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# **Guide** to the NEBOSH National General Certificate in Occupational Health and Safety



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# Guide to the NEBOSH National General Certificate in Occupational Health and Safety (November 2014 specification)

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## **1. Introduction**

The National General Certificate in Occupational Health and Safety is the most widely held health and safety qualification of its kind in the UK with over 170,000 people having gained the qualification since it was launched in 1989.

It is suitable for managers, supervisors and staff from all types of organisations making day-to-day decisions at work who need a broad understanding of health and safety issues and to be able to manage risks effectively. Many people take the NEBOSH National General Certificate as a first step in a career in health and safety. It provides a valuable overview, and is a sound basis for further professional study.

### **1.1 Benefits for employers**

Accidents and work-related ill-health affect all types of workplaces and occupations. In the year 2013/14, there were 133 workers were killed at work and almost 78000 reportable injuries. There were 1.2 million employees suffering from an illness they believed was caused or made worse by their current or past work, almost half of these being new cases. Around 20000 individuals annually are forced to give up work because of occupational injury or ill-health. An estimated 28 million working days were lost in 2013/14 as a result of workplace accidents and ill-health.

In addition to the direct costs of sick pay and absence, employers can find themselves dealing with criminal prosecution (674 prosecutions in the UK during 2013/14), claims for compensation, adverse publicity and harm to both business reputation and profitability. The estimated annual cost of occupational injury and illness in 2013/14 is £14.2 billion to the British economy (*Statistics supplied by the Health and Safety Executive: <http://www.hse.gov.uk/statistics/>*).

The vast majority of occupational injuries, incidents and ill-health are avoidable by good health and safety management. By saving money, improving productivity and raising workforce morale, effective health and safety management should be recognised as an essential element of a successful management strategy.

Many larger organisations choose the NEBOSH National General Certificate as a key part of their supervisors' or management development programme. By ensuring that line managers have a sound understanding of the principles of risk management they build an effective safety culture in the company. Smaller organisations, operating in lower risk environments, often choose the NEBOSH National General Certificate as the appropriate qualification for the manager taking the lead on health and safety issues.

This course can be delivered within an organisation, or employees can attend accredited training courses run throughout the UK by our network of accredited course providers. NEBOSH accredited course providers offer a variety of flexible course formats, so training can be arranged according to employer needs.

## 1.2 Professional membership

Holders of NEBOSH National General Certificate in Occupational Health and Safety are entitled to Associate Membership (AIOSH) of the Institution of Occupational Safety and Health (IOSH). The qualification also meets the academic requirements for Technical membership (Tech IOSH) of the Institute of Occupational Safety and Health (IOSH – [www.iosh.co.uk](http://www.iosh.co.uk)) and Associate membership (AIIRSM) of the International Institute of Risk and Safety Management (IIRSM – [www.iirsm.org](http://www.iirsm.org)).

## 1.3 Qualification level and UK accreditation

The NEBOSH National General Certificate is accredited and credit rated by the Scottish Qualifications Authority (SQA - [www.sqa.org.uk](http://www.sqa.org.uk)) for delivery across the UK. It is rated within the Scottish Credit and Qualifications Framework (SCQF - [www.scqf.org.uk](http://www.scqf.org.uk)) at SCQF Level 6 with 15 SCQF credit points.

For users in England, Wales and Northern Ireland, this is comparable to a Vocationally-Related Qualification (VRQ) at Level 3 within the National Qualifications Framework (NQF) and Qualifications and Credit Framework (QCF), or A-Level standard.

For further information please refer to the “*Qualifications can cross boundaries*” comparison chart issued by the UK regulators, available from the SQA website ([www.sqa.org.uk](http://www.sqa.org.uk)).

## 1.4 Key topics covered

- Legal requirements for health and safety at work
- Implementation of health and safety management systems
- Identification of workplace hazards
- Methods of hazard control
- Practical application of knowledge and understanding

## 1.5 Course tuition and private study time requirements

<b>Unit NGC1:</b> 36 hours tuition and 23 hours private study	<b>Total: 59 hours</b>
<b>Unit GC2:</b> 42 hours tuition and 26 hours private study	<b>Total: 68 hours</b>
<b>Unit GC3:</b> 2 hours tuition and 4 hours private study	<b>Total: 6 hours</b>

A programme of study therefore needs to be based around a minimum of **80 taught hours** and approximately **53 hours of private study** for an overall total of **133 Hours**.

A full-time block release course would be expected to last for a minimum of two weeks (ten working days) and a part-time day release course would be spread over at least ten weeks. For candidates studying by open or distance learning, the tuition hours should be added to the recommended private study hours to give the minimum number of hours that this mode of study will require.

Quoted hours *do not* include assessment time, ie, sitting written examinations or the practical application unit (see 1.5).

## **1.6 Entry requirements**

There are no specific barriers, in terms of academic qualifications, skills or experience to entry to the NEBOSH National General Certificate programme. However, it should be noted that currently the assessments are offered, and must be answered, in English only. The qualification includes a requirement to write a short report based on the candidate's own workplace, which must also be in English. Candidates should discuss this with the accredited course provider before undertaking the qualification.

## **1.7 Minimum standard of English required for candidates**

The standard of English required by candidates studying for the NEBOSH National General Certificate must be such that they can both understand and articulate the concepts contained in the syllabus. It is important to stress that the onus is on accredited course providers to determine their candidates' standards of proficiency in English.

NEBOSH recommends to accredited course providers that candidates undertaking this qualification should reach a minimum standard of English *equivalent* to an International English Language Testing System score of **6.0** or higher in IELTS tests in order to be accepted onto a National General Certificate programme.

For further information please see the latest version of the IELTS Handbook or consult the IELTS website: [http://www.ielts.org/institutions/test\\_format\\_and\\_results.aspx](http://www.ielts.org/institutions/test_format_and_results.aspx)

Candidates wishing to assess their own language expertise may consult the IELTS website for information on taking the test: <http://www.ielts.org/institutions/faqs.aspx>.

## **1.8 Languages**

All unit examinations and the practical assessment must be taken in English. Exemptions will not be allowed for Units GC2 and GC3 of the National General Certificate if these have been taken as part of the International General Certificate in a language other than English.

## **1.9 Legislation**

Each element within the syllabus refers to UK legislation and international standards and conventions. Course providers within the UK will be expected to teach candidates UK legislation and if being taught overseas ILO conventions and local legislation. Unit NGC1 examinations within the UK will refer to UK legislation. Where the syllabus refers to the legislative system of England and Wales, candidates may refer to the legislative systems and requirements that apply in Scotland or Northern Ireland, provided that these references are clearly indicated as such.

Unit GC2 is a common unit between the National and International General Certificate qualifications and the examinations will, therefore, contain no specific questions on legislation; however, candidates will be expected to apply relevant UK legislation OR international conventions/recommendations to the given scenario where appropriate to gain marks.

## **1.10 Legislative updates**

Relevant new legislation, conventions and recommendations will become examinable in detail six months after their date of introduction. However, candidates will be expected to be essentially up-to-date at the time of the examination and, whilst a detailed knowledge will not be expected, reference to new or impending legislation, conventions and recommendations, where relevant to an examination question, will be given credit.

Please note, NEBOSH will not ask questions related to legislation, conventions and recommendations that have been repealed, revoked or otherwise superseded.

**NB:** Accredited course providers are expected to ensure their course notes remain current with regard to new legislation, conventions and recommendations.

## **1.11 National Occupational Standards (NOS) and best practice**

The syllabus is mapped to the relevant National Occupational Standard (NOS):

- NOS for Health and Safety (Standalone units) published by Proskills Sector Skills Council.

The mapping of the syllabus units to each NOS can be found on pages 12-14.

## **1.12 Qualification type**

NEBOSH qualifications are categorised as 'Other' qualifications by SQA Accreditation in Scotland. These are categorised as Vocationally-Related Qualifications (VRQs) in England, Wales and Northern Ireland.

VRQs provide the knowledge and practical skills required for particular job roles through a structured study-based training programme, that combine the testing of knowledge and understanding in written examinations with practical application of learning in the workplace.

VRQs are a popular type of qualification because they are nationally recognised, flexible and offer routes for progression to employment or further study.

## **1.13 Qualification progression**

Unit NGC1 is common to:

- NEBOSH National General Certificate in Occupational Health and Safety
- NEBOSH National Certificate in Construction Health and Safety
- NEBOSH National Certificate in Fire Safety and Risk Management

This enables students seeking to develop specialist knowledge to combine units across these NEBOSH qualifications. NGC1 unit holders do not need to re-sit this examination providing it was successfully achieved within the five year completion period for each qualification. The five year period commences from the result declaration date for the first unit successfully completed for the relevant qualification.



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Units GC2 and GC3 are common to:

- NEBOSH National General Certificate in Occupational Health and Safety
- NEBOSH International General Certificate in Occupational Health and Safety

This, therefore, enables candidates to obtain both the National and International General Certificate qualifications by passing just four units ie, Units NGC1, GC2 and GC3 to form the National General Certificate and Unit IGC1 to complete the International General Certificate (Units GC2 and GC3 passed as part of the National General Certificate can be used as exemptions for the International General Certificate).

Candidates wishing to further develop their health and safety expertise may consider studying:

- NEBOSH National Diploma in Occupational Health and Safety.

This is designed to provide students with the expertise required to undertake a career as a health and safety practitioner and also provides a sound basis for progression to postgraduate study.

Candidates looking to use their expertise overseas may consider:

- NEBOSH International General Certificate in Occupational Health and Safety
- NEBOSH International Certificate in Construction Health and Safety
- NEBOSH International Certificate in Fire Safety and Risk Management
- NEBOSH International Technical Certificate in Oil and Gas Operational Safety
- NEBOSH International Diploma in Occupational Health and Safety.

These qualifications focus on international standards and management systems rather than UK legislation.

Further information regarding our qualification portfolio can be found on our website: [www.nebosh.org.uk/qualifications](http://www.nebosh.org.uk/qualifications)

### **1.14 Programmes offered by NEBOSH-accredited course providers**

Accredited course providers can be located using the 'Where to study' tab on our website: [www.nebosh.org.uk](http://www.nebosh.org.uk)

**NB:** Candidates are advised to check up-to-date information on course dates with accredited course providers directly.

### **1.15 Examination dates**

'Standard' examination dates for this qualification are available in March, June, September and December annually. Accredited course providers may request 'on-demand' examinations on a date of their choosing for this qualification.

### **1.16 Specification date**

The November 2014 specification for this qualification replaces the previous January 2013 specification for all examinations from (and including) 7 October 2015.

## **1.17 Syllabus development and review**

The syllabus has been developed by NEBOSH following extensive consultation with key stakeholders, notably accredited course providers, professional bodies, employers, standards setting organisations, enforcement bodies and subject experts. NEBOSH would like to take this opportunity to thank all those who participated in the development, piloting and implementation of this qualification.

## **1.18 Further information for candidates**

Further information for candidates including a qualification overview leaflet and an Examiners' report can be found via the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)).

## **1.19 Further information for accredited course providers**

Further information for accredited course providers including policies and procedures and guidance on the practical unit can be found in the accredited course providers' section of the NEBOSH website.

## **1.20 Transitional arrangements**

The November 2014 specification for this qualification has been replaced by the October 2018 specification. The following dates are applicable to all learners who are currently studying the November 2014 specification.

<b>29 February 2020</b>	Last date that <b>new learners*</b> can be registered to the 2014 specification
<b>from 1 March 2020</b>	2014 specification - registrations for <b>existing learners** only</b>
<b>31 March 2022</b>	2014 specification - last assessment date

\* A **new learner** is classed as a person who has not been registered for an assessment of the 2014 specification.

