Safety Training: Fatality Report



INCIDENT

Mélanie tells her story.

My name is Mélanie, and I'm from Dieppe, NB. In 2001, on the eve of my 22nd birthday, I was involved in a serious accident at work.

My job, a part-time position, consisted of driving mentally challenged adults to social activities on Monday nights, using a 15-passenger van.

February 12th was a particularly cold night. When it was time to bring the participants back home, the other driver and I went to warm up the vans. The two vehicles were parked one in front of the other, about two metres apart.

Next to one I noticed a patch of ice near the door where the participants would get in. Thinking of their safety, I suggested the other driver back the van away from the ice. I went in between the two vehicles to direct her.

Suddenly I saw the van rushing towards me. I didn't have time to jump out of the way. I was pinned. The bumper crushed my upper legs, breaking both femurs.

I started yelling "Move the van!" banging on the back window. I still remember the yell. I didn't know I could scream like that.

The van moved, and I looked down at my legs. They were deformed in the shape of an arch. I panicked and threw myself on the ground; scared they would snap in two.

As I lay on the frozen ground waiting for the ambulance, my co-workers and the mentally challenged adults covered me with their jackets to keep me warm.

The femur is the biggest bone in the body. Usually, a person loses consciousness when it breaks. Both of mine were broken, and I wish I had lost consciousness. Instead I dug my fingers into the ground, thinking, "Will I be able to walk again?"

At the hospital, I had a 6-hour operation. Metal rods were put inside my femurs. Screws were put in both knees and hips. The incisions, some 20 centimeters long, were stapled closed.

NEED TO KNOW

Some individuals like to reflect back on the "old days" when it was all about production to protest the ever-increasing emphasis on workplace safety. Over the last

few decades many changes have come into play regarding workplace safety. Whether it is through new technologies, new laws, new rules, or just more focus given to safety, those in the same job for years have experienced a major shift towards more of an emphasis on safety than the years before.

Why Safety Can Be Redundant

Often times the same work tasks are completed every single day. Because of this, the safety issues and focuses are often the same- day in and day out. The discussions on safety will often focus on a handful of hazards for the work going on that day. The reason for this is because the same hazards often are the ones that cause the majority of incidents and injuries.

Battling Complacency

We do many of our work tasks in the same exact way every single day. Yet paperwork is still filled out and discussions are still had regarding safety for these tasks. One of the hardest things to avoid at work is **complacency** with hazards as well as going through the motions with safety procedures. As time goes on, individuals become more confident in their abilities and knowledge at work and some people are willing to take more risks. This is one reason why safety issues need to be constantly reinforced, even if it has become redundant to talk about them.

Summary

It is understood that safety can be redundant at times, but it needs to be understood by employees that we all need reminded to stay focused on working safely. The same old hazards are often the ones that get people injured. **OSHA's Fatal Four** construction hazards are an example of this. It is known that falls, electrocutions, struck-by, and caught in or between incidents are the main causes for the overwhelming majority of fatalities in the construction industry yet it reoccurs year after year. Do not get complacent with the hazards of your work and do not view some redundancy in a safety program as a negative.

Getting workers throughout your company to display a "safety attitude" is the key to a safe and healthy work environment.

BUSINESS / REGULATIONS

Know Your Enemy — What is Workplace Safety Training?

Workplace safety training is a process that aims to provide your workforce with knowledge and skills to perform their work in a way that is safe for them and their co-workers. In addition, an effective workplace safety plan includes instructions and guidelines to identify hazards, report them, and deal with incidents.

You need to encourage a great incident reporting culture so that you can effortlessly create a safer workplace and can identify how your company can continually improve the workplace environment. When a new incident happens, you have to have a quick method to relay the message to all your employees to avoid the incident from happening a second time. Employees need to be able to easily access old hazard reports so they can learn on-the-job. You should be able to warn and alert your employees to a hazard BEFORE it happens. When one happens, you need to be able to handle the situation DURING the incident. And then AFTER the incident, you have to be able to easily let the rest of the team know, like about the wet floor so slipping can be avoided. There is a lot that goes into protecting your employees so you must have a stable process in place.

As an employer, it is your legal (and moral) responsibility to instruct your workers how to perform in a safe and healthy manner before they even start to work. Safety training is an integral part of the employee onboarding process but it also requires regular "refresher" courses for compliance (and effectiveness). Not only because employee alertness goes down over time, but also because safety protocols change to keep up with changes in equipment, materials, and roles within the business.

