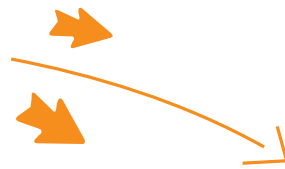


CHOOSE SAFETY



Teacher
Text

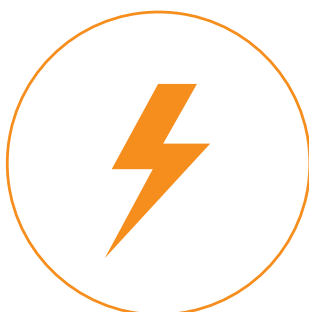


— Young People at Work —

An education programme on the principles of health and safety in the
workplace for senior cycle and students in further education



CHOOSE SAFETY



Young People at Work

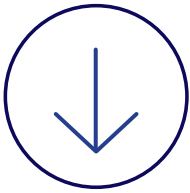


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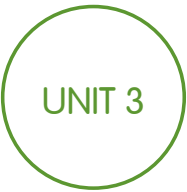
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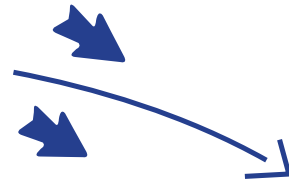
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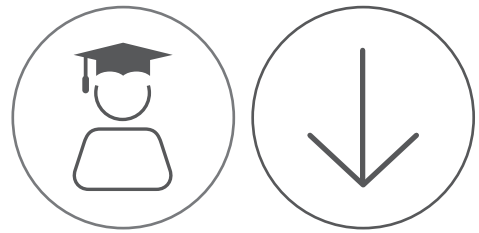


YOUNG PEOPLE AT WORK

An education programme on the principles of health and safety in the workplace for senior cycle and students in further education

Teacher Text

TEACHERS' PREFACE



An tÚdarás Sláinte agus Sábháilteachta
Health and Safety Authority

The Health and Safety Authority (HSA) is the national statutory body with responsibility for ensuring that over 2 million workers (employed and self-employed) and those affected by work activity are protected from work related injury and ill-health. The Authority operates under the Safety, Health and Welfare at Work Act, 2005 and reports to the Minister for Business, Enterprise and Innovation.

It is the lead National Competent Authority for a number of chemicals regulations including REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) Regulation and Seveso II Directive.

The Authority is also a key agency involved in market surveillance and ensuring the safety of products used in workplaces and consumer applications. We have a remit to protect 5.1 million citizens from unsafe products and articles and to enable the international movement and trade of goods manufactured in Ireland.

HEALTH AND SAFETY AUTHORITY

Central to the Authority's mission is promoting awareness of health and safety to young people and encouraging them to develop a safety mind-set before they reach the world of work. The Choose Safety programme aims to do just that and has now been updated to reflect feedback from schools and students.

'Choose Safety' will help students to prepare for the workplace, whether it is a part-time job, work experience, or entering the workplace on a more permanent basis. They will become more aware of workplace health and safety, and the measures in place to protect them.

By fostering a safety-first mind-set at school, students will also learn how they can protect themselves and those around them, while doing their job.

In Ireland, CSO figures indicate that workers aged 15-24 suffer significantly higher rates of work injury than other age groups.

The European Agency for Safety and Health at Work states that young people are especially vulnerable in the workplace: 18-24 year-old workers are at least 50% more likely to be hurt than older workers.

'Choose Safety' aims to persuade young people to consider health and safety in the context of their part-time jobs or work placements. The programme provides information and guidance that they will also apply in any future employment.

HOW TO USE THIS EDUCATION RESOURCE

'Choose Safety' promotes increased awareness among young people of health and safety issues in the workplace.

The programme is designed around six units. Each unit contains enough material and teaching suggestions to cover five or more class periods. You may dip into the text and engage in those topics and student activities that best suit the level and knowledge of your students. Equally, you may further expand the scope of the lessons using your own teaching ideas and/or referring to the websites or other resources listed.

'Choose Safety' is designed to provoke inquiry and debate. The questions that are raised in the students' minds are as valuable as the answers provided here or elsewhere.

DESCRIPTION OF UNITS

Although the course is designed for teachers to go directly to those sections most relevant to individual class groups, there is a developmental aspect to the sequence of lessons presented.

The focus of Units 1 to 4 is on work activities and young people. The prevention of workplace accidents is addressed including the various responsibilities of individuals. Key terms such as Hazard, Risk, and Control are explored and a number of workplace hazards are examined. The importance of health and well-being at work is also addressed. Units 1-4 are practical and relevant and therefore more knowledge and comprehension based.

Units 5 and 6 focus more on application, analysis and evaluation. The workbook, therefore, becomes a little more challenging as it goes along. It is worthwhile to attempt to follow the broad sequence of activities as presented in the text. Where time is at a premium, teachers should skip individual activities rather than whole units.

- **Unit 1** focuses on general health and safety in the workplace for young workers and the different responsibilities of individuals.
- **Unit 2** introduces the concept of hazard and risk and the process of risk assessment. The focus is on key hazards affecting young workers including manual handling and ergonomics, slips, trips and falls, fire and first-aid.
- **Unit 3** considers effective controls within the context of the management of working at height, machinery and equipment, workplace vehicles, and chemicals. It also addresses health and safety in two key work sectors: farming and hospitality.
- **Unit 4** addresses the specific roles of a safety officer and safety representative and encourages students to consider healthy work environments and personal health and well-being.
- **Units 5 and 6** challenge the student to reflect and discuss how the principles of health and safety can be applied to real-life work practices. This section of the book provokes discussion and inquiry. It also focuses on the person and accident prevention.
- **Unit 6** completes 'Choose Safety' by examining real-life case studies. This unit revisits the issues raised earlier in the course. Part 2 of unit 6 contains a choice

of optional major assignments that students can complete, if working towards a Certificate of Distinction.

CHOOSE SAFETY AWARDS

Each student who has successfully completed the Choose Safety programme can receive a **Certificate of Completion** in recognition of his/her increased understanding of health and safety at work.

A **Certificate of Distinction** may be awarded to students who have satisfactorily completed the optional major assignment as set out in Unit 6. Teachers will correct the major assignment and decide the award level for each student. For further information on Certificates see 'Assessment, Certification and Awarding Digital Badges' on page 4.

Digital badges can also be awarded to students who participate in Choose Safety and for completion of the individual Units and assessments. (For more details on digital badges see 'Digital Badges - Optional Awards System' on page 4).

'Choose Safety' contains over 50 exercises and activities. It is not necessary to complete every activity in each unit. The student will benefit more by experiencing activities in each unit rather than focusing only on the first half of the book.

TEACHER GUIDELINES

The text book contains ideas for teachers that intend to deliver the Choose Safety programme in class. Suggestions around shaping lessons for each of the units are provided.

- Unit 1 Induction.
- Unit 2 Slips, trips and falls.
- Unit 3 Workplace transport safety, Chemicals, Farming and Hospitality.
- Unit 4 Work environment.
- Unit 5 Safety signs.
- Unit 6 Impact of workplace accidents on individuals and business.

These are guidelines only and are not meant to be prescriptive or restrictive. You will know best how to design each lesson to maximise the engagement of your class group. The experience and ability of the students as well as the time-tabling of the programme will best guide your planning in this regard.

Some units contain additional information for teachers. This may help you to deliver the course. Further information as well as recent health and safety regulations can be found on the websites listed on page 17.

In each unit you will find the following:

- **Guidelines** for the teacher to support the concepts in the lesson.
- Suggested **lesson plans** to guide you through the unit. These lesson plans are suggestions only and may easily be complemented by your own knowledge and experience and preferred teaching methods.
- **Activities** to engage students in reflection and debate around the issues suggested by the unit. The activities in the pack will challenge students of all abilities. In broad terms, the assignments grow in complexity as the course progresses.
- **Fast facts** containing relevant information that add interest to the learning.
- **Additional information** or references of interest to strengthen your knowledge of the topic and to improve your preparedness for the lessons.

LEARNING OUTCOMES

The learning outcomes of each unit are listed in the teacher guidelines. These give an overview of what the student ought to be able to do having completed the unit.

WORD BANK

You may like to use or adapt the concept of a word bank. It is not included in the list of activities in the Student workbook. However, it is a useful additional exercise to broaden the students' vocabulary in the topic of health and safety.

The word bank is a glossary of terms that the student accumulates over time. At appropriate intervals in each unit, the student can research and write up a list of relevant terminology. This may be done in a jotter or on a computer file. Students can work individually or in pairs or groups. Alternatively, a word bank poster can be displayed in the class and added to, over time.

SHORT PRESENTATION

There are short presentations in Units 1 to 5. These are activities best suited for homework. They require more advanced consideration of the matters raised in the unit. In most cases the student needs to engage in some research. The project, in written or in oral form, should be quite formal and exact. The oral option allows a more interactive learning experience for the whole class. Students may also choose to prepare their presentation in the form of a poster, a collage, a video, drama, audio recording, blog, etc. The teacher can decide the range of options that best suit his/her students' abilities and skills.

SPEED TESTS

These end-of-unit exercises allow for a quick evaluation of the learning acquired in each unit. The teacher can set time limits to suit individual class groups. The timing adds some fun to the evaluation.

e-LEARNING



The Health and Safety Authority provides free online courses at <https://hsalearning.ie>. In particular, the course 'Get Safe - Work Safe: Health and Safety in the Workplace for Students Starting Work' will help students to prepare for the workplace. The 45-minute course is also a useful refresher course for students.

A group manager facility is available if you wish to deliver the course to your class or a group, while being able to manage and review your students' progress.

Courses are also available for a number of work sectors and topics, including Farm Safety, Slips, Trips and Falls, Healthcare and more.

Check out the following website for ideas on using group work, brainstorming and role-plays in the classroom.

Visit eslflow.com



ASSESSMENT, CERTIFICATION AND AWARDING DIGITAL BADGES

'Choose Safety' is not a training programme but one that promotes awareness, inquiry and reflection. The questions posed are as valuable as the core content.

The target audience is senior cycle students and students in further education likely to engage in work experience, part-time or full-time work or community service in the near future. The long-term aim is that this cohort of students will begin their working life with some understanding of the principles of health and safety.

'Choose Safety' engages many of the features of active learning that are essential elements of the alternative senior-cycle programmes such as TY, LCA and LCVP. There is a strong emphasis on problem-solving, In Groups, reflection and debate.

As the student progresses through the programme it will be necessary for the teacher to apply active learning methodologies. Teachers must be prepared to allow discussion, role play and debate without insisting on supplying the correct answers. It is the habit of inquiry that is encouraged by the latter units of 'Choose Safety'.

The style and range of activities in the programme are a key part of the learning process. Although understanding of the health and safety content is important for completing the programme, it is the manner in which that content is delivered and received that is central to the pedagogy. Entering the adult world of work with elementary knowledge of safety is an important step towards preventing accidents. Of equal value are the skills of reflection, inquiry and communication that students will gain by completing 'Choose Safety'.

Many of the activities in the text require a considered, intelligent response by the students. Health and safety should involve some reflection and it is treated as such in the style and depth of the assignments set for the students. Efforts are made, however, to make activities as enjoyable as possible. The success of this will depend greatly on the teacher's skills and the approach taken in class.

The table on page 8 sets out the range of classroom and homework activities in the pack. These can be amended to suit the ability range and particular interests of the students. There are over 50 activities to engage interest.

You may view these as a menu from which to choose, as appropriate for the class.

It is not essential to complete every exercise. You can judge whether or not the student has engaged adequately to deserve certificates on completion. Although completion of Choose Safety does not lead to an award under the National Framework of Qualifications (NFQ), the certificates and digital badges are nonetheless records of learning for students with specified learning outcomes.

Certificate of Completion:

For most students an 'ordinary' Certificate of Completion can be reasonably awarded. This is for students who have participated in a range of activities in each of the units. Each unit should be finished with a good understanding of the issues and a keen awareness that health and safety is a matter of concern for everyone.

Certificate of Distinction:

Students meriting a Certificate of Distinction must show advanced understanding of the issues raised. They will have completed almost all the activities, including each of the 'short projects' and at least one of the major assignments in Unit 6.

The teacher can decide which students merit which award. Certificates are issued to the school/institution digitally through your local 'Choose Safety' co-ordinator. If you have any difficulty contacting your coordinator or accessing the certificates, please email educationunit@hsa.ie.

DIGITAL BADGES – OPTIONAL AWARDS SYSTEM

The Health and Safety Authority Open Badges awarding system is a way of recognising the achievement and completion by students of each unit of the HSA range of Choose Safety programmes. It awards a 'digital badge' to students who complete **any of the six individual units** and any of the four Choose Safety full programmes on offer (see overleaf for full listing). This may suit students and teachers who don't complete the entire programme but rather concentrate on some units. See below for further information on badges. Digital badges can sit on your social networking site, your online CV, your badge backpack or other online profile.

PROGRAMME BADGES	INDIVIDUAL UNIT BADGES
<ul style="list-style-type: none"> • Choose Safety (full programme). • Choose Safety Distinction (full programme + major assignment (Unit 6, Part 2)). • Transition Year: (Choose Safety + Work Experience + e-Learning). The e-Learning component is the online course 'Get Safe - Work Safe' available at https://hsalearning.ie • Online e-learning programme: 'Get Safe - Work Safe' at https://hsalearning.ie • Choose Safety Master (Teacher is awarded a HSA digital badge for teaching Choose Safety). • Choose Safety Apprentice (awarded to school once it starts to deliver the programme). • Choose Safety Work Experience (awarded on successful completion of work experience.). 	<p>Choose Safety (per unit)</p> <p>Unit 1 – Induction</p> <p>Unit 2 – Workplace hazards</p> <p>Unit 3 – Risk awareness (Doing your Job)</p> <p>Unit 4 – Responsibility (Roles, tasks and you)</p> <p>Unit 5 – Communication</p> <p>Unit 6 – Case studies (Unit 6, Part 1)</p> <p>Unit 6 – Major Assignment (Unit 6, Part 2)</p>

WHAT IS A DIGITAL BADGE?

A badge is a symbol or indicator of an accomplishment, skill, competency or interest. Badges can be used to represent achievements, communicate successes and set goals. They can also support learning that happens beyond the traditional classroom.

Badges are a digital representation of the achievement. A badge is an image that has extra meta-data encoded into it to enable verification of the learning. This is managed by the Health and Safety Authority's Open Badges portal.

Upon completion of one of the Choose Safety programmes, a Digital Badge can be awarded to the student in recognition of their increased understanding of health and safety at work. These will be awarded through the HSA Digital Badges site. Further information on how to award digital badges is at <https://badges.hsalearning.ie>

What will students do with digital badges?

When students complete each unit of the HSA Choose Safety programme they can earn a badge. They can collect the badges earned in their own online backpack in order to use them to show learning to teachers, parents, potential employers and friends.






How do I award badges as a teacher?










Beyond the facilitation and assessment of the Choose Safety programme, the only extra commitment to awarding badges will be to create a list of the students who have completed the different Choose Safety Programmes and follow a few simple steps contained under the 'Digital Badges' heading on the HSA e-learning portal <https://hsalearning.ie>. For further queries on awarding digital badges, contact: educationunit@hsa.ie

The online system will then look after creating the student accounts and issuing them the badges. Further information on Digital Badges in general can be accessed at <https://openbadges.org/>. For information specific to Badgr see <https://info.badgr.com/>

DIGITAL BADGES ON OFFER FROM HSA

Please see below the images of the badges on offer from the HSA and links to their learning outcomes which will display when they are clicked on.

Choose Safety Digital badges	Badge titles	Description
	Unit 1 – Induction	<p>The Induction badge is awarded on successful completion of Unit 1, Starting work. The recipient should now be able to:</p> <ul style="list-style-type: none"> • outline the key provisions of the Protection of Young Persons (Employment) Act 1996; • describe the benefits of induction training; • outline key employer and employee responsibilities with regard to health and safety at work.
	Unit 2 – Workplace Hazards	<p>The Workplace Hazards badge is awarded on successful completion of Unit 2, Workplace hazards. The recipient should now be able to:</p> <ul style="list-style-type: none"> • identify and categorise hazards; • define risk assessment; • outline the following hazards and their respective controls; manual handling and ergonomics, slips, trips and falls, fire and first-aid; • outline the core principles of ergonomics; • outline key tips for safe lifting.
	Unit 3 – Risk Awareness	<p>The Risk Awareness badge is awarded on successful completion of Unit 3, Doing your job. The recipient should now be able to:</p> <ul style="list-style-type: none"> • outline key considerations when working at height; • list precautions to be taken around workplace vehicles; • describe how chemicals can cause harm; • outline the use of Safety Data Sheets; • recognise labels on chemical products; • identify the hazards associated with two key work sectors – farming and hospitality; • outline employer and employee responsibility in relation to PPE.
	Unit 4 – Responsibility	<p>The Responsibility badge is awarded on successful completion of Unit 4, Roles, tasks, and you. The recipient should now be able to:</p> <ul style="list-style-type: none"> • outline the roles of safety officer and safety representative; • outline the factors that contribute to a healthy work environment; • list factors that contribute towards positive and negative workplace health and well-being.
	Unit 5 - Communication	<p>The Communication badge is awarded on successful completion of Unit 5, Communicating safety. The recipient should now be able to:</p> <ul style="list-style-type: none"> • list methods of communicating health and safety issues; • comment on a few aspects of health and safety legislation; • outline the difference between an accident and a dangerous occurrence; • illustrate the use of accident reports; • prepare for a workplace meeting following an accident; • describe the purpose of a safety statement; • identify common safety signs and what they mean.

