

PPE: Take 5 Steps to Comply with Hand Protection Requirements



Various tasks and activities in the workplace can endanger workers' hands. For example, workers' hands could be cut by sharp materials, injured by hazardous substances or at risk of electrical shocks. If those hazards can't be eliminated, the OHS regulations may require employers to provide appropriate PPE to protect workers' hands. The types of available hand protection vary from basic leather or cotton work gloves to rubber gloves and metal mesh gloves. To ensure that your workers' hands are adequately protected and that you comply with the hand protection requirements, take these five basic steps.

Defining Our Terms

In many ways, machine guarding requirements could be considered hand protection requirements. After all, a worker's hands are the most likely body part to get caught or entangled in machinery. But in the context of this article, when we discuss hand protection requirements, we're specifically referring to PPE-related requirements.

In addition, some OHS regulations may contain hand protection requirements for specific types of work, operations, activities or occupations, such as electrical work, welding, using a chainsaw, firefighting or logging. But we'll focus only on the general hand protection requirements as they relate to various kinds of hazards rather than kinds of work.

TAKE 5 STEPS

Many jurisdiction's OHS regulations include hand-specific PPE requirements. In the jurisdictions without such requirements, the general PPE requirements still require employers to provide appropriate PPE based on the nature of the task and the hazards posed by it. So if a job poses a safety risk to a worker's hands, such as by exposing them to the risk of being burnt or cut, employers in such jurisdictions would be required to provide workers with appropriate hand protection. (See this chart for the general hand protection requirements in each jurisdiction.) Thus, appropriate hand protection for workers is required across Canada.

As always, you should consult and comply with the hand protection and PPE

requirements in your jurisdiction's OHS laws. But taking these general five steps will help you comply with the requirements for hand protection in all jurisdictions:

[learn_more caption="Step #1: Determine if Hand Protection Is Required"]

The OHS regulations typically require hand protection when workers' hands are at risk of injury or exposure to hazards such as:

- Punctures, cuts, irritations, burns or abrasions;
- Fractures or amputations;
- Contamination or infection;
- Contact with a hazardous, chemical or biological substance;
- Contact with an exposed energized electrical conductor;
- Exposure to work processes that result in extreme temperatures; and
- Injury arising from prolonged exposure to water.

General skin protection requirements may also apply to workers' hands. For example, under Sec. 243 of Alberta's *OHS Code 2009*, an employer must ensure that a worker's skin is protected from a harmful substance that may injure the skin on contact or may adversely affect a worker's health if it's absorbed through the skin. So if a worker could come into contact with such a harmful substance through the skin on his hands, you must take steps to prevent such contact from occurring, such as by requiring the worker to wear appropriate gloves.

Insider Says: Note that the OHS regulations typically require workplaces to have first aid kits containing specified items, which usually includes disposable surgical gloves. Such gloves will help protect first aiders from contact with blood or other bodily fluids while providing first aid. [/learn_more]

[learn_more caption="Step #2: Select Appropriate Hand Protection"]

Under most OHS regulations, many kinds of PPE, such as respiratory, hearing and eye protection, must comply with a designated standard, such as one from the CSA. But as to *hand* protection, the OHS regulations don't generally require compliance with any specific standards'with one notable exception. In some jurisdictions, if a worker may be exposed to electrical hazards, he may be required to use gloves that comply with a standard such as ASTM D120, 'Standard Specification for Rubber Insulating Gloves.'

As to other types of hazards that could injure a worker's hands, you should select the hand protection that's appropriate for that specific hazard. For example, if the hazard involves contact with hazardous substances, the gloves should be coated to prevent absorption of those substances. If the hazard is exposure to extreme cold, the gloves should keep workers' hands warm. In addition, even though it's not required, consulting a voluntary standard such as ANSI/ISEA 105-2016 Hand Protection Classification is still a good idea. And the IRSST has a [website](#) to help individuals and safety professionals identify protective gloves corresponding to their needs. The site can be searched by glove model or specific criteria. (The chart at the end shows types of gloves and the kinds of hazards against which they protect workers.)

