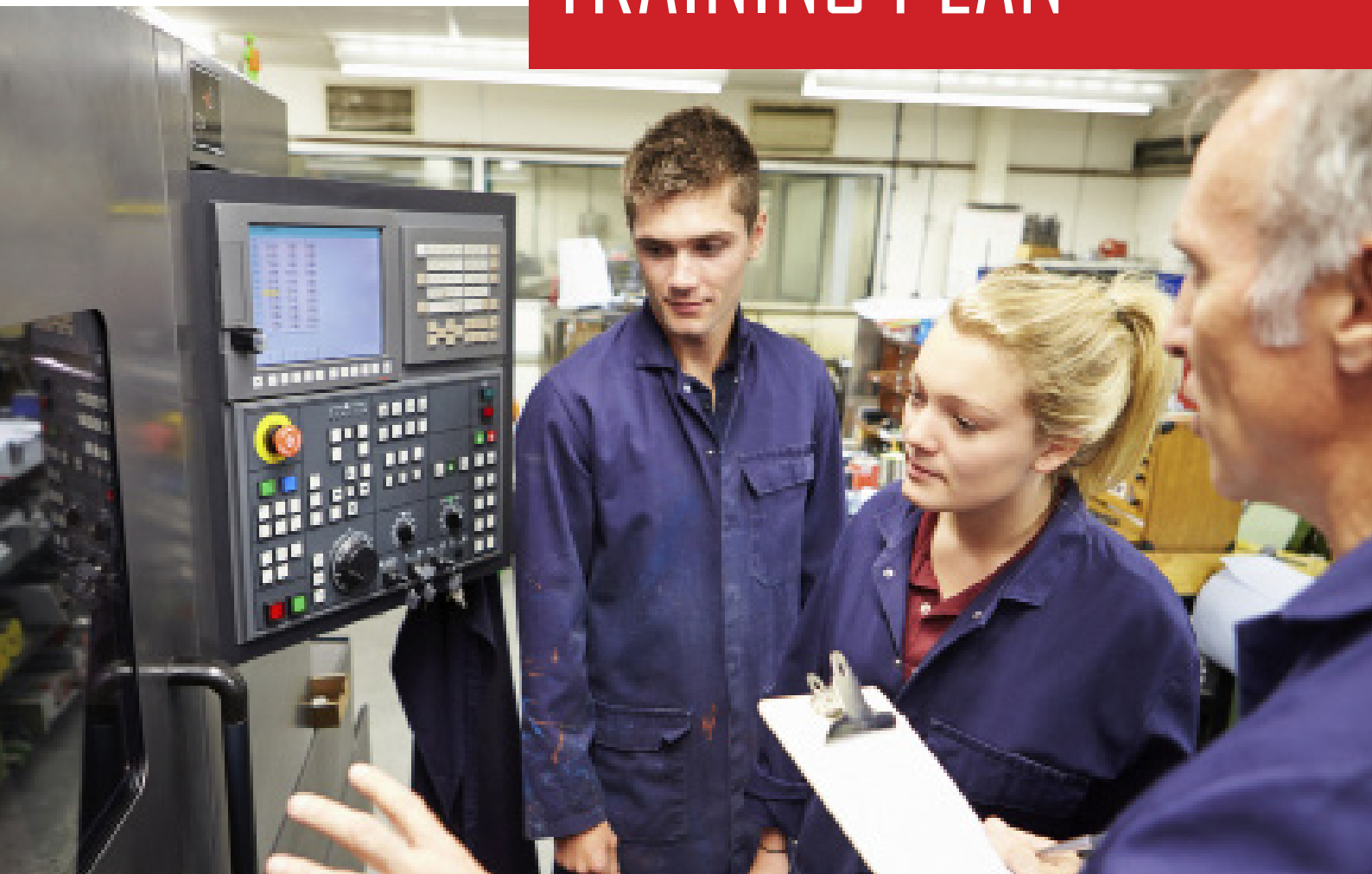


# BUILDING A SAFETY TRAINING PLAN



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## HOW TO START A SAFETY TRAINING PROGRAM

Training is an important part of any safety program. Training helps teach employees how to perform their work more safely. It also allows you to teach employees the company's policies and attitudes about on-the-job safety.

