safety.
Types of Corporate Climates

Corporate climate is a reflection of workers’ attitudes or perceptions of certain aspects of their work environment. Management actions strongly influence corporate climate and set the overall tone for the workplace. Workers pick up on management’s values. And workers’ attitudes and perceptions about the values and climate of their workplace affect their—and the company’s—performance. So once you understand what a company’s corporate climate is, you can change that climate by getting management to adopt new approaches. For our purposes, there are three kinds of corporate climates:

Safety. Safety climate (sometimes also called “safety culture”) is often defined as workers’ attitude toward safety in the workplace. It’s also been defined as workers’ perception of the company’s policies, procedures and practices concerning occupational safety and their sense of the priority the company gives to safety. In a strong safety climate, workers believe that the company takes safety seriously and thus they also take safety seriously. As a result, companies with strong safety climates are generally safer than companies with weak safety climates. For example, studies have shown that there’s an inverse relationship between a company’s safety culture and the number of safety incidents. In other words, the stronger a company’s safety culture, the fewer safety incidents it experiences; conversely, the weaker the safety culture, the greater the number of incidents.

Quality. Quality climate is reflected in the workers’ perception of the company’s quality objectives. There hasn’t been a lot of research about quality culture in general. Presumably, a greater emphasis on quality would result in decreased production as workers operated more slowly to ensure that things were made well. And because haste tends to increase risk, slower and more deliberate production would also presumably lead to fewer safety incidents. Unfortunately, no empirical research has been done on the actual effects of quality climate on workplace safety performance.

Productivity. Productivity climate is a reflection of workers’ attitudes and beliefs with respect to management’s emphasis on production in the workplace. It’s generally believed that increased pressure to produce reduces safety performance. But no known research had been conducted on the links between productivity climate and safety.

The Study

That’s where the wood manufacturers study comes in. The study is valuable because it demonstrates for the first time that companies with strong productivity climates have higher numbers of safety incidents than companies that emphasize safety or quality. The researchers focused on two furniture and two cabinet manufacturers in Pennsylvania. They collected surveys from 526 hourly production workers, asking the workers about:

SAFETY CLIMATE. Workers were asked to rate how much they agreed or disagreed with statements related to their perception of the company’s safety climate (1 = strongly disagree and 5 = strongly agree). Sample statements: “Upper management at this company does as much as possible to make this a safe place to work” and “My supervisor does not seem to care about my safety.”

QUALITY CLIMATE. On the same five-point scale, workers were asked to rate statements about the company’s quality climate, such as “My supervisor is always willing to consider suggestions on improving product quality.”

PRODUCTIVITY CLIMATE. Workers were also asked to rate on the same scale statements about the company’s quality climate, such as “Our upper management does everything possible to make sure productivity goals are met” and “My supervisor sometimes allows employees to take shortcuts in order to meet productivity goals.”

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supervisor sometimes allows employees to take shortcuts in order to meet productivity goals.” Safety-related events. To determine the number of safety incidents in the workplace, the researchers asked workers how often certain safety-related events had occurred during the last 12 months, from never to five times or more. Examples: “I tripped over something on the plant floor” and “An object got stuck in my hand while working.”

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CONTROL VARIABLES. The survey included several control variables. For example, workers were asked to rate how dangerous they felt their particular job was. The surveys also collected worker gender and information about their tenure with the company and verified that information with each company’s HR department.

The Study’s Results After analyzing the survey responses, the researchers came to the following conclusions:

Strong safety climate = fewer safety incidents. This study confirmed what prior studies had found: Companies with a strong safety climate have fewer safety incidents. That is, there were fewer incidents in companies in which workers were encouraged to work safely and supervisors put considerable emphasis on safety.

Strong production climate = more safety incidents. Workers who perceived their companies as having a strong productivity climate reported higher numbers of safety incidents. So the study suggests that an emphasis on productivity can force an increase in risky behaviours that may eventually lead to safety incidents. In
addition, the survey suggests that the more companies value productivity, the less they value quality.

**Meaning of the Results**

What do the study’s results mean for your company? Citing the results of this study is one of the things a safety coordinator can do to show that safety has an impact on financial performance. The study is evidence that safety climate and productivity climate influence the occurrence of safety incidents, albeit in opposite ways. Although there are advantages to promoting productivity for manufacturing companies, management must realize the trade-offs of emphasizing productivity at the expense of safety.

