Types of Hazards

Biological - bacteria, viruses, insects, plants, birds, animals, and humans, etc.,

Chemical - depends on the physical, chemical and toxic properties of the chemical,

Ergonomic - repetitive movements, improper set up of workstation, etc.,

Physical - radiation, magnetic fields, pressure extremes (high pressure or vacuum), noise, etc.,

Psychosocial - stress, violence, etc.,

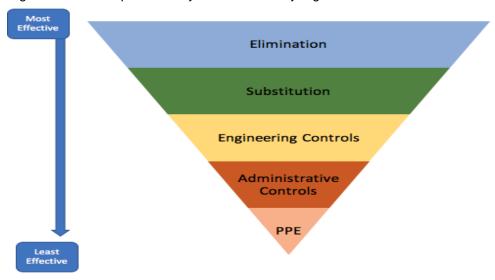
Safety - slipping/tripping hazards, inappropriate machine guarding, equipment malfunctions or breakdowns

Source: https://www.ccohs.ca/oshanswers/hsprograms/hazard_risk.html

Hierarchy of Controls (HOC)

In order to assess hazards in the workplace, inspections need to be completed to determine where these hazards are present. Once inspections are completed, a risk assessment will follow to identify reasonable measures to control those risks in the workplace.

The Hierarchy of Controls is a system that is used to eliminate or minimize hazards. It is the preferred method when controlling hazards and is promoted by numerous safety organizations.



Elimination:

Eliminating (removal) of the hazard from the workplace. This is always the first choice, however If the risk is unable to be eliminated or removed we carry to the next control.

Substitution:

Substitute/replace to a less hazardous material or process.

Engineering Controls:

Engineering controls are used when implementing physical controls to protect the worker from hazards. For example: implementing a sit stand workstation to alleviate musculoskeletal injuries (MSI's) within an office setting, or installing a dust collection system in a carpentry shop.

Administrative Controls:

Administrative controls involve implementing control measures and/or altering work practices to ensure worker safety is achieved. For example: providing more frequent breaks to workers working outside on a very hot day to avoid heat stroke. This can also include things like training and safe work procedures.

Personal Protective Equipment (PPE):

PPE is provided to workers to eliminate or reduce exposure to various hazards. This is the last resort control measure because the hazard has not been eliminated.

Examples of PPE include:

Respiratory Protection – Half/ Full face Respirator

Eye Protection – Safety Glasses, Safety Goggles.

Hearing Protection - Ear Plugs, Ear Muffs.

Hand Protection - Cut Resistant Gloves, Disposable Gloves.

Safety Footwear - Steel Toe Boots.