

The Evolution of Safety: What Your CEO¹ Should Know

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The Evolution

1911 has been dubbed the year that the modern safety movement began. It started after the disastrous Triangle Shirtwaist Factory fire that killed 146 young women in men in just 34 short, but harrowing minutes. Improved workplace safety started with ensuring that basic building codes and fire codes were properly enforced and improved. Labor laws were written to protect children, workers compensation laws were developed to protect workers injured on the job. That was the start. Safety training for employees began to evolve.

In 1931 H.W. Heinrich conducted a study and developed the injury pyramid that every SHE professional is familiar with. He estimated that the ratio related to the occurrence of a unit group of 300 accidents of the same kind and involving the same person that 29 times it would result in minor injury and one time would result in a major injury. Frank Bird conducted a separate study in 1969 and expanded the pyramid to the 600-30-10-1 model – for every 600 incidents 30 resulted in property damage, 10 in serious injury and 1 fatality. In 2003, ConocoPhillips Marine conducted a similar study demonstrating a large difference in the ratio of serious accidents and near misses. The study found that for every single fatality there are at least 300,000 at-risk behaviors. These studies lead to and reinforced the practice of behavior-based safety. All of these focus safety efforts on the front line employee and supervisor.

In 1970, Richard Nixon signed the OSH Act and prescriptive standards entered the mix. Today we deal in many national and international standards. Some are voluntary while others are not. But the majority of our safety programs still focused on changing the behavior of the front line employee and supervisor.

The idea of “Safety by Design” was actually around prior to the Triangle Shirtwaist Factory Fire, and continues to gain ground. The idea of safety by design was first promoted by Crystal Eastman in her book “Work Accidents and the Law.” She wrote her book in 1910 and talked about how the change to automatic coupling pins on railroad cars reduced the death rate among rail workers. Safety by design has had a facelift and is known today as “prevention through design.”

¹ The term CEO is used throughout this document to reference the chief executive officer regardless of the actual title, which may be President, Mayor, City Manager, Administrator, Chancellor, Plant Manager, etc. The term “Company” is used throughout this document, and is inclusive of public entities, private entities, entities that operate for a profit and those that are not-for-profit.

Process safety management entered the picture after the Union Carbide chemical release in Bhopal, India in 1984. System safety soon followed where the attention is on the interaction between departments and phases of the development, production, and delivery of the production. And since Sarbanes-Oxley Act, we've taken safety more and more into Enterprise Risk Management.

In the United States, we have made great strides since 1911, death and injury rates are down from what they were 100 years ago. However, in a study released by the U.S. Bureau of Labor Statistics' preliminary, fatal occupational injuries for 2010 show a minimal decline in workers dying from on-the-job injuries in 2010 compared with 2009. The report shows transportation-related fatalities continue to be the number one cause of on-the-job deaths followed by assaults and violent acts, contact with objects and equipment, falls, and exposure to harmful substances or environments. And we now know that the number of serious injuries has increased. Our efforts are stalled. Haven't we learned anything from the past?

We've stalled at behavior-based safety because it is hard to change behavior and we keep relying on ill trained supervisors to change those behaviors. So what is next? The next step is establishing a Prevention Culture. A Prevention Culture is not a matter of a single system or philosophy – it is the instillation of a culture that permeates the organization based on the use of all available tools that have gone before, with the addition of:

- Changing the management processes
- Adopting Enterprise risk management thinking
- Changing the attitude throughout the organization – recognizing that safety is not a program or something that is only applied at work and then only when it is convenient.
- Brand recognition and reputation
- Sustainability

It will take everyone embracing safety in every aspect of their lives. It is management valuing human lives and the quality of those lives, valuing the environment, and demonstrating that value in the decisions they make. Prevention is not focused on the employee and supervisor. It permeates the entire organization. It is in all departments. It is embraced by all personnel from the C-Suite to the entry-level employee. It is changing the attitude throughout the organization and recognizing that safety is not a program or something that is only applied at work and then only when it is convenient.