Why You Need Workplace Safety Training in Your Business

Beyond the obvious reasons — regulation and moral responsibility — there are plenty of advantages to investing more time and thought in a well-planned workplace safety training program. Here are a few:

- Lower insurance premiums
- Less productivity loss due to illness or injury
- Higher employee satisfaction
- Reduced worker compensation for medical leave due work-related injuries and illnesses
- Protection from liability lawsuits
- Future incident prevention.

But odds are you're already convinced, and are reading this post to learn how to make your safety training program a stellar example of employer diligence.

Training Beyond Regulation

Not all workplace safety training courses are the same. For different tasks and industries, there are different safety training requirements [PDF], both in content and training frequency. So, there's really no "one-size-fits-all" when it comes to workplace safety training.

The regulatory demands of OSHA and state health and safety authorities are the bare minimum. When planning your workplace safety training program, your goal should be to minimize incidents, maximize awareness and alertness, and keep your employees healthy, happy and productive. Not just comply with regulatory demands.

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing a safe and healthful workplace. No person should ever have to be injured, become ill, or die for a paycheck. OSHA's mission is to ensure the protection of workers and prevent work-related injuries, illnesses, and deaths by setting and enforcing standards, and by providing training, outreach, education and assistance. Many OSHA standards, which have prevented countless workplace tragedies, include explicit safety and health training requirements to ensure that workers have the required skills and knowledge to safely do their work. These requirements reflect OSHA's belief that training is an essential part of every employer's safety and health program for protecting workers from injuries and illnesses. Researchers conclude that those who are new on the job have a higher rate of injuries and illnesses than more experienced workers. To assist employers, safety and health professionals, training directors and others with a need to know, OSHA's trainingrelated requirements have been excerpted and collected in this updated booklet. Requirements for posting information, warning signs, labels, and the like are excluded, as are most references to the qualifications of people assigned to test workplace conditions or equipment. Training in the safe way for workers to do their jobs well is an investment that will pay back over and over again in fewer injuries and illnesses, better morale, lower insurance premiums and more.

STATISTICS

Too often and for too many employees, mandatory training is seen as a bother or inconvenience that disrupts a busy workday and results in work piling up. At the end of the training, the employee downloads the digital certification, turns it in and gets back to the job at hand.

On-the-job accidents and illnesses continue to present a major issue for companies in the United States. Preliminary numbers for 2013 from the Bureau of Labor Statistics show that 4,405 workers across multiple U.S. industries were killed on the job — an average of 85 each week. Accidents and illness can result in human tragedy, lost manpower and missed production deadlines.

The construction industry, characterized as "high hazard" by OSHA, is an area in which proper safety training is essential. But all industries must consider the quality of their training and ensure that it keeps up with changes and innovations.

The segment of the construction industry involved in the wireless industry is an example in which the growing demand for wireless and broadcast communications continues to spur a dramatic increase in communication tower construction and maintenance. Employees regularly climb towers in excess of 2,000 feet tall, and they do it throughout the year in all weather conditions. **OSHA Recorded 13 Communication Tower-Related Fatalities in 2013**, but as more towers are built, that number may well continue to grow each year.

With statistics like these, safety training for employees cannot be a "check the box" experience. The question companies face is how to provide training that enables employees to learn and retain the skills and knowledge they need to respond to a real-world emergency.

For most companies, training starts with **OSHA standards** that require the employer to train employees in the safety and health aspects of their jobs. Other **OSHA standards** make it the employer's responsibility to limit certain job assignments to employees who are "certified," "competent" or "qualified" —meaning that they have had special previous training, in or out of the workplace. Many companies, unions and other organizations also require employees to successfully complete training recommended by **OSHA** for worksite, insurance and job-bidding purposes.

Companies seeking training that meets OSHA standards look to organizations such as the **Health & Safety Institute (HSI)**, an Oregon-based company that is an authorized provider of **OSHA training**. HSI recently partnered with the **American Red Cross to deliver OSHA 10- and 30-hour training** for companies. It's up to these and other training providers to keep abreast of the most effective ways in which to teach safety to employees.

