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GUIDANCE NOTE	HEALTH AND SAFETY ADVICE/SUPPORT	Code: A002	Issue: D
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HEALTH AND SAFETY ASSISTANCE

THSP have been retained to assist this organisation in keeping up to date with changes in the law and to provide advice on all matters relating to health and safety at work.

THSP operate a telephone advisory service which is available to all, should you have need to call them a Director should be notified. The telephone number for the advice service is shown below. Out of hours the call will be answered by a recorded message for simple requests you should leave your Name, Company Name and a telephone number on which you can be reached. For the more pressing or urgent problems a number will be given on which you can contact the duty officer.

03456 122 144

ACCIDENTS AND EMERGENCIES

Deaths and Specified Injuries may be notified by telephone to the National Incident Contact Centre between the hours of 8.30 a.m. and 5.00 p.m. on weekdays, a report must be received by the enforcing authority within 10 days.

Telephone the Incident Contact Centre on:

0345 300 9923

Reporting of all other incidents under RIDDOR must be submitted via the relevant online interactive form, available on the HSE Website - www.hse.gov.uk/riddor .

CONTACTING THE HEALTH AND SAFETY EXECUTIVE (HSE) / EMPLOYMENT MEDICAL ADVISORY SERVICE

Refer to: - www.hse.gov.uk

CONTACTING THE HSE OUT OF HOURS

The types of circumstances where the HSE may need to respond out of hours are:

- Following a work-related death;
- Following a serious accident where there have been multiple casualties;
- Following an incident which has caused major disruption such as evacuation of people, closure of roads, large numbers of people going to hospital etc.

The duty officer can be contacted on **0151 922 9235**.

GUIDANCE NOTE	METHOD STATEMENT CHECKLIST	Code: B003	Issue: A
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INTRODUCTION

This is simply a format to work to when formulating a Method Statement using the Template contained in the Method Statement Guidance Note. It will ensure that all (or nearly all) requirements are considered. There may be nothing to enter in some of the headings. Keep entries short and simple and relevant to the task/work to be undertaken.

Scope of Works:

In this section give a brief description of what the project entails, for example:

“The demolition of a single-storey building containing some asbestos products and the subsequent rebuilding using the reclaimed materials”.

Access / Egress:

Describe access, both on to site and to the workplace once on site. Reference should be made to road names, width restrictions, entry/exit points, suitability for unloading, restrictions on stopping, parking, etc. On site consideration should be given to one-way circuits and the separation of pedestrians and vehicular traffic. This section could also be used to describe availability of on- and off-site parking for contractors.

Lighting:

Consideration should be given to site hours; this may immediately highlight the need for artificial/task lighting if work starts before first light or continues after dusk. Additionally the requirement for general site lighting and specific task lighting would be inserted here and who would be responsible for its provision of it.

Plant and Equipment used:

This section is purely a list of plant and equipment that it is proposed to use on site. It may be useful to include dimensions, weights etc. This box can then be referred to later when specific risk assessments are attached for the various operations/activities.

Materials used:

A comprehensive list of materials is to be entered here. This will highlight any COSHH Assessments and Safety Data Sheets that should be attached to the Method Statement.

Sequence of Tasks:

This section will contain a step-by-step explanation of how the work will be carried out. As the sequence of tasks is followed through, you must insert all the safety considerations that apply to the work, for example:

“The brickwork will then be removed using non-vibratory hand tools by operatives working from a correctly constructed mobile tower scaffold. Only trained operatives will erect mobile scaffold towers”.

Risks and Controls:

Within this section a list of identified risks throughout the task will be noted, along with the basic control measures to be put in place. This should be a summary of risks and controls, not just a copy of the actual risk assessments. The full risk assessments can be found at a later annex.

Manual Handling

“Where possible mechanical devices such as Forklifts should be used when carrying out manual handling operations, where this is not possible, operatives must be made aware of the Kinetic System of lifting and moving materials, and employ these methods, where appropriate PPE such as gloves and protective clothing, also where possible the weight and centre of gravity of materials to be manually handled should be made available”

Technical Information:

Any information that is critical to the safety of the project; this may include elements of the structural engineer’s reports, previous safety plans, plus inclusion of any design drawings or specifications that may be available.

Training:

Outline clearly activities requiring training that are going to take place on site. If a certain standard of training is required, then ensure it is detailed here. Operatives must be trained and competent in the use of abrasive wheels and cartridge operated tools etc (all training requirements must be fulfilled prior to operatives being set to work).

Example:

“A competent person will at all times control any lifting operations, all loads will be attached and moved by a competent Slinger/Signaller. As with all lifting equipment all accessories are subject to thorough examinations but in this case every 6 months (chains, slings etc.) All accessories are to be inspected weekly and these inspections are to be recorded in a register held on site. At all times during lifting operations the work area is to be barriered so as to prevent unauthorised persons entering the area”

Supervision:

Shown here is who the contracts manager, site manager, foreman/supervisor are, what each will be responsible for, their availability on site and their contact numbers.

Housekeeping and Waste Removal Procedure:

How will waste be removed from site? Consider location of skips, provision of bins and what collection arrangements will be put in place.

The following Risk/COSHH/Noise/Manual Handling assessments are attached:

COSHH Assessments: See attached sheets

Risk Assessments: See attached sheets

Manual Handling Assessments: Manual Handling assessments will be carried out where the need is identified.

Noise Assessments: Where equipment used in this task generates a noise level above the first action level of 80db(A), a noise assessment will be carried out.

GUIDANCE NOTE	AGENCY STAFF	Code: B303	Issue: A
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INTRODUCTION

The use of temporary staff from employment agencies is now well-established. Organisations employ temporary workers for many reasons, e.g. to cover for permanent employees who are sick or on holiday, or because they cannot recruit permanent staff.

However, all too often the health and safety aspects that are related to the use of temporary staff from agencies are often neglected. In 2000 a Health and Safety Executive (HSE) research report found that 80% of agencies considered responsibility for an agency worker's health and safety lay with the host employer, i.e. the employer who hires the workers from the agency.

Most agencies and employers claimed to share information about health and safety but the report pointed out that, in reality, there was generally poor awareness of such issues. It was also found that around half of all agencies do not have measures in place to ensure they are fulfilling their health and safety obligations.

LEGAL POSITION

Under Section 2 of the Health and Safety at Work etc. Act 1974 employers are required to ensure, so far as is reasonably practicable, the health, safety and welfare of their employees. Section 3 requires an employer to "conduct his undertaking in such a way so that persons not in his employment are not exposed to risks to their health and safety". This requirement applies equally to both the client and the employment agency.

Employment agencies must abide by the Conduct of Employment Agencies and Employment Businesses Regulations. These state that "neither an agency nor an employment business may introduce or supply a work-seeker to a hirer unless the agency or employment business has obtained sufficient information from the hirer to select a suitable work-seeker for the position which the hirer seeks to fill".

To be included in this information are "any risks to health or safety known to the hirer and what steps the hirer has taken to prevent or control such risks" along with "the experience, training, qualifications and any authorisation which the hirer considers are necessary, or which are required by law, or by any professional body, for a work-seeker to possess in order to work in the position". Failure to do this could lead to prosecution of the agency in the event of a serious incident.

Both parties have responsibilities under the Management of Health and Safety at Work Regulations. Under Regulation 12 the host employer must provide, to each outside employer, comprehensible information about the risks of the host undertaking and the controls in place to safeguard the relevant visiting personnel who will be working on site.

In addition, the host employer must ensure that temporary workers are provided with appropriate instructions and comprehensible information about any risks they might face.

Regulation 15(2) states that employers must provide any person employed in an employment business who is to carry out work in their undertaking with comprehensible information on any "special occupational qualifications or skills required to be held by that employee if he is to carry out his work safely" and any health surveillance required to be provided to that employee by or under any of the relevant statutory provisions.

In addition, the employment business must be provided with comprehensible information on:

- Any special occupational qualifications or skills required to be held by those employees if they are to carry out their work safely.
- The specific features of the jobs to be filled by those employees (in so far as those features are likely to affect their health and safety).

Regulation 15 also requires the employment business to ensure that the information provided is given to the temporary worker. Related to this, the employer (host) also has a duty under Regulation 12(4) to check that information provided to an employer (including someone carrying on an employment business) is received by the employee.

DIVIDED RESPONSIBILITY

In addition to the above, other health and safety legislation places responsibilities on the host and the temporary worker's, i.e. the employment agency. This is an area that often causes confusion. The duties of the host employer include:

- Reporting dangerous occurrences involving temporary workers under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).
- Informing the worker and his or her employer of any personal protective equipment (PPE) required for the safe performance of the job.
- Providing suitable training and information in respect of any work equipment the temporary worker may use.
- Assessing any display screen equipment workstations to be used by temporary workers.
- Assessing any manual handling tasks to be carried out by the temporary worker.
- Assessing the risk to the worker's health from hazardous substances under the Control of Substances Hazardous to Health Regulations (COSHH).
- Providing safe electrical systems.
- Assessing any exposure to noise and providing hearing protection where required.

The temporary worker's employer should:

- Report under RIDDOR any injuries, death or occupational diseases contracted by the temporary worker.
- Ensure that the temporary worker can complete a report in an accident book in the event of an accident.
- Provide adequate first aid arrangements for the worker.
- Provide suitable PPE for the worker.
- Provide eyesight tests and glasses, where necessary.
- Provide any health surveillance identified as necessary by the host under COSHH or other relevant legislation.
- Consider whether workers will be exposed to health issues.

The general requirements contained within the Management of Health and Safety at Work Regulations will cover other requirements such as emergency and evacuation procedures in the event of a fire.

In practical terms, the host employer and the temporary worker's employer could enter into an agreement that the first aid personnel and equipment on the host's premises will be made available to temporary workers. Arrangements should be agreed before the temporary worker commences their employment and the host should ensure that they have suitable insurance cover to enable staff to treat non-employees.

Similar arrangements may be entered into for other requirements such as the provision of protective equipment or the provision of appropriate manual handling training. It is important that they are well-documented.

IN PRACTICE

The key to addressing the above legal requirements and ensuring safety is an effective management system based upon formal control, co-operation, goodwill and common sense between the employment agency and host organisation. The system should include a written policy, appropriate planning and organisation, provision of information and training, and monitoring of its effectiveness.

The use of temporary workers is often dealt with at a departmental or divisional level, with those at higher echelons in the organisation or specialists (such as the health and safety advisor) not involved in the process.

It is often the case that the recruiters of temporary workers will not appreciate and understand the legal obligations or the potential health and safety implications, if these legal obligations are not met. Even straightforward requirements such as the performance of a workstation analysis are often not undertaken.

Information and training are an integral part of implementing the management system. It is imperative that those involved in bringing temporary workers onto the premises are given the necessary information, instruction and training to ensure that the health and safety system is considered and applied when engaging temporary workers.

Communication is the key to managing the safety of temporary workers. A system of communication between the employment agency and the host employer should be established and the employment agency should, in particular, be made aware of:

- The requirements of the job to be undertaken.
- Any health and safety implications identified.
- Any actions that the host feels the agency should be taking.
- Any qualifications or skills needed by the temporary worker to do the job safely.
- Any training that the agency should provide for the worker.

For ease of use, written specifications containing all relevant information can be drawn up for each job to be carried out by the temporary worker. These details can be provided both to the employment agency and to the worker, thereby allowing both to determine suitability for the role.

The performance of risk assessments will allow the host organisation to meet its legal duties by collating and passing onto the employment agency and the temporary worker the necessary information on the risks and control measures required.

The levels of competence required of the contractor can be established by identifying any risk. The host employer should ensure that the temporary worker has the required level of competence to carry out the job safely, i.e. asking for copies of certificates of competence before they start work.

The employment agency should ensure that the prospective candidates meet the requirements specified in the information provided by the host and that the host employer is made aware of any medical or other conditions which could affect the worker's health and safety. They should also detail any training the worker has received from the agency. For example, if an employee has a medical condition, or is pregnant, the host should be made aware of this, particularly if the role involves manual handling. Clearly in cases where a temporary worker is pregnant their employment agency should undertake the necessary assessment of the risks when placing the person into employment and make the host aware of the individual's condition.

In order to facilitate safety management it may be useful for each manager to keep records of which temporary workers are on site, who their employers are, what training they have received and what job they are carrying out. This could include a checklist of actions to take when engaging temporary workers so as to ensure all necessary steps are taken. Managers should check that:

- The job has been risk assessed.
- The employment agency has been given all necessary information in respect of the job.
- The prospective temporary employee has the necessary skills, knowledge and training.
- Information on emergency procedures has been provided to the temporary worker.
- Information on health and safety risks and what arrangements are in place to prevent or control the risks has been provided.
- Site safety rules have been provided.
- A workstation analysis has been completed.

GUIDANCE NOTE	LONE WORKING	Code: B304	Issue: A
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LONE WORKERS

There is no general prohibition to employees working alone with the exception of a few special circumstances where, due to the risk and hazard, there is a prohibition, e.g. for divers. However, lone workers may, obviously, be exposed to special risks and there is a need to put in place special arrangements to address those risks.

There are two major areas of risk for lone workers:

- The possibility of being unable to summon assistance if they have an accident or if they are incapacitated in some other way.
- Their vulnerability to violence.

The risk assessment carried out under the Management of Health and Safety at Work Regulations ought to properly examine the special circumstance of lone workers. The control measures recommended by this assessment should be enforced.

The sort of concerns that should be examined in the risk assessment includes:

- What might go wrong?
- How serious might it be?
- Would the worker be able to summon help?
- How would you check that they are OK?
- Are they going to come across circumstances in which they will attempt to do something that requires two people?
- Are they mentally and physically suited to working alone?
- What instruction have they received?
- Is that instruction in writing?
- What training have they received?
- How are you going to supervise them?
- What first aid arrangements should be made?

This list is not exhaustive.

After considering these things and putting into place such precautions as you can, you must assess whether it is safe or unsafe for a particular worker to work alone.

GUIDANCE NOTE	UV EXPOSURE	Code: B311	Issue: A
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HAZARDS

Exposure to ultraviolet (UV) radiation from the sun can cause skin damage including sunburn, blistering, skin ageing and in the long term can lead to skin cancer. Skin cancer is the most common form of cancer in the UK, with over 40 000 new cases diagnosed each year.

UV radiation should be considered an occupational hazard for people who work outdoors.

CONTROL MEASURES

- Encourage workers to keep covered up during the summer months - especially at lunch time when the sun is at its hottest. They can cover up with a long-sleeved shirt and a hat with a brim or flap that protects the ears and neck in non head protection areas.
- Encourage workers to use sunscreen of at least SPF (Sun Protection Factor) 15 on any part of the body they can't cover up due to PPE requirements such as ears and neck. Apply it as directed on the product. They might prefer to use a spray or an alcohol-based (non-greasy) sunscreen.
- Encourage workers to take their breaks in the shade, if possible, rather than staying out in the sun.
- Consider scheduling work to minimise exposure.
- Site water points and rest areas in the shade.
- Encourage workers to drink plenty of water to avoid dehydration.
- Keep your workers informed about the dangers of sun exposure.
- Encourage workers to check their skin regularly for unusual spots or moles that change size, shape or colour and to seek medical advice promptly if they find anything that causes them concern.

Consulting your employees and their safety representatives is important. Take their views into account when introducing any new sun safety initiatives.

REFERENCE

HSE Guidance: IND(G)147, IND(G)337

GUIDANCE NOTE	CDM PART 4 GENERAL REQUIREMENTS FOR ALL CONSTRUCTION SITES	Code: C011	Issue: A
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INTRODUCTION

Part 4 of the Construction (Design and Management) Regulations (CDM) sets out a number of provisions that only relate to work carried out on the construction site. Guidance on particular provisions is available on the HSE's construction web pages - www.hse.gov.uk/construction

Safe places of construction work

1. There must, so far as is reasonable practicable, be suitable and sufficient safe access and egress from -
 - a. Every construction site to every other place provided for the use of any person whilst at work; and
 - b. Every place construction work is being carried out to every other place to which workers have access within a construction site;
2. A construction site must be, so far as is reasonably practicable, made and kept safe for and without risks to the health of any person at work there;
3. Action must be taken to ensure, so far as is reasonably practicable, that no person uses access to or egress from or gains access to any construction site which does not comply with the requirements of paragraph 1 or 2.
4. A construction site must, so far as is reasonably practicable, have sufficient working space and be arranged so that it is suitable for any person who is working or who is likely to work there, taking account of any necessary work equipment likely to be used there.

Good order and site security

1. Each part of a construction site must, so far as is reasonably practicable, be kept in good order and those parts in which construction work is being carried out must be kept in a reasonable state of cleanliness;
2. Where necessary in the interests of health and safety, a construction site must, so far as is reasonably practicable, and in accordance with the level of risk posed, comply with either or both of the following-
 - a. Have its perimeter identified by suitable signs and be arranged so that its extent is readily identifiable; or
 - b. Be fenced off;
3. No timber or other material with projecting nails (or similar sharp object) must-
 - a. Be used in any construction work; or
 - b. Be allowed to remain in any place;
 If the nails (or similar sharp object) may be a source of danger to any person.

Stability of structures

1. All practicable steps must be taken, where necessary to prevent danger to any person, to ensure that any new or existing structure does not collapse if, due to the carrying out of construction work, it-
 - a. May become unstable; or
 - b. Is in a temporary state of weakness or instability;
2. Any buttress, temporary support or temporary structure must-
 - a. Be of such design and installed and maintained so as to withstand any foreseeable loads which may be imposed on it; and
 - b. Only be used for the purposes for which it was designed and installed and is maintained;
3. A structure must not be so loaded as to render it unsafe to any person.

Demolition or dismantling

1. The demolition or dismantling of a structure must be planned and carried out in such a manner as to prevent danger or, where it is not practicable to prevent it, to reduce danger to as low a level as is reasonably practicable,
2. The arrangements for carrying out such demolition or dismantling must be recorded in writing before the demolition or dismantling work begins.

Explosives

1. So far as is reasonably practicable, explosives must be stored, transported and used safely and securely;
2. An explosive charge may be used or fired only if suitable and sufficient steps have been taken to ensure that no person is exposed to risk of injury from the explosion or from projected or flying material caused by the explosion.

Excavations

1. All practicable steps must be taken to prevent danger to any person, including, where necessary, the provision of supports or battering to ensure that-
 - a. No excavation or part of an excavation collapses;
 - b. No material forming the walls or roof of, or adjacent to, any excavation is dislodged or falls; and
 - c. No person is buried or trapped in an excavation by material which is dislodged or falls;
2. Suitable and sufficient steps must be taken to prevent any person, work equipment, or any accumulation of material from falling into any excavation;
3. Suitable and sufficient steps must be taken, where necessary, to prevent any part of an excavation or ground adjacent to it from being overloaded by work equipment or material;
4. Construction work must not be carried out in an excavation where any supports or battering have been provided in accordance with paragraph 1 unless-
 - a. The excavation and any work equipment and materials which may affect its safety have been inspected by a competent person-
 - i. At the start of the shift in which the work is to be carried out;
 - ii. After any event likely to have affected the strength or stability of the excavation; or
 - iii. After any material unintentionally falls or is dislodged; and
 - b. The person who carried out the inspection is satisfied that construction work can be safely carried out there.
5. Where the person carrying out an inspection has informed the person on whose behalf the inspection is carried out of any matter about which they are not satisfied (under regulation 24(1), construction work must not be carried out in the excavation until the matter has been satisfactorily remedied.

Cofferdams and caissons

1. A cofferdam or caisson must be-
 - a. Of suitable design and construction;
 - b. Appropriately equipped so that workers can gain shelter or escape if water or materials enter it; and
 - c. Properly maintained;
2. A cofferdam or caisson must not be used to carry out construction work unless-
 - a. The cofferdam or caisson and any work equipment and materials which may affect its safety have been inspected by a competent person-
 - i. At the start of the shift in which the work is carried out; and
 - ii. After any event likely to have affected the strength or stability of the cofferdam or caisson; and
 - b. The person who carried out the inspection is satisfied that construction work can be safely carried out there;

3. Where the person carrying out an inspection informs the person on whose behalf the inspection is carried out of any matter about which they are not satisfied (under regulation 24(1)), construction work must not be carried out in the cofferdam or caisson until the matter has been satisfactorily remedied.

Reports of inspections

1. Where a person who carried out an inspection under regulation 22 or 23 is not satisfied that construction work can be carried out safely at the place inspected, that person must-
 - a. Inform the person on whose behalf the inspection was carried out, before the end of the shift within the inspection is completed, of the matters that could give rise to a risk to the safety of any person; and
 - b. Prepare a report which must include-
 - i. The name and address of the person on whose behalf the inspection was carried out;
 - ii. The location of the place of construction work inspected;
 - iii. A description of the place of construction work or part of that place inspected (including any work equipment and materials);
 - iv. The date and time of the inspection;
 - v. The details of any matter identified that could give rise to a risk to the safety of any person;
 - vi. Details of any action taken as a result of any matter identified in paragraph (v);
 - vii. The details of any further action considered necessary; and
 - viii. The name and position of the person making the report;
 - c. Provide the report, or a copy of it, to the person on whose behalf the inspection was carried out, within 24 hours of completing the inspection to which the report relates;
2. Where the person who carries out an inspection works under the control of another (whether as an employee or otherwise) the person in control must ensure the person who carries out the inspection complies with the requirements of paragraph 1;
3. The person on whose behalf the inspection was carried out must-
 - a. Keep the report or a copy of it available for inspection by an inspector for the Executive-
 - i. At the site where the inspection was carried out until the construction work is completed; and
 - ii. After that for 3 months; andSend to the inspector such extracts from or copies of it as the inspector may from time to time require;
4. This regulation does not require the preparation of more than one report where more than one inspection is carried out under regulation 22(4)(a)(i) or 23(2)(a)(i) within a 7 day period.

Energy distribution installations

1. Where necessary to prevent danger, energy distribution installations must be suitable located, periodically checked and clearly indicated;
2. Where there is a risk to construction work from overhead electric power cables-
 - a. They must be directed away from the area of risk; or
 - b. The power must be isolated and, where necessary, earthed;
3. If it is not reasonably practicable to comply with paragraph 2(a) or (b) suitable warning notices must be provided together with one or more of the following-
 - a. Barriers suitable for excluding work equipment which is not needed;
 - b. Suspended protections where vehicles need to pass beneath the cables; or
 - c. Measures providing an equivalent level of safety;
4. Construction work which is liable to create a risk to health or safety from an underground service, or from damage to or disturbance of it, must not be carried out unless suitable and sufficient steps (including any steps required by this regulation) have been taken to prevent the risk, so far as is reasonably practicable.

Prevention of drowning

1. Where, in the course of construction work, a person is at risk of falling into water or other liquid with a risk of drowning, suitable and sufficient steps must be taken to-
 - a. Prevent, so far as is reasonable practicable, the person falling;
 - b. Minimise the risk of drowning in the event of a fall; and
 - c. Ensure that suitable rescue equipment is provided, maintained and, when necessary, used so that a person may be promptly rescued in the event of a fall;
2. Suitable and sufficient steps must be taken to ensure the safe transport of any person conveyed by water to or from a place of work;
3. Any vessel used to convey any person by water to or from a construction site must not be overcrowded or overloaded.

Traffic routes

1. A construction site must be organised in such a way that, so far as is reasonably practicable, pedestrians and vehicles can move without risks to health or safety;
2. Traffic routes must be suitable for the persons or vehicles using them, sufficient in number, in suitable positions and of sufficient size;
3. A traffic route does not satisfy paragraph 2 unless suitable and sufficient steps are taken to ensure that-
 - a. Pedestrians or vehicles may use it without causing danger to the health or safety of persons near it;
 - b. Any door or gate for pedestrians which leads onto a traffic route is sufficiently separated from that traffic route to enable pedestrians to see any approaching vehicle or plant from a place of safety;
 - c. There is sufficient separation between vehicles and pedestrians to ensure safety or, where this is not reasonably practicable-
 - i. Other means for the protection of pedestrians are provided, and
 - ii. Effective arrangements are used for warning any person liable to be crushed or trapped by any vehicle of its approach;
 - d. Any loading bay has at least one exit for the exclusive use of pedestrians; and
 - e. Where it is unsafe for pedestrians to use a gate intended primarily for vehicles, at least one door for pedestrians is provided in the immediate vicinity of the gate, is clearly marked and is kept free from obstruction;
4. Each traffic route must be-
 - a. Indicated by suitable signs where necessary for reasons of health or safety;
 - b. Regularly checked; and
 - c. Properly maintained;
5. No vehicle is to be driven on a traffic route unless, so far as is reasonably practicable, that traffic route is free from obstruction and permits sufficient clearance.

Vehicles

1. Suitable and sufficient steps must be taken to prevent or control the unintended movement of any vehicle;
2. Where a person may be endangered by the movement of a vehicle, suitable and sufficient steps to give warning to any person who is liable to be at risk from the movement of the vehicle must be taken by either or both-
 - a. The driver or operator of the vehicle, or
 - b. Where another person is directing the driver or operator because, due to the nature of the vehicle or task, the driver or operator does not have full visibility, the person giving directions;
3. A vehicle being used for the purposes of construction work must, when being driven, operated or towed be-
 - a. Driven, operated or towed in such a manner as is safe in the circumstances; and
 - b. Loaded in such a way that it can be driven, operated or towed safely.

4. A person must not ride, or be required or permitted to ride, on any vehicle being used for the purposes of construction work otherwise than in a safe place in that vehicle provided for that purpose;
5. A person must not remain, or be required or permitted to remain on any vehicle during the loading or unloading of any loose material unless a safe place of work is provided and maintained for that person;
6. Suitable and sufficient measures must be taken to prevent a vehicle from falling into any excavation or pit, or into water, or overrunning the edge of any embankment or earthwork.

Prevention of risk from fire, flooding or asphyxiation

1. Suitable and sufficient steps must be taken to prevent, so far as is reasonably practicable, the risk of injury to a person during the carrying out of construction work arising from-
 - a. Fire or explosion;
 - b. Flooding; or
 - c. Any substance liable to cause asphyxiation.

Emergency procedures

1. Where necessary in the interests of the health or safety of a person on a construction site, suitable and sufficient arrangements for dealing with any foreseeable emergency must be made and, where necessary, implemented, and those arrangements must include procedures for any necessary evacuation of the site or any part of it;
2. In making arrangements under paragraph 1, account must be taken of-
 - a. The type of work for which the construction site is being used;
 - b. The characteristics and size of the construction site and the number and location of places of work on that site;
 - c. The work equipment being used;
 - d. The number of persons likely to be present on the site at any one time; and
 - e. The physical and chemical properties of any substances or materials on, or likely to be on, the site;
3. Where arrangements are made under paragraph 1, suitable and sufficient steps must be taken to ensure that-
 - a. Each person to whom the arrangements extend is familiar with those arrangements; and
 - b. The arrangements are tested by being put into effect at suitable intervals.

Emergency routes and exits

1. Where necessary in the interests of the health or safety of a person on a construction site, a sufficient number of suitable routes and exits must be provided to enable any person to reach a place of safety quickly in the event of danger;
2. The matters in regulation 30(2) must be taken into account when making provision under paragraph 1;
3. An emergency route or exit must lead as directly as possible to an identified safe area;
4. An emergency route or exit and any traffic route giving access to it must be kept clear and free from obstruction and, where necessary, provided with emergency lighting so that it may be used at any time;
5. Each emergency route or exit must be indicated by suitable signs.

Fire detection and fire-fighting

1. Where necessary in the interests of the health or safety of a person on a construction site, suitable and sufficient fire-fighting equipment and fire detection and alarm systems must be provided and located in suitable places;
2. The matters in regulation 30(2) must be taken into account when making provision under paragraph 1;
3. Fire-fighting equipment or fire detection and alarm systems must be examined and tested at suitable intervals and properly maintained;

4. Fire-fighting equipment which is not designed to come into use automatically must be easily accessible;
5. Each person at work on a construction site must, so far as is reasonable practicable, be instructed in the correct use of fire-fighting equipment which is may be necessary for the person to use;
6. Where a work activity may give rise to a particular risk of fire, a person must not carry out work unless suitable instructed;
7. Fire-fighting equipment must be indicated by suitable signs.

Fresh air

1. Suitable and sufficient steps must be taken to ensure, so far as is reasonably practicable, that each construction site or approach to a construction site has sufficient fresh or purified air to ensure that the site or approach is safe and without risk to health or safety;
2. Any plant used for the purpose of complying with paragraph 1 must, where necessary for reasons of health and safety, include an effective devise to give visible or audible warning of any failure of the plant.

Temperature and weather protection

1. Suitable and sufficient steps must be taken to ensure, so far as reasonably practicable, that during working hours the temperature at a construction site that is indoors is reasonable having regard to the purpose for which that place is used;
2. Where necessary to ensure the health and safety of persons at work on a construction site that is outdoors, the construction site must, so far as is reasonably practicable, be arranged to provide protection from adverse weather, having regard to-
 - a. The purpose for which the site is used; and
 - b. Any protective clothing or work equipment provided for the use of any person at work there.

Lighting

1. Each construction site and approach and traffic route to that site must be provided with suitable and sufficient lighting, which must be, so far as is reasonably practicable, by natural light;
2. The colour of any artificial lighting provided must not adversely affect or change the perception of any sign or signal provided for the purposes of health and safety;
3. Suitable and sufficient secondary lighting must be provided in any place where there would be a risk to the health or safety of a person in the event of the failure of primary artificial lighting.

GUIDANCE NOTE	COMMUNICATION WITH FOREIGN WORKERS	Code: D002	Issue: A
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INTRODUCTION

Good communication is essential to ensure a safe working environment. Employment of foreign nationals, can present communication difficulties. Many workers have only a basic level of understanding of the English language. Employers must be able to ensure that the health and safety message is communicated to everyone at risk, whatever their ethnic background or standard of literacy.

RISKS IDENTIFIED

The majority of risks arise from an inability to understand written or verbal instructions, how equipment works or specific warnings. Failure to understand instructions places workers in danger to themselves and also endangers other work colleagues.

SOLUTIONS

There are many solutions available to help improve communication:

- Buddy system - Use of an English speaking compatriot to act as an interpreter to pass on information and act as a minder for the non-English speaker.
- Design - Consideration at the design/procurement stages of a contract to ensure tender documents address this issue. Request that contractors have appropriate arrangements and funding in place.
- Guidance - Provision of information in various languages and formats, including pictograms, clear diagrams, pocket safety notes, etc. for providing essential information.
- Inductions - Inductions could be carried out in a variety of languages where appropriate. Detailed explanation of site procedures and site signage is essential.
- Supervision - Increased supervision and appropriate training to ensure correct working practices are followed. Ideally the supervisor should be bilingual.
- Toolbox talks - Regular toolbox talks can form an essential part of ongoing consultation with employees, these must be relevant and an interpreter could be employed if English is not understood.
- Training - It is essential that the operative is competent to undertake the task and they must be appropriately trained. Training media is often available in different languages. However, there is a risk that the individual may not have an adequate understanding of signs and instruction, which must not be overlooked.
- Translators/translation - Where the workforce has difficulty with the English language individuals can be provided with a list of commonly used words and their meanings, wording can be replaced with pictograms, simple instructions and guidelines in a number of common foreign languages can be provided and it can be ensured that groups of foreign operatives have at least one bilingual member to interpret. Provide important documentation such as method statements and risk assessments in the employee's native language.

GUIDANCE NOTE	INDUCTION TRAINING METHODOLOGY	Code: E002	Issue: A
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It is important, that the safety induction training concentrates on the core elements that allow employees to work safely. The following key points should be considered.

- Training should not overload new employees with information. This can be both confusing and demotivating;
- The major issues that new employees will encounter during their early days with the organisation should be covered in the training;
- The level of detail in the training should be limited, but signposts to more detailed information should be provided;
- Safety training should be incorporated into any general induction training, as opposed to being “tacked onto” the end of it, as is often the case. If safety is not given equal prominence in a general induction programme, the message that the organisation does not rate safety as highly as other issues will be sent to new employees.

Generally, safety induction training presents information at three levels:

- General information regarding health and safety in the organisation;
- Local health and safety information;
- Job-specific information necessary to allow the person to begin working safely.

ORGANISING THE INDUCTIONS

The health and safety induction must be undertaken as soon after the commencement of the new starter as practicable, preferably within the first few days.

In an ideal situation, the induction would be carried out on a one-to-one basis or with no more than three or four people. This allows the induction to be better tailored to the needs of each individual and is more likely to ensure a more effective acceptance of the information being passed on. In some cases, however, it will not be practicable to undertake the inductions other than in larger numbers and probably in conjunction with other induction sessions. In this case it is important that a competent person, probably at the new work area, provides the more specific aspects of the induction, i.e. those particular to the person, or their new work area.

Quite often it is difficult for the health and safety adviser to be aware of the actual start date of new employees. Since the human resources department is most likely to be aware of new starters, it is useful to develop some form of notification, preferably well in advance.

Some organisations use video or computer-based training to provide the induction training. These have many advantages, notably the much reduced need for administration and the ability to review it at will, but they can de-personalise the message and thus not have the best effect on encouraging positive safety culture that a face-to-face induction session can have. If this type of induction is planned, however, it is important that the new starter has adequate access to the means of using this type of induction.

GENERAL INFORMATION REGARDING HEALTH AND SAFETY IN THE ORGANISATION

Refer to Part 2 Arrangements Section E of the policy document for forms and content.

In addition to general Health and Safety Information you should consider local health and safety information

LOCAL HEALTH AND SAFETY INFORMATION MIGHT INCLUDE:

- Local fire and emergency arrangements, including the required action in the event of a fire or emergency, escape routes, muster points, identities of fire wardens, etc.;
- First-aid and accident-reporting procedures, such as the identities and locations of first aiders, location of the accident book, and action to be taken in the event of an accident;
- Welfare arrangements e.g. the location of facilities for obtaining food and water;
- Local rules and instructions, including any particular requirements for that location, over and above general organisation rules;
- Details of safety representatives and safety committees.