Setting up a training program may appear to be difficult and overwhelming. But this does not have to be the case. The first thing that needs to be done is to determine the important safety issues for your employees. You can use resources in your workplace to gather this type of information. Top among these tools are the incident reports that your facility generates about employee injuries. This will give you an idea not only of where employees are having problems, but also what kinds of problems they are having. For example, are your workers reporting a lot of foot injuries? Do they need to be trained on the importance of wearing steel-toed shoes? Are they experiencing a high number of eye injuries? Do they need to be educated on the importance of wearing eye protection and what types of eye protection are best for their jobs?

There are other good ways of collecting information to use in safety training. For example, if you perform routine audits of the workplace, you could make observations about the way employees are doing their jobs and how they could do them more safely - without pointing fingers, of course.

Sometimes safety training comes from regulatory requirements put out by agencies such as the US Occupational Safety and Health Administration (OSHA) or Occupational Health and Safety (OHS). For example, **do your workers drive forklift trucks?** If so, they'll need training in how to operate those vehicles in a safe manner. **Do your employees need to wear respirators to do their jobs?** They'll need a lot of training and review on fitting, testing and using respiratory protection.

**Once you've decided on the material to include in a safety program, there are some other things you might want to think about:**

- **How do you ensure that employees are actually learning something?** One way

is to follow the training with a short, but realistic quiz on the information they have just been trained in. This is an effective tool to judge how effective the training is and whether the employees have actually benefited.

- **Safety training works best if given to employees at a convenient time, whether it is at the start, middle or end of a shift.** No matter when you schedule the training, try and provide some drinks and snacks to help lure workers to the site. Of course, safety training should be mandatory, and you should keep records of who attends, but it should also be enjoyable for both the employees and the person giving the training.

- **Safety training should not be a “one shot” deal.** Periodic training on the same and related topics is a good idea. It gives you a chance to review the information that you’ve covered before. It also gives you a chance to expand the employee’s knowledge base, while updating any new methods or techniques.
- **The person giving the training should be knowledgeable and up to date on the safety aspects of the jobs performed in your company.** This person does not have to be a know-it-all - or even know it all - but this person needs to be open, honest and knowledgeable. Safety training is an important part of any safety program. Use the tools available to determine what training is needed.



# DO YOU KNOW WHY YOU SHOULD DOCUMENT YOUR SAFETY TRAINING?

Companies that deliberately cut corners on safety training deserve no sympathy if they get socked with an OSHA/OHS citation. Unfortunately, it's not just the "bad guys" who get into trouble. Companies that make a conscious effort to train still end-up getting cited for training violations. These companies learn a painful but important lesson: It's not enough just to train your workers; you must also be able to prove that you do. And that's not all. In many cases, you need to take steps to verify that workers understood the training you provided.

**“**  
**The contractor in charge of the excavation was fined \$2,500 for failure to train workers how to recognize and avoid unsafe conditions. The contractor appealed, claiming that he had trained the workers. But he didn't have the documents to prove it.**  
**”**

## THE IMPORTANCE OF DOCUMENTATION

There are more than a hundred standards that require a company to provide safety training to workers. Some, but not all, of these standards also require the employer to document that training.

But, as a practical matter, documentation is required even if the standard doesn't expressly mention it. That's because if investigators show up after an incident, one of the first questions they'll ask is whether the injured worker (and/or worker who caused the injury) received the required training. If you can't prove that training was

provided, you'll almost surely be cited. And if you don't have documentation, you're unlikely to be able to prove that the worker received the necessary training.

## A TALE OF TWO COMPANIES

Here's a demonstration of why documentation is so important.

### Company Fined Because It Can't Document Training

During a routine inspection, an OSHA investigator smelled sewer gases in a trench and discovered that none of the workers knew they should check for poisonous gases or determine if the air in the trench had enough oxygen. The contractor in charge of the excavation was fined \$2,500 for failure to train workers how to recognize and avoid unsafe conditions. The contractor appealed, claiming that he had trained the workers. But he didn't have the documents to prove it. So the Occupational Safety Health Review Commission (OSHRC) upheld the fine.

