

BSBWHS419

Contribute to Implementing WHS Monitoring Processes

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course training content (this matches the PowerPoint Presentation).
- Review questions.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.



LEARNER GUIDE

BSBWHS419 Contribute to Implementing WHS Monitoring Processes

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

- Course Information.
- Review Questions.

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Evaluation Copy Only

1.1 Introduction

This training course is based on the national unit of competency **BSBWHS419 Assist with Workplace Monitoring Processes**.

This unit applies to individuals who assist with using a range of measuring devices to identify hazards, assess risks and monitor the effectiveness of risk controls.

The unit applies to people who work in a broad range of WHS roles across all industries.

This unit describes the performance outcomes, skills and knowledge required to assist with monitoring a range of physical agents and conditions relevant to work health and safety (WHS).

NOTE: The terms Occupational Health and Safety (OHS) and Work Health and Safety (WHS) are equivalent and generally either can be used in the workplace. The term WHS will be used throughout this training course.



1.2 WHS Legal Requirements



It is important that you access and stay up to date with current Commonwealth, state or territory Work Health and Safety (WHS) Acts and legislation as well as regulations and codes of practice.

Other relevant information you will need to access includes organisational WHS policies and systems, and documents such as standards, guidance publications and alerts issued by the relevant WHS regulator.

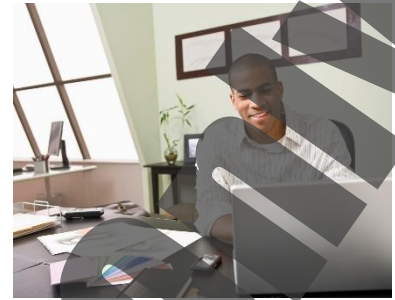
Some of the regulatory requirements and standards relevant to monitoring processes include:

- ◆ Australian and international standards, such as those produced by Standards Australia and Safe Work Australia.
- ◆ Biological exposure indices.
- ◆ Commonwealth and state or territory WHS Acts, regulations and codes of practice.
- ◆ Material Safety Data Sheets (MSDS) or Safety Data Sheets (SDS) for hazardous chemicals.
- ◆ Exposure standards for atmospheric contaminants in occupational environments.
- ◆ Guidance material, such as guidance notes, guides, fact sheets and technical reports that provide practical guidance and directions for hazard identification, risk assessment and risk controls.



Policies, procedures, legislation, codes of practice and regulations can be challenging to read. They are often long documents and consist of complex jargon and phrases. When reading these documents, try:

- ◆ Scanning through them first to get a rough idea of what they are about.
- ◆ Reading summaries or plain English versions if they are available.
- ◆ Conduct internet searches for legislation or codes of practice to find information about them to help put it in context.
- ◆ Remove distractions such as noise or interruptions when you are reading.
- ◆ Pay close attention to headings as they will help guide you through.



1.2.1 Key Elements of Acts, Regulations and Codes of Practice



It is essential that you have an understanding of the key provisions of relevant legislation from all levels of government that may affect your business operations.

In relation to conducting measurements in the workplace, the main aspects are:

- ◆ **Industrial relations** – a multi-disciplinary field relevant to the employment relationship. It examines various employment relationships, including union and non-union arrangements.
- ◆ **Equal employment opportunity** – protects individuals from discrimination on the basis of their individual attributes.
- ◆ **Privacy laws and confidentiality** – any personal information you acquire during your work activities must be kept confidential. This could include information relating to injuries or illnesses, occupationally acquired or not.
- ◆ **Workers compensation** – aims to provide money and other compensation to workers who are injured in the workplace.
- ◆ **Reporting of incidents.**
- ◆ **Work permits.**
- ◆ **Notification of incidents.**



1.2.1.1 Workers Compensation

Person(s) Conducting a Business or Undertaking (PCBUs) are required to comply with all Commonwealth and state and territory legislation relevant to their workplace. In Australia, each state or territory has its own compensation legislation.

You can access the legislation for your state or territory through your state or territory workplace safety authority.



