



## **SIT50416 Diploma of Hospitality Management**

### **SITXWHS301 Identify Hazards, Assess and Control Safety Risks**



## **Student Handout**

## SITXWHS301 Identify Hazards, Assess and Control Safety Risks

This unit describes the performance outcomes, skills and knowledge required to identify hazards, assess the associated workplace safety risks, take measures to eliminate or minimise those risks and document all processes.

This unit applies to all tourism, travel, hospitality and event sectors and to any small, medium or large organisation.

All people working at all levels can participate in risk assessments which are commonly conducted as a team effort. Frontline operational personnel, who operate with some level of independence and under limited supervision, would assist other colleagues during the process. Individuals may conduct the assessments independently of others.

### Elements and Performance Criteria

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
1. Identify hazards.	<p>1.1 Access and use <b><i>hazard identification and risk assessment tools and template documents</i></b>.</p> <p>1.2 Use <b><i>appropriate methods</i></b> to identify actual or foreseeable hazards that have the potential to harm the health and safety of workers or <b><i>anyone else in the workplace</i></b>.</p> <p>1.3 Work alone or with <b><i>other personnel</i></b> to identify hazards.</p> <p>1.4 Keep records of identified <b><i>hazards</i></b> according to organisational procedures.</p>
2. Assess the safety risk associated with a hazard.	<p>2.1 Access and use risk assessment tools and template documents.</p> <p>2.2 Work alone or with other personnel to assess the risk.</p> <p>2.3 Use a <b><i>systematic method</i></b> to assess the risk.</p> <p>2.4 Collect sufficient evidence of the type and level of risk posed by the identified hazard.</p> <p>2.5 Document the outcome of the risk assessment suggesting actions to eliminate or control risks.</p> <p>2.6 Keep records of risk assessments according to organisational procedures.</p>
3. Eliminate or control the risk.	<p>3.1 Discuss, with others, <b><i>ways of eliminating or controlling the risk</i></b>.</p> <p>3.2 Take <b><i>measures</i></b> to eliminate or control risks.</p>

## How to Manage Work Health and Safety Risks

Risk is the possibility that harm (death, injury or illness) might occur when exposed to a hazard. To get started you need to know what in your workplace or which work activities may present a risk. When you know where the risks are, you must do whatever you can to eliminate or minimise those risks. This is called the risk management process.

### Risk Management

The risk management process involves four steps:

1. Identify hazards - find out what could cause harm.
2. Assess risks, if necessary - understand the nature of the harm that could be caused by the hazard, how serious the harm could be and the likelihood of it happening.
3. Control risks - implement the most effective control measure that is reasonably practicable in the circumstances.
4. Review control measures - to ensure they are working as planned.

#### 1. Identify hazards

Identifying hazards involves finding all of the things and situations that could potentially cause harm to people. Hazards generally arise from the following aspects of work:

- the physical work environment
- the equipment, materials and substances used at the workplace
- work tasks and how they are performed
- work design and management.

Methods that can be used to identify hazards in your workplace include:

- inspecting the workplace and observing how work tasks are performed
- consulting your workers about any health and safety problems they have encountered in doing their work
- analysing your records of workplace incidents, near misses and worker complaints
- reviewing any information and advice about hazards and risks relevant to your particular industry or the type of work that you do e.g. information provided by industry associations, manufacturers or suppliers.

#### 2. Assess risks

A risk assessment should be done when:

- there is uncertainty about how a hazard may result in injury or illness
- the work activity involves a number of different hazards and there is a lack of understanding about how the hazards may interact with each other to produce new or greater risks
- changes at the workplace occur that may impact on the effectiveness of control measures.

A risk assessment is mandatory under the Work Health and Safety Regulations 2012 (SA) (the WHS Regulations) for high risk activities, such as entry into confined spaces, diving work and live electrical work.

Refer to page 9 of the Code for more information on when a risk assessment should be undertaken.

Assessing risks involves considering:

- how severe the potential harm caused by the hazard could be, including:
  - what type of harm could occur e.g. muscular strain, fatigue, burns, laceration
  - whether the hazard could cause death, serious injury or illness, or only minor injury
  - how many people are exposed to the hazard
- how hazards may cause harm, including:
  - the effectiveness of existing control measures and whether they control all types of harm
  - how work is actually done, rather than relying on written manuals and procedures
  - infrequent or abnormal situations, as well as how things are normally meant to occur
  - maintenance and cleaning processes, as well as breakdowns of equipment and failures of health and safety controls.
- the likelihood of harm occurring, including:
  - how often the task is done
  - how often people are near the hazard
  - whether it has happened before, either in your workplace or somewhere else, and how often.

