

Safety headgear

Assessing and controlling risk of head injury

As an employer, managing workplace risk involves identifying the hazards that can cause harm to your workers, and then determining whether you are taking all reasonable steps to prevent that harm from happening.

In 2021, the Occupational Health and Safety (OHS) Regulation requirements for the use of safety headgear changed. In the past, many employers relied on hard hats to protect workers from head injury on construction sites and other worksites. OHS Regulation section 8.11(1) now requires that, before a worker starts working where there is a risk of head injury from falling, flying, or thrown objects or other harmful contacts, the employer must first take reasonable steps to eliminate or minimize the risk. Personal protective equipment (PPE) is considered the least effective control measure as it does not actually eliminate or minimize a hazard — it only puts a barrier between the hazard and the worker. In addition, making safety headgear a requirement can result in workers who wear religious headwear (such as turbans) being excluded from the workplace.

This resource outlines a four-step risk management process you can use in consultation with workers to identify the most effective ways to protect them when there is a risk of head injury. It's designed for use in any workplace where workers may be at risk of such injuries. (Note: In this resource, safety headgear includes hard hats, bump caps, and helmets.)

Four-step process for managing risk of head injury

Risk management helps you to meet your workplace responsibilities as an employer, as well as to prioritize your safety efforts to focus on the most effective controls. To manage the risk of head injury, use a proactive process of risk management by first identifying hazards and risks, and then determining if your current controls are sufficient or if additional controls are needed. Engage with workers and supervisors throughout this process.

Step 1: Understand the risk

Identify hazards

Consider the workplace and its layout, as well as the work tasks or activities that may put workers at risk of head injury. This includes reviewing each area of the workplace where there is a risk due to falling, flying, or thrown objects, or other harmful contacts — such as overhead or elevated work where workers could be struck by falling or hazardous materials (including chemicals), or work tasks near mobile equipment.

Involve workers and supervisors in this process, as they are often more knowledgeable about day-to-day hazards in the workplace. Consult with your joint health and safety committee (or worker health and safety representative) if you have one.

The following are some examples of workplace conditions and work activities that could put workers at risk of head injury. If any of these work conditions exist, assess and implement appropriate controls.

Falling objects	<ul style="list-style-type: none"> • Objects falling or being thrown from height • Handling or manipulating objects above head level • Assembly or disassembly of equipment, including scaffolds • Working in trenches or excavations • Tree trimming • Pedestrian traffic routes that go under catwalks or conveyors, or work at elevations with tools and materials
Struck by or struck against objects or surfaces	<ul style="list-style-type: none"> • Working in, around, or under structures with low clearance • Contact with materials such as ends of scaffolding, uncapped formwork, or rebar • Working around protruding or unpredictable machinery or equipment • Working in restricted or awkward environments with insufficient headroom (e.g., in crawl spaces, on scaffolds)
Mobile equipment	<ul style="list-style-type: none"> • Working on or near mobile equipment with booms, buckets, chains, or other moving arm accessories • Working where material can be spilled from buckets
Other conditions	<ul style="list-style-type: none"> • Working in situations where the risk is unknown, unpredictable, and/or capable of changing and posing a risk of head injury • Hair entanglement in machinery • Electrical hazards, such as working around exposed energized conductors • Work at elevations with a risk of falling

Document all the head injury hazards you identify (a [risk management template](#) is available to help you with this).

Assess the risk

A risk is the chance of injury when an individual is exposed to a hazard. Hazards with a higher chance of occurrence and greater potential severity of injury have a higher risk level.

Consider the following to assess the risk level associated with each of the workplace activities and conditions (i.e., hazards) you identified:

- Which workers and other individuals might be at risk, including:
 - Workers at risk during their routine, day-to-day work
 - Workers who might be at risk only occasionally (e.g., an office worker who needs to cross a works yard, a maintenance worker who needs to enter a crawl space)
 - Contractors
 - Visitors and clients
- Length of time workers are typically exposed to the hazard — the longer the exposure, the higher the risk
- Frequency of the exposure (for intermittent tasks) — the higher the frequency and the exposure, the greater the need for controls
- Predictability of the hazard — unpredictable hazards (due to changing worksite conditions or work processes) have a higher risk level
- Potential severity of any resulting injury

As with the hazard identification process, involve workers and supervisors in assessing risks, as they will have direct knowledge of workplace conditions.

A good risk management strategy is to first focus on the hazards with the highest level of risk and the highest chance of an injury occurring. To meet the requirements of section 8.11 of the OHS Regulation, begin by looking at your work tasks or conditions where workers are currently required to wear safety headgear.