JOB-SPECIFIC INFORMATION NECESSARY TO ALLOW THE PERSON TO BEGIN WORKING SAFELY

Job-specific information necessary to allow employees to begin working safely includes:

- The nature of the hazardous substances employees are using, and the relevant controls;
- Any hazards related to the equipment employees are using, along with instructions on safe working procedures;
- Any other hazards to which employees might be exposed, and the appropriate safe systems of work.

SAFETY INDUCTION TRAINING METHODS

The training method used will depend on the length of the induction programme, and how hazardous the working environment is. In low-risk environments, e.g. offices, the training might be only a few hours long and could be conducted in the office itself. In more hazardous environments, a combination of methods might be necessary.

The principal methods appropriate for safety induction training are:

- Lectures and discussions;
- Videos/DVDs;
- Computer-based training;
- Tours;
- Documents and literature.

LECTURES AND DISCUSSIONS

For induction purposes, these must be informal and of short duration. They must give new employees the opportunity to ask questions. It is preferable to have a senior supervisor or manager attend, as well as the trainer, as this adds weight and importance to the subject matter.

VIDEOS/DVDS

Many suitable videos/DVDs are available off-the-shelf that cover general topics relevant to induction training, such as:

- Display screen equipment use;
- General attitudes to safety and an introduction to the Health and Safety at Work etc. Act, 1974;
- Fire safety;
- Office safety, etc.

Many organisations will have their own induction videos/DVDs produced, which not only have the advantage of covering site and organisation-specific issues, but also reinforce the safety culture by emphasising the importance of safety to the organisation. However, it is important not to rely wholly on videos/DVDs for induction training purposes - some interaction is also required within the training programme.

COMPUTER-BASED TRAINING

This involves the new employee undergoing training via interactive computer software, covering a particular health and safety topic. Normally these programmes are tailored to the needs of an organisation. The programme usually includes some form of evaluation, such as a test at each stage. It is also possible to monitor the time that employees spend on each subject area, to ensure that they do not neglect any of the material.

TOURS

An escorted tour of the work premises is essential for the general familiarisation and orientation of new employees. It is also an opportunity to meet key personnel, such as safety advisors, first aiders and fire wardens. During the tour, any hazardous areas, e.g. noise hazard zones, should be pointed out, and particular restrictions explained.

DOCUMENTS AND LITERATURE

During induction, it is useful to give new employees appropriate documentation. However, it is important not to overload them with material that is either irrelevant or too detailed. Appropriate documentation might include:

- Third-party information, e.g. leaflets produced by the Health and Safety Executive (HSE).
- Organisation information, such as:
 - ▶ Leaflets, e.g. a summary of the safety policy or general rules and information;
 - ▶ Specific safety instructions for carrying out certain tasks or working in hazardous areas, etc.;
 - ▶ Purpose-designed induction information, which might also include an evaluation test to ensure understanding and retention of the contents of the programme.

PLANNING INDUCTION TRAINING

Whichever method, or combination of methods, is used, it is important that the training is planned, and that new employees are given a timetable of induction activities. The induction might be spread over the first few months of employment. However, certain information must be given at the earliest opportunity. Therefore, a typical induction programme might look like the following.

Typical induction Programme

Timescale	Content
First Day	<ul style="list-style-type: none"> ● Fire evacuation procedures. ● "No smoking" policy and general safety rules. ● Names and locations of first aiders. ● Any job-specific information needed by employees immediately so they can carry out their jobs safely.
Within the first week	<ul style="list-style-type: none"> ● The health and safety policy. ● The safe systems of work applicable to their employment. ● Names and locations of key staff, such as the safety advisors, safety representatives, etc.
Within the first month	<ul style="list-style-type: none"> ● Formal induction to the organisation's safety arrangements. ● More details of the safety culture of the organisation, and the standards expected of employees. ● Evaluation of new employees' understanding and retention of the induction information.

EVALUATING INDUCTION TRAINING

In simple, low-risk environments, e.g. offices, it may not be critical to evaluate the degree to which new employees have absorbed and understood the safety induction material. The greater the hazards faced, however, the more important it is to be reassured that new employees have fully understood what is required of them in terms of safety. Induction training, as opposed to other health and safety training can be evaluated using the following methods:

- Simple written tests, usually following a multiple-choice format, or requiring single word/short sentence answers;
- Tests incorporated within computer-based training, or organisation induction booklets;
- Close observation of behaviour by the supervisor or manager, to ensure that the induction material is reflected in new employees' conduct.

It is important that new employees are informed of the evaluation. They should also be informed that failure to achieve the minimum standard may result in their having to repeat the training or retake tests - and might ultimately impact on whether or not they are retained after the probationary period has expired.

SAFETY INDUCTION FOR NON-EMPLOYEES

Employers have a legal duty to provide information to non-employees. However, this duty varies, according to the relationship between the employer and non-employee. Non-employees fall into three main categories:

- Contractors, e.g. for maintenance or installation work;
- Temporary agency staff, provided by an employment business;
- People working on fixed-term contracts.

CONTRACTORS

Organisations should have separate arrangements for the engagement and control of contractors. Hence, separate induction training is usually necessary. This training will include the organisation's requirements for contractors. Contractors may bring their own hazards onto the site, and both the contractors themselves and the client's employees could potentially be exposed to these hazards. Contractors may also be exposed to the client's hazards.

Induction training for contractors should include, as a minimum:

- Health and safety rules for contractors;
- Specific site restrictions;
- Hazards of the client's undertaking, as far as they might affect the contractors;
- Security arrangements;
- Incident and accident-reporting arrangements;
- Welfare arrangements - clients may restrict the use of their own facilities to employees, and require contractors to make their own arrangements;
- Fire and emergency arrangements for the site.

It is common for large clients to have booklets containing rules and arrangements specifically for contractors. These cover the above points. Induction training for contractors can be delivered via many different methods. In hazardous environments contractors should be tested on their understanding of health and safety issues before they commence work.

TEMPORARY AGENCY STAFF

Temporary agency staff are employees of the employment business ("agency"). Therefore, both the agency and the host employer have a legal duty to provide the following information to them.

- The host employer must inform the agency of any skills required by workers in order for them to work safely;
- Agencies must supply staff with the appropriate skills;
- Host employers need to ensure agency staff have the appropriate skills;
- The host employer must provide induction training detailing arrangements and work procedures for the health, safety and welfare of agency workers.

PEOPLE WORKING ON FIXED-TERM CONTRACTS

People working on fixed-term contracts should be treated as employees, although a simplified induction training programme may be used for very short-term contracts.

MEANS OF PROVIDING INFORMATION

The main means of providing information are as follows.

- Verbal and audio information provision;
- Signs and notices;
- Posters;
- Notice boards;
- Electronic displays;
- Computer-based information provision;
- Newsletters and publications;
- Static displays.

Visual information should be varied on a regular basis. If not, the information will soon be ignored as it will become part of the “decoration” of the area and no longer be noticed.

It is advantageous to change posters once a week if possible, even if only to rotate them to different parts of the premises. Notice boards should be kept tidy and free from information not related to health and safety, e.g. social events or general announcements. It can be useful to have a notice board that has a locking glass cover to prevent unauthorised placing or removal of notices.

A particularly useful way of ensuring that the information is changed is to use one of the modern types of electronic displays. These use a variety of techniques, but the most common are the panel of small lights that can be programmed into moving displays of text and simple figures, and visual display monitors displaying information fed from a computer source.

Static displays can be very useful to use for the provision of information. They can provide a distinct focal point, as long as they do not cause an unwanted obstruction. They can be used to display purely text and pictorial information, but can also be used to demonstrate items of equipment, e.g. a range of personal protective equipment, or equipment or techniques that form part of a safe system of work, particularly if it is a new method.

GUIDANCE NOTE	TOOL BOX TALKS	Code: F003	Issue: A
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INTRODUCTION

Tool box talks have been developed to promote health and safety of our employees and others who may be working for us or may be affected by our work.

Tool box talks are intended to be a part of ongoing operational training to be presented weekly or every other week. The aim for any major contract should be to cover all the subjects within the period of the contract but, if possible, the majority of the subjects should be covered before halfway through the contract. Any non-relevant subjects to the job in question may be omitted for short contracts.

Copies of these sets of talks should be provided to each site. When a talk has been given, the supervisor should record the talk. Attendees should sign and print as confirmation

Proof of this type of training is important as evidence of health and safety competence of operatives.

ADVICE ON PRESENTATION

The purpose of tool box talks is to assist supervisory staff who have some knowledge of the subjects to be able to give sufficient advice and instructions to employees so as to enable them to prevent accidents and injuries at work.

To do this, it is important to bear in mind the following points:-

- Although detailed specialist knowledge is not required to do the talk, experience of the activities is necessary together with an adequate appreciation of safety issues. The supervisor on site is probably the best person to lead the discussions.
- The supervisor on site should set aside time for these talks either by appending the time (10-15 minutes) to a tea break or first thing in the morning, when people are most likely to give their attention.
- Choose the right place. Avoid locations where distractions are likely. Make sure you can be heard and you will not be interrupted. Ensure phone calls and visitors are dealt with by someone else so that you and your listeners can concentrate on the talks.
- Speak clearly and loudly enough to get the message across. Use your experience, mention any examples you know of or any stories you have heard to liven up the presentation.
- You do not have to read the content of each talk - if you wish, use the points on the sheet as a basis for the talk and relate the subject to activities or equipment relevant to the site. Some preparation will be required beforehand to plan what you will actually say.
- Allow time for questions. Be prepared for a few questions, some of which may have to be referred to a safety advisor or senior management. Also be prepared for silence - try to "break the ice" with a question to provoke discussion. If someone asks a question, make sure everybody hears the question before you answer it and address your answer to the whole group, not just the questioner.
- Place a clock or watch where you can easily see it so that you can pace your talk without obviously doing so - glancing at your wristwatch periodically to check the time makes your listeners restless.

GUIDANCE NOTE	TRAINING MATRIX	Code: F004	Issue: A
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Training	IOSH Directing Safely	IOSH Managing Safely	Site Safety for Mangers / Supervisors (SMSTS/ SSSTS)	First Aid (FAW / EFAW)	Asbestos Aw areness	CSCS or Equiv Skill Card	NVQ / C&G	Fork Lift Truck Training	Plant Training
Senior Mgt									
Middle Mgt									
Fire Wardens									
First Aiders									
Office Based Staff									
Operatives									

Note this training matrix identifies examples of training courses only; it should be considered a live document and amended to suit organisational needs.

Further details on course outlines can be found on THSP's website training page www.thsp.co.uk

GUIDANCE NOTE	MOBILE ACCESS TOWERS	Code: G107	Issue: A
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INTRODUCTION

This guidance relates to free-standing mobile access towers manufactured from prefabricated components. It is based on information contained within the Prefabricated Access Suppliers' and Manufacturers' Association (PASMA) Operator's Code of Practice which incorporates the requirements of health and safety law, the Health and Safety Executive (HSE) guidance, and British and European standards.

STABILITY

One of the main reasons for selecting aluminium alloy towers is their lightness and ease of assembly. Due to this lightness, care must be taken to ensure the stability of the structure.

It is no longer appropriate to apply simple rules of thumb, e.g. height to base ratio of 3 x base dimensions for external use or 3.5 for internal use. Instead, reference must be made to the supplier's assembly instruction manual, which will specify the safe height to which various tower configurations can be erected and provide information on the use of stabilisers and outriggers to increase the stability of high towers. PASMA recommends that stabilisers or outriggers are added at the first available opportunity, usually after the first module is complete.

Wind affects the stability of a tower by imposing a horizontal load onto the tower, which in turn may cause it to overturn. During normal safe working conditions this tendency is counteracted by the weight of the tower and the effect of the outriggers or stabilisers.

Towers should be stable in a free-standing condition in a wind pressure that equates to 28mph (Beaufort force 6). However, **if the wind speed should exceed 17mph you should cease to work upon the tower**. If the wind speed is likely to reach 25mph the tower should be tied into a rigid structure and if it is likely to reach 40mph it should be dismantled.

SAFE LOADING

Generally, the manufacturer's instructions will give the safe working load (SWL) that can be placed on any platform, the SWL that can be placed on the tower as a whole and the SWL that can be placed on the castors. The castors will have this loading marked upon them. It is recommended that the maximum design load be displayed at the base of the tower for the information of all users.

Any load hoisted onto the tower must be within the effective base dimensions of the tower. Attempting to hoist a load outside the base area may cause it to overturn. Advice must be gained from the suppliers before hoisting loads to ensure the safe and stable use of the tower.

MEANS OF ACCESS

Access to the platform must be provided by integral/vertical ladders, stair ladders, inclined ladders or stairways. These should be erected in accordance with the supplier's instructions. A stairway should be used where there is frequent movement on or off the tower or where materials are carried. External ladders must never be used. Where access is through a fully decked platform, this must be via a hatch in the platform that is capable of being secured in the closed position. The minimum size of the hatch must be 400mm x 600mm.

MOVING

Towers are never to be moved with persons or materials on the platform and are only to be moved by applying force at or near the base of the tower.

All holes, ducts, pits or gratings near the tower are to be securely covered prior to movement being carried out.

If towers fitted with outriggers are to be moved regularly it is advisable that the outriggers should also be fitted with castors.

CANTILEVER PLATFORMS

Towers can be fitted with cantilever platforms. Such towers are to be erected in accordance with the manufacturer's instructions and must only be comprised of components designed and supplied by the manufacturer for that purpose. If such towers are mobile their stability will be affected, therefore, great care is to be taken whilst moving them.

SCAFFOLD BOARDS AND STAGING

Deck areas on aluminium towers must not be made up of scaffold boards. If a bridge is being constructed between two towers proprietary staging units are to be used. Care is to be taken to ensure the stability of the towers. The staging is to be firmly supported on a load-bearing part of the tower and secured to prevent movement with a minimum of 600mm oversail on either end support. If the unit is purpose-designed, with integral hooks for attachment to the tubular transom, the oversail is not required. Guardrails and toe boards are to be provided to such staging.

Care should be taken that the design load and stability requirements are complied with and that the working platform width is a minimum of 600mm. This may require the use of two staging units.

INSPECTIONS

Before Erection

Ensure that the supplier's manual is on site and has been read and understood, and that the operatives erecting the tower are competent. The following components are to be checked to ensure they are in good condition and are compatible:

- Castors. - Check that the castor housing and wheel are not damaged, that the wheel and swivels rotate freely and that the brake is effective.
- Adjustable legs. - Check they are not bent, that threads are free from debris, are clean and are not damaged. Check that the device fitted to stop the leg falling out is functioning.
- Frames. - Check that the members are straight and undamaged, and that they are free from extraneous material such as concrete. Spigots are to be straight and parallel with the axis of the column tube, and locking devices are to be functioning correctly.
- Braces, stairways and ladders. - Check that they are straight and undamaged, and locking hook mechanisms are functioning correctly.
- Platforms. - Check that they are undamaged and the frames are true and square. Check plywood decks are not split or warped and are fixed firmly to the frames. Where toe boards incorporate clips or fittings, check that these are undamaged.
- Ancillary parts, such as outriggers and stabilisers. - Check they are undamaged and function correctly.

Before Use

After the tower has been erected the following checks are to be made before it is used:

- The tower is level and square, and the horizontal braces and platforms are level.
- Outriggers or stabilisers are correctly positioned and secure.
- Base plates or castors are fully in contact with the ground and castors are properly locked.
- Spigot and socket joints are secure.
- Bracing members have been located in accordance with the manufacturer's instructions.
- Guardrails and toe boards are in position.
- Access stairways and ladders are in position and correctly secured.
- The ground is clear of obstructions, potholes and overhead obstructions.

During Use

During use the scaffold is to be kept in good order. Should parts become damaged they are to be replaced before the scaffold is used again. Due to the nature of these towers and the materials used in their construction, they are unstable during high winds and are, therefore, not to be used in windy conditions. After high winds have been experienced they are to be inspected as detailed in "before use" above.

A working platform that is used for construction work and from which a person could fall 2 metres or more must be inspected at least every 7 days and a formal record of inspection kept - this includes a mobile working platform.

Should a tower be used in a public place, e.g. housing estate or industrial area, etc. precautions should be taken to prevent unauthorised access onto the tower or vehicles colliding with it. This may be by the use of security fencing. Certain locations may require a pavement license that may impose additional conditions of use.

If towers are to be left incomplete or damaged they should display a clearly visible warning notice stating the tower's condition.

HANDLING AND STORAGE

The life of aluminium towers will be increased if proper care is taken during handling and storage. Before storage, the components should be cleaned and any concrete or corrosive substances should be removed. Proper stacking will reduce damage and make identification of components easier.

GUIDANCE NOTE	FORKLIFT TRUCKS - LPG & ELECTRIC	Code: G207	Issue: A
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MACHINE CHARACTERISTICS

Machine stability is to be maintained at all times. Therefore, selection of the correct machine is of paramount importance.

Manufacturers of these machines ensure that their products are designed and tested to be stable when handling specific loads. The manufacturers or suppliers are to be consulted about the suitability of the machine to do the required task.

The safe working load (SWL), quoted by the manufacturer, is the load the machine can handle with the mast in the vertical position and stationary. When the mast is tipped forward or the machine is moving the SWL is reduced. This situation is further aggravated if the mast is raised.

ATTACHMENTS

There are a variety of attachments available for forklift trucks, which increase their versatility. However, the addition of attachments may adversely affect the stability of the machine. Therefore, only attachments supplied by the manufacturer are to be used and only in accordance with the manufacturer's instructions.

SITE CONDITIONS

The best operating conditions possible are to be provided, to assist the stability of the machine. A properly constructed access is to be provided, where possible. It should be level and firm, having no camber, and be free from any hazards.

LOAD HANDLING

Forklifts are only stable within the limits laid down by the manufacturer. These limits, when transporting a load, depend on the forks being fully "home" under the load, in order to keep the centre of gravity as near as possible under the axis.

Before moving, the forks need to be raised from the ground. For maximum stability they should be raised by no more than approximately 150mm.

When negotiating inclines the forks are to be raised and the mast tilted back to clear the slope of the ground. The load is to be kept as close to the ground as possible.

Handling an awkward load requires great care. A banksman is to work in association with the driver while awkward loads are being handled.

STACKING

Stacking areas are to be clearly designated and built on firm, level ground, with good drainage. There is to be adequate clearance between the stack and any structure, both to allow the forklift access and to avoid putting excess pressure on the foundations of the structure.

To ensure the stability of the stack the following is to apply:

- The stack height is to be no more than three times its minimum base dimension.
- Materials are to be interlocked.
- Wedges are to be used, where necessary, to prevent sideways movement.
- Components at the bottom of the stack are to be capable of withstanding the weight of the stack.
- Items are not to protrude from the stack and aisles are to be kept clear.

OPERATING

Drivers

The minimum qualifications for a forklift driver are to:

- Be over the minimum school-leaving age; except in docks, where drivers must be aged at least 18 years. In practice, it is not recommended that young persons under the age of 18 years be authorised to drive forklifts, unless under the close supervision of a competent person.
- Hold a current driving licence if the forklift is to be operated on the public highway.
- Be medically fit.
- Hold a recognised operator's certificate for forklift trucks.

Operating Procedures

All drivers are to ensure that they:

- Wear the required protective clothing, e.g. safety helmet, safety footwear, ear defenders, etc.
- Operate at a safe speed consistent with the site conditions.
- Are alert to the presence of persons and vehicles or machinery within their operating area.
- Take particular care when moving off from a stationary position.
- Ensure the forklift is safe before vacating it by:
 - ▶ Stopping the engine;
 - ▶ Disengaging the gears;
 - ▶ Applying the brakes;
 - ▶ Leaving it on level ground;
 - ▶ Resting the forks on the ground;
 - ▶ Removing the key.
- Never carry passengers.
- Climb in and out of the machine using the steps and handholds provided.
- Never permit unauthorised personnel to operate their machine.
- Never operate the controls from outside of the machine.
- Never attempt to lift loads beyond the rated capacity of the machine.
- Never raise the load whilst travelling.
- Always lift the load with the forks tilted back.
- Ensure that the forks are correctly spaced for the load and are fully under the load.
- Travel with the load at the lowest possible level with the forks tilted back.
- Avoid sudden movements of the forklift.
- Ensure the load is stable and secure.
- Never use a defective machine.

TRAINING

The training of the operators should include as a minimum:

- How to safely mount and operate the fork-lift truck within the limits set by the manufacturer.
- The regular routine inspections and tests to be performed on the truck and its fitments.
- The proper and effective use of the controls, including safe driving, turning and maneuvering of the truck, both empty and laden.
- The safe way to use the lifting capabilities of the fork-lift truck and any expected fitments normally used, including the correct procedure for stacking loads, where necessary, and lifting operations to and from other vehicles.

INSPECTIONS AND EXAMINATIONS

Any chains associated with the forklift are to be inspected every 6 months by a competent person and a certificate is to be issued for the chains. A copy of this certificate is to be available on site.

The forklift is to be inspected by the operator prior to work commencing for the day. They are to check:

- Battery level - top up if necessary.
- Tyres - for damage, wear and pressure.
- Fork locating or retaining pins.
- Brakes.
- Overhead guard and load backrest.
- Steering.
- Horn and lights.
- Lift mechanism.
- For leakage of hydraulic oil, etc.

The above is to be recorded every 7 days by the operator or other competent person in a record of inspection.

MAINTENANCE

Maintenance is to be carried out in accordance with the manufacturer's instructions and is to be recorded.

CHARGING OF BATTERY-OPERATED FORKLIFTS

Charging is to be carried out following the manufacturer's instructions, in a well-ventilated area. Smoking shall be prohibited in the charging area.

REFUELLING OF LPG FORKLIFTS

Gas cylinders are to be changed in a well-ventilated area. Operators shall ensure that the valve on the used gas bottle is fully closed prior to its removal. When the new bottle is in place the operator shall check thoroughly for any leaks.

Naked lights are prohibited in the area when a gas bottle is being changed.

ROLLING OVER OF MOBILE WORK EQUIPMENT

Drivers need protection from the risks associated against the forklift truck rolling over and from being hit by falling materials. Roll over protection systems (ROPS) and seat restraints (seat belts) should be fitted to all forklifts having a seated operator.

The correct use of the seat restraint is an essential part of the ROPS and is designed to hold the driver in position when the vehicle tips over. A ROPS bar on its own will not adequately protect the driver in the event of a roll-over. Drivers will instinctively try to jump clear of the vehicle as it tips, but often this is only partially successful and they may suffer serious injuries from being trapped by the vehicle as it comes to rest. It is safer to be held in by the seat restraint within the area protected by ROPS.

GUIDANCE NOTE	BENCH MOUNTED ABRASIVE WHEELS	Code: G403	Issue: A
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INTRODUCTION

The Provision and Use of Work Equipment Regulations (PUWER) requires that all machinery is suitable for its intended use and is properly maintained. PUWER also requires that employees, including those using, mounting and managing the operation of abrasive wheels, are fully informed and properly trained in their safe use.

WHEEL CHARACTERISTICS

An abrasive wheel is usually defined as a wheel consisting of abrasive particles bonded together with various substances. There are two main types of bonding agent:

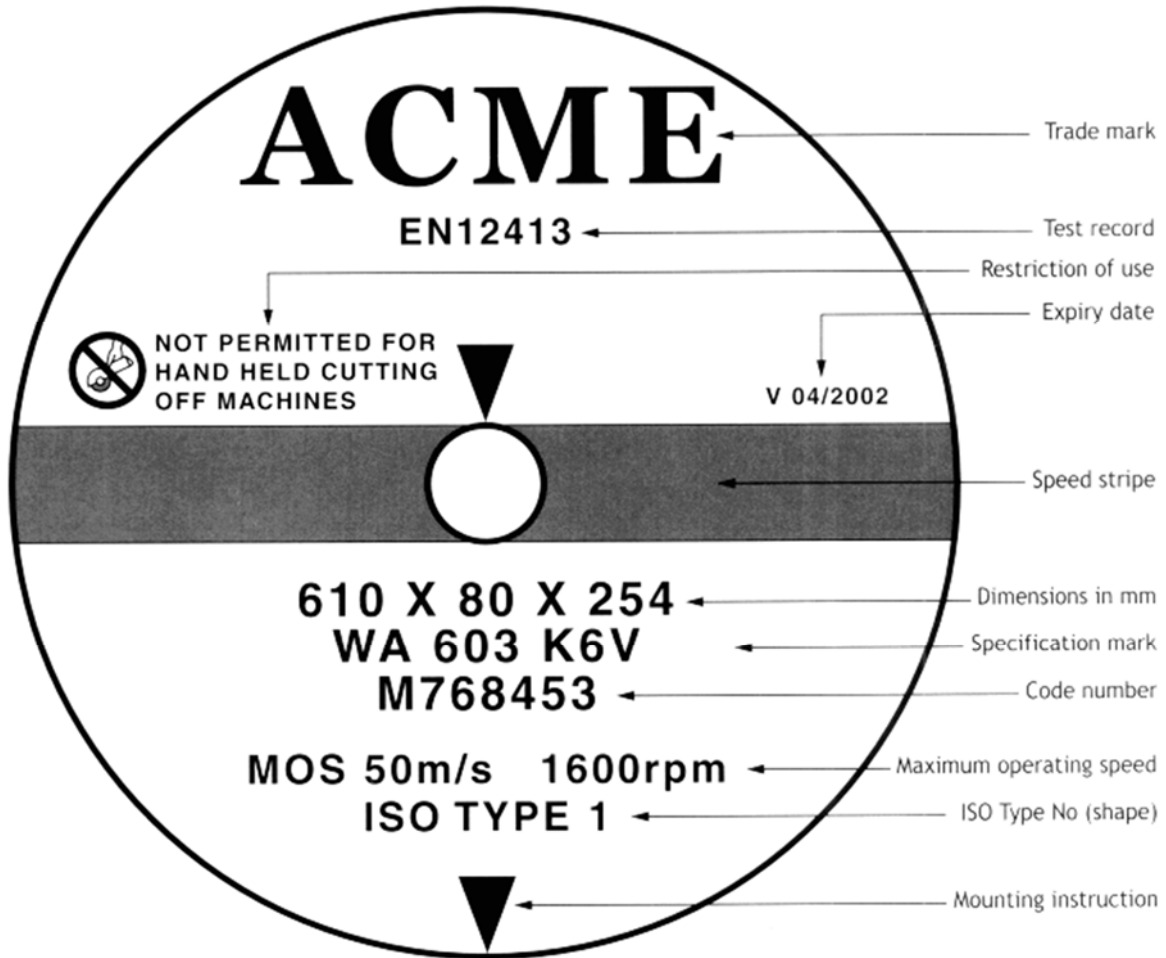
- Inorganic bonds. - Mainly vitrified, i.e. the wheel is generally fired in a furnace to give the bond a hard, strong but brittle structure. These wheels are used for precision grinding applications as they hold their shape, but require dressing.
- Organic bonds. - Not fired but cured at low temperature; the bonding agents are resinoid (B), rubber (R) and shellac (E). Such wheels are tough, shock-resistant and self-dressing, and are most suited to non-precision applications, e.g. fettling and cutting-off.

The following are the variable elements in abrasive wheel manufacture:

- Abrasive. - The type of abrasive used in wheel construction.
- Grain/grit size. - The particle size of abrasive grains. The range is expressed by number from 4, very coarse, to 1200, very fine.
- Grade. - The tenacity with which the bonding material holds the abrasive grain in a wheel. Wheels are graded as soft or hard, according to their degree of tenacity. The grade scale is expressed in letters from A, extremely soft, to Z, extremely hard.
- Structure. - The level of porosity in the wheel. The higher the number, the greater the level of porosity.
- Bond type. - The bonding material used in the wheel construction.

Advice on wheel selection should be obtained from the wheel manufacturer or supplier.

WHEEL MARKING



RESTRICTIONS OF USE

Annex A of BS EN 12413 - Safety Requirements for Bonded Abrasive Products, and BS ISO 525, specify how wheels should be marked to indicate specific restrictions for use. These are:

- (a) RE1: Not permitted for hand-held and manually guided grinding.
- (b) RE2: Not permitted for hand-held cutting-off machines (see figure above).
- (c) RE3: Not suitable for wet grinding (see figure below).



- (d) RE4: Only permitted for a totally enclosed working area.

(e) RE6: Not permitted for face grinding (see figure below).



All organic bonded wheels for hand-held applications will bear a use-by date of 3 years from the date of manufacture.

A code number should be marked on the wheel to indicate the source and manufacturing details of the wheel.

WHEEL SPEEDS

One of the main causes of an abrasive wheel “bursting” is overspeeding. To help prevent this, all grinding machines must be marked with the maximum operating speed of the spindle. Additionally, the maximum permissible speed in revolutions per minute (rpm) and metres per second (m/s), specified by manufacturers, should be marked on every abrasive wheel larger than 80mm in diameter, or on the blotter or identification label which is sometimes attached to it.

As it is not practicable to mark smaller wheels, the maximum permissible speed in rpm of wheels 80mm in diameter or less should be stated in a notice posted in a position where it can easily be read. For speeds of 50m/s and above, colour coded stripes will appear on the wheel.

Never operate abrasive wheels at speeds in excess of that marked on the wheel.

MOUNTING THE WHEEL

Prior to mounting an abrasive wheel onto a grinding machine it is to be cleaned with a brush and examined for any sign of damage. Any wheel which is shown to be damaged is not to be mounted and should be rejected.

Wheels are not to be mounted on machines for which they are not intended. The wheel should fit easily, but not loosely, onto the spindle. If it fits too tightly the heat generated during use may cause expansion in the spindle, thus cracking the wheel.

Worn spindle bearings are to be replaced or the wheel is likely to oscillate and hammer the workpiece and become damaged in the process.

In order to prevent the wheel coming off the spindle it should revolve in the opposite direction to the direction in which the securing nut is tightened.

Straight-sided wheels mounted onto fixed machines are to be mounted between suitable flanges that have a diameter of at least one-third of the total wheel diameter. The flanges are both to be of equal diameter and are to be recessed on the side next to the wheel, to ensure that clamping pressure is not exerted in the area of the centre hole. The driving flange is to be mounted on the spindle in a manner that does not allow the flange to revolve with the spindle. The flanges are to be of mild steel.

The nut holding the abrasive wheel between the flanges should be tightened only sufficiently to ensure that the flanges drive the wheel and do not slip. If the manufacturer's torque pressure is known, a torque spanner should be used to tighten the nut. If this is not available the nut should be tightened by hand pressure using a spanner.

Straight-sided cutting wheels larger than 230mm in diameter are to be fitted with washers of compressible material between the wheel and the flange.

Depressed-centre wheels are only to be mounted with the special flange assembly as illustrated in Figure 1 below. The following points are to be noted:

- When the adapter has been tightened there is to be a slight clearance between the wheel and the flange at (A). This is to ensure that any clamping pressure is exerted only at the centre of the wheel.
- The outer part of the face of the flange is to be tapered as shown. This permits the full width of the flange to support the wheel during grinding.

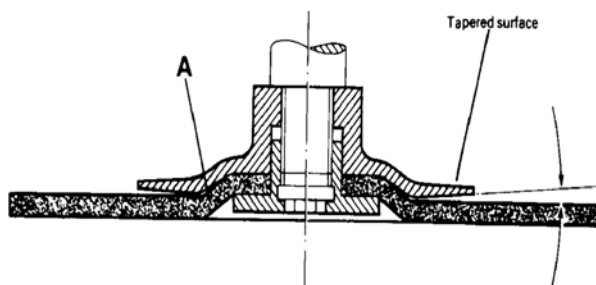


Fig. 1 FLANGE ASSEMBLY FOR A DEPRESSED-CENTRE WHEEL

Depressed-centre wheels are only to be mounted on machines designed for their use. They are never to be mounted on makeshift machines.

EYE PROTECTION

Fragments, flying particles and hot sparks are thrown off during grinding operations. These hazards are extremely dangerous to the eyes. Therefore, eye protection will be provided to guard against this hazard.

Eye protection provided will be in the form of either box goggles or face shields conforming to BS EN166 Grade 1 impact.

The eye protection provided is to be worn by all employees, whether grinding or not, who are exposed to the risks of eye injuries from grinding.

RESTS

Rests must be properly secured and adjusted, to ensure that they are as close as practicable to the wheel. If they are not correctly secured there is a risk that they might move and throw the operator's hand against the wheel. If the gap is too great the workpiece may become trapped between the wheel and the rest. If this happens, the operator's hand may come into contact with the wheel, or the wheel may be damaged, resulting in it bursting.

STORAGE OF ABRASIVE WHEELS

Abrasive wheels are to be stored in an area where the temperature is not excessively hot or cold, and in a dry atmosphere.

Straight-sided wheels, such as are used on bench mounted grinders, are to be stored on edge or on a spindle.

Thin wheels, such as cutting-off wheels, are to be stored flat on a horizontal surface to prevent warping.

TRAINING

There is no substitute for thorough practical training in all aspects of the mounting and use of abrasive wheels. Any training programme should cover at least the following:

- Hazards and risks arising from the use of abrasive wheels and the precautions to be observed.
- Methods of marking abrasive wheels with their type, size and maximum operating speed.
- How to store, handle and transport abrasive wheels.
- How to inspect and test abrasive wheels for damage.
- The functions of all the components used with abrasive wheels, such as flanges, blotters, bushes, nuts, etc.
- How to assemble abrasive wheels correctly to make sure they are properly balanced and fit to use.
- The proper method of dressing an abrasive wheel (removing dulled abrasive or other material from the cutting surface and/or removing material to correct any uneven wear of the wheel).
- The use of suitable personal protective equipment (PPE), e.g. eye protection.

It is recommended that a record of training in the safe mounting of abrasive wheels is kept, showing the trainee's name and date of training.