	Unit 6 - Case Studies	The Case Studies badge is awarded on successful completion of Unit 6, Reflections, Part 1: Case Studies. The recipient should now be able to: <ul style="list-style-type: none"> • discuss the impact of workplace accidents on individuals and business; • apply some of the principles of health and safety learned in the Choose Safety programme; • discuss aspects of real-life accidents; • complete a major assignment on one aspect of the course.
	Unit 6 - Major Assignment	The Major Assignment badge is awarded on successful completion of Unit 6, Reflections, Part 2: Major Assignment. The recipient has completed a major assignment on one aspect of the course.
	Choose Safety (Master)	The Choose Safety Master Open Badge is issued to the teacher once the school joins the programme.
	Choose Safety (Apprentice)	The Choose Safety Apprentice badge will be issued by the teacher at the start to all students undertaking the programme, once the school starts to deliver it.
	Choose Safety Completion	The Choose Safety badge is awarded on successful completion of the Choose Safety programme. The badge is awarded in recognition of the recipient's increased understanding of health and safety at work.
	Choose Safety Completion with Distinction	The Choose Safety Distinction badge is awarded to students who have satisfactorily completed the optional major assignment. The badge is awarded in recognition of the recipient's advanced understanding of issues raised and for exceptional completion of the Choose Safety programme.
	Get Safe – Work Safe Online Course Completion	The e-learning badge is awarded to students who have successfully completed the Health and Safety Authority's online course 'Get Safe – Work Safe'.
	Choose Safety Transition Year Completion	The Transition Year badge is awarded on successful completion of the Transition Unit programme. This full programme is for Transition Year students who have completed the Choose Safety programme plus work experience plus the e-learning course 'Get Safe - Work Safe' on https://hsalearning.ie
	Choose Safety Work Experience Completion	The Work Experience badge is awarded on successful completion of work experience.

STUDENT ACTIVITIES

The range of student activities is set out in the table below. Each unit invites a mixture of individual reflection, group work and classroom discussion.

Each requires a level of engagement and reflection appropriate to the senior cycle.

Topic	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Individual Exercise	✓	✓	✓	✓	✓	✓
In Pairs		✓	✓	✓		
In Groups		✓	✓	✓		✓
Classroom Discussion	✓	✓	✓	✓	✓	✓
Fast Facts	✓	✓	✓	✓	✓	
Short Presentation				✓	✓	
Major Project						✓
Brainstorm		✓		✓		
Debate						✓
Oral Presentation				✓	✓	✓
Letter						✓
Role Play					✓	✓
Speed Test	✓	✓	✓	✓	✓	✓
Questionnaire					✓	
Poster				✓	✓	✓
Word Bank	✓	✓	✓	✓	✓	

LINKS TO SENIOR CYCLE AND FURTHER EDUCATION/TRAINING

TRANSITION YEAR

All the essential features of the Transition Year Programme (TY) are supported by the content and style of this Health and Safety programme. The content is firmly grounded in the realities of the work experience that forms a focal part of TY in many schools. Further, the examination of concepts such as responsibility and accountability, self-esteem, tolerance and active citizenship is well reflected in the 'Choose Safety' course. Students are asked to **think and act**, to **reflect and persuade**.

The pedagogic philosophy that underpins the learning experiences in this programme draws from best practice. 'Choose Safety' emphasises individual reflection, paired work and group work. Other features of 'active learning' are also present in role playing, team debates, media analysis and case-study assessments.

The learning is facilitated by modern teaching techniques whereby the student actively engages in the lesson. The style and content is not suitable to one-dimensional instructional teaching.

In summary, the style, content and underlying rationale of this pack are entirely consistent with the philosophy of TY.

TRANSITION UNIT

'Choose Safety' is a core element of a transition unit entitled "Student Safety in the Workplace". This 45 hour transition unit introduces health and safety concepts to students planning work experience. The full unit is available for download on ncca.ie.

LEAVING CERTIFICATE VOCATIONAL PROGRAMME

Students of the Leaving Certificate Vocational Programme (LCVP) will find that much of the content of the 'Choose Safety' programme is relevant to the syllabus requirements of aspects of their course including gaining a good understanding of health and safety legislation. The text supports Link Module 1 "Preparation for the World of Work", Unit 1 Introduction to working life, and Unit 4 Work Placement.

Activities in the text may be of use for the portfolio requirement of the LCVP. As per TY, full and active participation will enhance many of the life skills that are fundamental to LCVP.

LEAVING CERTIFICATE APPLIED

Similarly, the content of this health and safety awareness

programme is relevant to all the components of the Leaving Certificate Applied (LCA). The LCA assessment modes (modules, student tasks and terminal examinations) are well supported by the content of 'Choose Safety'. LCA students will find much of this directly relevant to their Vocational Preparation course (subject).

'Choose Safety' incorporates the learning experiences expected for the completion of many of the learning outcomes explicit in vocational preparation. The content here directly supports the mandatory work experience that is a focal aspect of LCA. In addition, many LCA Vocational Specialisms include units where awareness of health and safety is explicit. Such relevant content is incorporated within 'Choose Safety'. Students may use the competencies developed here to fulfil the requirements of the LCA student 'tasks'. Finally, lessons learnt from this text are directly relevant to the terminal LCA examination.

ESTABLISHED LEAVING CERTIFICATE

'Choose Safety' may be used by teachers of mainstream Leaving Certificate subjects such as Technologies, Science, Agricultural Science, Construction studies, Home-Economics, Art, and P.E. Understanding of health and safety issues are explicit or implicit in all these subjects. The level of intellectual engagement that the latter units of the programme invite from students will assist their work in subjects such as English and Social, Personal and Health Education. Teachers and students of any of the above subjects can dip into this resource pack to supplement the core syllabus.

FURTHER EDUCATION AND TRAINING

There are many courses of further education where Choose Safety will be relevant in order to prepare young and unemployed people for the workplace. Teachers and tutors can dip in and out of topics and units as desired. Remember that digital badges can be awarded for each unit studied as well as certificates for completed courses. The Choose Safety programme is consistent with an education system that supports meeting the needs of all learners and aims to enhance the jobs prospects of young unemployed people in particular.

The Authority's e-learning site <https://hslearning.ie> also provides sector-specific courses which can be accessed 24/7 and free of charge. Teachers can set up groups of learners on the system or individual learners can access courses independently. For the full list of courses, see <https://hslearning.ie>

SENIOR CYCLE CURRICULUM LINKS

Topic	Leaving Cert Vocational Program	Leaving Cert Applied	Practical			Home Economics	Science (incl. practicals)	Agricultural Science	Business Economics Accounting	Technology, Engineering	Construction	Wellbeing SPHE
			Art	PE	PE							
Legal	Young Workers Rights	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
	Employer's Responsibilities	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
	Employee's Responsibilities	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Hazard, Risk, Control	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Fire and First-aid	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Manual Handling and Ergonomics	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Slips, Trips and Falls	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Working at Height	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Workplace Vehicle Safety	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Chemicals	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Farming	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Hospitality	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Safety Officer and Safety Representative	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Work Environment	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Workplace Health and Well-being	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Safety Statements	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Safety Signs	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Personal Protective Equipment	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Accident / Incident Investigation	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Major Assignments	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

*Teachers and trainers in Further Education may wish to browse the topics for course relevance.

SUBJECT EXERCISES

1. ART
2. HOME ECONOMICS
3. SCIENCE SUBJECTS
4. TECHNOLOGY SUBJECTS

ART



Art has the advantage over other subjects, of hands-on practical activity. However, the more activity that a student is engaged in, the more potential there is for accident and personal injury. Also, in an art classroom, students may be working with different mediums at the same time, which can present a danger, particularly if classroom space is restrictive.

The excitement generated by the use of potentially dangerous equipment, e.g. soldering iron and materials

for example powdered paints adds to the risks involved in carrying out practical art activities.

The following table shows activities and their associated hazards, relative to Art modules. Unit 2, Part 2 of Choose Safety (page 24 of the Student workbook) looks at Manual Handling and Ergonomics, Part 3 (page 29) looks at Slips, Trips and Falls, and Unit 3, Part 3 (page 43) focuses on Chemicals.

Practical Modules	Activity	Hazards:
Imaginative composition or still life	Trailing electrical leads, school bags,	Trips, Falls
	Mixing powdered paints	Eye Injury, dust to respiratory system
	Equipment storage	Ergonomics, Trips, Falls
	Water spillage	Slips
Design or craftwork	Soldering Iron	Burns, fire
	Paper Mache mulch	Slips from water. mulch
	Carving	Eye injury, cuts, dust to respiratory system
	Broken Ceramics	Cuts, eye injury
	Firing Pottery	Burns
	Mixing powdered paints	Eye Injury, dust to respiratory system
	Embroidery	Needle stick injury,
	Scissors	Cuts
	Lino-printing	Cuts, Finger / hand injury
	Batik – Hot wax	Burns, fire
	Disposal of broken needles	Needle stick injury,
Art metalwork	Burns, eye injury, cuts	
Life sketching	Set-up – trailing bags, leads	Trips, Falls
	Water spillage	Slips
	Sitting for long periods	Comfortable seating

Having worked with the Choose Safety programme here are some **optional exercises** which may enhance that learning experience.

1. What hazards are people exposed to when completing conservation work?
Design a poster to promote health and safety when completing conservation work using materials of your choice.
2. Visit an art gallery or museum. Observe how curators handle, move, display or store art pieces. Complete an ergonomic risk assessment for transporting a large art piece.

HOME ECONOMICS



While studying Home Economics in school students learn to:

- care for their health and safety and the health and safety of others;
- organise and manage their learning and working areas to create a healthy and safe environment;
- identify hazards, act on them, and avoid the consequences that may arise;
- handle materials and equipment in a safe and hygienic way;
- live safer, healthier lives.

Practical work is an integral component of Home Economics - Scientific and Social, and much of that takes place in the school kitchen. As the kitchen is the room where most accidents occur in the average home, it is important that the teacher sets the best standards and enables the student to carry out their learning in a safe, hygienic and supportive environment. Teachers are encouraged to develop in their students positive attitudes and approaches to safety, in the range of activities they encounter and to inculcate in the student, an awareness of the value of creating a safe working environment.

Students are encouraged to work in an observant manner, to be aware of the dangers of spillages, heat, fire, sharp knives, electrical equipment, toxic cleaning materials and other potential hazards that may arise. Students are taught the importance of adhering to regulations that apply to a working kitchen, including the importance of personal protection such as wearing protective clothing (aprons,

head covering, and oven gloves). They are trained how to behave in emergencies e.g. fire drills, how to use a fire blanket in the event of small local fires. The main learning outcomes of practical activities carried out in the school kitchen concerns:

- **the safe use of materials and equipment;**
- **the procedures that promote good health and safety practices.**

In the 'Textile, Fashion and Design elective students' are expected to be familiar with fire-retardant finishes and the 'Fire Safety (Domestic Furniture) Order (1988 and 1995) and to be cognisant of the flammability of fibres in the selection of household textiles.

Ergonomics is also studied in the Home Design and Management elective.

How can we apply the information learned from studying Home Economics to the working environment?

In the catering and hospitality sector, slips, trips and falls hazards are the most common causes of accidents, particularly around sources of liquid, for example at sinks washing vegetables, utensils and crockery.

The following table shows activities and their associated hazards relevant to the Food Studies, and Textiles, Fashion and Design modules. Unit 2, Part 2 of Choose Safety (page 24 of the Student workbook) looks at Manual Handling and Ergonomics, and Unit 2, Part 3 (page 29) looks at Slips, Trips and Falls in more detail.

Practical Modules	Activity	Hazards:
Food studies	Sink washing up	Slips, falls
	Oven	Burns
	Hot liquid, e.g. soup splashes	Burns, eye injury
	Pots and pans	Ergonomics - Lifting and carrying
	Mixers	Ergonomics - Lifting and carrying, foot injury
	Raw Material – floor, sugar	Ergonomics - lifting and carrying
	Knives and cutters	Cuts
	Trailing electrical leads, school bags	Trips, falls

Practical Modules	Activity	Hazards:
Textiles, fashion and design	Sewing	Needle stick injury
	Disposal of broken needles	Needle stick injury
	Repairs to equipment	Entanglement, finger pinch
	Soldering iron	Burns, fire
	Iron	Burns, fire
	Scissors	Cuts
	Trailing electrical leads, school bags,	Trips, falls
	Batik – hot wax	Burns, fire
	Trailing electrical leads, school bags	Trips, falls
	Mixing powdered paints	Eye Injury, dust to respiratory system
	Sink washing up	Slips, falls
	Equipment storage	Ergonomics, trips, falls

SCIENCE SUBJECTS



Students have many, if not all of their science lessons in a school laboratory during their post-primary education. The main learning outcomes of the initial practical activities carried out in the school laboratory concern:

- **the safe use of apparatus;**
- **the development of procedures that promote good health and safety practices.**

Students are taught how to identify and avoid potential hazards many of which they will encounter in day to day life such as burns, scalds, broken glass and slippery surfaces. They are taught the importance of adhering to the strict rules that apply to laboratories, including the importance of personal protection such as protective clothing and eye protection.

While studying science in school students learn how to:

- care about their health and safety and the health and safety of others;
- identify everyday hazards and how to protect themselves against them;
- handle materials and equipment safely;
- create a safer and healthier learning and working environment;
- live safer, healthier, lives.

One of the roles of a science teacher is to enable pupils to learn science in a safe and supportive environment. Throughout their experience of science in school, students are taught how to cope with the hazards associated with practical work, and to minimise the risk to themselves and to their colleagues. Science has the advantage over other subjects of hands-on practical activity. However, the more activity that a student is engaged in, the more potential there is for accident and personal injury. The excitement generated by the use of potentially dangerous equipment and chemicals adds to the risks involved in carrying out practical science activities. As well as practical activities, content from the science syllabi can be used as a context to help students develop a positive attitude towards health and safety issues in a variety of situations (Mapping Health and Safety in the Curriculum, National Council for Curriculum and Assessment, Sept. 2007).

The following table shows activities and their associated hazards relevant to Science. The hazards are categorised by chemical, biological, and physical. Unit 3, Part 3 of Choose Safety (page 43 of the Student workbook) focuses on Chemicals.

Experiments

No	Title	Hazards Category	Activity	Hazards
		Chemical	LPG gas – heavier than air	Suffocation, toxic poisoning
			Natural Gas – lighter than air	Fire
			Compressed hydrogen	
			Compressed carbon dioxide	Toxic poisoning
			Compressed oxygen	Fire, explosion
		Biological	Dissection of animal	Bacteria, virus
		Physical	Bunsen burner	Fire, burn
			Handling and disposal of broken slides, broken glassware	Cuts
			Hot glassware	Burns
			Hot ceramics	Burns
			Broken ceramics	Cuts
			Lasers	Eye injury, burns

Having worked with the Choose Safety programme here is an **optional exercise** which may enhance that learning experience.

Investigate chemicals used in your laboratory.

Pick three experiments which involve working with chemicals from your Science Curriculum.

Identify a toxic, a corrosive and an irritant chemical. How can each of these be hazardous to health?

Review the label for each chemical? What key information is given on the label?

Review the safety data sheet for one of the chemicals. What important information does this provide about the chemical?

TECHNOLOGY SUBJECTS



The syllabi emphasise the need to have due regard for health and safety issues in all activities, in particular when working with materials and equipment but also in terms of the generation and evaluation of design ideas and solutions.

A particular objective of technology education is that students should know and adhere to health and safety requirements associated with planning and conducting practical work and, furthermore, how these requirements may impose limitations or constraints on the design of artifacts and systems.

In the teaching and learning of these subjects, students are required to observe safe working practices and to follow

recommended procedures. They develop an understanding of the potential dangers that may be associated with energy sources, machines, equipment and devices that are used in the course of their learning. Through instruction they become familiar with the proper use of safety equipment and the maintenance of a safe working environment through the application of appropriate safety precautions that will avoid danger and minimize risks. Health and safety is required to be considered in the design and planning solutions to technological problems.

The following table shows activities and their associated hazards relevant to Technology subjects. Unit 2, Part 2 (page 24) focuses on manual handling and ergonomics.

