

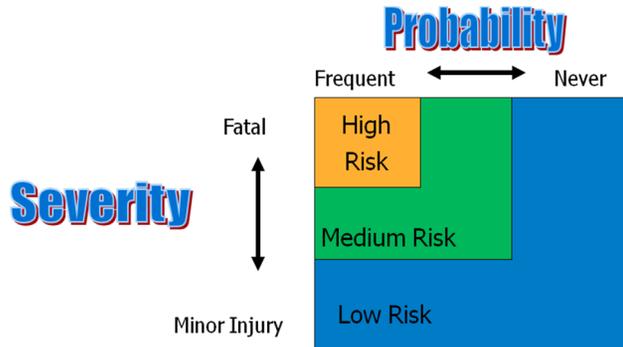
Topic: Hierarchy of Controls

Occupational injuries and illnesses can happen when workers are exposed to hazards in their workplace. If you eliminate the hazards, or at least prevent workers from being exposed to hazards, then it follows that they will not have work-related injuries and illnesses.

Every position in the organization should be assessed for hazards. The likelihood of those hazards posing a risk of injury is then assessed, and prioritized.

The greater the potential for injury and the more often the worker is exposed, the higher the level of risk.

Once risks are identified, steps must be taken to eliminate or reduce the risk to workers. When determining what steps to take, you need to follow the “hierarchy of controls”.



ELIMINATION

Can the hazard be removed at the source? Can the task be eliminated entirely?

An example of elimination would be eliminating the need to have a worker hand-dig an excavation by hydro-excavating to expose underground infrastructure.

SUBSTITUTION

Can a hazard, hazardous process or hazardous material be substituted to one with no hazards?

An example of substitution would be replacing a toxic cleaning substance with a non-toxic substance.

ENGINEERING CONTROLS Engineering controls include isolation, ventilation and equipment modification. These controls focus on the source of the hazard, unlike other types of controls that generally focus on the employee exposed to the hazard. When using engineering controls, the work environment and the job itself should be designed to eliminate hazards or reduce exposure to hazards.

Examples of engineering controls are a guard placed around a saw blade, or a shoring system placed in an excavation.



ADMINISTRATIVE CONTROLS Administrative controls remove or reduce the exposures by reducing the duration, frequency and severity of exposure to hazards, primarily through:

- changes to work procedures and practices;
- scheduling, job rotation, breaks, etc.

An example of an administrative control is to recommend work/rest breaks for workers suffering from heat exposure disorders.



PERSONAL PROTECTIVE EQUIPMENT

When exposure to hazards cannot be eliminated or engineered completely out of normal operations or maintenance work, and when safe work practices and other administrative controls cannot provide sufficient additional protection from exposure, personal protective clothing and/or equipment may be required. PPE cannot be relied upon as a control measure without having ensured all other measures in the Hierarchy of Controls have been assessed.

More than one control, obviously, can be used, as long as they are assessed in the proper order and the highest possible level of defence is utilized.

