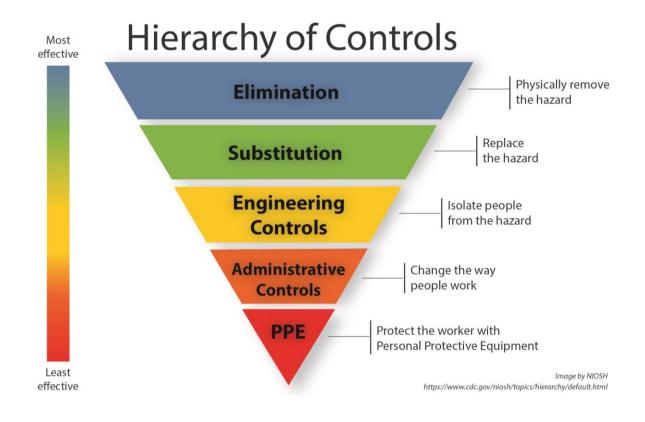
# Using the hierarchy of control



## In order of most effective - least effective

# 1. Eliminate the risk

The most effective control measure involves eliminating the hazard and its associated risk. The best way to eliminate a hazard is to not introduce the hazard in the first place. For example, you can eliminate the risk of a fall from height by doing the work at ground level.

Eliminating hazards can be cheaper and more practical at the design or planning stage of a product, process or workplace. In these early stages, there is more scope to design to eliminate hazards or to include risk control measures that are compatible with the requirements of the original design and function.

Employers can also eliminate hazards and risks by removing the hazard completely. For example, removing trip hazards on the floor or disposing of unwanted chemicals eliminates the risks they create.

It may not be possible to eliminate a hazard if doing so means you are unable to make the end product or deliver the service. If it is not possible to eliminate the hazard, then you must eliminate as many of the risks associated with the hazard as possible.

# 2. Reduce the risk through substitution, isolation or engineering controls

If it is not reasonably practicable to eliminate the hazards and associated risks, minimise the risks by:

### **Substitution**

Substitute the hazard with something safer. For example:

- use a scourer, mild detergent and hot water instead of caustic cleaners for cleaning
- use a cordless drill instead of an electric drill if the power cord is in danger of being cut
- use water-based paints instead of solvent-based paints

#### Isolation

Isolate the hazard. For example:

- use concrete barriers to separate pedestrians and employees from powered mobile plant
- use remote controls to operate machines
- install guard rails around holes

#### **Engineering controls**

An engineering control is a control measure that is physical in nature, including a mechanical device or process. Examples of engineering controls include:

- mechanical devices such as trolleys or hoists to move heavy loads
- guards around moving parts of machinery
- pedestrian-sensing systems
- speed-governing mechanisms

## 3. Reduce the risk using administrative controls

Administrative controls are work methods or procedures designed to minimise exposure to a hazard. In most cases, administrative controls use systems of work to control the risk. For example:

- developing procedures on how to operate machinery safely
- limiting exposure time to a hazardous task
- using signs to warn people of a hazard

# 4. Reduce the risk using personal protective equipment (PPE)

PPE refers to anything employees use or wear to minimise risks to their health and safety. PPE includes but is not limited to the following:

- ear muffs and earplugs •
- goggles •
- respirators •
- face masks .
- hard hats .
- safety harnesses
- gloves •
- aprons •
- high-visibility clothing •
- protective evewear •
- body suits •
- safety footwear •
- sunscreen •

PPE limits exposure to the harmful effects of a hazard but only if employees wear and use the PPE correctly.

Using administrative controls and PPE to reduce risks does not control the hazard at the source. Administrative controls and PPE rely on human behaviour and supervision and, used on their own, tend to be least effective in minimising risks. Use administrative controls and PPE only:

- as last resorts when there are no other practical control measures available •
- as an interim measure until introducing a more effective way of controlling the risk •
- to increase the effectiveness of higher-level control measures •

## Choose the most effective controls

Consider various control options and choose the controls that most effectively eliminate the hazard or, if elimination is not reasonably practicable, minimise the risk in the circumstances. Reducing the risk may involve a single control measure or a combination of different controls that work together to provide the highest level of reasonably practicable protection.