

Considerations for a Comprehensive Worker Training Program

Foundations for a healthy workplace

Every workplace has its own list of dangers, but some are inherently more hazardous than others. If you're purchasing equipment from us at Ultra Torq, chances are you or your employees face more daily physical hazards than the average Canadian worker. *The key to working safely and efficiently within these variable conditions is the implementation of a comprehensive, evolving training program.* Our brands of torque and tensioning, pipe and tube tools are trustworthy and proven. Combine this quality with an effective training program and the chance of accidents or human error resulting in injury drops significantly.

Why is training, safety and otherwise, so critical?

Workers who don't receive proper training are more likely to injure themselves than those who undergo a rigorous training program. While numbers that specifically outline differences between well trained and poorly trained workers are difficult to quantify, statistics about workplace injury are worth considering. According to the Workplace Safety and Insurance Board, in 2010:

- 51 workers per day suffered from overexertion injuries while lifting, pushing or pulling
- 43 workers per day suffered injuries like bruises, fractures or concussions when struck by equipment
- 40 workers per day slipped, tripped or fell, resulting in injuries ranging from minor sprains and multiple fractures to paralysis
- 12 workers per day were exposed to harmful substances that caused conditions like skin disorders or respiratory illnesses
- 10 workers per day had a hand, arm, leg or their entire body crushed by or caught in equipment
- 1 worker per day suffered burns or smoke inhalation from fires or explosions

Training is the best defense to keep your workers from becoming statistics. Knowing how to use our equipment, and knowing how to use it safely, is critically important.



Basic skills education

Most workplaces can benefit from a basic skills program like the one available through the Conference Board of Canada. Indeed, 79% of respondents in a Conference Board study report that they have observed increased productivity in their workplaces because of their basic skills programs. According to the Canadian Apprenticeship Forum, on average, a one-dollar investment in training returns a benefit to the employer of \$1.38. In a Conference Board study, 82% of respondents associated increased health and safety with their workplace's basic skills program and 87% of respondents said that programs impact positively on participants' ability to use workplace-based technology.

What does a comprehensive training program look like?

Broadly, effective training often involves three stages - verbal training, observational training and practical training.

Verbal training

Verbal training can be done in a group, individually, or through a combination of both. At this stage, the employer should...

1. Thoroughly explain each job or task and the reason for doing it.
 - a. This may be long and exhausting, but it is essential for staff to understand why something is done
2. Go through safety procedures and considerations detail by detail
 - a. Discuss workplace hazards, past accidents and what workers should do if they spot an unsafe situation
 - b. A good practice is to provide workers with a written compendium of safety procedures for reference following this section. This is recommended by the Workplace Safety Board of British Columbia.
 - c. Consider written procedures for:
 - i. Fall protection
 - ii. Personal protective equipment
 - iii. Emergency evacuation
 - iv. Working alone or in isolation
 - v. Violence in the workplace
 - vi. Confined space entry
 - vii. Equipment lockout



Sample chemical handling procedure:

Using smaller quantities of hazardous chemicals or substituting a less hazardous chemical reduces the risk of serious exposure or spill. When planning your work, consider the following possibilities:

1. Substituting less hazardous chemicals
2. Using less
3. Ordering only what is needed
4. Sharing chemicals when possible

Courtesy of the Fred Hutchinson Cancer Research Center. Detailed example available at <http://extranet.fhcrc.org/EN/sections/ehs/hamm/index.html>

This stage can also include a visual inspection or discussion of the specific equipment used in your workplace. Ultra Torq provides detailed data on each tool we sell, and this would be valuable for inclusion in a workplace manual; for example, [the RAD Wheel Nut Bolting and Mining Series](#).

Observational training

Observational training sessions are likely the first time new workers get to see procedures and equipment in action. At this point, training needs to be specific; tailored to the worker, their skills, experience, and function in the workplace.