The level of risk will increase as the likelihood of harm and its severity increases.

Refer to pages 9-12 of the Code and the case study on page 20 for more information on how to assess risks.

### **3. Control risks**

The ways of controlling risks are ranked from the highest level of protection and reliability to the lowest. This is known as the hierarchy of risk control.

You must work through the hierarchy of control in order and, where possible, implement risk controls high in the order as follows:

1. Eliminate - remove the hazard completely from the workplace e.g. removing trip hazards on the floor or disposing of unwanted chemicals. This is the most effective control measure and must always be considered before anything else.
2. Substitute - substitute or replace the hazard with a less hazardous work practice e.g. replace solvent-based paints with water-based paints.
3. Isolate - as much as possible, separate the hazard or hazardous work practice from people by distance or using barriers e.g. placing guards around moving parts of machinery.
4. Engineering controls - these are physical control measures e.g. use a trolley to lift heavy loads.
5. Administrative controls - these should only be considered when other higher order control measures are not practicable. These are work methods or procedures that are designed to minimise the exposure to a hazard e.g. developing a procedure on how to operate machinery safely or use signs to warn people of a hazard.
6. Personal protective equipment (PPE) - this should be the last option. PPE, such as ear muffs, hard hats, gloves and protective eyewear, relies on the proper fit and use of the PPE, but does nothing to change the hazard itself.

In some cases a combination of control measures may need to be implemented to provide the highest level of protection that is reasonably practicable. When selecting and implementing a combination of control measures it is important to consider whether any new risks might be introduced as a result.

Refer to pages 13-17 of the Code for more information on how to control risk, including the development, implementation and monitoring of controls.

#### **4. Review control measures**

Control measures that have been implemented must be reviewed, and if necessary, revised to make sure they work as planned.

There are certain situations where you must review your control measures, including:

- when the control measure is not effective in controlling the risk e.g. when an incident occurs
- before a change at the workplace that is likely to give rise to a new or different health and safety risk that the control measure may not effectively control
- if a new hazard or risk is identified
- if the results of consultation indicate that a review is necessary
- if a Health and Safety Representative requests a review.

Control measures may be reviewed using the same methods as the initial hazard identification step.

Refer to page 18 of the Code and the case study on pages 22-27 for more information on how to review controls.

#### **Keeping records**

Keeping records of your risk management process can assist in demonstrating potential compliance with work health and safety legislation. It can also help you to monitor the health and safety performance of your business.

There are some specific record-keeping requirements in the WHS Regulations for some hazards, such as hazardous chemicals and asbestos. If such hazards are identified at your workplace, you must keep the relevant records for the time specified. The detail and extent of recording will depend on the size of your workplace and the potential for major work health and safety issues.

#### **Hazard Identification, Risk Assessment and Risk Control**

- Beyond School >
- Work Experience and Structured Workplace Learning >
- safe@work >
- Hazard Identification, Risk Assessment and Risk Control

There are three steps used to manage health and safety at work:

1. Spot the Hazard (Hazard Identification)
2. Assess the Risk (Risk Assessment)
3. Make the Changes (Risk Control)

At work you can use these three ThinkSafe steps to help prevent accidents.

## 1. Spot the Hazard

### Key Point

A hazard is anything that could hurt you or someone else.

Examples of workplace hazards include:

- frayed electrical cords (could result in electrical shock)
- boxes stacked precariously (they could fall on someone)
- noisy machinery (could result in damage to your hearing)

During work experience, you must remain alert to anything that may be dangerous. If you see, hear or smell anything odd, take note. If you think it could be a hazard, tell someone.

## 2. Assess the Risk

### Key Point

Assessing the risk means working out how likely it is that a hazard will harm someone and how serious the harm could be.

Whenever you spot a hazard, assess the risk by asking yourself two questions:

- how likely is it that the hazard could harm me or someone else?
- how badly could I or someone else be harmed?

Always tell someone (your employer, your supervisor or your health and safety representative) about hazards you can't fix yourself, especially if the hazard could cause serious harm to anyone.