VENTILATION

Where the use of an abrasive wheel gives rise to dusts that are offensive or may be a hazard to health, or where the quantity of dust is excessive, all practicable measures shall be taken to minimise the hazard. Where practicable, exhaust ventilation shall be provided as near as possible to the source of the dust.

SUMMARY OF OPERATING PRECAUTIONS

Guards	Ensure the guard is in position and properly adjusted.
Work rests	Keep the rest as close as possible to the wheel.
Side grinding	Avoid grinding on the edge of straight-sided wheels.
Lubrication	Check that spindles do not become overheated through lack of lubrication.
Stopping wheel	Do not attempt to slow the wheel, allow it to stop naturally.
Cutting-off wheels	Avoid using warped wheels and avoid the tendency to twist the wheel or exert pressure on the sides of the wheel. Ensure that the workpiece is firmly secured or clamped.

REFERENCES

HS(G)17 - Safety in the Use of Abrasive Wheels.

GUIDANCE NOTE	STONEWORKING MACHINES	Code: G601	Issue: A
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INTRODUCTION

Stoneworking machines present significant risks during use, due to the high operating speeds involved and the size, shape and weight of the stone. The Provision and Use of Work Equipment Regulations (PUWER) are the regulations that govern the use of stoneworking machines. The regulations apply to all workplaces where stoneworking machinery and equipment is used.

SUITABILITY OF STONEWORKING MACHINES

Machinery should be suitable, by design or construction, for the work to be undertaken. It should be used in accordance with the manufacturer's specifications and instructions at all times.

The location in which stoneworking machinery is used must be assessed to take into account any specific risks that may arise.

Some operations are higher risk when carried out on one type of machine rather than another. Tools should not be run at speeds greater than the safe working/operating speed marked on the machine or the speed laid down in the manufacturer's instructions.

MAINTENANCE

All work equipment must be subject to regular maintenance to ensure that its performance does not deteriorate and it remains safe to operate. Stoneworking machinery is to be checked frequently to ensure that safety-related features are functioning correctly. The frequency of checks will depend on the intensity and variety of use. Manufacturers' instructions will help determine the items that require maintenance; this may include proper lubrication, replacement and adjustment of parts.

For maintenance to be effective it needs to be targeted at the parts of machines where failure or deterioration could lead to increased risks to health and safety. To achieve this three types of maintenance are available:

- Planned preventative. - Involves replacing parts or making necessary adjustments at preset intervals to prevent deterioration or failure of the equipment.
- Condition-based. - Involves monitoring the condition of critical parts and replacing them when they are identified as showing signs of wear or in a condition that could begin to affect the safety of the machine.
- Breakdown maintenance. - Only needs to be carried out after failure has occurred. However, this is only appropriate if the failure does not present an immediate risk and can be corrected before any risk occurs.

Maintenance work should only be carried out by those who are competent to do so. It is recommended that a maintenance log is kept to record maintenance, provide information for future planned maintenance activities and inform maintenance personnel of previous action taken.

Maintenance should ensure the following:

- Worktables should be smooth and free of any obstructions or damage that is likely to interrupt the continuous feeding of any workpiece to the tool head.
- Mechanical feed systems should track and run smoothly.
- Guards should be freely adjustable over the full range of work for which they are designed, and continue to fulfil their safety function.
- Protection devices, including two-handed controls and photo-electric devices, should be in effective working order.
- Tools should be sharp and not damaged in such a way that they are likely to disintegrate or break up.
- Tool holders and clamping systems should move freely and continue to function safely.

SPECIFIC RISKS

Risks should always be controlled. This should follow the hierarchy of risk control:

- Eliminate the risk completely, if possible.
- If it is not possible to completely eliminate risk take physical measures to control the risks, such as the provision of guards.
- If the risks still cannot be adequately controlled follow safe systems of work and provide information, instruction and training to deal with the remaining risk.

The use of stoneworking machines should be restricted to operatives who are properly trained, and have enough information and instruction, particularly where the machine is hand-fed. The operation of feeding material through the machine is always towards a fast moving cutter, which in many cases cannot be fully enclosed. Therefore, safety relies on a combination of the use of guards, protection devices and protection appliances, selecting competent persons to use the equipment and following safe systems of work.

NOISE

Stoneworking machines may exceed the noise levels as laid down by the Control of Noise at Work Regulations. Please refer to the guidance notes regarding noise at work (B200).

MANUAL HANDLING

Slabs of stone are heavy items that should be mechanically handled whenever possible. In some cases there may be a need to place slabs on a stoneworking machine before the machining task can be carried out. It is therefore necessary that machine operatives have manual handling training, giving them the ability to assess each slab of stone on an individual basis as tasks require. This will allow the start and end of the task to be carried out in a safe manner.

STONE DUST

Stone dust is likely to occur during the sawing, moulding, routing, carving and polishing of stone.

It presents a risk of dermatitis, asthma and severe irritation to the eyes, skin and respiratory system. Stone dust is deemed to be harmful and has been ascribed a workplace exposure limit, long term exposure limit (LTEL) (8-hr TWA) inhalable dust: 10mg/m³, respirable dust: 4mg/m³.

An adequate dust minimising system shall be provided and used, where practicable, by the use of water lubricating and collection equipment.

Recommended Reading - (HSE) INDG 315(rev1) Stone Dust and You. Which will cover other potentially harmful dust related issues Chronic Obstructive Pulmonary Disease (COPD), Respirable Crystalline Silica (RCS).

All Employers must comply with COSHH Regulations

HAND ARM VIBRATION

Health Surveillance is required for Vibration Injury under the MHSW Regulations.
Recommend Reading - Information sheet: Reducing the Risk of Hand, Arm Vibration Injuries among Stonemasons.

INFORMATION AND INSTRUCTION

Written instructions are to be available on the use of stoneworking machines, which are easily understandable. This may include information provided by the manufacturer or supplier, such as instruction sheets or manuals, instruction placards, warning labels and training manuals. Information and instructions should include:

- All health and safety issues relating to the use of the stoneworking machine.
- Any limitation on these uses, such as cutting speeds of machines or limits on the size or type of material being worked.
- Any foreseeable difficulties that could arise and methods to deal with them.
- Any particular tips gained from experience of using particular machines.
- The speed, range, type and dimensions of tools suitable for the machine.
- Procedures for the repair or replacement of any guard or protection device.
- The correct procedures for any setting or adjusting operations.
- Safe methods of handling tools.
- Correct procedures for start-up and shut-down, isolation and how to discharge any residual energy.

TRAINING

Training, whether it is in-house, external or a combination of both must cover the specific type of machine being used and the particular type of work which the operator is expected to carry out. The trainer must be competent in the safe operation of the class and type of machine being used. Training requirements will vary and an assessment will need to be carried out to identify particular individuals' training needs. A competent worker will need to be able to demonstrate:

- Selection of the correct machine and tooling for the job.
- The purpose and adjustment of guards, protection devices and appliances.
- Knowledge of safe methods of working including appropriate selection of holders, jigs and similar protection appliances.
- A practical understanding of the legal requirements.
- Knowledge of the nature of the materials being used and associated hazards.

Training needs are likely to be greatest on recruitment. However, there is also a requirement for refresher training for experienced operators, particularly where the worker has not operated a machine for some time, the method of control has changed, new equipment or technology has been introduced or the system of work has changed.

DANGEROUS PARTS OF MACHINERY

Effective measures must be taken to prevent access to dangerous parts of stoneworking machinery or to stop their movement before a person can enter a danger zone. Protective measures should be implemented in the following order:

- Fixed enclosing guards.
- Interlocking guards and pressure mats.
- Protection appliances such as push sticks, jigs and holders.
- The provision of information, instruction, training and supervision.

Where guarding is achieved by using an outer fence to prevent access, such as in the case of a sliding door or panel, it should be interlocking so that the machine will not run unless it is effectively closed. An adjustable guard must be capable of adjustment over the full range of the tool and stone piece. It must be large enough to enclose as much of the tool as is practicable during the cutting operation, be sufficiently strong and rigid so as to withstand normal usage and contain pieces of tool and workpiece thrown off during operation. All guards must also be capable of being adjusted without any risk to the operator.

All guards must be kept in good working order and it is important that they are regularly checked to ensure that they move freely, are free from defect and continue to be adjustable over the range of work for which they were designed.

STOP CONTROLS

Stoneworking machines run at very high speeds and braking devices should be fitted to reduce the rundown times, effectively stopping the machine and bringing it to rest within 10 seconds.

MARKINGS

Markings are required to ensure that risks that might occur from overspeeding are controlled.

The safe working speed should be marked or displayed on the stoneworking machine, it must also be marked on the tool or, if this is not practicable, a table should be readily available to those who select tools showing the speed range of these tools. The diameter of the smallest blade that should be used should be marked on every circular sawing machine.

DUST PREVENTION EQUIPMENT

Dust will be produced from stonework activities. Therefore, collection equipment shall be fitted on all:

- Milling machines.
- Profiling machines.
- Bridge saws.
- High-speed routing machines.

GUIDANCE NOTE	HAND TOOLS	Code: G701	Issue: A
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GENERAL PRECAUTIONS

Quality

Buying cheap tools is a false economy. They do not last and can be dangerous. Hammers and chisels of inferior steel can chip or shatter when struck. Cheap punches, drifts and cold chisels quickly mushroom at the head. Cheap spanners and wrenches can open out or break. Knives of poor steel rapidly lose their edge; pressure is then necessary and the blade can easily snap. Similarly, blunt edges on hatchets and axes, and worn teeth on saws result in a loss of control.

Handles

Handles are necessary for ease of manipulation and for the protection of hands. They are to be of good quality plastic or well-seasoned durable hardwood, of smooth finish and firmly fixed. They are to be regularly checked for splits or cracks and wedged, where necessary, to keep them tight.

Cleanliness

Grease, moisture and dirt are to be regularly removed. All moving or adjustable parts are to be lightly oiled.

Cutting Edges

Cutting edges are to be kept sharp to allow accurate work and to avoid the hazards caused by excessive pressure.

Repair and Storage

All tools are to be regularly checked. They are to be thoroughly examined prior to storage and if worn or damaged they are to be repaired or replaced.

When not in use, tools are to be stored in boxes or racked.

Selection

Every tool has its proper application. The correct type, size and weight of tool should be selected for the job.

Electrical Risk

All metal tools are conductors of electricity. Where work takes place on or near live electrical apparatus, only properly insulated or non-conductive tools are to be used.

Sparking Risk

Special tools made of non-ferrous materials are to be used for work near highly flammable materials or explosive dust. Spark proof tools are to be regularly examined to ensure that no ferrous metals have become embedded in them.

INDIVIDUAL TOOLS

Cold Chisels

The cutting edges of cold chisels and bolsters are to be kept sharp. Resharpened chisels are to be suitably hardened and tempered to keep them in a safe working condition.

Chisel heads mushroom with use. Any mushrooming is to be ground off and the edge left with a slight taper to reduce the tendency to mushroom.

The correct type and size of chisel is to be used, along with a mallet of the right weight.

Chisels are to be held in a steady and relaxed grip. The depth of the cut is regulated by the angle that the chisel is held at. Cutting or chipping work should be carried out with the edge of the chisel pointing away from the operative.

The use of chisels can result in flying debris. Therefore, eye protection is always to be worn by the operative and any others who may be exposed to the danger of flying debris.

Files

Files are made of highly tempered steel, which will shatter if struck or if used as a lever.

The correct type and size of file is to be selected for the task. Handles are to be fitted to all sizes of files, to prevent damage to the operative's hands. The handles are to be in good condition and are to be regularly inspected. Files are to be kept free from oil and grease and not allowed to become rusty. The cutting surfaces of the file are to be cleaned regularly using a wire brush to prevent the teeth becoming clogged with waste material.

Hacksaws

The correct type of blade is to be selected to suit the material being cut. Teeth are to be set in the frame pointing forward and sufficient tension is to be applied to keep the blade rigid.

In use, strong steady strokes are to be made away from the operator and the full length of the blade used. Hard materials are to be cut slowly, to prevent the blade becoming overheated and blunt.

Hammers

Heads of hammers are to be firmly and accurately set on the handle. If the head works loose it is likely to fly off, possibly causing serious injury.

Heads are to be secured with the correct wedges and kept in shape by occasionally grinding the face. Heads that show signs of cracking are to be disposed of.

Handles are to be in good condition.

The correct type of hammer is to be used for the task.

Knives

Knives are to be kept sharp. The correct knife is to be selected for the task. When not in use, knives are to be kept sheathed, with the blade retracted or placed in slotted racks. Razor blades or Stanley blades are only to be used in the correct holders.

Pliers

Pliers are only to be used when there are no other tools suitable for the job.

All pliers are to be kept free from dust, grit and corrosion, with the moving parts lubricated. Rivets and bolts, holding pliers together, are to be sufficiently tight to ensure efficient working.

Punches

Punches are to be straight and heavy enough for the work. Point of centre punches are to be kept accurately ground. Pin punches and starting punches are to be kept squared. The tools are to be held firmly and are to be started with light taps.

Screwdrivers

Screwdrivers are one of the most commonly used tools and are regularly misused. They are not to be used as chisels, drifts or wedges. The screwdriver head is to be the correct size for the screw and its tip is to fit the slot.

The work is to be held firmly and a steady, even pressure exerted on the screw.

Screwdriver handles are not to be hammered as this can cause the handle to split. If the handle is designed for use with a rubber grip, that grip must be fitted. Serious puncture wounds can be sustained if screwdrivers are carried in the pocket.

Spanners and Wrenches

Only spanners of the right size are to be used. The length of the spanner is not to be adjusted by fitting an extension to it, as this will increase the likelihood of the spanner breaking. Spanners are to have square and undamaged jaws. Adjustable spanners and pipe wrenches will not withstand hammer blows. After use, all spanners and wrenches are to be cleaned and any moving parts oiled, before storing in a box or rack.

Woodworking Tools

The sharp edges of woodworking tools are to be kept sharp, to promote ease of working. Sharpening is to be carried out according to the type of tool. Chisels are always to be worked with mallets, as a hammer will split the handle. All sharp edged tools are to be racked with the edge downwards or are to have the edge protected.

Always select the correct type of saw for the task. Saw teeth are to be correctly set to avoid binding. When saws are not in use, the teeth are to be cleaned and the blade wiped with an oily cloth, to prevent corrosion.

Securing Hand Tools Whilst Working At Height

When working at height with tools it is recommended that tools are adequately secured in a securing holster or by buggie ties secured to an adequate stable anchor point. This will help prevent tools accidentally falling from height.

GUIDANCE NOTE	ELECTRICALLY OPERATED TOOLS	Code: G702	Issue: A
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ELECTRICAL SAFETY

As far as possible all electrically operated tools used are to be of the reduced voltage of (110v). This is in order to reduce the risk of an operator receiving a lethal shock. Additional protection should be provided by the use of an earth leakage circuit breaker. All electric tools should be manufactured to BS 2769 or a similar European standard.

Checks are to be carried out to ensure that the power supply is within the operating range of the tool, as indicated on the tool plate. All plugs and sockets should conform to BS 4343 to help ensure that plugs cannot be connected to the incorrect supply.

All electrical tools are to be either double-insulated or earthed. The former is recommended.

GENERAL PRECAUTIONS

Chuck keys are to be kept on a clip attached to the cable, to avoid any temptation to improvise.

Whenever on-the-spot adjustments or changes in attachments need to be made, tools are to be disconnected from the mains supply. Use of the control switch on the tool is not sufficient. The plug is to be removed from the socket and should be visible to the operator while the adjustment is being carried out.

All attachments should be firmly affixed.

Guards are to be used and are to be kept in good condition. The relevant protective clothing such as goggles, dust masks, etc. is to be used.

INSPECTION AND MAINTENANCE

Each tool shall be clearly marked with a unique identification number to enable records to be kept of the inspections and maintenance carried out. Any tool without an identification number shall not be used until it has been inspected and recorded, and an identification number marked onto it.

All electrically operated tools shall be inspected prior to use for signs of faults in the wiring, switching, guarding, etc. Any defective equipment shall be taken out of use and a label - clearly identifying it as defective - shall be attached to the tool.

A competent person shall carry out maintenance on a regular basis and a register shall be kept of such inspections and maintenance.

The maintenance and inspection shall constitute the following:

- Once monthly, a check of the cable along its entire length is to be carried out.
- Once monthly, a check of the plug to ensure there are no signs of damage, the cable clamp is in the correct position and the fuse is of the correct value is to be carried out.
- Every 3 months, a check of the current carrying capacity of the earth wire is to be carried out. Double-insulated tools may not have an earth cable.
- Every 3 months, a check of the insulation-resistance is to be carried out and the value should be recorded.
- Every 3 months, if fitted, carbon brushes shall be checked and replaced if there is excessive sparking.

- Every 3 months, any motor shall be blown through with a jet of clean, dry air and any particles of debris shall be removed from the switch.
- Every 3 months, all parts shall be examined for wear and lubricated with the recommended lubricant.

INDIVIDUAL TOOLS

Hand-Held Saws

These are to be fitted with a spring-loaded guard that only uncovers the teeth when the tool is pressed against the work. A check is to be made to ensure that the guard moves freely.

Blades are to be inspected before use to ensure that no teeth are missing.

The work is to be clamped, leaving both hands free to control the saw. On the larger, portable stand models a riving knife is fitted to prevent the saw cut closing on the blade and the work kicking back. The riving knife is, therefore, to be kept clean and in good condition.

The work area is to be kept clear of all obstructions and debris.

Where the work gives rise to dust, respiratory protection shall be provided and worn.

Where the work results in particles being thrown off, eye protection shall be provided and worn.

Cutting Discs

See the guidance notes regarding cutting-off discs (G712).

Drills

The material is to be firmly secured so that it does not spin as the drill begins to bite.

Rotary hammer drills are to be fitted with a safety clutch to protect the operator and the tool, should the drill bit snag.

All drills are to be kept sharp and a punch mark is always to be made as a starter.

The common operating fault lies in trying to drill too large a hole in a single operation, causing the drill to bind and then stop. This results in damage to the tool and a possible wrist injury to the operative. Therefore, when a large hole is to be drilled, a pilot hole should be drilled first.

Drills are to be held firmly until the chuck has come to a stop.

NOISE

The use of portable electric tools can result in noise levels above the statutory exposure action values, in which case a planned programme of noise control must be put in place. See also the guidance notes regarding noise (B200).

GUIDANCE NOTE	DIAMOND DRILLING	Code: G710	Issue: A
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INTRODUCTION

There are three main types of diamond drills. Hydraulically powered, either from a petrol-driven source, three-phase 415 volt electricity source or powered 110 volts from a mains transformer.

TYPICAL HAZARDS

Listed below are typical hazards that may be encountered during a diamond drilling operation. The list is not exhaustive and site specific risk assessments will need to be carried out prior to the operation beginning:

- Manually handling the machine to site and into position.
- Sudden, uncontrolled or unexpected movement of the machine.
- Electric shock.
- Contact with moving parts.
- Being struck by the falling core.
- Exposure of operatives and others to hazardous substances.
- Exposure of operatives and others to excessive levels of noise.

CONTROL MEASURES

- Drilling rigs can be very heavy and manual handling risk assessments for the movement and positioning of the equipment may be required. Where appropriate, operatives should be trained in safe manual handling techniques.
- The drill must be adequately secured to prevent movement. This is usually achieved through the use of raw bolts, acrows, vacuum pads or weights.
- Electrically powered drills must be maintained to the requirements of the Electricity at Work Regulations.
- Three-phase drills must include in line earth leakage trip units and all cabling must be of the armoured type.
- All hydraulically powered drills must be maintained in accordance with the Provision and Use of Work Equipment Regulations (PUWER).
- Adequate guarding must be in place and adjustable guards must be correctly positioned before drilling commences.
- Boring must take place in line with the speed dictated by the manufacturer's recommendations.
- The area of work must be controlled to prevent unauthorised access. This should also include the displaying of appropriate signs.
- The area below a horizontal slab being drilled is to be cleared of all personnel and clearly marked as an unsafe area.
- Where possible, the drilled core will not be allowed to fall to the floor beneath and will be held in place by timber/acrow propping and removed carefully. If the exact thickness of the slab is known then consideration should be given to drilling to within 15mm of the full depth and carefully snapping and removing the core. The remaining concrete may then be removed using a percussive tool.
- Any dust or slurry produced by the drilling process is likely to be hazardous. Where appropriate COSHH risk assessments should be in place. Engineering controls such as wet dust suppression or LEV should be given priority over PPE.
- Where noise levels may exceed current exposure limits a noise risk assessment must be carried out and adequate controls put in place.

OTHER CONSIDERATIONS

- All operatives must be adequately trained / competent to carry out drilling operations. They must be fully briefed on the method statement and risk assessment for the operation to be undertaken.
- Operatives must have a full understanding of the hazards and guarding requirements for the machine they are to use particularly in relation to adjustable guards.
- A method statement and risk assessments must be in place taking into consideration all activities, all equipment, emissions such as dusts slurry and noise, the environment including local conditions and relevant emergency arrangements.
- Electrical tools should be subjected to Portable Appliance Testing (PAT) and have a daily visual inspection carried out by a competent operative.
- Work equipment must be entered into a PUWER register and weekly inspections recorded.
- An effective fault reporting system must be in place and any equipment identified as being faulty removed from use / repaired by a competent person immediately.
- Adequate barriers must be provided, including any necessary signs to control access where required.
- Any surface where drilling operations are to take place must be capable of supporting the loads and where work at height is to be undertaken then appropriate measures must be in place to prevent falls and falling materials.
- Collective methods of protection such as dust suppression, acoustic screens etc should be given priority over individual protective measures (PPE).

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- The risk assessment process should identify PPE needs. Where PPE is provided it must be appropriate for the risk and, where required, fitted to the individual.
- The standard requirement for drilling operations is hard hat, goggles / visor, safety footwear, gloves, dust mask and hearing protection.
- Where emissions such as dust and noise cannot be controlled by any other means and operatives working nearby may be affected then PPE control zones will need to be set up and controlled.

REFERENCES

Other Guidance notes that should be read in conjunction with this Guidance note are:

- B200 Noise at Work.
- G702 Electrically Operated Tools (Construction).
- G303 Machine Guarding.
- H400 Hazardous Dusts, Fumes, Gases, Vapours.
- O001 Health Surveillance.

GUIDANCE NOTE	DRIVING VEHICLES ON COMPANY BUSINESS	Code: G800	Issue: B
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Introduction

It has been estimated that up to a third of all road traffic accidents involve somebody who is at work at the time. Some employers believe, incorrectly, that provided they comply with certain road traffic law requirements, e.g. company vehicles have a valid MOT certificate, and that drivers hold a valid licence, this is enough to ensure the safety of their employees and others, when they are on the road. However, health and safety law applies to on-the-road work activities as to all work activities, and the risks should be effectively managed within a health and safety management system.

Benefits of managing work related road safety

The true costs of accidents to organisations are nearly always higher than just the costs of repairs and insurance claims. The consequences of an accident on the self-employed and small businesses are likely to be proportionately greater than on a larger business with greater resources. The benefits to you from managing work-related road safety can be considerable, no matter the size of your business.

- It allows you to exercise better control over costs, such as wear and tear and fuel, insurance premiums and legal fees and claims from employees and third parties.
- It also allows you to make informed decisions about matters such as driver training and vehicle purchase, and helps you identify where health and safety improvements can be made.
- Case studies and research have shown that benefits from managing work-related road safety and reducing crashes include:
 - Fewer days lost due to injury;
 - Reduced risk of work-related ill health;
 - Reduced stress and improved morale;
 - Less need for investigation and paperwork;
 - Less lost time due to work rescheduling;
 - Fewer vehicles off the road for repair;
 - Reduced running costs through better driving standards;
 - Fewer missed orders and business opportunities so reduced risk of losing the goodwill of customers;
 - Less chance of key employees being banned from driving, e.g. as a result of points on their licences.

Assessing risks on the road

Risk assessments for any work-related driving activity should follow the same principles as risk assessments for any other work activity. Failure to properly manage work-related road safety could be even more likely to endanger other people than a failure to properly manage risks in the workplace.

Step 1 - Look for hazards that may result in harm when driving on public roads. Remember to ask your employees, or their representatives, what they think as they will have first-hand experience of what happens in practice. You need the views of those who drive extensively, but also get the views of those who only use the roads occasionally. The range of hazards will be wide and the main areas to think about are the driver, the vehicle and the journey.

Step 2 - Decide who might be harmed. In almost all cases this will be the driver, but it might also include passengers, other road users and/or pedestrians. You should also consider whether there are any groups who may be particularly at risk, such as young or newly qualified drivers and those driving long distances.

Step 3 - Evaluate the risk and decide whether existing precautions are adequate or more should be done. You need to consider how likely it is that each hazard will cause harm. This will determine whether or not you need to do more to reduce the risk. It is likely that some risks will remain even after all precautions are taken. What you have to decide for each significant hazard is whether the remaining risk is acceptable.

When carrying out the risk assessment you first should establish whether you can eliminate the hazard. If not, the following should be considered when deciding on how to control the risk:-

- Consider whether your policy on the allocation of company cars actively encourages employees to drive rather than consider alternative means of transport;
- Consider an alternative to driving, e.g. going at least part of the way by train;
- Try to avoid situations where employees feel under pressure, e.g. avoid making unrealistic claims about delivery schedules and attendance which may encourage drivers to drive too fast for the conditions, or exceed speed limits;
- Organise maintenance work to reduce the risk of vehicle failure. Ensure that maintenance schedules are in place and that vehicles are regularly checked by a competent person;
- Ensure that drivers and passengers are adequately protected in the event of an incident, e.g. ensure that seatbelts are correctly fitted, work properly and are used;
- Ensure that company policy covers the important aspects of the Highway Code, such as not exceeding speed limits.

Step 4 - Record your findings. Employers with five or more employees are required to record the significant findings of their risk assessment. If you have fewer than five employees you do not have to write anything down, though it is useful to keep a written record. You must also tell your employees about what you have done. Your risk assessment must be suitable and sufficient. You need to be able to show that:

- A proper check was made;
- You consulted those who might be affected;
- You dealt with all the obvious hazards.

Step 5 - Review your assessment and revise it if necessary. You will need to monitor and review your assessment to ensure that the risks to those who drive, and others, are suitably controlled. For this to be effective you need to have a system for gathering, recording and analysing information about road incidents involving your staff. You should also record details of driver and vehicle history.

You may also need to review your assessment to take account of changing circumstances, e.g. the introduction of new routes, new equipment or a change in vehicle specification. Such a review should seek the views of employees and safety representatives where appointed.

RESPONSIBILITY

There should be top-level commitment to work-related road safety within the organisation and responsibility should be clearly defined. The responsible person should have sufficient authority to exert influence and employees should understand what is expected of them.

It is a legal requirement to understand/adhere to all traffic regulations that are in force. It is therefore your employees' responsibility to be familiar and comply with all aspects of the traffic regulations, including a good understanding of the Highway Code.

EMPLOYERS

Staff and/or their safety representatives should be fully consulted about the organisation's policies on safe driving, including driver assessment and training, and this should be reviewed periodically in joint health and safety committee meetings.

All staff, including managers, should understand that the organisation expects everyone to drive within the law, safely and responsibly on work journeys and appropriate help and training will be provided to enable everyone to play their part.

All managers should be trained to manage work related road safety as part of their health and safety responsibilities. They should lead by personal example and follow the organisation's policy.

As part of recruitment, training and staff appraisal, ensure that drivers, and their line managers, are reminded about the:

- Increased accident risk of accidents resulting from poor driving;
- Potential impact on driving of poor health, fatigue and distractions;
- Organisation's policy on driver assessment and training;
- Help to become available for staff that would benefit from further training.

Staff also need to be aware of the:

- Legal, financial and other effects on the business after a road traffic accident;
- Organisation's policy on work related road safety;
- Need to co-operate in carrying out the policy, to report any problems and to participate in investigations.

THE DRIVER

Drivers should be competent and capable of doing their work in a way that is safe for them and other people.

At-work drivers should be aware of company policy on work-related road safety, and understand what is expected of them.

TRAINING

- Ensure that your drivers are properly trained;
- Evaluate whether those that drive at work require additional training to carry out their duties safely;
- Provide induction training for drivers;
- Arrange for drivers to be trained giving priority to those at highest risk, e.g. those with high annual mileage, poor accident records, or young drivers;
- Ensure that drivers know how to carry out routine safety checks such as those on lights, tyres and wheel fixings;
- Ensure that drivers know what actions to take to ensure their own safety following the breakdown of their vehicle;
- Provide a handbook for drivers giving advice and information on road safety;
- Ensure that drivers are aware of the dangers of fatigue;
- Ensure that drivers know what they should do if they start to feel sleepy.

Sub-Contractors

Sub-Contractors must also ensure that their vehicles are roadworthy. Their insurance, tax, MOT status and servicing records must be kept up to date in accordance with the law and the manufacturer's recommendations and operator's license regulations (where relevant).

Agency workers.

Agency providers are required to ensure individuals they employ have the correct requirements to carry out their duties whilst working for the company. This includes assurance that the agency worker can legitimately work in the UK and holds a valid UK driving licence.

It is the responsibility of the agency to ensure drivers provided hold the relevant licence to carry out duties.

Employees opting for company car allowance

If employees have a car allowance rather than a company car, the allowance must be used for procurement of a vehicle including use for business purposes.

It is the employee's responsibility to ensure that the vehicle is kept in reliable running order and complies with all legislation.

The condition of the vehicle should be in keeping with the professional image of the company. It is the employee's responsibility to ensure that it is roadworthy and legal at all times, MOTd (if required) and serviced at a recognised and reputable business in line with manufacturer's recommendations.

We strongly recommend that drivers carry out a daily vehicle check prior to commencing their journey.

AUTHORISATION TO DRIVE FOR WORK PURPOSES

Company Vehicles

Only authorised drivers with a current full driving licence are permitted to drive a company-owned vehicle, providing that they have authorisation from a departmental manager and have completed the Driver Check procedure.

Non-employees should only drive company vehicles if they have obtained written permission from the company.

Pool Vehicles

Only authorised drivers with a current full driving licence are permitted to drive a pool vehicle, providing that they have the appropriate authorisation from their departmental manager and have completed the Driver Check procedure.

Non-employees should only drive pool cars if they have obtained written permission from the company.

Employees' Vehicles

The organisation should ensure that employees are legally entitled to drive their vehicles for work purposes (i.e. that their insurance permits business use) and that their vehicles conform to legal requirements (Road Tax, MOT, general road-worthiness).

Carriage of Passengers

Passengers should not be carried for hire or reward.

Servicing

Manufacturers's recommended servicing intervals should be adhered to and arranged by the driver at the recommended lease company service station.

Hire Cars

Hire cars should conform to the company's minimum safety requirements. In addition:

- Employees using hire cars must have a current full driving licence;
- Employees using hire cars must be authorised to drive by a departmental manager and have completed the Driver Check procedure;
- Hire cars may only be used during the agreed hire period. Use of the hire car outside the hire period will mean the car is being driven without insurance cover;
- Employees must always remember to undertake appropriate pre-journey checks. These include checks on the features fitted and the safety kit. A cockpit check should also be completed. If deficiencies cannot be rectified, the leasing company must be contacted for an alternative car;
- Any vehicle hired in the UK is insured fully comprehensively for company and authorised social and domestic use.

Additional Safety Kit for Overseas Driving

An additional safety kit may also be provided, as required. It should include a minimum of:

- A warning triangle;
- High visibility jackets (to be kept in the passenger compartment);
- Spare bulbs;
- A multi-torch.

These are the minimum requirements that need to be carried in the vehicle when driving outside the UK.

DRIVER CPC (CERTIFICATE OF PROFESSIONAL COMPETENCE)

The EU passed the Driver CPC EU Directive in 2003. This affects all professional LGV and PCV drivers. For new drivers it introduces a new initial qualification, the Driver CPC, which increases the level of knowledge that drivers need before they can drive.

All drivers, new and existing, now have to undertake 35 hours of training every five years to ensure that their Driver CPC remains valid. This is known as Periodic Training.

Periodic Training is designed to confirm, and expand on, the existing knowledge and skills of each driver to ensure that they continue to be safe, courteous and fuel-efficient drivers.

This will also enable drivers to keep up-to-date with ever changing regulations and to benefit from training throughout their whole career.

FITNESS AND HEALTH

- Drivers should be sufficiently fit and healthy to drive safely and not put themselves or others at risk;
- Staff that drive at work should be reminded that they must be able to satisfy the eyesight requirements set out in the Highway Code Drivers who need glasses or contact lenses to drive must wear them at all times when driving.

Prescribed/over the counter medication

Some medication can affect your ability to drive - employees should check the instructions within the literature or take medical advice, and notify the employer of any restrictions immediately. The employer must comply with medical advice implementing appropriate restrictions. If medication is impairing the driver's ability to drive or making them feel drowsy and unwell they must not drive and should contact their line manager and/or HR immediately.

Drugs and alcohol policy

No vehicle should be driven when the driver's ability may be affected due to alcohol, drugs or medication.

Employees must comply with company drug and alcohol restrictions as set out in the organisation's employment policy (this may be more stringent than legislative requirements). Drivers must not consume alcohol (above the legal limit - please ensure you follow guidelines provided by law), or take illegal drugs then drive a vehicle.

Measures to prevent any person driving for work under the influence of alcohol or illegal drugs could include random testing. Disciplinary action should be taken against individuals refusing or failing the test.

The organisation should encourage individuals who have a problem with either alcohol or drug abuse to contact a HR representative or designated individual. An individual with known problems should never drive a vehicle.

PREGNANT DRIVERS AT WORK

Pregnancy is not a form of ill health and should never be regarded as such. However, the Management of Health and Safety at Work Regulations require employers to conduct a risk assessment of the work to be carried out by a member of staff who is pregnant. Some women can experience health problems during pregnancy. A sympathetic approach is needed, and at some point, changes to work patterns are unavoidable. Employers should provide an environment that allows pregnant women to communicate their needs without fear of prejudice.

