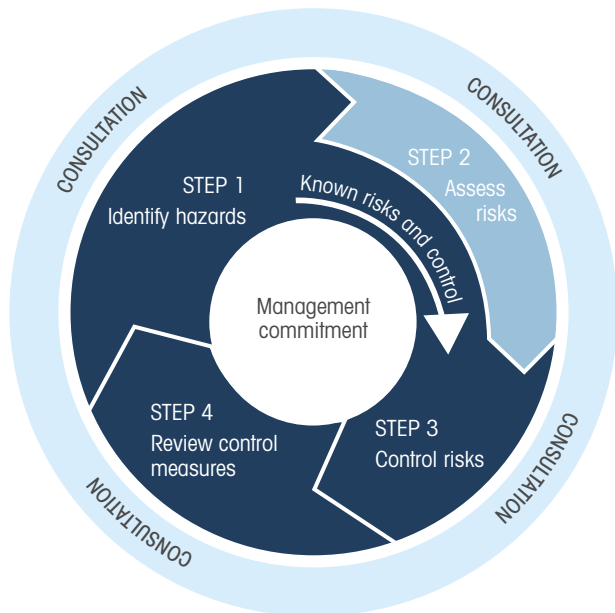# RISK MANAGEMENT: A SNAPSHOT

Think of risk management as a stepped process of identifying hazards, assessing risks, controlling those risks and then reviewing the efficacy of control measures over time or in response to an event*:

CONSULTATION

CONSULTATION

CONSULTATION

CONSULTATION

STEP 1 Identify hazards

STEP 2 Assess risks

STEP 3 Control risks

STEP 4 Review control measures

Known risks and control

Management commitment

A word about events*…

Events can change circumstances. If an event occurs; like a change in the work task, new tools, a workplace injury, a dangerous incident or even new legislative or industry practice—safe work procedures, risk assessments and the like must be reviewed since they will also change.

Don't forget that any change relating to a risk document may also require a review of induction or any other safety training offered at the workplace.

Remember that this risk management process must be undertaken consultatively. Workers can provide a rich source of information on the nature of the hazards experienced at work—after all, who better to ask about hazards and risk than the person undertaking the task.

GETTING STARTED BY IDENTIFYING HAZARDS

There are different types of hazards that may be present in your workplace. The table below describes those and gives some explanation of their potential harm. Use these as triggers during your hazard identification step and during consultation to make sure nothing is missed.

Hazard	Potential harm
Manual tasks	Overexertion or repetitive movement can cause muscular strain
Gravity	Falling objects, falls, slips and trips of people can cause fractures, bruises, lacerations, dislocations, concussion, permanent injuries or death
Electricity	Potential ignition source Exposure to live electrical wires can cause shock, burns or death from electrocution
Machinery and equipment	Being hit by moving vehicles, or being caught by moving parts of machinery can cause fractures, bruises, lacerations, dislocations, permanent injuries or death
Hazardous chemicals	Chemicals (such as acids, hydrocarbons, heavy metals) and dusts (such as asbestos and silica) can cause respiratory illnesses, cancers or dermatitis
Extreme temperatures	Heat can cause burns, heat stroke or fatigue Cold can cause hypothermia or frost bite
Noise	Exposure to loud noise can cause permanent hearing damage
Radiation	Ultra violet, welding arc flashes, micro waves and lasers can cause burns, cancer or blindness
Biological	Micro-organisms can cause hepatitis, legionnaires' disease, Q fever, HIV/AIDS or allergies
Psychosocial hazards	Effects of work-related stress, bullying, violence and work-related fatigue

