Element 1 – Why We Should Manage Workplace Health and Safety

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Justify health and safety improvements using moral, financial and legal arguments	**1.1** **1.2**	Discuss the moral, financial and legal reasons for managing health and safety in the workplace Explain how the law works and the consequences of non-compliance	OBE, Practical
Advise on the main duties for health and safety in the workplace	**1.3**	Summarise the main health and safety duties of employers and workers in HSWA 1974 and MHSWR 1999	OBE
Help their organisation manage contractors	**1.4**	Explain how contractors should be selected, monitored and managed	OBE

1.1 Morals and Money

Definitions

- **Safety** – An absence of danger from physical injury, e.g., from moving vehicles, falls from height.
- **Health** – a person's state of wellbeing which may be affected by e.g., noise, dust or stress.
- **Welfare** – facilities for workplace comfort, e.g., drinking water or toilets.

The Moral Expectations of Good Standards of Health and Safety.

- Employers have a **moral duty** to keep people safe and healthy in the workplace.
- Good standards of health, safety and welfare reduce injuries and ill-health which, in turn, **reduce pain and suffering**.
- A moral approach can also **increase employees' motivation and satisfaction**.
- Employees have a **moral right to fair pay** commensurate with their contribution at work.
- **Employees unable to work due to ill-health or injury are disadvantaged**. This disadvantage can extend to their family for more than one generation.
- Employees are more than employees. They have lives outside of work and employers should allow them opportunities to **live those lives free from injury, ill-health or excessive fatigue** caused by work.
- Each organisation has a **place in society**. The way it runs its business should **benefit, not damage the local community or society**.
- Moral attitudes towards worker health and safety have evolved since the industrial revolution and **continue to adjust**.

Element 2 – How health and safety management systems work and what they look like

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Work within a health and safety management system, recognising what effective general policy, organisation and arrangements should look like	**2.1** **2.2**	Give an overview of the elements of a health and safety management system and the benefits of having a formal/certified system Discuss the main ingredients of health and safety management systems that make it effective – general policy, organisation, arrangements	OBE

2.1 What they are and the benefits they bring

The Basics of a Health and Safety Management System

HSE publication HSG65 sets out guidance on how to put in place suitable arrangements to manage safety. The guidance relies heavily on a **'Plan, Do, Check, Act' approach**.

Plan

- Think about where you are now and **where you need to be**
- Write down your **policy** and your **plan** to deliver it:
  - What you want to **achieve**?
  - Who will be **responsible** for what?
  - How will you achieve your **aims**?

Element 3 – Managing Risk – Understanding People and Processes

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Positively influence health and safety culture and behaviour to improve performance in their organisation	**3.1** **3.2** **3.3**	Describe the concept of health and safety culture and how it influences performance Summarise how health and safety culture at work can be improved Summarise the human factors which positively or negatively influence behaviour at work in a way that can affect health and safety	OBE
*	**3.4**	Explain the principles of the risk assessment process	OBE Practical
Recognise workplace changes that have significant health and safety impacts and effective ways to minimise those impacts	**3.5**	Discuss typical workplace changes that have significant health and safety impacts and ways to minimise those impacts	OBE
Develop basic safe systems of work (including taking account of typical emergencies) and knowing when to use permit-to-work systems for special risks	**3.6-3.8**	Describe what to consider when developing and implementing a safe system of work for general activities Explain the role, function and operation of a permit-to-work system Discuss typical emergency procedures (including training and testing) and how to decide what level of first aid is needed in the workplace	OBE

3.1 Health and Safety Culture

According to the HSE Advisory Committee on the Safety of Nuclear Installations (ACNSI), the **Health and Safety Culture** of an organisation can be defined as:

*"The **product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour** that determine the **commitment** to, and the **style** and **proficiency** of, an organisation's health and safety management."*

Put more simply, it could be expressed as:

*The **way we do things** around here.*
or
*The **way that people in this organisation behave** with regard to health and safety **when they think no-one is watching**.*

Relationship Between Health and Safety Culture and Health and Safety Performance

Element 4 – Health and Safety Monitoring and Measuring

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Work within a health and safety management system, recognising what effective general policy, organisation and arrangements should look like	**2.1** **2.2**	Give an overview of the elements of a health and safety management system and the benefits of having a formal/certified system Discuss the main ingredients of health and safety management systems that make it effective – general policy, organisation, arrangements	OBE

4.1 Active and Reactive Monitoring

The Differences Between Active and Reactive Monitoring

- **Regulation 5 MHSWR** requires employers with **five or more employees to record** their arrangements for the monitoring of preventive and protective measures.
- All organisations need to monitor their financial, quality, production and health and safety performance to gain accurate information that informs management decisions.
- Monitoring falls into two categories:
  - Active monitoring.
  - Reactive monitoring.

