

# Hidden Hazards in the Workplace

## An Educator's Guide



As a teacher, you're in a unique position to influence young people before they enter the workplace. You play an important role in shaping young workers' attitudes about health and safety and equipping them with knowledge that will help protect them on the job.

Young workers, on average, are injured more often than older, more experienced workers. They may lack experience and familiarity with hazards in the workplace. They may also believe that risks are an acceptable part of the job or that occupational diseases only affect older people. Research shows that youth don't reach full cognitive development until they are about 22 years old, which could affect their ability to make the connection between occupational exposures and the consequences to their health. This underlines the importance of your role in helping them make safety a priority while working.



**Hidden  
hazards at your  
workplace**

For a construction worker:

**Asbestos**

**Bacteria and viruses**

**Chemicals**

**Lead**

**Noise**

**Silica dust**

## Youth entering the workforce face many hazards in the workplace

Sometimes the hazards are obvious, such as a broken ladder or water on the floor. But there are hazards young workers can't see that are less evident — or even invisible. Being aware of these hazards will help keep young workers safe and healthy throughout their working careers.

The hidden hazards your students may be exposed to depend on the kind of work they do. Here are some examples of common jobs and the exposure risks associated with them:

Type of work	Potential exposure	Potential impact of exposure
Loud restaurant, kitchen, or bar; industrial setting where there's loud machinery or tools	Noise	<ul style="list-style-type: none"> <li>Hearing loss</li> </ul>
Any environment where worker wears earbuds or listens to music while working	Noise	<ul style="list-style-type: none"> <li>Hearing loss</li> <li>Distraction, preventing worker from hearing alarms, sirens, or warnings from other workers</li> </ul>
Farm or greenhouse work; landscaping, yard, or garden maintenance	Pesticides, herbicides	<ul style="list-style-type: none"> <li>Irritation of eyes, nose, throat</li> <li>Headache, dizziness, blurred vision</li> <li>Excessive salivation, vomiting</li> <li>Abdominal cramps</li> <li>Increased rate of breathing, inability to breathe</li> <li>Chemical burns on skin</li> <li>Loss of reflexes, uncontrollable twitching</li> <li>Unconsciousness</li> </ul>
Construction, demolition, or renovations	Asbestos, silica dust, lead	<ul style="list-style-type: none"> <li>Asbestosis</li> <li>Silicosis</li> <li>Mesothelioma</li> <li>Lung cancer</li> </ul>
Cleaning, commercial dry cleaning, chemical manufacturing, printing, or spray painting	Solvents (e.g., acetone or benzene)	<ul style="list-style-type: none"> <li>Irritation of eyes, nose, throat</li> <li>Headache, dizziness, drowsiness</li> <li>Unconsciousness</li> </ul>
Any work that involves significant interaction with the public (e.g., health care, corrections, retail, or tourism)	Bacteria, viruses	<ul style="list-style-type: none"> <li>Bacterial and viral infection</li> <li>Cold and flu</li> <li>Disease</li> </ul>

### Did you know?

About 15 percent of people who work around noise have noise-induced hearing loss.

## Hidden hazard: Excessive noise

Most noise-induced hearing loss occurs in the first decade of exposure and even though it usually happens gradually, the damage is permanent. Noise isn't just a problem for those working on construction sites or around heavy machinery. Even environments such as loud restaurants, bars, and recreation centres can compromise workers' hearing.

Hearing loss can happen when you're exposed to noise louder than 85 decibels. When workers are exposed to excessive noise, tiny sensory cells deep inside their ears are damaged. It's painless, but it's also irreversible. Since they can't see the damage, they may not know something's wrong until it's too late.

It's the employer's responsibility to reduce workplace noise. The best way is for employers to change the design of the workplace or to implement safe work procedures, such as reducing exposure through job rotation. In the meantime, employers have to provide workers with appropriate hearing protection.

**When it comes to hearing protection, encourage your students to keep the following things in mind:**

- Ensure they receive hearing protection that fits properly from their employers or from their teachers (e.g., in technology education classes).
- Be sure they're protected for the entire time they're exposed to noise. This means wearing hearing protection before they enter a noisy area and only removing it once they're away from the noise.
- If earplugs are their hearing protection, have students ensure they are a proper fit and are inserted correctly. Remind them that one size doesn't fit all.
- **Earbuds (headphones) are not work equipment** and don't provide hearing protection. Listening to music on phones or other portable devices while working puts workers at risk. These devices can distract workers from other important sounds, such as approaching machinery, alarms, or warnings from other workers.

