

# GUIDANCE NOTES

## IMPLEMENTING CONTROLS

The most important step in managing risks involves eliminating them so far as is reasonably practicable, or if that is not possible, minimising the risks so far as is reasonably practicable.

In deciding how to control risks you must consult your workers and their representatives who will be directly affected by this decision. Their experience will help you choose appropriate control measures and their involvement will increase the level of acceptance of any changes that may be needed to the way they do their job.

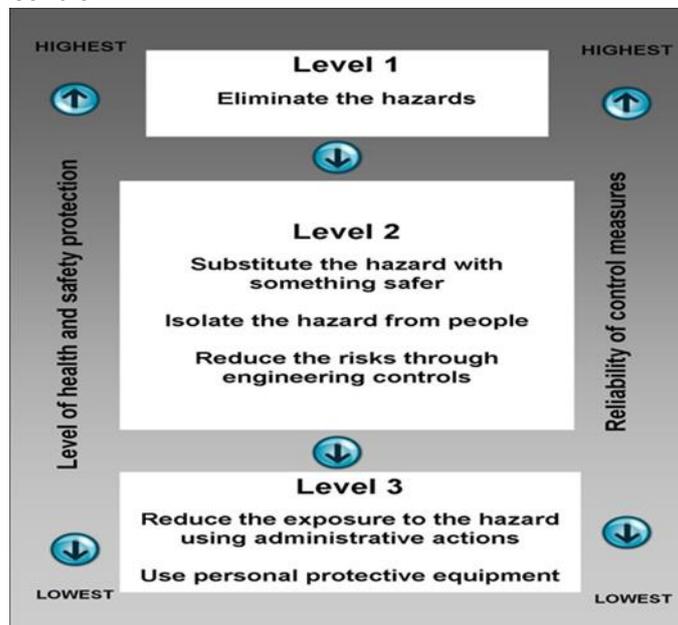
There are many ways to control risks. Some control measures are more effective than others. You must consider various control options and choose the control that most effectively eliminates the hazard or minimises the risk in the circumstances. This may involve a single control measure or a combination of different controls that together provide the highest level of protection that is reasonably practicable.

Some problems can be fixed easily and should be done straight away, while others will need more effort and planning to resolve. Of those requiring more effort, you should prioritise areas for action, focusing first on those hazards with the highest level of risk.

### THE HIERARCHY OF RISK CONTROL

The ways of controlling risks are ranked from the highest level of protection and reliability to the lowest as shown in Figure 1. This ranking is known as the hierarchy of risk control. The WHS Regulations require duty holders to work through this hierarchy when managing risk.

Figure 1: Hierarchy of Control



You must always aim to eliminate a hazard, which is the most effective control. If this is not reasonably practicable, you must minimise the risk by working through the other alternatives in the hierarchy.

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## LEVEL 1 CONTROL MEASURES

The most effective control measure involves eliminating the hazard and associated risk. The best way to do this is by, firstly, not introducing the hazard into the workplace. For example, you can eliminate the risk of a fall from height by doing the work at ground level.

Eliminating hazards is often cheaper and more practical to achieve at the design or planning stage of a product, process or place used for work. In these early phases, there is greater scope to design out hazards or incorporate risk control measures that are compatible with the original design and functional requirements. For example, a noisy machine could be designed and built to produce as little noise as possible, which is more effective than providing workers with personal hearing protectors.

You can also eliminate risks by removing the hazard completely, for example, by removing trip hazards on the floor or disposing of unwanted chemicals.

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

## LEVEL 2 CONTROL MEASURES

If it is not reasonably practicable to eliminate the hazards and associated risks, you should minimise the risks using one or more of the following approaches:

### *Substitute the hazard with something safer*

For instance, replace solvent-based paints with water-based ones.

### *Isolate the hazard from people*

This involves physically separating the source of harm from people by distance or using barriers. For instance, install guard rails around exposed edges and holes in floors; use remote control systems to operate machinery; store chemicals in a fume cabinet.

### *Use engineering controls*

An engineering control is a control measure that is physical in nature, including a mechanical device or process. For instance, use mechanical devices such as trolleys or hoists to move heavy loads; place guards around moving parts of machinery; install residual current devices (electrical safety switches); set work rates on a production line to reduce fatigue.