What Your CEO Needs to Know

We have gathered the fruit on the ground and the low-hanging fruit. We made rapid improvement when we embraced engineering changes, improved signage, implemented a system approach to safety. We began to stall at behavior-based safety. To move forward, we must strive to instill a prevention culture that engages the entire organization. It has to start with our CEOs and senior managers. But in order to engage them, there are a few things they need to know and understand. They need to know the true cost of loss. They need to understand that loss costs are controllable, and what they can do to lead their company to form a culture of prevention.

The Cost

The cost of doing business includes covering losses arising out of the company's risk exposures. The type of business conducted, the size of the company, and where the business is conducted

will determine how those risk exposures need to be addressed. Insurance is a common way to cover losses. Generally speaking, the types of insurance coverage sought by companies include: general liability, workers compensation, automobile/vehicle insurance, product liability, professional liability, and commercial property. Insurance coverage can be obtained by being fully insured, self-insured, a member of a risk sharing pool, or the owner of a captive insurance company. The location of the company and its financial health will influence or direct insurance coverage decisions. For instance, in the United States, forty-seven states allow those companies that meet specific financial requirements to be self-insured, while only thirty-four allow like entities to pool their resources to meet self-insurance financial requirements.

If the company should choose, or is required by State statutes, to be fully insured, their premium dollar has to cover the costs of claims, the cost of administering the claims and provide a profit for the insurer. When fully insured, regardless of the type of insurance, the premium is determined by the historic loss experience for like entities, and the company's loss history. When grouped within a loss class, part of each premium dollar goes to cover the losses of those within the class; so in essence, the Company is paying in part for someone else's losses. In regard to the company's experience, think of the cost of insurance for your personal vehicle. If you experience accidents, the cost of your insurance premium goes up. If you had to add a teen-aged son, the premium really went up. Conversely, the premium went down when he reached the age of 25, or was otherwise removed from your policy. The company can influence the out of pocket expense of insurance by adjusting its deductible. The size of the deductible will depend on the company's financial ability to pay the premium and its risk appetite.

If you have the size and financial ability to be self-insured, the Company is paying all of the loss costs. Many companies choose to maintain excess insurance coverage to absorb the cost of catastrophic losses. Self-insured companies either manage their claims in-house or contract with a third-party claims administrator. So in addition to the costs of loss, there are claims administration costs, and the costs for excess insurance premiums.

If the Company is in a risk sharing pool, the Company membership dues (also known as premium) is dependent the decisions of the pool. Some pools apply experience modification factors, so that those members with high loss experience pay a higher premium. The pool's coverage decisions also influence the premium; as a member of the pool, the Company has a voice in those decisions. Its risk appetite and the rules of the pool will dictate its self-insured retention (SIR). As an example, one of the risk sharing pools that I serve permits an SIR range of \$250,000 to \$2,000,000 per claim. The risk management dollar for risk sharing pools, breaks down as follows: 13% goes to pool administration cost, 8% goes to the purchase of excess and reinsurance premiums, and 79% goes to pay the claims that exceed the members' SIR. Unless the pool pays for a third party claims administrator, the members also incur additional claims administration costs. A list of states that permit risk-sharing pools can be found at http://www.naschip.org/states_pools.htm.