Although the Acts are different in each state or territory, the basic obligations of PCBUs are the same. A PCBU must:

- ◆ Take out insurance with an approved insurer covering the PCBU's full liability for workers compensation and damages.
- ◆ Provide a safe and healthy workplace for workers so they are not at risk of accident or injury because of work practices.
- ◆ Make support and assistance available to a worker that suffers from work related injury or disease.
- ◆ Report incidents or injuries.
- ◆ Establish a return-to-work program.



Workers have an obligation to:

- ◆ Notify their PCBU of an injury as soon as possible.
- ◆ Permit their nominated doctor to release information to the insurer.
- ◆ Participate and cooperate with the implementation of injury management and return-to-work plans.

1.2.1.2 Work Permits

When monitoring risks and hazards there are various permit procedures or certification requirements that may be needed. While monitoring and collecting data you may be working in areas that require permits or written authorisation. This may apply to:

- Working in confined spaces.
- Performing hot work.
- Working on powered machinery.
- Excavation work.
- Working around temporary opening in platforms or walkways.

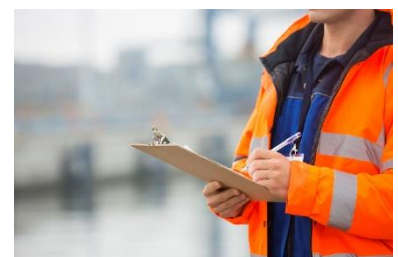
For confined space work, permits are a legal requirement.

1.2.1.3 Notification of Incidents

Each different authorising body, such as WorkCover, has its own requirements for incident notification.

These requirements range from immediate notification through to notification up to a designated number of days after the incident.

It is the responsibility of each person to be aware of the notification requirements for the state or territory they are working in.



1.2.1.4 Reporting of Incidents

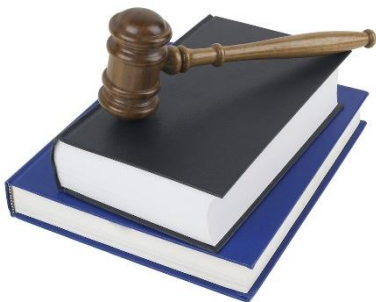
Each incident should be investigated and the results of the investigation recorded and reported to senior management.

These incident reports should be comprehensive and contain recommendations to ensure the chance of a repeat of the incident is minimised.

Each organisation should have an investigative procedure that meets the Australian standards.



1.2.2 Regulations



WHS regulations specify the way in which some duties must be met under the WHS Act.

They also prescribe procedural or administrative requirements to support the WHS Act (for example requiring licences for specific activities and the keeping of records).

Regulations support the Acts by imposing mandatory requirements for managing WHS.

They supplement the Act by providing more detailed information on duties that apply to specific hazards, other procedures and obligations.

WHS regulations cover general requirements for hazard identification, risk assessment and risk controls for high risk areas, such as:

- ◆ Manual handling.
- ◆ Confined spaces.
- ◆ Competency standards for users and operators of industrial equipment.
- ◆ Occupational noise.
- ◆ Plant.
- ◆ Hazardous substances.
- ◆ Construction work.
- ◆ Storage and handling of dangerous goods.
- ◆ Major hazards facilities.
- ◆ Electrical safety.
- ◆ Driver fatigue.
- ◆ Working at heights.





Your workplace may also be guided by other Acts and regulations related to:

- ◆ Mines.
- ◆ Accident compensation.
- ◆ Workers compensation.
- ◆ Dangerous goods.
- ◆ Equipment.

1.2.3 Codes of Practice

Codes of practice (also known as Compliance Codes) play a key role under the WHS legislation in providing guidance to assist duty holders to eliminate or control risks.

They recommend practical instructions on how to meet the terms of the law and state ways to manage exposure to risks.



Code of Practice instructions include:

- ◆ How to manage work health and safety risks.
- ◆ Managing noise and preventing hearing loss.
- ◆ Hazardous manual tasks.
- ◆ Confined spaces.
- ◆ Managing the risk of falls at workplaces.
- ◆ Preparation of Safety Data Sheets for hazardous chemicals.
- ◆ Labelling of workplace hazardous chemicals.
- ◆ How to manage and control asbestos in the workplace.
- ◆ First aid in the workplace.
- ◆ Managing risks in construction work.
- ◆ Managing electrical risks at the workplace.
- ◆ Welding processes.
- ◆ Safe design of building and structures.
- ◆ Excavation work.
- ◆ Demolition work.
- ◆ Spray painting and powder coating.
- ◆ Abrasive blasting.