### Company Avoids Fines Because It Can Document Training

A Ministry of Labour investigator interviewed the victim of a serious workplace incident in Ontario. The victim said the company had never trained her and that she didn't know about the hazard. But the company had written records showing that training sessions were held and that the victim had attended them. When she saw her signature on the attendance sheet, the victim suddenly "remembered" that she had been trained, after all, the company's safety director relates. No citations were issued.



# SAFETY TRAINING RECORDS: THE RECORDS YOU NEED & HOW LONG TO KEEP THEM

Simply providing safety training isn't enough to ensure compliance; companies also must document their training efforts in case inspectors, regulators, prosecutors and courts demand proof that they provided the necessary training to each worker. Such documentation can also help companies avoid liability for a safety offence or even a crime under Bill C-45. For example, if a worker suffers a chemical burn on the job, records verifying that he attended WHMIS training and understood what he was taught can help your company prove that it exercised due diligence as to WHMIS requirements.

This article will explain everything you need to know about training records requirements under OHS laws, including why records are necessary, what kind of training must be documented, how to create the right documentation and how long to hang onto your records. There's also a chart showing the kinds of training for which the

OHS laws in each jurisdiction require documentation.

## WHAT THE LAW SAYS

Every jurisdiction's OHS laws require employers to provide safety training to workers. There are two kinds of training requirements:

- **General:** A broad obligation under the OHS act on the part of employers to provide sufficient training and instruction to workers to ensure their health and safety in performing their duties and the health and safety of others in the workplace; and
- **Specific:** An obligation under the OHS regulations to provide training and instructions for dealing with specific hazards (such as asbestos), operations (such as working in confined spaces) or equipment (such as respirators).

What do these laws say about documenting required training? Surprisingly, not much. In fact, no jurisdiction has a blanket rule requiring employers to document all worker training. The OHS statutes and regulations deal with documentation of training in two ways:

**Require documentation of specific kinds of training.** The OHS laws of nine jurisdictions—Fed, AB, BC, MB, NS, ON, PEI, SK and YT—require employers to keep records for specific kinds of training, typically including training on:

- Confined spaces;
- Asbestos;
- Fire fighting;
- WHMIS;
- Forestry; and
- Fall protection

**No explicit training record requirements.** The OHS laws and regulations of the remaining five jurisdictions—NB, NL, NT, NU and QC—don't specifically require documentation for certain kinds of training.

## WHY YOU MUST DOCUMENT ALL TRAINING ANYWAY

Laws must be understood by not only their literal terms but also what they're designed to do. Accordingly, the obligation to document safety training is an implicit one that furthers the purpose behind training requirements. Specifically, simply communicating safety information to workers during training sessions or through policies and other writings isn't enough to meet the law's training requirements. Employers are also expected to evaluate the effectiveness of their training and take additional steps if it's not working. There's no way on earth you can meet this obligation unless you keep track of the training each worker has received.

Many provinces have issued guidelines either implying or expressly stating that the

government agency that enforces the OHS laws views documenting training as a key component of an OHS program—even if it's not explicitly spelled out in the law. Thus, for example, the WHSCC in Newfoundland, where training records aren't mentioned in the OHS laws, has issued guidance stating that employers must take a “systematic approach to OHS education and training” that includes “maintenance of education and training records.”

Another reason that you need to keep training records even if the law doesn't literally say you have to is to prove that the company provided training to its workers. Such documentation is often crucial to prove due diligence. Simply put, having training records can only help the company, while not having them can only hurt it:

**Training records help company.** A mine worker was killed when he fell through an open hole while conducting a post-blast clearance gas check. The mine was charged with three safety violations, including failing to properly train workers on performing gas checks safely. The court dismissed the training charge. It noted that the mine had produced training records for the two workers involved in the incident that indicated that both workers were well aware of the procedures for post-blast clearance checks [*R. v. Placer Dome (CLA) Ltd.*].

**Lack of records hurts company.** A log fell off a piece of equipment called a “debarker,” landed on a worker and broke his pelvis. The Ontario MOL inspector concluded that workers hadn't been well trained on use of the debarker and issued an order requiring the employer to provide such training to all workers. The employer asked the Labour Relations Board to suspend the order. It argued that it already provided intensive and high quality training to workers on the use of all equipment. The Board refused to suspend the order, noting that the employer couldn't produce any records to prove that it provided proper training [*Gulick Forest Products Ltd. v. Brennan*].