For example:

- ask your supervisor for instructions and training before using equipment
- ask for help moving or lifting heavy objects
- tell your supervisor if you think a work practice could be dangerous

If you are not sure of the safest way to do something on work experience, always ask your work experience supervisor.

## 3. Make the Changes

### Key Point

It is your employer's responsibility to fix hazards. Sometimes you may be able to fix simple hazards yourself, as long as you don't put yourself or others at risk. For example, you can pick up things from the floor and put them away to eliminate a trip hazard.

The best way to fix a hazard is to get rid of it altogether. This is not always possible, but your employer should try to make hazards less dangerous by looking at the following options (in order from most effective to least effective):

- **Elimination** - Sometimes hazards - equipment, substances or work practices - can be avoided entirely. (e.g. Clean high windows from the ground with an extendable pole cleaner, rather than by climbing a ladder and risking a fall.)
- **Substitution** - Sometimes a less hazardous thing, substance or work practice can be used. (e.g. Use a non-toxic glue instead of a toxic glue.)
- **Isolation** - Separate the hazard from people, by marking the hazardous area, fitting screens or putting up safety barriers. (e.g. Welding screens can be used to isolate welding operations from other workers. Barriers and/or boundary lines can be used to separate areas where forklifts operate near pedestrians in the workplace.)
- **Safeguards** - Safeguards can be added by modifying tools or equipment, or fitting guards to machinery. These must never be removed or disabled by workers using the equipment.
- **Instructing workers in the safest way to do something** - This means developing and enforcing safe work procedures. Students on work experience must be given information and instruction and must follow agreed procedures to ensure their safety.
- **Using personal protective equipment and clothing (PPE)** - If risks remain after the options have been tried, it may be necessary to use equipment such as safety glasses, gloves, helmets and ear muffs. PPE can protect you from hazards associated with jobs such as handling chemicals or working in a noisy environment.

Sometimes, it will require more than one of the risk control measures above to effectively reduce exposure to hazards.

### **Managing OHS risk in your workplace**

Occupational Health and Safety (OHS) legislation requires that all foreseeable hazards are identified and the risks arising from these hazards are eliminated or controlled.

Risk management is a legal requirement for all businesses regardless of their size and basically it involves asking the following questions:

- what hazards exist in the workplace?
- how serious are the hazards?
- what can be done to control these hazards?

Risk management is a four step process whereby you identify hazards in the workplace, then assess the risk of those hazards and then implement control measures, which will eliminate or minimise the risk of injury from the hazards you identified.

Control measures which have been put in place must be reviewed periodically to check that they actually fix the problem, without creating another one.

#### **Step 1: hazard identification**

Hazards can be identified through:

- workplace inspections
- incident reporting
- register of injuries
- consultation with employees
- feedback from employees.

There are a number of business activities which can involve risk to safety. These can include:

- **Purchasing:** the equipment or chemicals purchased to run your business may introduce safety issues (e.g. plant and equipment; cleaning agents)
- **Work activities:** in carrying out work tasks the physical and psychological demands of the tasks, equipment used, working environment can place employees at risk (e.g. repetitive movements, length of time spent on the computer, air quality, materials handling)
- **Contractors/casual employees/customers:** other workers who come into the workplace can be at risk or place your employees at risk from the work activities they conduct (e.g. cleaning agents used by cleaners, electrical contractors, verbal abuse by customers).

### Step 2: risk assessment

Risk Assessment determines how likely and how serious the effects will be on people in the workplace being exposed to the hazard. Work out which hazards are most serious and deal with them first. To assess the risk, you should consider:

- the type of hazard
- how severely could the hazard injure or cause illness (consequence)
- how likely is this consequence going to happen (likelihood)
- the frequency and duration of exposure
- who it may effect
- capabilities
- skills, experience and age of people
- layout and condition of the working environment.

### Step 3: risk control

Risk Control involves deciding what needs to be done to eliminate or control the risks to health and safety. Where possible, you should always try to remove or eliminate the problem from the workplace, for example by using a different process, or changing the way a job is done.

If it is not possible to eliminate the hazard, the Hierarchy of Risk Control must be used to determine the most effective measures to minimise the risks.

### Hierarchy of risk control

**1. Design or reorganise to eliminate the hazard from the workplace:** try to ensure that hazards are designed out when new materials, equipment and work systems are being planned for the workplace.