While a duty holder is not required to comply with codes of practice, they may be used in court proceedings as evidence of what is known about particular risks and what is considered reasonably practicable to control them.



In summary, codes of practice:

- ◆ Provide practical guidance.
- ◆ Should be followed unless there is another solution that achieves the same or better standard of health and safety.
- ◆ Can be used to support a prosecution.

Every organisation is advised to obtain copies of codes of practice that are relevant to their workplace and the hazards they face in their work.

1.2.4 Standards for Measurements

In order to measure against the required standard, you will need to know what the industry standard is.

Depending on the measurements you are taking, you can find this information in:

- ◆ Codes of practice.
- ◆ Exposure standards.
- ◆ Guidance notes.
- ◆ National and industry standards.
- ◆ WHS regulations.



1.2.5 Exposure Standards



Exposure standards are the standards that have been set as the maximum amount of exposure a person or environment can withstand while still remaining relatively healthy.

The practical use of standards is to determine how long a person should be subjected to a particular substance before that substance is considered to be toxic.

At all times exposure should be kept to the barest minimum and personal protective equipment (PPE) used as much as possible to further reduce exposure to any substance considered to be dangerous.

For this reason, it is essential that exposure standards are identified and followed.



Review Questions

1.

What are three (3) of the regulatory requirements and standards that may apply to the monitoring process?

1.

2.

3.

2.

Some of the documents relevant to monitoring processes can be difficult to read and interpret. List three (3) things you can do to assist you to understand them.

1.

2.

3.

3.

Provide three (3) examples of circumstances that may require work permits or written authorisation.

1.

2.

3.

4.

What are exposure standards and what are they used for?



1.3 Identify Agent or Condition to be Measured

Workplace monitoring is often necessary where environmental factors have the potential to be hazardous.

This may affect one person or many in the workplace environment, or could have the potential to have wider reaching effects on other people in the area.

Once you have become aware of a situation that may require action, you will firstly need to identify the agent or condition that has to be measured.



1.3.1 Common Agents or Conditions

Some of the common or typical physical agents and/or conditions relevant to WHS that may need to be monitored could include:

Agent or Condition	Description
Biological Agents	Include insects, mites and bacteria. These could range from single insects like spiders right through to hive circumstances or insect infestations. Biological agents can also include body fluids, human or animal waste, or any other contaminated materials.
Electricity	Often this is a silent killer unless it is visibly arcing. It can cause other objects in the area to become energised.
Fibres, Dusts and Particulates	These can have long-term effects on the health of people in the work area. Asbestos is a very common example that must be monitored and handled correctly.
Fumes, Mists, Gases, and Vapours	These can come from some chemicals or gaseous substances and have the potential build up in enclosed areas. They can be extremely dangerous and require specialised monitoring to ensure that environmental levels are kept within the correct tolerances.

Agent or Condition	Description
Heat and Humidity	In their extremes these can make working conditions difficult, but also can cause health issues. Temperature extremes must be monitored closely. In addition, the time of exposure can also have an influence on the methods of control.
Light	Incorrect levels of light can cause glare or strain on eyes. This may not only be uncomfortable for people concerned, but could have significant long term effects. Additionally, incorrect levels of light can be dangerous where people may not be able to see clearly in the workplace.
Noise	Noisy work areas can be the cause of long term damage to the sensitive fibres inside the ear, leading to deafness. This can be progressive and once hearing loss begins, there is little that can be done to help the person concerned. It is important to try to control the noise at its source.
Radiation	Radiation can be classed as ionising, non-ionising and laser.
Vibration	Can have serious effects on the body, causing problems with circulation. It can also cause serious damage to structures. Environmental vibration should be monitored closely and minimised or controlled.

1.3.1.1 Radiation



Radiation includes electromagnetic waves such as light, radio waves and X-rays, and the particles emitted by radioactive materials.

These particles and the more energetic waves produce electrically charged particles called 'ions' in the materials they strike.