Active Monitoring

- Active suggests **'before the event'**.
- It involves **regular, planned observations** of the workplace.
- The information gained provides an **indication of the direction** in which health and safety performance is heading and **whether objectives and standards are being met**.

Reactive Monitoring

- Reactive suggests **'after the event'**.
- It involves **learning from mistakes** such as accidents and ill-health absence.
- It involves the analysis of data and relies on processes in place to collect the data.

Health and Safety Inspections

- Many health and safety **regulations require regular inspection**.
- The Provision and Use of Work Equipment Regulations (PUWER) Regulation 6 requires the inspection of any work equipment that could result in danger through deterioration.
- The Work at Height Regulations (WAHR) require inspections of all equipment intended to prevent or limit falls.
- Other regulations require a more formal form of inspection called thorough examination such as the Lifting Operations and Lifting Equipment Regulations (LOLER).
- An inspection typically involves **comparison of a workplace**, the equipment and the behaviour of those observed against a defined standard.

Element 5 – Physical and Psychological Health

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Do a general risk assessment in their own workplace – profiling and prioritising risks, inspecting the workplace, recognising a range of common hazards, evaluating risks (taking account of current controls), recommending further control measures, planning actions	**5-11**	Produce a risk assessment of a workplace which considers a wide range of identified hazards (drawn from elements 5–11) and meets best practice standards ('suitable and sufficient')	Practical

5.1 Noise

Physical and Psychological Effects of Noise Exposure

- Exposure to high noise levels over extended periods can cause damage to the hairs in the cochlea. This leads to noise induced hearing loss.
- Noise induced hearing loss may be temporary (temporary threshold shift) or permanent (permanent threshold shift).
- Exposure to single very loud noises, such as explosions, can rupture the ear drum or dislocate bones within the ear. This is a factor in developing tinnitus, a ringing in the ear.
- Noise experienced in the workplace can cause distraction, making it difficult to concentrate.
- Noise in the workplace can also be a factor in developing stress.
- The inability to hear conversations clearly can lead to individuals feeling isolated.

Meanings of Commonly Used Terms in the measurement of Sound

- Sound pressure – the change in the static pressure when a sound wave passes through a medium. Measured in Pascals (Pa).
- Intensity – the sound energy flowing through an area represented by the amplitude of the sound curve.
- Frequency – the number of sound oscillations per second. Measured in Hertz (Hz).
- Decibel Scale – a logarithmic scale used to measure the large variation in pressure waves that can be detected by the human ear.
- dB(A) – an adjusted scale that reduces the impact of sounds at very high and very low frequencies to reflect how human hearing works.
- dB(C) – an adjusted scale that focuses on the impact that intense sound pressure can have on the ear from single, very loud sounds such as explosions.

When Exposure Should be Assessed and Comparison with Recognised Standards

Element 6 – Musculoskeletal Health

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Do a general risk assessment in their own workplace – profiling and prioritising risks, inspecting the workplace, recognising a range of common hazards, evaluating risks (taking account of current controls), recommending further control measures, planning actions	**5-11**	Produce a risk assessment of a workplace which considers a wide range of identified hazards (drawn from elements 5–11) and meets best practice standards ('suitable and sufficient')	Practical

6.1 Work-related Upper Limb Disorders

Meaning of Terms

- **Musculoskeletal Disorders (MSDs)**
  - Any injury, damage or disorder of the joints or other tissues in the upper/lower limbs or the back.

- **Work-related Upper Limb Disorders (WRULDs)**
  - Aches and pains in the shoulders, arms, wrists, hands and fingers as well as in the neck cause by work.

- WRULDs are a subset of MSDs.

Ill-health Conditions from Poorly Designed Tasks and Workstations

- Carpal Tunnel Syndrome
  - Pressure on a nerve in the wrist caused by tendons or ligaments becoming inflamed. This leads to tingling, numbness and pain in the hand and fingers.
- Tenosynovitis
  - Inflammation of the fluid-filled sheath that surrounds a tendon causing joint pain, swelling and stiffness.
- Tendonitis
  - A tendon swells after a tendon injury causing pain, stiffness and restricted movement.
- Osteoarthritis
  - The most common form of arthritis causing joint pain and stiffness, swelling, tenderness, grating or crackling sounds.
- Peritendinitis
  - Inflammation of a tendon and its sheath, usually in the hands and wrists, feet and ankles as a result of continued use. Painful and may temporarily disable the affected part.