## LEVEL 3 CONTROL MEASURES

These control measures do not control the hazard at the source. They rely on human behaviour and supervision, and used on their own, tend to be least effective in minimising risks. Two approaches to reduce risk in this way are:

### *Use administrative controls*

Administrative controls are work methods or procedures that are designed to minimise exposure to a hazard. For instance, develop procedures on how to operate machinery safely, limit exposure time to a hazardous task and use signs to warn people of a hazard.

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*Use personal protective equipment (PPE)*

Examples of PPE include ear muffs, respirators, face masks, hard hats, gloves, aprons and protective eyewear. PPE limits exposure to the harmful effects of a hazard but only if workers wear and use the PPE correctly.

Administrative controls and PPE should only be used:

- when there are no other practical control measures available (as a last resort)
- as an interim measure until a more effective way of controlling the risk can be used
- to supplement higher level control measures (as a back-up).

**HOW TO DEVELOP AND IMPLEMENT CONTROL OPTIONS**

Information about suitable controls for many common hazards and risks can be obtained from:

- codes of practice and guidance material
- manufacturers and suppliers of plant, substances and equipment used in your workplace
- industry associations and unions.

In some cases, published information will provide guidance on the whole work process. In other cases, the guidance may relate to individual items of plant or how to safely use specific substances. You may use the recommended control options if they suit your situation and eliminate or minimise the risk.

**DEVELOPING SPECIFIC CONTROL MEASURES**

You may need to develop specific control measures if the available information is not relevant to the hazards and risks or circumstances at your workplace. This can be done by referring to the chain of events that were recorded during the risk assessment.

For each of the events in the sequence, ask: “What can be done to stop or change the event occurring?”

Working through the events in the sequence will give ideas about all possible ways to eliminate or minimise the risk. There may be more than one solution for each of the events. The control option you choose should be:

- one that provides the highest level of protection for people and is the most reliable – that is, controls located towards the top of the hierarchy in Figure 2.
- available – that is, it can be purchased, made to suit or be put in place.
- suitable for the circumstance in your workplace – that is, it will work properly given the workplace conditions, work process and your workers.

Where the hazard or risk has the potential to cause death, serious injury or illness, more emphasis should be given to those controls that eliminate or reduce the level of harm, than those that reduce the likelihood of harm occurring.

Make sure that your chosen solution does not introduce new hazards.

**COST OF CONTROL MEASURES**

All risks can be controlled and it is always possible to do something, such as stopping the activity or providing instructions to those exposed to the risk. There will normally be a number of different

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options between these two extremes. Cost (in terms of time and effort as well as money) is just one factor to consider when determining the best control option.

The cost of controlling a risk may be taken into account in determining what is reasonably practicable, but cannot be used as a reason for doing nothing.

The greater the likelihood of a hazard occurring and/or the greater the harm that would result if the hazard or risk did occur, the less weight should be given to the cost of controlling the hazard or risk. If two control measures provide the same levels of protection and are equally reliable, you can adopt the least expensive option.

Cost cannot be used as a reason for adopting controls that rely exclusively on changing people's behaviour or actions when there are more effective controls available that can change the risk through substitution, engineering or isolation.

### IMPLEMENTING CONTROLS

The control measures that you put into operation will usually require changes to the way work is carried out due to new or modified equipment or processes, new or different chemicals or new personal protective equipment. In these situations, it is usually necessary to support the control measures with:

#### *Work procedures*

Develop a safe work procedure that describes the task, identifies the hazards and documents how the task is to be performed to minimise the risks.

#### *Training, instruction and information*

Train your workers in the work procedure to ensure that they are able to perform the task safely. Training should require workers to demonstrate that they are competent in performing the task according to the procedure. It is insufficient to simply give a worker the procedure and ask them to acknowledge that they understand and are able to perform it. Training, instruction and information must be provided in a form that can be understood by all workers. Information and instruction may also need to be provided to others who enter the workplace, such as customers or visitors.

#### *Supervision*

The level of supervision required will depend on the level of risk and the experience of the workers involved. High levels of supervision are necessary where inexperienced workers are expected to follow new procedures or carry out difficult and critical tasks.