Be sure to revisit your risk assessment whenever any of the following apply:

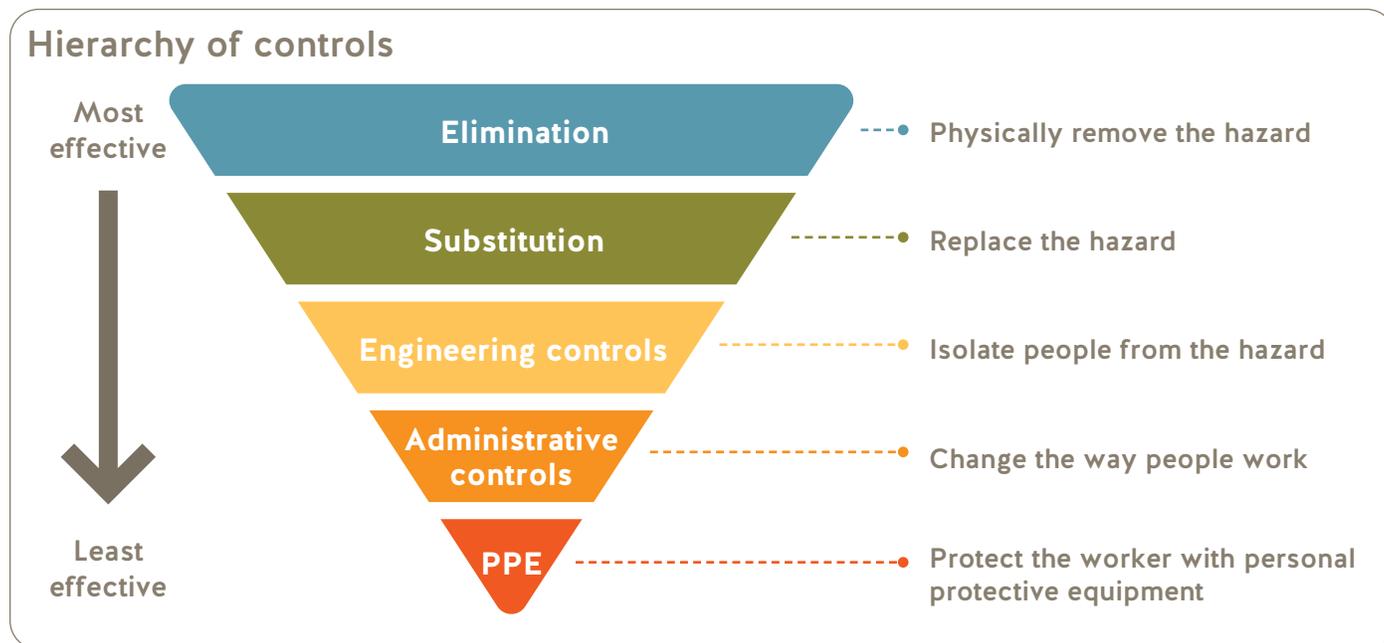
- Your workplace changes (e.g., you establish a new worksite)
- New equipment or processes are introduced that could create a risk of head injury
- Workers provide feedback on new hazards or risks

Step 2: Implement controls

Follow the hierarchy of controls when considering how to control workplace risks. The hierarchy of controls is a step-by-step approach to eliminating or reducing risks in the workplace. It ranks risk controls from the highest level of protection and reliability to the lowest.

Workers are best protected from head injury when you eliminate the risks from falling, flying, or thrown objects, or other hazards. If you can't eliminate the risk, use engineering and administrative controls to minimize that risk to the lowest level practicable. PPE, such as safety headgear, provides the lowest level of protection in the hierarchy and should ideally be used in combination with other control measures.

While the controls are listed in order of effectiveness, reducing the risk may involve using two or more different controls in combination. For example, you could install physical barriers to protect workers from falling objects (engineering control) along with work task scheduling to ensure no workers are on the ground underneath crews working at elevation (administrative control).



The following are examples of each level of control in relation to eliminating or reducing head injury risks.