## Hidden hazard: Exposure to asbestos



Inhaling asbestos fibres may damage the lungs and cause serious health problems such as asbestosis, lung cancer, and mesothelioma. People exposed to asbestos won't see the health effects right away because there is a latency period of 20 to 30 years between exposure to asbestos and signs of asbestos-related disease.

Workers are most at risk of being exposed to asbestos if they are involved in construction, demolition, or renovation work — especially if the building they're working on was built before 1990. Asbestos can also be found in other workplaces and in all kinds of building materials, including roof shingles, vinyl flooring, and stucco. Disturbing any asbestos-containing materials (ACMs) could put workers and others at risk of exposure.

Employers are required to take precautions to protect workers from asbestos exposure. This includes having a qualified professional identify any ACMs before work begins and ensuring that all hazardous materials are safely contained and removed. Employers are also required to provide their workers with proper training, safe work procedures, and safety equipment.

## Other hidden hazards: Working with hazardous products and chemicals

Workers who use hazardous products or chemicals as part of their jobs need to make sure they know how to safely use the products:

- Carefully read labels on chemicals.
- Store chemicals properly after use.
- Follow safe work procedures and use all protective equipment recommended by the manufacturer and specified by the employer. If your students believe they haven't received the right training or equipment, advise them to ask their supervisor for it.

### How to talk to students about safety

Young and new workers may be more at risk of being injured at work than older or more experienced workers. One reason for this is that they may be more hesitant to speak up about safety. Discussing health and safety with your students at school may help them feel more comfortable talking about it at work.

Here are some tips to reach out to young workers:

- Encourage students to ask questions of their supervisors, managers, and co-workers and talk about safety.
- Have them check if their workplace has a mentorship program, or encourage them to find a more experienced worker to mentor them.
- Encourage students to get involved with health and safety at their workplace. This could include participating in the joint health and safety committee or in regular, informal health and safety meetings (e.g., toolbox talks).
- Encourage parents and other family members to talk with their kids about workplace safety.
- Remind them of their rights at work and emphasize the empowerment that comes with exercising those rights.



## Learn more

To find more information about hidden hazards, search for the following resources by name on [worksafebc.com](https://www.worksafebc.com) or visit [worksafebc.com/youngworkers](https://www.worksafebc.com/youngworkers).

### Getting a Job? Ask Questions About Safety

This brochure offers useful tips on how young workers can address concerns about safety in their workplaces.

### Listen to Your Gut

This website provides young workers with tips for improving health and safety on the job, as well as guidance on what to say when something doesn't feel safe.

### Student WorkSafe

This program is linked to the B.C. curriculum and includes instructional modules, worksheets, and learning guides to help high school teachers incorporate workplace health and safety into their classes.

### Tools for Training Young and New Workers

This guide helps employers meet their regulatory requirements for new and young worker orientation and training. For career educators or teachers coordinating work experience, it shows what employers should be doing to keep young workers safe.

### 6-Minute Safety Talks

These safety talks are designed for students in apprenticeship programs. Each topic includes a student handout and an instructor's guide with suggested resources.

### Rights and Responsibilities for New and Young Workers

This self-paced program helps workers, supervisors, and employers learn more about their health and safety rights and responsibilities.

### What's Wrong With This Photo?

These photos have been staged to show a number of hazards or dangerous work habits. Encourage students to use their safety knowledge by identifying what's wrong in the photo.

### Hear for Good: Preventing Noise Exposure at Work

This pamphlet explains noise-induced hearing loss, noise control, and hearing protection.

### The Hearing Video

This video demonstrates how your ears work and the effects of hazardous noise on your hearing. WorkSafeBC also has several other video resources on specific exposure hazards such as asbestos, mould, WHMIS, and silica exposure.

### **When You Use Foam Earplugs...**

This handout illustrates how to insert foam earplugs properly.

### **Hazards & exposures page on [worksafebc.com](https://worksafebc.com)**

This page compiles links to information about different hazards and exposures workers may encounter.

### **Young and new workers page on [worksafebc.com](https://worksafebc.com)**

This page looks at what defines a new or young worker, why they're vulnerable to injury at work, and resources to help prevent them from getting injured.

- **Sections 3.22-3.25: Young or new workers**
- **Sections 5.48-5.59: Controlling exposure**
- **Sections 7.1-7.9: Noise exposure**

## **Questions?**

Email [yworker@worksafebc.com](mailto:yworker@worksafebc.com)



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