Core Subjects - Practical Modules	Activity	Hazards:
A Process of design		
Project and quality management		
Materials and production	Milling machine	Entanglement,
	Pedestal drill	Eye injury, cuts
	Metal working centre lathe	Eye injury, cuts
Communication and graphic media		
Information and communications technology	Visual display units	Eye strain, upper limb strains
	Ergonomics	Repetitive strain injury
Structures and mechanisms		
Energy, electricity and electronics		

Options (Select Two)

Electronics and control		
Applied control systems		
Information and communications technology		
Manufacturing systems		
Materials technology		

In subjects like Construction studies and Engineering a knowledge of health and safety is explicit in their syllabi.

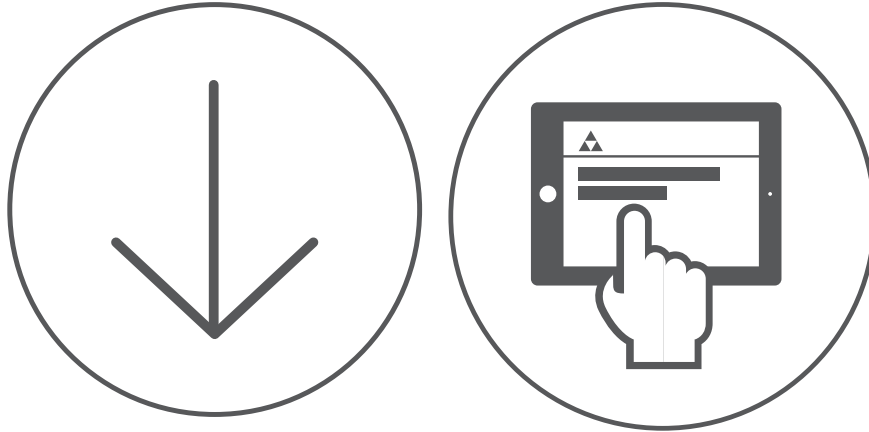
Having worked with the Choose Safety programme here is an **optional exercise** which may enhance that learning experience.

Review plant and equipment in your Technology classroom.

In groups of three:-

1. Complete an inventory of plant and equipment in your classroom and record manufacturer, date of manufacture, date last maintained.
2. Identify one piece of equipment. Review the selected equipment's operating manual, in particular health and safety information. Identify the hazards, risks, and controls associated with this equipment.
3. Look at the design of this piece of equipment and how it is used. Can any improvements be made in terms of ergonomics?
4. From what you have learned complete a one page health and safety information sheet for the piece of equipment.

GO BROWSING



You can find detailed and up-to-date information on all the topics explored in 'Choose Safety' by visiting the Health and Safety Authority website <https://hsa.ie>
To view the Authority's online courses go to <https://hsalearning.ie>



Other websites:

<https://education.ie>
https://hsa.ie/eng/Topics/Simple_Safety/
<https://workplacerelements.ie>
<https://agriaware.ie>
<https://scoilnet.ie>
<https://cdc.gov/niosh>
<https://pdst.ie>
<https://esb.ie>
<https://mentalhealthireland.ie>
<https://epa.ie>
<https://osha.gov> (USA)
<https://fsai.ie>
<https://hse.gov.uk> (UK)
<https://osha.europa.eu>
<https://rsa.ie>
<https://agriculture.gov.ie>
<https://enetosh.net>
<https://safeworkaustralia.gov.au> (Australia)
<https://citizensinformation.ie>
<https://besmart.ie>
<https://hse.ie>



UNIT 1

STARTING WORK

Unit Contents

- 1 Teacher guidelines
- 2 Young workers' rights
- 3 Induction
- 4 Health and safety laws and my workplace
- 5 Unit activities
- 6 Further information

STARTING WORK



TEACHER GUIDELINES

The 'Young People at Work' workbook contains the following contents in **Unit 1 Starting Work**:

- Part 1 Young workers' rights
- Part 2 Induction
- Part 3 Employer and Employee responsibilities

Unit 1 focuses on preparing young people for the workplace. It opens the door to health and safety learning, giving an insight into key health and safety requirements. Unit 1 pays particular attention to starting work and what young people should know in relation to young worker rights and induction.

UNIT 1, PART 1, YOUNG WORKERS' RIGHTS

All the relevant health and safety legislation and regulations apply to workplaces that employ young people. For example, under 18s must not be employed to give signals to operators of lifting equipment driven by mechanical power (e.g. cherry pickers), nor should they be employed to operate such equipment. Under 18s must not do work that:

- exceeds their physical or mental capacities;
- exposes them to toxic substances;
- exposes them to radiation;
- involves extreme heat, noise or vibration;
- involves risks that they are unlikely to recognise or avoid because of their lack of experience or training.

The Protection of Young Persons (Employment) Act, 1996 is designed to protect the health of young workers, and to ensure that work done during the school years does not put your education at risk.

"Young Person" means a person who has reached 16 years of age or the school-leaving age (whichever is higher) but is less than 18 years of age.

The law sets minimum age limits for employment, defines

rest intervals and maximum working hours, and prohibits the employment of those under 18 years of age on work

late at night – see **Table 1**: Working Hours: Under 16s and **Table 2**: Working Hours: 16 and 17 Year Olds (page 6 of the Student workbook).

Employers of employees under 18 years of age must display an Abstract of the Act at the main entrances to his/her work premises. A poster version of the summary information is available from the Workplace Relations Commission https://www.workplacerelements.ie/en/publications_forms/under_18_a3_poster.pdf. Employers must also keep specified records for those workers aged under 18 years.

The Minimum Age for Employment

Employers can take on 14 and 15 year olds on light work:

- part-time during the school term (over 15 years only);
- as part of an approved work experience or educational programme;
- during the school holidays, provided there is a minimum three week break from work in the summer.

Any child under 16 may be employed in film, theatre, sports or advertising under licence.

UNIT 1, PART 2, INDUCTION

Starting work for the first time can be a nervous and exciting time in a young person's life. Periods of work experience and work-based learning may be the first time that young people experience the work environment. But there are dangers in every workplace, accidents can and do happen. Some accidents cause serious injuries and even death – but most can be avoided. Make sure to ask plenty of questions as this is your opportunity to find out what is required of you and to protect yourself from an occupational related injury or illness.

When starting work for the first time, you are 50% more likely to be injured in the workplace than more experienced workers.

'Choose Safety' gives you health and safety information you need to help keep you safe at work.



Should all new workers (including students on work experience) receive induction training?

Yes, employers legally must provide instruction, training and supervision. Induction training is an essential part of the learning process. When you start a job or work experience you should be given an induction and specific training for each new job.

This is when you are told basic information about the workplace so you can stay safe.

You should be told the following:

- the rules of your workplace. This should include an introduction to health and safety, first-aid arrangements and evacuation procedures in case of a fire or other emergency;
- any known hazards and risks in your workplace;
- what safety measures are in place;
- what you must do to keep yourself and others safe.

Remember → Keep Cool – Stay Safe

Key Points to remember:

- Get to know your surroundings, your work base, the canteen, rest rooms, exits including fire exits, first-aid station if there is one, parking areas, etc.
- Know who your supervisor is and how to contact him/her if required.
- Know how to use your Personal Protective Equipment (PPE) if required. If you need replacements be familiar with the procedures for doing this.
- Training – what training do you require?
- Emergency procedures – fire drill, first-aid.

Your employer may ask you to read important safety documentation/rules and ask you to sign a document stating you have read and understood these.

See 'Student Checklist' in HSA Publication 'Health and Safety Matters for Students on Work Experience'

Check out 'Workplace Safety, Health and Welfare Induction' at <https://hsalearning.ie>. The course developed in collaboration with ATU Sligo contains lots of practical information for inductees, and can be delivered in a classroom setting. The course has 8 units ranging from 20 minutes to 45 minutes. Units 1&2 are mandatory.

new

UNIT 1, PART 3, HEALTH AND SAFETY LAWS AND YOUR WORKPLACE

Health and Safety law is there to protect workers (this includes students on work experience) or those who may be affected by work activities. The Safety, Health and Welfare at Work Act, 2005 is the primary legislation covering safety, health and welfare in the workplace. The Health and Safety Authority (HSA) has overall responsibility for ensuring the 2005 Act is complied with.

Who is responsible for safety? The short answer is 'everyone is'. It is wrong to assume that employers are the only ones responsible for creating and maintaining a safe and healthy workplace. Everyone has a role to play. You will look at the key responsibilities of employers and employees in this final Part of Unit 1.

EMPLOYER RESPONSIBILITIES

Employers are responsible for providing a safe and healthy workplace. This includes, for example, the provision of safe plant and equipment, safe systems of work, training and supervision where required, and personal protective equipment where required.

There is also lots of health and safety legislation in place with some specifically for the Protection of Children and Young Persons. The Health and Safety Authority (HSA) has published Guidance on the 'Protection of Children and Young Persons' which includes information on:

- ✓ the employment of young persons;
- ✓ risk assessment;
- ✓ circumstances prohibiting employment of a child or young person;
- ✓ health surveillance;
- ✓ a guide list of agents, processes or work that children and young persons may require protection from.

The aim of the Guide is to protect you and your co-workers and to prevent occupational accidents or ill-health occurring. The document can be downloaded from hsa.ie

EMPLOYEE RESPONSIBILITIES

Employees have a duty to protect themselves and others. You must co-operate with your employer and ensure you are not a danger to yourselves or others at work. If you are provided with personal protective equipment such as gloves, mask, hearing protection, high visibility clothing, safety helmet, then you must use it as directed and look after it.

You should also report to your employer or supervisor any matter that could give rise to an accident occurring, for example, if you notice unsafe work practices or serious hazards. Never attempt to repair anything yourself – tell your supervisor.

Learning Outcomes

On completion of this unit, students should be able to:

- identify employer and employee responsibility with regard to health and safety at work
- outline the key provisions of the Protection of Young Persons (Employment) Act 1996
- describe the benefits of induction

3. Consider each of the scenarios in Activity 1.C. Divide the class into groups and ask them to consider how they would react as employers and then as employees. Ask students to consider what the best course of action is in each case. Allow for a lengthy discussion.
4. Invite the class to answer Activity 1.D – employer and employee responsibilities on page 11. This can be done individually, in pairs or in groups.
5. Young worker rights is covered on pages 5-6 of the Student workbook. Ask students if they have any knowledge of Young Workers' Rights. Do they know where to find this information? How relevant is it to part-time workers?
6. Introduce the concept of the Word Bank. Decide whether to use a jotter, a computer file or a classroom poster as your word bank.
7. For the **Unit Activities** students should consider their own experience to date or consider any experience they have had to date in reflecting on the questions.

Who is responsible for safety?

The short answer is 'everyone is!'



It is wrong to assume that managers are the only ones responsible for creating and maintaining a safe workplace. Everyone has a role to play. Unit 1 looks at employer and employee responsibilities.

SUGGESTED LESSON PLANS FOR UNIT 1

1. Introduce the concept of health and safety and the aims of the unit.
2. Opening questions for consideration by the class might include:
 - Identify two types of occupations associated with high levels of workplace accidents? (Answer: farming and construction work);
 - Who are at greater risk of injury in the workplace? (Answer: Young people, aged between 18 and 24).



UNIT 1 ACTIVITIES

Unit 1, Part 1, Young Workers' Rights



ACTIVITY 1.A, Page 7 CLASS DISCUSSION

Discuss the data in Table 1 and Table 2.
Do you think these working hours,
time off and rest breaks are reasonable?
Are they adhered to?



ACTIVITY 1.B, Page 7 LOG ON

Search the web for more information on employment rights for young people. Look for information on minimum pay levels and on use of equipment. You could begin by looking at the following sites:

- <http://www.irishstatutebook.ie/>
- <https://citizensinformation.ie>
- <https://workplacerelations.ie>

Legal Reference

- Safety, Health and Welfare at Work (General Application) Regulations 2007, Protection of Children and Young Persons, Chapter 1 of Part 6.
- The Safety, Health and Welfare at Work (General Application) (Amendment) Regulations.



UNIT 1 ACTIVITIES

Unit 1, Part 3, Health and safety laws and your workplace



ACTIVITY 1.C, Page 10 CLASS DISCUSSION

Read the following excerpts from the Safety, Health and Welfare at Work Act, 2005. Consider why these are in the 2005 Act. How effective do you think they may be in reducing accident rates at work?

EXCERPT A:

'an employer's duty extends to:

... managing and conducting work activities in such a way as to prevent any improper conduct or behaviour likely to put the safety, health or welfare at work of his or her employees at risk.

... preparing and revising adequate plans and procedures to be followed and measures to be taken in the case of an emergency or serious or imminent danger.

... reporting accidents and dangerous occurrences.'

Section 8 of the 2005 Act

→ Discuss how each of these three duties may be performed by an employer of your choice.

EXCERPT B:

'Every employer shall ... ensure that instruction, training and supervision is provided in a form, manner and language that is reasonably likely to be understood by the employee.'

Section 10 of the 2005 Act

→ Why is this provision in the Act? Discuss the difficulties of performing this duty in, say, a large hospital. Consider the implications of this law in an organisation employing workers of many different nationalities.

EXCERPT C:

'An employee must not engage in improper conduct or other behavior such as violence, bullying or horseplay, which could endanger another person at work or his or her safety, health and welfare.'

Section 13 of the 2005 Act

→ Why is this provision in the Act? How can 'violence, bullying or horseplay' affect another person's safety, health and welfare? What are the other effects of such behaviour?



END OF UNIT 1: SPEED TEST, Page 12

- Q1.** List three responsibilities of an employer and three responsibilities of an employee?
- Q2.** What activities must your employer ensure you are not exposed to?
- Q3.** How many hours must you work before getting a 30 minute break?
- Q4.** What is the minimum age for regular full-time employment?
- Q5.** List three of the key items to be covered during induction training.



FURTHER INFORMATION



A wide range of publications and resources are available at <https://hsa.ie>

- HSA publication 'Health and Safety Matters for Students on Work Experience'
- HSA online course 'Get Safe Work Safe' at <https://hsalearning.ie>
- Workplace Safety, Health and Welfare Induction – This course has lots of practical information for inductees, and can be delivered in a classroom setting. The course has 8 units, two compulsory 45 minute units, and 6 optional 20 minute units, available at <https://hsalearning.ie>
- HSA Guidelines - Protection of Children and Young Persons
- <https://workplacereactions.ie>
- <https://citizensinformation.ie>



UNIT 2

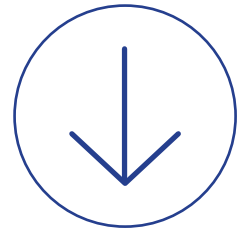
WORKPLACE HAZARDS

Unit Contents

- 1 Teacher guidelines
- 2 Hazards and risk assessment
- 3 Manual handling and ergonomics
- 4 Slips, trips and falls
- 5 Fire safety and first-aid
- 6 Unit activities
- 7 Further information



WORKPLACE HAZARDS



TEACHER GUIDELINES

The 'Choose Safety' workbook contains the following contents in **Unit 2 Workplace hazards**

- Part 1 Hazards and risk assessment
- Part 2 Manual handling and ergonomics
- Part 3 Slips, trips and falls
- Part 4 Fire safety and first-aid

Unit 2 introduces the terms 'hazard', 'risk' and 'control'. This terminology is re-visited throughout Choose Safety. Unit 2 aims to increase students' awareness of workplace hazards and risk. It focuses on some key hazards present in almost all workplaces: manual handling and ergonomics, slips, trips and falls, and fire.

UNIT 2, PART 1, HAZARDS AND RISK ASSESSMENT

A brief overview of hazards and risk assessment is provided on pages 16 and 17 of the Student workbook. The nine Principles of Prevention are explained, and outlined in a useful chart (dark blue section, page 17). The Fast Facts section on page 18 of the Student workbook provides some statistics on workplace accidents.

Risk assessment is a three-step process.

- step 1** Identify the hazard
- step 2** Assess the risk
- step 3** Apply the control

When assessing risk the following must be checked:

1. What is the likelihood of injury or harm occurring?
2. How severe is that likely to be?
3. How many people might be affected?

Risk can be measured using the following formula:

$$\text{Risk} = \text{Likelihood} \times \text{Severity of the potential injury}$$

When assessing risks it is also important to consider the number of people who may be affected by the hazard. Another way that risk can be measured is using a matrix. For example if you assign a number from 1-3 for each of the above, with 1 meaning low and 3 high, the risk rating may range from 1-9.