It is important that women who are pregnant wear their seat belt correctly. Pregnancy does not automatically exempt women from the requirement to wear a seatbelt. A doctor may issue a 'Certificate of Exemption' if there is a medical reason for not using a seatbelt. The diagonal strap should be between the breasts, over the breastbone, resting on the shoulder, not the neck. The lap belt should be placed on the thighs, fitting beneath the abdomen and over the pelvis, not the bump. The belt should be worn as tightly as possible. Pregnant women should never wear lap-only belts.

As the pregnancy progresses, the driver's position in relation to the airbag should be considered. The driver should sit as far back as possible from the airbag, while ensuring that she can still easily reach and operate all the controls.

DRIVERS WITH DISABILITIES

Employers have legal duties to ensure that employees with disabilities are not subject to unfair discrimination and that reasonable adjustments are made if necessary to enable them to work safely. A full and proper Risk Assessment must be carried out to identify additional risks faced by those with disabilities and to enable their needs to be met. Some common issues affecting driving include reduced physical capacity (such as ability to operate controls, turn the head), deafness and severe musculoskeletal disorders.

Establish how to get access to help

It is important that line managers and staff know where to obtain assistance for any health concerns. The first port of call should be the organisation's HR Department. Companies that do not have an Occupational Health Department should ensure they have established a system for obtaining this service through an Occupational Health specialist, perhaps at a local hospital or GP clinic. Specialist advice can also be obtained from the NHS, which is designed to assist small to medium sized businesses with occupational health, www.nhshealthatwork.co.uk.

Employers can use this scheme to ensure their staff receive professional occupational health advice.

Health referrals must relate to the requirements of the job. Disabled workers should not be referred simply because they are disabled, but because their health is being affected by their job. The assessor should also have a clear framework on which to base their judgements.

THE VEHICLE

Suitability:

- Ensure that vehicles are fit for the purpose for which they are used;
- Investigate which vehicles are best for driving and public health and safety when purchasing new or replacement vehicles;
- Ensure that privately owned vehicles are not used for work purposes unless they are insured for business use and, where the vehicle is over three years old, they have a valid MOT certificate.

CONDITION

- Ensure that vehicles are maintained in a safe and fit condition;
- Ensure that adequate maintenance arrangements are in place;
- Ensure that maintenance and repairs are carried out to an acceptable standard;
- Ensure that planned/preventative maintenance is carried out in accordance with manufacturers' recommendations. Remember an MOT certificate only checks for basic defects and does not guarantee the safety of a vehicle;
- Ensure that drivers know how to carry out basic safety checks.

Housekeeping

Drivers should be encouraged to keep the vehicle clean and tidy at all times.

Drivers should ensure that no loose items are placed on the front seat - they could fall off under heavy braking.

Drivers should limit equipment and materials to prevent restrictions of view and reduce driver distractions.

MOBILE TELEPHONES

Using a hand-held mobile telephone while driving a motor vehicle is illegal. Drivers caught using a mobile phone in this way will be issued with a fixed penalty fine and will receive an endorsement on their driving licence.

REMEMBER, YOU CAN STILL BE PROSECUTED FOR USING A HANDS-FREE DEVICE IF YOU ARE DEEMED NOT TO BE IN CONTROL OF YOUR VEHICLE.

Employers who require staff to use mobile phones while driving for work could be prosecuted if an investigation determined that such use of the phone contributed to an accident. It could also result in a claim through the civil courts.

What employers should do:

- Consult staff about the organisation's policies on mobile phones and driving. Make sure this is reviewed periodically in joint health and safety meetings;
- Expect safe driving. Ensure all staff, including managers and directors, understand that everyone who drives for work must drive safely for their own and others' benefit. All managers should lead by personal example and follow the organisation's policy;
- Raise awareness as a part of recruitment, training and staff appraisal, ensuring that drivers and their line managers are reminded about:
 - The law about mobile phones and driving;
 - The dangers of hand-held and hands-free phones;
 - The need to use voice mail messaging when driving - or allow passenger to take the call;
 - The importance of line managers not expecting staff to make or receive calls while driving;
 - Staff not being contacted by phone whilst driving on company business.
- Provide Training. Interview staff that have been identified as using a phone while driving, or been involved in a crash, to establish the details and to identify what lessons can be learned. The approach should be positive and helpful, rather than punitive, although it should be made clear that further incidents will lead to disciplinary action. Consider whether driver training would help.

Usage of other technological devices while driving

The law requires that drivers are, at all times, in full control of the vehicle and that they are driving with due care and attention. There is a danger of drivers being distracted due to in-vehicle systems or other hand-held devices. It is therefore recommended that PDAs, satellite navigation systems, congestion warning systems, or in-cab technology (PCs, multi-media etc.) should not be operated by the driver while the vehicle is moving.

RULES OF THE ROAD

Observation of the Highway Code

Staff should be reminded of the following key points from the Highway Code:

- Do not exceed speed limits and ensure that speeds are appropriate for the driving conditions;
- Obey traffic signs and signals;
- Give way to drivers who have the right of way or priority;
- Never drive under the influence of alcohol or drugs;
- Always wear your seat belt;
- Drive sensibly and defensively;
- Ensure mirrors and seat are correctly positioned before you start;
- Avoid "tailgating" - observe the "2-Second" rule;
- Don't dazzle others - dip your headlights;
- Look well ahead and anticipate what may happen.

Confrontation - 'road rage'

Drivers and passengers must avoid road rage and any such aggressive confrontation with other drivers.

Any complaints regarding road rage made by a member of the public should be investigated by the organisation.

If a problem is encountered with another driver/vehicle, employees should take the registration number and report to their line manager, who in turn may request them to file a report with the police.

THE JOURNEY

Plan routes thoroughly:

- Drivers should consider using safer routes which are more appropriate for the type of vehicle undertaking the journey. Motorways are the safest roads and although minor roads may be fine for cars, they are less safe and could present difficulties for larger vehicles;
- Route planning should take sufficient account of overhead restrictions e.g. bridges and tunnels and other hazards, such as level crossings, which may present dangers for long vehicles.

Work schedules should be realistic:

- Sufficient account should be taken of periods when drivers are most likely to feel sleepy when planning work schedules. Sleep-related accidents are most likely to occur between 2 a.m. and 6 a.m. and between 2 p.m. and 4 p.m.;
- Steps should be taken to stop employees from driving if they feel sleepy, even if this might upset delivery schedules;
- Where appropriate, tachographs should be checked regularly to ensure drivers are not cutting corners and putting themselves and others at risk;
- Periods of peak traffic flow should be avoided where possible;
- Sufficient allowances should be made for trainee drivers.

Sufficient time should be allowed to complete journeys safely:

- Are work schedules realistic? Do journey times take account of road types and condition, and allow for rest breaks? A non-vocational driver should not be expected to drive and work for longer than a professional driver. The Highway Code¹ recommends that drivers should take a 15 minute break every two hours. Professional drivers must of course comply with drivers' hours rules;
- Company policy should not put drivers under pressure and encourage them to take unnecessary risks, e.g. to exceed safe speeds because of agreed arrival times;
- It should be considered whether drivers could make an overnight stay, rather than having to complete a long road journey at the end of the working day;
- Staff that work irregular hours should be advised of the dangers of driving home from work when they are excessively tired;
- Employees should not be asked to work an exceptionally long day. It should be taken into account that sometimes people will be starting a journey from home.

Drivers should not be put at risk from fatigue caused by driving excessive distances without appropriate breaks

- Long road journeys could be eliminated or reduced by combining with other methods of transport. For example, it may be possible to move goods in bulk by train and then arrange for local distribution by van or lorry;
- Journeys should be planned so that they are not so long as to contribute to fatigue.

WEATHER CONDITIONS

Sufficient consideration should be given to adverse weather conditions, such as snow or high winds, when planning journeys

- Journey times and routes should be rescheduled to take account of adverse weather conditions;
- Vehicles should be properly equipped to operate in poor weather conditions, e.g. fitted with anti-lock brakes;
- Drivers should understand the action they should take to reduce risk, e.g. drivers of high-sided vehicles should take extra care if driving in strong winds with a light load;
- Drivers should not feel pressurised to complete journeys where weather conditions are exceptionally difficult.

EXTRA CONSIDERATIONS / PRECAUTIONS

Provide a contact number for breakdown / recovery service to employees

Ensure that the following are carried in case of emergencies:

- A fire extinguisher, first aid kit, drinking water and warm clothing;
- Spares including fuses, fan belt; screen washer fluids;
- A torch and reflective warning devices;
- Battery jump leads and / or a tow rope;
- A legal and properly inflated spare wheel / tyre;
- A car jack / wheel brace.

A quick reference guide to driver responsibilities:

- You can only drive on company business once authorised to do so, following a driving licence check. Do not drive a company vehicle if you are unsure if you have the appropriate authorisation;
- Inspect your vehicle on a daily basis to ensure it is in a roadworthy condition;
- Drive safely and in an environmentally responsible manner at all times;
- Never drive under the influence of drugs or alcohol;
- Tiredness is a major cause of road traffic accidents. You must take responsibility for ensuring you are fit to drive;
- It is illegal to use a hand-held mobile device while driving;
- Only drive when necessary and ensure the journey is effectively planned to include rest breaks as appropriate;
- Smoking is illegal in any vehicle carrying out company business. This includes car allowance vehicles;
- Report any road traffic incident to the relevant authorities and/or company individual(s) as soon as practicably possible;
- Report any change in driving licence status immediately to the relevant company individual(s);
- Report any damage or defect to your company vehicle to the relevant company individual(s) as soon as practicably possible. Do not drive if you have concerns the vehicle is not roadworthy;
- Ensure your vehicle is serviced in line with manufacturer's instructions and retains a valid MOT and road fund licence;
- Ensure your vehicle load is secured legally and safely;
- Ensure your vehicle is locked at all times and do not leave any company or commercially sensitive information in the vehicle. This includes laptops;
- Ensure your vehicle is clean and tidy and represents the company image;
- Act as an ambassador for the company when driving;
- Ensure you follow the 'major incident reporting policy' for relevant Road Traffic Accidents.

GUIDANCE NOTE	LOADING AND UNLOADING TRANSPORTERS	Code: G801	Issue: B
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RECOMMENDED PROCEDURES

Loading and unloading can be very dangerous. Heavy loads, moving or overturning vehicles and working at height can all lead to injuries or death. Loading and unloading should be avoided on busy roads, pavement areas and where there are pedestrians and other traffic.

KEY RESPONSIBILITIES

Individuals are often unfairly blamed for accidents that could have been prevented if Duty holders had co-operated with one another. The three key duty holders are:

- The **supplier** sending the goods.
- The **carrier** - the haulier or other company carrying the goods.
- The **recipient** - the person receiving the goods.

A common factor in delivery/collection accidents is the **lack of any agreement** between Supplier, carrier and recipient about 'who is responsible for what' in terms of safety. In most work situations the safety of an employee is primarily the responsibility of their employer, but to deliver or collect goods, employees have to visit premises controlled by others. The safety of everyone at these premises, including people visiting the site, is the responsibility of the organisation in charge of the site (the recipient or supplier), as they should control what takes place on site.

The three general principles that suppliers, carriers and recipients should follow are:

- **Send out safety information** on deliveries and collections to other parties in the delivery chain.
- **Request safety information** on deliveries and collections from other parties in the delivery chain.
- **Agree a safe delivery plan.**

All parties involved in deliveries should, so far as reasonably practicable, exchange and agree information to make sure goods can be delivered and collected safely. In particular consider:

- Any restrictions on the type or size of vehicle the site can safely handle, e.g. visiting lorries may be required to have CCTV or other reversing aids fitted.
- Any restrictions on when goods should be delivered or collected.
- Best approach routes to the site, especially if nearby one-way systems, low bridges, narrow roads, awkward access etc could cause problems for visiting vehicles.
- A site plan or sketch showing parking, location of reception, route to take through the site, designated turning/reversing areas, rest facilities, location of loading/unloading area etc.
- Where visiting vehicles should park on arrival, where and whom to report to. Generally, parking and subsequent loading/unloading should be off the road and pavement and well away from members of the public. If articulated vehicles are coupled/uncoupled, drivers should have been instructed on how to park each vehicle type they use, as there can be significant differences and misunderstandings are common. Trailer parking and cab hand brakes should always be used - there have been a number of fatal accidents recently caused by not using these.
- The loading/unloading area should be in a designated, adequately lit area where people and vehicles not essential for loading/unloading are excluded.
- Any procedures the visiting driver needs to follow, e.g. wearing high-visibility vest, limits on use of mobile phones, prohibitions on reversing or conditions for reversing such as the use of a banksman.

- Who will be in overall charge of the loading/unloading of visiting vehicles.
- What visiting drivers or site staff should do if they are not satisfied with safety arrangements for the delivery or collection (who to report concerns to etc.).
- Contact details for the other parties in case of problems.
- What to do if a load appears to have shifted dangerously in transit.
- When the visiting driver will 'give permission' for his vehicle to be loaded/unloaded, and how this hand-over will be clearly understood by all. Before this time site staff should keep clear of the vehicle, and after this time the driver should keep clear of the vehicle.
- The method of loading/unloading - what equipment is available, what is the capacity of the lifting equipment.
- The method of loading/unloading is often overlooked or the driver has received insufficient information regarding access etc. when deliveries are made to a domestic premises.
- Where the driver should be during the loading/unloading of their vehicle. Drivers are often the victims of delivery accidents. It is often unrealistic and sometimes unsafe to expect drivers to stay in their cab throughout loading/unloading of their vehicle. A designated safe area for visiting drivers with easy, safe access to toilet and refreshment facilities reduces risks considerably. A safe area may be needed for drivers to observe loading.
- The delivery vehicle driver should not use a fork-lift truck (FLT) at a delivery site unless this has been agreed in advance and steps taken to make sure that the FLT is well maintained and the site suitable. The driver must also be trained to drive FLT's in accordance with the Approved Code of Practice.
- If access onto the vehicle is likely, how will falls be prevented or fall risks reduced? If the load has to be sheeted/unsheeted, consider whether an on-vehicle sheeting device should be provided or find out if a sheeting gantry is provided on site.
- To reduce the need for people to go up onto vehicles or the load itself, all parties should consider removing the need for sheeting whole loads solely for weather protection during transit (e.g. by using curtain-sided vehicles rather than flatbeds, or by shrink-wrapping individual pallets or packs of goods). Shrink-wrapping may also result in cost and time savings, e.g. reduced turnaround times and reduced product wastage through weather damage at the recipients' premises.
- All parties should set up simple, well-understood systems for reporting any vehicle accidents, incidents, near misses and other safety concerns during deliveries and collections, and exchanging information with the other parties. All should be encouraged to report incidents and concerns and appropriate action taken.
- Where deliveries or collections will take place regularly and special risks are likely, or at sites where visiting vehicles have had problems before it may be necessary for a manager to visit the site before sending further vehicles, to assess in more detail the risks involved and agree precautions.
- Are drivers able to understand English or does the plan need to be available in translation? Use pictograms where possible.

LOADING AND UNLOADING AREAS SHOULD BE:

- Clear of all other traffic, pedestrians and people that are not involved in loading or unloading.
- Clear of any overhead power lines, cables or other obstructions.
- Level surface to maintain stability of the loads, and trailers. Parking should only be permitted on level and firm ground. Potholes to be avoided.
- The floor or deck of the loading area should be clear of obstructions, debris or broken boarding.
- Loading should allow for safe unloading.
- Areas should be protected from winds. Winds can be very dangerous during loading/unloading.

Dock shelters and dock houses can help with loading and unloading conditions. Such shelters should not create their own trapping or machinery hazards. All people using this equipment must be trained to do so. Any seal created around the vehicle may also impair communication therefore this needs to be taken into consideration and additional safety measures implemented.

Tailgates and sideboards must be closed when possible. If overhanging can not be prevented then this must be minimised as much as possible.

There must be safeguards in place to ensure that the driver does not drive away too early. This can be very dangerous if this occurs. Such problems may occur when there is a communication problem for example if English is not the primary language of the driver or they have a hearing impairment. Consideration should be made for the following control measures to prevent this from happening:

- Traffic lights.
- Use of vehicle restraints.
- Person in charge of loading / unloading holds the vehicle keys.

USE OF BRAKES

During parking / unloading or loading it is important that the vehicle does not move. Vehicles therefore need effective brakes for general service and for parking. Drivers sometimes use the emergency brakes as parking brakes when they uncouple the tractive and semi-trailer units, because they have to disconnect the suzi anyway. **This should never be allowed to happen. Air brakes should never be applied solely by disconnecting the suzi hose. The emergency brakes should never be relied on to secure the semi-trailer. Such accidents which are caused by this are known as “vehicle runaways and can be fatal and can be prevented.**

Drivers should never leave their vehicle without ensuring that the vehicle and its trailer are securely braked, the engine is stopped, the starter key removed, and any mounted equipment lowered to the ground. Remember:

- Brakes **on**.
- Engine **off**.
- Key **out**.
- Equipment **safe**.

THE LOAD

- Loads are to be spread as evenly as possible during loading / unloading operations as uneven loads can make the vehicle / trailer unstable.
- Loads are to be made secure and be balanced. Loads should not slide around, racking can be used.
- The vehicle must not be overloaded.
- The safe working load (SWL) limit is not to be exceeded at any time.
- The load must be suitably packaged.
- Any spilled loads should be removed as soon as possible to prevent any slip, trip and fall hazards.
- The vehicle should be suitable for the load to be transported.
- All loads should be handled mechanically wherever possible to reduce manual handling injuries.

If pallets are used, these must be checked to ensure that they are in good condition, that the load is secured to them, and that loads are safe on the vehicle.

Checks must be completed before unloading to make sure loads have not shifted during transit and are not likely to move or fall when restraints are removed.

An overloaded vehicle may become unstable, difficult to steer and less able to brake.

MEANS OF SECURING A LOAD

The following can be considered:

- Clamps.
- Special bolts.
- Steel wire ropes.
- Chains.
- Webbing harnesses.
- Sheets.
- Nets.
- Ropes and shoring bars

Sheeting rope hooks should never be used to secure loads. They are not designed to bear heavy loads.

Never rely on curtain sides to secure a load in place.

VEHICLE STABILITY

- The load should be positioned so that the centre of gravity is as low as possible and near to the vehicles centre line.
- When a load is stacked, the larger and heavier items should be placed at the bottom and lighter loads to the top.
- The heavier items should be placed nearer to the centre line of the vehicle and the lighter ones towards the sides.
- The load is to be evenly spread throughout the floor area.
- When a load is stacked the lower packages should be strong enough to support the others when the vehicle is braking, cornering or accelerating.

SAFETY EQUIPMENT

Guards or skirting plates may be necessary if there is a risk that anything may be caught within the machinery of the transporter, such as dock levellers or vehicle tail lifts.

The vehicle should have its brakes applied and stabilisers (if available) used. This will make the vehicle as stable as possible.

In some workplaces it may be possible to install a harness system to protect people working at height.

SAFE PLACE

A safe place needs to be provided for the driver if they are not involved in the loading / unloading of the vehicle. Drivers should not remain within their cab.

It is important that the driver does not leave the vehicle unless the handbrake is applied, it is on level ground, the engine is off and any attachments are lowered.

No unauthorised personnel should be in the loading / unloading area.

Reversing vehicles are a major source of accidents. The best way of preventing reversing accidents is to make reversing unnecessary. A one-way system with drive-through loading/unloading areas can do this. If the site layout makes this impossible, other measures should be taken to make reversing safe.

Make sure that equipment on site that is used by drivers can be operated from a safe place, e.g.:

- Gate/barrier buttons, intercom systems and security points that can be operated from the vehicle driving position.
- Fill gauges that can be read without the need to climb on vehicles or structures.
- Controls for dock levellers that can be used from several feet clear of the moving parts.

Traffic routes

By law, every workplace must be organised so that pedestrians and vehicles can circulate safely. Workplace traffic routes must also be suitable for the people and/or vehicles using them, and pedestrian movement counts as 'traffic'. Where vehicles and pedestrians share a traffic route, they must be safely separated.

Every workplace traffic route must be constructed so that the driving surface is suitable for the purpose for which it is used. The build quality of outdoor traffic routes should be similar to that required for public highways.

General principles for safe traffic routes are:

- They should be wide enough for the safe movement of the largest vehicle permitted to use them (including visiting vehicles).
- They should take vehicle height into account. Remember that the height of a vehicle may vary, e.g. when the body of a tipper vehicle is raised. Potentially dangerous obstructions, such as overhead electric cables, or pipes containing hazardous chemicals, need to be protected using goal posts, height gauge posts or barriers.
- They should be planned to give the safest routes between calling places. Try to avoid routes that pass close to such things as unprotected fuel or chemical tanks or pipelines, unprotected road edges, unfenced edges of elevated weighbridges, loading bays or excavations, or anything that is likely to collapse or be left in a dangerous state if hit by a vehicle.
- They should be constructed of suitable material for the location, the type of traffic, the size of the route, and the ground or foundation it is laid on.
- They should have firm and even surfaces, and be properly drained.
- They should avoid steep slopes. If steep slopes are unavoidable, they should be properly signposted.
- They should avoid sharp or blind bends.
- They should be maintained to provide a good grip for vehicles and people, e.g. by roughening smooth surfaces, or applying sand to slippery ones.

By law, traffic routes must also keep vehicle routes far enough away from doors or gates used by pedestrians, or from pedestrian routes that lead to or from them, so that pedestrian safety is not threatened.

Vulnerable parts of the workplace (such as cast-iron columns, partitions or pipes) need to be protected from vehicles.

Temporary traffic routes

Temporary workplaces (e.g. construction sites, forestry operations and farms) often have routes for vehicles and pedestrians that change as work progresses, or 'unprepared' routes such as unsurfaced roads or open ground.

These routes should comply with the same basic safety standards applying to 'prepared' routes, i.e. they should be suitable for their purpose, have firm and even surfaces, be properly drained, and slopes that are too steep should be avoided. Try to make temporary routes follow natural contours of the ground where possible, so that natural drainage works for you, not against you.

Temporary roadways increase the risk of accidents. Consider:

- Driver competence, particularly in dealing with the sorts of hazards encountered on unprepared sites.
- Providing information and instructions to drivers, especially if they are not familiar with the temporary roadways.
- Safe systems of work and traffic management, e.g. use of temporary road signs and traffic lights.
- Supervision of drivers, vehicle activities, and other employees.

More frequent preventative checks may also be necessary to ensure that vehicles do not develop faults while working on unprepared roadways.

Speed

Limiting vehicle speed is an important part of traffic control. The best way is to use fixed features (traffic calming features) that stop drivers travelling too quickly. Examples include speed humps, narrowing routes by use of bollards, raised kerbs or chicanes, and 'rumble' strips or areas. However, the wrong traffic calming feature can sometimes increase risk, e.g. by affecting the stability of vehicles or less-secure loads. The various features available should be assessed and those most appropriate for the traffic using your site should be selected.

Traffic calming measures should be clearly visible. Many features can be lit or made reflective.

Speed humps are often used to control speed but need to be used with care as they can create hazards of their own.

Speed limits are also widely used, but they need to be sensible and practicable, or drivers will be tempted to break them. Speed limits need to be appropriate for:

- The vehicles using the route.
- The types of load they carry and how they carry them.
- The driving surface.
- The route layout, including how tight the bends are, and visibility at junctions.
- Hazards along the way.
- Work being done on or near the route.

Common problems with speed limits are that they are inappropriate, poorly signed, or not enforced. They are often arrived at by guesswork, and may be unreasonable and difficult to enforce in practice. Often, vehicle speedometers do not work effectively at low speeds. Some internal site transport vehicles do not have speedometers at all.

Pedestrians

The most effective way of protecting pedestrians is to provide separate routes away from vehicles. Good examples of complete segregation include footbridges and subways. Protective barriers, clearly marked pedestrian and vehicle routes, and raised kerbs can all help.

Building entrances should have separate doorways for vehicles and pedestrians, with vision panels on all doors. Barriers or guard rails may be useful at building entrances and exits, at corners, and to prevent pedestrians walking straight onto roads.

Where pedestrian and vehicle routes cross, well-marked and signposted crossing points should be provided. Dropped kerbs should be used where the walkway is raised above the driving surface. Barriers, rails or deterrent paving should be used to direct pedestrians to designated crossing points.

On routes used by both pedestrians and automatic (driverless) vehicles, care should be taken that vehicles do not trap pedestrians. The vehicles should be fitted with safeguards to reduce the risk of injury if they do hit someone. As much clearance as possible should be provided between vehicles and pedestrians, and fixtures along the route should not create trapping hazards.

Weather conditions can make the driver's job more difficult and hazardous when loading and unloading. An important part of the planning process is to make sure that the effects of bad weather conditions are considered. For example, very high winds may cause people to fall, and rain, ice and snow will make surfaces more slippery.

Lighting should be provided in vehicle depots and on the vehicle. Poor lighting makes it difficult to identify slip and trip hazards. Winter working can involve significant time spent working in the dark,. Truck loading areas tend to be poorly lit, and uneven ground around the vehicle will present a more significant risk in the dark, for example in accessing the fifth wheel area.

Where lights are positioned is important, e.g. lights placed in the centre of loading bays may be blocked by tall vehicles. Lights placed between bays will often be more effective. Where drivers have to reverse towards strong lights, care should be taken that the lights are not placed so that they dazzle the driver, either directly or through mirrors.

Measures may be needed to avoid sudden changes in lighting levels, e.g. when moving from a dark warehouse to bright daylight.

Housekeeping

By law, traffic routes must, so far as is reasonably practicable, be kept free from obstruction and from anything that may make a person slip, trip or fall. The workplace should be kept clean and free from obstructions. Spilled loads, anything that falls from a vehicle, used packaging, and anything else that creates a risk of slips, trips and falls should be dealt with as soon as possible.

Yard conditions: yard surfaces should be even and free from potholes and obstacles, to enable safe access to and egress from the vehicle.

LIFTING EQUIPMENT

The employer must ensure that all lifting equipment or parts of a load which will be load-bearing have adequate strength and stability to accept the stresses induced by lifting.

- Winch equipment and accessories should be visually checked on a daily basis by the driver, to ensure that they are in good condition.
- A recorded inspection of lifting equipment and accessories should take place on a weekly basis.
- The rope and any other lifting accessories must be thoroughly examined at least every 6 months by a competent person and a record kept.
- The winch itself must be thoroughly examined at least annually by a competent person and a record kept.
- Any winch rope that has received substantial damage or has become frayed is not to be used.
- Correct pulleys are to be used at all times and the winch rope is not to be allowed to come into contact with any straight or abrasive edges.
- Winch rope is not to be abused, i.e. wrapping winch rope around an object and hooking it up back on itself is not permitted. Correct shackles and chains are to be used.
- The driver is to ensure that the area is kept clear of personnel during the winching procedure.
- The driver is to ensure that the vehicle is chocked before removing the winch rope.
- The driver is to avoid being in between two vehicles during the winching procedure.

Remember that metal rubbing against metal is always liable to slip - stay alert.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The driver is to wear suitable personal protective equipment (PPE) during loading and unloading procedures. This may include a hard hat, gloves, driver restraint, safety boots, high visibility clothing and equipment to prevent falls.

Most drivers wear safety boots, which have a steel toecap to protect them from falling objects, these boots may or may not be slip resistant. Some of these boots are marked 'oil resistant'. This relates to how the sole material becomes harder, softer or weaker due to oil impregnation - it is nothing to do with slip resistance.

Taking advice from specialist suppliers and testing different footwear is probably the best way to arrive at a good solution in terms of comfort, fit, durability, and slip resistance. It is important to involve the workforce in choosing footwear as they are the ones who will have to wear it.

Many drivers work in conditions where their footwear regularly gets caked in mud, e.g. on construction sites, farms or other outdoor sites. Where footwear does get mud or dirt on it, drivers need to be able to clean it off before they walk on surfaces where they are likely to slip.

PREVENTION OF ACCIDENTS

- Drivers should have a safe area to observe from.
- Drivers should be encouraged to report near misses and damaged equipment.
- Information should be obtained from the companies which drivers are delivering to or collecting from about their facilities and off-loading arrangements on their site, before the visit.

Prevention of falls from vehicles:

- **DO NOT** jump down - this is bad for the joints and the driver is more likely to fall.
- Steps and handholds should always be used where provided.
- Drivers should climb down from the cab, load area or catwalk facing the vehicle and use the handhold.
- Missing or damaged equipment should be reported.
- Before stepping off the vehicle, drivers should check for uneven surfaces such as potholes or kerbs which may cause them to slip or trip.

Keeping your vehicle safe:

- Vehicles should be checked before use, including checking that any steps or handholds are in good condition.
- Broken boards and any other objects that could cause a fall should be reported.
- The loading area should be kept tidy -loose ropes, packaging etc. should be picked up.
- Straps should be safely stored on curtainsiders so they do not become a trip hazard.
- Spills and dirt such as diesel or mud on the catwalk or load area should be cleared up to avoid people slipping in them.
- On refrigerated vehicles, the floor conditions should be checked for ice or water and any systems in place for helping to reduce the amount of water produced should be followed.

How drivers can work safely:

- Well-fitting, slip-resistant safety footwear should be worn when working on vehicles.
- Soles of footwear should be kept clean to reduce the risk of slipping.
- Safe systems of work for loading and unloading vehicles should be followed.
- Drivers should be trained in and follow the company's safe ways of working if they have to use equipment such as tail-lifts or lorry loader cranes.
- Safe ways of getting on or off the vehicle should be used when carrying out maintenance above ground level, for example by using gantries or tower scaffolds.

References:

Workplace transport safety: An employers' guide HSG136.
Workplace transport safety: An overview Leaflet INDG199 (rev1).
Preventing falls from vehicles an industry guide 2005.
Preventing slips, trips and falls from vehicles: The basics WPT01.
Safe access to road-going vehicles: Specifying the right equipment WPT02.
Selecting flooring materials to avoid falls from vehicles WPT03.
Selecting the right footwear to avoid falls from vehicles WPT04.
Managing work to avoid falls from vehicles WPT05.
Delivering safely: Co-operating to prevent workplace vehicle accidents WPT06.
Health and safety in road haulage Leaflet INDG379.
Driving at work: Managing work-related road safety Leaflet INDG382.
Coupling or uncoupling and parking of large goods vehicle trailers SOE/IRTE.
Safety of loads on vehicles Code of Practice DfT 2002.

GUIDANCE NOTE	BANKING VEHICLES	Code: G803	Issue: A
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INTRODUCTION

Every year around 70 people are killed in transport-related accidents in the workplace. In addition, there are more than 1,000 major injuries, i.e. accidents which result in broken bones, amputations, etc. and around 5,000 injuries that cause people to be off work for more than 3 days.

Most transport-related accidents involve people being hit or run over by moving vehicles, people falling from vehicles, people being struck by objects falling from vehicles (usually part of the load) or being injured as a result of vehicles overturning.

Where possible, vehicle and pedestrian routes should be signed and segregated. Where this is not possible, a signaller/banksman must be used, especially when loading and unloading vehicles and equipment.

A banksman should be a trained and competent person authorised by the site management.

BANKSMAN

- Whilst acting as banksman, hi-visibility jacket or vest and hardhat (where appropriate) should be worn. This will ensure they are clearly and easily visible to the driver and that all signals are clearly seen.
- The banksman must be in constant contact with the driver with either hand signals or, where line of sight or distance impairs vision, by means of radio communication. Spoken instructions are to be avoided (other than by radio communication) as work sites are, by nature, noisy places and instructions may be misinterpreted or unheard.
- Both the banksman and driver must be aware of the means of communication being used and be fully conversant with the relevant hand signals or instructions before the operation starts.
- The banksman is to be in control of the operation.
- The banksman should be controlling the operation from a safe place and not putting themselves in danger from the operation or any other activity.
- The banksman must control other vehicle or pedestrian movement during the operation so as not to put them at risk and, if necessary, set up an exclusion zone for the duration of the operation.
- The operation is to be stopped if the banksman loses sight or communication with the driver until communication is restored.

THE DRIVER

- Must be in constant contact with the banksman.
- Must understand the signals/communication system in place (to be agreed with the banksman prior to starting).
- Must stop and wait if they lose sight or communication with the banksman, only resuming when communication has been restored.
- Must follow instructions given by the banksman.

GUIDANCE NOTE	STONEMWORK	Code: G914	Issue: A
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ACCESS AND WORKING PLACES

Access and working places are fully detailed in the guidance notes regarding scaffolding (G113), ladders (G105) and working at heights (G100). However, consideration needs to be given to the weight likely to be exerted on the access or working place, due to the nature and quantities of the materials in use. It should be borne in mind that, if the weight to be placed on a scaffold is great, the scaffolding may have to be designed by a competent person to support the required loadings.

CRANES AND LIFTING GEAR

These are covered in the guidance notes regarding cranes (G217) and lifting accessories (G202). During planning for the operation, consideration needs to be given to the size and weight of material to be lifted, the possible locations for a crane and the boom length that will be required.

CUTTING

Reference is to be made to the guidance notes regarding abrasive wheels (G403). Diamond-tipped cutters are to be considered as abrasive wheels; training in their operation and the changing of wheels is required. No one is to be permitted to operate a cutter unless they have undergone a period of training, which covers the following:

- Approved advisory literature relating to the use of abrasive wheels.
- Hazards arising from the use of abrasive wheels and the precautions to be observed.
- Methods of storing, handling and transporting abrasive wheels.
- The function of all components used with abrasive wheels and their assembly.
- The positioning of guards.

STORAGE OF CUTTING DISCS

Cutting discs are to be stored in an area where the temperature is not excessively hot or cold, and in a dry atmosphere. Cutting-off discs are to be stored flat on a horizontal surface to prevent warping.

EYE PROTECTION

Fragments, flying particles and hot sparks are thrown off during cutting or grinding operations. These hazards are extremely dangerous to the eyes and eye protection shall, therefore, be provided to guard against this hazard. Eye protection provided will be in the form of either box goggles or face shields conforming to BS EN 166. The eye protection provided is to be worn by all employees, whether grinding or cutting, or not, who are exposed to the risks of eye injuries from grinding or cutting.