\*\* An **existing learner** is a person who has been registered for at least one unit of the 2014 specification (status must be studying, absent, Pass or Refer).

Further details can be found on the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)).

## **2. Qualification structure**

### **2.1 Unit assessment**

The National General Certificate in Occupational Health and Safety is divided into three units:

#### **Unit NGC1: Management of health and safety**

- Unit NGC1 is a taught unit, assessed by one two-hour written examination
- Each written examination consists of ten 'short-answer' questions (8 marks each) and one 'long-answer' question (20 marks)
- Each examination paper covers the whole NGC1 unit syllabus. All questions are compulsory
- Candidate scripts are marked by external examiners appointed by NEBOSH
- A sample examination paper can be found in Section 5

#### **Unit GC2: Controlling workplace hazards**

- Unit GC2 is a taught unit, assessed by one two-hour written examination
- Each written examination consists of ten 'short-answer' questions (8 marks each) and one 'long-answer' question (20 marks)
- Each examination paper covers the whole GC2 unit syllabus. All questions are compulsory
- Candidate scripts are marked by external examiners appointed by NEBOSH
- A sample examination paper can be found in Section 5.

#### **Unit GC3: Health and safety practical application**

- Unit GC3 is assessed by one practical assessment carried out in the candidate's own workplace
- This is held on a date set by the accredited course provider and must normally be taken within 10 working days of a written examination
- The practical examination is internally assessed by the accredited course provider and externally moderated by NEBOSH
- Guidance for candidates and accredited course providers is available in a separate document available on the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)).

NEBOSH applies best practise in relation to assessment setting and marking. NEBOSH uses external assessment for written examinations and assignments: scripts are sent to NEBOSH and undergo rigorous marking, checking and results determination processes to ensure accuracy and consistency.

For more information on the assessment feedback provided for this qualification, please visit the NEBOSH website: <https://www.nebosh.org.uk/faqs/how-can-i-gain-feedback-on-my-performance-to-assist-with-future/>

## 2.2 Unit exemptions

Exemptions for the following units are available:

- Unit NGC1: Management of health and safety
- Unit GC2: Controlling workplace hazards
- Unit GC3: Health and safety practical application

Exemptions are allowable for a set time period, usually 5-years. Candidates/accredited course providers must, therefore, refer to the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)) for an up-to-date list of applicable exemptions and the rules for use of the exemptions before applying for an exemption.

## 2.3 Achieving the qualification

Candidates will need to pass **all three units** within a **five year** period to achieve the qualification. The five year period commences from the result declaration date of the first successful unit.

Units which have a 'Pass' mark but are older than 5-years, will not be counted towards the overall qualification. Any such units will need to be retaken and a 'Pass' achieved in the unit/s before the qualification can be awarded.

## 2.4 Unit pass standard

The provisional pass mark for NGC1, and GC2 is 45%. More information on how provisional marks are set can be found in our FAQs: <https://www.nebosh.org.uk/faqs/how-does-nebosh-set-the-pass-mark-for-each-assessment/> . The pass standard for the practical application unit (GC3) is 60%.

## 2.5 Unit certificates

Candidates who are successful in an individual unit will be issued with a unit certificate, normally within 40 working days of the issue of the result notification. Units are not graded and the unit certificates will show a 'Pass' only.

## 2.6 Qualification grades

When candidates have been awarded a unit certificate for all three units (ie, have achieved a Pass in units NGC1, GC2 and GC3), the marks are added together and a final grade is awarded as follows:

<b>Pass</b>	150 - 179 marks
<b>Credit</b>	180 - 209 marks
<b>Distinction</b>	210 marks or more

## **2.7 Qualification parchment**

Once a candidate has achieved a Pass in all three units and the overall qualification grade awarded they are normally considered to have completed the qualification and an overall qualification parchment will be issued, within 40 working days of the result declaration date for the third successfully completed unit.

However, once the result of the third successfully completed unit has been issued the candidate has **20 working days** from the date of issue of that result to either:

- Inform NEBOSH in writing of their intention to re-sit a successful unit for the purposes of improving a grade\*
- Submit an Enquiry About Result (EAR) request (see Section 3.3).

\* In the event that the candidate does not re-sit the unit(s) as intended, on expiry of the units (five years from the declaration date of the first successful unit), a qualification parchment will automatically be issued showing the original declaration date.

## **2.8 Re-sitting unit/s**

If a candidate's performance in a unit is lower than a pass, candidates may re-sit just the unit in which they have been unsuccessful providing that they re-sit **within 5-years of the result declaration date for their first successful unit** (also see Section 2.3). Where a candidate has yet to achieve a successful unit of a qualification, the 5-year rule does not apply until a unit has been successfully achieved.

Candidates who wish to improve the mark from a unit they have successfully passed in order to improve their qualification grading to a credit or distinction, may do so providing that they re-sit the unit/s within the qualifying period (see section 2.3). The candidate must notify NEBOSH in writing if they wish to do this (see section 2.7). Any candidate who re-sits a successful unit, and does not surpass their original mark, eg, is referred in the paper, will keep the *original* mark awarded. Re-sit marks are not capped. There is no limit to the number of re-sits within this five year period.

Candidates who register for any unit of the National General Certificate whilst awaiting a result from a previous sitting of an examination for the same qualification may not seek a refund of the registration fee if they retrospectively claim exemption from any part of the qualification, subsequent to the issue of the awaited result.

## **3. Policies**

### **3.1 Requests for access arrangements/reasonable adjustments**

Access arrangements and reasonable adjustments are modifications which are approved in advance of an examination to allow attainment to be demonstrated by candidates with either a permanent or long-term disability or learning difficulty, or temporary disability, illness or indisposition.

Requests for access arrangements or reasonable adjustments must be made to NEBOSH by accredited course providers at least one month before the assessment.

For further details see the NEBOSH *“Policy and procedures for access arrangements, reasonable adjustments and special consideration”* available from the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)).

### **3.2 Requests for special consideration**

Special consideration is a procedure that may result in an adjustment to the marks of candidates who have not been able to demonstrate attainment because of temporary illness, injury, indisposition or an unforeseen incident at the time of the assessment.

Candidates who feel disadvantaged due to illness, distraction or any other reason during the assessment must report this to the invigilator (or the accredited course provider in the case of a practical examination) before leaving the examination room and request that their written statement, together with the invigilator’s comments on the statement, be sent by the accredited course provider to NEBOSH.

Requests for special consideration must be made to NEBOSH by the accredited course provider as soon as possible and no more than seven working days after the assessment.

For further details see the NEBOSH *“Policy and procedures for access arrangements, reasonable adjustments and special consideration”* available from the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)).

### **3.3 Enquiries about results and appeals**

NEBOSH applies detailed and thorough procedures to moderate and check assessment results before they are issued. It thereby ensures that the declared results are a fair and equitable reflection of the standard of performance by candidates.

There are, however, procedures for candidates or accredited course providers to enquire about results that do not meet their reasonable expectations. An ‘enquiry about result’ (EAR) must be made in writing within one month of the date of issue of the result to which it relates.

For details see the NEBOSH *“Enquiries About Result (EARs) and appeals policy and procedures”* document available from the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)).

### **3.4 Malpractice**

Malpractice is defined as any deliberate activity, neglect, default or other practice by candidates and/or accredited course providers that compromise the integrity of the assessment process, and/or the validity of certificates. Malpractice may include a range of issues from collusion or use of unauthorised material by candidates, to the failure to maintain appropriate records or systems by accredited course providers, to the deliberate falsification of records in order to claim certificates. Failure by an accredited course provider to deal with identified issues may in itself constitute malpractice.

For further details see the NEBOSH *“Malpractice policy and procedures”* document available from the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)).

## **4. Notes for tutors**

### **4.1 Tutor references**

Tutor references are given at the end of each unit and are split between statutory provisions and guidance documents. These references are given to aid tutors with the teaching of the syllabus content; they are not an exhaustive list and tutors can use other references to those quoted in the syllabus.

### **4.2 Teaching of units**

Although the syllabus sets out the Units and Elements in a specific order, tutors can teach the Units and Elements in any order they feel is appropriate. Course providers will need to reflect this in the timetables which are submitted for approval as part of the accreditation/re-accreditation process.

### **4.3 Conflict of interest**

Accredited Course Provider staff including Head of Accredited Course Providers, Tutors, Administrators, Examinations Officers and Invigilators must declare in writing to NEBOSH any employment and/or familial, spousal or other close personal relationship with any examination or assessment candidate. Further information can be found in the '*Instructions for Conducting Examinations*' document.

### **4.4 Minimum standard of English required for tutors**

Tutors who are based overseas and wish to deliver the NEBOSH National General Certificate in Occupational Health and Safety must have a good standard of English. They must be able to articulate the concepts contained in the syllabus. The accredited course provider must provide evidence of the tutor's standard of English when submitting the tutor's CV for approval.

NEBOSH's requirement is for tutors delivering this qualification to have reached a minimum standard of English *equivalent* to an International English Language Testing System score of **7.0** or higher in IELTS tests.



## **5. Syllabus - NEBOSH National General Certificate in Occupational Health and Safety (November 2014 specification)**

### **Structure**

The qualification is divided into three units. Unit NGC1 is further divided into five elements and Unit GC2 into eight elements.

The matrix below indicates how the syllabus elements map to the relevant National Occupational Standards (See also section 1.11):

- National Occupational Standards (NOS) for Health and Safety (Standalone units) published by Proskills Sector Skills Council. The NOS can be downloaded from <https://www.ukstandards.org.uk/Pages/index.aspx>.

### **Unit NGC1: Management of health and safety**

<b>Element Number</b>	<b>Element Title</b>	<b>Recommended hours</b>	<b>Relevant Proskills units and elements</b>	<b>Page</b>
1	Foundations in health and safety	7	PROHSS1-3, 5-6	15
2	Health and safety management systems - Plan	3	PROHSS2-3, 5	20
3	Health and safety management systems - Do	17	PROHSS1-3, 6	22
4	Health and safety management systems - Check	5	PROHSS1-3, 8	25
5	Health and safety management systems - Act	4	PROHSS1-3, 8	29
	<b>Minimum unit tuition time</b>	<b>36</b>		
	<b>Recommended private study time</b>	<b>23</b>		

## **Unit GC2: Controlling workplace hazards**

<b>Element Number</b>	<b>Element Title</b>	<b>Recommended hours</b>	<b>Relevant Proskills units and elements</b>	<b>Page</b>
1	Workplace hazards and risk control	8	PROHSS1-3, 6, 8-9	32
2	Transport hazards and risk control	4	PROHSS1-3, 6, 8-9	36
3	Musculoskeletal hazards and risk control	6	PROHSS1-3, 6, 8-9	39
4	Work equipment hazards and risk control	6	PROHSS1-3, 6, 8-9	42
5	Electrical safety	3	PROHSS1-3, 6, 8-9	45
6	Fire safety	6	PROHSS1-3, 6, 8-9	47
7	Chemical and biological health hazards and risk control	6	PROHSS1-3, 6, 8-9	50
8	Physical and psychological health hazards and risk control	3	PROHSS1-3, 6, 8-9	54
<b>Minimum unit tuition time</b>		<b>42</b>		
<b>Recommended private study time</b>		<b>26</b>		

## **Unit GC3: Health and safety practical application**

<b>Element Number</b>	<b>Element Title</b>	<b>Recommended hours</b>	<b>Relevant Proskills units and elements</b>	<b>Page</b>
1	Health and safety practical application	2	PROHSS1-3, 5-6, 8-9	57
	<b>Minimum unit tuition time</b>	<b>2</b>		
	<b>Recommended private study time</b>	<b>4</b>		
	<b><i>Minimum total tuition time</i></b>	<b>80</b>		
	<b><i>Recommended total private study time</i></b>	<b>53</b>		
	<b><i>Total overall hours</i></b>	<b>133</b>		

## **5.1 Unit NGC1: Management of health and safety**

### **Element 1: Foundations in health and safety**

#### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 1.1 Outline the scope and nature of occupational health and safety
- 1.2 Explain the moral and financial reasons for promoting good standards of health and safety in the workplace
- 1.3 Explain the legal framework for the regulation of health and safety including sources and types of law
- 1.4 Explain the scope, duties and offences of employers, managers, employees and others under the Health and Safety at Work etc. Act 1974
- 1.5 Explain the scope, duties and offences of employers, managers, employees and others under the Management of Health and Safety at Work Regulations
- 1.6 Outline the legal and organisational health and safety roles and responsibilities of clients and their contractors
- 1.7 Outline the principles of assessing and managing contractors.