Elimination or substitution	<ul style="list-style-type: none">• Exclusion zone or safe zones that eliminate the need for head protection
Engineering controls	<ul style="list-style-type: none">• Safety nets to catch falling objects• Temporary or permanent solid barriers to prevent objects from falling, being thrown, or sent flying from work areas• Temporary or permanent physical barriers to prevent workers from entering hazard areas• Tethering and securing tools, materials, and equipment so they can't fall• Using automation or other changes to the workplace so workers don't need to enter areas where a risk of head injury exists
Administrative controls	<ul style="list-style-type: none">• Requiring work to stop when other workers are underneath elevated work areas• Creating designated pedestrian-safe walkways that are free from overhead hazards• Using spotters to alert workers to vacate areas when overhead hazards are present• Using signs to alert workers to overhead hazard areas and, if necessary, to communicate the need for safety headgear before entering those areas
PPE	<ul style="list-style-type: none">• Use of safety headgear such as hard hats, bump caps, or helmets <p>Note that safety headgear is the lowest level of control. If elimination, engineering controls, and/or administrative controls are not adequate to minimize the risk of head injury to the lowest level practicable, safety headgear must be worn.</p>

For each hazard identified in Step 1, follow the hierarchy of controls to identify which controls you will use to eliminate or minimize the risk, in consultation with workers, supervisors, and your joint committee.

Documenting these reviews can help you manage the process and make sure everyone in the workplace understands the hazards and control measures. The following is an example of a documented risk management plan. You can follow this format using the fillable Word [risk management template](#) provided or another method of your choosing.

What is the worksite location of the hazard? Elevated walkway between buildings 1 and 2	What is the task or activity? Be specific. Workers at start and end of shift carrying tools and materials across walkway that could fall onto other workers below
Can the hazard be eliminated or substituted? Describe. No	
What engineering controls are already in place or can be added? Describe. Install safety nets below elevated walkway to catch falling materials	
What administrative controls are already in place or can be added? Describe. Use spotters at start and end of shift to keep workers away from area underneath walkway	
Will elimination, substitution, engineering, and/or administrative controls be enough to eliminate the risk or minimize it to the lowest level practicable? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Action completion date Completion means the control measures are in place and operational. April 14, 2022
If the answer is No, safety headgear is required for this work task and location.	

Step 3: Communicate and engage

Through orientation, training, work procedures, and signage, workers are made aware of current workplace hazards and how these hazards are controlled and managed.

As an employer, you have a duty under the *Workers Compensation Act* to provide workers with the information, instruction, training, and supervision necessary to ensure their health and safety. Communicating your controls to everyone affected, and including information about controls in your workplace orientation and training, will help you meet this obligation. Ensure you are communicating with:

- All affected workers, particularly if the controls involve changes in their work processes (e.g., use of spotters, new signage to be followed, tethering tools and materials)
- Supervisors of affected workers
- All other people (e.g., visitors, clients) who need to follow safety procedures in areas with a risk of head injury

Communicating hazards and controls provides an opportunity for worker feedback. Accepting and considering worker feedback on controls will contribute to more effective risk management.

Step 4: Monitor and update

Managing your workplace risks is an ongoing process. You'll need to monitor the effectiveness of the control measures in place and improve those that are not working as intended. Continue to engage your workers throughout the monitoring and updating of your risk management plan.

- Conduct regular workplace safety inspections so you can identify new or changing hazards and risks. Activities that support your regular workplace inspections may include daily checks, supervisory walk-throughs, and an ongoing program of maintenance inspections.

- Engage with workers and supervisors and revisit your assessment of the risks whenever your workplace changes (e.g., you establish a new worksite) and whenever new equipment or processes are introduced that could create a risk of head injury.
- Observe and supervise work activities that have a higher level of risk. Confirm your controls are being used properly and procedures are being followed.
- Use regular safety meetings to talk about head injury safety issues.
- Invite your joint health and safety committee to include review of controls in its meetings.
- Make sure workers know how to raise any concerns they have about head injury risks and controls. Review the risk management plan to see if all concerns are addressed. Adjust your controls and communicate the outcomes.
- If your workplace experiences an incident resulting in a head injury or an incident that had the potential for causing a serious head injury to a worker, ensure your incident investigation identifies any improvements needed to manage the risk of these injuries more effectively.

For more information

Safety headgear: Risk management template is available to help you document your workplace risks and the steps you will take to control those risks.

Section 8.11 of the OHS Regulation outlines the requirements for the use of safety headgear. OHS guideline **G8.11(1)** provides additional support, including information about what to do if workers have concerns about the appropriateness of the control measures selected.

The following pages on worksafebc.com provide more information and resources:

- [Safety headgear](#)
- [Managing risk](#)

We're here to help. Call the WorkSafeBC Prevention Information Line at 1.888.621.7233 if you have questions about workplace health and safety.