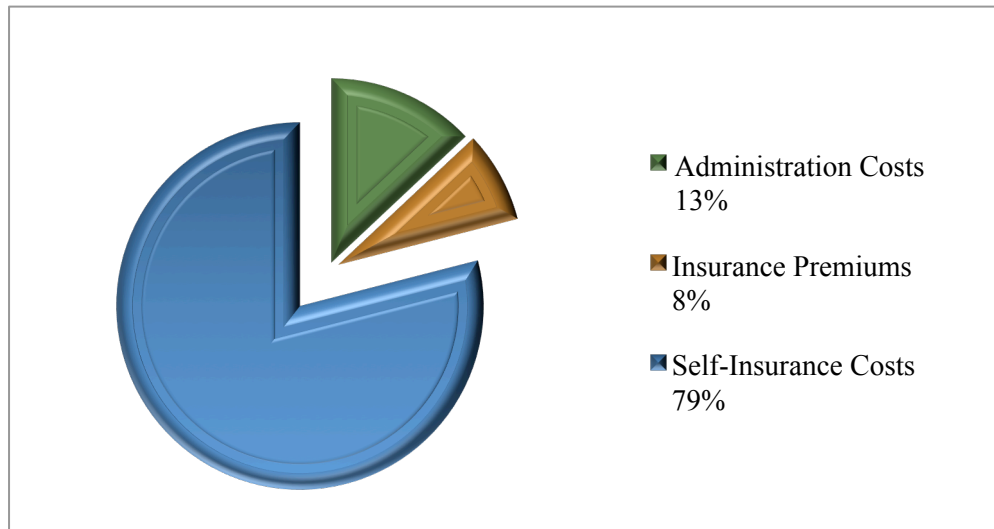


Exhibit 1. Typical Risk Management Dollar

If the Company has a captive insurance, basically the Company is its own insurer. Since most captive owners are not in the insurance business, they still need to hire someone to manage the captive for them, usually an insurance company or a knowledgeable captive manager. The dollars to pay the claims, the administration costs, and the excess or reinsurance insurance coverage premium are still paid by the company.

No matter what method a company chooses to obtain the insurance coverage required to conduct business, those dollars are still being deducted from the bottom line and cutting into profits. In a prevention culture, loss experiences are reduced and loss dollars are controlled; therefore, the cost of insurance is reduced and company profits are increased.

In business every dollar invested in good production and management methods results in increased profits. Loss prevention can produce similar results. Every dollar spent on safety and loss prevention returns four to six dollars to the bottom line through: reduced loss expenses, such as claims administration, medical costs, and indemnity; reduced employee absenteeism; reduced time spent away from production to deal with the loss incident; reduced employee turnover; and higher productivity and employee morale. As an example, I heard Anil Mathur, CEO of Alaska Tanker Company (ATC) speak at an ASSE Loss Control Symposium where he shared his experience. He is one of the CEOs who understand the value of safety. Mr. Mathur put a high value on safety when he took the helm of ATC, and as a result the reduction in their P&I total loss exceed the annual fleet wide voyage repairs. The dollars saved supported the bottom line and bolstered profits. He also shared that another cost savings benefit of the change in culture, was a reduction in employee turn-over. Human resource personnel tell us that hiring a new employee can cost between \$1,500 and \$10,000 dollars per employee depending on the position and salary. Not all the dollars saved through the adoption of a prevention culture are visible simply because they are not tracked, like the time devoted to interviewing that could have been devoted to employment practice liability prevention. Companies are losing dollars not just due to the loss dollars that are tracked, but also from those costs associated with losses that we do not track. The Titanic was sunk not by the top of the iceberg seen above the water line, but by the iceberg unseen beneath the water line.



Exhibit 2. “It is the unseen part of the iceberg that will take us down.”

Companies are bleeding dollars they can't see, because they are not tracking them. Those untracked costs include: increased maintenance costs due to replacement rather than timely repair; decreased employee morale; employee chit-chat about what happened rather than concentrating on their work; increased employee turnover; decreased productivity when an unskilled worker has to replace an injured skilled workers; supervisor and employee incident investigation and reporting time; human resources recruiting time to replace the injured workers and those who leave because it is safer elsewhere; management time spent managing workers compensation claims; the cost of repairing property damage; lost production time; time spent with litigators; the cost of renting replacement equipment; and reputational damage that effects stock market standing and shareholder dividends.

The Basics

OSHA is working on an Injury and Illness Prevention Plan regulation. Many states already have such a plan, and they all have similar core components – leadership, communication, employee compliance, training, loss incident investigation, hazard identification, and hazard correction. I mention this not to promote compliance for compliance sake, but to point out that the basics of the injury and illness prevention regulations focus on those things that a company can do to prevent loss, and thereby, increase their profits and improve their reputation. Upper management leadership, communication and the provision of resources are essential components in the establishment of a prevention culture just as they are essential roles in the successful management of a profitable organization. And just as profitability is driven by the CEO, so too is a culture of prevention.