In addition to selecting hand protection that's appropriate for the hazard, also ensure that you select gloves that are the appropriate size for the workers who'll be wearing them. If gloves are too big, they won't adequately protect the

worker and may get caught in machinery (more on this issue below). And if gloves are too small or are otherwise uncomfortable, workers may not use them. It may be particularly challenging to find properly sized gloves for female workers, who often have smaller hands than their male colleagues. But more PPE suppliers have lines created especially for female workers. So consider getting gender-specific hand protection if necessary to adequately protect *all* of your workers.

When selecting hand protection for your workers, keep in mind that you need to balance safety with productivity. That is, gloves should protect workers' hands, while still allowing them to do their jobs efficiently. For example, gloves shouldn't interfere with workers' dexterity or their ability to grip or hold tools and materials.

Insider Says: Who has to provide the required hand protection: the employer or the workers? It varies by jurisdiction, but the general rule is that workers must provide general purpose work gloves, while employers must provide more specialized hand protection. (See, 'PPE: Can Employers Make Workers Pay for Their Own Protective Equipment')[\[/learn_more\]](#)

[\[learn_more caption="Step #3: Ensure Use of Hand Protection Doesn't Create a Hazard"\]](#)

In some cases, the use of hand protection may actually create a safety hazard for workers. For example, wearing gloves while using certain equipment could expose workers to the risk of the gloves getting entangled in the machinery and their hands or arms being injured. (See this vivid example of such an entanglement.) In such cases, workers should *not* wear gloves. For example, Prince Edward Island's OHS regulations require an employer to ensure that workers handling materials likely to puncture, abrade or irritate hands or arms wear PPE to prevent such injuries, *except when the use of this equipment introduces equal or greater hazards*. In such cases, you must implement alternate safety measures to protect workers' hands.[\[/learn_more\]](#)

[\[learn_more caption="Step #4: Set Hand Protection Rules"\]](#)

You should have safety rules on the use of all PPE, including hand protection. These rules should cover, at a minimum:

- When the use of hand protection is required and when not to use it. For example, bar workers from wearing gloves with metal parts near electrical equipment or wearing gloves when they could come into contact with a moving part of a machine;
- How to choose appropriate safety gloves, including properly fitting gloves;
- How to properly clean and care for gloves, which is usually specified by the manufacturer or supplier;
- How to inspect gloves before each use for damage that could make them ineffective. For example, rubber or synthetic gloves should be inflated to test for leaks; and
- How to put on and remove gloves to avoid contamination (if appropriate).

In addition to these PPE-related rules, you should also bar workers from wearing rings, which can get caught in machinery and result in various hand injuries, including fractures and amputations.[\[/learn_more\]](#)

[\[learn_more caption="Step #5: Train Workers"\]](#)

Naturally, you should train workers on all of your PPE rules, including those relating to hand protection. Regularly reinforce such training with toolbox talks and quizzes to ensure that workers understand these rules and know how to apply them on the job when their hands are at risk of injury. [/learn_more]

BOTTOM LINE

According to SafeWork Manitoba, approximately 10,000 times a year, individuals' hands are injured, disabled or lost because of workplace injury. Failing to ensure that workers wear appropriate hand protection can result in such injuries. For example, a municipal worker in New Brunswick was replacing the blade of an ice resurfacer when his Allen wrench slipped. His hand came into contact with the blade's razor-sharp edge, which sliced through his leather glove and cut him deeply. Although the leather glove may have prevented a more serious injury from occurring, wearing cut-resistant gloves may have prevented an injury completely. So ensure that your OHS program's PPE rules comply with the hand protection requirements in your jurisdiction's OHS laws and adequately protect workers' hands from injury.

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HAND AND ARM PROTECTION EXAMPLES

Types of Gloves

Neoprene, rubber or vinyl

Thick leather

Aluminized fabrics of nylon, rayon, wool, asbestos or glass

Rough finish

Cotton and terry cloth

Lead-lined

Metal mesh

Insulated material often made of rubber and worn inside leather gloves

Protection Against

Most chemicals

Welding, rough surfaces

Heat

Handling slippery objects/materials

Abrasions and cuts

Radiation

Knife blades, other sharp instruments

Electric shocks and burns

Source: Labour Program's Our Hands at Work! [/box]