		Likelihood		
		1	2	3
Severity	1	Low (1)	Low (2)	Medium (3)
	2	Low (2)	Medium (4)	High (6)
	3	Medium (3)	High (6)	High (9)

UNIT 2, PART 2, MANUAL HANDLING AND ERGONOMICS

The lack of effective management of the hazard of manual handling results in one third of all reported workplace accidents. Page 24 of the Student workbook emphasises that risk assessment is the most important aspect of safe manual handling. The following factors should be considered for manual handling activities:

- Task
- Individual
- Load
- Environment

Further information on each of these factors is provided on page 24 and 25 of the Student workbook, followed by key tips for safe lifting (with diagram) on page 25, information on ergonomics, and Fast Facts on musculoskeletal disorders on page 26.

UNIT 2, PART 3, SLIPS, TRIPS AND FALLS

Slips, trips and falls often result in injuries, and time off work. In 2021 slipping or falling led to 2,007 injuries (24%); of these, 81% were falls on the same level while 19% were falls from height. The average number of incidents from 2017 - 2021 was 2,152, making falls one of the most common triggers for non-fatal workplace injuries over the 5-year period.

Information on slips, trips and falls including key areas to consider are covered on pages 29-31 of the Student workbook.

UNIT 2, PART 4, FIRE SAFETY AND FIRST-AID

Fire causes many injuries and deaths each year. Employers must take all reasonable measures to guard against the outbreak of fire and plan measures to protect people's safety if fire breaks out. All businesses should have a fire safety management system that is based around the three key stages:

Protection → Detection → Evacuation

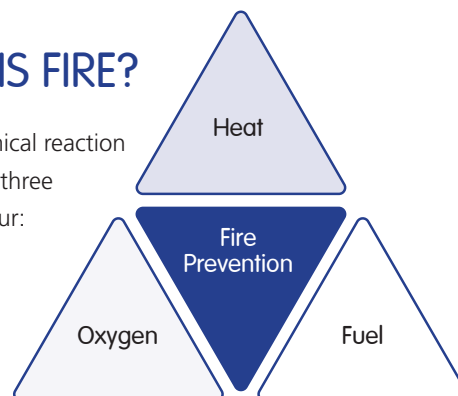
Fire precautions include:

- all employees must be instructed on what to do in the event of a fire;
- escape routes must be clearly marked and assembly points easily identifiable;
- evacuation procedures must be well known to everyone and regularly practiced;
- all equipment must be inspected regularly. Smoke detectors, fire alarms, fire doors and fire-resistant building material assist in preventing the rapid spread of fire;
- fire safety certificates are required for all new buildings and for most renovations or extensions to business premises;

- emergency lighting and fire-fighting equipment can help save lives when fire breaks out;
- in the event of a fire evacuate the building immediately and call the fire brigade.

WHAT IS FIRE?

Fire is a chemical reaction which needs three things to occur:



Oxygen + Heat + Fuel = Fire

If one of these is not present, the fire cannot start. If one of these is taken from a fire, it will go out. But how does a combination of the three create fire?

Page 32 and 33 of the Student workbook provides further information on this.

Details on the burning temperature of various fuels, fire safety statistics, workplace fire safety procedures, and fire extinguishers are also covered on pages 33 and 34 of the Student workbook.

Unit 2, Part 4.1, page 35 finishes with some practical information on first-aid.

Learning Outcomes

On completion of this unit, students should be able to:

- identify and categorise hazards
- define risk assessment
- outline the following hazards and their respective controls; manual handling and ergonomics, slips, trips and falls, fire and first-aid
- outline the core principles of ergonomics
- outline the key tips for safe lifting

SUGGESTED LESSON PLANS FOR UNIT 2

- Opening questions for consideration by class:
 - What do you understand by the term 'hazard', 'risk', 'control'?
 - Can all hazards be eliminated? Why? Class may give examples of everyday hazards. This will lead nicely into the concept of 'risk assessment'. It is impossible to eliminate every hazard. It is therefore important to reduce the likelihood of an accident occurring by putting 'controls' in place.
 - What does 'risk assessment' mean? You can ask the student to outline routine daily activities that carry a risk.
 - Who should carry out a risk assessment? Why is risk assessment necessary in workplaces?
- After completing **Exercise 1** you could ask the class to rank according to the level of risk activities such as sky diving, flying, driving, construction work, hairdressing, etc. This introduces the idea of relative risk.
- Exercise 2** introduces the more technical consideration of measuring risk and the nine Principles of Prevention.
- See **Technology** subjects exercise (page 15 of Teachers' Preface) and **Art** exercise (page 11). This can be applied to Manual Handling and Ergonomics.
- See **Home Economics** information (page 12 of Teachers' Preface). This can be applied to Slips, Trips and Falls.
- For the **Unit Activities** (see below) students should consider their own experience to date or consider any experience they have had to date in reflecting on the questions.



UNIT 2 ACTIVITIES

Unit 2, Part 1, Hazards and risk assessment



ACTIVITY 2.A, Page 19 BRAINSTORM

List 25 hazards that can be found in a school. Remember hazards are everywhere, all workplaces have hazards.



ACTIVITY 2.B, Page 19 CLASS DISCUSSION

The illustrations below show examples of high, medium and low risk in different situations.

Think of the reasons why these ratings are applied.

Are there other things that should be taken into account that are not obvious in the drawings for example, the location of the bus stop or the time of day?



ACTIVITY 2.C, Page 19 IN PAIRS

Using the following formula and the matrix, calculate the risk for each of the above activities.

Risk = Likelihood - 1 for unlikely, 2 for likely, 3 for very likely

Severity of the potential injury - 1 for little harm, 2 for harmful, 3 for very harmful

		Likelihood		
		1	2	3
Severity	1	Low (1)	Low (2)	Medium (3)
	2	Low (2)	Medium (4)	High (6)
	3	Medium (3)	High (6)	High (9)

Your answers will range from minimum risk 1 to maximum risk 9.



ACTIVITY 2.D, Page 20 INDIVIDUAL EXERCISE

- i. Suppose you are working in an office and are required to sit at a computer for most of the day.
 - a. List all the hazards on and around your desk in the office.
 - b. Rate the risk of each hazard that might cause harm. Say whether each one is:
 - Likely to cause injury **high risk**
 - Could possibly cause injury **medium risk**
 - Very unlikely to cause injury **low risk**
 - c. Calculate a numerical value (1 to 9) for each risk.



Hazard	High risk (value) ●	Medium risk (value) ●	Low risk (value) ●

- ii. Imagine you are working as a dental assistant. Repeat questions a, b and c above.

Hazard	High risk (value) ●	Medium risk (value) ●	Low risk (value) ●



ACTIVITY 2.E, Page 20 IN PAIRS

Compare your list with that of another student in your class. Try to agree a common list of hazards and the level of risk associated with each. One of you will report back to the class.



ACTIVITY 2.F, Page 21

INDIVIDUAL EXERCISE

Do you consider each of the following to be true or false?

		True	False
1	The back is the most commonly injured body part in workplace accidents.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Slipping, or falling is the least common cause of workplace accidents.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	It is the employee's responsibility to ensure risk assessments are carried out.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	A hazard is anything that could cause harm.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Hazards are not always obvious.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Manual handling accounts for almost one-third of all non-fatal incidents reported to the HSA.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	The first principle of prevention is adapt the work to the individual.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	'Manual handling' and 'Slipping or falling' were two of the highest reported non-fatal injuries by trigger (2021).	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Teacher's Note:

Answers are provided in the Teacher's text only. The diagrams and pie chart associated with Activity 2.F are on page 18 of the Student Workbook.

The diagrams show the most injured body parts in workers and non-workers, and a pie chart shows the top 5 reported non-fatal injuries by trigger.

The most injured body part for **workers** in 2021 was the back, associated with 21% of non-fatal incidents reported to the Authority. Non-fatal back injuries were caused primarily by manual handling incidents.

The most injured body part for **non-workers** was the head (23%). The most common cause of head injuries in non-workers was falling or slipping, causing the victims to strike their heads.

The **trigger** is the term used to describe the cause of an incident. The pie chart on page 18 of the Student Workbook shows the top 5 non-fatal injuries by trigger, of non-fatal incidents reported to the HSA in 2021, where a clear trigger was identified.

The single most common trigger was manual handling leading to internal injury (2,656, 32%). Slipping or falling led to 2,007 injuries (24%); of these, 81% were falls on the same level while 19% were falls from height. Manual handling and falls together account for over half of all non-fatal injuries reported to the Authority in 2021.



ACTIVITY 2.G, Page 22 INDIVIDUAL EXERCISE

List the activities you normally do in your everyday life where there is some risk of injury, then complete the rest of the table.

Typical activity	What could go wrong?	How likely is this to happen?	Controls
Cycling to school	Falling Colliding Being struck or knocked down Equipment failure Loss of control	Medium to high risk Factors include the route to school, traffic, visibility, condition of bicycle and maintenance, training and skills, weather conditions	Wear a helmet and protective gear Be clearly visible Follow the rules of the road Avoid dangerous routes Slow down Maintain your bike
Computer games	Eye fatigue Muscular pain and strain Headache Stress Obsession Electrical fault	Low risk Minor discomfort likely, unless used excessively	Use for short period only Take frequent breaks Adjust chair and position of monitor/screen Wear glasses if required Consider your posture and also the environment, for example, room lighting



ACTIVITY 2.H, Page 22 IN GROUPS

In a group of three, select a classroom in your school with practical tasks for example, Art room, Home Economics room, ICT room, Science Laboratory, Technology room.

1. Compile a hazard checklist for the classroom selected.
2. Using the checklist identify and categorise the hazards in the room, referring back to what you have learned so far.
3. Once completed, assess the level of risk by determining who might be harmed and how. Consideration should be given to:
 - the number of persons exposed to the hazard;
 - the frequency of exposure to the hazard;
 - duration of exposure to the hazard;
 - potential failure modes;
 - routes of exposure.
4. Calculate the level of risk and identify if the hazard is a high, medium or low risk.
4. Confirm what controls are in place to manage the hazard and what other controls need to be put in place to reduce the risk of injury and ill-health. Remember legislation, code of practices and standards state the minimum requirements for the workplace.

Once the above project is completed, you may be able to use the hazard checklist to help keep the classroom your group selected safe for students, staff and visitors.

Teacher's Note

'Guidelines on Managing Safety, Health and Welfare in Post-Primary Schools' are available at hsa.ie/education.



ACTIVITY 2.I, Page 23 SPOT THE HAZARD

As a class, look at the picture on page 23 of your text book. Can you spot what has the potential to cause an injury – the 'hazard'?



Teacher's Note:

There are 5 hazards in this picture:

1. Fire extinguisher used as doorstop.
2. Electric cable extended across a walkway.
3. Folders blocking walkway.
4. Filing cabinet door left open.
5. Boxes stored dangerously high.



UNIT 2 ACTIVITIES

Unit 2, Part 2, Manual handling and ergonomics



ACTIVITY 2.J, Page 27 CLASS DISCUSSION

1. What is happening here?
2. Is the workstation suitably set up?
3. Do you think the screen, keyboard, and mouse are positioned correctly?
4. Do you consider the office to be a low risk work environment?
5. List four hazards associated with working in an office.



ACTIVITY 2.K, Page 27 IN GROUPS

Source some clean, empty cardboard or plastic boxes/containers. Your teacher may have some of these in the classroom already. Use a combination of containers if you prefer. Place the containers on the floor and start to load them with some light contents such as plastic bottles, tennis balls, or similar. Think about how this activity could be improved to prevent ergonomic or manual handling risk factors.



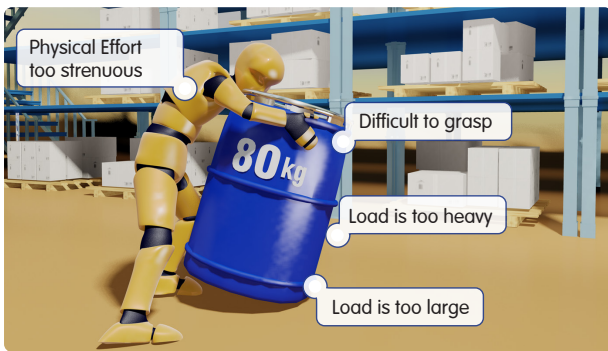
ACTIVITY 2.L, Page 27 INDIVIDUAL EXERCISE

Consider this shelving unit that may be found in a storage area. There are four shelves. The unit reaches 2.5 m (8 feet) from floor level. Decide where the following categories of storage box should be placed.



ACTIVITY 2.M, Page 28 IN PAIRS

View both pairs of illustrations below. Explain how the work system in each environment has been improved by applying the principles of ergonomics.



To see more illustrations like those above visit hsa.ie and search for 'manual handling case studies'.





UNIT 2 ACTIVITIES

Unit 2, Part 3, Slips, trips and falls



ACTIVITY 2.N, Page 31 CLASS DISCUSSION

If this was your workplace what could you do to stop people slipping?



Teacher's Note:

Answers to Activity 2.N Class Discussion

1. Use barriers or signs to tell people something has been spilt on the floor.
2. Clean up the spill immediately.
3. If the liquid is greasy, make sure a suitable cleaning agent is used.
4. If possible, dry the floor.
5. If possible, arrange cleaning to be done at the end of the day.
6. Once the floor is dry, take down the barrier or sign.



ACTIVITY 2.O, Page 31 IN GROUPS

In groups of two complete a slips, trips and falls survey of one of your classrooms (choose a classroom where a practical activity takes place such as Home Economics or Art room). Use the approach in the Mapping Tool to complete a slips, trips and falls risk assessment.

- See hsa.ie/slips for useful information and to access the Mapping Tool
- An e-version of this Choose Safety text book is also accessible on hsa.ie/education



hsa.ie/slips



ACTIVITY 2.R, Page 36 IN GROUPS

Organize your class into small groups. Seek permission to locate and to note details of all fire extinguishers in the school. Report your findings to the class.

Or

Consider the fire evacuation drill in your school. Is it followed? Do you think it is sufficient? What improvements would you make?



ACTIVITY 2.S, Page 36 CLASS DISCUSSION

Fire extinguishers must be suitable for the workplace and for the type of fire that could happen. From what you have learned can you identify 4 types of fire extinguishers and what types of fire they are used to extinguish?



WORD BANK

Complete Unit 2 by inviting the class to write up their Word Bank using the terms learned throughout Unit 2.



END OF UNIT 2: SPEED TEST, Page 36



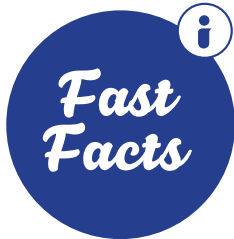
- Q.1** What is meant by a hazard?
- Q.2** Why are controls necessary?
- Q.3** Give five examples of slips, trips and falls hazards that exist in many workplaces.
- Q.4** Why is it important to learn about handling and lifting items?
- Q.5** How can work activities be improved to reduce or avoid manual handling risk factors?
- Q.6** Explain the fire triangle.
- Q.7** Is it mandatory to have a trained occupational first-aider in every workplace?



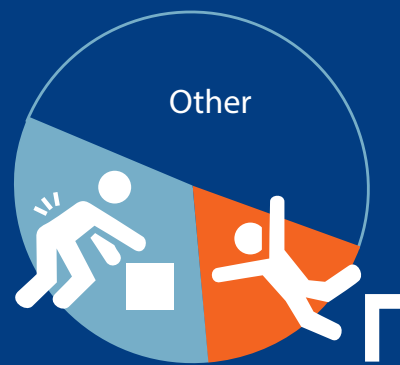
FURTHER INFORMATION

A wide range of publications and resources are available at <https://hsa.ie>

- Guidance on the Prevention and Management of Musculo-Skeletal Disorders in the Workplace.
- Ergonomics in the Workplace – HSA ISBN 1-84496-036-6.
- Ergonomics Good Practice in the Workplace.
- Manual Handling Assessment Charts (MAC tool) at <https://www.hse.gov.uk/>
- Guidance on Manual Handling Risk Assessment in the Manufacturing Sector.
- Guidance on An Introduction to the Management of Manual Handling in Construction.
- Guidance on the Management of Manual Handling in Healthcare
- Guide on Manual Handling Risk Assessment in the Hospitality Sector.
- Guide on Manual Handling Risk Assessment in the Retail Sector.
- Manual Handling Videos Series 1 and 2.
- Slips, Trips and Falls.



Main causes of non-fatal accidents 2021



Manual Handling
32%
(2,656)

Slipping or Falling
24%
(2,007)

Back injuries were reported in 21% of worker incidents, but only in 5% of non-worker incidents. This is because more workers were involved in manual handling injuries caused by lifting or moving heavy objects than non-workers.

For non-workers, the part of the body injured most frequently was the head (23%). These head injuries most often followed slips or falls.

The most common working environment for non-fatal work-related incidents was industrial or maintenance areas for workers (29%) and shop or service areas for non-workers (58%).