Visible Leadership

I recently completed a risk assessment for a client, and what I heard throughout the management and employee interviews was the importance of the CEO's leadership. Vehicle operators were required to adhere to a 5 mph speed limit while on property, and to come to a complete stop prior to driving through the pedestrian walkway that traversed the driveway. The CEO's office overlooked the main entry to the facility so he could clearly see the driveway and crosswalk from his office. Employees reported that when the CEO's office light was on, the operators entering property adhered to the speed limit and came to a stop as required. But when his light was out, they exceeded the speed limit and rolled through the stop. The CEO's visibility, even the illusion of visibility affected the way the employees behaved. These observations support the necessity for visible leadership.

Being a visible leader need not take an excessive amount of time and can be accomplished in many ways. CEOs can accomplish much by walking around the facilities, placing safety at the top of every staff meeting agenda, routinely including safety in written communications to employees, and providing support for the safety program activities.

Walk Around

August Busch used to routinely walk the Sea World amusement park with his staff conducting his own safety inspection. A colleague of mine started with a new company recently where the General Manager is routinely seen on the manufacturing floor talking safety with the employees about the safety program. This visible leadership drives the culture within that organization. When the CEO shows an active interest in safety, so will the senior staff, their subordinates, and employees in general.

"Agendize" Safety

Employees in risk assessment interviews have stated, "Management focuses on safety only as long as the CEO is focused on safety. As soon as he turns his attention elsewhere, so does the remainder of management." That is why it is critical that the CEO place safety at the top of the agenda for each and every staff meeting. Vary the safety focus from meeting to meeting to keep the topic fresh. Invite safety and risk management staff to present the information even if the VP of Risk Management is part of the senior staff. Ensure that the following topics are reviewed routinely during the safety segment of the staff meeting:

- Loss Statistics
 - Monthly Reports
 - Routine Loss Analysis
- Loss Incident Investigation Reports
 - The Company's
 - Industry
- Employee Safety Concerns
- Safety Inspection Reports
- Training Reports

Loss statistics: The CEO and senior staff should know where the company is spending its loss dollars. They should be reviewing periodic loss analysis reports that show which divisions, which departments, and which job classifications are sustaining losses. When presented with a loss control plan, they should be reviewing a loss analysis report that illustrates what job classifications within which divisions and departments are the targets for the corrective actions and what the expected outcomes of the corrective actions will be. Safety and risk management personnel know where the dollars are going. However, to support the corrective actions the CEO

and CFO must first understand what they are supporting and why – what will be the benefit. Providing routine monthly reports on losses keeps the CEO focused on controlling the losses. The break down by division and department will ensure the support of the senior staff for safety and risk management efforts because they know they have answer to the CEO regarding what they are doing to stem the losses and maintain their profitability margins, or otherwise stay within their budgets.

Loss investigation reports: The CEO and senior staff need not review every incident; however, they should be informed of serious loss incidents. A serious loss incident would be one in which a fatality occurred, the employee sustained disabling injury, multiple employees were injured in a single incident, or significant property damage was sustained. The CEO would determine what constitutes significant property damage. The staff report provided to the CEO for the staff meeting should include: what were the circumstances; what were the root causes; what is the probability that similar incidents will happen in other areas of the company; what immediate corrective actions were taken; what permanent actions need to be or have been taken; what's the company's reputational risk; and when was OSHA notified? All of this information may not be available when first reported at the staff meeting; therefore, a log should be maintained to ensure that follow-up reports are made until the CEO and risk management are satisfied that the incident has been properly addressed and that preventative actions have been taken.

Many companies have limited losses and may become complacent and lax in their approach to safety. It is important to inform the CEO and senior staff of loss incidents occurring to competitors and those entities with similar exposures. Reviewing lessons learned reports will ensure the CEO and senior staff maintain a clear idea of the company's risk exposures and what efforts are needed to reduce the probability the company will sustain a similar loss.