#### **Content**

##### **1.1 The scope and nature of occupational health and safety**

- The multi-disciplinary nature of health and safety; the barriers to good standards of health and safety (complexity, competing and conflicting demands, behavioural issues)
- Meanings and distinctions between:
  - health, safety and welfare.

##### **1.2 The moral and financial reasons for promoting good standards of health and safety**

- The size of the health and safety 'problem' in terms of the numbers of work-related fatalities and injuries and incidence of ill-health
- Societal expectations of good standards of health and safety
- The business case for health and safety: insured and uninsured costs of accidents and ill-health; employers' liability insurance.

##### **1.3 The legal framework for the regulation of health and safety including sources and types of law**

- The influence and role of the European Union in harmonising health and safety standards

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- Meaning of Criminal law
  - offence against the state
  - prosecution to establish guilt
  - burden of proof with reference to S40 Health and Safety at Work etc. Act 1974 (onus of proving limits of what is practicable, etc)
- Meaning of Statute law
  - Acts of Parliament, Health and Safety at Work etc. Act 1974, health and safety regulations, approved codes of practice, official guidance: their relationship and status
  - absolute and qualified duties (practicable and reasonably practicable)
  - relevance to criminal and civil law
- The structure and role of criminal courts and the penalties they can impose
- Criminal law liabilities
  - role, functions and powers of enforcement authorities, the courts and other associated bodies: Health and Safety Executive (HSE)/HSE Northern Ireland (HSENI); local authority; fire and rescue service; Procurators Fiscal in Scotland (including homicide/corporate homicide); Office of Rail Regulation (ORR); Crown Prosecution Service (CPS) (for manslaughter / corporate manslaughter); insurance companies; Environment Agency/Scottish Environment Protection Agency/Northern Ireland Environment Agency
  - Fees for Intervention (FFI) with reference to the Health and Safety (Fees) Regulations 2012
  - powers of inspectors under the Health and Safety at Work etc. Act 1974:
    - enforcement notices (improvement, prohibition): conditions for serving; effects; procedures; rights and effects of appeal; penalties for failure to comply
    - simple cautions
  - prosecution: summary and indictable (solemn in Scotland) offences
  - the Corporate Manslaughter and Corporate Homicide Act 2007: the offence and available penalties
  - defences
- Meaning of Common law
  - precedents and case law
  - the importance of common law
  - relevance to criminal and civil law
- Meaning of Civil law
  - from the private individual seeking compensation
  - burden of proof
  - statute-barred
- The structure and role of civil courts and the different types of remedy they can impose
- The role of employment tribunals
- Civil law liabilities
  - civil wrong (tort/delict)
  - tort/delict of negligence
  - duty of care (neighbour principle)

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- tests and defences for tort/delict of negligence: duty owed / duty breached / injury or damage sustained
- contributory negligence
- vicarious liability
- the employer's civil common law duty to provide a safe place of work, safe plant and equipment, safe systems of work, training and supervision, and competent employees
- breach of statutory duty in relation to new and expectant mothers.

**1.4 The scope, duties and offences of employers, managers, employees and others under the Health and Safety at Work etc. Act 1974**

- Scope: covers all workplaces, work activities, employed and self-employed with reference to:
  - general duties of employers to their employees
  - the health, safety and welfare of employees and the health and safety of those affected by work activities (eg client, visitors, contractors, the public)
  - the provision and maintenance of safe plant and systems of work
  - safe use, handling, storage and transport of articles and substances
  - the provision of information, instruction, training and supervision
  - safe place of work
  - safe access and egress
  - adequate welfare facilities
  - legal duty to prepare a safety policy
  - appointment of safety representatives
  - duty to consult
- General duties of employers and self-employed to persons other than their employees
- General duties of persons concerned with premises to persons other than their employees
- General duties of manufacturers etc as regards articles and substances for use at work
- General duties of employees at work:
  - to take reasonable care for the health and safety of themselves and of other persons who may be affected by their acts or omissions at work
  - to co-operate with employer
- General duties of all persons
  - duty not to interfere with or misuse things provided for health and safety at work
- Duty not to charge employees for things done or provided for health and safety at work
- Offences due to fault of other person
- Offences by bodies corporate
  - consent or connivance or neglect on the part of, any director, manager, secretary or other similar officer of the body corporate.

**1.5 The scope, duties and offences of employers, managers, employees and others under the Management of Health and Safety at Work Regulations**

- Scope
- Risk assessment
- Principles of prevention to be applied
- Health and safety arrangements
- Health and safety assistance
- Procedures for serious and imminent danger and for danger areas
- Information for employees
- Co-operation and co-ordination where two or more employers share a workplace
- Ensuring employees are provided with adequate health and safety training
- Employees' duties
- Employee to work in accordance with any training
- Employee to inform employer of any work situation which represents a serious and immediate danger to health and safety; and any shortcoming in the employer's protection arrangements for health and safety
- Temporary workers
- Risk assessment in respect of new or expectant mothers
- Protection of young persons.

**1.6 The legal and organisational health and safety roles and responsibilities of clients and their contractors**

- Relationship between client and contractor
- Duties each has to the other and to the other's employees
- Effective planning and co-ordination of contracted work, including interaction with existing staff
- Management controls that must be applied for significant construction projects:
  - duties and responsibilities of the Client, Principal Designer, Principal Contractor, Contractors, Workers and Domestic Clients
- HSE notification, health and safety plan, health and safety file

**1.7 The principles of assessing and managing contractors (links to 1.4)**

- Scale of contractor use
- Pre-selection and management of contractors
- Contractor responsibilities.

***Recommended tuition time not less than 7 hours***

## **Element 2: Health and safety management systems – Plan**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 2.1 Outline the key elements of a health and safety management system
- 2.2 Explain the purpose and importance of setting policy for health and safety
- 2.3 Describe the key features and appropriate content of an effective health and safety policy.

### **Content**

#### **2.1 Key elements of a health and safety management system**

- The HSE's Managing for health and safety (HSG65)
  - Plan
  - Do
  - Check
  - Act
- ISO45001:2018: Occupational health and safety management systems (H&SMS)
  - context of the organisation (H&SMS framework)
  - leadership and worker participation (H&SMS framework)
  - planning (Plan)
  - support (Do)
  - operation (Do)
  - performance evaluation (Check)
  - improvement (Act).

#### **2.2 Purpose and importance of setting policy for health and safety**

- The role of the health and safety policy in decision-making and the differing needs of individual organisations
- Legal duties
  - duty to prepare a safety policy (linked to 1.4)
  - when to record in writing.



### **2.3 Key features and appropriate content of an effective health and safety policy**

- Stating the overall aims of the organisation in terms of health and safety performance :
  - general statement of intent
  - setting overall objectives and quantifiable targets (specific, measurable, achievable, reasonable, timebound SMART principles)
  - basic concept of benchmarking
  - views of interested parties
  - technological options
  - financial, operational and business requirements
  - signatory to statement
- Defining the health and safety roles and responsibilities of individuals within the organisation
  - organising for health and safety: allocation of responsibilities; lines of communication and feedback loops; the role of line managers in implementing and influencing the health and safety policy and monitoring its effectiveness
- Specifying the arrangements for achieving general and specific aims:
  - health and safety arrangements: the importance of specifying the organisation's arrangements for planning and organising, controlling hazards, consultation, communication and monitoring compliance with, and assessing the effectiveness of, the arrangements to implement the health and safety policy
- Circumstances that may lead to a need to review the health and safety policy in order to maintain currency and effectiveness (eg, technological, organisational or legal changes).

***Recommended tuition time not less than 3 hours***

## **Element 3: Health and safety management systems - Do**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 3.1 Outline the organisational health and safety roles and responsibilities of employers, directors, managers and supervisors
- 3.2 Explain the concept of health and safety culture and its significance in the management of health and safety in an organisation
- 3.3 Outline the human factors which influence behaviour at work in a way that can affect health and safety
- 3.4 Explain how health and safety behaviour at work can be improved
- 3.5 Explain the principles and practice of risk assessment
- 3.6 Explain the general principles of prevention
- 3.7 Identify the key sources of health and safety information
- 3.8 Explain what factors should be considered when developing and implementing a safe system of work for general activities
- 3.9 Explain the role and function of a permit-to-work system
- 3.10 Outline the need for emergency procedures and the arrangements for contacting emergency services
- 3.11 Outline the requirements for, and effective provision of, first aid in the workplace.

### **Content**

- 3.1 Organisational health and safety roles and responsibilities of employers, directors, managers and supervisors**
  - Organisational roles of directors / managers / supervisors
  - Senior management demonstrating commitment by:
    - ensuring availability of resources so the occupational health and safety management system is established, implemented and maintained
    - defining roles and responsibilities
    - appointing member of senior management with specific responsibility for health and safety
    - appointing one or more competent persons and adequate resources to provide assistance in meeting the organisation's health and safety obligations including specialist help where applicable (link 1.5)
    - engagement and management of contractors (link 1.6)
    - role in reviewing health and safety performance.

### **3.2 Concept of health and safety culture and its significance in the management of health and safety in an organisation**

- Meaning and extent of the term 'health and safety culture'
- Relationship between health and safety culture and health and safety performance
- Indicators which could be used to assess the effectiveness of an organisation's health and safety culture:
  - tangible outputs or indicators of an organisation's health and safety culture (eg accidents, absenteeism, sickness rates, staff turnover, level of compliance with health and safety rules and procedures, complaints about working conditions)
- Influence of peers.

### **3.3 Human factors which influence behaviour at work**

- Organisational factors:
  - eg culture, leadership, resources, work patterns, communications
- Job factors:
  - eg task, workload, environment, display and controls, procedures
- Individual factors:
  - eg competence, skills, personality, attitude and risk perception
- Link between individual, job and organisational factors.

### **3.4 How health and safety behaviour at work can be improved**

- Securing commitment of management
- Promoting health and safety standards by leadership and example and appropriate use of disciplinary procedures
- Competent personnel with relevant knowledge, skills and work experience
- Identifying and keeping up to date with legal requirements
- Effective communication within the organisation:
  - merits and limitations of different methods of communication (verbal, written and graphic)
  - use and effectiveness of notice boards and health and safety media such as films, digital media, company intranet, posters, toolbox talks, memos, employee handbooks
  - co-operation and consultation with the workforce and contractors where applicable (roles and benefits of employee participation, safety committees and employee feedback)
- Duties to consult; appointment, functions and entitlements of employee representatives (trade union-appointed and elected); safety committees (legal requirement, typical constitution, requirements for / ways to promote effectiveness)
- Training:
  - the effect of training on human reliability

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- opportunities and need for training provision (induction and key health and safety topics to be covered, job change, process change, introduction of new legislation, introduction of new technology).