UNIT 3

DOING YOUR JOB

Unit Contents

- 1 Teacher guidelines
- 2 Working at height
- 3 Workplace transport safety
- 4 Chemicals
- 5 Farming
- 6 Hospitality
- 7 Personal protective equipment (PPE)
- 8 Unit activities
- 9 Further information

DOING YOUR JOB

UNIT 3



TEACHER GUIDELINES

The 'Choose Safety' workbook contains the following contents in **Unit 3 Doing your Job**

- Part 1 Working at height
- Part 2 Workplace transport safety
- Part 3 Chemicals
- Part 4 Farming
- Part 5 Hospitality
- Part 6 Personal protective equipment (PPE)

UNIT 3, PART 1, WORKING AT HEIGHT

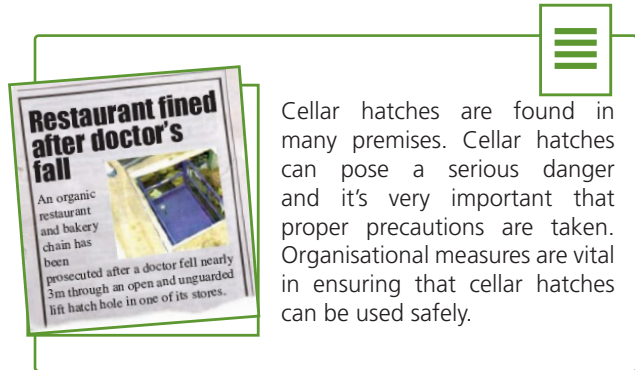
Working at height is work in any place from which an employee could fall a distance liable to cause personal injury. This includes working on a scaffold or mobile platform, working on the back of a lorry, on a telephone pole, a ladder, etc.

Examples of work activities that are classified as working at height, and covered by the Work at Height Regulations include:

- using a kick-stool or step ladder in a stock room or library;
- using a mobile elevating work platform to erect steel work;
- using working platforms and ladders to paint or clean;
- changing lamps or ceiling tiles in an office;
- working on the back of a lorry to sheet a load;
- working on top of a fuel truck;
- climbing masts or poles;
- rigging lighting for a concert or stage production;
- using harnesses and ropes professionally to instruct in abseiling or rock climbing;
- working close to an open excavation or cellar trap door;
- erecting bill posters at a height;
- erecting or working on a scaffold;
- working on formwork at height.

Activities not covered by the Work at Height Regulations include:

- walking up and down a staircase in an office;
- working in an office on the upper floors of a temporary accommodation building;
- sitting in a chair.



Cellar hatches are found in many premises. Cellar hatches can pose a serious danger and it's very important that proper precautions are taken. Organisational measures are vital in ensuring that cellar hatches can be used safely.

CONSIDERATIONS:

- Avoid working at height if you can.
- Ask your boss if the job can be done from the ground, for example, by using an extendable brush to clean an upstairs window.
- Select suitable work at height equipment. If you have to use ladders ensure it is safe to use them. Check they are in good condition before you use them, and set up and secured correctly.
- If work at height is outside, consider the weather conditions.

The Work at Height Regulations require employers and the self-employed to ensure that:

- all work at height is avoided where possible;
- all work at height is properly planned, organised, supervised and carried out;
- the place where the work at height is done is safe;
- all work at height takes account of weather conditions;
- workers are instructed and trained;
- equipment is inspected before use;
- the most appropriate equipment is used.

UNIT 3, PART 2, WORKPLACE TRANSPORT SAFETY

Every year, a substantial number of accidents are caused by vehicles at work. It is because vehicles are widely used as part of daily life, that employers, managers and employees often fail to recognise that vehicles' activities can be dangerous in a workplace and need to be effectively controlled and managed to prevent injury to persons. Some accidents are due to the vehicle being unsuitable for the task, faulty or poorly maintained or maintained using untrained staff or unsafe practices. Accidents are also often caused by failing to control pedestrian access to vehicle areas or lack of training of drivers.

Employers and the self-employed need to be aware of the main risks associated with vehicles that need to be managed to protect workers and members of the public in the workplace.

The activities most commonly associated with vehicle related deaths and injuries are:

- driving for work;
- reversing and slow speed manoeuvres;
- coupling and uncoupling;
- vehicle maintenance and repairs;
- loading, unloading and load securing.

Features of a Safe Workplace

A well-designed and maintained workplace should include appropriate traffic routes, signage and markings. Keeping pedestrians and vehicles apart, a one-way system and good visibility will also be key features.

Traffic Routes

Suitable, clear, signed and well-marked traffic routes will help ensure safe movement for all around the workplace.

Signage

Appropriate signage will help drivers and pedestrians follow site rules.

Pedestrian Safety

Pedestrians are people who travel on foot in the workplace. Effective separation of pedestrians from vehicles (as far as possible), helps eliminate possible risks. Suitable, clear, signed and well-marked pedestrian routes will help make sure that pedestrians can move around safely and without risk of injury.

Pedestrian safety and forklift safety are further explored on pages 41 and 42 of the Student workbook.

UNIT 3, PART 3, CHEMICALS

Chemicals are part of everyday life. They can be found in the home in a wide variety of products, from paint and washing powder to shampoo and shower gel. They can also be found in the environment, either intentionally, for example from pesticides used in the garden, or unintentionally from pollution. Chemicals are also present in every workplace; even in the cleanest, most modern office, it is possible to be routinely exposed to chemicals such as inks and toners.

Chemicals can exist in many forms:

Dust, fumes, fibres, powders

Liquids

Gases, vapours, mists

Not all chemicals are harmful, but those which have the potential to cause harm to human health or the environment are referred to as hazardous chemicals.

The hazards associated with chemicals include:

Explosive
Flammable
Oxidising
Corrosive
Irritant

Sensitiser
Carcinogen
Mutagen
Reproductive toxicity
Hazardous to the environment

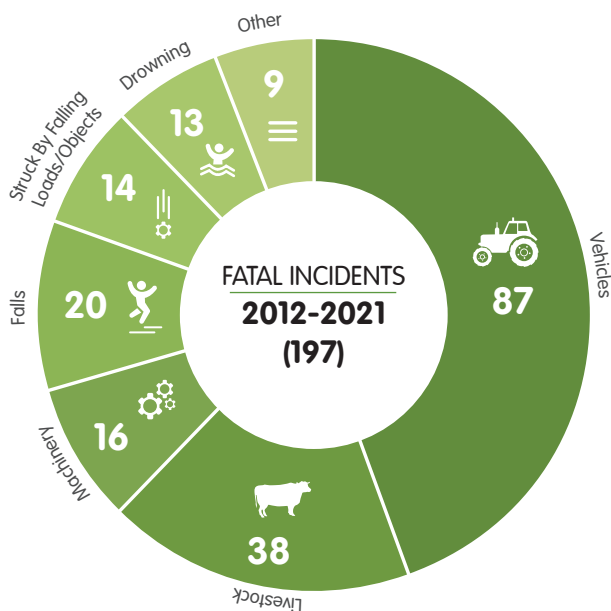
- The effects of hazardous chemicals may be seen:
- immediately after contact, for example chemical burn or an explosion;
 - only after a period of time: for example cancer.

Unit 3, Part 3 of the Student workbook also covers the following:

- how can chemicals be hazardous to health?, page 43;
- where can you find information about chemical hazards?, page 44;
- fast facts on laundry liquid tablets/capsules/pods, page 44;
- useful information on labels, including diagrams, page 44 and 45;
- safety data sheets, page 46;
- top tips, when asked to use a chemical in the workplace, page 47.

UNIT 3, PART 4, FARMING

Farming is a high risk work sector. There were 38 work-related fatal incidents in 2021 with 11 (29%) occurring in Agriculture, Forestry and Fishing. This follows a similar pattern to recent years, with almost half of all fatal incidents in the five-year period since 2017 occurring in this sector.



NUMBER OF WORK-RELATED FATALITIES IN AGRICULTURE 2012 - 2021

Part 4 of the Student workbook further explores the main causes of farm accidents and keys to prevention, page 49. It also looks at Power Take Offs (PTOs), Safe Tractor Skills, All-Terrain Vehicles (ATVs)/Quad Bikes, page 49 and 50.



From 2012- 2021 there have been 11 fatalities in agriculture involving quad bikes.

New Regulations take effect from November 2023 which include compulsory helmet wearing and training for operators of quad bikes (ATVs). Further information on [hsa.ie](https://www.hsa.ie).

UNIT 3, PART 5, HOSPITALITY

Many young people are employed in the hospitality sector. These are busy, active workplaces with lots of hazards. Manual handling and slips, trips and falls are the most common causes of accidents in this sector. These were both covered in Unit 2. Other causes of accidents and preventative measures are outlined on page 51 of the Student workbook.

UNIT 3, PART 6, PERSONAL PROTECTIVE EQUIPMENT (PPE)

Unit 3 finishes with a look at personal protective equipment or PPE. The provision and use of PPE is determined by a risk assessment. All control measures should be put in place before or in addition to PPE. Top tips for PPE use are provided on page 53 of the Student workbook.

Learning Outcomes

On completion of this unit, students should be able to:

- outline key considerations when working at height;
- list precautions to be taken around workplace transport;
- describe how chemicals can cause harm;
- outline the use of Safety Data Sheets;
- recognise labels on chemical products, including hazard pictograms;
- outline employer and employee responsibility in relation to PPE;
- identify the hazards associated with two key work sectors – farming and hospitality.

SUGGESTED LESSON PLANS FOR UNIT 3

1. Ask students to list work activities they are doing and the associated risks to their health and safety. Have a class discussion on ways of making the work activity safer.
2. Incorrect manual handling and slips, trips and falls account for a large proportion of workplace accidents. Students could examine where these hazards are most likely to arise in their job or work experience, and the measures in place to prevent accidents occurring.
3. Students could be asked to explain why chemical products contain labels, what chemical products are used in the home, and how should they be stored and handled.
4. See **Science subjects exercise** (page 14 of the Teachers' Preface). This can be applied to the Chemicals section.
5. See **Home Economics** information (page 12 of the Teachers' Preface). This can be applied to Hospitality.
6. Complete the Unit by asking the students to add more words to their individual or group Word Bank.
7. For the **Unit Activities** students should consider their own experience to date or consider any experience they have had to date in reflecting on the questions.

Make Notes



UNIT 3 ACTIVITIES

Unit 3, Part 1, Working at Height



ACTIVITY 3.A, Page 40 IN PAIRS

In Pairs

1. List seven workplaces where working at a height is a regular occurrence.

2. List the type of injuries that may result from working at a height.

3. Consider the controls that could be put in place for two of the workplaces you listed in no.1 above

4. List the personal protective equipment (PPE) that may help to prevent an accident or injury while working at a height.

Teacher's Note: Activity 3.A

Occupations where working at height is a regular occurrence:

- Builders.
- Carpenters/Joiners.
- Electricians.
- Glaziers.
- Heating and Ventilation Engineers.
- Painters/Decorators.
- Plumbers.
- Roofers.
- Chimney sweepers.

Major Injuries from working at a height:

- Broken limbs.
- Fractures.
- Amputations.
- Dislocations (shoulder, hip, knee, spine).
- Brain damage (head injuries).
- Concussions and unconsciousness.



UNIT 3 ACTIVITIES

Unit 3, Part 2, Workplace Transport Safety



ACTIVITY 3.B, Page 42 IN GROUPS

Recent research carried out on behalf of the Health and Safety Authority (HSA) indicated that all 111 organisations surveyed said they had pedestrians moving around their workplace.

Worryingly, 45% of these organisations believed that pedestrians were not aware of the risks associated with workplace transport.

Pedestrians may be employees, members of the public or visiting workers that pass near vehicles in the workplace. This could range from a maintenance engineer arriving on site, to a customer walking near a fork-lift truck at a

supermarket or builder provider's yard, or even someone passing near a mobile crane.

Your challenge – 'What can you do to help keep all pedestrians safe'?

In groups of three **select a workplace listed in above article** and provide solutions to keep pedestrians safe and outline the benefits of same.



UNIT 3 ACTIVITIES

Unit 3, Part 3, Chemicals



ACTIVITY 3.C, Page 43 IN PAIRS

Use a dictionary or website to find the meaning of each of the words in the boxes below.

Chemicals can exist in many forms:

Dust, fumes, fibres, powders

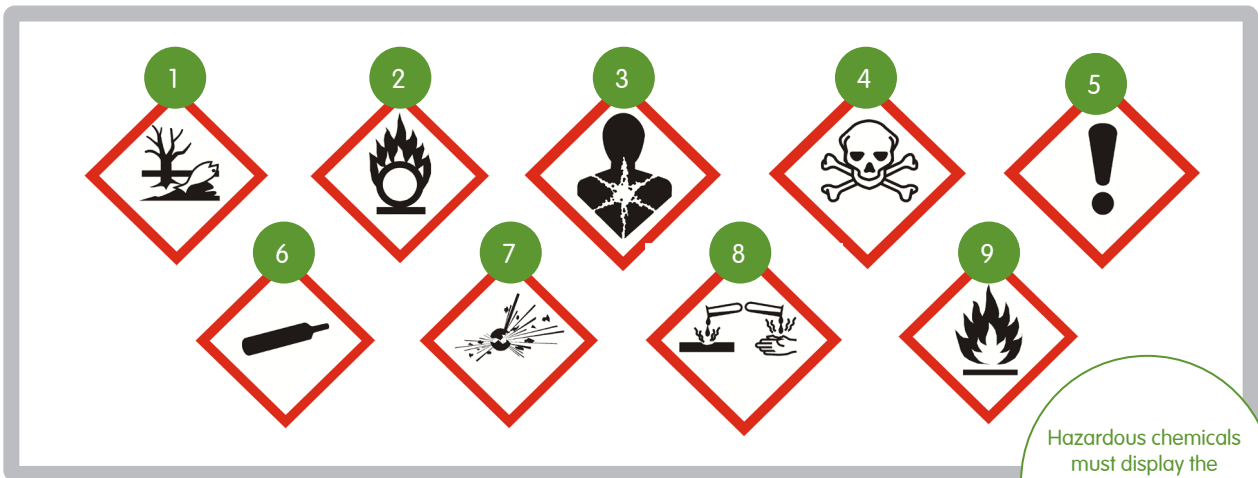
Liquids

Gases, vapours, mists

The hazards associated with chemicals include:

Explosive
Flammable
Oxidising
Corrosive
Irritant

Sensitiser
Carcinogen
Mutagen
Reproductive toxicity
Hazardous to the environment



Hazardous chemicals must display the appropriate hazard symbol or pictogram on their label.



ACTIVITY 3.D, Page 44
GROUP EXERCISE/ CLASS DISCUSSION

Match the list of hazards below with their associated hazard pictogram from the image above:
(Correct answers are listed in columns 2 and 4):

Hazard	Pictogram Number	Hazard	Pictogram Number
Explosive	7	Corrosive	8
Oxidising	2	Serious long term health hazard (carcinogen, mutagen, reproductive toxicity)	3
Gas Under Pressure	6	Health hazard (e.g. skin/eye irritation)	5
Flammable	9	Toxic	4
Hazardous to the Environment	1		



ACTIVITY 3.E, Page 45
IN PAIRS

List some hazardous chemicals that may be found in your home or school

Chemical	Hazards listed on the label
Bleach	Irritant



ACTIVITY 3.F, Page 47 IN PAIRS

From the list of hazardous chemicals which may be found in your home or school, describe what the hazard is and how it may be controlled.

Chemical	Hazards	Control measure
Bleach	Irritant	Clear label Child proof cap Careful storage Use gloves and goggles



ACTIVITY 3.G, Page 47 IN PAIRS

Select a household product, for example, a cleaning agent. Search online for cleaning agent SDS. **Tip** – search for the Supplier name and from this website you should be able to get a copy of the SDS. Discuss in class how you get on.



UNIT 3 ACTIVITIES

Unit 3, Part 4, Farming



ACTIVITY 3.H, Page 50

INDIVIDUAL EXERCISE

You are asked to help on a neighbour's farm during the summer months. You will be involved in: moving sheep from field to field, bringing feed to cattle in pasture, driving a tractor, using a range of tractor attachments, dosing animals with veterinary products.

Identify the top ten hazards you feel you will encounter. How do you propose to deal with those hazards? How will you communicate your suggestions or concerns to the farmer?



ACTIVITY 3.I, Page 50

IN GROUPS

- Discuss how the Government, the Health and Safety Authority, Third Level Agricultural colleges, IFA, Teagasc, and other farming bodies could further get the message across to the farming community about the need to farm safely.
- Decide on suitable themes for a TV advertising campaign on farm safety.

Discuss how this will help spread the farm safety message throughout the farming community and if there are other suitable ways to promote and highlight farm safety.



ACTIVITY 3.J, Page 50

CLASS DISCUSSION

Watch the short video <https://www.youtube.com/watch?v=W5I1hzWO--o> from the HSA website, Survivor Stories, Episode 8: Thirteen year old boy in tractor accident. Discuss the impact this video makes. What did you learn from this video? How can similar accidents be prevented?