## TRAINING RECORD BASICS

Documenting training is either a specific legal requirement or a best practice. Let's now explain how to do it.

### Which Training to Document

If your workplace is in a jurisdiction that requires employers to document certain kinds of training, make sure that your company keeps records of such training as a bare minimum. However, the better practice for all workplaces—regardless of location—is to document all training. After all, you never know when a safety inspector may request your training records on a particular kind of training or when certain training will be relevant in a prosecution for a safety violation. So create records of all the training your company provides workers, including:

- Initial training at the start of employment, including new or young worker orientation;
- New training when workers are reassigned to new jobs involving different hazards;
- Training on how to handle new equipment, procedures or processes as they're introduced into your workplace;
- Additional training when test scores and other assessments show initial training hasn't sunk in or after a worker commits a safety infraction or gets involved in a safety incident; and
- Periodic re-training to reinforce or update the lessons of previous training.

### In terms of training methods, keep records of:

- Formal training sessions, whether run by an outside consultant or in-house staff;
- Online training, such as taking e-learning courses;

- Tool box talks, lunch-and-learns and other informal training sessions; and
- Annual training reviews, such as annual WHMIS reviews.

### How to Document Training

Training documentation doesn't need to be elaborate. You can use very simple forms to create records of the training your company gives workers. You can also keep training records electronically. Whatever method you use, make sure you record at least the following information about each training session:

- When the session was held;
- Who conducted it;
- How long it lasted;
- What topics the session covered in sufficient detail. For example, don't just say "PPE" when the specific topic was actually the proper use of respiratory equipment; and
- Who attended the session.

### What to Do with Training Records

Creating training records is just step one. You have to retain those records so you have them on hand when needed. But retaining all of your old training records is a burden, even if they're in electronic form. And if you're using a paper system, it can be an administrative nightmare. As a result, many safety coordinators are eager to dispose of their records the moment they believe they no longer need them.

So how long does a company have to keep its training records? In some cases, the OHS laws in the jurisdictions that require employers to keep records of certain kinds of training specify how long those records must be retained. For example:

- Under the federal *Canada OHS Regs.*, Employers must keep records of WHMIS

training for two years after the worker ceases a) to handle or be exposed to the hazardous substance; or b) to install, operate, maintain or repair the assembly of pipes;

- Under AB's *OHS Code, 2009*, employers must keep records of training for mine self-rescuers for at least three years;
- Under BC's *OHS Regs.*, employers must keep records of asbestos and cytotoxic drug training for at least three years,
- Under NS's *Underground Mining Reg.*, employers must keep mine job training program records for at least two years after the mine closes;
- Under PEI's *OHS General Regs.*, employers must keep records of noise exposure training for as long as the worker is employed by the employer; and
- Under SK's *OHS Regs.*, employers must keep respiratory protection device training records for as long as the worker is employed by the employer.

As you can see, training record retention requirements are all over the place.

**A good rule of thumb: Keep training records for each worker for as long as the worker is employed by your company, even if the worker changes positions and so his prior, say, crane operation training is no longer relevant.** After a worker leaves the company, the most prudent course is to keep that worker's training records for at least five years, says Toronto OHS lawyer Ryan J. Conlin. And although it may seem like a long time to keep a lot of paperwork, training records can be kept electronically now, eliminating storage concerns, he adds.

## CONCLUSION

Safety coordinators don't want to be nor should they be paper pushers. But often a few scraps of paper can mean the difference between proving due diligence and paying a huge fine for a safety violation. So take the time to set up a simple training record program for your company and you and your company will reap the benefits down the road.







## PLAN FOR THE EXPECTED AND UNEXPECTED

**IF YOU FAIL TO PLAN, YOU PLAN TO FAIL.** Procedures and rules are in place to address emergency situations. Employees must be properly trained on the procedures. You must take a proactive approach to planning for the unexpected and take steps to ensure employees know what to do in an emergency. Injuries and damage will then become minimal. If plans are not in place or not followed, injuries, property damage and possible loss of business can result.