- *New workers or young workers are most likely to overlook the value of this training. Small group or individualized training helps circumvent this.*
- Set up a clean, uncluttered demonstration area
- Demonstrate, in painful detail, the entire process of unpacking, assembling, engaging, disengaging, positioning, repacking and so on
- Highlight moments when safety training or the use of proper technique comes in to play

This is an opportunity for new workers to see ideal procedures, the most safe and textbook iteration of the tasks they will perform in the field. It is also an opportunity for experienced workers to refresh themselves on their fundamental tasks. Experienced workers develop habits that stray from best practice and can leave them vulnerable to injuries.



Strain and working with bolting, tube and pipe tools

According to the Workers Health and Safety Centre, repetitive strain injuries (RSIs), also known as musculoskeletal disorders (MSDs), are by far the most common type of injury suffered by workers. The pain can be significant, as are the economic costs borne by injured workers, their families and taxpayers. International RSI Awareness Day is held annually the last day in February. It highlights this ongoing epidemic and focuses attention on ergonomic prevention solutions, including training designed to help stop RSIs before they happen.

The Workers Health & Safety Centre offers discounted rates on RSI related training across Ontario. A single representative from your workplace can attend and bring back new best practices to keep employees fit for work.

By the end of this section...

Workers should have a visual guide on how to perform procedures and operate tools and machinery safely, and a verbal understanding of why a tool is used the way it is, why tasks are performed in a certain order, how safety equipment protects from hazards, etc.

Practical training

Only after establishing a base of knowledge and understanding should employees move to a practical training stage. Here, employees go hands on with safety equipment and tools to practice and eventually demonstrate proficiency enough to work confidently. Some considerations:

- Practical training is most effective in small group or 1 on 1 settings, mirroring the expected work conditions of the trainee
- It is best to establish an in-house certification system for tool operation
 - This can be done with a two tiered system wherein employees are certified annually as “proficient.”
 - When an employee has earned “proficient” certification 5+ years in a row, they earn “trainer” status, which must be renewed in the same annual process as a “proficient” employee. This not only streamlines the long term training program, but allows the business to recognize employees with an outstanding record
- A checklist is an excellent tool for employers to facilitate a practical training session. A great example can be found on page 4-5 (.pdf page 12-13) of the Worksafe BC guide to Effective Worker Training and Safety [here](#).

Note: Training is a constantly evolving practice. Just like worker skills must be updated, so must training practices. It is the duty of the employer to stay up to date on trends in training, from health and safety to specific tool operation and employee communication.



The cost of ineffective training

Workers who aren't properly trained are likely to injure themselves. They become a drain on the health care system. They also temporarily remove themselves as a source of income to the business. Some of the industries we supply are among the most hazardous in Canada. While the mining and power generation industries are regarded as low injury fields, construction related industries report the highest instances of worker injury in Canada, according to the International Labour Organization. Workplace Safety and Prevention Services Ontario estimates the total direct annual costs of workplace injuries and fatalities to the Canadian economy around \$9.7 billion annually.

Young workers entering the trades

Hiring young workers is always a good investment in the future of your business. Young workers need extra training because they aren't always comfortable approaching supervisory staff with concerns over their proficiency with a tool or a process.

Circumvent this problem by ensuring your training is comprehensive and employees have every opportunity to privately come to you with concerns. In fact, many employers in the trades develop a regular schedule to sit down with young employees following training and in intervals throughout their first few years of employment.

- After training, schedule a sit down and go over their concerns or the things they found challenging.

Every province has employer, supervisor and employee standards. WorkRights.ca is a great resource for employers with easy to follow guidelines for each Canadian province and territory.

Young workers are always looking to prove they know how to do something, and this can result in an unprepared worker entering a hazardous situation. Make sure they know how to do it before they jump in and hurt themselves.

If you can only train once a year, train in the spring

To minimize the disruption to normal work practices, schedule training in early spring. This is the time that many young workers are entering the seasonal work market or finishing school and entering the first year of their chosen career. As an employer, you have the opportunity to establish this time as a key transitional and introductory training period.

With that said, ideally training should be a regular and continuous process. To maintain competency in all tasks, training can't be a once a year thing. Habits develop and attention to safety standards can degrade. Consider an in house certification system wherein employees must recertify every 4 months. This may seem daunting and disruptive to the workplace, but a group of certified workplace trainers can actually make the process quite painless.