### **3.5 Principles and practice of risk assessment**

- With reference to legal requirements (Element 1)
- Meaning of hazard and risk and risk assessment:
  - hazard: 'something with the potential to cause harm (this can include articles, substances, plant or machines, methods of work, the working environment and other aspects of work organisation)'
  - risk: 'the likelihood of potential harm from that hazard being realised'
  - risk assessment: 'identifying preventive and protective measures by evaluating the risk(s) arising from a hazard(s), taking into account the adequacy of any existing controls, and deciding whether or not the risk(s) is acceptable'
- Objectives of risk assessment; prevention of workplace accidents
- Risk assessors:
  - composition of risk assessment team
  - competence
- Criteria for a 'suitable and sufficient' risk assessment
- Identification of hazards
  - sources and form of harm; task analysis, legislation, manufacturers' information, incident data
- Identifying population at risk:
  - employees, operators, maintenance staff, cleaners, contractors, visitors, public, etc
- Evaluating risk and adequacy of current controls:
  - likelihood of harm and probable severity
  - risk rating
  - apply the general hierarchy of control with reference to ISO45001:2018, requirement 8.1.2 (links with 3.6)
  - application based on prioritisation of risk
  - use of guidance; sources and examples of legislation
  - applying controls to specified hazards
  - residual risk; acceptable / tolerable risk levels
  - distinction between priorities and timescales
- Recording significant findings:
  - format; information to be recorded
- Reviewing: reasons for review (eg incidents, process/equipment/staff/legislative changes; passage of time)
- Special case applications to young persons, expectant and nursing mothers also consideration of disabled workers and lone workers.

### **3.6 General principles of prevention**

- General principles of prevention with reference to Regulation 4 and Schedule 1 of the Management of Health and Safety at Work Regulations 1999:
  - avoiding risks
  - evaluating the risks which cannot be avoided
  - combating the risk at source
  - adapting the work to the individual especially with regards to design of workplace, the choice of work equipment, and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and work at a predetermined work-rate and to reducing their effect on health;
  - adapting to technical progress
  - replacing the dangerous by the non-dangerous or the less dangerous
  - developing an overall coherent prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment;
  - giving collective protective measures priority over individual protective measures; and
  - giving appropriate instructions to employees.

### **3.7 Sources of health and safety information**

- Internal to the organisation (eg, accident/ill health/absence records, inspection, audit and investigation reports, maintenance records)
- External to the organisation (eg, manufacturers' data, legislation, EU (European Union) HSE (Health and Safety Executive) and its publications, trade associations; International, European and British Standards, ILO (International Labour Organisation) and other authoritative texts, IT sources.

### **3.8 Factors that should be considered when developing and implementing a safe system of work for general work activities**

- Employer's duty to provide safe systems of work
- Role of competent persons in the development of safe systems
- Importance of employee involvement in the development of safe systems
- Importance and relevance of written procedures
- The distinction between technical, procedural and behavioural controls
- Development of a safe system of work
- Analysing tasks, identifying hazards and assessing risks
- Introducing controls and formulating procedures
- Instruction and training in the operation of the system
- Monitoring the system
- Definition of and specific examples of safe systems of work for:
  - confined spaces
  - lone working (including travelling away from the employee's usual place of work)

**3.9 Role and function of a permit-to-work system**

- Meaning of a permit-to-work system
- Role and function
- Operation and application of a permit-to-work system
- Circumstances in which a permit to work system may be appropriate, with reference to: hot work, work on non-live electrical systems, machinery maintenance, confined spaces, work at height.

**3.10 Emergency procedures and the arrangements for contacting emergency services**

- Importance of developing emergency procedures
- What needs to be included in an emergency procedure
  - why an emergency procedure is required
  - size and nature of potential emergencies and the consequences if they occur
  - procedures for raising the alarm
  - action of the employees on site
  - dealing with the media
  - arrangements for contacting emergency and rescue services
- Importance of training and testing emergency procedures.

**3.11 Requirements for, and effective provision of, first-aid in the workplace**

- First-aid requirements
- Role, training and number of first-aiders and appointed persons
- Requirements for first-aid boxes
- Coverage in relation to shift work and geographical location.

***Recommended tuition time not less than 17 hours***

## **Element 4: Health and safety management systems – Check**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 4.1 Outline the principles, purpose and role of active and reactive monitoring
- 4.2 Explain the purpose of, and procedures for, investigating incidents (accidents, cases of work-related ill-health and other occurrences)
- 4.3 Describe the legal and organisational requirements for recording and reporting incidents.

### **Content**

#### **4.1 Active and reactive monitoring**

- Active monitoring procedures including the monitoring of performance standards and the systematic inspection of plant and premises
- Role of safety inspections, sampling, surveys and tours and their roles within a monitoring regime
- Factors governing frequency and type of inspection; competence and objectivity of inspector; use of checklists; allocation of responsibilities and priorities for action
- Effective report writing: style, structure, content, emphasis, persuasiveness etc
- Reactive monitoring measures including data on accidents, dangerous occurrences, near misses, ill-health, complaints by workforce and enforcement action.

#### **4.2 Investigating incidents**

- Function of incident investigation as a reactive monitoring measure
- Distinction between different types of incident: ill-health, injury accident, dangerous occurrence, near-miss, damage-only; typical ratios of incident outcomes and their relevance in terms of the proportion of non-injury events; utility and limitations of accident ratios in accident prevention (Bird's triangle)
- Basic incident investigation procedures
- Interviews, plans, photographs, relevant records, checklists
- Immediate causes (unsafe acts and conditions) and root causes (management systems failures)
- Remedial actions.

#### **4.3 Recording and reporting incidents**

- Typical examples of major injuries, diseases and dangerous occurrences
- Statutory requirements for recording and reporting incidents
- Additional organisational requirements for recording and reporting incidents
- Accident Book
- The requirement for recording and procedure for reporting fatalities, specified injuries, 'over 3 or 7-day injuries', disease and dangerous occurrences
- Internal systems for collecting, analysing and communicating data
- Collection of relevant information and its availability in a civil claim
- Lessons learnt.

***Recommended tuition time not less than 5 hours***



## **Element 5: Health and safety management systems – Act**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 5.1 Explain the purpose of, and procedures, for health and safety auditing
- 5.2 Explain the purpose of, and procedures for, regular reviews of health and safety performance.

### **Content**

#### **5.1 Health and safety auditing**

- Meaning of the term 'health and safety audit'
- Scope and purpose of auditing health and safety management systems; distinction between audits and inspections
- Pre-audit preparations, information gathering, notifications and interviews, selection of staff, competence of auditors, time, resources
- Responsibility for audits
- Advantages and disadvantages of external and internal audits
- Actions taken following audit (eg, correcting nonconformities).

#### **5.2 Review of health and safety performance**

- Purpose of reviewing health and safety performance
- Who should take part in review
- Review at planned intervals
- Assessing opportunities for improvement and the need for change
- Review to consider:
  - evaluations of compliance with applicable legal and organisational requirements
  - accident and incident data, corrective and preventive actions
  - inspections, surveys, tours and sampling
  - absences and sickness
  - quality assurance reports
  - audits
  - monitoring data/records/reports
  - external communications and complaints
  - results of participation and consultation
  - objectives met
  - actions from previous management reviews
  - legal / good practice developments
- Maintenance of records of management review

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- Reporting on health and safety performance
- Feeding into action and development plans as part of continuous improvement
- Role of Boards, Chief Executive/Managing Director and Senior Managers.

***Recommended tuition time not less than 4 hours***

## Unit NGC1: Tutor References

### Statutory instruments

<b>Legislation</b>	<b>Country</b>	<b>Element/s</b>
Confined Space Regulations 1997	UK / Great Britain	3
Construction (Design and Management) Regulations 2015	UK / Great Britain	1
Corporate Manslaughter and Corporate Homicide Act 2007	UK / Great Britain	1, 3
Deregulation Act 2015 (Section 1)	UK / Great Britain	1
Employers' Health and Safety Policy Statements (Exceptions) Regulations 1975	UK / Great Britain	2
Employers' Liability (Compulsory Insurance) Regulations 1998 (as amended)	UK / Great Britain	1
Enterprise and Regulatory Reform Act 2013 (Section 69)	UK / Great Britain	1
Health and Safety at Work etc Act 1974	UK / Great Britain	1, 2, 3
Health and Safety at Work etc Act 1974 (Civil Liability) (Exceptions) Regulations 2013	UK / Great Britain	1
Health and Safety at Work etc Act 1974 (General Duties of Self-Employed Persons) (Prescribed Undertakings) Regulations 2015	UK / Great Britain	1
Health and Safety (Consultation with Employees) Regulations 1996	UK / Great Britain	3
Health and Safety (Fees) Regulations 2012	UK / Great Britain	1
Health and Safety (First Aid) Regulations 1981 (as amended)	UK / Great Britain	3
Health and Safety Information for Employees Regulations 1989 (as amended)	UK / Great Britain	3
Interpretation Act 1978	UK / Great Britain	1
Legal Aid, Sentencing and Punishment of Offenders Act 2012	UK / Great Britain	1
Legal Aid, Sentencing and Punishment of Offenders Act 2012 (Fines on Summary Conviction) Regulations 2015	UK / Great Britain	1
Management of Health and Safety at Work Regulations 1999 (as amended)	UK / Great Britain	1 - 5
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013	UK / Great Britain	4
Safety Representatives and Safety Committee Regulations 1977	UK / Great Britain	3
Social Action, Responsibility and Heroism Act 2015	UK / Great Britain	1
Confined Space Regulations (Northern Ireland) 1999	Northern Ireland	3
Construction (Design and Management) Regulations (Northern Ireland) 2016	Northern Ireland	1
Employers' Liability (Compulsory Insurance) Regulations (Northern Ireland) 1999	Northern Ireland	1

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<b>Legislation</b>	<b>Country</b>	<b>Element/s</b>
Health and Safety (Consultation with Employees) Regulations (Northern Ireland) 1996	Northern Ireland	3
Health and Safety (Fees) Regulations (Northern Ireland) 2012	Northern Ireland	1
Interpretation Act (Northern Ireland) 1954	Northern Ireland	1
Management of Health and Safety at Work Regulations (Northern Ireland) 2000 (as amended)	Northern Ireland	1 – 5
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (Northern Ireland) 1997 (as amended)	Northern Ireland	4
Inquiries into Fatal Accidents and Sudden Deaths etc (Scotland) Act 2016	Scotland	1

### Other relevant references

<b>Reference title</b>	<b>Reference detail eg ISBN number</b>	<b>Element/s</b>
<a href="#">About sentencing</a> , information and videos explaining how sentences are worked out	Sentencing Council	1
Bird F E, 1974. Management guide to Loss Control, Institute Press, Atlanta, Georgia, USA		3
Consulting workers on health and safety, Safety Representatives and Safety Committee Regulations 1977 (as amended) and Health and Safety (Consultation with Employees) Regulations 1996 (as amended), <a href="#">L146</a>	HSE Books, ISBN: 978-0-7176-6461-0	3
Electricity at work, safe working practices, <a href="#">HSG85</a>	HSE Books, ISBN: 978-0-7176-6581-5	5
Emergency procedures, HSE website guidance	<a href="http://www.hse.gov.uk/toolbox/managing/emergency.htm">http://www.hse.gov.uk/toolbox/managing/emergency.htm</a>	3
First aid at work, <a href="#">L74</a> , third edition (amended 2018)	HSE Books, ISBN: 978-0-7176-6560-0	3
Guidance on permit-to-work systems. A guide for the petroleum, chemical and allied industries, <a href="#">HSG250</a>	HSE Books, ISBN: 978-0-7176-2943-5	3
Guidance on the application of Fees for Intervention (FFI), <a href="#">HSE47</a>	HSE Books, ISBN: 978-0-7176-6456-6	1
Health and Safety Offences, Corporate Manslaughter and Food Safety and Hygiene Offences, <a href="#">Definitive Guideline</a>	Sentencing Council	1
Health and safety made simple, <a href="#">INDG449</a>	HSE Books	2
HSE's Managing for health and safety	<a href="#">Managing for health and safety</a>	1 - 5
HSE's The Health and Safety Toolbox: how to control risks at work	<a href="#">The health and safety toolbox</a>	1 - 5
Human factors and ergonomics	<a href="http://www.hse.gov.uk/humanfactors/">http://www.hse.gov.uk/humanfactors/</a>	3
Human factors: Permit to work systems	<a href="#">Human factors/PTW</a>	3
Investigating Incident and Accidents at Work, <a href="#">HSG245</a>	HSE Books	4

