



Unit IA: Managing health and safety

Unit Element Name	Learning Outcomes
<p>Element IA1: Principles of health and safety management</p>	<ul style="list-style-type: none"> • Explain the moral, legal and economic reasons for the effective management of health and safety. • Outline the societal factors which influence an organisation's health and safety standards and priorities. • Outline the uses of, and the reasons, for introducing a health and safety management system. • Explain the principles and content of an effective health and safety management system including the reasons for integration with other management systems.
<p>Element IA2: Regulating Health and Safety</p>	<ul style="list-style-type: none"> • Describe comparative governmental socio-legal and regulatory models. • Outline the purpose of enforcement and laws of contract. • Explain the role and limitations of the International Labour Organisation in a global health and safety setting. • Explain the role non-governmental bodies and self-regulation has in securing common health and safety standards in a global economy.
<p>Element IA3: Loss causation and incident investigation</p>	<ul style="list-style-type: none"> • Outline theories/models and use of loss causation techniques. • Explain the use of quantitative methods in analysing loss data. • Explain the significance and use of statutory and internal reporting of loss events. • Explain the reasons for loss and near miss investigations and the procedures to be followed.



<p>Element IA4: Measuring and reviewing health and safety performance</p>	<ul style="list-style-type: none"> • Explain the purpose and use of performance measurement in relation to health and safety objectives and arrangements. • Explain the need for, and the objectives and limitations of, health and safety monitoring. • Describe the variety of health and safety monitoring and measurement techniques. • Explain the need for and process of reviewing health and safety performance.
<p>Element IA5: The assessment and evaluation of risk</p>	<ul style="list-style-type: none"> • Explain how to use internal and external information sources in identifying hazards and the assessing of risk. • Outline the use of a range of hazard identification techniques. • Explain how to assess and evaluate risk and to implement a risk assessment programme. • Explain the analysis, assessment and improvement of system failures and system reliability with the use of calculations. • Explain the principles and techniques of failure tracing methodologies with the use of calculations.
<p>Element IA6: Risk control</p>	<ul style="list-style-type: none"> • Explain the use of common risk management strategies. • Outline factors to be taken into account when selecting risk controls. • Explain the development, main features and operation of safe systems of work and permit-to-work systems.



<p>Element IA7: Organisational factors</p>	<ul style="list-style-type: none">• Explain the types of health and safety leadership, their advantages; disadvantages and likely impact on safety performance.• Explain the organisational benefits of effective health and safety leadership.• Explain the internal and external influences on health and safety in an organisation.• Outline the different types of organisation, their structure, function and the concept of the organisation as a system.• Explain the requirements for managing third parties in the workplace.• Explain the role, influences on and procedures for formal and informal consultation with workers in the workplace.• Explain health and safety culture and climate.• Outline the factors which can both positively and negatively affect health and safety culture and climate.
<p>Element IA8: Human factors</p>	<ul style="list-style-type: none">• Outline psychological and sociological factors which may give rise to specific patterns of safe and unsafe behaviour in the working environment.• Explain the nature of the perception of risk and its relationship to performance in the workplace.• Explain the classification of human failure.• Explain appropriate methods of improving individual human reliability in the workplace• Explain how organisational factors can contribute to improving human reliability.• Explain how job factors can contribute to improving human reliability.• Outline the principles, conditions and typical content of behavioural change programmes designed to improve safe behaviour in the workplace.



Element IA9: The role of the health and safety practitioner

- Explain the role of the health and safety practitioner.
- Explain the importance of effective communication and negotiation skills when promoting health and safety.
- Outline how health and safety practitioners can use financial justification to aid decision making.
- Outline the different types of organisation, their structure, function and the concept of the organisation as a system.
- Explain the requirements for managing third parties in the workplace.
- Explain the role, influences on and procedures for formal and informal consultation with employees in the workplace.
- Explain health and safety culture and climate.
- Outline the factors which can both positively and negatively affect health and safety culture and climate.