**TRAINING IS A KEY TO PREVENTION.** Safety training is not always the most enjoyable event in our lives. However, your life and the life of your crew often depend on the information presented in the safety training programs at your facility. Safety training is required to help make you aware of the hazards in your environment and to teach you what to do in an emergency situation. In turn, you can pass this information on to your team members.

**EMERGENCY SITUATIONS HAPPEN WITHOUT NOTICE.** The ideal safe environment would include a warning system to alert us of an emergency and give us time to react before the

emergency occurs. In real life, this is not the case. In most emergencies you have very little or no warning before it occurs. Therefore, you do not have time to make emergency preparations during the emergency. Know what to do in an emergency every minute you are at work. Know the potential emergencies that could occur in your environment and know what to do if an emergency situation happens.

**IN AN EMERGENCY YOU MUST TAKE IMMEDIATE ACTION.** If a situation occurs in your workplace that could cause injuries, production loss, or damage you must be trained to take immediate action. Situations such as a chemical spill, flammable gas release, water on the floor, or toxic gas release require immediate action and implementation of established emergency plans in order to prevent serious injuries and property loss.

Much of the work we do in safety is designed to help prevent injuries in every-day operations. However, part of safety involves planning for the unexpected and knowing what to do if it does happen.

# CHECK YOUR WORKER TRAINING SKILLS

**As a supervisor or manager, this checklist will help you effectively train your employees in various skills.**

**Step 1: Introduction:** What is to be learned? How and why? How will it be evaluated?

**Step 2: Perfect demonstration:** Without error, demonstrate each step of the task, with a detailed explanation of each step.

**Step 3: Practice with much supervision:** Guide each worker through each step, with careful explanation. Repeat until the worker shows basic ability.

**Step 4: Practice with moderate supervision:** Worker conducts steps/tasks while explaining each step to instructor until basic mastery is achieved. Focus on quality and safety, not speed.

**Step 5: Practice without supervision:** Worker practices skill, concentrating on building speed while maintaining safety and quality.

**Step 6: Evaluation or test:** Worker demonstrates mastery of skill according to established standards.

## WorkSafeBC Issues Significant Fines Over Workers' Injuries

British Columbia's workers' compensation board, WorkSafeBC, recently issued a couple of significant fines following workers' injuries in different parts of the province.

West Fraser Mills Ltd. has been fined \$75,000 with regard to serious burns suffered by a young worker at a mill in Fraser Lake, BC. The unsupervised worker was using a torch to repair a piece of logging equipment. He had removed grease from equipment using a combustible cleaning liquid before lighting a torch and starting to cut through material.

Soon afterwards, his coveralls caught fire and he suffered serious burns to his legs and hands. WorkSafeBC found that the young worker had not been supervised as he carried out his assigned tasks and he also had not been instructed on how to safely handle, use, and dispose of the combustible cleaning product.

The firm also failed to provide written instructions for safely repairing equipment.

"These violations demonstrate the firm's failure to provide the instruction, training and supervision needed to ensure the health and safety of its young worker," says WorkSafeBC.

In a second recent incident, a worker suffered serious injuries at a foundry in Surrey, BC. The worker had been cleaning a 362-kilogram (800-pound) mold suspended by a crane about two meters (six feet) above the floor. The worker was standing underneath the mold when one of the job-built hooks embedded in the mold pulled out, causing the mold to drop onto the worker and crush both his legs.

WorkSafeBC says Century Pacific Foundry Ltd. failed to ensure that its worker did not stand under or pass beneath a suspended load. It also failed to ensure that the hook's working load limit had been determined and certified by a professional engineer. Another finding was that the company had failed to provide its worker with the information, training and supervision needed to ensure his safety.