PROTECTIVE CLOTHING

- Hard hats are to be worn unless there is no foreseeable risk of injury to his (the employee's) head other than by his falling.
- Whilst carrying out operations where there is a risk of injury to the feet, safety footwear is to be worn.
- Gloves are to be worn whilst handling stonework.

GUIDANCE NOTE	ASBESTOS WORK (GENERAL)	Code: H201	Issue: B
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INTRODUCTION

Due to its unique fire-resistance properties, asbestos has been identified in over 3000 different products, most extensively in buildings. Most buildings built between 1950 and 1980 are likely to contain some asbestos. Asbestos in the form of asbestos cement can also be found in buildings constructed or refurbished as late as 1999.

The main uses of asbestos in buildings were as:

- Sprayed insulating coating on steelwork and concrete;
- Lagging on pipes and boilers;
- Insulation boards on walls, doors and ceilings;
- Asbestos cement as structural sheets, pipes and tanks;
- Some ceiling tiles;
- Some decorative plasters.

HEALTH HAZARDS OF ASBESTOS

All types of asbestos are classified as Category 1 carcinogens. Amphiboles, which include crocidolite (blue asbestos) and amosite more correctly called grunerite (brown asbestos) are considered the most dangerous substances, with the serpentine chrysotile (white asbestos) recognised as being slightly less dangerous due to the nature of the fibres.

Inhaled asbestos fibres can cause a range of asbestos-related diseases

- Diffuse pleural thickening, preventing the lung from expanding and hence causing breathlessness;
- Asbestosis, a scarring of the lungs, which has a latent period from first exposure of up to 30 years and for which currently there is no effective treatment;
- Lung cancer, which has a similar latent period, and also currently has no effective treatment;
- Mesothelioma, a cancer of the pleural lining, where the latent period from first exposure can be between 15 and 55 years and which is always fatal.

WORK WITH ASBESTOS

For any work with ACMs, the employer is required to:

- Prevent the exposure of employees to asbestos as far as is reasonably practicable;
- Identify the type of asbestos involved in the work, or assume the type of asbestos is not chrysotile alone;
- Make a suitable and sufficient assessment of the risks to health presented by exposure, before carrying out the work;
- Identify and implement the procedures needed to control exposure;
- Record the significant findings of the assessment;
- Prepare a suitable written plan of work detailing how the work is to be carried out without risk to health;
- Provide employees who are liable to be exposed to asbestos and those who supervise such employees with information, instruction and training on the risks to health and the precautions to be taken;
- Provide washing/changing facilities and facilities for the storage of protective equipment and personal clothing.

CATEGORIES OF WORKING WITH ASBESTOS

There are three categories for working with asbestos

LICENSABLE WORK

Licensable work with asbestos is -

- Work where the exposure to asbestos is not **sporadic and of low intensity**; or
- Work for which the risk assessment demonstrates that the **control limit** will be or is liable to be exceeded; or
- Work on asbestos coating; or
- Work on asbestos insulating board or asbestos insulation for which the risk assessment demonstrates that the work -
 - (i) Is not **sporadic and of low intensity**; or
 - (ii) Will be or is liable to exceed the **control limit**; or
 - (iii) Is not **short duration work**

Where:

“**Sporadic and Low Intensity**” relates to the exposure risk and not the frequency of the asbestos work. Work which is likely to result in exposure at or above the short term exposure limit of 0.6 fibres per cubic centimetre (f/cm^3) of air measured over a 10 minute period cannot be considered sporadic and low intensity exposure.

“**The Control Limit**” for all types of asbestos is 0.1 fibres per cubic centimetre (f/cm^3) which is equivalent to fibres per millilitre (f/ml). This is the maximum concentration of asbestos fibres in the air (averaged over any continuous 4 hour period) that must not be exceeded.

“**Short Duration Work**” means work carried out by any one person for less than one hour in a seven -day period. The total time spent by all workers on the work in a seven-day period should not exceed a total of two hours including ancillary work liable to disturb asbestos.

“**Asbestos Coating**” means a surface coating containing asbestos for fire protective purposes or as both heat and sound insulation. It does not include textured decorative coatings.

“**Asbestos Insulation**” means any material containing asbestos and used for thermal, acoustic or other insulation purposes (including fire protection) except -

- (a) asbestos cement or asbestos insulating board; or
- (b) any article of bitumen, plastic, resin or rubber which contains asbestos and the thermal or acoustic properties of which are incidental to its main purpose.

“**Asbestos Insulating Board**” means any flat sheet, tile or building board consisting of a mixture of asbestos and other material except -

- (a) Asbestos cement; or
- (b) Any article of bitumen, plastic, resin or rubber which contains asbestos, and the thermal or acoustic properties of which are incidental to its main purpose.

Licensed work requires:

- Use of a Licenced Contractor;
- Notification 14 days in advance (HSE or local authority);
- Preparation of specific asbestos emergency procedures,
- Designation of asbestos areas;
- A medical examination every two years;
- Health records to be maintained;
- Compliance with risk assessment, control of exposure and training requirements.

Note: The HSE website holds a database of all current asbestos licensed contractors.

NOTIFIABLE NON-LICENSED WORK

Notifiable Non-Licensed Work requires:

- Notification to the relevant enforcing authority before work commences;
- Medical examinations by a doctor before exposure to asbestos begins and then at least every three years (There is a three year transition period for compliance expiring April 2015);
- A register of work (Health Records) to be kept by the employer for each employee exposed to asbestos e.g. copy of the notification with a list of workers on the job, plus the level of likely exposure of those workers to asbestos. This does not require air monitoring on every Job if an estimate of degree of exposure can be based on experience of similar past tasks or published guidance;
- Compliance with risk assessment, control of exposure and training requirements.

Assuming all exposure is **sporadic and of low intensity** and the **control limit will not be exceeded** and the **work does not require a licence** the following activities are Notifiable Non -Licensed Work:

- Minor maintenance work involving asbestos insulation for example, repairing minor damage to a small section of pipe insulation where the exterior coating has been broken or damaged;
- Minor removal work involving Asbestos Insulation Board (AIB) for example removing AIB panels fixed with nails or screws;
- Removal work involving textured decorative coatings where the method of removal requires deterioration of the material. For example, where the material is treated by steam, hydrating gel etc. and scraped off the underlying surface;
- Removal of asbestos paper and cardboard products if not firmly bonded into a matrix;
- Maintenance work on Asbestos Cement (AC) which cannot be described as short and non-continuous;
- Removal of AC which is substantially degraded e.g. badly fire damaged material, or where significant breakage (deterioration) is unavoidable to achieve removal,

Where:

“Textured Decorative Coating” means thin decorative and textured finishes, such as paints and ceiling plasters used to produce visual effects and which contain under 6% asbestos.

“Asbestos Cement” means a material which is predominantly a mixture of cement and chrysotile which when in a dry state absorbs less than 30% water by weight.

NON LICENSED WORK

Non Licensed Work requires:

- Compliance with risk assessment, control of exposure and training requirements.

Notification, health records and medical surveillance do not apply because:

- The exposure of employees to asbestos is sporadic and of low intensity; and
- It is clear from the risk assessment that the exposure of any employee to asbestos will not exceed the control limit; and
- The work involves:
 - (i) Short, non-continuous maintenance activities in which materials which are non-friable are handled; or
 - (ii) Removal without deterioration of non-degraded materials in which the asbestos fibres are firmly linked in a matrix, or
 - (iii) Encapsulation or sealing of asbestos-containing materials which are in good condition, or
 - (iv) Air monitoring and control, and the collection and analysis of samples to ascertain whether a specific material contains asbestos.

Assuming all exposure is **sporadic and of low intensity**, the **control limit will not be exceeded** and the **work does not require a licence** the following activities are Non Licensed Works:

- Short, non-continuous maintenance work involving AIB which is in good condition. For example, drilling holes in AIB to attach fittings or to pass through cables/pipes, cleaning light fittings attached to AIB, repairing very minor damage, e.g. a single broken corner, lifting ceiling tiles for inspection or access purposes;
- Short, non-continuous maintenance work on AC;
- Removal of AC. Weathered AC is likely to be able to retain the vast majority of fibres in its matrix and should not normally be regarded as degraded. Most AC can be removed whole and the inadvertent breakage of the occasional piece during manual removal will not attract Notifiable Non-Licensed Work requirements;
- Short, non-continuous maintenance work on textured decorative coatings. For example, drilling holes, inserting screws;
- Removal of textured decorative coatings when this can be achieved without deterioration of the material e.g. by careful cutting around backing sheets to achieve removal intact;
- Removal, for example, of gaskets or asbestos rope cords from heating appliances which can be left in situ for disposal or can be lifted out virtually intact without substantial breakage;
- Short, non-continuous maintenance work on clutch discs, brakes, friction products etc. unless significant damage (deterioration) is required e.g. by power tools;
- Work to enclose or seal asbestos materials which are in good condition;
- Air monitoring and control, and the collection and analysis of samples.

Where:

“Short non-continuous maintenance activities” include:

Activities involving asbestos insulation and asbestos insulating board, if any one person carries out work with these materials for less than 1 hour in a seven day period. The total time spent by all workers on the work should not exceed a total of 2 hours.

When calculating the time the work takes, you should include anything ancillary to the work which is liable to disturb the asbestos, including setting up enclosures and clearing any potentially affected area.

Please note that if short non-continuous maintenance activities are carried out by licensed contractors under this exemption, then it does not preclude the operatives concerned from carrying out other work with asbestos during the seven day period, it only precludes them from carrying out work under the short, non-continuous maintenance activities exemption within the seven day period.

“Firmly linked matrix” - the more firmly linked the asbestos containing material is, the likelihood of fibres being released is reduced. Examples of asbestos containing materials with a firm linked matrix include:

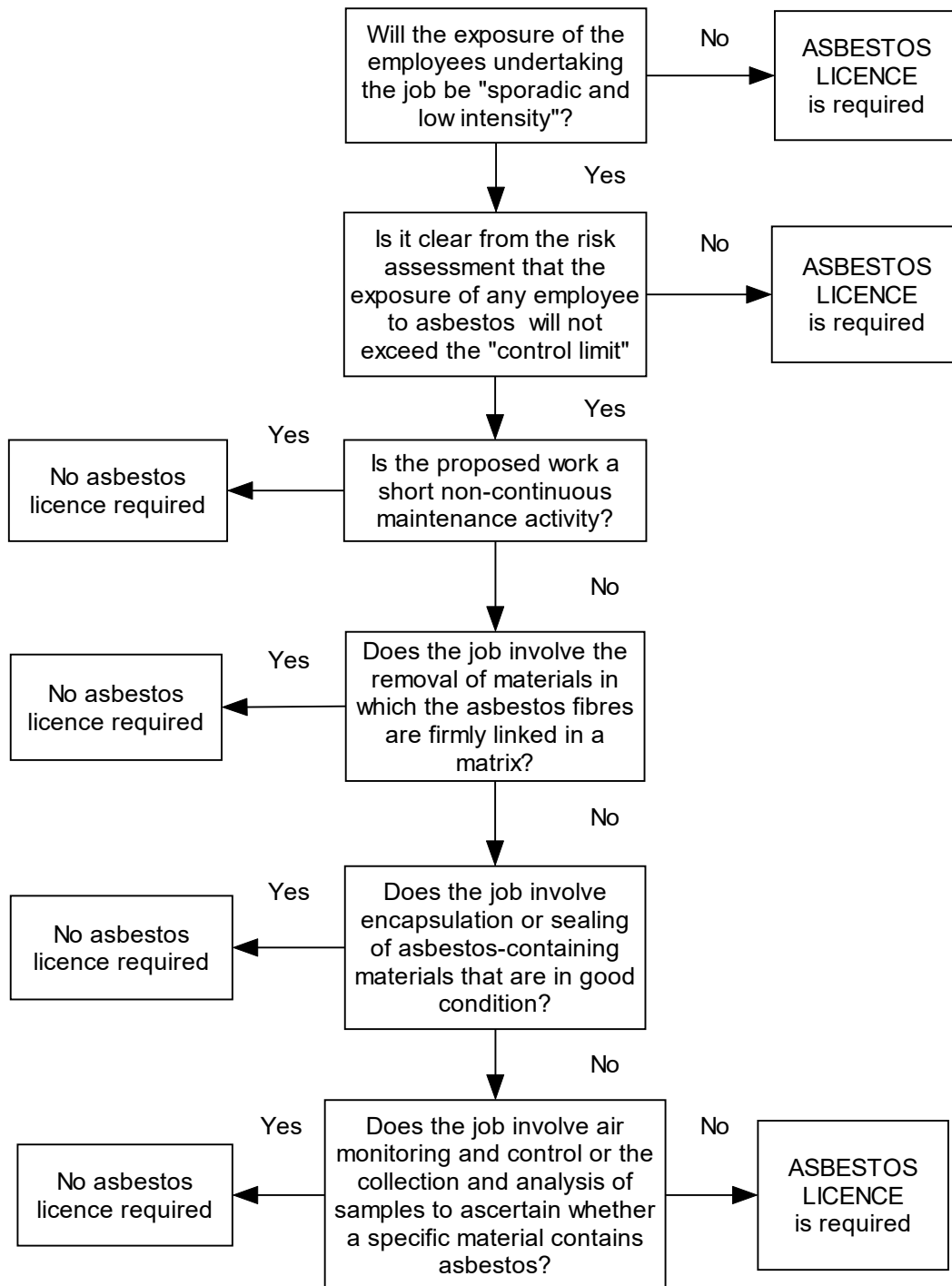
- Asbestos cement (e.g. corrugated roof sheets, flue pipes, guttering);
- Textured decorative coatings and paints which contain asbestos (e.g. artex);
- Any article of bitumen, plastic resin or rubber which contains asbestos where its thermal or acoustic properties are incidental to its main purpose (e.g. vinyl floor tiles, electric cables, roofing felt).

There may be other materials in which the asbestos fibres can be firmly linked in a matrix such as paper linings, cardboards, felt, textiles, gaskets, washers or rope where the products have no insulation purposes. If this is the case then the exemption from licensing may apply.

The Control of Asbestos Regulations does not define the terms **“friable”** or **“without deterioration”** of non degraded materials. The Oxford English Dictionary defines these as:

- Friable - capable of being easily crumbled or reduced to powder; pulverisable, crumbly.
- Deterioration - the action or process of deteriorating, a growing or making worse; a deteriorated condition.
- Degraded - having suffered degradation, worn down.

DETERMINING WHETHER AN ASBESTOS LICENCE IS REQUIRED TO WORK WITH ASBESTOS UNDER THE CONTROL OF ASBESTOS REGULATIONS



ASBESTOS TASK MANUAL

HSE guidance HS(G)210 - "Asbestos Essentials Task Manual" provides task guidance sheets for the building maintenance and allied trades. Tasks covered by the manual include drilling holes in asbestos insulating board, removal of a single asbestos insulating board ceiling tile, drilling holes in asbestos cement and other bonded materials.

Individual task guidance sheets can be downloaded from the HSE website -

www.hse.gov.uk/asbestos

ASSESSMENT AND PLAN OF WORK

The Control of Asbestos Regulations require that a suitable and sufficient risk assessment is carried out for any work which is liable to expose employees to asbestos, so as to establish the potential risks and whether or not the work is licensable.

From this assessment, a plan of work with details of the work methods and controls to be used should be provided for both licensable and non-licensable work. The plan of work should always be job-specific; however, information from previous similar jobs can be used provided there are no additional risks and it is appropriate for the site conditions.

For licensable work, the plan of work must be site specific, readily available on site and cover in sufficient detail the following information:

- The scope of the work as identified by the risk assessment;
- Details of hygiene facilities, transit route and decontamination arrangements, vacuum cleaners, protective clothing and RPE;
- Details of the use of barriers and signs, location of enclosures and airlocks, location of skips, negative pressure units, air monitoring, cleaning and clearance certification, emergency procedures.

CLEANLINESS OF PREMISES AND PLANT

Once removal of the asbestos has been completed the premises must be thoroughly cleaned before being handed over for reoccupation. All visible traces of asbestos dust and debris must be removed and a thorough visual inspection carried out.

Where the work is licensable then a certificate of reoccupation should be issued following the 4-stage clearance procedure:

- A preliminary check on site conditions and job completeness;
- A full visual inspection inside the enclosure/work area;
- Clearance air monitoring (see note below);
- Final assessment after enclosure/work area dismantling.

Air measurements shall only be taken by those able to demonstrate they can carry out such work to the specified requirements in ISO 17020. Competence should be evidenced through accreditation with a recognised accreditation body such as the United Kingdom Accreditation Service (UKAS).

Analysis of the concentration of asbestos in the air shall be measured using the 1997 WHO recommended method.

Any person who issues a site clearance certificate for reoccupation must be accredited by an appropriate body (i.e. UKAS) as competent to perform work in compliance with ISO 17020 and ISO 17025.

WASTE DISPOSAL

All asbestos waste is classified as hazardous waste under the Hazardous Waste Regulations and must be disposed of at a licensed waste disposal site. For most waste, double plastic sacks are suitable provided they will not split during normal use. Large pieces of rigid material, e.g. cement sheets, should be double-wrapped intact in heavy gauge polythene sheeting.

The waste **must** be clearly labelled and transported by registered carrier in an enclosed vehicle, skip or freight container.

TRAINING

The Control of Asbestos Regulations require that anyone liable to be exposed to asbestos fibres at work undertakes relevant training. This includes maintenance workers and others who may come into contact with or who may disturb asbestos (e.g. electricians, plumbers, etc.) as well as those involved in asbestos removal work.

The three main types of training cover:

- Licensable work - such as removing asbestos insulation or insulating board;
- Non-licensable work - such as a roofer or demolition worker removing a whole asbestos cement sheet in good condition or analytical staff and asbestos surveyors;
- Asbestos awareness - for those persons who are liable to disturb asbestos while carrying out their normal everyday work, or who may influence how work is carried out.

All training should be provided by someone who has had adequate personal practical experience and who has theoretical knowledge of all relevant aspects of the work carried out by the employer. All training certificates issued by such people or organisations should be traceable and valid for no more than 1 year.

(Chapter 4 of HSG247 Asbestos: The Licensed Contractors' Guide sets out the detailed content of the asbestos training modules for operatives, supervisors, managers, directors, supervisory licence holders and ancillary licence holders involved in licensable work).

A GUIDE TO LIKELY FIBRE CONCENTRATIONS

The figures below are a guide to the airborne fibre levels that may be expected close to the operator's breathing zone in a number of different processes. The following points should be borne in mind when using them:

They are based on measurements taken by HSE. Different processes in different locations may result in higher or lower concentrations than those listed in the table. They are average concentrations for the time during which the process is actually taking place.

Selection of a figure from the list is not in itself an assessment. The person making the assessment must consider whether it is reasonably practicable to use methods that give a still lower value.

The estimated dust concentrations given are to help in making assessments of likely exposure and through the assessment to help in the choice of work methods, exposure control methods and protective equipment. The figures are a guide only; results may vary from one operation to the next, and the assessment should allow for that. If there is doubt about the likely exposure to asbestos dust then the precautions taken should be adequate to meet the worst case.

These figures are the concentrations found when the processes are carefully carried out. Bad handling practices may result in higher concentrations.

All the figures given for typical fibre levels for work with asbestos cement sheets and pipes are shown in fibres per millilitre of air. As shown, many of the tasks create dust levels above the control limit (0.1 f/ml) and therefore must be carried out by an asbestos licensed contractor.

Process		Concentration fibres/ml	
Asbestos Stripping Operations			
De-lagging	Dry stripping of Crocidolite	100-1000	
	Dry stripping, except Crocidolite	Greater than 20	
	Stripping with water sprays	5-40	
	Controlled wet stripping (thorough soaking of insulation)	1-5	
Removal of insulating board and tiles	Breaking and ripping out	5-20	
	Unscrewing and careful removal with application of local exhaust ventilation	Less than 2	
Asbestos Cement Sheets and Pipes (Normally Chrysotile)			
Machine cutting without exhaust ventilation	Abrasive disc cutting	15-25	
	Circular saw	10-20	
	Jig saw	2-10	
Machine sawing with exhaust ventilation		Below 2	
Reciprocating saw		Below 1	
Hand saw		Below 1	
Machine drilling		Below 1	
Removal of asbestos cement sheeting		Below 0.5	
Stacking of asbestos cement sheet after removal		Below 0.5	
Remote demolition of asbestos cement structures		Below 0.1	
(CAUTION: subsequent clearance may give rise to concentrations greater than 1)			
Cleaning of asbestos cement		Roofing	Vertical Cladding
	Dry brushing (wire)	3	5-8
	Wet brushing (wire)	1-3	1-2
	Water jetting	0-0.5	1-2
(NOTE: Water jetting may produce debris and slurry which is difficult to control and needs to be collected and disposed of as hazardous waste)			

Process		Concentration fibres/ml
Asbestos Insulation Board and Tiles (Normally Amosite and Chrysotile)		
Sanding and surfforming		6-20
Machine cutting without exhaust ventilation	Circular saw	Greater than 20
	Jig saw	5-20
Machine cutting with exhaust ventilation		1-5
Drilling overhead		5-10
Drilling vertical columns		2-5
Hand sawing		5-10
Scribing and breaking		1-5
Rough handling of insulating board and removal of pieces		Greater than 15
Careful removal of whole boards		Up to 5
(NOTE: The dust levels are likely to be highest if Amosite is present and the material is handled roughly. Bad handling practices may result in much higher concentrations)		
Decorative Plasters		
Scraping painted plaster		0.1 - 0.2
Light hand sanding of unpainted area		Greater than 0.3
Mixing		Greater than 1

REFERENCES

The Control of Asbestos Regulations.

The Hazardous Waste (England and Wales) Regulations.

The List of Wastes (England) Regulations.

L143 Approved Code of Practice and guidance for work with materials containing asbestos.

HS (G) 210 Asbestos Essentials Task Manual.

GUIDANCE NOTE	ASBESTOS INFORMATION INSTRUCTION AND TRAINING	Code: H203	Issue: B
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INTRODUCTION

In accordance with the Control of Asbestos Regulation employers **must** ensure that any employee employed by that employer is given adequate information, instruction and training where that employee:

- is or is liable to be exposed to asbestos, or if that employee supervises such employees;
- carry out work in connection with the employer's duties under the Control of Asbestos Regulations, so that they can carry out that work effectively.

ASBESTOS AWARENESS TRAINING

Asbestos awareness training is required to be given to employees whose work could foreseeably expose them to asbestos. Exemption from this requirement would apply only where the employer can demonstrate that work will only be carried out in or on buildings free from Asbestos Containing Materials (ACMs). Examples of those workers that may fall into this category are:

- General maintenance staff;
- Plumbers;
- Electricians;
- Gas fitters;
- Painters, decorators and plasterers;
- Construction and demolition workers;
- Heating and ventilation engineers;
- Telecommunication engineers;
- Fire and burglar alarm installers;
- IT installers;
- Shop fitters;
- Architects, surveyors and other such professionals.

Training should cover the following topics in appropriate detail, by means of both written and oral presentation, and by demonstration as necessary:

- The properties of asbestos and its effect on health, including the increased risk of lung cancer for asbestos workers who smoke;
- The types, uses and likely places where asbestos and ACMs may be found in buildings and in plant;
- The procedure to be followed to deal with an emergency such as the accidental disturbance or discovery of asbestos or ACM including if they suspect it may contain asbestos;
- How to avoid the risks from asbestos e.g. by confirmation from the employer that ACMs are not present. An employee should not carry out any work that may disturb the fabric of the building unless they have confirmation that ACMs are not present.

TRAINING FOR NON-LICENSABLE ASBESTOS WORK

This training is designed for those who undertake planned works with asbestos which is non-licensable such as:

- Roofers or demolition workers removing whole asbestos cement sheets (in good condition);
- Maintenance workers and their supervisors;
- Those who carry out asbestos sampling and analysis.

This training is in addition to the asbestos awareness training detailed above and should be delivered by means of both written and oral presentation, and by demonstration as necessary. It should include:

- Details of the work which has the potential to expose them to asbestos, the importance of control measures to minimise potential exposure;
- How to make a suitable and sufficient assessment of the risks of exposure to asbestos including the control limits and the purpose of air monitoring;
- Details of safe working practices, control measures, PPE including how their correct use can reduce the risks from asbestos, limit exposure to the workers and limit the spread of asbestos fibres outside the work area;
- Maintaining control measures including the maintenance of enclosures (if applicable);
- Procedures for reporting, recording and correcting defects;
- The purpose, choice and correct selection of suitable RPE including any limitations
- Details of cleaning, maintenance and storage of RPE and PPE in accordance with manufacturer's instructions;
- RPE fit tests, including their relevance and the importance of achieving and maintaining a good seal;
- Hygiene requirements, waste handling, decontamination and emergency procedures;
- An introduction to the regulations and Approved Codes of Practice that apply including any other relevant regulations that apply such as for the carriage and disposal of asbestos;
- Any other work hazards that may apply such as work at height, use of tools, electrical equipment, plant etc;
- For analysts, personal sampling and leak and clearance sampling techniques.

Where equipment such as decontamination facilities, PPE, RPE, mini enclosures and other control techniques such as class H vacuum cleaners are to be used then practical training should be given. This should allow workers to practice using the equipment in a safe environment identifying any problems or issues before entering the work area.

Details of the procedure for providing information, instruction and training should be set out in writing and contained within the safety policy document. This should be reviewed regularly particularly when working methods change. Records of training undertaken by each individual should be kept.

TRAINING FOR LICENSABLE ASBESTOS WORK

This training is designed to be given to all employees involved in licensable works. This should include operatives, supervisors, managers, directors and supervisory license holders. It should be done in addition to the asbestos awareness training detailed above:

- The risks involved with taking potentially contaminated clothing or equipment home or elsewhere
- Smoking and the increased risk of developing lung cancer;
- The risk assessment and the purpose of the plan of works;
- Operations which could result in the exposure to asbestos and the importance of preventative controls to minimise exposure;
- Control limits, the assessment of exposure and the importance of air monitoring to check compliance with the limit including the purpose of personal sampling;
- Safe working practices, control measures, and protective equipment including an explanation of how the correct use of control measures, PPE and work methods can reduce the risks, limit exposure and limit the spread of asbestos outside of the work area;
- The importance of following the procedures controls and preventative measures set out in the plan of works and risk assessment. For managers and supervisors ensuring the workforce follow all work instructions;

- The maintenance of control measures including enclosures and negative pressure equipment;
- The procedures for reporting, recording and correcting defects;
- The purpose, choice and selection of RPE and its limitations;
- The use, cleaning, maintenance and safe storage of RPE with a focus on ensuring that the RPE is working correctly in accordance with manufacturer's instructions and information;
- The importance of achieving and maintaining a good seal around the face including the importance of fit tests and of being clean shaven;
- Suitability, use, storage and maintenance of PPE including that used for transit
- Hygiene requirements;
- Decontamination procedures, particularly with enclosures, airlocks (including bag locks) and hygiene units;
- Site organisation; marking out work areas, setting up barriers, transit routes, waste storage areas, pre-cleaning, sealing sources of potential leaks, construction and layout of the enclosure including negative pressure units, viewing panels and airlocks, positioning of decontamination units, air management and leak testing;
- Controlled removal techniques and how they work including types of wet surfactant injection of sprayed asbestos and lagging, spray wetting of AIB and asbestos cement, wrap-and-cut, and glove bags (if relevant);
- Waste handling including bagging procedures, storage and disposal;
- Site clean-up and clearance procedures including the certification of re-occupation arrangements;
- Emergency procedures including general procedures such as the uncontrolled release of asbestos fibres into the workplace or outbreak of fire;
- Medical examination requirements;
- The results of any air monitoring carried out with an explanation of the findings;
- For analysts, personal sampling and leak and clearance sampling techniques;
- Other work hazards such as work at height, electrical hazards, slips, trips etc;
- An introduction to the regulations and guidance.

ADDITIONAL TRAINING

Supervisors, managers, directors and supervisory license holders should be given the following additional training at an appropriate level so they can effectively carry out their role on site:

- Details of responsibilities for all aspects of work on site;
- The importance of onsite supervisory duties at all key stages including witnessing smoke tests, ensuring hygiene facilities are fully operational before work starts, ensuring signs and barriers are erected, carrying out safety checks and ensuring work is carried out safely;
- Producing and applying plans of work setting out appropriate procedures, controls and preventative measures based on the assessment, including how and when to update plans;
- How and when to notify the enforcing authority that work is taking place and situations where re-notification is necessary;
- Dealing with situations where the methods set out in the plan cannot be followed due to a change in circumstances and a revision to the plan is needed;
- Applying contingency procedures in the event of a failure of control;
- The importance of monitoring and auditing the work activities;
- The importance of having effective arrangements in place to communicate with and monitor workers inside the enclosure and hygiene unit;
- The need to provide additional information, instruction and training to workers as necessary such as the use of a particular piece of equipment or work method;
- Assessing the competency of employees and identifying training needs;

- When and how air monitoring should take place including how to interpret the results and who to inform;
- How the results and records of personal air sampling, fit tests and medicals should be kept and maintained and to whom they should be communicated;
- How to apply the procedures for dealing with accidents, incidents and emergencies;
- Keeping the work area clean and free of asbestos;
- The importance of ensuring that the correct procedures are followed at the end of the job to allow a certificate of reoccupation to be issued;
- An understanding of what the laboratory analyst will require before clearance sampling is undertaken and the certificate of reoccupation can be issued.

Practical training is essential for those entering enclosures such as operatives, supervisors and supervisory licence holders. Practical training is also required where people are required to use the following plant and equipment or carry out the following work activities or procedures:

- Decontamination procedures and use of hygiene facilities;
- Use of PPE, particularly RPE;
- Construction of enclosures, airlocks and achieving sufficient numbers of air changes within the enclosure;
- Controlled removal techniques, including the use of multiple and single needle injection systems, glove bags and wrap-and-cut;
- Waste removal procedures on site including double bagging and removal through the bag lock.

Anyone who carries out any examination, testing (including clearance inspection, air monitoring and exposure monitoring) or maintenance of plant or equipment (eg LEV systems and RPE) should have had sufficient training and experience in inspection methods and techniques to ensure that they are competent.

REFRESHER TRAINING

Refresher training must be given at least every year and should be appropriate to the role undertaken. Those persons who require only awareness training could have refresher training as part of other health and safety updates. Employers should identify the specific training needs of their employees so that the refresher training can be appropriately tailored. It should not be a repeat of the initial training. Where training needs dictate, refresher training should include an appropriate element of practical training, particularly covering decontamination procedures, use of RPE, and controlled removal techniques. Refresher training will be required more frequently than annually if:

- Work methods change;
- The type of equipment used to control exposure changes;
- The type of work carried out changes significantly.

REFERENCES

Control of Asbestos Regulation
ACoP L143 Work with materials containing asbestos

GUIDANCE NOTE	HAZARDOUS DUSTS, FUMES, GASES AND VAPOURS	Code: H400	Issue: A
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INTRODUCTION

Hazards from substances can be divided into two main areas: **physical hazards** and **health hazards**. This section looks at the health hazards from situations in which internal damage to employees can be caused, involving, for example, disorder or malfunction of the lungs, stomach, ear or brain.

HAZARDOUS DUSTS, FUMES, GASES AND VAPOURS

Substances harmful by inhalation are usually in the form of dusts, fumes, gases or vapours.

It should be noted that smoking increases the health risks associated with inhalation hazards. This has particular importance where there is a risk of lung disease or cancer. Active measures shall be taken to promote awareness of this fact to all levels of employees.

It is a legal requirement under the Control of Substances Hazardous to Health Regulations to assess the extent of the risk prior to permitting anyone to enter or work in an area where such hazards exist. An assessment may reveal that it is necessary to provide adequate natural ventilation. However, in many cases, the assessment will initially have led to an evaluation of both the amount and concentration of the hazardous substance present in the atmosphere, which in turn would have resulted in implementing controls for entry into the area, the provision of forced ventilation and/or extraction, the monitoring of the atmosphere and the provision and use of respiratory protection.

In a confined space an assessment of the oxygen content, to ensure that the oxygen levels are within the range of 18% to 21.5% and to assess the possibility of the atmosphere being explosive or flammable, shall be carried out.

Entry into any area where the atmosphere is unsafe shall be strictly controlled and supervised, and the necessary safety precautions shall be laid down and strictly complied with.

If, after all reasonably practicable steps have been taken to ensure adequate ventilation, the hazard still exists, the use of respirators or breathing apparatus shall be necessary. The type of respiratory protective equipment (RPE) required needs careful evaluation if the correct and most cost-effective choice is to be made. Respirators shall not be worn in oxygen deficient areas; only breathing apparatus that is self-contained or fed by an airline shall be used.

The certificate of approval, issued annually by the Health and Safety Executive, lists the types of RPE approved for use in conjunction with specific legislation, such as the regulations applicable to lead and asbestos. The types of RPE available may be suitable for the filtration of a variety of substances - the suitability shall be checked with the manufacturers or suppliers of the equipment.

Adequate instruction and training shall be given to all those required to use RPE, both in use, hazards and rescue procedures.

All dusts, gases and fumes shall be regarded as hazardous to health until such time as evidence to the contrary is provided.

DUSTS

Most of the damage and toxic effects take place once the dusts, etc. reach the deep lung spaces and those particles that are small enough to reach these areas are regarded as “respirable” dusts. Airborne dusts that do not contain substances recognised as being hazardous to health are regarded as “nuisance” dusts.

Where possible, the dusts shall be cleaned up as they are created and dust-inhibiting measures, such as damping down surfaces, vacuum cleaning and the exhaust ventilation of power tools, shall be taken.

Typical hazardous dusts are:

Asbestos

In maintenance, refurbishment and demolition, asbestos in the form of cement products, lagging, sprayed coatings and insulation boarding (including old ceiling tiles) is often encountered.