*The Guide to the NEBOSH National General Certificate in Occupational Health and Safety (November 2014 specification)*

<b>Reference title</b>	<b>Reference detail eg ISBN number</b>	<b>Element/s</b>
Involving your workforce in health and safety, <a href="#">HSG263</a>	HSE Books, ISBN: 978-0-7176-6227-2	3
Leading health and safety at work, <a href="#">INDG417</a>	HSE Books	1, 3
Managing for health and safety, <a href="#">HSG65</a>	HSE Books, ISBN: 978-0-7176-6456-6	1 - 5
Managing Health and Safety in Construction, Construction (Design and Management) Regulations 2015, Guidance on regulations, <a href="#">L153</a>	HSE Books, ISBN: 978-0-7176-6623-3	1
<a href="#">Manslaughter, Definitive Guideline</a>	Published by the Sentencing Council	1
New and expectant mothers, HSE website guidance	<a href="http://www.hse.gov.uk/mothers/">http://www.hse.gov.uk/mothers/</a>	3
Occupational health and safety management systems – requirements with guidance for use	ISO 45001:2018 ISBN: 978-0-580-86393-6	2, 3
Plan, Do, Check, Act, An introduction to managing for health and safety, <a href="#">INDG275</a>	HSE Books	2
Reducing error and influencing behaviour, <a href="#">HSG48</a>	HSE Books, ISBN: 978-0-7176-2452-2	3
Reporting accidents and incidents at work, <a href="#">INDG453</a>	HSE Books,	4
Risk assessment, A brief guide to controlling risks in the workplace, <a href="#">INDG163</a>	HSE Books	3
Safe work in confined spaces, <a href="#">L101</a>	HSE Books, ISBN: 978-0-71766233-3	3
The health and safety toolbox, How to control risks at work, <a href="#">HSG268</a>	HSE Books, ISBN: 978-0-7176-6587-7	1 - 5
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Clients</a>	Produced by CONIAC, published by CITB, ISBN: 978-1-85751-389-9	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Principal Designers</a>	Produced by CONIAC, published by CITB, ISBN 978-1-85751-390-5	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Designers</a>	Produced by CONIAC, published by CITB, ISBN 978-1-85751-393-6	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Principal Contractors</a>	Produced by CONIAC, published by CITB, ISBN 978-1-85751-393-6	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Contractors</a>	Produced by CONIAC, published by CITB, ISBN: 978-1-85751-391-2	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Workers</a>	Produced by CONIAC, published by CITB, ISBN 978-1-85751-394-3	1
When a health and safety inspector calls, what to expect when we visit your premises, <a href="#">HSC14</a>	HSE Books	1
Young people and work experience, <a href="#">INDG364</a>	HSE Books	3

## **5.2 Unit GC2: Controlling workplace hazards**

### **Element 1: Workplace hazards and risk control**

#### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 1.1 Outline common health, welfare and work environment requirements in the workplace
- 1.2 Explain the risk factors and appropriate controls for violence at work
- 1.3 Explain the effects of substance misuse on health and safety at work and control measures to reduce such risks
- 1.4 Explain the hazards and control measures for the safe movement of people in the workplace
- 1.5 Explain the hazards and control measures for safe working at height
- 1.6 Outline the hazards and control measures associated with works of a temporary nature.

#### **Content**

##### **1.1 Health, welfare and work environment requirements**

- Health and welfare provisions:
  - supply of drinking water, washing facilities, sanitary conveniences, accommodation for clothing, rest and eating facilities, seating, ventilation, heating and lighting
- The effects of exposure to extremes of temperature; preventive measures

##### **1.2 Violence at work**

- Risk factors relating to violence at work (both between employees/workers and third parties)
- Appropriate control measures to reduce risks from violence at work.

##### **1.3 Substance misuse at work**

- Types of substances misused at work, eg,
  - alcohol
  - legal/illegal drugs
  - solvents
- Risks to health and safety from substance misuse at work
- Control measures to reduce risks from substance misuse at work.

#### **1.4 Safe movement of people in the workplace**

- Hazards in the workplace:
  - typical hazards leading to: slips, trips and falls on the same level; falls from a height; collisions with moving vehicles; being struck by moving, flying or falling objects; striking against fixed or stationary objects
  - conditions and environments in which each hazard may arise, including maintenance activities
- Control measures for the safe movement of people in the workplace:
  - slip resistant surfaces; spillage control and drainage; designated walkways; fencing and guarding; use of signs and personal protective equipment; information, instruction, training and supervision
  - maintenance of a safe workplace: cleaning and housekeeping requirements, access and egress, environmental considerations (lighting), including during maintenance activities.

#### **1.5 Working at height**

- Examples of work activities involving a risk of injury from falling from height, and the significance of such injuries
- Basic hazards and factors affecting risk from working at height (including vertical distance, fragile roofs, deterioration of materials, unprotected edges, unstable/poorly maintained access equipment, weather and falling materials)
- Methods of avoiding working at height
- Main precautions necessary to prevent falls and falling materials, including proper planning and supervision of work, avoiding working in adverse weather conditions
- Emergency rescue
- Provision of equipment, training, instruction and other measures to minimise distance and consequences of a fall
- Head protection
- Safe working practices for common forms of access equipment, including ladders, stepladders, scaffolds (independent tied and mobile tower), mobile elevating work platforms, trestles, staging platforms and leading edge protection systems
- Inspection of access equipment
- Prevention of falling materials through safe stacking and storage.

**1.6 Hazards and control measures for works of a temporary nature**

- The impact on workplaces from hazards associated with works of a temporary nature (including building maintenance, renovation, demolition and excavations)
- Main control measures relating to the management of works of a temporary nature:
  - communication and co-operation
  - risk assessment
  - appointment of competent people
  - segregation of work areas
  - amendment of emergency procedures
  - welfare provision

***Recommended tuition time not less than 8 hours***



## **Element 2: Transport hazards and risk control**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 2.1 Explain the hazards and control measures for the safe movement of vehicles in the workplace
- 2.2 Outline the factors associated with driving at work that increases the risk of an incident and the control measures to reduce work related driving risks.

### **Content**

#### **2.1 Safe movement of vehicles in the workplace**

- Hazards and factors affecting level of risk from workplace transport operations including conditions and environments in which each hazard may arise:
  - vehicle movement, eg, driving too fast, especially around bends; reversing; silent operation of machinery; poor visibility (around loads etc), overturning of vehicles; collisions with other vehicles, pedestrians and fixed objects
  - non-movement, eg, loading (including overloading); unloading; securing loads; sheeting; coupling; vehicle maintenance work
- Control measures for safe workplace transport operations:
  - Safe site*
    - suitability of traffic routes (including site access and egress)
    - management of vehicle movements
    - environmental considerations (visibility, gradients, changes of level, surface conditions)
    - segregating of pedestrians and vehicles and measures to be taken when segregation is not practicable
    - protective measures for people and structures (barriers, marking signs, warnings of vehicle approach and reversing)
    - site rules (including speed limits)
  - Safe vehicles*
    - suitable vehicles
    - maintenance/repair of vehicles
    - visibility from vehicles/reversing aids
    - driver protection and restraint systems
  - Safe drivers*
    - selection and training of drivers
    - banksman (reversing assistant)
    - management systems for assuring driver competence including local codes of practice.

## **2.2 Driving at work**

- Managing work-related road safety
  - policy covers work-related road safety
  - systems to manage work-related road safety
  - monitoring performance to ensure policy is effective eg collection of information, reporting of work-related road incidents by employees
  - organisation and structure (to allow cooperation across departments with different responsibilities for work-related road safety)
  - legal responsibilities of individuals on public roads
- Risk assessment - factors associated with driving at work that increases the risk of being involved in a road traffic incident (distance, driving hours, work schedules, stress due to traffic and weather conditions etc)
- Evaluating the risks
  - the driver (competency, fitness and health, training)
  - the vehicle (suitability, condition, safety equipment, safety critical information, ergonomic considerations)
  - the journey (routes, scheduling, sufficient time, weather conditions)
- Control measures to reduce work-related driving risks.

***Recommended tuition time not less than 4 hours***

## **Element 3: Musculoskeletal hazards and risk control**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 3.1 Explain work processes and practices that may give rise to work-related upper limb disorders and appropriate control measures
- 3.2 Explain the hazards and control measures which should be considered when assessing risks from manual handling activities
- 3.3 Explain the hazards and controls to reduce the risk in the use of lifting and moving equipment with specific reference to manually-operated load moving equipment
- 3.4 Explain the hazards and the precautions and procedures to reduce the risk in the use of lifting and moving equipment with specific reference to powered load handling equipment.

### **Content**

#### **3.1 Work-related upper limb disorders**

- Meaning of musculoskeletal disease and work related upper limb disorders (WRULDs)
- Examples of repetitive operations such as keyboard operation, assembly of small components, bricklaying and checkout operators; assessment of a display screen equipment workstation
- Matching the workplace to individual needs of workers
- The ill-health effects of poorly designed tasks and workstations
- The factors giving rise to ill-health conditions: task (including repetitive, strenuous); environment (including lighting, glare); equipment (including user requirements, adjustability)
- Appropriate control measures.

#### **3.2 Manual handling hazards and control measures**

- Common types of manual handling injury
- Assessment of manual handling risks by considering the task, the load, the individual and the working environment
- Means of avoiding or minimising the risks from manual handling with reference to the task, load, individual and working environment, eg design, automation, mechanisation
- Efficient movement principles for manually lifting loads to reduce risk of musculoskeletal disorders due to lifting, poor posture and repetitive or awkward movements.

### **3.3 Manually operated load handling equipment**

- Hazards and controls for common types of manually operated load handling aids and equipment: trucks and trolleys; pallet trucks; people handling hoists; people handling aids.

### **3.4 Powered load handling equipment**

- Hazards, precautions and procedures for powered load handling equipment eg, fork-lift trucks, lifts, hoists, conveyors and cranes
- Requirements for lifting operations:
  - strong, stable and suitable equipment
  - positioned and installed correctly
  - visibly marked ie safe working load
  - ensure lifting operations are planned, supervised and carried out in safe manner by competent persons
  - special requirements for lifting equipment used for lifting people
- Periodic inspection and examination/testing of lifting equipment.

***Recommended tuition time not less than 6 hours***

## **Element 4: Work equipment hazards and risk control**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 4.1 Outline general requirements for work equipment
- 4.2 Explain the hazards and controls for hand-held tools
- 4.3 Describe the main mechanical and non-mechanical hazards of machinery
- 4.4 Explain the main control measures for reducing risk from machinery hazards.