Element 7 – Managing Risk – Chemical and Biological Agents

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Do a general risk assessment in their own workplace – profiling and prioritising risks, inspecting the workplace, recognising a range of common hazards, evaluating risks (taking account of current controls), recommending further control measures, planning actions	**5-11**	Produce a risk assessment of a workplace which considers a wide range of identified hazards (drawn from elements 5–11) and meets best practice standards ('suitable and sufficient')	Practical

7.1 Hazardous Substances

Forms of Chemical Agent

Chemical Agents can be presented in many different forms:

- Solids – rat poison.
- Dusts – wood dust, cement dust.
- Fibres – asbestos, man-made mineral fibre.
- Fumes – weld fume, vehicle exhaust fume.
- Gases – carbon monoxide, chlorine.
- Mists – spray paint suspended in liquid droplets.
- Vapours – a liquid in gaseous state (solvents).
- Liquids – thinners, petrol, adhesives.

Forms of Biological Agent

Biological Agents can be presented in different forms:

- Fungi – a group of spore-producing organisms feeding on organic matter including moulds, yeast, mushrooms and toadstools.
  - Examples include Aspergillus found in damp buildings.
- Bacteria – unicellular organisms that have cell walls but lack an organised nucleus. Some can cause disease.
  - Examples include – legionella, anthrax, leptospira, tetanus.
- Viruses – a small parasite that cannot produce by itself but uses cell machinery to produce more viruses.
  - Examples include – COVID-19, influenza, Hepatitis C.

Element 8 – General Workplace Issues

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Do a general risk assessment in their own workplace – profiling and prioritising risks, inspecting the workplace, recognising a range of common hazards, evaluating risks (taking account of current controls), recommending further control measures, planning actions	**5-11**	Produce a risk assessment of a workplace which considers a wide range of identified hazards (drawn from elements 5–11) and meets best practice standards ('suitable and sufficient')	Practical

8.1 Health, Welfare and Work Environment

Health and Welfare

- The Workplace (Health, Safety and Welfare) Regulations require employers to provide workplaces that support good standards of health and welfare. The provisions include:

- **Drinking Water.**
  - The water should be wholesome i.e. potable.
  - Readily accessible at suitable places.
  - Marked to differentiate between potable and non-potable water.
  - Suitable means to drink hygienically – cups, jets.
  - Free of charge (HASAWA S9).

- **Washing Facilities.**
  - A sufficient number of washing facilities, readily accessible.
  - Showers if required by the nature of the work.
  - Adjacent to toilets and to changing areas.
  - Hot and cold or warm water with soap and towels or equivalent.
  - Rooms to be ventilated and lit.
  - Rooms to be kept clean and orderly.
  - Separate rooms for men and women unless self-contained, unless just used to wash the hands, face and forearms.

- **Sanitary Conveniences.**
  - Suitable for the nature of individuals on the premises.
  - Sufficient numbers and readily accessible.
  - Rooms to be ventilated and lit.
  - Rooms to be kept in a clean and orderly condition.
  - Separate rooms for men and women unless self-contained.
  - Notice that this applies to WCs, urinals and sanitary towel disposal.

Element 9 – Work Equipment

Learning outcome The learner will be able to:	Related content	Assessment criteria	Assessment
Do a general risk assessment in their own workplace – profiling and prioritising risks, inspecting the workplace, recognising a range of common hazards, evaluating risks (taking account of current controls), recommending further control measures, planning actions	**5-11**	Produce a risk assessment of a workplace which considers a wide range of identified hazards (drawn from elements 5–11) and meets best practice standards ('suitable and sufficient')	Practical

9.1 General Requirements

Providing Suitable Equipment

- Regulation 4 of the Provision and Use of Work Equipment Regulations (PUWER) sets out the requirements for the provision of suitable work equipment.
- Work equipment is defined as:
  - Toolbox tools – hammer, screwdriver.
  - Single machines – drill, dumper truck.
  - Apparatus – laboratory apparatus.
  - Lifting equipment – slings, chains.
  - Other equipment – ladders, pressure washer.
  - Installations such as a series of machines connected together.
- All work equipment must be suitable for the purpose for which it was provided. The right tool for the job.
- Selection of work equipment should take account of the working conditions and the risks involved in using the work equipment.
- Work equipment should only be used for the purpose and conditions for which it is suitable.
- This means carrying out a risk assessment to ensure that work equipment is suitable.
- Consider work conditions including:
  - Levels of lighting, the terrain and the space available.
  - Weather conditions, explosive atmospheres, humidity.
  - Other work in the area and the proximity of other people.
- The selection of work equipment will also be influenced by:
  - Ergonomics – the interaction between human and machine.
  - The level of risk involved in failure.
  - The amount of use the equipment is likely to get.
  - How rugged the equipment needs to be – potential for damage.
  - Will it need to be adjustable to cope with multiple users.
  - The level of competence of those who will use it.
  - How easy it will be to maintain and the likely maintenance levels.