

### HEALTH AND SAFETY AT WORK

A course book for the NEBOSH Award in Health and Safety at Work





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### Foreword



The NEBOSH Award in Health and Safety at Work is the perfect introductory qualification for those who need to understand the principles of health and safety as part of their job. By studying for this qualification you will gain a better understanding of how to identify and deal with hazards at work, helping to reduce accidents and ill-health which will achieve cost savings for your organisation.

The qualification is particularly relevant to:

- Team leaders, supervisors and managers
- Skilled workers
- Human resources managers
- Facilities managers

This course book has been structured to match the

NEBOSH syllabus. It has been written by health and safety experts, who take you step-by-step through the content of the qualification. The information is divided into distinct sections, each of which starts by listing the learning outcomes for that particular section. It isn't full of jargon or confusing terms and offers useful examples, mock exam questions and helpful tips throughout to aid your learning.

The book focuses primarily on practical knowledge of health and safety that is applicable to any type of workplace. As you work through, you will notice that the examples included relate to all sorts of industries such as manufacturing and service industries such as care homes and catering. Examples provided throughout the book are designed to help you apply your knowledge and understanding to your own workplace. Using this book as part of your course preparation and study could improve your chance of success. How you use this book is entirely up to you however, we would definitely recommend that you use it as a revision aid as part of your formal course leading to the qualification. You may feel you want to read it from cover to cover, or you may simply want to read certain chapters where you would like to concentrate your studies. You will also find it useful as a source of reference when you are back in your workplace.

The NEBOSH Award in Health and Safety is intended to be suitable for students working anywhere in the world. The content is based on recognised international best practice. Knowledge of specific legislation, either in the UK or in any other country, is not a requirement of the qualification.

Even if you are not studying for the NEBOSH Award in Health and Safety, this book will still provide useful practical information on ways to control the risk from workplace hazards such as fire, manual handling, work equipment, hazardous substances and transport. In addition, it explores many different workplace scenarios and activities, such as driving for work and working in someone's home or on another employer's premises.

#### We recommend that you spend at least 24 hours studying for the NEBOSH Award in Health and Safety at Work in total, including four hours preparing for the practical risk assessment activity. Further information, including the Guide for the qualification can be found on the NEBOSH website at www.nebosh.org.uk.

The NEBOSH Award in Health and Safety at Work is also a perfect introduction to further health and safety studies such as the NEBOSH National or International General Certificate in Occupational Health and Safety.

We hope you find this book useful and thank you for taking the time to learn more about how to protect people in your workplace.

## A guide to the symbols used in this course book

#### PAUSE FOR THOUGHT/ ACTIVITY



These ask you to think about what you have been learning, to relate it to your own experience, or to carry out an activity to reinforce what you have just read.

#### EXAMPLE

Real or imagined scenarios that give context to points made in the text.



### The foundations of health and safety



This element focuses on some initial concepts which are fundamental to this course book. You will become familiar with some of the meanings of common words used in health and safety and then look at the reasons why health and safety is important.

#### Learning outcomes

On completion of this element, you should be able to:

- 1.1 Outline the scope and nature of workplace health and safety
- 1.2 Identify the reasons for practising good standards of health and safety
- 1.3 Outline the role of workplace health, safety and fire law, the role of enforcement agencies and possible enforcement actions
- 1.4 Identify the key internal and external sources of health and safety information

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### The scope and nature of workplace health and safety

Before you read this section, pause to consider what you think the terms 'health' and 'safety' mean. Then read on to learn what they mean in the context of this course book.

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All subjects tend to use their own terminology and health and safety is no exception. Therefore, it is important that you understand from the beginning some of the most common terms used by health and safety professionals. These will be used throughout this course book. It is important that you can appreciate both the meaning of these terms and the differences between them. These are not always obvious to people who are new to health and safety but don't worry, you'll soon be very familiar with them.