### **Content**

#### **4.1 General requirements for work equipment**

- Types of work equipment including: hand tools, power tools and machinery
- Suitability as it relates to provision of equipment; including the requirement for CE (Conformité Européenne) marking within the UK and Europe
- Prevention of access to dangerous parts of machinery
- The need to restrict the use and maintenance of equipment with specific risks
- Extent of information, instruction and training to be provided in relation to specific risks and persons at risk (eg users, maintenance staff and managers)
- The need for equipment to be maintained and for maintenance to be conducted safely
- Importance of operation and emergency controls, stability, lighting, markings and warnings, clear unobstructed workspace
- Responsibilities of users.

#### **4.2 Hazards and controls for hand-held tools**

- Hazards and misuse of hand-held tools whether powered or not; requirements for safe use, condition and fitness for use, suitability for purpose and location to be used in (eg, flammable atmosphere)
- Hazards of portable power tools (eg, drill, sander) and the means of control.

#### **4.3 Mechanical and non-mechanical hazards of machinery**

- Potential **consequences** as a result of contact with, or exposure to, mechanical or other hazards as identified in ISO 12100:2010 (Table B.1)
- Hazards presented by a range of equipment including office machinery (eg, photocopier, document shredder); manufacturing/maintenance machinery (eg, bench-top grinder, pedestal drill); agricultural/horticultural machinery (eg, cylinder mower, strimmer / brush cutter, chain-saw); retail machinery (eg,

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compactor, checkout conveyor system); construction machinery (eg, cement mixer, bench mounted circular saw).

**4.4 Control measures for reducing risks from machinery hazards**

- The basic principles of operation, merits and limitations of the following:
  - guards: fixed ; interlocking; self-closing and adjustable/self-adjusting
  - protective devices: two-hand; hold-to-run; sensitive protective equipment (trip devices), emergency stop controls
  - jigs, holders, push-sticks
  - information, instruction, training and supervision
  - personal protective equipment
- Application of these methods of protection to the range of equipment listed in 4.3
- Basic requirements for guards and safety devices:
  - compatibility with process, adequate strength, maintained, allow for maintenance without removal, not increase risk or restrict view, not easily by-passed.

***Recommended tuition time not less than 6 hours***

## **Element 5: Electrical safety**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 5.1 Outline the principles, hazards and risks associated with the use of electricity in the workplace
- 5.2 Outline the control measures that should be taken when working with electrical systems or using electrical equipment in all workplace conditions.

### **Content**

#### **5.1 Principles, hazards and risks associated with the use of electricity at work**

- Principles of electricity:
  - basic circuitry for current to flow: relationship between voltage, current and resistance
- Hazards, risks and danger of electricity:
  - electric shock and its effect on the body; factors influencing severity: voltage, frequency, duration, resistance, current path; electrical burns (from direct and indirect contact with an electrical source)
  - electrical fires: common causes
  - workplace electrical equipment including portable: conditions and practices likely to lead to accidents (unsuitable equipment; inadequate maintenance; use of defective apparatus)
  - secondary effects (eg, falls from height)
  - use of poorly maintained electrical equipment
  - work near overhead power lines; contact with underground power cables during excavation work
  - work on mains electricity supplies
  - use of electrical equipment in wet environments.

#### **5.2 Control measures when working with electrical systems or using electrical equipment in all workplace conditions**

- Control measures:
  - protection of conductors
  - strength and capability of equipment
  - advantages and limitations of protective systems: fuses, earthing, isolation of supply, double insulation, residual current devices, reduced and low voltage systems
  - use of competent persons
  - use of safe systems of work (no live working unless no other option, isolation, locating buried services, protection against overhead cables)
  - emergency procedures following an electrical incident

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- inspection and maintenance strategies: user checks; formal inspection and tests of the electrical installation and equipment; frequency of inspection and testing; records of inspection and testing; advantages and limitations of portable appliance testing (PAT).

***Recommended tuition time not less than 3 hours***



## **Element 6: Fire safety**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 6.1 Describe the principles of fire initiation, classification and spread
- 6.2 Outline the principles of fire risk assessment
- 6.3 Describe the basic principles of fire prevention and the prevention of fire spread in buildings
- 6.4 Outline the appropriate fire alarm system and fire-fighting arrangements for a simple workplace
- 6.5 Outline the factors which should be considered when implementing a successful evacuation of a workplace in the event of a fire.

### **Content**

#### **6.1 Fire initiation, classification and spread**

- Principles of fire: fire triangle; sources of ignition; fuel and oxygen in a typical workplace; oxidising materials
- Classification of fires (different local classification systems will be accepted)
- Principles of heat transmission and fire spread: convection; conduction; radiation; direct burning
- Common causes and consequences of fires in workplaces.

#### **6.2 Fire risk assessment**

- The reasons for carrying out a fire risk assessment
- Factors to be considered in carrying out the assessment
- Consideration of temporary workplaces and changes to workplaces.

#### **6.3 Fire prevention and prevention of fire spread**

- Control measures to minimise the risk of fire in a workplace:
  - elimination of, or reduction in, the use and storage of flammable and combustible materials
  - control of ignition sources
  - systems of work
  - good housekeeping
- Storage of flammable liquids in work rooms and other locations
- Awareness of structural measures to prevent the spread of fire and smoke: properties of common building materials; protection of openings and voids
- Use of suitable electrical equipment in flammable atmospheres.

#### **6.4 Fire alarm system and fire-fighting arrangements**

- Fire detection, fire warning and fire-fighting equipment:
  - common fire detection and alarm systems
  - portable fire-fighting equipment: siting, maintenance and training requirements
  - extinguishing media: water, foam, dry powder, carbon dioxide; advantages and limitations
  - access for fire and rescue services and vehicles.

#### **6.5 Evacuation of a workplace**

- Means of escape: travel distances, stairs, passageways, doors, emergency lighting, exit and directional signs, assembly points
- Emergency evacuation procedures
- Role and appointment of fire marshals
- Fire drills; roll call; provisions for people with disabilities
- Building plans to include record of emergency escape.

***Recommended tuition time not less than 6 hours***

## **Element 7: Chemical and biological health hazards and risk control**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 7.1 Outline the forms of, the classification of, and the health risks from exposure to, hazardous substances
- 7.2 Explain the factors to be considered when undertaking an assessment of the health risks from substances commonly encountered in the workplace
- 7.3 Explain the use and limitations of occupational exposure limits including the purpose of long term and short term exposure limits
- 7.4 Outline control measures that should be used to reduce the risk of ill-health from exposure to hazardous substances
- 7.5 Outline the hazards, risks and controls associated with specific agents
- 7.6 Outline the basic requirements related to the safe handling and storage of waste.

### **Content**

#### **7.1 Forms of, classification of, and health risks from hazardous substances**

- Forms of chemical agent: dusts, fibres, fumes, gases, mists, vapours and liquids
- Forms of biological agents: fungi, bacteria and viruses
- Health hazards classifications: acute toxicity; skin corrosion/irritation; serious eye damage/eye irritation; respiratory or skin sensitisation; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single and repeated exposure); aspiration hazard
- Difference between acute and chronic health effects.

#### **7.2 Assessment of health risks**

- Routes of entry of hazardous substances into the body and body reaction in the form of superficial and cellular defence mechanisms with particular reference to the hazardous substances listed in 7.5
- Factors to be taken into account when assessing health risks
- Sources of information:
  - product labels
  - guidance documents eg, UK HSE Guidance Note EH40, EU list of Indicative Limit Values, ACGIH list of Threshold Limit Values (US)
  - safety data sheets and responsibility for their provision; information to be included by supplier
  - limitations of information in assessing risks to health
- Role and limitations of hazardous substance monitoring.

### **7.3 Occupational exposure limits**

- Purpose of occupational exposure limits
- Long term and short term limits
- Significance of time weighted averages
- Limitations of exposure limits
- Application of relevant limits eg, Threshold Limit Values, Workplace Exposure Limits, Maximum Allowable Concentrations, etc
- Comparison of measurements to exposure limits established by competent national authorities or internationally recognised standards.

### **7.4 Control measures**

- The need to prevent exposure or, where this is not reasonably practicable, adequately control it
- Principles of Good Practice as regards control of:
  - minimisation of emission, release and spread of hazardous substances through design and operation of processes and task activities
  - account for relevant routes of entry into the body when developing control measures for hazardous substances
  - control measures to be proportional to health risk
  - effectiveness and reliability of control options that minimise the escape and spread of hazardous substances
  - use of personal protective equipment in combination with other measures where adequate controls cannot be achieved otherwise
  - regular checks and review of implemented control measures to confirm continued effectiveness
  - provision of information and training to those working with hazardous substances as to the risks and use of measures to minimise the risks
  - ensuring control measures do not increase overall risk to health and safety
- Common measures used to implement Principles of Good Practice above:
  - elimination or substitution of hazardous substances or form of substance
  - process changes
  - reduced time exposure
  - enclosure of hazards; segregation of process and people
  - local exhaust ventilation: general applications and principles of capture and removal of hazardous substances; components of a basic system and factors that may reduce its effectiveness; requirements for inspection
  - use and limitations of dilution ventilation
  - respiratory protective equipment: purpose, application and effectiveness; types of equipment and their suitability for different substances; selection, use and maintenance
  - other protective equipment and clothing (gloves, overalls, eye protection)
  - personal hygiene and protection regimes
  - health/medical surveillance and biological monitoring
- Further control of substances that can cause cancer, asthma or genetic damage that can be passed from one generation to another.

**7.5 Specific agents**

- Health risks and controls associated with asbestos
- Managing asbestos in buildings
- Health risks and controls associated with other specific agents: blood borne viruses, carbon monoxide, cement, legionella, leptospira, silica, wood dust; workplace circumstances in which they might be present.

**7.6 Safe handling and storage of waste**

- Basic environmental issues relating to safe handling and storage of waste (suitable PPE, separate storage of incompatible waste streams).

***Recommended tuition time not less than 6 hours***

## **Element 8: Physical and psychological health hazards and risk control**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations. In particular they should be able to:

- 8.1 Outline the health effects associated with exposure to noise and appropriate control measures
- 8.2 Outline the health effects associated with exposure to vibration and appropriate control measures
- 8.3 Outline the health effects associated with ionising and non-ionising radiation and appropriate control measures
- 8.4 Outline the meaning, causes and effects of work related stress and appropriate control measures.

### **Content**

#### **8.1 Noise**

- The physical and psychological effects on hearing of exposure to noise
- The meaning of terms commonly used in the measurement of sound; sound pressure, intensity, frequency; the decibel scale, dB(A) and dB(C)
- The need for assessment of exposure; comparison of measurements to exposure limits established by competent national authorities or internationally recognised standards
- Basic noise control measures (isolation, absorption, insulation, damping and silencing) the purpose, application and limitations of personal hearing protection (types, selection, use, maintenance and attenuation factors)
- Role of health surveillance
- Occupations with potential noise exposure problems: eg, construction, uniformed services, entertainment, manufacturing, call centres.

#### **8.2 Vibration**

- The effects on the body of exposure to vibration, with particular reference to hand-arm vibration and whole body vibration
- The need for assessment of exposure; comparison of measurements to exposure limits established by competent national authorities or internationally recognised standards
- Basic vibration control measures including choice of equipment, maintenance, limiting exposure (including duration and magnitude, work schedules / rest periods, clothing to protect against cold)
- Role of health surveillance.

### **8.3 Radiation**

- The types of, and differences between, non-ionising and ionising radiation (including radon) and their health effects
- Typical occupational sources of non-ionising and ionising radiation (including radon)
- The basic means of controlling exposures to non-ionising and ionising radiation (including radon)
- Basic radiation protection strategies including the role of the competent person in the workplace
- The role of monitoring and health surveillance.

### **8.4 Stress**

- Meaning of 'work related stress'
- Causes, effects and control measures (demand, control, support, relationships, role, change).