There are two main safety hazards associated with asbestos:

- Asbestosis. - This may result from working with all types of asbestos. It is a chronic industrial lung disease, slow in onset, leading to increasing breathing difficulties and eventual respiratory disablement. It is dose-related and results from a long exposure.
- Mesothelioma. - This results from the inhalation of asbestos. This is a specific and serious form of cancer only found after exposure to asbestos and affects either the lining of the lung cavity or the abdominal wall.

Wood Dust

This is caused through sawing, routing, moulding, carving and sanding.

The hazards associated with exposure to wood dusts include asthma, skin disorders, and irritation to the eyes and respiratory system. There is also evidence that certain wood dusts are carcinogenic.

Where exposure cannot be prevented, suitable and sufficient assessment of the risks from airborne dust must be carried out such that adequate controls can be implemented. This may mean additional ventilation is required, i.e. local exhaust ventilation at machines, along with the use of suitable personal protective equipment (PPE).

Man-Made Mineral Fibres (MMMF)

These fibres are widely found in use as a replacement for asbestos and in the form of fibreglass insulation in lofts and other areas.

There is little evidence to indicate that MMMFs are a cause of cancer. However, inhalation is to be avoided as irritation of the respiratory system is a common health effect. Other effects include skin irritation and dermatitis where contact with the skin is regular and/or prolonged.

PPE would normally include overalls (tightly woven Terylene or similar), impervious gloves and approved respirators.

Plaster, Mortar and Cement

Cementitious materials contain lime. Inhalation of dry dust is likely to irritate the respiratory system. Contact with the eyes and skin may also irritate and burn.

Dust respirators shall be used along with eye protection and the skin shall be protected.

When wet, the skin shall be protected either by gloves or with the use of barrier creams.

Silica and Quartz Dust

Large quantities of silica-bearing rocks are crushed for the production of aggregates to make concrete. There are hazards, not only in the crushing operation, but also in the batching of the aggregates, the abrasive cleaning of buildings and the drilling or scabbling of concrete.

The major hazard is that of silicosis, the effects of which are the same as asbestosis. The precautions to be taken are, where appropriate, the use of "wet" methods of work, total enclosure of the work area, exhaust ventilation, RPE and the segregation of other workers.

FUMES, GASES AND VAPOURS

The majority of gases and vapours have a toxic effect and inhalation usually results in rapid absorption into the blood stream. Others may have the effect of reducing the percentage of oxygen in the atmosphere, which could lead to the asphyxiation of workers. Exposure to exhaust gases from vehicles and machinery are particularly dangerous in confined spaces, such as tunnels, sewers and manholes.

Oil mists can also be created by the exhaust of pneumatic tools and can build-up in a confined space or poorly ventilated area and can cause nausea.

The use of chemicals with potential toxic properties is increasing in the workplace. Solvent fumes can be given off by drying paint, lacquers and adhesives. They are frequently heavier than air and can build-up in confined spaces, displacing the oxygen. Polymer resins give off styrene, and glues and foams can give off isocyanates.

Examples of hazardous fumes, gases and vapours include:

Isocyanates

These are used in adhesives, insulation foams, paints and varnishes. The most hazardous operation involving isocyanates is the spraying of foam compounds in which isocyanates are present.

They act as an irritant to the respiratory tract and may cause sensitisation - leading to asthma, dermatitis and damage to the eyes.

Precautions include the wearing of protective clothing, the provision of exhaust ventilation and, where necessary, the use of full-face breathing apparatus.

Liquefied Petroleum Gases (LPG)

Though we are usually well aware of the hazards connected with LPG it is not usually appreciated that the use of LPG space heaters in confined areas can, without adequate ventilation, cause a deficiency of oxygen in the atmosphere resulting in asphyxiation. Propane and butane have a narcotic effect as well as presenting a risk of explosion.

When using LPG it must be ensured that there is adequate high- and low-level ventilation.

Solvents

Solvents normally give off a vapour, which can be flammable and even explosive. These are frequently found in paints, adhesives, paint strippers, varnishes, mastics, surface coatings, etc. The inhalation or absorption of solvents through the skin can result in impaired judgement, dizziness, headaches and unconsciousness. Other possible effects include skin irritation and dermatitis. The risk is greater when the solvents are used in confined spaces or poorly ventilated areas.

Where possible, the area should be well-ventilated. However, air quality monitoring and the use of RPE may be required in potential confined space situations. Skin contact should be avoided by means of impervious clothing and gloves. Smoking, eating and drinking should be prohibited in the working area and good personal hygiene practices encouraged.

HAZARDOUS CONTACT WITH THE SKIN AND MUCOUS MEMBRANES

Many fumes and dusts can be harmful in contact with the skin and mucous membranes, e.g. eyes and nasal passages. There are also many equally harmful chemical-based products.

The most common hazard is occupational dermatitis. Occupational dermatitis is neither infectious nor contagious, but will continue for as long as the sufferer is in contact with the offending substance and often longer. If a person is allergic to the substance it is not safe for them to handle that substance at any time.

Many materials are known to potentially cause adverse health effects, although the level of reactions to substances does vary from person to person. The following list includes some known to fall into this category:

- Pitch, tar and bitumen;
- Brick, stone and plaster dust;
- Cement;
- Paints, lacquers, stains and varnishes;
- Woods;
- Epoxy resins;
- Acrylic and formaldehyde resins;
- Chromates present in primer paints, cement, etc.;
- Petrol, thinners and white spirit;
- Acids and alkalis.

The incidence of occupational dermatitis can be reduced by the provision and use of protective clothing and barrier creams to help prevent skin contact with the material, and by practicing good personal hygiene such as regularly washing off contaminants.

SUBSTANCES HAZARDOUS BY INGESTION

The ingestion of hazardous substances is likely to cause internal irritation and may cause systemic poisoning. In the majority of cases the risk of this occurring can be significantly reduced or even eliminated when the following precautionary steps are followed:

- Using substitute materials which are safer or less toxic;
- Ensuring that employees are aware of the hazard when using substances;
- Establishing safe systems and instructing employees in the safe use of toxic substances;
- Ensuring that all substances are correctly and clearly labelled;
- Prohibiting drinking, eating and smoking in areas where toxic substances are stored or used;
- Promotion of a personal hygiene programme and health education;
- Provision of the correct PPE and ensuring its use.

GUIDANCE NOTE	BIOLOGICAL HAZARDS	Code: H501	Issue: A
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INTRODUCTION

Biologically hazardous agents are living micro-organisms capable of causing disease or harm. Pathogenic micro-organisms have special adaptations allowing them to colonise a host and cause disease. Other organisms are opportunist pathogens and are able to cause disease in debilitated hosts or those with immune deficiencies.

The occupational acquired infections are hepatitis B and HIV infections, which are normally associated with discarded needles and sharps; and leptospirosis, also known as Weil's Disease, which is a form of jaundice caused by contact with water that has been contaminated by the urine of rats, other small mammals such as mice and voles, and cattle.

CONTROL OF EXPOSURE

Where employees are exposed to discarded needles and sharps, or other material which may be contaminated with human secretions, the following precautions must be adopted:

- Keep cuts and abrasions covered with an impervious dressing.
- Wear heavy-duty, impervious gloves to BS EN 464, to protect the hands whilst collecting the sharps, etc.
- Segregate the needles and sharps from other rubbish, in a disposable plastic container.
- Dispose of the container and its contents by contacting the Local Authority Environmental Health Department.
- Ensure a strict hygiene culture is enforced prior to eating, drinking, smoking, etc.

Where employees may come into contact with contaminated water, or work regularly in or near impure water, the following precautions must be adopted:

- Discourage the presence of vermin by careful disposal of waste food, especially on sites that are wet or adjacent to rivers and lakes.
- Do not handle the carcasses of dead rats or other small mammals; use gloves and/or tools to do so.
- Cover all cuts and abrasions with a waterproof dressing and wear appropriate protective clothing.
- Ensure a strict hygiene culture is enforced prior to eating, drinking, smoking, etc.

These precautions are pertinent to those engaged in:

- Work on sewers and other drainage systems.
- Work on canals and similar conservation projects.
- Work in tunnelling.

FIRST AID

If discarded needles and sharps are found accidentally then work in that area is to be suspended until the debris has been cleared. Should a worker receive a cut or puncture wound from a needle or sharp then they are to inform their medical practitioner at the earliest opportunity.

INFORMATION AND TRAINING

Where work is to be carried out in an area known to be contaminated with discarded needles and sharps then all employees are to be made aware of the precautions to be adopted and the potential hazards associated with this kind of debris.

Similarly, where work is to be carried out in or near impure water, all employees are to be made aware of the potential for leptospiral infection and the precautions to be adopted.

HIV and AIDS

AIDS (Acquired Immune Deficiency Syndrome) is a disease of the immune system, caused by the virus HIV. The body's defence system is damaged, allowing illnesses and infections, which would not otherwise have occurred, to develop. The HIV virus can be transmitted by injection or inoculation with infected blood.

AIDS is not transmitted by normal social contact and normally the HIV virus survives only for a very short period outside the body.

Where there is a risk of contamination, heavy-duty gloves and overalls should be worn as protection against cuts, and suspected items should be removed by tongs and placed in punctureproof bins for disposal.

The COSHH Regulations require employers to ensure that exposure of employees to substances hazardous to health is either prevented, or if this is not reasonably practicable, adequately controlled.

LEPTOSPIROSIS

Leptospirosis is also known as Weil's Disease and is a form of jaundice. It is caused by contact with water that has been contaminated by the urine of rats, other small mammals such as mice and voles, and cattle.

The disease enters the body through breaks in the skin and through the lining of the mouth and nose; it can be caught if water gets in the mouth or nose after falling into contaminated water.

Leptospirosis starts as a mild illness that can be easily cured if treated early enough. The initial symptoms are very similar to flu and it is possible that symptoms could be ignored or be treated as flu. However, if leptospirosis is left untreated it can become more serious and can be fatal.

Personnel who contract any flu-like symptoms after falling into water that may be contaminated should see their doctor immediately and inform them of the potential for leptospiral infection.

It is advisable for persons who frequently work near water to carry a card or tag saying that they may be at risk of catching the disease.

AVIAN INFLUENZA - H5N1 VIRUS

There are several different varieties of the avian influenza A virus (better known as bird flu). However, only four strains are currently known to have caused infections to humans: H5N1, H7N3, H7N7 and H9N2. H5N1 is currently causing the greatest concern for human infection, although there have still only been relatively few incidents of people contracting the H5N1 virus.

Currently the cases where humans have contracted the virus are attributable to exposure to dead or very ill, infected birds. The virus does have the potential to evolve quickly, although it is impossible to predict if the virus will evolve into a highly contagious strain that will pass from human to human.

The virus can exist in populations of wild or domestic birds; however, the disease often spreads much faster within domestic populations because of the large numbers in relatively small spaces. Workers who are regularly in environments such as poultry houses, zoos, aviaries and bird sanctuaries, pet shops, abattoirs or any other environment containing birds should take precautions to prevent the risk of contracting the virus.

In humans, initial symptoms of infection can include a high fever, a high temperature (>38°C) and flu-like symptoms. Diarrhoea, vomiting, abdominal pain, chest pain and bleeding from the nose and gums have also been reported as early symptoms in some patients.

Should any dead birds be found in suspicious circumstances that may indicate the presence of the virus, the following steps must be undertaken immediately:

- Cease work.
- Do not touch the bird.
- Evacuate the immediate work area.
- Inform others locally not to disturb the area.
- Inform both the trade contractor's senior person on site and the project manager, who will call for advice and assistance.
- Do not return to that task until it has confirmed that it is safe to do so by the project manager.

The work area must be quarantined, with measures being taken to ensure that there is no further contamination, until such time as remedial action is taken.

Avian influenza is a notifiable disease - a disease named in section 88 of the Animal Health Act or an order made under that Act. Any suspected incidence should be reported to the Department for Environment, Food and Rural Affairs (DEFRA) via their helpline 03459 335577.

GUIDANCE NOTE	NEEDLES AND SHARPS	Code: H505	Issue: A
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INTRODUCTION

Biologically hazardous agents are living micro-organisms capable of causing disease or harm.

Pathogenic micro-organisms have special adaptations allowing them to colonise a host and cause disease. Other organisms are opportunist pathogens and are able to cause disease in debilitated hosts or those with immune deficiencies.

The occupational acquired infections which are normally associated with discarded needles and sharps are hepatitis B and HIV infections.

CONTROL OF EXPOSURE

Where employees are exposed to discarded needles and sharps, or other material that may be contaminated with human secretions, the following precautions must be adopted:

- Keep cuts and abrasions covered with an impervious dressing.
- Wear heavy-duty, impervious gloves to protect the hands whilst collecting the sharps, etc.
- Segregate the needles and sharps from other rubbish in a disposable plastic container.
- Dispose of the container and its contents by contacting the local authority's environmental health department.
- Ensure a strict hygiene culture is enforced prior to eating, drinking, smoking, etc.

FIRST AID

If discarded needles and sharps are found accidentally, work in that area is to be suspended until the debris has been cleared. Should a worker receive a cut or puncture wound from a needle or sharp, they are to inform their medical practitioner at the earliest opportunity.

INFORMATION AND TRAINING

Where work is to be carried out in an area known to be contaminated with discarded needles and sharps all employees are to be made aware of the precautions to be adopted and the potential hazards associated with this kind of debris.

HIV AND AIDS

AIDS (Acquired Immune Deficiency Syndrome) is a disease of the immune system, caused by the virus HIV. The body's defence system is damaged, allowing illnesses and infections, which would not otherwise have occurred, to develop. The HIV virus can be transmitted by injection or inoculation with infected blood. AIDS is not transmitted by normal social contact and normally the HIV virus survives only for a very short period outside the body.

Where there is a risk of contamination, heavy-duty gloves and overalls should be worn as protection against cuts, and suspected items should be removed by tongs and placed in puncture proof bins for disposal.

The COSHH Regulations require employers to ensure that exposure of employees to substances hazardous to health is either prevented, or if this is not reasonably practicable, adequately controlled.

GUIDANCE NOTE	LEGIONELLA	Code: H506	Issue: B
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INFORMATION

The HSG 274 Approved Code of Practice (ACOP) was amended in November 2013, the main changes are the removing Part 2, the Technical Guidance, which is now published separately in HSG 274, and giving the following issues ACOP status:

- Risk Assessment;
- The specific role of the appointed competent person, known as the ‘responsible person’;
- The control scheme;
- Review of control measures; and
- Duties and responsibilities of those involved in the supply of water systems.

The Technical Guidance information is itself broken down into 3 Parts:

- Part 1 - The control of legionella bacteria in evaporative cooling systems.
- Part 2 - The control of legionella bacteria in hot and cold water systems (interim guidance).
- Part 3 - The control of legionella bacteria in other risk systems.

INTRODUCTION

Legionellosis is a collective term for diseases caused by legionella bacteria including the most serious Legionnaires’ disease, as well as the similar but less serious conditions of Pontiac fever and Lochgoilhead fever. Legionnaires’ disease is a potentially fatal form of pneumonia and everyone is susceptible to infection. The risk increases with age, but some people are at higher risk, e.g.

- People over 45;
- Smokers;
- Heavy Drinkers;
- People suffering from chronic respiratory or kidney disease;
- Diabetes;
- Lung and Heart disease; or
- Anyone with an impaired immune system.

The bacterium Legionella pneumophila and related bacteria are common in natural water sources such as rivers, lakes and reservoirs, but are usually in low numbers. They may also be found in purpose built water systems, such as cooling towers, evaporative condensers, hot and cold water systems and spa pools. If conditions are favourable, the bacteria may multiply, increasing the risks of Legionnaires’ disease, and it is therefore important to control the risks by introducing appropriate measures.

Legionnaires' disease is normally contracted by inhaling small droplets of water (aerosol), suspended in the air, containing the bacteria. Certain conditions increase the risk from legionella if:

- The water temperature in all or parts of the system may be between 20 - 45°C, which is suitable for growth;
- It is possible for water droplets to be produced and if so, they can be dispersed;
- Water stored and / or recirculated;
- There are deposits that can support bacterial growth, such as rust, sludge, scale, organic matter and biofilms.

It is important to control the risks by introducing measures which do not allow proliferation of the organisms in the water systems and reduce, so far as is reasonably practicable, exposure to water droplets and aerosol. This will reduce the possibility of creating conditions in which the risk of exposure to legionella bacteria is increased.

HAZARDS

The hazard identification and risk assessment process will help to establish the following:

- Whether any physical aspect of the water system could support the harbouring of legionella bacteria.
- Whether any water storage conditions exist under which legionella bacteria might multiply.
- Which water outlets might release a spray?
- The Health and Safety Executive (HSE)'s Approved Code of Practice Legionnaires' Disease: The Control of Bacteria in Water Systems offers practical guidance for the control of legionella bacteria in the workplace where water is used or stored in a way which may create a reasonably foreseeable risk of legionnaires' disease, including:
 - Cooling towers;
 - Evaporative condensers;
 - Hot water systems in non-domestic premises, except where the volume of water does not exceed 300 litres;
 - Hot and cold water services, irrespective of the premises' size if the occupants are deemed particularly susceptible; and
 - Humidifiers and air washers.

PHYSICAL ASPECTS

In hot and cold water systems, the initial design and any additions and adaptations will have a bearing on the likelihood of legionella bacteria being harboured. Hazard identification and risk assessment should ask whether:

- Storage cisterns are unnecessarily large;
- Pipework is unnecessarily long or indirect or contains "deadlegs";
- Anything prevents the system being completely drained or pumped out;
- Anything prevents easy access to cooling towers and evaporative condensers for visual inspection and maintenance;
- Cooling towers have efficient drift eliminators fitted.

WATER STORAGE CONDITIONS

Legionella bacteria need nutrients to support growth, so it should be determined if:

- Sludge, scale or rust has accumulated in cisterns or pipework;
- Foreign matter can be or has been allowed into tanks through poor housekeeping or maintenance;
- Plumbing materials have been used which do not comply with water authority by-laws;
- Materials have been allowed to deteriorate;
- Algae, organic matter, insects or vermin have been allowed to enter and remain in tanks;
- A bio film is coating hard surfaces or lying on the water surface.

Water temperatures are crucial to the existence of legionella bacteria.

- In water below 20°C, the bacteria remain dormant in low numbers;
- In water which is between 20°C and 45°C, the bacteria multiply, so water stored within this range is a hazard;
- In water above 45°C, bacteria growth slows;
- At 60°C, 90% of legionella will die within 2 minutes.

Temperatures should be monitored and insulation checked to prevent the growth of bacteria. The following should be considered.

- Insulation, or lack of insulation, which enables water to be stored at incorrect temperatures, is a hazard;
- Cold water tanks situated in warm parts of buildings are a hazard;
- Tanks where water is not uniformly heated are a hazard.

Water flow is another important consideration. Low or no flow results in stagnation, enabling bacteria to multiply undisturbed, so hazard identification and risk assessments should look for:

- Cisterns or pipework which allow water to stand undisturbed for long periods;
- Deadlegs - pipework or tanks which are no longer used, but are still connected to the system.

WATER OUTLETS THAT MIGHT RELEASE A SPRAY

Water outlets which might release a spray should be identified. These may include:

- Taps;
- Shower heads;
- Spas or whirlpool baths;
- Pools, including hydrotherapy pools;
- Humidifiers;
- Fountains;
- Evaporative condensers; and
- Wet cooling towers.

PEOPLE AT RISK

People at risk from legionella which originates from a hot and cold water system could be any building occupants or visitors to the building.

Cooling towers can create risks for additional people. In closed cooling tower systems, the vapour is recirculated within the building, so those at risk will be building occupants or visitors to the building. However, in open cooling tower systems, the vapour is released into the atmosphere and can infect neighbouring towers. Therefore, people in the surrounding area and those in nearby buildings served by their own cooling towers will be at risk.

Particularly vulnerable people include those over 40, especially if they are smokers, alcoholics, diabetics, have chronic respiratory or kidney disease, have cancer, or are on renal dialysis or immunosuppressant drugs.

CONTROL MEASURES

After the hazard identification and risk assessment process, including the recognition of at risk people, attention should be given to control measures, including an assessment of the adequacy of existing controls and the identification of further actions needed to control the risks. Control measures fall into four categories.

- Improvements to physical aspects of the system;
- Water temperature;
- Maintenance and cleanliness;
- Water testing and treatment.

IMPROVEMENTS TO PHYSICAL ASPECTS OF THE SYSTEM

- A complete and up-to-date schematic plan should exist of the hot and cold water system and wet cooling system;
- Main components and fittings, such as washers, gaskets, sealants, jointing coatings, linings and hosing should be constructed from materials which comply with water authority by-laws;
- Water storage containers should be the right size to ensure uniform heating and to prevent stagnation;
- Where possible, tanks should be horizontal rather than vertical;
- Cisterns and storage tanks should have properly fitting covers;
- Cold water tanks should not be sited in warm areas of buildings;
- Insulation should be adequate. It should be possible to drain or pump out the system completely;
- All pipe runs should be as short and direct as possible;
- There should be no pipework deadlegs to cause stagnation;
- Redundant pipework or tanks should be isolated from the system;
- Vermin traps should be fitted where appropriate;
- Insulation should be adequate;
- Efficient drift eliminators should be fitted in cooling towers to reduce escape of spray;
- Where reasonably practicable, wet cooling towers should be replaced by dry cooling systems;
- It should be possible to drain or pump out the system completely.

WATER TEMPERATURE

- Cold water should be stored below 20°C. Adequate insulation can assist;
- Hot water should be stored at 60°C. Thermostats need to be set and maintained at the appropriate level and adequate insulation installed.

Note

Water coming out of taps above 43°C poses the risk of scalding, and hot water pipes and radiators carrying water above 43°C could pose a hazard where vulnerable people may lean or fall against them, e.g. in healthcare environments.

Ideally, water should be circulated at 50°C, with scalding hazards controlled by fitting thermostatic control valves to radiators and to the water supply for baths, showers and hand basins.

MAINTENANCE AND CLEANLINESS

Maintenance and cleanliness are perhaps the most crucial aspects in the prevention of Legionnaires' disease.

A detailed preventive maintenance schedule should incorporate regular visual inspection, cleaning, disinfection and physical maintenance. It should also include water storage tanks, pipework, water outlets, cooling towers, and all fittings.

A competent person (trained in the risks and nature of legionellosis and relevant prevention and maintenance techniques) should make regular inspections and keep a record. The following procedures should be included in the maintenance plan:

- Check cistern covers are in place;
- Check that dirt, debris and vermin have not entered cisterns;
- Clean and disinfect cisterns;
- Clean and disinfect heat exchangers;
- Clean and disinfect water filters;
- Check insulation is in good condition;
- Check water temperatures;
- Check that showers, shower heads and taps are clean and free from scale;
- Check that cooling towers, drift eliminators and fans are clean and in good condition;
- Clean cooling tower basin if slime, algae, or dirt are visible;
- Blow down direct chilled water risers;
- Flush, clean and disinfect the entire cooling tower system; and
- Carry out any necessary repairs and improvements promptly.

WATER TESTING AND TREATMENT

Since legionella bacteria are widespread in the environment, they cannot be prevented from entering water systems which means water needs to be regularly tested.

In chlorinated water systems, checking should be a continuous, automated process. Dip-slides can detect general bacterial growth, but not legionella specifically.

If automatic biocide systems are installed, an alarm back-up for malfunction should be installed and water regularly checked. Sampling of cooling towers for legionella should be done on a quarterly basis. Good record-keeping is essential and records of inspections and tests should be kept for at least two years. If water services are outsourced, regular checks should be made of the provider's records.

Water treatment should be carried out on a regular basis, immediately after any work which requires shutting down or re-pressurising the system, and after any suspected outbreak of legionellosis. Water can be treated either manually or by automatic dosing.

Equipment must be properly installed, maintained and monitored and it is essential to ensure professional, competent people do all the work. A Recommended Code of Conduct for Service Providers exists, supported by the British Association for Chemical Specialities, the Water Management Society and the HSE. It is a good idea to check if the provider has signed up to the code.

There are various types of treatment, each with their own advantages and disadvantages and some may be combined. Impartial, professional advice should always be taken to ensure that the most appropriate treatment method is used, including the following:

- Ozone, a high-energy form of oxygen, destroys legionella bacteria. It is produced electronically in a generator under vacuum and continuously drawn into the water. A build-up of sludge or sediment may need to be dealt with;
- Chlorination can be achieved by continuous injection of a chlorine compound or gas. It is hard to maintain constant levels, penetration of bio films may not be successful, and high concentrations of chlorine will corrode pipes;
- Ionisation treatment releases electrolytically generated copper and silver ions into the water through an intelligent control system, killing legionella bacteria. Care must be taken to remove scale build-up from the electrodes and high pH levels will reduce effectiveness;
- Continuous UV light treatments involve mercury lamps within hydraulic chambers installed close to water outlets. It is easy to install, forms no by-products and does not harm water or plumbing. However, UV light cannot penetrate bio films and tubes must be regularly cleaned and water filtered to avoid build-up of scale;
- Thermal treatment by superheating and flushing water through the system is an emergency procedure adopted during an outbreak of Legionnaires' disease. There is no residual protection.

RESPONSE TO AN OUTBREAK

If a case or cases of Legionnaires' disease are reported or suspected among building occupants, or those who have been in the vicinity, immediate action must be taken. The source of the infection may be the employer's building or another building nearby, but all precautions must be taken as follows:

- Inform senior management, providing all relevant information;
- Consult the HSE immediately and follow its advice. In Scotland, legionellosis is a notifiable disease;
- Test water storage tanks and outlets to identify the possible source;
- Notify neighbours;
- Start water treatment;
- Consider closing the building. If this is done, staff should be given non-alarmist literature explaining the symptoms and what to do if they are concerned;
- Do not open the building again until test results show bacteria readings have dropped to a safe level.

As soon as an outbreak is suspected, a team of specialists including staff from the local environmental health department and the Public Health Laboratory Service will begin an investigation. This will be aimed at identifying the source and those likely to be affected, and ensuring the contaminated water system is treated as quickly as possible. The police and the HSE will also be involved.

SAFE SYSTEMS OF WORK

This must be developed in conjunction with the Risk Assessment and detail the hazards associated with the task and specific site, the controls put in place to enable the works to be conducted safely and an emergency plan for out of compliance testing or results.

TRAINING & COMPETENCE

Employees involved in facilities management and building services maintenance with the responsibility for carrying out preventive maintenance, water checks and water treatments will need to be trained in the risks and nature of the disease and be given specific technical training.

Employees charged with responding appropriately in the case of a suspected outbreak will need to understand the risks and nature of the disease, who is at risk, and the appropriate response.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment requirements will be identified during the Risk Assessment process and provided for use. The main areas for concern would be testing or sampling hot water or in a known contaminated area.

While sampling for testing it should also be remembered to take precautions to stop cross-contamination of a sample during the sampling process, which could compromise the results.

REFERENCE

Regulations/ACoPs:

Legionnaires' disease: The control of legionella bacteria in water systems. Approved Code of Practice and Guidance on Regulations L8 (Fourth Edition) HSE Books 2013 ISBN 978 0 7176 66157 7 Part 1 of this publication contains advice on your duties under the law.

Technical Guidance which Part 2 contains guidance on technical aspects of the assessment and control of legionella risks this includes:

- Part 1 - The control of legionella bacteria in evaporative cooling systems;
- Part 2 - The control of legionella bacteria in hot and cold water systems (interim guidance);
- Part 3 - The control of legionella bacteria in other risk systems.

Other:

Controlling legionella in nursing and residential care homes INDG253
HSE Books 1997 (single copy free)

The control of legionellae in healthcare premises: A Code of Practice. Good Practice guide Health Technical Memorandum 2040
ISBN 978 0 11 321683 3 TSO 1994

The control of legionellosis: A recommended code of conduct for service providers
Legionella Control Association 2005

Health and safety in care homes HSG220 HSE Books 2001
ISBN 978 0 7176 2082 1

GUIDANCE NOTE	PSITTACOSIS	Code: H602	Issue: A
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INTRODUCTION

Psittacosis is a zoonotic disease acquired through contact with infected birds; usually through inhalation of dust or aerosol contaminated by bird faeces, Urine and respiratory secretion or nasal discharge. Person-to-person spread has also been reported but is rare. It may occur when a person is exposed to infectious droplets from another person experiencing sudden, very forceful coughing during the acute illness. The organism can survive for many months in dry dust.

Other sources of exposure include:

- Mouth-to-beak contact.
- A bite from an infected bird.
- Handling the plumage and tissues of infected birds.

The disease varies from a flu-like illness with a fever, headache, joint and muscle pains, lasting a few days, to pneumonia and possible endocarditis and hepatitis. The incubation period is usually between 4 and 15 days.

Other symptoms might include:

- Chills.
- Cough.
- Weakness or fatigue.
- Chest pain.
- Loss of appetite.
- Nausea.
- Vomiting.
- Diarrhoea.
- Sweating.
- Abnormal intolerance to light.

Psittacosis is primarily a lung disease but it can involve several organs.

Some reports show that inflammation of the liver, lining of the heart cavity, the heart muscle, and the brain can occur.

In mild cases, fever may continue for three weeks or more.

Early detection and treatment normally results in complete recovery. However, more severe illness, or even death, may occur in susceptible individuals or if there is a delay in diagnosis.

CONTROL OF EXPOSURE

- Good general ventilation is required.
- Cleaning procedures should avoid creating aerosols and dust. High-pressure jetting should be avoided.
- Work techniques should be designed to keep the worker's breathing zone away from possible aerosol and dust clouds. Avoid the need for close approach during demolition.
- High levels of faeces/dust should, where possible, be enclosed with local exhaust ventilation.
- Handling systems, e.g. for waste, diseased birds, and feathers should be enclosed where reasonably practicable. All bird waste must be contained in polythene sacks, sealed and disposed of by an approved contractor.
- Respiratory protective equipment (RPE) is most likely to be needed when demolition work is in progress.
- Personal protective equipment (PPE), as appropriate, should be worn, i.e. hand protection, disposable hooded coverall and eye protection.
- Good standards of personal hygiene must be maintained. Washing facilities should be provided and there should be separate eating facilities.
- Employees and visitors should be alerted to the potential hazard, of the precautions they need to adopt, and the need to seek help from and inform their doctor if illness develops.

OCCUPATIONS AT RISK

- Psittacosis is an occupational health hazard for many people whose work brings them into contact with birds. These include:
- Construction Workers.
- Bird fanciers.
- Pigeon fanciers.
- Poultry production workers.
- Poultry processing workers.
- Pet shop employees.
- Quarantine facilities employees.
- Veterinary clinic employees.
- Diagnostic laboratories employees.
- Racing pigeon keepers.
- Public health inspectors.
- Exotic and domestic bird breeders.
- Bird dealers.

REFERENCES: Aberdeenshire Council Guidance on Psittacosis.

GUIDANCE NOTE	HEALTH AND SAFETY RULES	Code: I002	Issue: A
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EMPLOYEES

This section details the rules and standards that relate to all employees at work, contractors and visitors. It is the responsibility of all to obey these rules and to behave in a safe manner whilst at work.

Deliberate contravention of these rules shall be considered a break in the employee's contract of employment and shall, at the discretion of the management, lead to instant dismissal.

It should also be borne in mind that contravention of the health and safety legislation is a criminal offence and that a prosecution can be taken against the employee by the enforcing authority.

WORKING PRACTICES

- No equipment is to be operated by any person unless they have been trained and are authorised to do so.
- Any fault, defect (including damage) or malfunction in any item of equipment must be reported immediately.
- No equipment is to be cleaned whilst in motion, unless you are authorised to do so.
- No repairs, maintenance or adjustments to equipment are to be carried out, unless you are authorised to do so.
- All substances are only to be used in accordance with the written instructions.
- All substances are to be stored in accordance with the written instructions and are to be returned to storage after use.
- All hazard notices or warning signs displayed on the premises are to be obeyed.
- All notices displayed in the workplace are to be read and you are to ensure that you understand the instructions.
- All safety equipment and facilities provided are to be used and are not to be misused or wilfully damaged.
- Protective clothing and safety equipment is to be stored in accordance with instructions.
- The work area is to be kept clean and tidy at all times.
- All waste is to be disposed of in the correct container.
- All liquid spillages are to be cleaned up immediately.
- All emergency procedures relevant to each work area are to be obeyed.
- Emergency exits and equipment are not to be obstructed.
- Any use or damage to firefighting equipment is to be reported immediately.
- Prompt medical assistance must be sought for any injury received at work and the injury must be reported as soon as possible.

MISCONDUCT

Any employee found to have acted in any one of the following ways shall be liable to the organisation's disciplinary procedure:

- Wilfully breaching the safety rules or safety policy.
- Operating any equipment without authority.
- Misusing equipment provided
- Misusing items provided for first aid.
- Recklessly interfering with or misusing anything provided in the interest of health, safety or welfare at work.
- Defacing or removing notices, signs, labels or any other warning device.
- Misusing any chemical, flammable substance, toxic material, etc.
- Smoking in designated "No Smoking" areas or whilst using flammable substances.
- Taking part in horseplay or practical jokes.
- Making false declarations or interfering with evidence following an accident or dangerous occurrence.

This list is not exhaustive.

GUIDANCE NOTE	VIOLENCE TO STAFF	Code: I003	Issue: A
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WHAT IS VIOLENCE?

Violence is defined as “any incident in which an employee is abused, threatened or assaulted by a member of the public in circumstances arising out of the course of his or her employment”.

Verbal abuse and threats are the most common types of incident. Physical attacks are comparatively rare.

Both employer and employees have an interest in reducing violence at work. For employers, violence can lead to low morale and a poor image for the organisation, making it difficult to recruit and retain staff.

For employees, violence can cause pain, suffering and even disability or death. Physical attacks are obviously dangerous but serious or persistent verbal abuse or threats can also damage an employee’s health through anxiety or stress.