Employee safety concerns: To ensure the CEO is not caught off guard regarding employee safety concerns and complaints, submit routine reports of employee concerns and complaints. They should be provided with: the basis of the concern/complaint; what were the investigation findings; what corrective actions have been taken; what still needs to be done; and, if nothing was done, what are the potential consequences.

Safety inspection and training reports: The CEO needs to be kept informed regarding the proactive actions taken to prevent loss incidents. A prevention culture while knowing what the lagging² indicators are, such as loss reports, is achieved through a focus on those actions, those leading³ indicator behaviors, known to provide safe and healthful workplaces, such as safety inspection and employee safety and health training reports.

Reporting on safety inspections can be as simple as reporting whether they were completed. However, establishing an inspection program that includes numeric measurements for safe/unsafe conditions provides a clearer picture of the effectiveness of the inspection activities. These report should report which divisions, departments are completing the required inspections. Senior staff will ensure that the inspections are completed and corrective action implemented if they know they will have to explain to the CEO why the inspections were not completed, and/or why the same safety hazards appear in the reports month after month. The inspection reports

² Lagging indicators are associated with historic data; evidence of those events that have occurred in the past.

³ Leading indicator activities are those activities known to drive desired behaviors and outcomes, such as reducing risk exposures through routine inspection.

should include details on any serious conditions identified during the inspections and what is being done to correct the conditions.

Reporting on employee safety and health training should include the percentage of employees within each division/department that successfully completed the scheduled training. Much like the reporting of the inspections, senior staff will ensure their subordinates schedule the time for training and follow-up to ensure that employees absent from the initial training session still receive the training.

Communication

Communication from the CEO to the employees is a key component of a prevention culture, and provides another aspect of visible leadership. Each communication event should express the CEO's commitment to providing a safe and healthful environment.

Each walk-through of the facility presents the CEO with an opportunity to conduct personal safety coaching. The coaching session may be to correct an unsafe behavior or condition, or to recognize safe behaviors. The time the CEO takes to discuss the condition/situation with the employee impacts more than just the individual involved. The story of the event will spread and the lesson learned shared with others inside as well as outside of the company.

Training sessions, whether classroom events or tailgate meetings, have a significant impact on the lessons learned when the CEO makes an unexpected appearance to kick-off the meeting or simply sits in to participate. This provides the CEO with an opportunity to find out what concerns and questions the employees and supervisors have. The personal appearance of the CEO at remote facilities becomes less and less probable as the size of the organization increases; however, a personal message can still be delivered either through video conferencing or pre-recorded message.

The CEO should routinely communicate to employees regarding safety whether that message is about a loss incident, the status of the program, a new policy or procedure or other steps being taken to improve safety. This can be accomplished through the company newsletter, posted memos, emails, and paycheck stuffers. The employees need to be routinely reminded that the CEO cares about and is committed to their safety and health.

Provide Resources

Providing resources means ensuring that both the funds and time are budgeted for loss prevention. I have had to establish my own department budget, and found that it did not matter if I had budgeted the funds for employee training if management had not budgeted the time to conduct that training. It does not matter if the prevention plan includes safety inspections if upper management does not budget sufficient time for supervisors and employees to conduct those inspections.

When establishing the annual budget, include the funds and time allowances needed for the completion of critical leading indicator items, such as:

- Employee training
- Safety Committee meetings
- Preventative maintenance
- Reserves to replace costly equipment or conduct costly maintenance activities

Ensure that employee training includes on-site training activities and off-site training activities. On-site training might include the purchase of training materials, refreshments served, and the cost of bringing in live training. Training materials are most effective when they are current, which means replacing them periodically. While refreshments are not needed for tailgate training, they are necessary for long training sessions, such as those lasting 90 minutes or more. Many safety training topics require hands-on training and in-person training to be effective and to meet the skills testing requirements for some of the mandated training, such as aerial lift and forklift operations. When developing the time for on-site training, include time for management personnel to participate as well as the time for the employees.

Some training must be conducted off-site because: only a few personnel need the training; it is specialized training that is only cost-effective when attending off-site settings; or the specialized training materials are not transportable, such as the race track used for emergency vehicle training. When budgeting for this training, include the cost of transportation, lodging, meals, and other travel expenses. When budgeting the time, remember to include the time for the travel to and from the training venue along with the time for the actual training.