#### 1. Health, safety and welfare Health

The most common definition of *health* comes from the World Health Organisation, namely: "a state of complete physical, mental, and social well-being and not merely the absence of disease, or infirmity".

Health has a very wide meaning and does not just relate to whether you are free of a particular disease. It also takes into account other things such as how you feel both physically and emotionally about your health, how you live, how you interact with society, and the effect of the environment around you.

In relation to the definition of health we've just looked at, think about:



- the short-term and long-term health effects of not eating a balanced diet
- the possible effects of stress on an individual's health

Can you now begin to see the wider meaning of the term "health"?

Throughout this course book we are only referring to health issues as they are affected by work. This is most commonly called 'occupational health'.

When used together, *health and safety* generally refers to all aspects of maintaining a healthy and a safe workplace where harm to people is prevented. This can include many issues such as laws, management systems and training, as well as physical items such as guards on dangerous machines.

#### Safety

*Safety* is not merely the absence of accidents, but the results of ALL persons taking positive actions to identify accident causes and implement suitable preventative measures.

#### Welfare

*Welfare* is the availability of facilities and presence of conditions required for reasonably comfortable, healthy, and secure living.

Welfare facilities which should be provided and maintained for workers include toilets, washing facilities, rest facilities and drinking water. Workers should use welfare facilities correctly and help their employer to keep them clean and well maintained.

# 2. Accident, dangerous occurrence, near-miss and work-related ill-health

#### Accident

An *accident* is any unplanned occurrence which results in some loss, often an injury.

An accident is always an unplanned occurrence. The most common kinds of accidents which occur in workplaces are slips, trips and falls; falls from height; being injured while carrying or moving objects; and being struck by moving or falling objects.

Element 1 The foundations of health and safety

### The scope and nature of workplace health and safety

#### **Dangerous occurrence**

The International Labour Organisation (ILO) defines a dangerous occurrence as a "Readily identifiable event as defined under national laws and regulations, with potential to cause an injury or disease to persons at work or the public."

A dangerous occurrence is "any unplanned occurrence which normally results in some loss or damage to machinery and/or the workplace but has not resulted in injury."

Examples of things which might be classified as a dangerous occurrence include large scaffolding collapses, a crane overturning and fires which stop normal activity for more than 24 hours in the workplace.

#### **Near-miss**

A *near-miss* is "an incident in which no injury or damage results."

Generally, workplace incidents are very much more likely to result in a near-miss than an actual injury. For every one injury there are probably at least another 100 near-misses. The important thing is to report and act on a near-miss so that action can be taken to ensure that it doesn't happen again. Next time the consequences could be far more serious. Near-miss reporting could help highlight some of the less obvious hazards in a workplace, or identify areas where a problem is developing.

An example of near misses would be a spillage on a tile floor which has not been cleaned up causing a person to slip but not injury themselves or break any equipment which they may have been holding or carrying.

#### Work-related ill-health

This is defined as "any physical or psychological ill-health which is caused by or affected by your work."

The most common types of work-related ill-health include:

- effects on muscles of the upper limbs and back;
- work-related stress, which can be caused by many things such as poorly organised work, difficulties with colleagues, etc.;

- diseases caused by exposure to certain chemicals and other substances, e.g. detergents causing dermatitis and asbestos causing lung disease;
- hearing loss caused by long-term exposure to loud noises.

For this Activity you will need some pieces of paper.



Write each of the following terms on a separate card:

Health, Safety, Welfare, Accident, Dangerous Occurrence, Near-Miss, Work-Related III-Health

Then write each of the meanings given earlier on a separate card.

Mix all the cards up and then match the correct meaning to each term.

#### 3. Health, safety and workplace fire law and guidance

Any country that has adopted International Labour Organisation Convention C155 "Occupational Safety and Health Convention, 1981" must have, in their own country, a system promoting occupational health and safety which includes relevant laws.

In the UK, the laws which first started to regulate health and safety were first made many years ago. In certain industries, such as the manufacture and processing of cotton, these laws have been in place since the 1830's. These laws have changed a great deal over time and there is now a robust legislative system in place to regulate general health and safety in UK workplaces.