Unit IB: Hazardous substances / agents

Unit Element Name	Learning Outcomes
Element IB1: Managing occupational health	<ul style="list-style-type: none">• Outline the nature of occupational health.• Outline the principles and benefits of the management of return to work including the role of outside support agencies.• Outline the management of occupational health (including the practical and legal aspects).• Outline the uses of, and the reasons, for introducing a health and safety management system.• Explain the principles and content of an effective health and safety management system including the reasons for integration with other management systems.
Element IB2: Identification, assessment and evaluation of hazardous substances	<ul style="list-style-type: none">• Explain the main routes of entry and the human body's defensive responses to hazardous substances.• Explain the identification, classification and health effects of hazardous substances used in the workplace.• Outline the factors to consider when undertaking assessment and evaluation of risks from hazardous substances.• Outline the role of epidemiology and toxicological testing.



<p>Element IB3: The control of hazardous substances</p>	<ul style="list-style-type: none"> • Explain the principles of prevention and control of exposure to hazardous substances (including carcinogens and mutagens). • Outline the specific requirements for working with asbestos. • Explain the uses and limitations of dilution ventilation and the purpose and operation of local exhaust ventilation, including assessing and maintaining effectiveness. • Explain the effectiveness of various types of personal protective equipment (PPE) and the factors to consider in selection of PPE.
<p>Element IB4: The monitoring and measuring of hazardous substances</p>	<ul style="list-style-type: none"> • Explain how workplace exposure limits are used in the workplace. • Outline the methods for sampling of airborne contaminants. • Outline the principles of biological monitoring.
<p>Element IB5: Biological agents</p>	<ul style="list-style-type: none"> • Explain the types and properties of biological agents found at work. • Explain the assessment and control of risk from deliberate and non-deliberate exposure to biological agents at work.
<p>Element IB6: Noise and vibration</p>	<ul style="list-style-type: none"> • Explain the basic physical concepts relevant to noise. • Explain the effects of noise on the individual and the use of audiometry. • Explain the measurement and assessment of noise exposure. • Explain the principles and methods of controlling noise and noise exposure. • Explain the basic physical concepts relevant to vibration. • Explain the effects of vibration on the individual. • Explain the measurement and assessment of vibration exposure. • Explain the principles and methods of controlling vibration and vibration exposure.



<p>Element IB7: Radiation</p>	<ul style="list-style-type: none"> • Outline the nature of the different types of ionising and non-ionising radiation. • Explain the effects of exposure to non-ionising radiation, its measurement and control. • Outline the effects of exposure to ionising radiation, its measurement and control. • Outline the different sources of lasers found in the workplace, the classification of lasers and the control measures. • Explain the principles and methods of controlling vibration and vibration exposure.
<p>Element IB8: Mental ill-health and dealing with violence and aggression at work</p>	<ul style="list-style-type: none"> • Explain the effects and causes of common types of mental ill-health within the workplace. • Explain the identification and control of workplace mental ill-health with reference to legal duties and other standards. • Explain the scope, effects and causes of work-related violence/aggression. • Explain the identification and control of work-related violence/aggression with reference to legal duties.
<p>Element IB9: Musculoskeletal risks and controls</p>	<ul style="list-style-type: none"> • Outline types, causes and relevant workplace examples of injuries and ill-health conditions associated with repetitive physical activities, manual handling and poor posture. • Explain the assessment and control of risks from repetitive activities, manual handling and poor posture.
<p>Element IB10: Work environment risks and controls</p>	<ul style="list-style-type: none"> • Explain the need for, and factors involved in, the provision and maintenance of temperature in both moderate and extreme thermal environments. • Explain the need for suitable and sufficient lighting in the workplace, units of measurement of light and the assessment of lighting levels in the workplace. • Explain the need for welfare facilities and arrangements in fixed and temporary workplaces. • Explain the requirements and provision for first aid in the workplace.



Unit IC: Workplace and work equipment safety

Unit Element Name	Learning Outcomes
<p>Element IC1: Workplace welfare requirements and specific workplace issues</p>	<ul style="list-style-type: none"> • Explain the need for, and factors involved in, the provision and maintenance of a safe working environment. • Explain the hazards, risks and control measures associated with work in confined spaces. • Outline the main issues associated with maintaining structural safety of workplaces. • Explain the hazards, risks, and controls when working at height. • Explain the hazards, risks and controls for lone working.
<p>Element IC2: Fire and explosion</p>	<ul style="list-style-type: none"> • Outline the properties of flammable and explosive materials and the mechanisms by which they ignite. • Outline the behaviour of structural materials, buildings and building contents in a fire. • Outline the main principles and practices of prevention and protection against fire and explosion.
<p>Element IC3: Workplace Fire Risk Assessment</p>	<ul style="list-style-type: none"> • Explain the processes involved in the identification of hazards and the assessment of risk from fire. • Describe common fire detection and alarm systems and procedures. • Describe the factors to be considered when selecting fixed and portable fire-fighting equipment for the various types of fire. • Outline the factors to be considered in providing and maintaining the means of escape. • Explain the purpose of, and essential requirements for, emergency evacuation procedures.