**Century Pacific Foundry Ltd. was fined \$56,480.**

# TRAINING FOLLOW-UP VERIFICATION FORM

EMPLOYEE'S NAME: \_\_\_\_\_

SUPERVISOR'S NAME: \_\_\_\_\_

Safety Meeting Topic	Method Used to Verify That Worker Understood Topic	Date of Verification	Additional Training Necessary?	Date of Additional Training
	<input type="checkbox"/> Observation <input type="checkbox"/> Interview <input type="checkbox"/> Quiz <input type="checkbox"/> Other: _____	MM/DD/YYYY	Y/N	MM/DD/YYYY
	<input type="checkbox"/> Observation <input type="checkbox"/> Interview <input type="checkbox"/> Quiz <input type="checkbox"/> Other: _____	MM/DD/YYYY	Y/N	MM/DD/YYYY
	<input type="checkbox"/> Observation <input type="checkbox"/> Interview <input type="checkbox"/> Quiz <input type="checkbox"/> Other: _____	MM/DD/YYYY	Y/N	MM/DD/YYYY
	<input type="checkbox"/> Observation <input type="checkbox"/> Interview <input type="checkbox"/> Quiz <input type="checkbox"/> Other: _____	MM/DD/YYYY	Y/N	MM/DD/YYYY

**DOWNLOAD TRAINING  
VERIFICATION FORM**





## SAFETY TRAINING: ONCE IS NOT ENOUGH

Being experienced in your work does not provide immunity from injuries. Nearly a quarter of acute injuries happen to experienced workers—as a result of human errors.

Statistics like this remind us of the need for continued safety training. Refresher courses, new training with new information and regular safety reviews are all necessary to keep you safe from workplace injury.

Near misses or minor incidents indicate something is wrong with the way you are working. Or perhaps it has simply been a long time since you covered the material. You may have forgotten some of it, or there may be new information or new methods to make it easier to understand.

### HOW CAN YOU UPDATE YOUR SAFETY TRAINING?

- Ask for a review. Go to your supervisor, qualified co-workers and company's safety department with specific questions you need to have answered.
- Use the company's library of safety resources. Self-directed study workbooks and CD's, safety booklets and videos are some of the ways to learn and review the information. If you are not familiar with computers, start with an easy course while you learn to navigate.
- Use your breaks for safety reading and discuss it with your co-workers. Encourage your company to supply safety literature in the break rooms. Help set up a television and video player in the lunch room for safety presentations.
- Read again the information presented to you when you started your job. It will make much more sense the second time around. This could include your company's safety policies and procedures, emergency instructions, operating manuals for equipment, Material Safety Data Sheets and labels for chemicals in your work area.
- Ask for cross-training in other jobs. You will look at hazards and safety procedures from a new perspective.
- Take the materials home to your family if you are allowed to. Make your safety training a household project. This will give your family members a better understanding of what you do, and they will encourage you to work safely.
- Ask for help with advanced training and education if you are interested. Your company might have a budget for sending you to safety conferences or technical courses. Even if no financial help is available, the department might be able to schedule your shifts to accommodate learning. Consider distance learning, in which you communicate by computer, television and mail.



## WHY WORKERS REQUIRE COMPETENCY TESTS AFTER SAFETY TRAINING

How many of you have been given a 200 page OHS manual and told to read it? Of course, after you've read the manual, you're asked to sign a waiver stating that you've read and understood its contents. So you just skim through the manual, thinking, "I have sufficient work experience. I know what I'm doing." And then you sign the waiver.

A oilfield services company did just that. They gave a large health and safety manual to its workers, told them to read it and, after they'd read it, sign a waiver that they understood its contents. The company didn't give the workers a competency test to determine if they'd actually understood the manual. It mistakenly believed that the onus was now on workers to work safely.

Not so. The company then had a serious incident in which a worker didn't follow procedure and was hurt very badly. He said that he'd read the safety manual but didn't understand it. The company argued that it had done everything reasonable and practicable to protect the health and safety of its workers. The injured worker

should have followed the procedure because he'd signed a waiver saying that he'd read and understood it.

The court asked the company if it had done anything to make sure he actually understood what he'd read. The company's answer was, "No, we didn't." The court explained that it was the company's responsibility as an employer to determine workers' competency and it couldn't transfer that duty to workers by having them sign a waiver. The court convicted the company of OHS violations and fined it.