The details of UK legislation are covered in Approved Codes of Practice and other guidance documents which are usually published by the UK Health and Safety Executive.

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Looking outside of the UK there are health and safety legal systems operating worldwide. Many of these follow the International Labour Organisation (ILO) model which requires employers to protect both workers and the public so far as is reasonably practicable. "Reasonably practicable" means that when deciding what to do to protect workers and others such as visitors, employers will be expected to do all that is possible to adequately control the risk, based on local or national legislative principles. Employers can balance the health and safety risk of an activity against the cost (in terms of money, time or effort needed) of controlling this risk. Here, for protection to be "reasonably practicable" the risk and the cost should be balanced. This means that more controls will be required to control a higher risk activity than it would lower risk activity.



The specific situation in your country may vary but generally health and safety laws apply to all businesses, however small, including the self-employed and to workers.

# 4. Health, safety and workplace fire enforcing agencies and inspectors

Where any laws exist, it is important that they are enforced by an independent regulator if they are going to be effective. There should also be adequate penalties if the laws are violated. The system of enforcement varies significantly around the world but is most often carried out by Labour Inspectors or in the case of the UK by Health and Safety Inspectors from either the Health and Safety Executive (HSE) or the Local Authority. The Health and Safety Executive enforces health and safety at factories, farms and building sites, while the Local Authorities have enforcement powers in offices, shops, hotels and catering, and leisure activities. Workplace fire safety in the UK is generally regulated by the Fire Authority.

The range of powers that these Inspectors have varies, but most commonly:

- they can enter any premises;
- they will inspect workplaces to check that people are obeying the rules as laid down by law and give advice;
- they can take samples or look at records;
- they can interview any persons;
- they may investigate accidents and complaints.

When they find things that are seriously wrong, Inspectors may take enforcement action. This enforcement action might require specific improvements to be made in a set time, in which case the Inspector in the UK will issue an Improvement Notice. However, the issue may be so serious that the Inspector requires some or all work to stop until the necessary action has been taken to make the situation safe. In this case a Prohibition Notice will be issued. In the most serious circumstances the ultimate sanction for an enforcing agency will be to prosecute a company and/or individual workers. Such a decision is not taken lightly.

# The scope and nature of workplace health and safety



Before you read this section, note down some reasons why you think health and safety is important.



We will come back to these later.

There are a number of very important reasons why organisations and workers should see health and safety as a priority. For ease of understanding, these reasons have been grouped under three main headings:

- Moral;
- Legal;
- Financial.

#### 1. The moral reasons

Very few, if any, organisations deliberately set out to allow their workers to be injured through their work. Most organisations and the people who work for them try to do what they believe to be the right thing. Some people call this moral. Others call it ethical or humanitarian.

Many people across the world are killed or seriously injured at work each year. The International Labour Organisation (ILO) estimated that there may be as many as 2.3 million people dying each year as a result of work related accidents and diseases<sup>1</sup>. This number exceeds the average annual deaths from road accidents, war and HIV/AIDS combined. In the UK each year:

- between 120 and 160 workers are killed as a result of work;
- more than half-a-million injuries are believed to have occurred;
- around 27 million working days are lost each year due to work related illness and work place injury.

Please refer to the HSE's<sup>2</sup> website for the latest statistics.

These figures do not show the pain and suffering caused to the individuals concerned and the effects on their families and friends resulting from these occurrences.

The good news is that many if not all of these injuries and diseases are preventable. The numbers injured have reduced significantly in the last 30 years, mainly as a result of better health and safety standards.

#### 2. The legal reasons

Many countries of the world have laws to ensure that employers do as much as they can to prevent people being injured as a result of their work. These laws are also there to protect the general public from workplace dangers. Obviously, organisations wish to avoid prosecution, since they could be fined, they would receive bad publicity and, most seriously, individuals within their organisation could go to prison.