UNIT 3 ACTIVITIES

Unit 3, Part 5, Hospitality Sector



ACTIVITY 3.K, Page 52

CLASS DISCUSSION

You have been asked by the Hotel Manager to list the top ten hazards you can identify in his hotel commercial kitchen. He wants you to rank them in order of their seriousness and the risk of injury to staff and then compile a set of control measures for the top five.

See publication at <https://hsa.ie> Safe Hospitality Parts 1 to 7 for useful information to complete the above activity. The table on page 52 of the Student workbook may also be used to complete Activity 3.K.



ACTIVITY 3.L, Page 52

INDIVIDUAL EXERCISE

You have just begun your summer job in a local restaurant. Initially you are asked to take out the rubbish to a compactor at the back of the premises. You have not been shown how to operate the compactor and feel unsure about how to put the cardboard into it.

What should you do?



UNIT 3 ACTIVITIES

Unit 3, Part 6, Personal Protective Equipment (PPE)



ACTIVITY 3.M, Page 54
INDIVIDUAL EXERCISE



ACTIVITY 3.N, Page 54
INDIVIDUAL EXERCISE

PPE



Which of the following are personal protective equipment?

Ladders, **goggles, ear plugs**, drill, **safety boots**, scaffolding, **high visibility vest**, conveyor belt, **hard hat, face mask, safety harness, gloves**, fire extinguisher, VDU.

Identify the eight items of PPE in the list above. Explain briefly why each provides some personal protection. Give examples of workplaces where each item of PPE is likely to be found.

Teacher's Note:

The correct answers are highlighted above.



END OF UNIT 3: SPEED TEST, Page 54

- Q.1. Give four examples of workplace transport hazards.
- Q.2. List four main causes of farm accidents.
- Q.3. What are the key considerations for operating an ATV?
- Q.4. Identify three chemical hazards which affect human health.
- Q.5. Name two main ways you can be exposed to chemicals in the workplace.
- Q.6. Name the two most important sources of information on a hazardous chemical.
- Q.7. Indicate the type of information you would expect to see on the label of a hazardous chemical.
- Q.8. List four occupations that may require PPE.





FURTHER INFORMATION

A wide range of publications and resources are available at <https://hsa.ie>

Farming

- Keep Safe on the Farm information leaflet for post-primary students.
- Quad Bike Safety Update.
- Tractor Safety and You.
- Code of Practice on Children and Young Persons in Agriculture.
- Survivor Stories video - A thirteen year old boy seriously injured his foot when changing a tractor hitch. In this video he describes his accident and the effect it has had on him, along with information on staying safe around machinery.
- Farm Safely with Slurry course at <https://hsalearning.ie>
- An Introduction to Tractor Safety course <https://hsalearning.ie>
- Health and Safety for Seasonal Workers in Horticulture - this free online course is available in English and has also been translated into ten languages - full details at hsalearning.ie
- Once Upon a Farm - a safety video for students (this video focuses on children and farm safety).

Hospitality

- Safe Hospitality Parts 1-7.
- Catering and Hospitality Information at <https://hsa.ie>
- Simple Safety Series – a series of practical tools designed to help improve workplace health and safety and reduce accidents. The series includes simple safety in food and drink and in retail sectors.
- Guide on Manual Handling Risk Assessment in the Retail Sector.
- Manual Handling Videos Series 1 and 2.

FURTHER INFORMATION



A wide range of publications and resources are available at <https://hsa.ie>

- Workplace Transport Safety – Safe Workplace.
- Pedestrian Safety in the Workplace.
- Forklift Safety Tips.

Chemicals

- Detergents Information Sheet.
- Safety Data Sheet (SDS) Information Sheet.
- Nail Bars Information Sheet.

Make Notes



UNIT 4

ROLES, TASKS, AND YOU

Unit Contents

- 1 Teacher guidelines
- 2 Safety officer and safety representative
- 3 Work environment
- 4 Workplace health and well-being
- 5 Unit activities
- 6 Further information



ROLES, TASKS, AND YOU



TEACHER GUIDELINES

The 'Young People at Work' workbook contains the following contents in **Unit 4 Roles, Tasks and You**:

- Part 1 Safety officer and safety representative
- Part 2 Work environment
- Part 3 Workplace health and well-being

UNIT 4, PART 1, SAFETY OFFICER AND SAFETY REPRESENTATIVE

Every employer is required to manage safety, health and welfare at work so as to prevent accidents and ill-health. The employer may decide to appoint a **safety officer** to manage health and safety operations and to consult and act on his / her behalf in relation to health and safety matters. However, overall responsibility for this still rests with the employer.

Employees are entitled to select a **safety representative** to represent them on safety and health matters in consultation with their employer. The functions of a safety representative are outlined on page 57 of the Student workbook.

UNIT 4, PART 2, WORK ENVIRONMENT

Unit 4, Part 2 looks at the work environment. The work environment includes factors such as heat, light, ventilation, and noise. It is important that workers are comfortable at work and that appropriate controls are in place to ensure this. For example, computer screens are appropriately placed to avoid glare from sunlight.

Part 2 focuses on temperature, lighting, ventilation, dust and fumes, noise, and housekeeping (page 59 and 60 of the Student workbook).

UNIT 4, PART 3, WORKPLACE HEALTH AND WELL-BEING

Unit 4, Part 3 looks at workplace health and well-being. The term 'psycho-social' refers to those types of injuries that are not physical but instead affect how people feel. Health may be seen as not just the absence of illness but the presence of well-being. Maintaining a sense of well-being and a positive outlook on life can add greatly to our quality of life. People who are content, with a healthy attitude and strength of mind and spirit, are generally better to deal with the challenges that life may bring.

However, those workers with low self-esteem or with low morale are often less productive. They are also more likely to experience an accident at work.

Unit 4, Part 3 also looks at:

- Stress (page 61 of the Student text).
- Human behaviour and how it can contribute to accidents (page 65 and 66 of the Student text).
- Distractions (page 67 of the Student text).

Imagine:

Imagine yourself juggling three balls at once. You feel fine juggling 3 balls, you are well able for it and don't feel anxious about one falling, because if one does fall, you can just stop and start over again. However, imagine you are juggling 5 balls, and you feel you cannot do it, that one will fall any second, that someone might throw you another any time, and if they fall, you will face lots of criticism and won't be able to start up again. Imagine that scenario for a few seconds and how you would feel. That feeling, that experience of heightened vigilance and fear, is the basic ingredient in stress.

Learning Outcomes

On completion of this unit, students should be able to:

- outline the roles of a safety officer and a safety representative;
- list the factors that contribute to a comfortable work environment;
- list factors that contribute towards positive and negative workplace health and well-being;
- identify workplace distractions which can cause injury.

SUGGESTED LESSON PLANS

1. Opening questions for consideration by the class could include: what is the difference between a safety officer and a safety representative? Where are you likely to find both? Are workplaces required to have both?
2. Note in Activity 4.A Short Presentation that the principal in your school may be the safety officer. This project requires careful preparation. Appropriate care and supervision are essential when students visit technology rooms, science rooms, etc.

3. Discuss the merits of a comfortable working environment. Pay particular attention to factors such as heat, light, ventilation, and noise.
4. Consideration of stress and bullying in the workplace needs to be cognisant of students' own exposure to bullying at school. Care may be needed here. Allow open discussion on these topics while remaining sensitive to individual needs.
5. Encourage a broad discussion on the 'Wheel of Life'. Why is this exercise useful? Discuss ideas for achieving balance in some segments of the wheel. Be mindful that some students may wish to keep this information to themselves. Keep the discussion general.
6. For the **Unit Activities** students should consider their own experience to date or consider any experience they have had to date in reflecting on the questions.

- List ways by which a worker may feel bullied in the workplace.
- Who is affected by bullying?
- Why does bullying occur?
- Why is it a serious issue?
- What can an employee and an employer do to remove the risk of bullying in the workplace?
- Who else can help to remove this hazard?
- Is bullying at school different to bullying at work?

Fast Facts

Bullying at work may take the form of one or more of the following: Physical or verbal abuse, exclusion, pestering, aggression, intimidation, undermining, excessive monitoring, withholding information, blaming, ignoring, humiliating or treating less favourably.

For a behaviour to be bullying, it must be **repeated, inappropriate and disrespectful to the basic rights of every human being.**

**UNIT 4 ACTIVITIES**

Unit 4, Part 1, Safety officer and safety representative

**ACTIVITY 4.A, Page 58**
SHORT PRESENTATION

Make arrangements with your teacher and school principal or safety officer to visit one of the work rooms in your school. Groups of six could visit the art room, woodwork room, science room or similar.

Make a record of the meeting. Choose any format you wish such as an edited tape recording or video, a collage of photographs or illustrations, an oral report or an interview transcript.

**UNIT 4 ACTIVITIES**

Unit 4, Part 2, Work environment

Quick Quiz, Page 60

Workplace conditions include:

- | | |
|-----------------|-----------------------|
| A. Heat | D. Ventilation |
| B. Light | E. PPE |
| C. Noise | |

Select the correct answers.

Quick Quiz**UNIT 4 ACTIVITIES**

Unit 4, Part 3, Workplace health and well-being

**ACTIVITY 4.B, Page 62**
CLASS DISCUSSION

Consider these two questions:

- Q.1** What causes stress?
- Q.2** What can a person do to reduce stress levels in their life?
- Q.3** What can employers do to reduce stress at work?

**ACTIVITY 4.C, Page 62**
CLASS DISCUSSION

- Q.1** What types of pressure might be associated with positive and negative outcomes?
- Q.2** Does personality type matter?
- Q.3** Does the situation matter?
- Q.4** Does age and/or gender matter?



ACTIVITY 4.D, Page 62 IN PAIRS

Discuss with another student each of the following matters relating to bullying:

- ways by which a worker may feel bullied in the workplace.
- who is affected by bullying?
- why does bullying occur?
- why is it a serious issue?
- what can an employer and employee do to remove the risk of bullying in the workplace?
- who else can help to remove this hazard?
- is bullying at school different to bullying at work?



ACTIVITY 4.E, Page 62 SHORT PRESENTATION

Prepare a presentation on ONE of the following workplace hazards:

- Excessive noise
- Poor lighting
- Stress
- Poor housekeeping

Teacher's Note: housekeeping in the workplace is essentially keeping the workplace tidy to prevent accidents occurring. Housekeeping examples including keeping walkways clear, no trailing cables, goods not stacked too high on shelves, putting away tools and/or personal protective equipment when not in use, and organised storage areas.

Your presentation may take the form of a

- written project;
- poster;
- drama piece;
- painting or art piece;
- collage;
- video;
- radio piece.



ACTIVITY 4.F, Page 63 BRAIN STORM

1. Discuss the role that can be played by each of the following in promoting positive well-being among workers:

employer	school
parents	spouse / partner
government	work colleague
friend	employee
trade union	

2. What do you understand by the following terms:
self-confidence / self-esteem / self-image
3. Complete a brainstorm on the concept of 'work-life balance'.



ACTIVITY 4.G, Page 63 IN GROUPS

In groups of FOUR, consider how each of the following contributes to a greater sense of individual well-being. Then list the top ten factors in the list which you, as a group, consider to be the MOST important in determining a sense of well-being. Do you think that an older person would make a different list?

Sport, Physical Activity, Work, Music, Community, Empathy, Wealth, Freedom To Make Choices, Relationships, Religious Faith, Accepting Diversity, Effective Law And Order, Support, Good Nutrition, Proper Social Facilities, Understanding Learning Difficulties, The Right to Vote.



ACTIVITY 4.H, Page 63 IN GROUPS

In the same groups of FOUR, consider how each of the following may have a negative influence on a person's sense of well-being. Again, try to list the top ten factors which you, as a group, consider to be the MOST negative influence in maintaining a sense of well-being.

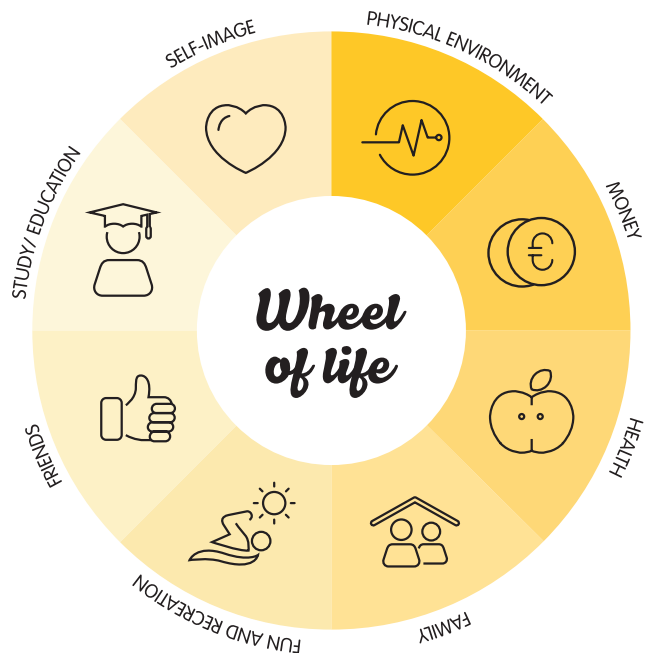
Bullying, Stereotyping, Domestic Violence, Peer Pressure, Learning Difficulties, Materialism, Eating Disorders, Unemployment, Alcohol, Family Break-Up, Stress, Relative Poverty, Low Level of Education, Relationships, Bereavement, Addiction.



ACTIVITY 4.I, Page 64 INDIVIDUAL EXERCISE

COMPLETE A 'WHEEL OF LIFE'.

Note: The wheel of life is divided into 8 segments that are important to you in life. Take some time to reflect on each segment. Then assuming that the centre of the wheel is 0 and the outer edge is 10, rate your level of satisfaction with each area. Remember the wheel of life is about finding happiness and balance in your life.



ACTIVITY 4.J, Page 65 CLASS DISCUSSION

Earlier we discussed the importance of an employee's sense of well-being. Where this is undermined, more accidents can occur. Consider ways (controls) that may help to promote a positive sense of well-being for each of the following workers.

Production-line worker

Newly trained garda

Child care assistant

Waiter/waitress in a busy restaurant



ACTIVITY 4.K, Page 67 IN GROUPS

In this activity you work in groups of four. You must agree a common response to the scenarios described, before one of you reports to the whole class. Read each of the following scenarios. Identify what the bad practice is and why. Comment on who acted responsibly and who acted irresponsibly. How should the matter have been handled?

Scenario 1

An employee tells her supervisor that there are exposed wires at the back of the microwave in the staff kitchen. The supervisor fails to report this to the manager. Two days later another employee receives an electric shock while using the microwave.

Scenario 2

An employee tells his boss about a slippery surface on the steps leading to the storeroom. The cause seems to be worn floor-tiles. The employer moves the employee to a different task in another area of the plant. The employer does not fix the problem.

Scenario 3

You are asked to collect a box containing 'some cleaning stuff' from the storeroom downstairs. You are told the containers are in unmarked boxes 'somewhere' on one of the top shelves. After much difficulty, you find the boxes and bring them back to the office.

Scenario 4

You are a student on work experience in a large hardware store. You have been asked to mix cement-based mortar to assist in the repairing of a wall in the outside storage area. Though you have seen this done many times and helped your father mix mortar some years ago, you are uncertain as to safe practice. In particular, you do not understand the labels on the side of the cement bag.

Scenario 5

You are working in a busy hotel. You have become aware that the receptionist, on a temporary contract, is handling a lot of telephone calls along with checking people in and out, and dealing with general enquiries and complaints. She appears to be stressed and increasingly tired and distant. The hotel manager and supervisor do not seem to be aware of the pressure the receptionist is under. She has asked you not to say anything in case she is considered to be unsuited to reception duties. She is also hoping to have her contract made permanent in the future. You decide to remain quiet and tell nobody.

Scenario 6

A transition-year student on work experience in a farm equipment store is asked to hop on to a forklift truck to move it three metres out of the way before a delivery van arrives. The student is not trained to drive a forklift.



END OF UNIT 4: SPEED TEST, Page 68

- Q.1.** What is the main difference between a safety officer and a safety representative?
- Q.2.** List four factors that contribute to a comfortable work environment.
- Q.3.** Name eight everyday activities that are beneficial for individual well-being.
- Q.4.** What can an employer do to create a more comfortable working environment for the employee?



FURTHER INFORMATION



A wide range of publications and resources are available at <https://hsa.ie>

- [Workplace Stress](#).
- [Work Positive Case Studies](#).
- [Work Positive Online Questionnaire](#).
- [Behaviour at Work and You](#).
- [Guide to the Safety, Health and Welfare at Work \(General Application\) Regulations 2007, Chapter 1 of Part 6 Protection of Children and Young Persons](#).
- [Work Related Stress - HSA Information Sheet for Employees](#).
- [HSA Code of Practice on the Prevention and Resolution of Bullying at Work](#).
- [Intoxicants at Work - HSA Information Sheet](#).
- Work Positive is a free online tool which can be used to help employers to implement a structured and collaborative approach to managing work related stress. The tool is available at <https://www.workpositive.ie>

See <https://hsalearning.ie> for free online courses including:

- [Managing Bullying Complaints at Work - for Managers](#).
- [A Short Course for Safety Representatives](#).