ACTION PLAN

Employers and employees need to work together on this issue to decide what to do.

Find out if there is a problem

This can be done informally by the relevant managers, supervisors and safety representatives or by a short questionnaire to staff. The results of any survey should be disclosed to staff so that if there is a problem they will see that management are aware of it.

If no problem is detected it is still advisable to check again, from time to time.

Record and reporting all Incidents

The recording of all incidents is essential in building up a picture of a problem, and may assist in solving the problem before it escalates out of control and any serious harm is caused. A simple report form can be used to record the details of who, what, where, when, why and how.

Staff may be unwilling to report incidents for a number of reasons. They should be encouraged to report all such incidents.

You should also report serious incidents to the police by dialling 999 in an emergency, or contacting your local police station.

Classify all Incidents

Classifying incidents will assist in finding out what kinds of incidents are happening. They can be classified under headings such as place, time, type of incident (physical or verbal), who was involved and the possible causes.

Verbal assaults are difficult to classify as it greatly depends upon how the individual reacts to the assault.

Employers must notify their enforcing authority in the event of an accident at work to any employee resulting in death, major injury or incapacity for normal work for three or more days. This includes any act of non-consensual physical violence done to a person at work.

Search for Preventive Measures

There are no ready-made remedies but the way jobs are designed can reduce the risk of violence. Measures that can be taken include the training of staff to enable them to recognise when a situation may escalate and instruction on how to deal with this; reducing the amount of any cash handled (if involved); installing CCTV systems; or installing security locks or doors.

The circumstances of each individual incident will dictate which preventative measures are appropriate in the situation.

Work Environment

- The way your premises are designed in terms of layout, security provision and the general environment can affect the risk of crime and violence happening to your staff.
- Premises design/layout.
- Poor location of cash tills and sales displays, blind spots, poor layout and counter design can all make customers less visible and target items more accessible.
- If people think they cannot be seen, they may be more likely to commit crime or violence.

Think carefully about the layout of your premises - can it be improved?

- Can you see your customers and colleagues?
 - ▶ Consider high and wide counters.
 - ▶ or installing mirrors to help you see concealed areas.
- How do you manage the way your customers move around your premises?
- Consider how you can prevent the build-up of crowds or queues.
- Maintain the exterior of your building to prevent break-ins.

Visibility and Lighting

- If you are not able to easily see your customers and colleagues, spotting and deterring aggressive behaviour becomes more difficult.
- Staff can feel less safe, and criminals can feel more secure.
- If this is a risk for you or your staff, ensure your lighting is adequate.
- You should aim to keep entrances/exits, reception areas and car parks well lit.

Working Practices

- How people carry out their jobs affects the risk of violence and crime happening to you or your staff.
- Cash handling and transit.
- People carrying out these activities may be particularly vulnerable to robbery attacks.
- Reduce the amount of cash handled, particularly in front of customers.
- Arrange cash collection where possible. Think about who is going to handle your cash, and how. Try to avoid set routines and routes.

Security Devices

- A lack of security devices, such as alarms and locks, can increase the risk of crime and work-related violence. However, even when they are used, other control measures will help to reduce the risk further.
- Good quality materials and workmanship for doors, windows and locks are important.
- Window restraints, e.g. bars and shutters, can make your workplace more secure.
- Alarms can be useful, but make sure your staff know how to use them and how to respond.

Security Personnel

- Well-trained security staff can reduce the risk of violence. However, make sure they are competent and have the right level of training for what you want them to do.
- This will include getting a suitable licence to practice from the Security Industry Authority (SIA).

Legal Options

- There are several legal options that are open to you, or the police and your local authority, to help to deal with issues around anti-social behaviour and violence.
- These mainly involve banning individuals from your premises or local area, or preventing alcohol being consumed in specific areas.
- Bans, such as exclusion orders, restraining orders, trespass notices and Antisocial Behaviour Orders (ASBOs) keep troublemakers from specific premises, among other things. Managers can also order someone off their premises, and ask them not to return, but make sure you have appropriate support when doing this.
- Fines or fixed penalty notices (FPNs) can be issued by the police for anti-social behaviour and criminal activity.
- Local authority bye-laws make it an offence to consume alcohol in designated street areas, for example 'Designated Public Places Orders'.
- In order to take legal action, the police or local authority may need evidence of the extent of the violence or anti-social behaviour problem, or examples of incidents.
- This is why regular and consistent recording and reporting of work-related violence is important, together with keeping CCTV footage for evidence.

Staffing Levels

- Risks increase where there are inadequate staffing levels. Visibility will be reduced, and waiting and queuing times might increase, leading to customer frustration.
- It may also mean there are less staff available to deal with situations if customers become difficult or violent.

Partnership working and special schemes

- Working with others is one of the most effective tactics in preventing violence and aggression.
- Partnerships can be between you and just one other business, organisation or agency, or with a whole network of organisations.
- The benefits of working with others include:
 - ▶ sharing of information;
 - ▶ pooling of funding and expertise;
 - ▶ greater likelihood of identifying and understanding violence and crime in your business.

Decide what to do

It is advisable to involve employees in the decision making process when deciding what preventative measures are to be taken. Employee involvement ensures they are more likely to support any action taken and work with it rather than against it.

Put Measures into Practice

Whatever measures are decided upon, a section of the health and safety policy statement should include dealing with violence to staff. This will make employees aware of the policy and help them to co-operate with you, follow procedures and report any incidents.

Check That These Measures Work

Once procedures have been put into place a check needs to be made to ensure that they are working effectively. If not, other measures will need to be decided upon and put into place.

WHAT ABOUT THE VICTIMS?

Victims may need help. This may include counselling, time off or help with legal advice. Employees will be better able to cope with stressful situations once they know they have your support.

REFERENCES

www.hse.gov.uk/violence

GUIDANCE NOTE	SITE RULES	Code: I100	Issue: A
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EMPLOYEES

This section details the rules and standards that relate to all employees at work, contractors and visitors. It is the responsibility of all to obey these rules and to behave in a safe manner whilst at work.

Deliberate contravention of these rules shall be considered a break in the employee's contracts of employment and, at the discretion of the management, shall lead to instant dismissal.

It should also be borne in mind that contravention of the Health and Safety Legislation is a criminal offence and that a prosecution can be taken against the employee by the enforcing authority.

Working Practices

- No machine, item of plant or equipment is to be operated by any person, unless they have been trained and are authorised to do so.
- All machine guarding is to be in place and correctly adjusted, prior to machinery being used.
- Any fault, defect, including damage, or malfunction in any item of machinery, plant, equipment, tool or guard must be reported immediately.
- No machine, plant or equipment is to be left unattended whilst in motion, unless you are authorised to do so.
- No machine, plant or equipment is to be cleaned whilst in motion, unless you are authorised to do so.
- No repairs, maintenance or adjustments to machines, plant or equipment are to be carried out, unless you are authorised to do so.
- All substances are only to be used in accordance with the written instructions.
- All substances are to be stored in accordance with the written instructions and are to be returned to the storage after use.
- All hazard notices or warning signs displayed on the premises are to be obeyed.
- All notices displayed in the workplace are to be read and you are to ensure that you understand the instructions.
- All safety equipment and facilities provided are to be used and are not to be misused or wilfully damaged.
- Protective clothing and safety equipment is to be stored in accordance with the instructions.
- The work area is to be kept clean and tidy at all times.
- All waste is to be disposed of in the correct container.
- All liquid spillages are to be cleaned up immediately.
- All emergency procedures relevant to your work area are to be obeyed.
- Emergency exits and equipment are not to be obstructed.
- Any use or damage to fire-fighting equipment is to be reported immediately.
- Prompt medical assistance must be sought for any injury received at work and the injury must be reported as soon as possible.

MISCONDUCT

Any employee, found to have acted in any one of the following ways, shall be liable to the organisation's disciplinary procedure: -

- Wilfully breaching the safety rules or Safety Policy.
- Removing any guard or protective device without permission.
- Operating any machine, plant or equipment without authority.
- Misusing items provided for first aid.
- Recklessly interfering with or misusing anything provided in the interest of health, safety or welfare at work.
- Defacing or removing notices, signs, labels or any other warning device.
- Misusing any chemical, flammable substance, toxic material, etc.
- Smoking in designated "No Smoking" areas or whilst using flammable substances.
- Taking part in horseplay or practical jokes.
- Making false declarations or interfering with evidence following an accident or dangerous occurrence.
- Misusing compressed air, electric or pneumatic equipment.
- Overloading lifting equipment.

(The above list is not exhaustive).

VISITORS

The following rules are designed to assist in the control of visitors to the premises. It is of importance that persons visiting the premises should not be allowed to wander freely. In the event of fire it is important to know the number of persons in the area and their location, to ensure that, on evacuation, the buildings are in fact empty.

Protective Clothing and Equipment

Visitors are required to wear and use the protective equipment, which shall be supplied where necessary.

Accidents

All accidents or incidents occurring on the premises must be reported.

Fire

Visitors are required to follow any fire procedures displayed and are to obey any "No Smoking" controls.

CONTRACTORS

In the context of the Health and Safety at Work Etc. Act 1974, the term contractor has a wide definition. Any person or organisation that enters into an agreement, whether written or oral, with the Organisation to provide any service is regarded as a contractor. This includes window cleaners, builders or a specialist.

Contractor's Contact

The contractor's contact is to ensure that: -

- The contractor has received a completed copy of the Contractor's Information Sheet, prior to any work starting;
- The contractor's work is monitored to ensure that they are complying with the Organisation's Health and Safety Policy.

CONTRACTORS SAFETY INFORMATION

This Safety Information, which forms an integral part of the Organisation's Health and Safety Policy, is applicable to all contractors and persons under their control and forms part of the Terms of Contract.

Contractors are required to ensure that: -

- They, and all persons under their control, familiarise themselves with the site and any hazards to be found on the site;
- Their activities are conducted in accordance with the safe practices as detailed in this Policy, taking precautions to protect all employees and others who may be affected by their actions or failures to act;
- They comply with all the requirements of the Organisation's Health and Safety Policy;
- They comply with all the relevant legislation applicable to the workplace;
- They provide the correct protective equipment and clothing to their employees at the contractor's expense;
- Employees remain within the designated areas of their work;
- They only employ persons who are sufficiently trained and experienced in the performance of their duties. If persons under training are employed the contractor is to ensure that they are adequately supervised.

Nothing in the above information relieves the contractor of their duties and obligations under Statute or Common Law.

Failure to comply with the Organisation's Health and Safety Policy or any legal requirements will lead, at the employer's discretion, to suspension of the contractor's work, at no cost to the employer, or to termination of the contract.

CONTRACTOR'S SAFETY INFORMATION SHEET

Your Contact within this Organisation is: -.....

First Aid kits are located at: -.....

Contractors are responsible for ensuring that all persons under their control know and understand the fire procedures applicable to their work areas and the location of any fire fighting equipment within those areas.

Means of escape and access routes into the work areas are not to be obstructed without prior permission.

All accidents or dangerous occurrences are to be reported, immediately, to the above contact.

Welfare facilities are provided as agreed within the contract and are not to be misused.

All registers and other documents required by Statute are to be available for inspection by the employer or their safety advisers at all times.

GUIDANCE NOTE	ON-SITE INSPECTIONS AND AUDITS	Code: J105	Issue: A
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INTRODUCTION

Where it is necessary for staff to visit sites that, at times, may be considered hazardous the following procedure must be adhered to:

On Arrival

- Introduce yourself to the person in charge of works.
- Ensure you receive all information appertaining to the site regarding known hazards.
- Ensure that you are equipped with all the relevant PPE required for those hazards identified.
- If the site is unoccupied consider whether it is safe to continue alone. If you believe that it is then inform your external minder, normally by telephone, that you are about to enter the site and give an approximate time when you will contact your minder again.

Audit/Inspections

- When carrying out the audit/inspection a member of the on-site management team should accompany you.
- If at any time you, in your opinion, are placed at imminent risk of injury during your visit you are to stop and inform both the client's on-site representative and the company office of your decision.
- Discuss remedial actions with the client and record this in writing.

HAZARDS

There follows a list of those hazardous areas or situations that you may encounter during the course of your visit. This list is not to be considered exhaustive and is to be used purely as an aide memoire.

Be careful of the following. If in doubt - STOP.

Structures

The chance of partial or total collapse of:

- Chimney stacks, parapets or gable walls.
- Leaning, bulged and unrestrained walls (including boundary walls).
- Rotten or corroded beams and columns.
- Roofs and floors.
- Incomplete/temporary structures (Scaffolds etc)

Timbers

- Rotten and broken staircases and floors.
- Flimsy cellar flaps and broken pavement lights.
- Floorboards, joists and buried timbers weakened by age, decay or attack.
- Projecting nails and screws.
- Broken glass, loose glazing in windows and partitions, weak or broken hinges and sash cords.
- Glass panels in doors and winglights may be painted over.

Roofs

- Fragile rooflights (often obscured by dirty or temporary coverings).
- Asbestos cement sheeting.
- Low parapets or unguarded roof edges. Loose copings.
- Rusted, rotten or moss covered fire escapes, access ladders and guardrails.
- Rotten roof joists and decking.
- Slippery roof coverings and surfaces.
- Broken access hatches.
- Mineral wool dust, mortar dropping, birds' nesting material and excrement in roof voids.
- Cornered birds and vermin.
- Insects, bugs and lice. Bee and wasp colonies.
- Water cooling plant may harbour legionella.
- Unguarded flat roofs.
- Broken, loose, rotten and slippery crawling boards and escape ladders.
- High winds during roof inspection.
- Ill-secured or flimsy, collapsible, sectional or fixed loft ladders.
- Concealed ceiling joists and low purlins.
- Ill-lit roof voids.

Unsafe Atmospheres

- Confined spaces with insufficient oxygen, including manholes, roof voids, cellars, vaults, ducts and sealed rooms.
- Rotting vegetation which may consume oxygen and give off poisonous fumes.
- Accumulation of poisonous or flammable gases in buildings on contaminated land.
- Stores containing flammable materials such as paint, adhesives, fuel and cleaning fluids.
- Hazardous substances, including toxic insecticides and fungicides.
- Gas build-up in sub-floor voids.

Live and Unsecured Services

- Electricity, gas, water and steam supplies.
- Awkward entrances into substations and fuel stores.
- Temporary lighting installations, mains connections and generators.
- Buried cables and pipes.

Hidden Traps, Ducts and Openings

- Lift and service shafts, stairwells and other unguarded openings.
- Manholes, including those obscured by flimsy coverings, cesspools, wells and septic tanks.

Intruders and Others

- Physical dangers from squatters and vagrants.
- Guard dogs.
- Health risks, including HIV, from discarded syringes, condoms and bodily fluids.
- Structures weakened by vandalism or arson.
- Aggressive tenants and property owners.

Contamination

- Asbestos, lead and other substances hazardous to health.
- PCB and PCN chemicals in electrical transformers and capacitors in fluorescent lighting fittings.
- Overhead electrical cables.
- Contaminated water supplies.
- Contaminated air conditioning systems; legionella.

Vermin and Birds

- Rats and mice; Weil's and other diseases.
- Bird droppings; psittacosis and others.
- Lice may be present in bedding, soft furniture and carpets.

Tips and Land Reclamation Sites

- Unstable slopes and ground.
- Water lagoons, ponds and other water-filled areas.
- Slurry and quicksand areas.
- Burning areas where tips are heating or on fire.
- Hazardous or harmful chemicals; liquid matters and wastes; contaminated land.
- Explosive and toxic gases and vapours.

Moving Plant/Vehicles

- Impact from moving vehicles.
- Dust and spray.
- Spillage from poorly loaded dumpers.
- Reversing.
- Overhead loads (crane lifts).
- Noise.

Process Plant

- Moving parts of plant, conveyor systems, etc.
- Dust.
- Noise.

GUIDANCE NOTE	CONSTRUCTION IN OCCUPIED PREMISES	Code: J201	Issue: A
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GENERAL

Working in occupied or partially occupied buildings, and adjacent to the general public, calls for particular care. Special precautions need to be taken to protect the occupants and their visitors. Their means of access and escape must be maintained at all times and additional temporary measures may be necessary to ensure this. Measures must also be taken to protect them against falls, falling materials, dust, vibration, fumes and other hazards.

If Asbestos is likely to be within the building, a sufficient Asbestos Survey should be in place. If present it must be ensured that all the required precautions have been taken to protect the work force, the occupants and their visitors.

Where possible, the workplace is to be completely segregated from the occupied section of the building by hoarding panels. If this is not a practical option then working areas should be clearly marked and access denied to non-construction personnel.

A fire alarm system, if in place, must be maintained - although part of a smoke/heat detection system may have to be temporarily disconnected or isolated when hot-works, such as burning or welding operations, are carried out. A hot-work permit system should be imposed for such work.

There can also be major problems with noise levels and vibration, which affect not only the worker but also the occupants of the building. Where it is reasonably practicable, noise-reduced compressors and other machinery is to be used to reduce the inconvenience. Where noise levels are specified in the conditions of the contract it will be necessary to carry out noise monitoring to ensure compliance.

SERVICES

Services should be inspected prior to commencement of the work. Arrangements must be made, before the start date, to ensure that services to the occupied part of the building are not compromised and that any supplies to the work area are sufficient to cope with demand. Consideration should be given to fitting RCD breakers on services to the occupied section that could be damaged by contractors' activities.

It is sometimes necessary to enhance services to meet the needs of modern information technology and environmental requirements. This can entail breaching fire stopping in services, recesses, ducts and voids where fire can spread rapidly. Care should be taken that occupants are not put at risk during such work.

Where work is to be carried out on the drainage system it must be done in such a way as to leave the drainage to the occupied section in a working condition and protected from rodent infestation.

GUIDANCE NOTE	COMPETENCY CARDS	Code: K002	Issue: A
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INTRODUCTION:

Since the late 1980's the HSE concept on competence has been central to improving health and safety performance and standards within the construction industry.

The Meaning of Competence

The Oxford English dictionary defines 'competent' as being adequately qualified or capable and effective. The practical definition is borne out by regulation 7 (5) of the management of health and safety regulations which states that a person is deemed to be competent if he or she has an adequate combination of training and experience or knowledge.

Competence is a combination of appropriate practical and theoretical knowledge and the ability to apply that knowledge in a work situation

What makes a construction worker 'competent'?

Current route to competence include:

- Qualifications (both-work based and college based).
- Short courses.
- Safety passport courses.
- Competent person development.
- On-the-job training.
- General experience.
- Refresher training, continual development and lifelong learning.

In construction one of the ways of proving this is by the use of Competency Cards. The most common competency card scheme in the construction industry is the Construction Skills Certification Scheme (CSCS).

There is a designated route through from trainee to management. Each level has a cross link to the associated trade and equivalent level of NVQ.

Additionally there are various boards covering different sectors of the industry. Construction Plant Competence Scheme (CPCS) deals with training levels within the use of heavy plant.

The Construction Industry Scaffolders Record Scheme (CISRS) deals with training levels within the scaffold industry.

There are other well-known training bodies such as:

- International Powered Access Federation (IPAF) these are a recognised training body in the mobile elevated platform sector.
- Prefabricated Access Suppliers and Manufacturers Association (PASMA) are a recognised training body for mobile towers and platforms.

It's not to say that the above training providers have to be used however they are one way of identifying the person has received the required training to carry out their task competently.

As part of a Principal Contractors construction phase plan there will be a section in this relating to training. This should always be reviewed as it may state the minimum requirement or type of training provider they require to work on site.

On receiving a copy of a competency card form a contractor it is advisable to contact the training association and cross reference the card to clarify if it is a genuine card.

REFERENCES

Regulations/ACoPs:

Construction Design and Management Regulations (Management Health and Safety in Construction) ACOP L144.

Appendix 4: Core Criteria for demonstration of competence.

THSP is a qualified training provider for a number of trade training bodies so please contact our training section of the company on:

Telephone: 03456 122 144 or email training@thsp.co.uk.

Links:

<http://www.thsp.co.uk/training>

<http://www.cscs.uk.com>

<http://www.cskills.org/education/cpcs/>

<http://www.cisrs.org.uk>

<http://www.ipaf.org/>

<http://www.pasma.co.uk/>

GUIDANCE NOTE	MANUAL HANDLING SOLUTIONS	Code: L002	Issue: A
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INTRODUCTION

The Manual Handling Regulations define manual handling operations as:

Transporting or supporting of a load, including the lifting, putting down, pushing, pulling, carrying or moving thereof by hand or by bodily force”

More than a third of all industrial injuries are caused by manual handling activities. Manual handling can result in injuries which may be acute or chronic. Acute injuries are the immediate type of injury such as cuts, bruises, torn ligaments or fractures. Chronic injuries are often cumulative and can result from poor posture or excessive repetition of activities and are often not associated with a single manual handling event. Chronic injuries may include back pain and musculo-skeletal disorders. Manual handling injuries can result in long term absence from work, compensation claims and regulatory action from the enforcing authority.

AVOIDING MANUAL HANDLING

Avoiding manual handling operations that may cause injury may be achieved by:

- Redesigning the task to avoid moving the load;
- Doing the job in a different way e.g. breaking the load down to smaller, more manageable units;
- Automation;
- Mechanisation;
- The use of mechanical manual handling aids;

FACTORS TO CONSIDER WHEN SELECTING LIFTING AND HANDLING AIDS

- Consult employees and safety representatives during assessment and when considering possible solutions;
- Seek advice on suitability from suppliers/hirers;
- Request equipment on trial basis, if possible, to check it solves the problem, again involve employees who will be expected to use it;
- Ask suppliers about other customers so you can see it in use;
- Check lifting equipment is CE-marked;
- Consider what maintenance will be required;
- Check the proposed use will be within the safe working load;
- Does it suit the area it will be used in? Is there enough room to manoeuvre, enough headroom etc.?
- Does it suit the terrain in terms of stability and ground surface?
- Consider other risks associated with introducing the lifting aid, e.g. site safety and driver training, concerning use of a fork lift truck.

Where implementing a long term solution may take some time e.g. procuring funding for mechanical aids, short term solutions must be introduced to reduce any high risks to an acceptable level.

GUIDANCE NOTE	FIRE MARSHALS / WARDENS	Code: M006	Issue: A
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INTRODUCTION

The Regulatory Reform (Fire Safety) Order requires that a responsible person is nominated, assisted by sufficient competent persons to implement procedures for the evacuation of people from a building in the event of fire, and similarly to undertake fire-fighting measures where necessary. Persons so nominated are usually referred to as fire wardens, with the person supervising them during an emergency, and who has overall responsibility for the evacuation plan, known as the fire marshal. Properly trained fire wardens with a heightened awareness and a responsible approach to fire and other emergency scenarios can be used to assist in achieving compliance with the emergency plan.

DUTIES OF THE FIRE WARDEN

The duties of the fire warden will depend on the Fire and Emergency Plan for the premises, however the general duties are likely to cover:-

- The carrying out of regular inspections of the premises to identify potential fire-related problems, or defects in the fire precautions in their area of responsibility.
- Ensuring that fire escape routes remain clear.
- Ensuring that fire and emergency route signage remains in good condition.
- Ensuring that the fire precautions in their area are not compromised by actions such as the wedging open of fire doors.
- Assisting people to evacuate in the event of fire or, if appropriate, other emergencies.
- Making the area safe in the event of an evacuation, i.e. stopping production or removing power where practicable or safe to do so.
- Ensuring that their area is clear when evacuated.
- Taking whatever action is required by the Fire and Emergency Plan with regard to the evacuation of people with disabilities.
- Ensuring that people are correctly mustered at the relevant assembly point, and accounted for.
- Passing on to the responsible person (fire marshal) the information that their area is clear, that all people are mustered or accounted for, or details, as far as is known, of people missing.
- Providing a contact point in a department for guidance or advice in their area of responsibility, even if only to pass the queries on to the fire marshal.
- Assisting in the induction of new entrants to the fire instructions for their area.
- Weekly documented checks of fire extinguishers, fire alarms and emergency lighting (if installed).

Working under the fire marshal, it is recommended that there is at least one fire warden appointed for each floor of the building, and for more complex buildings this number should be increased.

IN THE EVENT OF A FIRE

- Ensure that the alarm has been raised.
- Check that processes have been made safe.
- Evacuate staff from the building.
- Check that any staff with disabilities are assisted/taken to refuges or evacuated using the planned methods.
- Fight the fire, if safe to do so and if trained in the use of fire-fighting equipment.

THE FIRE MARSHAL

Generally in larger premises, the efforts of fire wardens need to be co-ordinated and someone needs to take charge during the evacuation. This person should be appointed by the company and is commonly known as the fire marshal. In smaller premises the fire marshal may have sole responsibility for fire precautions, and take on all duties themselves.

A key role of the fire marshal is to keep track of the effectiveness of the evacuation, undertake the “roll call” of staff and inform the fire brigade of any missing persons, their likely location(s) and any significant characteristics of the premises, e.g. the location of gas cylinders.

TRAINING & COMPETENCE

People nominated to undertake fire warden/marshal responsibilities must be adequately trained. The content of a fire warden training course would normally include:

- Methods by which the fire alarms are activated.
- Communications, particularly with the Emergency Services.
- Evacuation procedures.
- In-house emergency procedures.
- Detailed knowledge of the fire safety plan for the premises and familiarity with the emergency plan.
- Awareness of human behaviour in fires.
- How to encourage others to use the most appropriate escape route and direct people in emergency situations, performing a supervisory/managing role in any fire situation.
- The extent of their responsibilities to ensure safe evacuation, including how to search safely and recognise areas that are dangerous to enter
- Assisting those on the premises to leave, the difficulties that some people, particularly if disabled, may have in escaping and any special evacuation arrangements that have been pre-planned
- Their responsibilities for checking the premises to ensure everyone has left (usually within a specified area, floor or section of a building)
- The use of fire-fighting equipment IF SAFE TO DO SO, and the types and application of fire extinguishers and where they are located
- Liaising with the fire and rescue service on arrival
- Shutting down vital or dangerous equipment
- Checking zones of responsibility, thereby ensuring that no persons remain
- Ensuring all windows and doors are closed to prevent the spread of fire (in a bomb threat situation, all windows and doors should be left open)
- Checking off of personnel at the assembly point
- Reporting the result of the evacuation and assembly to the fire marshal or designated person and awaiting further instructions
- Informing personnel when it is safe to return to the building.

With regard to training on fire itself, fire wardens/marshals should be taught:

- How fires start and the risks of flashovers.
- The fire triangle (Heat, Oxygen, Ignition).
- Different classes of fire.
- Colour codes for extinguishers.
- Extinguishing agents.
- Use of suppressants.
- Methods of fire spread, e.g. convection, conduction and radiation.

There are no set rules on the frequency of refresher training for fire wardens/marshals, one period of training per year is adequate - although every six months is preferable.

GUIDANCE NOTE	FIRE INSTRUCTION AND DRILLS	Code: M007	Issue: B
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TRAINING AND INSTRUCTION

All employees shall receive instructions and training on initial employment and thereafter annually to ensure that they understand the fire precautions, the practical use of fire-extinguishers and hose reels, and the action to be taken in the event of a fire. This shall include persons engaged on duties outside normal working hours, such as security personnel and cleaners.

Such instruction shall be given by a competent person and shall be based upon written instructions.

The instruction and training shall include the following:

- The action to be taken on discovering a fire.
- The action to be taken on hearing the fire alarm.
- How to raise the alarm, including the location and activation of alarm points, telephones and alarm indicator panels.
- The correct method of calling the emergency services.
- The location and correct use of firefighting equipment.
- The escape routes to be used and the muster points.
- The importance of the need to ensure that fire doors are not obstructed or propped open and are closed when the alarm is sounded.
- The isolation of electrical and gas supplies and the stopping of machinery, where appropriate.
- The evacuation of members of the public and other persons who may occupy the building.

Certain categories of personnel shall be given further training in matters that are particular to their own responsibilities at the time of a fire. These categories shall include:

- Department heads.
- Security staff.
- Telephonists.
- Supervisory staff.

ALARM TESTS

The fire alarm shall be tested weekly in all buildings, using a different actuation point for each test. A check is to be carried out in each building to ensure that the alarm is audible from every position within the building.

FIRE DRILLS

Fire drills shall be carried out every 6 months. Consideration shall be given to the simulated blocking of fire evacuation routes to provide realistic conditions.

FIRE INSTRUCTION NOTICES

Notices detailing the action to be taken in the event of fire shall be displayed in conspicuous positions in all parts of the building.

RECORDS

Records shall be kept of all activities relating to fire and fire prevention and shall include:

- Dates of any training and instruction given, fire drills and alarm tests.
- Type of training, instruction, drill or test.
- Duration of training or drill.
- Name of person carrying out training, instruction, drill or test.
- Names of persons receiving training or instruction.

FIRE DRILL RECORD FORM

Date:	Time:	
Total number of participants:		
Staff:	Visitors:	Others (specify):
Evacuation time:		
Miscellaneous information (simulated inaccessibility, etc.):		
Problems identified:	Action to be taken:	Date action completed:
Signature:	Date of next drill:	

GUIDANCE NOTE	TRAINING REQUIREMENTS FOR FIRST AIDERS	Code: N002	Issue: B
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INTRODUCTION

UK Employers have an obligation under the Health and Safety (First Aid) Regulations to make adequate and appropriate first aid provision for their workforce.

As an employer you must provide training, which is carried out by a competent training provider; your selection of provider must be appropriate and adequate, it will be based on the requirements of your first aid assessment. The training provider should be selected after due diligence (Reasonable Investigation) has been conducted.

DUE DILIGENCE

The amount of effort you need to put into due diligence will vary depending on the training course selected.

Consider:

- The qualifications expected of trainers and assessors;
- Monitoring and quality assurance systems;
- Teaching and standards of first aid practice;
- Syllabus, Content and Certification.

The information within this guidance note should be used in conjunction with the information on assessing first aid requirements which is contained within Section N of your arrangements.

CATEGORIES OF FIRST AIDERS

FIRST AID AT WORK (FAW):

This is a comprehensive three day course covering everything required to be an official company first aider. It is especially useful for companies that are in high risk sectors or who have many employees.

On completion of training successful candidates should be able to provide emergency first aid at work including the following techniques:

- Administer first aid to a casualty who is unconscious (including seizure);
- Administer CPR;
- Administer first aid to a casualty who is choking;
- Administer first aid to a casualty who is wounded and bleeding;
- Administer first aid to a casualty suffering from shock;
- Provision of first aid for minor injuries (including small cuts, grazes and bruises, minor burns and scalds, small splinters).

In addition, attendees will learn how to administer first aid to a casualty with:

- Injuries to bones, muscles and joints - this includes spinal injuries;
- Chest injuries;
- Burns and scalds;
- Eye injuries;
- Sudden poisoning;
- Anaphylactic shock;

and recognise the presence of major illnesses and provide appropriate first aid (including heart attack, stroke, epilepsy, asthma and diabetes).

ANNUAL UPDATES FOR TRAINING

The HSE strongly recommend that people completing both the First Aid at Work and Emergency First Aid at Work course attend an annual update to refresh their skills. This annual update will take half a day (3 hours). This should be implemented to avoid “skills fade”.

EMERGENCY FIRST AIDER AT WORK (EFAW):

This is a one day course and is better suited for low risk environments and companies with few staff as outlined within the relevant risk assessment.

On completion of training successful candidates should be able to:

- Understand the role of the first aider including reference to:
 - The importance of preventing cross infection;
 - The need for recording incidents and actions;
 - The use of available equipment;
- Assess the situation and circumstances in order to act safely, promptly and effectively in an emergency;
- Administer first aid to a casualty who is unconscious (including seizure);
- Administer CPR;
- Administer first aid to a casualty who is choking;
- Administer first aid to a casualty who is wounded and bleeding;
- Administer first aid to a casualty who is suffering from shock;
- Provide appropriate first aid for minor injuries (including small cuts, grazes and bruises, minor burns and scalds, small splinters).

SPECIALIST FIRST AID TRAINING:

An employer may select an alternative level of first-aid training outside of the usual framework, if indicated by the first aid needs assessment. This is likely to contain all the elements of the FAW syllabus with the addition of site specific training needs.

APPOINTED PERSON:

When an employer’s first aid needs assessment identifies that a first aider is not necessary, the minimum requirement is to appoint a person to:

- Take charge when someone is injured or ill, including calling an ambulance if required;
- Look after the first aid equipment, e.g. restocking the first aid box.

This training could be undertaken by an employer in house.

Appointed Persons should not attempt to perform first aid or emergency care for which they have not received training.

RE-QUALIFICATION COURSES

To maintain a First Aid at Work qualification the holder must complete a two day re-qualification courses before the expiry date of their certificate.

To maintain an Emergency First Aid at Work qualification the holder must re-attend a one day courses for Emergency First Aid at Work before the expiry date of their certificate.

Certificates for both these courses are valid for three years.

REFERENCE

Regulations/ ACoPs: Health and Safety (First Aid) Regulations

Red Cross Guidance Notes

St Johns Ambulance Guidance Notes

GUIDANCE NOTE	RIDDOR REPORTING	Code: N005	Issue: F
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INTRODUCTION

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) require that some work-related accidents, diseases and dangerous occurrences are reported to the relevant enforcing authority (HSE, Local Authority or the Office of Rail and Road). Employers, the self-employed and those in control of work premises all have duties under RIDDOR.

TYPES OF REPORTABLE INJURY

DEATHS

All deaths to workers and non-workers, with the exception of suicides, must be reported if they arise from a work-related accident. This also includes an act of physical violence to a worker.

SPECIFIED INJURIES

If there is an accident connected with work and an employee, or a self-employed person working on company premises, the following Specified Injuries are reportable:

- Fracture other than to fingers, thumbs or toes;
- Any crush injury to the head or torso causing damage to the brain or internal organs;
- Amputation of an arm, hand, finger, thumb, leg or toe;
- Serious burns (including scalding) which:
 - Covers more than 10% of the body; or
 - Causes significant damage to the eyes, respiratory system or other vital organs;
- Any scalping requiring hospital treatment;
- Any injury likely to lead to permanent loss of sight or reduction in sight;
- Any loss of consciousness caused by head injury or asphyxia;
- Any other injury arising from working in an enclosed space which:
 - Leads to hypothermia or heat induced illness, or
 - Requires resuscitation or admittance to hospital for more than 24 hours.