Sidebar: Spanish-Language Training Important in Construction Industry

When it comes to safety in the construction industry, companies have an important demographic to consider: nearly one in four construction workers (24.4 percent) is Latino, compared to 15.4 percent of all employed workers, according to the U.S. Bureau of Labor Statistics (BLS).

Work-related fatalities in 2013 rose for Latino workers. According to the BLS, 797 Hispanic or Latino workers were killed from work-related injuries in 2013-7 percent higher when compared to 2012.

Of the total fatalities for Latinos, 527 (or 66 percent) involved foreign-born workers. Specific studies of Mexican-born workers show that this population accounted

for 352 — or 42 percent — of the 845 fatal injuries among all foreign-born workers. The BLS data also shows that fatalities among contract or temporary workers are on the rise, with 734 contractors dying as a result of work-related injuries in 2013, up from 715 in 2012 and 542 in 2011, when BLS began collecting data.

These statistics strongly suggest that proper safety training is even more important for companies with Latino employees, especially those in which the employees do not speak English or understand English with proficiency.

RECOMMENDATIONS

There is a measure that is **Recommended** for companies to undertake to keep employees awake while learning about safety training. It is called **Simulation Learning** the recommendation is as.

"Simulation learning," allows learners to test their knowledge of instructional materials using online interactive, scenario-based simulations. These programs offer multiple scenarios in which to test a concept or skill. In any given scenario, students may select from a number of possible actions, each of which results in further situations and possibilities based on the course taker's choice.

The benefits are:

- 1. A no-risk experience: Virtual interaction offers a safe environment in which to test knowledge with no fear of causing actual harm. Research shows that no-risk environments allowing for unlimited attempts at mastering knowledge and decision-making results in greater learner confidence.
- 2. **Real-world scenarios:** Simulation learning is effective because virtual scenarios can offer engaging psychological realism that bridges the gap between the classroom and the real world. Learners stimulated by realism retain information more effectively.
- 3. A new way to train: Although simulation learning is not intended to be a game, many individuals find the video-game aspects of the interactions engaging.

 Course takers can train anytime and anywhere they have access to a computer.
- 4. **Practice makes perfect:** Simulation learning allows learners to repeatedly test their skills and knowledge at their own pace and in a variety of scenarios; this increases retention of knowledge and leads to automatic responses.
 - In a 2014 survey conducted by Northwestern University's Kellogg School of Management, researchers questioned 4,888 Red Cross trainers on their views about simulation training. The majority of respondents said that simulation learning is a good addition to current teaching methods, and they are willing to use it in their training.
 - In a separate Red Cross-sponsored meta-analysis of dozens of U.S. Department of Education studies and interviews with first responders and cognitive experts, researchers found that when combined with traditional classroom experience, simulation learning is more effective in preparing people to act in a crisis than classroom learning or online learning alone.
 - "The value for me," said a paramedic, "is being able to make mistakes in a low-pressure environment and then learning from your mistakes, and then doing that repetitive action. So that when you do have the pressure on you and you know you have to perform with that pressure, you are able to do it because you have seen it done and felt it before."

PREVENTION

Effective Workplace Safety Training Programs

- 1. Identify the needs of your business, potential hazards, and training objectives. Then, analyze past incidents and common industry hazards. Figure out which issues need to be addressed through training, and which have other solutions like protective equipment or warning signs.
- 2. Involve your workforce in developing, implementing, and optimizing the training program. The contribution of managers, supervisors and workers is crucial. They have the best understanding of how work gets done, and where dangers to their safety and health might be hiding.
- 3. Create modular training and testing processes that can be applied to each role in the business according to regulations. For example, knife safety handling instructions are the same for a waiter and fry cook, while fire safety protocols might be different for each.
- 4. Train managers and supervisors in the safety requirements of their teams. This will allow them to identify issues with employee compliance with safety regulations.
- 5. Include communication channels for hazard reporting in your training, so workers know who to contact and how to prevent a potential accident.
- 6. Test your workers with quizzes, surprise inspections. These can help you determine how effective your workplace safety program is before an accident forces you to discover it is not.
- 7. Provide continuous and easy access to safety training content to let employees refresh their memory when necessary. For example, an employee who was instructed on the safety requirements of operating a certain machine six months ago, and hasn't touched it since? Is more likely to stay safe if they have the content of the training course readily available for him to review.