Over time, the costs associated with the consequences of a high-production work environment, such as increased worker injuries, absences and turnover and lower quality, can be detrimental. Conversely, fostering a climate for safety should reduce safety incidents and injuries and thus reduce the related costs.

These results have important implications for senior management and supervisors. Managers and supervisors should concentrate on fostering a strong safety climate within their company in order to decrease work-related injuries or incidents. For example, the researchers note that simply keeping the workplace clean and in good working condition can help eliminate safety problems, improve morale and increase efficiency and effectiveness. Plus, doing so will improve productivity and quality, while lowering product costs and enhancing the operation’s flexibility.

Other steps the researchers recommend for management:

- Establish good working relationships between production managers and safety coordinators;
- Encourage workers to report unsafe working conditions, incidents and near misses;
- Promote open communication on safety-related issues and methods for improvement among safety coordinators, production managers and supervisors; and
- Require safety and supervisory personnel to act quickly to identify the root cause of safety problems and implement remedies.

**Insider Says:** The study’s results also have implications for safety coordinators. You can directly affect your company’s safety climate by effectively communicating management’s safety-related values, beliefs and concerns to workers. After all, the company’s safety climate is unlikely to improve if workers don’t know that management does make their safety a priority.

**Conclusion**

If safety coordinators were running companies, we know they’d value safety above everything else. Workers would also probably give safety top priority. On the other hand, corporate officials driven by profit motives place stronger emphasis on productivity. So as a safety coordinator, you’re going to have to accept the fact that your values aren’t now and will never be precisely the same as management’s. But what you can and must do is ensure that safety isn’t sacrificed at the altar of productivity. Intuitively, it makes sense that a company that’s willing to risk workers’ safety to enhance productivity is making a serious mistake not of only morals and law, but also of business. After all, nothing reduces productivity more drastically than a workplace injury or illness. However, it may take more than intuition to get management to move safety up on the company’s priority list so that it’s reflected in the company’s climate.

Because this study shows that stressing productivity above everything else negatively impacts safety and thus the company’s financial performance, it can help you build your business case. It suggests that a company’s climate does make a difference and that committing to a strong safety climate in your workplace will actually improve its bottom line.
Case Studies

Criminal Charges in Gruesome California Fatality End in $6 Million

A gruesome fatality at a Bumble Bee tuna processing plant in California resulted in the indictment on criminal charges of the company and two employees. The Los Angeles County District Attorney recently announced the settlement of these charges in the largest known payout in a California criminal prosecution of workplace safety violations involving a single victim—$6 million (USD).

Jose Melena entered a cylindrical oven as part of his duties. Co-workers, who were unaware that Melena was inside the oven, loaded multiple carts of tuna into the oven and started it. Melena’s severely burned remains were later discovered by a co-worker.

Prosecutors charged Bumble Bee, former Safety Manager Saul Florez and Director of Plant Operations Angel Rodriguez with the felony of an OSHA violation causing death.

On Aug. 12, 2015, the Los Angeles County District Attorney’s Office announced a settlement agreement that will require Bumble Bee Foods LLC to pay $6 million for willfully violating worker safety rules as follows:

- $3 million to replace all of their outdated tuna ovens with new ovens that are automated and won’t ever require workers to set foot inside the superheated, pressurized steam cookers;
- $1.5 million in restitution to Melena’s family;
- $750,000 to the District Attorney’s Environmental Enforcement Fund for the investigation and prosecution of OSHA criminal cases and improvement of enforcement of workplace safety and compliance rules; and
- $750,000 in combined fines, penalties and court costs.

In addition, the company must implement enhanced safety measures, such as:

- Installing video cameras at their ovens to ensure safety compliance;
- Providing training to managers and workers about safety rules; and
- Conducting safety audits of their plant equipment.

Florez pleaded guilty to the felony of willfully violating LOTO rules and proximately causing the victim’s death. He was sentenced to three years’ probation, fined $19,000 and ordered to complete 30 days of community labor. And Rodriguez agreed to do 320 hours of community service and pay about $11,400 in fines and penalty assessments.