***Recommended tuition time not less than 3 hours***

## Unit GC2: Tutor References

### UK references

#### *Statutory instruments*

<b>Legislation</b>	<b>Country</b>	<b>Element/s</b>
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), 18 December 2006 and subsequent amendments	European Regulation	7
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures	European Regulation	7
Regulation (EU) 2016/425 on personal protective equipment at work	European Regulation	1, 4, 8
Construction (Design and Management) Regulations 2015	UK / Great Britain	1
Control of Electromagnetic Fields at Work Regulations 2016	UK / Great Britain	8
Control of Noise at Work Regulations 2005	UK / Great Britain	8
Control of Substances Hazardous to Health Regulations 2002	UK / Great Britain	7
Control of Vibration at Work Regulations 2005	UK / Great Britain	8
Dangerous Substances and Explosives Atmospheres Regulations 2002	UK / Great Britain	6
Deregulation Act 2015 (Section 6)	UK / Great Britain	1
Electrical Equipment (Safety) Regulations 2016	UK / Great Britain	4, 5
Electricity at Work Regulations 1989	UK / Great Britain	5
Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016	UK / Great Britain	4, 6
Health and Safety (Display Screen Equipment) Regulations 1992 (as amended)	UK / Great Britain	3
Health and Safety (Safety Signs and Signals) Regulations 1996	UK / Great Britain	1, 2, 4, 6
Ionising Radiations Regulations 2017	UK / Great Britain	8
Lifting Operations and Lifting Equipment Regulations 1998	UK / Great Britain	3
Manual Handling Operations Regulations 1992 (as amended)	UK / Great Britain	3
Personal Protective Equipment at Work Regulations 1992	UK / Great Britain	1, 4, 7, 8
Personal Protective Equipment (Enforcement) Regulations 2018	UK / Great Britain	1, 4, 7, 8
Provision and Use of Work Equipment Regulations 1998	UK / Great Britain	1, 2, 3, 4
REACH Enforcement Regulations 2008 (as amended)	UK / Great Britain	7
Regulatory Reform (Fire Safety) Order 2005	UK / Great Britain	6



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<b>Legislation</b>	<b>Country</b>	<b>Element/s</b>
Road Traffic Act 1988 and 1991	UK / Great Britain	2
Social Action, Responsibility and Heroism Act 2015	UK / Great Britain	1
Supply of Machinery (Safety) Regulations 2008 (as amended)	UK / Great Britain	4
The Work at Height Regulations 2005 (as amended)	UK / Great Britain	1
Workplace (Health, Safety and Welfare) Regulations 1992	UK / Great Britain	1
Construction (Design and Management) Regulations (Northern Ireland) 2016	Northern Ireland	1
Control of Electromagnetic Fields at Work Regulations (Northern Ireland) 2016	Northern Ireland	8
Control of Noise at Work Regulations (Northern Ireland) 2006	Northern Ireland	8
Control of Vibration at Work Regulations (Northern Ireland) 2005	Northern Ireland	8
Dangerous Substances and Explosive Atmospheres Regulations (Northern Ireland) 2003	Northern Ireland	6
Deregulation Act 2015 (Section 7)	Northern Ireland	1
Fire and Rescue Services (Northern Ireland) Order 2006	Northern Ireland	6
Fire Safety Regulations (Northern Ireland) 2010	Northern Ireland	6
Ionising Radiations Regulations (Northern Ireland) 2017	Northern Ireland	8
Lifting Operations and Lifting Equipment Regulations (Northern Ireland) 1999	Northern Ireland	3
Personal Protective Equipment at Work Regulations (Northern Ireland) 1993	Northern Ireland	1, 4, 7, 8
Provision and Use of Work Equipment Regulations (Northern Ireland) 1993	Northern Ireland	3, 4
Work at Height Regulations (Northern Ireland) 2005	Northern Ireland	1
Workplace (Health, Safety and Welfare) Regulations (Northern Ireland) 1993	Northern Ireland	1
Fire (Scotland) Act 2005	Scotland	6
Fire Safety (Scotland) Regulations 2006	Scotland	6

**Other relevant UK references**

<b>Reference title</b>	<b>Reference detail eg ISBN number</b>	<b>Element/s</b>
Buying new machinery, <a href="#">INDG271</a>	HSE Books	4
Controlling Noise at Work, The Control of Noise at Work Regulations, Guidance on Regulations, <a href="#">L108</a>	HSE Books, ISBN: 978-0-7176-6164-4	8
Driving at Work – Managing Work-Related Road Safety, <a href="#">INDG382</a>	HSE Books	2

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Reference title	Reference detail eg ISBN number	Element/s
Drug misuse at work a guide for employers, <a href="#">INDG91</a>	HSE Books	1
<a href="#">EH40/2005</a> Workplace exposure limits, third edition, 2018	HSE Books, ISBN: 978-0-7176-6703-1	7
Electricity at Work – Safe Working Practices, <a href="#">HSG85</a>	HSE Books, ISBN: 978-0-7176-2164-4	5
Electromagnetic fields at work, A guide to the Control of Electromagnetic Fields at Work Regulations, <a href="#">HSG281</a>	HSE Books	8
<a href="#">Fire Safety Risk Assessment series</a> , Home Office publications 1. Offices and shops 2. Factories and warehouses 3. Sleeping accommodation 4. Residential care premises 5. Educational premises 6. Small and medium places of assembly 7. Large places of assembly 8. Theatres, cinemas and similar premises 9. Open air events and venues, 10. Healthcare premises, 11. Transport premises and facilities 12. Means of escape for disabled people	1. ISBN: 978-1-8511-2815-0 2. ISBN: 978-1-8511-2816-7 3. ISBN: 978-1-8511-2817-4 4. ISBN: 978-1-8511-2818-1 5. ISBN: 978-1-8511-2819-8 6. ISBN: 978-1-8511-2820-4 7. ISBN: 978-1-8511-2821-1 8. ISBN: 978-1-8511-2822-8 9. ISBN: 978-1-8511-2823-5 10. ISBN: 978-1-8511-2824-2 11. ISBN: 978-1-8511-2825-9 12. ISBN: 978-1-8511-2873-0	6
<a href="#">Guidance on the management of electrical safety and safe isolation procedures for low voltage installations</a>	Electrical Safety First in partnership with others (including the HSE)	5
Hand-arm vibration, Control of Vibration at Work Regulations 2005, Guidance on Regulations, <a href="#">L140</a>	HSE Books, ISBN: 978-0-7176-6125-1	8
Health and Safety (Safety Signs and Signals) Regulations 1996, Guidance on regulations, <a href="#">L64</a>	HSE Books, ISBN: 978-0-7176-6359-0	1, 2, 4
HSE Stress Management Standards	<a href="#">Stress management standards</a>	8
HSE's The Health and Safety Toolbox: how to control risks at work	<a href="#">The health and safety toolbox</a>	1, 8
IET Wiring Regulations 18 <sup>th</sup> Edition (first amendment)	BS7671:2018	5
Lighting at Work, <a href="#">HSG38</a>	HSE Books, ISBN: 978-0-7176-1232-1	1
Maintaining Portable and Transportable Electrical Equipment, <a href="#">HSG107</a>	HSE Books, ISBN: 978-0-7176-2805-6	5
Managing Health and Safety in Construction, Construction (Design and Management) Regulations 2015, Guidance on regulations, <a href="#">L153</a>	HSE Books, ISBN: 978-0-7176-6623-3	1
Managing skin exposure risks at work, <a href="#">HSG262</a>	HSE Books, ISBN: 978-0-7176-6649-2,	7
Manual Handling, Manual Handling Operations Regulations 1992 (as amended), Guidance on Regulations, <a href="#">L23</a>	HSE Books, ISBN: 978-0-7176-6653-9	3
Memorandum of guidance on the Electricity At Work Regulation 1989, Guidance on Regulations, <a href="#">HSR25</a>	HSE Books, ISBN: 978-0-7176-6228-9	5
Personal Protective Equipment at Work (second edition), Personal Protective	HSE Books, ISBN: 978-0-7176-6597-6	1, 4, 8

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Reference title	Reference detail eg ISBN number	Element/s
Equipment at Work Regulations 1992 (as amended), Guidance on Regulations, <a href="#">L25</a>		
Radon in the workplace	<a href="#">HSE website: Radon content</a>	8
<a href="#">Regulatory Reform (Fire Safety) Order 2005</a> : a short guide to making your premises safe	Home Office guidance	6
Safety signs and signals, Guidance on Regulations, <a href="#">L64</a>	HSE Books, ISBN: 978-0-7176-6598-3	1, 2, 4, 6
Safe use and handling of flammable liquids, <a href="#">HSG140</a>	HSE Books	6
Safe Use of Work Equipment, Approved Code of Practice and guidance, <a href="#">L22</a>	HSE Books, ISBN: 978-0-7176-6295-1	1, 2, 3, 4
Safe use of lifting equipment, Lifting Operations and Lifting Equipment Regulations 1998, ACoP and Guidance, <a href="#">L113</a> (amendments made 2018)	HSE Books, ISBN: 978-0-7176-1628-2	3
Safety in Working with Lift Trucks, <a href="#">HSG6</a>	HSE Books, ISBN: 978-0-7176-1781-4	3
Seating at Work, <a href="#">HSG57</a>	HSE Books, ISBN: 978-0-7176-1231-4	1
Storage of flammable liquids in containers, <a href="#">HSG51</a>	HSE Books	6
Storage of flammable liquids in tanks, <a href="#">HSG176</a>	HSE Books	6
Supplying new machinery, <a href="#">INDG270</a>	HSE Books	4
Tackling work-related stress using the Management Standards approach, A step-by-step workbook, <a href="#">WBK1</a>	HSE Books	8
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Clients</a>	Produced by CONIAC, published by CITB, ISBN: 978-1-85751-389-9	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Principal Designers</a>	produced by CONIAC, published by CITB, ISBN 978-1-85751-390-5	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Designers</a>	produced by CONIAC, published by CITB, ISBN 978-1-85751-393-6	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Principal Contractors</a>	produced by CONIAC, published by CITB, ISBN 978-1-85751-393-6	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Contractors</a>	Produced by CONIAC, published by CITB, ISBN: 978-1-85751-391-2	1
The Construction (Design and Management) Regulations 2015, <a href="#">Industry guidance for Workers</a>	produced by CONIAC, published by CITB, ISBN 978-1-85751-394-3	1
The Electricity at Work Regulations 1989, <a href="#">HSR25</a>	HSE Books, ISBN: 978-0-7176-6636-2	5
The health and safety toolbox, How to control risks at work, <a href="#">HSG268</a>	HSE Books, ISBN: 978-0-7176-6587-7	5
Understanding ergonomics at work, <a href="#">INDG90</a>	HSE Books	1, 3
Upper Limb Disorders in the Workplace – A Guide, <a href="#">HSG60</a>	HSE Books, ISBN: 978-0-7176-1978-8	8
Violence at work: A guide for employers, <a href="#">INDG69</a>	HSE Books	1

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<b>Reference title</b>	<b>Reference detail eg ISBN number</b>	<b>Element/s</b>
Whole-body vibration; The Control of Vibration at Work Regulations 2005, Guidance on Regulations, <a href="#">L141</a>	HSE Books, ISBN: 978-0-7176-6126-8	8
Work at Height Regulations 2005 (as amended) – A Brief Guide, <a href="#">INDG401</a>	HSE Books	1
Working with ionising radiation, Approved Code of Practice and guidance, <a href="#">L121</a>	HSE Books, ISBN: 978-0-7176-6662-1	8
Workplace health, safety and welfare, Workplace (Health, Safety and Welfare) Regulations 1992, ACOP, <a href="#">L24</a>	HSE Books, ISBN: 978-0-7176-0413-5	1
Work Related Upper Limb Disorders – A Guide, <a href="#">HSG60</a>	HSE Books, ISBN: 978-0-7176-1978-8	3
Workplace Transport Safety – Guidance for Employers, <a href="#">HSG136</a>	HSE Books, ISBN: 978-0-7176-6154-1	1, 2
Work with display screen equipment: Health and Safety (Display Screen Equipment) Regulations 1992 as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002: Guidance on Regulations, <a href="#">L26</a>	HSE Books ISBN: 978-0-7176-2582-6	3

## **5.3 Unit GC3: Health and safety practical application**

### **Learning Outcomes**

- Demonstrate the ability to apply knowledge of the unit NGC1 and GC2 syllabus, by successful completion of a health and safety inspection of a workplace
- Complete a report to management regarding the inspection with recommendations.