There are several different types of radiation:

- ◆ **Lasers** – these are highly concentrated beams or blasts of light. They are used in DVD players, laser printers, barcode scanners, medicine (surgery) and skin treatments, and in industry for cutting and welding materials. The most common injury caused by lasers is damage to the eyes through the burning of the retinas.
- ◆ **Ionising radiation** - has 2 types, the first relates to particles, and the other relates to electromagnetic radiation. Ionising radiation is high frequency and high-energy and can penetrate the body and damage DNA, e.g. X-rays and gamma rays.
- ◆ **Non-ionising radiation** - is related to 3 key areas, magnetic fields from electrical devices, radiofrequency and microwaves, and ultraviolet radiations.



1.3.2 Identifying Agents in the Workplace



Each of these agents or conditions may be a hazard or may be a developing or potential hazard.

If you suspect or notice a potential hazard developing it is even more important to undertake base level readings so you will have a reference point for continual monitoring.

You may also need to consult with those in the workplace who work directly with these agents or conditions.

They are the best people to be able to advise you on the types they are facing, the extent to which they are exposed to them, and how they are being affected.

Consultation is an important part of identifying agents in the workplace. Talk to:

- ◆ Duty holders as specified in WHS Acts:
 - ◆ PCBUs or their officers.
 - ◆ Workers.
 - ◆ Other persons at a workplace.
- ◆ Contractors and subcontractors.
- ◆ Health and safety representatives.
- ◆ Health and safety committees.
- ◆ Suppliers.
- ◆ WHS entry permit holders.
- ◆ WHS inspectors.
- ◆ WHS regulators.
- ◆ WHS specialists, such as occupational hygienists or occupational physicians.



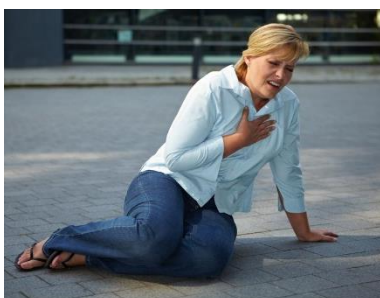
1.3.2.1 Basic Human Physiology



When identifying the characteristics of an agent or condition, it is essential that you have an understanding of basic physiology, and how physical, biological and chemical agents affect the body and produce discomfort or harm.

There are 5 basic ways that chemicals or toxins can enter the body. These are:

1. Injection, where toxins are placed into the bloodstream. This can include envenomation from insects or poisonous animals.
2. Absorption through body tissues or skin.
3. Ingestion via the mouth.
4. Inhalation through airways.
5. Pressure, where an agent is physically forced into the body.



Once in the body, physical, biological and chemical agents can act on areas such as the heart and heart rate, the respiratory system and breathing, the nervous system, and all the way down to affecting cells on a cellular level.

Depending on the severity of the exposure, the body can suffer acute or chronic effects.

As each agent or condition is different it is necessary for you, as a WHS professional, to use your investigative skills and conduct research to identify how agents and conditions affect the human body.

You will also need to determine how each different method of transmission and contact will affect the individual.

It is also essential that you recognise the limits of your own knowledge and understanding and seek out specialist advice and support when required.

For example, it is important when dealing with microbiological hazards that you get help and advice on how to proceed.



Review Questions

5.	List five (5) common or typical physical agents and/or conditions relevant to WHS that may need to be monitored.	<input type="checkbox"/>
1.		
2.		
3.		
4.		
5.		

6.

List two (2) duty holders you may consult with when identifying agents in the workplace.



1.

2.

7.

What are the five (5) basic ways a toxin or chemical can enter the human body?



1.

2.

3.

4.

5.

1.4 Define Measurement Area



Once you have identified possible agents or conditions and their characteristics, it is important to define the area where measurements are to be taken. The area of measurements may include not just the physical space but also the work processes and relevant hazards associated with the agent or condition.

By defining the area, you will ensure that the measurements taken and the equipment used will meet the requirements of the workplace, legislation and regulations, and the characteristics of the agents or conditions being measured.

Boundaries will often have to be defined so that accurate and relevant information can be determined regarding the agent or condition.

It also can assist in control measure implementation.