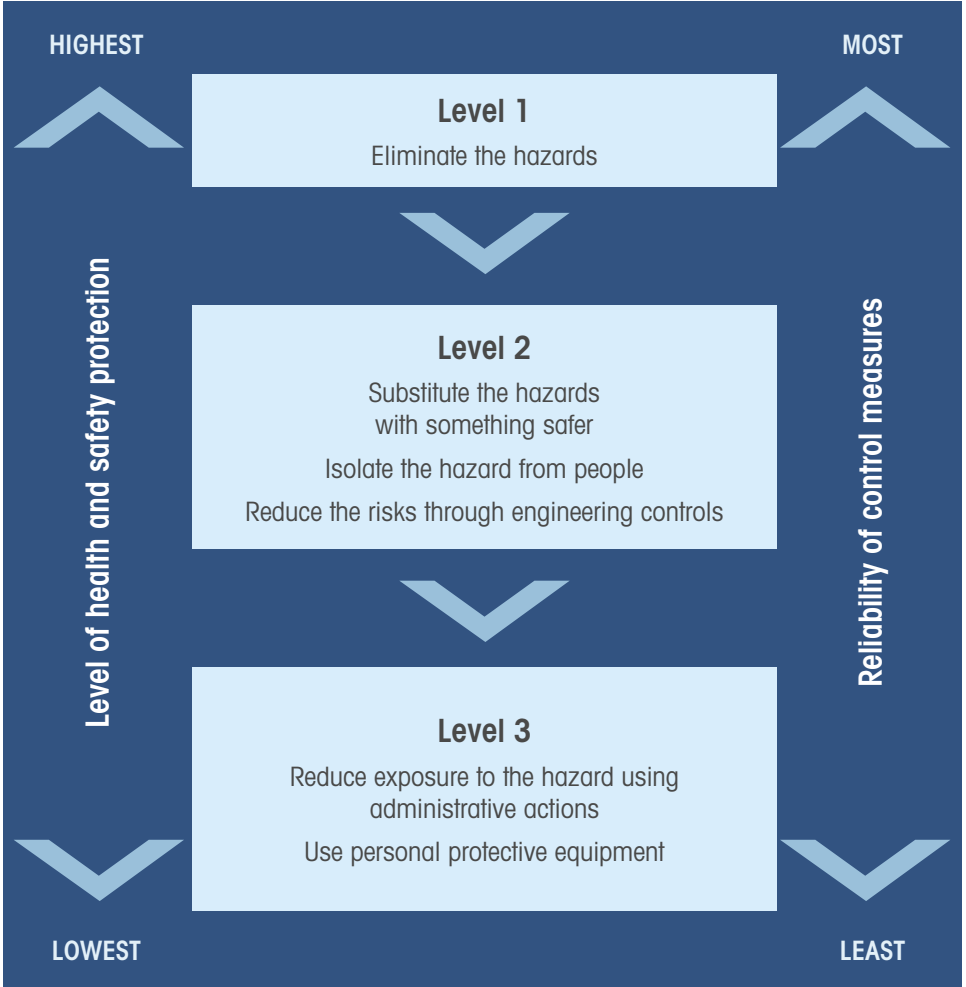# ASSESSING THE LIKELIHOOD OF A RISK

A good way to assess how a hazard might escalate to a risk is to ask questions like the following:

Questions to ask in determining likelihood	Explanation and examples
How often are people exposed to the hazard?	A hazard may exist all of the time or it may only exist occasionally. The more often a hazard is present, the greater the likelihood it will result in harm. For example: > Meshing gears in an enclosed gearbox can cause crushing only if the gearbox is open during maintenance, and therefore the potential for harm will not occur very often. > Continuously lifting heavy boxes has the potential to cause harm whenever the work is done.

Questions to ask in determining likelihood	Explanation and examples
How long might people be exposed to the hazard?	The longer that someone is exposed to a hazard, the greater the likelihood that harm may result. For example: > The longer a person is exposed to noisy work, the more likely it is that they will suffer hearing loss.
How effective are current controls in reducing risk?	In most cases the risks being assessed will already be subject to some control measures. The likelihood of harm resulting from the risk will depend upon how adequate and effective the current measures are. For example: > Traffic management controls have been implemented in a warehouse to separate moving forklifts from pedestrians by using signs and painted lines on the floor. These controls may need to be upgraded to include physical barriers.
Could any changes in your organisation increase the likelihood?	The demand for goods or services in many organisations varies throughout the year. Changes in demand may be seasonal, depend on environmental conditions or be affected by market fluctuations that are driven by a range of events. Meeting increased demand may cause unusual loads on people, plant and equipment and systems of work. Failures may be more likely. For example: > Inner city restaurants and bistros are very busy in the period prior to Christmas, placing extra demands on kitchen and serving staff. > The increase in volume of food to be prepared and serving a larger number of patrons increases the potential for human error and the likelihood of harm.
Are hazards more likely to cause harm because of the working environment?	Examples of situations where the risk of injury or illness may become more likely: > Environmental conditions change. For example, work performed in high temperatures in a confined space increases the potential for mistakes because workers become fatigued more quickly; wet conditions make walkways and other things slippery. > People are required to work quickly. The rate at which work is done (e.g. number of repetitions) can over-stress a person's body or make it more likely that mistakes will be made. > There is insufficient light or poor ventilation.
Could the way people act and behave affect the likelihood of a hazard causing harm?	The possibility that people may make mistakes, misuse items, become distracted or panic in particular situations needs to be taken into account. The effects of fatigue or stress may make it more likely that harm will occur.
Do the differences between individuals in the workplace make it more likely for harm to occur?	People with disabilities may be more likely to suffer harm if the workplace or process is not designed for their needs. New or young workers may be more likely to suffer harm because of inexperience. People who do not normally work at the workplace will have less knowledge than employees who normally work there, and may be more likely to suffer harm. These people include contractors, visitors or members of the public.

WHAT'S NEXT?

Once you've looked at the hazards and assessed the risks that are present in the workplace, the next step is to decide on suitable controls. Always start at the top of the *hierarchy of control* and try wherever possible to first eliminate the hazard. If you can't eliminate the hazard, perhaps you can use a combination of different controls for greater protection. Strategies at the lower end, while valuable, are less effective, particularly when used in isolation.

HIGHEST

MOST

Level 1

Eliminate the hazards

Level of health and safety protection

Reliability of control measures

Level 2

Substitute the hazards
with something safer

Isolate the hazard from people

Reduce the risks through engineering controls

Level 3

Reduce exposure to the hazard using
administrative actions

Use personal protective equipment

LOWEST

LEAST

NEED MORE INFORMATION?

See the *Model Code of Practice—How to manage
Work Health and Safety Risk* on the SafeWork Australia website.