**[Note:** The case discussed above is [R. v. Dial Oilfield Services](#), [2007] ABPC 16, Jan. 19, 2007 (upheld on appeal [R. v. Rose's Well Services Ltd. \(Dial Oilfield Services\)](#), [2009] ABQB 1 (CanLII), Feb. 1, 2009).]

**THE LESSON:** Simply handing over health and safety information and expecting workers to read it on their own and understand it isn't acceptable. Workers must actually be trained and have their understanding of that training verified.



## Quick QUIZ - The Right & Responsibility To Work Safely

1. Who is responsible for safety in your workplace?
  - a. Management
  - b. Employees
  - c. You
  - d. Everyone

2. Failure to report a hazard could set someone else up for an injury.

**True or False**

3. You should regularly inspect any equipment and tools you use.

**True or False**

4. Checklists can be useful in doing equipment inspections.

**True or False**

5. If you do not understand something about work safety, you should:

- a. Ask about it
- b. Pretend you know all about it

6. Have you met anyone on your safety and health committee?

**Yes or NO**

7. The only place you can pick up safety information is from a formal training program.

**True or False**

8. Do you have any safety concerns about your job?

**Yes or NO**

9. What are you going to do about them?

- 
10. Safety is:
    - a. Your right
    - b. Your Responsibility
    - c. Both

Safety training needs to cover company safety policies and procedures, critical health and safety issues such as where the first aid kits, eye washes and fire extinguishers are located and what to do in an emergency. New workers should get a site tour where they're introduced to their co-workers and acquainted with the site health and safety precautions and hazards.

It's then the employer's duty to ensure that the workers understand the workplace's safety policies and procedures. To do so, it must assess the effectiveness of their safety training either by giving them a quiz that tests key concepts or by having the worker demonstrate knowledge and competency of safety procedures on the job under the watchful eye of an experienced worker or supervisor, who signs off on the worker's competency.

Mentors are great for assisting in this process. An experienced worker can oversee a new worker until he can perform the job safely and well, with little or no supervision. The mentor signs off that the worker's competent and the cycle is complete.

Only then has the company truly done everything that a reasonable person would do to protect the health and safety of its workers—in other words, exercise due diligence. Don't just read and sign off... Your life may be on the line!

# TAKE 5 STEPS TO PROVE THE ROI OF SAFETY TRAINING PROGRAMS

Getting sufficient funding for the OHS program, including safety training, always seems like an uphill battle. It can be especially difficult in a struggling economy when budgets are getting slashed. "Training dollars compete against other funding requests on a daily basis," said J. LeRoy Ward, Executive Vice President of [ESI International](#), a project management training company. Ward added that, in today's environment, it's not enough to simply measure how well a training program is delivered. In other words, those responsible for training, such as safety coordinators, need to prove to senior management that their programs are having a measurable impact on the bottom line.

Easier said than done, right? ESI recently released a report that explains how you can prove the value of your training program through a practical and straightforward approach to return on investment (ROI). Here's a look at that report and its step-by-step process for calculating the ROI of a training program. (Although the study speaks to training programs in general, we'll apply its lessons to safety training specifically.)

## 5 STEPS FOR CONDUCTING A TRAINING ROI STUDY

Proving the ROI of training means providing evidence that training is creating value. Yes, business value is generally measured in dollars. But you can't credibly jump straight from training to dollars; you must first show where value is being created in the company, explains the ESI report. In other words, you need to prove:

- Your training program improves workers' ability to do the job and do it safely;

- That improvement has a positive impact on the company;
- That impact benefits the company financially; and
- That benefit is more than the cost of the training.

To accomplish the above, the report recommends that you take these five steps:

### STEP #1: SURVEY WORKERS WHO ATTENDED TRAINING

After a training session, survey all workers who attended. The survey shouldn't be long and should be easy to complete. For example, the ESI report includes a case study that used a survey that contained 22 questions and took about seven minutes to complete. Some of the areas the questions in the survey should cover include:

- Quality and effectiveness of the training;
- Impact of the training on the workers' job performance;
- Any post-training support provided, such as resources and opportunities to apply the training; and
- Business results, such as improved productivity or fewer safety incidents.

