

Hazard Recognition, Assessment and Control

The “*recognize, assess and control*” method of dealing with hazards is actually a specialized form of problem solving. The problem is to anticipate hazards and then take action to prevent injury and illness in people or to control property losses.

You may become aware of a hazard in a variety of ways such as voiced as a worker concern, or something noticed during a workplace inspection. It may come to your attention through the Health and Safety Representative or a Joint Health and Safety Committee member, or because of an accident investigation.

Use the hazard recognition, assessment and control principles to deal with all hazards.

Hazard Recognition

Hazard *recognition* means noting a “suspected” hazard, because of its potential to harm or damage, or having it brought to your attention. The alert may come as a personal opinion or concern.

Hazard *identification* is a skill used by a trained individual who has the knowledge to make this determination. This could include trained workers, supervisors, members of a joint health and safety committee, or a health and safety professional.

Whether identified or merely suspected, the objective is to anticipate hazards *before* they cause harm or damage.

What is a hazard?

... any practice, behaviour, condition, or combination that can cause injury or illness in people or damage to property.

Health hazards

These include

- chemical agents (solids, liquids or gases)
- physical agents (forms of energy or force such as sound, heat or electricity)
- biological agents (microorganisms from plant, animal or human tissue)
- ergonomic hazards (consequence of poor equipment, workstation design or work activity design).

Safety hazards

These have the potential to cause traumatic injury or death. They include

- machinery and equipment related hazards
- energy hazards (falls, struck by incidents, kinetic, released energy)
- confined space hazards and
- material handling hazards.

Hazard Recognition, Assessment and Control

Hazard Assessment

Hazard assessment means evaluating the degree of risk and exposure to the suspected or identified hazard. Tools to assess hazards include

- detailed inspection and/or testing of the hazard
- physical observation by trained individuals
- investigations of near misses
- conducting interviews of workers or
- reviewing records such as first-aid records or minutes of joint health and safety meetings.

More detailed evaluation is possible using techniques like task analysis or exposure assessment and monitoring.

Proper hazard assessment requires comparing the findings from hazard identification techniques against predetermined standards for practices, behaviour or safe conditions. Standards are set by industry and/or regulatory guidelines or company rules and expectations. Trained individuals can use them to make recommendations to return the identified hazard to predetermined standards, using appropriate controls.

Hazard Controls

Controlling hazards means eliminating the hazard, or preventing it from harming workers. Control methods can be applied at three possible points with respect to the hazard.

At the source of the hazard

- This is the preferred point of control. Strategies here include use of engineering controls, isolation, elimination or substitution of the hazard with less hazardous processes, materials or machinery.

Along the path between the source and the worker

- This is the next best solution that uses strategies such as ventilation, worker enclosures, barriers (such as machine guards), or distance from the hazard.

At the worker

- This is the control of last resort. This involves the use of personal protective equipment and administrative controls (such as depending on only training or work scheduling).

**For more information, contact your Health and Safety Association.
Or call the WSIB Prevention Hotline 416 344-1016 (1-800-663-6639).
For information in other languages call (416) 344-4999
Toll-free 1-800-465-5606 OR Telephone Service for the Deaf – TTY 1-800-387-0050**