**2. Remove or substitute the hazard:** where possible remove the hazard or substitute with less hazardous materials, equipment or substances.

**3. Enclose or isolate the hazard:** this can be done through the use of barriers, introducing a strict work area, enclosing a noisy process from a person.

**4. Minimise through engineering controls:** this can be done through the use of machine guards, effective ventilation systems etc.

**5. Minimise the risk by adopting administrative controls:** establish appropriate procedures and safe work practices such as job rotation to reduce exposure time or boredom; timing the work so that fewer employees are exposed; routine maintenance and housekeeping procedures; training on hazards and correct work methods.

**6. Personal Protective Equipment:** provide suitable and properly maintained personal protective equipment and ensure employees are trained in its proper use (examples include gloves, earplugs etc.).

If no single control is appropriate, a combination of the above controls needs to be taken to minimise the risk to the lowest level that is reasonably practicable.

#### **Step 4: review**

Periodic reviews of control measures and risk assessments should be conducted to ensure the control measures implemented are appropriate and effective and the risk assessments are still valid. This can be achieved through safety audits, regular workplace inspections, consultation with employees and review of incident investigations. Risk management should be built into all workplace activities that can give rise to safety issues.

For further guidance on the risk management process review the recently developed standard AS/NZ ISO 31000:2009 Risk Management-Principle and guidelines available from Standards Australia.

<http://www.australianbusiness.com.au/whs/resources/managing-ohs-risk-in-your-workplace>

For further information, follow these links:

An example of a Hazard Identification, Risk Assessment and Control Procedure

[https://www.uws.edu.au/\\_data/assets/pdf\\_file/0020/12917/12917\\_Hazard\\_Identification,\\_Risk\\_Assessment\\_and\\_control\\_Procedure.pdf](https://www.uws.edu.au/_data/assets/pdf_file/0020/12917/12917_Hazard_Identification,_Risk_Assessment_and_control_Procedure.pdf)

Managing Health and Safety Risks

<http://education.qld.gov.au/health/docs/healthsafety/managing-health-safety-fact-sheet.pdf>

**Hierarchy of hazard control** is a system used in industry to minimize or eliminate exposure to hazards. It is a widely accepted system promoted by numerous safety organizations. This concept is taught to managers in industry, to be promoted as standard practice in the workplace. Various illustrations are used to depict this system, most commonly a triangle.

The hazard controls in the hierarchy are, in order of decreasing effectiveness:

- Elimination
- Substitution
- Engineering
- Administration
- Personal protective equipment

## Components of the hierarchy

### Elimination

Eliminating the hazard—physically removing it—is the most effective hazard control. For example, if employees must work high above the ground, the hazard can be eliminated by moving the piece they are working on to ground level to eliminate the need to work at heights.

### Substitution

This pesticide contains DDT, an effective substitution would be to replace it with a green pesticide.

Substitution, the second most effective hazard control, involves replacing something that produces a hazard (similar to elimination) with something that does not produce a hazard—for example, replacing lead-based paint with acrylic paint. To be an effective control, the new product must not produce another hazard. Because airborne dust can be hazardous, if a product can be purchased with a larger particle size, the smaller product may effectively be substituted with the larger product.

### Engineering controls

The third most effective means of controlling hazards is engineered controls. These do not eliminate hazards, but rather isolate people from hazards. Capital costs of engineered controls tend to be higher than less effective controls in the hierarchy, however they may reduce future costs. For example, a crew might build a work platform rather than purchase, replace, and maintain fall arrest equipment. "Enclosure and isolation" creates a physical barrier between personnel and hazards, such as using remotely controlled equipment. Fume hoods can remove airborne contaminants as a means of engineered control.

### Administrative controls

Administrative controls are changes to the way people work. Examples of administrative controls include procedure changes, employee training, and installation of signs and warning labels (such as those in the Workplace Hazardous Materials Information System). Administrative controls do not remove hazards, but limit or prevent people's exposure to the hazards, such as completing road construction at night when fewer people are driving.

### Personal protective equipment

Personal protective equipment (PPE) includes gloves, respirators, hard hats, safety glasses, high-visibility clothing, and safety footwear. PPE is the least effective means of controlling hazards because of the high potential for damage to render PPE ineffective. Additionally, some PPE, such as respirators, increase physiological effort to complete a task and, therefore, may require medical examinations to ensure workers can use the PPE without risking their health.