SAFETY TRAINING IN 2019

Safety Training Programs today are very different from those made a decade ago. New technologies are responsible for the most obvious changes in the way we communicate. This affects the way we train and complete tasks. But keeping up with technological trends is not the only reason your business safety training plan needs to be current to be effective.

- Mobile workforce— More and more businesses employ remote workers as well as deskless workers on the go. These are harder to train than in-house employees. Solution? Safety training tools and formats that DO NOT require on-site presence.
- Contingent workforce— With the "gig economy" becoming prevalent across all industries, training (including health and safety training) needs to be fast (but thorough).
 - Solution? Modular training programs, easily customizable for onboarding.
- Workplace diversity— Global economy is getting more global in 2019. However, international organizations and businesses employing expats often lack safety training materials in multiple languages.
 - **Solution?** Technological tools that allow for quick translation and localization of the training modules.

There's no doubt that some types of safety training require hands-on demonstrations and are best delivered in person or in a small group. But when it comes to workplace safety training of deskless workers, contingent employees or a dispersed global workforce — the best choice is mobile learning.

1. Determine What Safety Training is Needed

Employers should first ask themselves if training can solve the problem at hand. If problems stem from employee performance, rather than the workplace environment itself, training is the most effective way to remedy the problem. If problems are stemming from employee motivation or attitude, training is less effective at correcting these issues.

When evaluating employee performance issues, it is important to assess the type of issue to determine the best approach. Training programs are most effective at addressing an employee's lack of knowledge about proper procedures or equipment usage.

2. Identify Workplace Safety Training Needs

The next step is correctly identifying the specific training required to address the knowledge gap. This process includes identifying the specific information that an employee needs to know to perform the job safely.

A proven method for determining the depth of training required is to conduct a Job Hazard Analysis. This process documents each step of a task while identifying and analyzing possible safety hazards along the way. The organization can translate high risk activities into a prioritized training plan by taking the time to assess the process.

3. Identify Safety Training Goals and Objectives

Once training needs have been clearly identified, it is important that learning goals and objectives are set. Effective learning objectives must be clear and measurable, making it possible to evaluate the training at a later date. Training objectives should precisely spell out the desired skill or behavior using specific, action-oriented language. Detailed learning objectives allow employees and employers to understand the expected outcome of the training.

4. Develop Workplace Safety Learning Activities

After learning objectives are clearly identified, learning activities that support those objectives must be developed. Employers should consider which methods, materials, and resources will be needed to most effectively convey the message. The type of training chosen (group, one-to-one etc.) should be selected keeping the audience and specific skill set in mind.

Ideally, learning activities will include opportunities for employees to demonstrate the skills and knowledge they have learned in the training. These activities should directly apply to the employee's actual job and include lessons arranged in sequential order according to the job process.

5. Conduct Safety Training

Now that the above steps have been completed, training should be scheduled and conducted. Training should be presented in a clear and organized fashion. To maximize learning, provide the trainees a training overview. Ensure that the training is related to the employee's experience. Then follow up by reinforcing the lessons learned. To keep employees interested and motivated in learning, allow trainees to participate and practice their new skills along the way. Participation in discussion and hands-on practice encourages new information to be retained, and real life examples to be incorporated into the discussion.

6. Evaluate Workplace Safety Training Program Effectiveness

After training is conducted, it is vital to evaluate its effectiveness in accomplishing defined goals. There are three ways to conduct an evaluation:

- Ask the trainees for feedback via questionnaire or informal discussions. This will provide a quick review of initial value and learning outcomes.
- Follow up with supervisors and their observations about employee behavior before and after the training. This shows whether the training had a noticeable outcome.
- Evaluate workplace data to examine if long term there is a trend toward reduced incident or near miss rates. This will be the bottom-line indicator of a training program's success rate.

7. Improve the Safety Training Program

Based on the training program feedback, look for ways to improve future training sessions. A critical re-examination of all the steps of a job and in training will determine what gaps existed in the training program. Items to revisit include:

- The method chosen to determine if there is a better way to conduct the training.
- The presentation of training materials to determine if it was effective for the audience chosen.
- The key concepts and skills that were highlighted. If there was a gap, it may be beneficial to review the Job Hazard Analysis to identify any missing components or any new steps added to the process since the training was developed.
- Revise training as improvements are identified.