When establishing the training budget, remember to include the supervisors, middle management and upper management. They can best manage a prevention culture when they understand the risks and prevention methods. When staffed with safety and health professionals, it is essential that management provide the time and resources for these employees to gain and maintain their skills, knowledge, and professional certifications. Many professional designations, such as the “certified safety professional” and the “certified industrial hygienist” require the payment of annual dues and the completion of on-going education units (CEU) – 25 every five years. These CEU are earned by attending professional development conferences, monthly professional association meetings, and educational institution courses. They can also be earned through the participation in leadership roles within local, national and international professional associations. The Company gains added benefits when they support the time and travel for this participation in that their safety professional learns greater leadership skills and is introduced to business management methods that can be applied in their day-to-day work.

Safety committees can play a significant role in developing and maintaining a prevention culture. The key is providing the support and resources needed to ensure they are effective. Get them started off right, with a safety committee start-up training day. Invest in them by teaching them the skills needed to identify issues, establish action plans, problem solve and develop effective solutions. Establish a budget for refreshments for their regularly scheduled meetings. When planning work schedules, include the time required for the safety committee members to attend their safety committee meetings and other safety activities.

Preventative maintenance is crucial for production and transportation equipment and is generally included in the budgets and work schedules. Those are big items, but what about the little things? What about scheduling documented inspections for hand and power tools, hoists, overhead cranes, and testing equipment. There are multitude of items used daily in the workplace that are simply overlooked because the loss of the item will not necessarily shut down production, but a fault can result in injury that does shut down production; therefore, they are just as crucial to production. Ensure that management supports inspections and preventative maintenance throughout the organization by providing the time and materials and monitoring the activities to see that they are completed.

Setting reserves is not an uncommon business practice. It is just as important to establish reserves for the safety as it is for production and company growth. We set reserves for anticipated loss costs, but not necessarily to replace safety equipment or maintain the pavement in the parking lot. Everything has an expected service life, and yes it can be extended through proper maintenance, but eventually, it has to be replaced. Think about the high cost equipment involved in the safe completion of your business; have reserves been set aside for the anticipated replacement of that equipment? Or will the Company be left scrambling or cutting corners when suddenly it no longer functions?

Help Your CEO

Every safety and health professional has a responsibility to help their CEO and upper management understand management's role in establishing a prevention culture. First the safety professional must understand their company's strategic plan and determine where safety, health and prevention fit within that plan as a strategic partner. It is only through understanding where they fit that the safety professional can convince the CEO and upper management that safety, health and prevention are part of the strategic plan and not an expendable operational expense.

The CEO needs the support of their safety and health professional to agendaize safety. The CEO will look to the safety and health professional to provide the materials to be examined at the staff meeting, to explain the reports and provide recommendations for solutions that include the return on investment data. Meeting the CEO's informational needs will require the safety and health professional to examine the tracked and untracked costs associated with losses and determine how best to track and report them.

The CEO also needs the assistance of their safety and health professional to understand the regulatory compliance issues within the areas they operate. The larger the geographic area in which the company operates the more information the safety and health professional must be able to supply to the CEO. I recently spoke on the topic of prevention at a CEO Winter Management Conference. The CEOs in the room ranged from owners with less than 50 employees during their peak season, to companies that operated in as many as 31 US states, and several companies that had multi-national companies. Twenty-four of the US states have approved state OSHA plans. Countries around the world, such as Australia and Korea, not only have safety and health regulations, they also require the staffing of safety professionals based the size of the company. The purpose of educating the CEO is not to try to scare them into regulatory compliance. CEOs are entrepreneurs and are risk takers by nature. Regulatory compliance is way down on their list of worries. It is important to educate them regarding how to use the regulations as a framework for basis of a prevention culture and then how to go beyond compliance for increased profitability.

The CEO is the heart of any organization's culture. Help your CEO understand the importance of their leadership in prevention and the benefits of establishing and maintaining a prevention culture.

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