- [Psychosocial Hazards and Stress at Work online course](#) <https://hsalearning.ie>
- [Managing Psychosocial Hazards in the Workplace - HSA Information Sheet](#)

Work related stress (WRS) is stress caused by or made worse by work. Further information and guidance is available on https://www.hsa.ie/eng/workplace_health/workplace_stress/



UNIT 5

COMMUNICATING SAFETY

Unit Contents

- 1 Teacher guidelines
- 2 Communicating the safety message
- 3 Accident and incident reports
- 4 Safety statement
- 5 Safety signs
- 6 Unit activities
- 7 Further information

COMMUNICATING SAFETY

UNIT 5



TEACHER GUIDELINES

The 'Choose Safety' workbook contains the following in **Unit 5 Communicating Safety**:

- Part 1 Communicating the safety message
- Part 2 Accident and incident reports
- Part 3 Safety statements
- Part 4 Safety Signs

In this unit students learn about communicating safety. They learn about workplace accidents and dangerous occurrences, including when and how to report these. Students should learn the importance of effective communication on health and safety matters and develop an awareness of the need for sensitivity and discretion.

UNIT 5, PART 1, COMMUNICATING THE SAFETY MESSAGE

A concern for many workers, especially those on work experience and those working part-time, is knowing how to tell management that there is a new or increased risk in the workplace. If they see something unsafe should they report it? Will they be congratulated or side-lined for having expressed concern?

Procedures are usually discussed during induction training or workers may learn from their colleagues, or from reading work notices. If in doubt it is good practice to ask a responsible person, such as a supervisor or safety officer. Management, too, have concerns about communicating matters of health and safety. What is the best way of telling staff or customers about new health and safety concerns? In the same way, government must carefully consider the style and method of their communication of health and safety matters. Laws must be clear and easily understood.

There are lots of ways by which the message of workplace safety and health may be communicated to employers, employees and the public.

These include:

- government publications;
- guidelines and codes of practice published by the Health and Safety Authority;
- social media, e.g. YouTube/Facebook/Instagram;
- newspaper, radio and TV ads;
- professional journals and trade magazines;
- workplace notice boards;
- meetings and trade conferences;
- billboards and public posters;
- training courses and manuals;
- HSA-sponsored events.

Of course, the most used system of communication today is the internet. A good place to start a search on 'health and safety' is the Health and Safety Authority's website: hsa.ie. In particular, check out the *Simple Safety* series on the Authority's website. Log on to see the latest news, advice and statistics that relate to health and safety at work.

UNIT 5, PART 2, ACCIDENT AND INCIDENT REPORTS

The reporting and recording of workplace accidents is important for prevention purposes. Similar accidents can be avoided and systems can be reviewed and improved as required. Part 2 looks at the reporting of accidents and dangerous occurrences to the Health and Safety Authority, and also some of the measures a Health and Safety Authority Inspector may take to prevent accidents occurring, see page 74 of Student workbook.

UNIT 5, PART 3, SAFETY STATEMENT

A brief description of the Safety Statement and its purpose is covered on page 77 of the Student workbook. This re-introduces the 'hazard', 'risk', and 'control' concepts from Unit 2.

Students may not always see a safety statement when they start work and sometimes workplaces refer to it as their 'safety policy'. It is the employer's duty to ensure that an up-to-date safety statement is in place, and more importantly, in practice.

UNIT 5, PART 4, SAFETY SIGNS

A safety sign provides information about safety or health and can be a:

- signboard;
- colour;
- acoustic signal;
- verbal communication;
- hand signal.

A signboard is a sign that provides information or instruction using a combination of shape, colour and symbols but excludes information in writing.

Text should not be used if the meaning is clear by use of a pictogram or symbol alone. If a text explanation is necessary (e.g. where doubt could exist as to the meaning of a symbol) a supplementary signboard containing appropriate text should be provided. This supplementary signboard can be on the same "carrier".



The colours and shapes that should be used on safety signboards are

- **red** for prohibition;
- **blue** for mandatory actions;
- **yellow** for caution;
- **green** for positive action;
- discs for prohibitions and instructions;
- triangles for warnings;
- squares and rectangles for emergency and information signs.

Page 79 and 80 of the Student workbook contains a useful table on safety sign information, including sign type, meaning and information, and an example of each type.

It is useful for students to familiarise themselves with this content as most workplaces contain safety signs. Page 80 contains some 'fast facts' on the provision and use of signs.

Learning Outcomes

On completion of this unit, students should be able to:

- list methods of communicating health and safety issues;
- comment on a few aspects of health and safety legislation;
- outline the difference between an accident and a dangerous occurrence;
- illustrate the use of accident reports.
- prepare for a workplace meeting following an accident;
- describe the purpose of a safety statement;
- complete a risk assessment using the online BeSMART risk assessment tool <https://besmart.ie>;
- identify common safety signs and what they mean.

SUGGESTED LESSON PLANS

1. There is scope for a variety of classroom activities on the topic raised at the start of the unit 'Communicating the Message'. You may decide it is appropriate for your class to spend time considering the role of the media in communicating matters such as workplace health and safety. Time could be spent exploring the internet and other media to consider the most effective means of promoting safety at work.
2. Students should have a general understanding of the difference between a workplace accident and dangerous occurrence, and when these must be reported to the Health and Safety Authority? Time could also be spent exploring the need for sensitivity and discretion when it comes to safety in the workplace. Students should not be encouraged to comment indiscriminately on health and safety matters in local enterprises or workplaces that may employ them or provide work experience opportunities to the school.
3. The Safety, Health and Welfare at Work Act (2005) is quite detailed. A guide to the Act is available on hsa.ie. The excerpts in Activity 5.A revisit some of the important issues raised earlier in this book.
4. The accident report in Activity 5.B is based on fact. The names of the people and places are fictitious.
5. Allow lots of preparation time for the role play in Activity 5.C. Much of the learning is in the preparation before the meeting takes place. Good fun will be had during the presentation of the role play and the judging thereof. Role play works best when the ground rules are understood, where students understand the role they have to play and where the teacher is willing to allow the students' imagination to dominate.
6. Note in Activity 5.G that the principal in your school may also be the Safety Officer.
7. Students can research the HSA BeSMART.ie online risk assessment tool available at <https://besmart.ie> and put into practice what they learned by completing an online risk assessment in groups for their chosen workplace.
8. Complete the unit by asking the students to add more words to their individual or group Word Bank.
9. For the **Unit Activities** students should consider their own experience to date or consider any experience they have had to date in reflecting on the questions.



UNIT 5 ACTIVITIES

Unit 5, Part 1, Communicating the safety message



ACTIVITY 5.A, Page 72

CLASS DISCUSSION

Read the following excerpts from the Safety, Health and Welfare at Work Act (2005). Consider why these are in the 2005 Act. How effective do you think they may be in reducing accident rates in work?



Excerpt A:

'an employer's duty extends to:

... managing and conducting work activities in such a way as to prevent any improper conduct or behaviour likely to put the safety, health or welfare at work of his or her employees at risk.

... preparing and revising adequate plans and procedures to be followed and measures to be taken in the case of an emergency or serious or imminent danger.

... reporting accidents and dangerous occurrences.'

Section 8 of the 2005 Act

Discuss who an employer may need to communicate with in performing these duties.

Excerpt B:

'Every employer shall ... ensure that instruction, training and supervision is provided in a form, manner and language that is reasonably likely to be understood by the employee.'

Section 10 of the 2005 Act

Discuss the different ways an employer can provide instruction, training and supervision to his/her employees. Consider the difficulties of performing this duty in a large company employing workers of many different nationalities.



Excerpt C:

'An employee must not engage in improper conduct or other behaviour such as violence, bullying or horseplay, which could endanger another person at work or his or her safety, health and welfare.'

Section 13 of the 2005 Act

Discuss the effects of workplace violence, bullying or horseplay on an individual. What measures can an employer put in place to prevent such behaviour?

Excerpt D:

'Every employer shall identify the hazards in the place of work under his control, assess the risks presented by those hazards and be in possession of a written assessment of the risks.'

Section 19 of the 2005 Act

Why is this provision in the Act? What can be done to enforce this regulation? Does your school meet this requirement?

Excerpt E:

'An employer shall not penalise an employee for ... making a complaint or representation to his or her safety representative or employer or the (Health and Safety) Authority as regards any matter relating to safety, health or welfare at work.'

Section 27 of the 2005 Act

Why is this provision in the Act? Do you think employers would be wise to penalise or attempt to penalise workers who report incidents of poor health and safety in their workplace? Would you make such a complaint?



UNIT 5 ACTIVITIES

Unit 5, Part 2, Accident and incident reports



ACTIVITY 5.B, Page 75 INDIVIDUAL EXERCISE

Read the following accident report and answer the following questions:

Q.1 Where did the accident happen?

Q.2 How did the accident happen?

Q.3 What treatment did the worker receive?

Q.4 Do you consider that this accident was easily avoidable? Explain your answer.

NOTICE OF ACCIDENT

Details of injured person:

Name: Joe Ryan

Address: Bellview, Kilmoy

Occupation: Farm labourer

Date of Birth: 29/04/1965

Sex: Male

Date / time of accident: 6.50 am. 12/08/2023

Describe the type of work the person was doing at the time of the accident:

Joe was preparing to bale hay. He was attaching a baler to the 'power take-off shaft' (PTO) of a 1997-registered tractor.

Describe the environment where the accident took place:

The accident took place in the yard of Martin McKenna's farm. It was a dry, bright morning. The yard contained a lot of farm machinery.

Describe what happened at the time of the accident:

Joe's shirt got caught in the PTO which was running at the time. Joe became entangled in the PTO.

Describe the injuries incurred:

Joe received major injuries. He suffered severe abrasions to his chest. His left arm was seriously entangled in the machinery and was later amputated.

Outline the immediate aid given to the injured person:

As Joe was working alone, he did not receive aid until the owner, Mr McKenna, heard calls for help. Mr McKenna turned off the tractor. He called for an ambulance immediately. This arrived twenty minutes later. Medics were able to remove Joe from the machinery. He was taken to the nearest hospital, twenty-three miles away.

Outline the consequences:

Fatal: no

Ambulance / doctor called: yes

Hospitalisation: yes

Period of absence from work:

Joe remains on sick leave. It has not been decided if he will be able to return to farm work

Details of notifier: Mr Martin McKenna

Type / name of business: farm

Today's date: 15/08/2023



ACTIVITY 5.C, Page 76 ROLE-PLAY

In this exercise you are asked to role-play. Read the account below of an incident that occurred and the details of the part your character played. Due to the circumstances of the accident and the subsequent events, a meeting has been called between management and the worker involved. In character, you must prepare your thoughts before the meeting begins. Then you will role-play the meeting in class.

You will be asked to play the part of one of the following:

- Paul Walsh.
- Ger Byrne, a colleague of Paul's.
- Jane Brennan, managing director of Brennan's Design.
- Damien Browne, Paul's supervisor on the day and a senior manager for Brennan's Design.

Description of incident



Paul Walsh is an apprentice painter working with Brennan's Design. The company was contracted to redecorate a block of a large pharmaceutical company called DCC. Paul's job included carrying 10-litre containers of paint from the company van outside the building. To do this, Paul had to walk up a flight of stairs and through a 'clean area' where a critical stage of the drug-manufacturing process took place. Everyone entering this area has to wear complete personal protective clothing, including shoe covers.

On the day of the accident, Paul was carrying two 10-litre containers up the stairs. He was carrying one container on each shoulder. He was wearing all the required protective clothing. Paul lost his footing on a step of the stairs and fell. His knee was badly hurt and he has since suffered from acute backache. Paul received no training from Brennan's Design on how to carry large weights and no training from DCC on working with protective clothing.

- Get all your facts right.
- List your responsibilities in relation to health and safety.
- Be clear on your role in the incident.
- Anticipate what the other characters are likely to say.
- Decide what you wish to achieve from the meeting.
- Write everything down.

When ready, each group acts out its role-play. This is viewed by the rest of the class. A class discussion may follow.



ACTIVITY 5.D, Page 76 CLASS DISCUSSION

Look at BeSMART.ie - Business electronic Safety Management and Risk Assessment Tool.

What is this tool and how will it benefit small businesses? What are the advantages of online tools such as BeSMART.ie for (a) individuals? (b) business?



UNIT 5 ACTIVITIES

Unit 5, Part 3, Safety Statement



ACTIVITY 5.E, Page 78 SHORT PRESENTATION QUESTIONNAIRE

In groups of four, prepare a short questionnaire which may be used to investigate the levels of health and safety awareness and controls that exist in ANY small local enterprise of your choice.



ACTIVITY 5.G, Page 78 SHORT PRESENTATION School Health and Safety System

Invite the school's Safety Officer or Safety Representative to talk to the class about the Health and Safety System that operates in your school.

Before the talk prepare a set of questions. It may be best to present these questions to the guest speaker in advance of the talk.



ACTIVITY 5.F, Page 78 SHORT PRESENTATION Health and Safety Poster

Design a poster that promotes either of the following:

Positive well-being

or

A safe working environment for young workers



Remote working arrangements are in place for many employees now. Occupational Safety and Health Guidance on Remote Working is available on <https://hsa.ie> and a short online course, suitable for employers and employees, is available at <https://hsalearning.ie>.

Consider a short class exercise or discussion on the possible advantages and disadvantages of remote working, and what health and safety considerations need to be in place.



UNIT 5 ACTIVITIES

Unit 5, Part 4, Safety Signs



ACTIVITY 5.H, Page 80 INDIVIDUAL EXERCISE

Q1. What is the difference between red, blue and yellow signs and when are these used?

Q2. When might discs, triangles, and squares be used on a safety signboard and give an example for each?



END OF UNIT 5: SPEED TEST, Page 81



- Q1.** List four requirements of the Safety, Health and Welfare at Work Act, 2005.
- Q2.** Where might you find a safety statement?
- Q3.** What is the main difference between an accident and a dangerous occurrence?
- Q4.** Why is it important to report accidents?
- Q5.** What do the colours red, blue, yellow, and green stand for on a signboard?

FURTHER INFORMATION



A wide range of publications and resources are available at <https://hsa.ie>

- Accident and Dangerous Occurrence Reporting - see hsa.ie or telephone the HSA Contact Centre at 0818 289 389 or email contactus@hsa.ie
- Learn More – Industry specific information including top tips and short videos <https://besmart.ie>
- BeSMART – Business electronic Safety Management and Risk Assessment Tool - <https://besmart.ie>



UNIT 6

REFLECTIONS

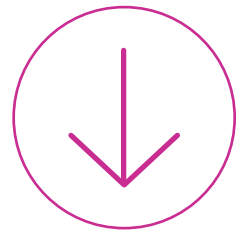
Unit Contents

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REFLECTIONS

UNIT 6



TEACHER GUIDELINES

The “Choose Safety’ workbook contains the following in **Unit 6 Reflections**:

- Part 1 Case studies
- Part 2 Major assignment

This final unit aims to allow students to apply all the knowledge and skills they have acquired during this course. The case studies are examples of the types of accidents or real-life scenarios that have occurred previously. Some details have been changed for reasons of confidentiality.

Choose those case studies that you feel are appropriate to the level of your students.

Statistical information is provided in relation to non-fatal injuries by absence from work (2021 and 5-year average 2017-2021), and by work environment (page 83 and 84 of the Student workbook). Students should analyse these statistics and visit the Health and Safety Authority’s website to develop their knowledge of workplace accidents and prevention strategies.

Activity 6.C provides details of non-fatal injuries reported in 2020 and 2021, and Activity 6.D on the number of reported fatalities by age band 2021. A chart showing the work sectors with the highest number of fatalities in 2020 and 2021 is also included on page 87. Part 2 finishes with the optional Major Assignment.

Learning Outcomes

On completion of this unit, students should be able to:

- discuss the impact of workplace accidents on individuals and business;
- apply some of the principles of health and safety learned on the Choose Safety programme;
- complete a major assignment on one aspect of the course.