### STEP #2: RE-SURVEY WORKERS 60 DAYS LATER

Sixty days after the training session, give the workers who attended a second survey to validate their initial responses and collect additional information, such as any barriers to the use of their training they've experienced. It's important to re-survey the workers because immediately after training, they tend to be overly optimistic about how the training is going to impact their jobs.



### STEP #3: ANALYZE THE SURVEY RESULTS

The study recommends analyzing the results of both surveys based on “four levels of learning measurement”:

**Quality and effectiveness.** The goal here is to determine whether attendees were satisfied with the overall program, the instructor’s performance and the content and delivery, and whether they gained significant knowledge and skills from the training.

**Job impact.** The single most important measurement in determining the ROI for a training program is the training’s contribution to performance improvement. So it’s critical to determine how the training impacted workers’ ability to do their jobs. For example, you want to know whether they were able to successfully apply the knowledge and skills they learned to their jobs and whether the training contributed to a significant improvement in their job performance. You should end up with a percentage by which the workers’ performance improved due to the training.

**Business results.** When reporting ROI to senior management, it’s not enough to claim that the company was impacted positively by your training program. You need to explain where it was impacted and provide quantitative evidence. You can do so by asking in the survey for specific business results that the workers’ participation delivered to the workplace and measuring the extent to which training impacted each. For example, determine whether training:

- Increased quality, productivity, customer satisfaction and worker engagement; and
- Decreased safety incidents and violations, injuries, risks and costs.

### STEP #4: CALCULATE COST OF TRAINING

Because ROI by definition is a return on investment, it can’t be calculated without knowing the investment—that is, the cost of training. To calculate training ROI, the report says you should estimate:



- The per worker cost of attending training, including course materials, the instructor's fee (if applicable), venue costs (if training isn't conducted in the workplace), snacks, administrative costs, etc.; and
- The average salary cost of the attendees. Although your estimates should be as close as possible, they're averages, so you shouldn't have to go to the HR department for specific salary information.

## STEP #5: CALCULATE ROI AND RELATED MEASURES

When it comes to measuring ROI, be as conservative as possible in your calculations. Although ROI is technically a single calculation, there are a few additional calculations you can perform around ROI to help communicate the impact of training more effectively. We explain how to calculate each below:

ROI is calculated as the return of the training (financial benefit) minus the investment in the training (cost) and then divided by the investment, resulting in a percentage. You calculated the investment component in Step #4. Calculate the return by multiplying the average percentage of performance increase by the average attendee's salary. Why salary? As the ESI report explains, your company gets more value from you than it pays you—that's how it earns a profit. So we can conclude that if a worker's productivity increases by, say, 6%, then the company would benefit by more than 6% of his salary. Thus, using salary as a basis for calculating ROI is actually conservative. Here's the math using numbers from the case study in the report to make it more concrete:

**Return = \$80,000 (average salary) x 5.82% (performance increase) = \$4,656**

**Investment = \$1,600 (cost of training)**

**ROI = (\$4,656 – \$1,600) / \$1,600 = 191%**

**Monetary benefit per worker.** This number

shows only the return side of the ROI calculation. For example, using the figures above, the training generated \$4,656 in monetary benefit for each worker attending the training session.

**Benefit to cost ratio.** This ratio spells out the monetary value of the training relative to its cost. For example, again using the figures above, the companies in the case study that invested in the training program received \$2.91 for every dollar they invested in training (\$4,656/\$1,600). So the benefit to cost ratio is 2.91 to one.

**Average payback period.** This measure is a time-based ROI calculation, which indicates how long in months it will take to pay back the initial investment in the training. To calculate the payback period, divide the per worker monetary benefit by 12 to get the monthly benefit. Then divide the investment by the monthly benefit to get the payback period:

**\$4,656 (annual benefit) / 12 (months) = \$388 (monthly payback)**

**\$1,600 (investment) / \$388 = 4.12 month to pay back the investment**

### Bottom Line

Very simply put, if you're unable to prove beyond a reasonable doubt that your training efforts generate more value than they cost, then sooner or later you're going to lose funding for your training program. Of course, because safety training is required by the OHS laws, management can't cut it completely. But they can force you to make do with as few resources as possible. So as a safety professional, it may be up to you to not only ensure that the company provides adequate safety training for workers, but also justify the training program in financial terms.