<p>Element IC4: The storage, handling and processing of dangerous substances</p>	<ul style="list-style-type: none"> • Outline the main physical and chemical characteristics of industrial chemical processes. • Outline the main principles of the safe storage, handling and transport of dangerous substances. • Outline the main principles of the design and use of electrical systems and equipment in adverse or hazardous environments. • Explain the need for emergency planning, the typical organisational arrangements needed for emergencies and relevant regulatory requirements.
<p>Element IC5: Work equipment</p>	<ul style="list-style-type: none"> • Outline the criteria for the selection of suitable work equipment for particular tasks and processes to eliminate or reduce risks. • Explain how risks to health and safety arising from the use of work equipment are controlled. • Explain safe working procedures for the maintenance, inspection and testing of work equipment according to the risks posed. • Explain the role of competence, training, information and supervision in the control of risks arising from the installation, operation, maintenance and use of work equipment. • Outline the maintenance and prevention strategies when working with pressure systems.
<p>Element IC6: Workplace machinery</p>	<ul style="list-style-type: none"> • Outline the principles of safety integration and the considerations required in a general workplace machinery risk assessment. • Outline the principal generic mechanical and non-mechanical hazards of general workplace machinery. • Outline the main types of protective devices found on general workplace machinery. • Explain the principles of control associated with the maintenance of general workplace machinery. • Explain the key safety characteristics of general workplace machinery control systems.



<p>Element IC7: Mobile, lifting, access and work at height equipment</p>	<ul style="list-style-type: none"> • Outline the main hazards and control measures associated with mobile work equipment. • Outline the main hazards and control measures associated with lifting equipment. • Outline the main hazards and control measures associated with access equipment and equipment for working at height.
<p>Element IC8: Electrical safety</p>	<ul style="list-style-type: none"> • Outline the basic concepts of electricity. • Outline the hazards of electricity and static electricity. • Outline the issues relevant to the installation, use, inspection and maintenance of electrical systems. • Outline the main principles for safe working in the vicinity of high voltage systems. • Outline the main hazards, risks and controls associated with the use of portable electrical equipment.
<p>Element IC9: Construction and works of a temporary nature – hazards and controls</p>	<ul style="list-style-type: none"> • Outline the scope and nature of construction activities. • Explain the scope and application of the Construction (Design and Management) Regulations 2015 and associated guidance. • Explain the appropriate site control measures that should be adopted to protect employees and others during construction work. • Outline the hazards and control measures associated with working at height from fixed work or temporary platforms. • Explain the hazards and control measures, associated with demolition work. • Explain the hazards and control measures associated with excavation work.
<p>Element IC10: Workplace transport and managing work-related road risk</p>	<ul style="list-style-type: none"> • Outline the factors to be considered in a workplace transport risk assessment and the controls available for managing workplace transport risk. • Outline the role and purpose of a work-related road risk policy and the key components of a work-related road traffic safety management system.



Unit DNI: Application of health and safety management in the workplace

Area	Description
Aim of the DNI Assignment	<ul style="list-style-type: none"> Students demonstrate their competency and understanding gained from the study of Units A, B and C, based on a practical workplace situation.
Materials Covered	<ul style="list-style-type: none"> The assignment unit DNI contains no additional content.
Assignment Brief	<ul style="list-style-type: none"> Students are required to perform a review of the existing systems for managing health and safety in a workplace. Students will then provide their recommendations to justify proportionate recommendations in an aim to improve performance.
Assignment Location	<ul style="list-style-type: none"> The assignment must be carried out in the student's workplace. Where no access to a suitable workplace is available, the accredited course provider should be consulted to assist in this regard. Both the student and the employer should be made aware the report of Unit DNI is for educational purposes only.
Assignment Submission	<ul style="list-style-type: none"> Students can submit their DNI assignment report in the months of February, May, August and November. The assignment is submitted directly to NEBOSH electronically for marking.