SUGGESTED LESSON PLANS

1. The Fatal Accidents, Activity 6.A Scenario No. 1 (page 85 of the Student workbook) is the only one not adapted from the archives of fatal accidents reported to the HSA. However, it is a very credible scenario and common occurrence. Some details of the remaining nine scenarios have been changed. Encourage a broad discussion on each of the scenarios. Try to discourage students from focusing too much on the compensation awarded in each case. Such emphasis could distort the message.
2. Most of the scenarios in 6.B (page 86 of the Student workbook) are based on actual reports. Professional carers are employed mainly by the Health Service Executive (HSE) and include home help, public health nurses and occupational therapists providing a care service in the home. Other carers are family carers looking after a relative who has become ill or incapacitated.
3. Allow plenty of time for students to research and plan for the team debate in 6.F (page 89 of the Student workbook). They should show a good understanding of the issues raised as well as evidence of some research.
4. **The final Major Assignment is an optional exercise.** It can be adapted to suit the abilities of your students. Consult with the Programme Coordinator in your school on whether such an assignment may be used as part of the course requirements for Leaving Certificate Applied Or the Leaving Certificate Vocational Programme.
5. Completion of one of the Major Assignments is a requirement for the awarding of a **Certificate of Distinction and/or Digital Badge of Distinction.** This is in addition to evidence that the student has reasonably engaged in most other aspects of the ‘Choose Safety’ programme.



UNIT 6 ACTIVITIES

Unit 6, Part 1, Case studies



ACTIVITY 6.A, Page 85

IN GROUPS

Read these case studies of fatal accidents and answer the questions that follow:

FATAL ACCIDENTS

- 1 A gardener died from a fatal electric shock after switching on a kettle of water. The kettle was five years old and had not been used for some time, as an electric water heater was in use. However, the water heater had recently failed and had been sent for repairs. As a result, the worker used the old kettle. Examination after the accident showed that the earth wire was not connected to the terminal in the plug. The earth and live wires crossed, causing the accident.
- 2 An employee of company A died when a bale of steel coils fell from the trailer of a lorry. She was attempting to secure the load to a large trailer when the accident occurred.
- 3 An employee of company B died from severe head injuries received when struck by a telescopic handler being used to place a large stone on a wall of a house.
- 4 An employee of company C died from electrocution while topping trees close to live 20,000-volt power lines.
- 5 An employee died when a 9 tonne dumper he was driving overturned trapping him under the vehicle.
- 6 An employee of company D died when he fell from planks on top of an internal partition wall of a single-storey dwelling under construction. He fell as a result of falling roof trusses which fell 'domino-like' before they had been secured into place. There was no fall-protection in place.
- 7 A farm labourer walked into an area where slurry was being agitated. After inhaling one lungful of slurry gas he collapsed and died.
- 8 A student working part-time for company F died from electrocution. The accident occurred when the student was harvesting silage. He was attempting to climb onto the harvester (driven by his employer) as it was passing under high-voltage wires.
- 9 An employee of company H died from electrocution while installing aluminium gutters on a newly constructed two-storey house. A 15-metre section of gutter made contact with a 10,000-volt power line as it was being manoeuvred into position.
- 10 A maintenance worker was clearing guttering on a 2-storey house when the ladder he was standing on slipped. The worker fell to the ground suffering fatal injuries.

- Q.1 Only one of the above case studies is not a factual account of a real incident. Which one is it?
- Q.2 In each case, discuss the main cause of the accident and the sensible control measures that could have been put in place.
- Q.3 On what grounds could an employer appeal a fine or prison sentence?
- Q.4 What general lessons can be drawn after considering the above cases?



ACTIVITY 6.B, Page 86 CLASS DISCUSSION

Read these case studies of non-fatal accidents and answer the questions that follow:

NON-FATAL ACCIDENTS

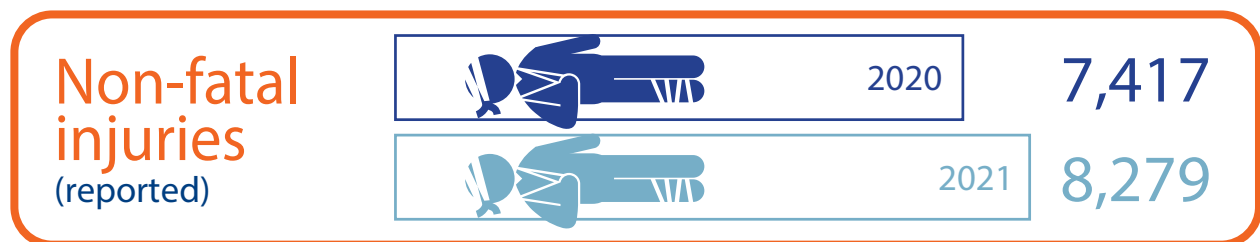
- 1 An employee of company X was injured when she was investigating a malfunctioning machine. Her arm was severely crushed because the electro-mechanical guarding equipment around the machine had been turned off.
- 2 A member of the public received injuries following the collapse of a scaffold which was being dismantled on a busy main street.
- 3 A contractor was employed to remove a corrugated metal roof from the premises of company Y. An employee of the contractor was exposed to asbestos residue in the roof panels. The owner of the company was aware of the likely presence of asbestos in the roof but did not pass on this information to the contractor.
- 4 An apprentice worker was seriously injured after falling through a perspex corrugated roof on a farm shed.
- 5 An employee was paralysed when crushed by a dumper he was driving, which toppled over on a steep incline.
- 6 An employee of company Z had four fingers on his right hand amputated while using a circular saw. The saw had no guarding.
- 7 A carer looking after an incapacitated man received serious back injury as a result of frequently lifting a man from his bed to his chair.
- 8 A hotel worker tripped on a Hoover cable and fell down a flight of stairs suffering a severe back injury.

- Q.1** Consider the control measures that should have been in place in each of the circumstances above.
- Q.2** What role would training and / or supervision have played in preventing the above accidents?
- Q.3** Who do you think is at fault in each case?



ACTIVITY 6.C, Page 86 CLASS DISCUSSION

Many workplace accidents may go unreported. Why do you think this happens?



Of the 8,279 non-fatal injuries reported in 2021, 97% related to workers. The highest number was reported in Human Health and Social Work Activities, which accounted for over 22% of all incidents. For non-worker incidents, the highest number was reported in Wholesale and Retail Trade (118) representing 46% of all non-worker injuries.



ACTIVITY 6.D, Page 87 CLASS DISCUSSION

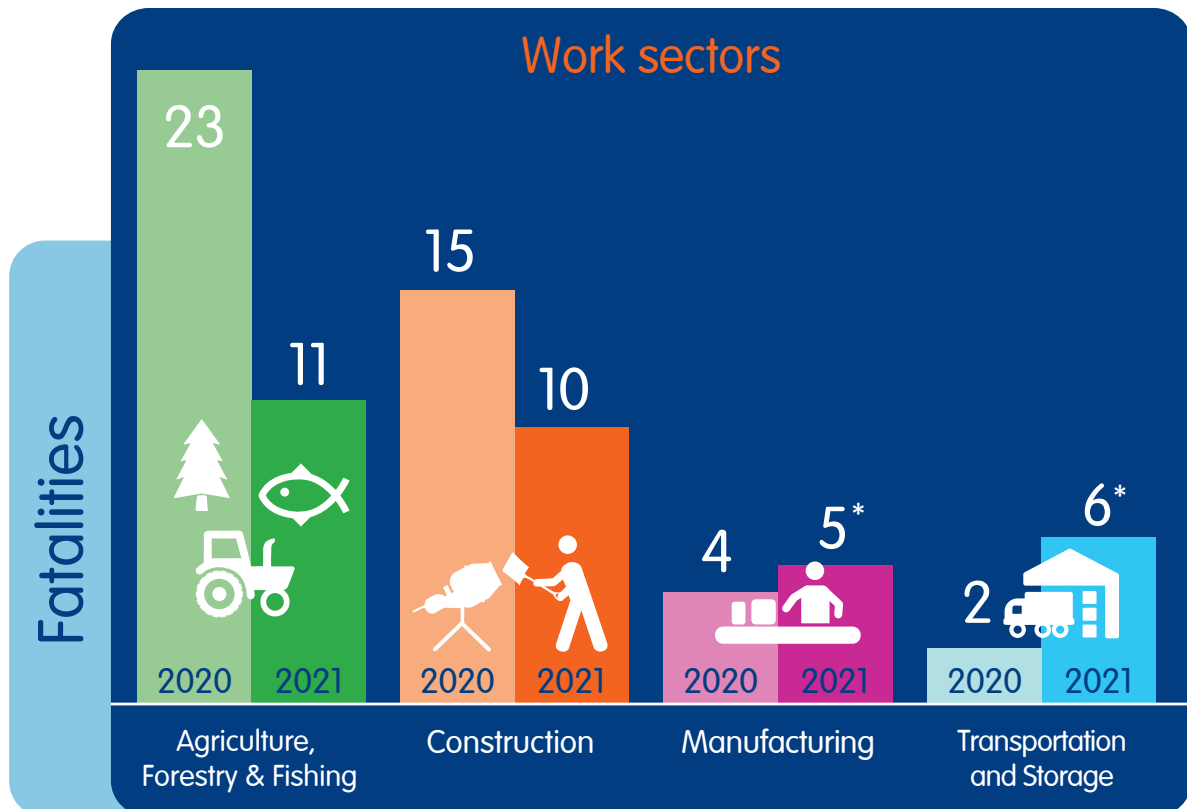
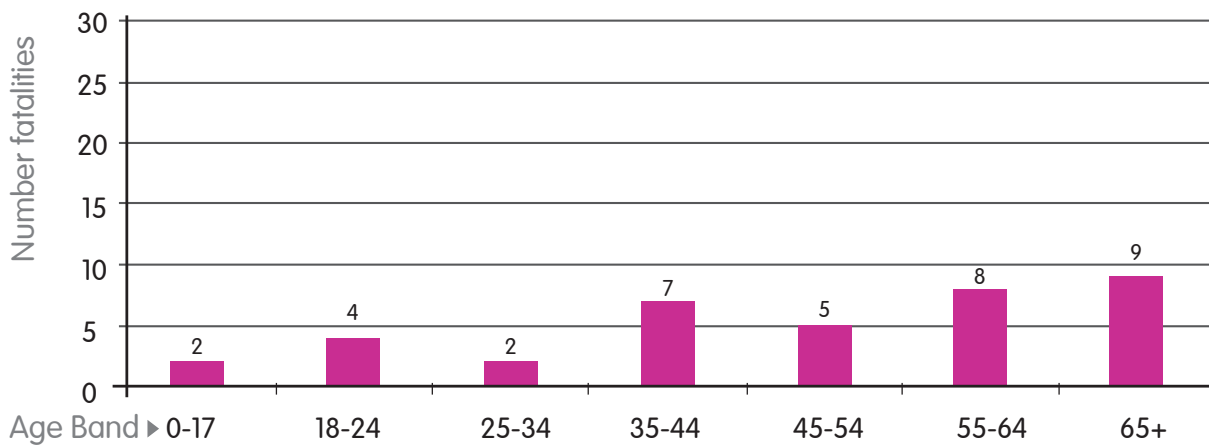
Looking at the charts below discuss suitable methods of communicating health and safety information to employees in the 18-24 age band and employees in the 55-64 age band.

Consider sources of information and advice, education and training, promotional campaigns, tv, radio, and social media.

In 2021 a total of **8,279** non-fatal incidents were reported to the HSA, an **8%** increase on the figure for **2020** (7,417) which is likely to be due in part to revived economic activity in 2021.

A chart showing the **Top 5 working environments for worker and non-worker incidents 2021** is shown on page 84 of the Student Workbook.

Number of fatal work-related incidents by age band 2021 (HSA)



*Fatal incidents occurred to four workers and two non-workers in Transportation and Storage, and four workers and one non-worker in Manufacturing.



ACTIVITY 6.E, Page 88

WRITE A LETTER TO A POLITICIAN

Read the following true account of how a man's life was dramatically changed as a result of a fall from a roof:

Since my accident six years ago, I have not worked. In fact, my whole life has fallen apart.

I fell from a roof while constructing a house and fractured my spine in two places. I also received soft-tissue damage and other damage to my right knee. My ankle was badly twisted and the shock absorber in my knee was destroyed. Everyone told me I was lucky to survive at all. I spent the next six years in a spinal frame, confined to my bed.

Actually, the worst thing was the depression and panic attacks. I ended up in a psychiatric ward.

My income, of course, was gone. And the strain of living off disability allowance and the recurring panic attacks were too much for my family. My wife and I separated and I find it very difficult to talk openly to my kids.

Now, years later, the physical wounds are largely healed but I am still not the man I used to be.'

John aged 38.

Suppose you are John's wife, child or friend. Write a letter that he or she might send to the minister responsible for regulating health and safety at work.



ACTIVITY 6.F, Page 89 TEAM DEBATE

Prepare a team debate on one of the following topics.

- No.1 That the government is not doing enough to protect workers from workplace accidents.
- No.2 That all health and safety matters depend on the individual's acceptance of personal responsibility.
- No.3 That there should be zero tolerance in relation to all breaches of health and safety regulations.
- No.4 That all injuries and occupational illnesses are preventable.
- No.5 That health and safety matters should feature more strongly in the curriculum for primary and second level schools.

Debate rules

Teams consist of three students. The team argues for or against the motion. Each team must discuss, plan and prepare all of its arguments. Parts of this are then assigned to each team member. One student acts as captain. The captain begins the team's debate, then returns at the end to summarise.

Each team member speaks for THREE minutes. The captain returns to summarise in TWO minutes the essential argument of the team.



ACTIVITY 6.G, Page 89 SHORT GROUP PROJECT A Diary

Write an imaginary account entitled: 'A day in the life of...' based on what you suppose is the typical daily work routine of one of the following workers. For this exercise, focus entirely on hazards, risks and other health and safety matters that would routinely arise during the person's daily work.

Choose from:

garda;
crèche supervisor;
GP;
carer;
waitress;
farmer;
off-shore fisherman;
construction worker;
hairdresser;
bus driver;
manager in financial services;
manager in a manufacturing plant.



UNIT 6 ACTIVITIES

Unit 6, Part 2, Major assignment

MAJOR ASSIGNMENT, Page 90



Each student is asked to complete **one** of the following projects

Project Number One



Consider a workplace where you have recently worked or are currently working. Write a report on the health and safety practices of the business. Do not include personal or sensitive information.

Part one of your report should include some or all of the following:

- a summary of the company's safety statement;
- a report on the company's knowledge of health and safety legislation;
- consideration of the training provided for staff;
- company policy on the following (if relevant):
 - Personal protective equipment;
 - Accident reports;
 - Evacuation procedures;
 - Policy on bullying in the workplace.

Part two of your report should make suggestions as to how safety could be improved in this workplace.

Project Number Two



Ask permission to view your school's safety statement. Write a critical analysis of the statement, based on parts one and two of Project One above.

Project Number Three



Consider an important event in your school's calendar (such as TY trip, school tour, school musical or sports day). Write a risk assessment for the event considering all hazards, risks and controls that you associate with the event.

Project Number Four



You are due to attend a meeting with the minister in charge of workplace safety. You want to discuss with him / her ways of improving health and safety for young people at work. Prepare the notes which you will bring with you on the day. This should contain the key points that you wish to make, as well as relevant statistics and / or illustrations to strengthen your argument.

Project Number Five



Design a poster for your school which can be placed in a prominent place. The poster should advise all users of the school (students, teachers, parents, etc) of the best and safest practice when using the available facilities (such as assembly areas, science rooms, computer rooms, etc). The poster must be both informative and eye-catching. If you prefer, you can design a poster for EACH of the key areas in your school.



Project Number Six



Design, prepare and conduct a survey of a full year-group in your school. The survey should ascertain the students' knowledge of and interest in health and safety matters. You must compile graphs, charts and lists based on your research. There should also be a section with conclusions based on the survey. You may like to engage the cooperation and assistance of the school's student council, prefects or appropriate Year Head.

Project Number Seven



Choose any one of the scenarios presented in this unit. Imagine a criminal court case takes place as a result of the event. Prepare the speech that may be presented by the barrister representing either the defence or the prosecution. Your speech may be presented orally or in writing.

Project Number Eight



Write a report on developing a social media campaign on slips, trips and falls. Take into consideration what you have learned on the 'Choose Safety' programme. Use statistical information, charts, and resources to emphasise why the campaign is important, the best times to commence the campaign, the target audience, and the media to be used. Write a short post for Facebook and Twitter or describe a suitable YouTube post, and incorporate these details in your report.

Teacher's Note:

The teacher will correct the Major Assignments and decide the award level for each student.



END OF UNIT 6: SPEED TEST, Page 92

Working in groups of four, you have 12 minutes to complete the following rapid-risk assessments:



Workplace	Hazards Unit 1	Risk Unit 2	Control Unit 3
Kitchen area of a restaurant			
Storeroom in a DIY store			
Busy accountants office			
Hairdressers			
Farmyard			
Garden centre			
Fishing trawler			

FURTHER INFORMATION



A wide range of publications and resources are available on <https://hsa.ie>

- [Annual Review of Workplace Injuries, Illnesses and Fatalities 2020 - 2021](#)
- [Health and Safety Executive \(UK\) <https://hse.gov.uk/>](#)
- [European Agency for Safety and Health at Work: <https://osha.europa.eu/en>](#)



HSA

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