### **Content**

This unit contains no additional syllabus content. However, completion of study for unit NGC1 and GC2 is recommended in order to undertake the practical application unit GC3.

#### **5.3.1 Purpose and aim**

- To carry out, unaided, a safety inspection of a workplace, identifying the more common hazards, deciding whether they are adequately controlled and, where necessary, suggesting appropriate and cost effective control measures
- To prepare a report that persuasively urges management to take appropriate action, explaining why such action is needed (including reference to possible breaches of legislation) and identifying, with due consideration of reasonable practicability, the control measures that should be implemented.

This will require candidates to apply the knowledge and understanding gained from their studies of elements of Units NGC1 and GC2 in a practical environment and to carry out an evaluation of information gathered during the inspection. The practical application may be submitted in the candidate's own handwriting or be word processed.

The submission must include:

- Completed observation sheets covering a number and range of hazards and good practice, identifying suitable control measures and timescales;
- An introduction and executive summary;
- Main findings of the completed inspection;
- Conclusions which summarise the main issues identified in the candidate's workplace;
- Completed recommendations table.

The time allowed to complete the assessment is not restricted but candidates should aim to complete the inspection and the report in two hours.

### **5.3.2 Marking**

Practical applications will be marked by an internal assessor – a person proposed to NEBOSH by an accredited course provider and approved by NEBOSH. Internal assessors will be at least Grad IOSH of the Institution of Occupational Health and Safety or equivalent and working towards chartered membership, CMIOSH, (or similar).

A marking sheet will be completed by the internal assessor for each candidate and attached to the candidate's report. The total percentage mark for each candidate will be transferred to a results sheet and returned to NEBOSH by no later than 15 working days after the examination date of NCG1 and/or GC2.

Candidates must achieve the pass standard (60%) in this unit in order to satisfy the criteria for the qualification.

### **5.3.3 Assessment location**

The practical application must be carried out in the candidate's own workplace. Where the candidate does not have access to a suitable workplace, the accredited course provider should be consulted to help in making arrangements for the candidate to carry out the practical application at suitable premises. Providers seeking to run the practical unit in this way should contact NEBOSH for advice and approval.

Candidates do not require supervision when carrying out the practical application, but the candidate must sign a declaration that the practical application is their own work.

The candidates, employers and internal assessors should be aware that the status of the health and safety review and report undertaken to fulfil the requirements of unit GC3, which is **for educational purposes only**. It *does not* constitute an assessment for the purposes of any legislation or regulations.

### **5.3.4 Assessment requirements**

Assessment of the practical unit (GC3) must normally take place within 10 working days of (before or after) the date of the NGC1 and/or GC2 written papers (the 'date of the examination'). The results sheet completed by the accredited course provider must reach NEBOSH by no later than 15 working days after the date of the examination.

Any practical application not submitted by this deadline will be declared as absent. The candidate will then be required to re-register (and pay the registration fee) at the next standard (or local) sitting date.

If a candidate is absent from the written papers because of illness corroborated by a doctor's note, but successfully completes the GC3 unit within the 10 working day deadline, the result will stand. If a candidate is unable to complete the GC3 unit under similar circumstances, NEBOSH may allow it to be taken at a later date beyond the normal 10 working day deadline.

### **5.3.5 Submission of completed work**

The accredited course provider should advise the candidate of the latest date by which the completed practical application documents must be received by the accredited course provider for marking. It is the responsibility of the accredited course provider to ensure that the results of the practical application (unit GC3) are available to NEBOSH by no later than **15 working days** after the date of the examination for NGC1 and/or GC2 as appropriate.

Candidates planning to post their reports to the accredited course provider are reminded of the need to guard against loss in the post by sending their work by trackable delivery. Candidates are therefore advised to retain copies of both their completed proforma and final management report.

### **5.3.6 Further information**

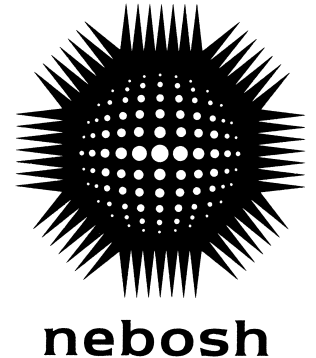
Further detailed information regarding the practical application unit including forms and mark schemes can be found in a separate guidance document for candidates and accredited course providers available from the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)): *“Unit GC3: Health and safety practical application: Guidance and information for accredited course providers and candidates”*.

## 6. Sample examination papers

### 6.1 Unit NGC1: Management of health and safety

#### THE NATIONAL EXAMINATION BOARD IN OCCUPATIONAL SAFETY AND HEALTH

#### UNIT NGC1: MANAGEMENT OF HEALTH AND SAFETY



For: **NEBOSH National General Certificate in Occupational Health and Safety**  
**NEBOSH National Certificate in Fire Safety and Risk Management**  
**NEBOSH National Certificate in Construction Health and Safety**

[DATE]

2 hours, 0930 to 1130

Answer both **Section 1** and **Section 2**. Answer **ALL** questions.

The maximum marks for each question, or part of a question, are shown in brackets.

Start each answer on a new page.

Answers may be illustrated by sketches where appropriate.

This question paper must be returned to the invigilator after the examination.

---

#### SECTION 1

You are advised to spend about **half an hour** on this section, which contains **ONE** question.

---

- 1 An enforcement officer has visited an organisation and has found that a number of work activities have not had risk assessments completed.
- (a) **Describe** actions that the enforcement officer could take. (4)
- (b) **Outline** key stages of a risk assessment **AND identify** issues that would need to be considered at **EACH** stage. (10)
- (c) **Explain** criteria that could be used to prioritise any action required as a result of the completed risk assessment. (6)



## **SECTION 2**

You are advised to spend about **one and a half hours** on this section, which contains **TEN** questions.

---

- 2** (a) **Identify** work-related illnesses that are reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013. (2)
- (b) **Outline** reasons why employers should keep records of occupational ill-health among employees. (6)
- 3** **Outline** *job* factors that could lead to poor health and safety behaviour in the workplace. (8)
- 4** (a) **Outline** functions of a permit-to-work *form*. (2)
- (b) **Outline** key elements of a permit-to-work *system*. (6)
- 5** **Identify** information that could be used to review an organisation's health and safety performance. (8)
- 6** (a) **Outline** legal requirements placed on employers to have a written health and safety policy. (2)
- (b) **Outline** circumstances that may require a health and safety policy to be revised. (6)
- 7** (a) **Identify** work activities that may present a particular risk to pregnant women at work **AND give** an example of **EACH** type of activity. (6)
- (b) **Outline** actions that an employer may take when a risk to a new or expectant mother cannot be avoided. (2)

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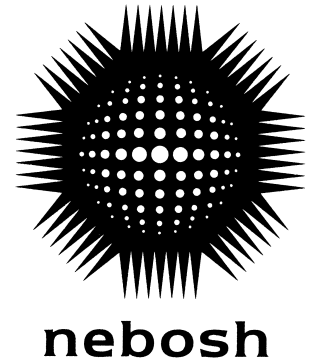
- 8** **Outline** the purpose and legal status of:
- (a) health and safety regulations; **(4)**
  - (b) Health and Safety Executive (HSE) approved codes of practice (ACOPs) **(4)**
- AND give** an example in **EACH** case.
- 9** When carrying out a health and safety inspection of a workplace:
- (a) **outline** the benefits of using a checklist; **(4)**
  - (b) **outline** the limitations of using a checklist. **(4)**
- 10** **Explain** why it is important to use a variety of methods to communicate health and safety information in the workplace. **(8)**
- 11** (a) **Outline** employee duties under the Management of Health and Safety at Work Regulations 1999. **(2)**
- (b) **Outline** employee responsibilities that should be included in the 'organisation' section of a health and safety policy. **(6)**

## 6.2 Unit GC2: Controlling workplace hazards

### THE NATIONAL EXAMINATION BOARD IN OCCUPATIONAL SAFETY AND HEALTH

#### Unit GC2: Controlling workplace hazards

For: **NEBOSH National General Certificate in Occupational Health and Safety**  
**NEBOSH International General Certificate in Occupational Health and Safety**



[DATE]

2 hours, 1400 to 1600

Answer both Section 1 and Section 2. Answer **ALL** questions.

The maximum marks for each question, or part of a question, are shown in brackets.

Start each answer on a new page.

Answers may be illustrated by sketches where appropriate.

This question paper must be returned to the invigilator after the examination.

---

### SECTION 1

You are advised to spend about **half an hour** on this section, which contains **ONE** question.

---

- 1 Airborne measurements have identified that a local exhaust ventilation system (LEV) is no longer adequately controlling worker exposure to airborne dust. A risk assessment has identified that respiratory protective equipment (RPE) can be used as an interim measure to protect workers while engineers repair the LEV system.
- (a) **Identify** the main components of the LEV system. (4)
- (b) **Outline** factors that may have reduced the effectiveness of the LEV system. (8)
- (c) **Outline** factors that should be considered when selecting the RPE to protect the workers while engineers are working on the LEV system. (8)

## **SECTION 2**

You are advised to spend about **one and a half hours** on this section, which contains **TEN** questions.

---

- 2** (a) **Identify** health risks associated with exposure to wood dust. (2)
- (c) **Outline** control measures to reduce the health risks from exposure to wood dust. (6)
- 3** **Identify** items that should be inspected on a mobile tower scaffold prior to use. (8)
- 4** **Outline** how the following two protective measures reduce the risk of electric shock **AND**, in **EACH** case, **give** an example of its application:
- (a) reduced low voltage; (4)
- (b) double insulation. (4)
- 5** **Outline** factors that should be considered so that persons with sensory impairments and/or physical disabilities can safely evacuate a workplace in the event of a fire. (8)
- 6** **Identify** possible hazards that could cause workers to be injured when walking through an external storage area of a workplace. (8)
- 7** (a) With reference to mechanical hazards of machinery, **describe** how harm may arise from:
- (i) entanglement; (1)
- (ii) shearing; (1)
- (iii) drawing in; (1)
- (iv) crushing. (1)
- (b) **Identify** non-mechanical hazards associated with the use of machinery. (4)

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- 8 **Identify** rules that should be followed by a driver when leaving a forklift truck unattended during a work break. (8)
- 9 A dental surgery has installed an X-ray facility.
- (a) **Identify** the health effects associated with exposure to X-ray radiation. (4)
- (b) **Outline** control measures that could be taken in order to help reduce the risks to the operator from exposure to X-ray radiation. (4)
- 10 To reduce the risk of musculoskeletal disorders and back injuries, postal workers have been provided with manually operated trolleys to carry post during their delivery rounds.
- Outline** factors that would need to be considered when carrying out a manual handling assessment of the use of the trolley. (8)
- 11 (a) **Outline** control measures that could be used to reduce the exposure of construction workers to high levels of noise from cement mixers. (4)
- (b) **Identify** other noise hazards that may be present on construction sites. (4)