Both men must take classes on LOTO and confined space rules and make public statements conceding guilt for their respective roles in the victim’s death.

In Canada, safety professionals such as safety managers may also be held personally liable under the OHS laws and even criminal law. For a look at the history of criminal cases in Canada since Bill C-45 was enacted, watch a recording of our webinar, Criminal Liability for OHS Violations: A Review of 10 Years of Bill C-45 Cases.
The Value of Setting Long-Term EHS Goals

It’s easy to get focused on immediate safety goals in your workplace, such as giving safety orientations to workers you’ve just hired, complying with new requirements in the OHS laws that are about to take effect and simply keeping the OHS program operating effectively. But setting long-term environmental, health and safety (EHS) goals can have a much bigger impact on your workplace’s overall safety performance and culture. For example, in 1995, Dow Chemical set EHS goals it wanted to attain by 2005. The company drastically improved its EHS performance and attained nearly all of these goals. The initiative not only contributed billions to Dow’s bottom line, but also improved employee morale, enhanced the company’s industry standing and helped it attract and retain top talent. Here’s a look at a case study from the Campbell Institute on Dow’s approach and its success as well as how it followed up those initial goals.

Dow didn’t rest on its laurels. Instead, it set new 10-year goals to be achieved by 2015. The new goals captured the gains the company achieved with the 2005 goals and reflected new commitments in the following areas:

• Local protection of human health and the environment;
• Sustainable chemistry;
• Breakthroughs to world challenges;
• Product safety leadership;
• Contributing to community success;
• Energy efficiency and conservation; and
• Addressing climate change.

The specific 2015 goals that focused on local protection of human health and the environment focused on these areas:

**IIR.** Achieve an IIR of 0.12 per 200,000 hours of work, including injuries to both Dow employees and contractors.

**Severity rate.** Reduce the injury severity rate by 75%. (The severity rate is similar to the injury and illness rate, but it weighs incidents by the severity of the injury to focus injury and illness prevention efforts on minimizing the impacts of injuries rather than the number of injuries.)

Severe motor vehicle accident rate. Reduce the rate of motor vehicle accidents causing or having high potential to cause injuries to 0.28 incidents per million miles driven.

**LOPC.** Reduce LOPC incidents to fewer than 130 incidents at all sites.

**Transportation incidents.** Decrease the number of hazardous material transportation LOPC incidents by 75% and eliminate highly hazardous material releases, such as those posing a toxic inhalation hazard or involving flammable gas.

**Process safety incidents.** Reduce process safety incidents by 75% and the severity rate by 95% at all sites, according to the 2005 baseline.

**Environmental releases.** Decrease company wide emissions of volatile organic compounds, nitrogen oxide compounds and priority compounds by 30%. In addition, reuse 300 million pounds of by-products instead of disposing as waste.

*Preliminary results:* Just seven years into the new EHS plan, Dow’s achievements were shaping up to be just as impressive as those made under the 2005 goals. For example:

• The 2015 target was to drive the IIR to no more than 0.12 incidents per 200,000 hours. The IIR in 2011 was 0.30 per 200,000 hours, representing a 42% reduction;

• The 2011 severe motor vehicle accident rate of 0.17 per million miles driven was already less than the 2015 goal of 0.28 per million miles driven;

• The number of process safety incidents in 2011 was 74% lower, compared to a reduction target of 75%; and

• Dow’s goal was to reduce LOPC incidents 90% by 2015 and by 2011 there had been an 80% reduction.

**BOTTOM LINE**

EHS improvements continued to pay off for Dow. The company realized more than $4 billion in additional savings from reductions in energy use, wastewater and chemical emissions, and an additional $100 million from reductions in injuries, LOPCs and process safety incidents.

Projects to reduce and reuse waste in new and innovative ways returned a net present value of more than $2 billion per year to the company, which were especially critical to the company’s bottom line during the 2008 financial crisis. The tangible benefits included reductions in workers’ comp premiums, which fell by 75% between 2005 and 2009. As a safety or EHS coordinator, show this case study to senior management as proof that a serious commitment to long-term EHS goals can result in significant benefits for workers and the environment—as well as the company’s bottom line.
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