OVER SEVEN DAY-INCAPACITATION OF A WORKER

Accidents must be reported where they result in an employee or self-employed person being away from work, or unable to perform their normal work duties, for more than seven consecutive days as the result of the injury. This seven day period does not include the day of the accident, but does include weekends and rest days.

OVER 3 DAY INCAPACITATIONS

Accidents must be recorded, but not reported, where they result in a worker being incapacitated for more than three consecutive days. This should be recorded in the accident book.

NON FATAL INJURIES TO NON-WORKERS

You must report injuries to members of the public or people who are not at work if they are injured through a work-related accident and are taken from the scene of the accident to hospital for treatment to that injury. (Examinations and diagnostic tests do not constitute 'treatment' in such circumstances).

There is no need to report incidents where people are taken to hospital purely as a precaution when no injury is apparent.

If the accident occurred at a hospital, the report only needs to be made if the injury is a 'Specified Injury'.

EXEMPTIONS

Reports are not required under RIDDOR in relation to the following:

- Accidents during medical or dental treatment or during any examination carried out or supervised by a doctor or dentist;
- Accidents involving the movement of a vehicle on a public road (other than those associated with: loading or unloading operations; work alongside the road such as road maintenance; escapes of substances from the vehicle; and accidents involving trains);
- Accidents to members of the armed forces on duty.

REPORTABLE OCCUPATIONAL DISEASE

Employees and self-employed people must report diagnoses of certain occupational diseases, where these are likely to have been caused or made worse by their work.

A reportable disease must be diagnosed by a Doctor.

Reportable Work-Related Diseases include:

- Carpal Tunnel Syndrome;
- Severe Cramp of the Hand or Forearm;
- Occupational Dermatitis;
- Hand Arm Vibration Syndrome;
- Occupational Asthma;
- Tendonitis or Tenosynovitis of the Hand or Forearm;
- Any Occupational Cancer;
- Any Disease attributed to an occupational exposure to a biological agent.

DANGEROUS OCCURRENCE

Dangerous occurrences are certain, specified near-miss events. Not all such events are reportable. There are 27 categories of dangerous occurrences that are relevant to most workplaces. Additional categories of dangerous occurrences apply to mines, quarries, relevant transport systems, railways and offshore workplaces.

The following are reportable dangerous occurrences:

Lifting equipment

1. The collapse, overturning or failure of any load-bearing part of any lifting equipment, other than an accessory for lifting;

Pressure systems

2. The failure of any closed vessel, its protective devices or any associated pipework (other than a pipeline) forming part of a pressure system as defined by regulation 2(1) of the Pressure Systems Safety Regulations, where that failure could cause the death of any person;

Overhead electrical lines

3. Any plant or equipment unintentionally coming into contact with an uninsulated overhead electric line in which the voltage exceeds 200 volts; or close proximity with such an electric line, such that it causes an electrical discharge;

Electrical incidents causing explosion or fire

4. Any explosion or fire caused by an electrical short circuit or overload (including those resulting from accidental damage to the electrical plant) which either results in the stoppage of the plant involved for more than 24 hours; or causes a significant risk of death;

Explosives

5. Any unintentional fire, explosion or ignition at a site where the manufacture or storage of explosives requires a licence or registration, as the case may be under regulation 9, 10 or 11 of the Manufacture and Storage of Explosives Regulations, or explosion or ignition of explosives (unless caused by the unintentional discharge of a weapon, where, apart from that unintentional discharge, the weapon and explosives functioned as they were designed to) except where a fail-safe device or safe system of work prevented any person being endangered as a result of the fire, explosion or ignition;
6. The misfire of explosives (other than at a mine or quarry, inside a well or involving a weapon) except where a fail-safe device or safe system of work prevented any person being endangered as a result of the misfire;
7. Any explosion, discharge or intentional fire or ignition which causes any injury to a person requiring first-aid or medical treatment, other than at a mine or quarry;
8. The protection of material beyond the boundary of the site on which the explosives are being used, or beyond the danger zone of the site, which caused or might have caused injury, except in a quarry;
9. The failure of shots to cause the intended collapse or direction of fall of a structure in any demolition operation;

Biological agents

- 10 Any accident or incident which results or could have resulted in the release or escape of a biological agent likely to cause severe human infection or illness;
- 11 The malfunction of a radiation generator or its ancillary equipment used in fixed or mobile industrial radiography, the irradiation of food or the processing of products by irradiation, which causes it to fail to de-energise at the end of the intended exposure period; or equipment used in fixed or mobile industrial radiography or gamma irradiation, which causes a radioactive source to fail to return to its safe position by the normal means at the end of the intended exposure period;

Breathing apparatus

- 12 The malfunction of breathing apparatus (other than at a mine): where the malfunction causes a significant risk of personal injury to the user; or during testing immediately prior to use, where the malfunction would have caused a significant risk to the health and safety of the user had it occurred during use;

Diving operations

- 13 The failure, damaging or endangering of any life support equipment, including control panels, hoses and breathing apparatus; or the dive platform, or any failure of the dive platform to remain on station which causes a significant risk of personal injury to a diver;
14. The failure or endangering of any lifting equipment associated with a diving operation;
- 15 The trapping of a diver;
- 16 Any explosion in the vicinity of a diver;
- 17 Any uncontrolled ascent or any omitted decompression which causes a significant risk of personal injury to a diver;

Collapse of scaffolding

- 18 The complete or partial collapse (including falling, buckling or overturning) of a substantial part of any scaffold more than 5 metres in height; any supporting part of any slung or suspended scaffold which causes a working platform to fall (whether or not in use); or any part of any scaffold in circumstances such that there would be a significant risk of drowning to a person falling from the scaffold;

Train Collisions

- 19 The collision of a train with any other train or vehicle, other than a collision reportable under Schedule 2 Part 5 of the RIDDOR Regulations, which could have caused the death or Specified Injury of any person;

Wells

- 20 In relation to a well (other than a well sunk for the purpose of the abstraction of water):
 - A blow-out;
 - The coming into operation of a blow-out prevention or diversion system to control flow of well-fluids where normal control procedures fail;
 - The detection of hydrogen sulphide at a well or in samples of well-fluids where the responsible person did not anticipate its presence in the reservoir drawn on by the well;
 - The taking of precautionary measures additional to any contained in the original drilling programme where a planned minimum separation distance between adjacent wells was not maintained; or
 - The mechanical failure of any part of a well or whose purpose is to prevent or limit the effect of the unintentional release of fluids from a well or a reservoir being drawn on by a well, or whose failure would cause or contribute to such a release;

Pipelines or pipeline works

- 21 In relation to a pipeline or pipeline works: any damage to, accidental or uncontrolled release from or inrush of anything into a pipeline; the failure of any pipeline isolation device, associated equipment or system; or the failure of equipment involved with pipeline works, which could cause personal injury to any person, or which results in the pipeline being shut down for more than 24 hours;
- 22 The unintentional change in position of a pipeline, or in the subsoil or seabed in the vicinity, which requires immediate attention to safeguard the pipeline's integrity or safety;

The following dangerous occurrences are reportable except in relation to offshore workplaces:

Structural Collapse

23 The unintentional collapse or partial collapse of:

- Any structure, which involves a fall of more than 5 tonnes of material; or
- Any floor or wall of any place of work;

arising from, or in connection with ongoing construction work (including demolition, refurbishment and maintenance), whether above or below ground;

24 The unintentional collapse or partial collapse of any falsework;

Explosion or fire

25 Any unintentional explosion or fire in any plant or premises which results in the stoppage of that plant, or suspension of normal work in those premises, for more than 24 hours;

Release of flammable liquids and gases

26 The sudden, unintentional and uncontrolled release:

- Inside a building of:
 - 100kg or more of flammable liquid;
 - 10kg or more of flammable liquid above its normal boiling point;
 - 10kg or more of flammable gas;
- In the open air, of 500 kilograms or more of a flammable liquid or gas;

Hazardous escapes of substances

27 The unintentional release or escape of any substance which could cause personal injury to any person other than through the combustion of flammable liquids or gases;

Specialist cases relating to Mines, Quarries, Relevant Transport Systems and Offshore Workplaces are detailed within Schedule 2 Parts 3 - 6 of the RIDDOR Regulations.

NEAR MISS

A near miss is any other occurrence where injury has not occurred but which clearly could have done. The term “near miss” has no basis in law but is a term frequently used in safety management. Enforcing authorities do not need to be notified of near misses. However, it is strongly recommended that a full investigation is carried out in line with the company’s accident reporting and investigation procedures.

NOTIFICATION/REPORTING

All reportable injuries must be reported to the enforcing authority by the 'responsible person' as follows:

- Deaths and specified injuries;
- Non-fatal accidents requiring hospital treatment to non-workers;
- Dangerous occurrences;

without delay and a report must be received by the enforcing authority within 10 days.

Over-seven day incapacitation of a worker, a report must be submitted to the enforcing authority within fifteen days of the incident.

Deaths and Specified Injuries can be notified by telephone to the National Incident Contact Centre between the hours of 8.30 a.m. and 5.00 p.m. on weekdays.

Telephone the Incident Contact Centre on:

0345 300 9923

Reporting of all other incidents under RIDDOR must be submitted via the relevant online interactive form, available on the HSE Website - www.hse.gov.uk/riddor

On line forms are:

- F2508IE Report of an Injury;
- F2508DOE Report of a Dangerous Occurrence;
- F2508AE Report of a Case of Disease;
- OIR9BIE Report of an Injury Offshore;
- OIR9BDOE Report of a Dangerous Occurrence Offshore;
- F2508G1E Report of a Flammable Gas Incident;
- F2508G2E Report of a Dangerous Gas Fitting.

CONTACTING THE HSE OUT OF HOURS

The types of circumstances where HSE may need to respond out of hours are:

- Following a work-related death;
- Following a serious accident where there have been multiple casualties;
- Following an incident which has caused major disruption such as evacuation of people, closure of roads, large numbers of people going to hospital etc.

The duty officer can be contacted on **0151 922 9235**.

RESPONSIBLE PERSON

Employer - if you are an employer, you must report any work-related deaths, and certain work-related injuries, cases of disease, and near misses involving your employees wherever they are working.

Person in control of Premises - If you are in control of the premises, you must report any work-related deaths, certain injuries to members of the public and self-employed people on your premises, and dangerous occurrences that occur on your premises.

Self-employed - If you are working in someone else's work premises and suffer either a specified injury or an over seven-day injury, then the person in control of the premises will be responsible for reporting. If there is a reportable accident while you are working on your own premises or in a domestic premises, or if a doctor tells you that you have a work-related disease or condition, then you need to report it.

An Employment Agency - The status of agency workers is not always clear to the worker, or to the organisations who are supplied with the labour. In many cases, the employment agency is the legal employer, and is under the same legal obligations as any other employer to report accidents and ill health to their employees. In other cases, for instance where workers are self-employed, the duty is on the host business to report accidents as the person is in control of the premises where an accident occurs.

Agencies should ensure that the responsibility for reporting under RIDDOR is clearly assigned to the appropriate person, and the host business and the workers fully understand their responsibilities.

A gas supplier - If you are a distributor, filler, importer or supplier of flammable gas and you learn either directly or indirectly that someone has died, lost consciousness or been taken to hospital because of an injury suffered in connection with the gas you distributed, filled, imported or supplied, then this must be reported.

A gas engineer - If you are a gas engineer registered with the Gas Safe Register, you or your employer must provide details of any gas appliances or fittings that you consider to be dangerous, to such an extent that people could die or suffer a major injury, because the design, construction, installation, modification or services could result in:

- An accidental leakage of gas;
- Inadequate combustion of gas; or
- Inadequate removal of products of the combustion of gas.

GUIDANCE NOTE	PRE-EMPLOYMENT HEALTH SCREENING	Code: O002	Issue: A
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GENERAL

The Equality Act 2010 came into force on 1st October 2010. It replaced all previous discrimination legislation and aims to update, simplify and strengthen legislation so as to protect individuals from unfair treatment and promote a fair and more equal society. The Act protects individuals on the grounds of age, disability, gender reassignment, race, religion or belief (including lack of belief) sex, sexual orientation, marriage and civil partnership, and pregnancy and maternity. These are described as “protected characteristics”.

The Act also prohibits employers, or third parties acting on their behalf, from asking potential employees about their health before offering them work through pre-employment questionnaires. Companies who do ask job candidates about health pre-employment will find it harder to defend a claim against disability discrimination from an unsuccessful candidate.

The Equality and Human Rights Commission can take enforcement action against you if you ask job applicants any health or disability related questions that are not allowed by the Act. This includes sending health questionnaires to job applicants asking questions other than those that are permissible under the Act before you have offered them a job.

The Act does however allow for certain circumstances where you can ask health related questions before you offer an individual a job. Those circumstances are restricted to asking questions that:

- Will allow you to make any reasonable adjustments for the individual during the recruitment and selection process;
- Will help you to decide whether a candidate can carry out a function that is essential (intrinsic) to the work they will be required to undertake;
- Will assist you in monitoring the diversity among people making applications for jobs;
- Will help you to take positive action to assist disabled individuals; and,
- Will assure you that the candidate has the disability where the job genuinely requires the individual to have a disability.

Once an individual has passed the interview stage and they have been given an offer of employment you are permitted to ask appropriate health questions. When making an offer of employment, consider making it subject to a satisfactory health report. Remember that should you withdraw an offer of employment on health grounds you must be able to prove that the health issues raised mean an individual is unable to carry out an intrinsic function of the role.

JOB APPLICANT'S INFORMATION

It is perfectly acceptable for an employer to establish what skills, qualities, qualifications or experience an individual may have to ensure they are suitable for the job. This type of information is usually gathered via application forms or curriculum vitae (CVs). This information must not be used to directly discriminate unlawfully against them, e.g. an applicant being rejected because they fall within one of the “protected characteristics” mentioned above.

It is however acceptable for you to ask questions where the question relates to a person's ability to carry out a function that is intrinsic (or absolutely fundamental) to that job. Where a health or disability related question would mean you would know if a person can carry out that function with reasonable adjustments in place, then you can ask the question.

An example given in the Equality Act's explanatory notes of "intrinsic to the work concerned" is a warehouse job involving heavy lifting, where the employer would be permitted to ask questions relevant to establishing whether the employee is able to cope with such duties.

REASONABLE ADJUSTMENTS

As before, the Act puts a duty on employers to make reasonable adjustments. Reasonable adjustments ensure that in any particular case a disabled job applicant or employee is not disadvantaged by reason of working practices or the physical features of premises. The Act also includes a duty to take reasonable steps to provide auxiliary aids/services where this could alleviate any disadvantage and makes it clear that the costs should not be passed on to the disabled person. You should seek professional advice when considering reasonable adjustments and what is practicable.

GOOD PRACTICE

Use job descriptions and person specifications to aid recruitment. These focus on the key requirements of the role including skills, experience and qualifications. They will help you to more easily identify the right person for the job and will help to avoid discrimination. When using job descriptions and personal specification you should make it clear what the job involves and the skills, qualifications, qualities and experience you are looking for. Try to avoid making assumptions how a job will be done as there could potentially be a different way of doing it which may include making reasonable adjustments. When specifying skills, qualifications, qualities and experience try to be clear as to whether they are essential or desirable.

GUIDANCE NOTE	EMPLOYEE HEALTH QUESTIONNAIRES	Code: O017	Issue: B
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INTRODUCTION

It is recommended that the monitoring of health related issues is undertaken in conjunction with external occupational health providers.

In many cases, a simple health questionnaire will provide adequate information on the fitness of an individual to carry out the work required of them. For others, an interview or an examination and biological tests may be necessary.

For the majority of employees, demonstrating fitness for work will be a routine formality, but a more detailed assessment may be necessary for staff involved with specific hazards. In some cases the organisation may seek the advice of an independent occupational health doctor on the advice of the occupational health provider. This function applies:

- before employment;
- before transfer to a different job within the organisation;
- on return to work following illness or injury;
- in situations where work performance is being adversely affected by a health problem.

The occupational health provider may need to discuss the working situation with the local manager or GP prior to any decision being reached about an applicant's or existing employee's fitness for work. Pertinent medical advice can then be given.

When an employee has health problems requiring consideration for rehabilitation after illness, discussions will take place between the employee, the human resource manager and the local managers.

HEALTH MAINTENANCE

There are situations where it will be necessary to review at regular intervals the health of certain staff and the environment they work in. This should be done informally or by confidential interview with the occupational health provider and an example of the typical health questionnaire they may use is overleaf.

This document helps the employer to assess whether the employee would be able to carry out his assigned duties effectively.

It also establishes the fact that whether the employee has any health hazards. All the questions answered in the questionnaire should be checked by a health practitioner. The answers are always kept confidential.

Employee Health Questionnaire

Please complete this questionnaire. All the information provided by you will be kept confidential.

Name: _____

Middle Name: _____

Surname: _____

Date of Birth: _____

Address: _____

Telephone Number: _____

Department: _____

Job Title: _____

Please tick the answer to the questions below, and if you answer yes to any please provide details or further information on the next page.

No:	Question	Yes	No
General			
1	Do you suffer from diabetes and/or need insulin?		
2	Do you suffer from epilepsy or fits?		
3	Do you have any medical condition(s), illnesses or any disability?		
4	Are you taking any medication that causes dizziness, drowsiness or other side effects?		
5	Have you had any accidents, illnesses or incidents requiring hospitalisation or operations in the last 3 years?		
6	Have you had any alcohol related illness during the last 12 months?		
7	Have you used any drugs in the past 12 months?		
8	Have you ever suffered from any mental illness, depression or stress related issues?		
9	Have you ever been signed off work due to stress, depression or mental illness?		
10	Do you have any allergic conditions?		
11	Do you have any other physical/medical condition which could affect your or others' safety?		
12	Have you been exposed to any lead, asbestos, chemical or biological agent in the last 6 months?		
13	Have you ever suffered from ill effects due to contact with or exposure to lead or asbestos or to a chemical or biological agent?		
Eyes			
14	Are you colour blind?		
15	Do you have any difficulty with your eyesight? (Simple problems requiring glasses need not be included)		
16	Have you ever suffered an eye injury on any other type of eye problem?		
Respiratory			
17	Have you suffered with re-occurring chest, bronchial or respiratory problems?		
18	Are you asthmatic? If so, please provide details of severity of asthma and medications/ treatments undertaken.		
19	Do you have any other respiratory condition?		
20	Have you suffered from any respiratory illnesses or breathing difficulties in the last 12 months?		
Hearing			
21	Do you suffer from any form of deafness?		
22	Do you have any difficulty in hearing normal conversations?		
Vibration			
23	Do you use power tools that oscillate or rotate as part of your regular daily working life? If so, for how many years?		
24	Have you ever suffered from swelling at the base of the fingers as a result of using oscillating or rotating tools? (Generally known as power tools)		
25	Do you now, or have you ever suffered from HAVS or any other condition related to the use of vibrating equipment?		
26	Do you suffer from poor circulation, chilblains or particularly cold hands/toes/nose in cold weather?		
Muscular/Skeletal			
27	Do you now or have you ever suffered from any back or musculoskeletal disorders, including any strains, injuries, operations, or undergone treatments such as osteopathy or chiropractic?		
Skin			
28	Do you now, or have you ever suffered from any skin conditions such as eczema, psoriasis or similar?		
29	Have you ever suffered from dry, cracked, sensitive or peeling skin?		
30	Have you, in the past, used barrier and moisturising creams to protect your skin whilst at work?		

Please provide details or further information:

.....
Employee Name:

.....
Employee Signature: **Date:**

For Office Use Only:

Reviewed By:

Date:

Comments/actions:.

Health Surveillance Annual Review			
In the last 12 months:		Yes	No
A	Have you suffered from any sensitivity, dryness or irritation to your skin?		
B	Have you had any problems with your eyesight?		
C	Have you had any problems with your hearing?		
D	Have you had any problems with your back or joints?		
E	Have you developed any medical conditions?		
F	Have you suffered any injuries?		
G	Have you been ill? Please list		
H	Have you suffered from any mental illness, depression or stress?		
I	Have you had any accidents, incidents or near misses at work?		
If yes, please provide details or further information:			
Employee Name: Employee Signature: Date:			
For Office Use Only: Reviewed By: Date: Comments/actions: .			

GUIDANCE NOTE	FOOT PROTECTION	Code: P002	Issue: A
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INTRODUCTION

Foot injuries are common whilst at work, and employers have basic duties regarding the provision and use of personal protective equipment to safeguard the feet.

CAUSES OF INJURY

Foot injuries usually result from the following causes:-

- Crushing caused by heavy objects falling onto part or all of the foot.
- Foot penetration due to standing or walking onto a sharp object, e.g. nails left imbedded in timber.
- Contact with irritant or corrosive chemicals, e.g. cement burns whilst pouring concrete.

LEGAL REQUIREMENTS

The Personal Protective Equipment at Work Regulations governs the provision and use of all protective clothing, including footwear. Where a risk assessment identifies the need for safety footwear to protect against one or more of the risks outlined above, this must be provided free of charge by the employer or the self-employed.

The regulations also require that:

- The footwear is properly assessed before use to ensure it is suitable.
- It is maintained and stored properly.
- It is provided with instructions on how to use it safely.
- It is used correctly by employees.

ASSESSING SUITABLE SAFETY FOOTWEAR

To allow for the right type of safety footwear, carefully consider the different hazards in the workplace, this will enable you to assess which types of footwear are suitable to protect against your particular hazards.

Ask your supplier for advice on the different types of footwear available, and how suitable they are for different tasks.

Where a significant risk of foot injuries exist, the footwear should:

- Be strong enough to withstand the stresses placed upon it.
- Have protected (steel) toecaps capable of resisting a heavy falling object.
- Where there is a risk of foot penetration the footwear should incorporate a steel midsole, or other armouring to prevent this type of injury.
- Be robust enough and have sufficient grip for the working environment.

It must also be:

- Comfortable.
- Flexible to reduce the risk of tiring legs and feet.
- Capable of absorbing perspiration.
- Waterproof (where required).

COMMON TYPES OF SAFETY FOOTWEAR

- **The Safety Boot or Shoe.** This is the most common type of safety footwear and it has a steel toecap and most types have a protected mid-sole. They are usually worn in construction or industry where heavy items could fall onto feet.
- **Wellington Boots.** These should be worn to protect against water and corrosive materials such as cement. They are usually made of rubber, but are available in polyurethane and PVC which is warmer and more resistant to chemicals, oils, petrol, greases and sunlight. Wellington boots can be obtained with corrosion and impact resistant toe-caps, rot-proof insoles, ankle bone padding and cotton linings. They range from ankle boots to chest waders. This type of footwear should be worn for operations where water or other liquids may be present.
- **Safety Trainers.** In recent years a range of softer, more flexible safety footwear, known as safety trainers have been introduced. These are fitted with a protective toe-cap and anti-slip soles. Whilst their resistance to sole penetration is usually less than that provided by the safety boot, they can be worn for a wide variety of work activities, provided the area is free from materials likely to penetrate the wearers' foot.

MAINTENANCE

Safety footwear should be maintained in good condition, checked regularly and discarded if worn or deteriorated. Laces should be checked and replaced as necessary. (Do not replace laces with bits of wire or string) Materials lodged into the tread should be removed. The stitching should be checked for loose, worn, or cut seams. Spraying the upper layers of new footwear with a silicone spray or applying protective wax will give extra protection against wet conditions.

CE MARKING

Ensure that any safety footwear purchased is “CE” marked and complies with the requirements of the Personal Protective Equipment Regulations. The CE marking signifies that the footwear satisfies certain basic safety requirements and in some cases will have been tested and certificated by an independent body.

GUIDANCE NOTE	HAND PROTECTION	Code: P003	Issue: A
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DECIDING WHAT TYPE OF HAND/ARM PROTECTION IS NEEDED

Safety gloves are available in a wide range of types. The type and degree of protection afforded by gloves will depend on the glove material and the way the glove is constructed. Gloves must be comfortable, fit well and be suitable for purpose. There is no point insisting on the use of gloves if an operative cannot grip, handle, feel the item they are using. A wide range of sizes may be needed to cater for all employees.

Suppliers of PPE should be able to provide further information on what type is suitable. The choice depends on the exact nature of the hazard(s) involved. The most common types of gloves include the following:

- Chemical protection gloves protect against contact with substances such as acids, alkalis, solvents, irritants, etc. Protection can be provided by many different materials.
- Gloves that protect against excessive high and low temperatures can be provided, made of materials such as Kevlar, terrycloth, glass fibre and leather, etc.
- Gloves providing protection against sharp edges, including splinters and abrasives, etc. and made of leather, chain-mail, knitted Kevlar, etc.
- General use gloves are made from materials such as rubber, plastic and knitted fabric. They can resist abrasion, repel some liquids and provide a good grip. Some thin gloves can protect the hands while still providing good dexterity and touch, such as those used by surgeons. In most cases, general-purpose gloves should only be used against low risks.

The types of hazards which can be protected against include the following.

- Penetration and abrasion: gloves made from chain mail will resist strong sharp cuts; chain mail, leather, nitrile and PVC with fabric liner can protect from penetration and abrasion. Knitted Kevlar gloves will protect against cuts, and Kevlar needlefelt gives good puncture resistance.
- Thermal protection: available in various weights and construction, cotton terrycloth gloves will protect from both heat and cold, (but they do tend to impede dexterity). Neoprene gloves are good for handling oils in low temperatures. Gloves made from Kevlar, glass fibre and leather can protect against higher temperatures, and aluminised gloves can be used to handle hot materials such as would be used in foundries.
- Fire resistance: chromed leather gloves are fire retardant.
- Chemicals (contamination) protection: the degree of chemical protection will depend on the glove material, its thickness and method of construction. It is vital that manufacturers are consulted and their instructions followed regarding gloves to protect against chemicals, especially toxic chemicals where the time taken for the chemical to get through the glove material is the critical factor. Materials available are natural rubber; synthetic rubbers such as neoprene, nitrile and butyl; and "plastics" e.g. PVC, PVA and Viton. Any chemical resistant gloves may be used when handling powdered chemicals, but some glove materials may be adversely affected by abrasion.
- General glove use: natural and synthetic rubber, plastic or knitted fabric gloves will allow dexterity, resist cuts and abrasions, repel liquids and allow a good grip. Rubber gloves are softer and allow a sensitive touch and give a firm grip in water or wet conditions. Leather, cotton knit or other general purpose gloves are suitable for most common jobs. General purpose gloves should only be worn to protect against minimal risks to health and safety, such as gardening and washing up, and similar low-risk tasks.

- Electrical hazards: voltage and the conditions in which the hazard exists should be taken into account, but generally natural rubber latex gloves offer excellent electrical insulating properties. Protective gloves designed for electrical insulation purposes are covered by a stringent standard BS EN 60903: Live Working. Gloves of Insulating Material. Gloves used for electrical safety within the EU must conform to this standard.

When providing protection against chemicals, it is important to know the exact nature of the substances in order to identify suitable glove materials. The safety data sheets on the substances may provide some information on which types of gloves are acceptable.

The degree of protection provided by gloves will depend on:

- The material used.
- The thickness of the gloves.
- How they have been made.

In addition to hand protection, the provision of arm protection may be needed. This could be in the form of long gloves or as separate arm protectors, which can complement shorter gloves for some risks, such as heat protection.

Barrier cream can be useful in some circumstances where it is not possible to use gloves. For example, gloves are not suitable in a machine shop but there may be coolants and other substances that can affect the skin. However, barrier creams are not a substitute for suitable gloves.

Latex gloves can be very useful at work, however, some people are allergic to latex and are unable to use gloves made of this material. They may react to the powder present on the gloves. In this case, other employees should not use this type of glove near to anyone with a latex allergy.

Working for long periods wearing impervious gloves can adversely affect the skin, causing sweating and irritation. It might also aggravate existing skin conditions. Wearing a pair of thin cotton-lined gloves under the impervious ones can help reduce this problem.

Gloves should not be worn by anyone working with moving machinery (e.g. drills, lathes, etc.) because of the risk that the gloves may get caught in the machine and cause the wearer to be drawn in.

HAND AND ARM PROTECTION: STORAGE AND MAINTENANCE

Care should be taken when putting on, using, taking off, and storing gloves. They should be kept in good condition, checked regularly and changed if damaged, worn or deteriorated. They should:

- Be free from holes, cuts or tears.
- Have no foreign bodies or materials embedded in the glove material.
- Not be distorted out of shape.

Gloves should be stored somewhere clean and free from contamination. There should be adequate facilities for the disposal of contaminated protective gloves.

Glove cleaning should be carried out following the manufacturer's recommendations as special conditions or requirements might apply. For example, repeated washing may remove fungal or bacterial inhibitors from the lining of the glove which may ultimately lead to skin irritation. There is also a risk of cross-contamination as chemical residues can remain on gloves even after washing.

Contact between gloves and chemicals should be kept to a minimum, as some chemicals can alter the physical characteristics of a glove and impair its protective properties. Gloves contaminated by chemicals should be washed as soon as possible and before they are removed from the hands.

People using non-disposable gloves for chemical protection should clean the gloves before taking them off and then take them off in a manner that does not risk them contaminating themselves or the insides of the gloves. If they are grossly contaminated, they should be thrown away.

People using disposable gloves should take them off so that they do not touch the outside of the gloves. This can be done by pulling from the cuff and turning the glove inside out while removing it, providing the cuff is not contaminated (in which case, longer gloves are probably required).

GUIDANCE NOTE	RESPIRATORY PROTECTION RPE	Code: P004	Issue: B
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INTRODUCTION

Suitable respiratory protective equipment (RPE) must be provided if, despite the precautions taken, exposure is not adequately controlled. In the hierarchy of control measures RPE is regarded as the last resort as a means of controlling exposure to hazardous substances. It is only when the exposure cannot be adequately reduced by other means, including process and work methods modification and engineering controls, should the use of RPE be considered. Where RPE is provided, the employer must provide adequate training in its selection, use, maintenance and storage.

The RPE must be suitable for the purpose for which it is used. This means that it must provide effective protection to the wearer in the circumstances in which it is worn. It must be capable of providing a sufficient quantity of clean air for the wearer to breathe, it must fit the wearer and the wearer must use it properly in accordance with the manufacturer's instructions. If the respirator is not a disposable 'one shift' type, it must also be cleaned daily and maintained in accordance with the manufacturer's instructions. A risk assessment will identify which specific type of RPE is suitable

TYPES OF RESPIRATORY PROTECTIVE EQUIPMENT

RPE is divided into two groups; respirators and breathing apparatus, which are further divided into other classes.

- 1) Respirator (filtering device): this filters or cleans air before it is inhaled by the wearer. Respirators can protect against dust, fibres, fumes and gas, but are not suitable to be worn in environments which are immediately dangerous to life or health, i.e. those where there is little or no oxygen to breathe, such as a confined space.
- 2) Breathing apparatus (BA): this delivers breathable air or oxygen to the wearer from an independent source, either through an air-line or from a portable container. As a result, breathing apparatus may be suitable for environments that are immediately dangerous to health or life.

OTHER CLASSES OF RPE

These two groups are further sub-divided into other classes of RPE, such as:

- 1) Disposable and non-disposable half masks.
- 2) Air-line and container-fed breathing apparatus.

All disposable respirators must be individually CE-marked. They are also marked to show the European standard, EN 149, and class:

- FFP1 (low efficiency).
- FFP2 (medium efficiency).
- FFP3 (high efficiency).

It is vitally important to maintain RPE in effective and efficient working order.

- Follow the instructions in the manual.
- If any equipment is faulty, stop work until it is repaired.
- Make sure that users examine their RPE and test it works properly before each use.
- Examine and test RPE thoroughly at least once every three months.
- Check the air flow and air quality to air-fed RPE at least once every three months or before use.
- Ensure that compressors take in only clean air. Keep records of all examinations and tests for at least five years.
- Review records - failure patterns show where preventive maintenance is needed. If hot work involves cadmium, seek advice on biological monitoring.
- Make sure all RPE is properly fit-tested - get advice from your supplier.
- Make sure that workers check their RPE works properly before use.
- Replace RPE filters as recommended by your supplier. Throw away disposable masks after one use.
- Keep RPE clean and store it away from dust.

Everyone who is involved in the use of RPE should be appropriately trained. They must be aware of why the RPE is being worn and how it should be worn properly.

Training may be available from the supplier or manufacturer of your RPE.

FACE FIT TESTING

For RPE to be suitable it must be matched to the job, the environment, the anticipated airborne contaminant exposure level, and **JUST AS IMPORTANTLY**, the wearer. As people come in all sorts of shapes and sizes it is unlikely that one particular type, or size of RPE facepiece, will fit everyone. Fit testing will help ensure that the equipment selected is suitable for the wearer.

The Approved Codes of Practice (ACoPs) supporting the Control of Substances Hazardous to Health Regulations (COSHH), the Control of Lead at Work Regulations (CLAW), the Control of Asbestos Regulations (CAR) and the Ionising Radiation Regulations require that all reasonable steps be taken to prevent exposure to substances hazardous to health, or where prevention is not possible, to reduce exposure to the lowest level reasonably practicable.

The ACoPs supporting the COSHH, CLAW and CAR Regulations advise that the initial selection of tight-fitting facepieces should include a fit test. This is to ensure that the selected RPE has the potential to provide adequate protection for the wearer and circumstances where repeat fit testing is needed.

The employer must have documented evidence of the characteristics of the RPE to be used. These requirements are there to ensure that the RPE provided is suitable. The evidence to support the suitability will include fit test reports for facepieces with tight-fitting face seals.

Fit test reports should be available for all employees who wear RPE incorporating tight-fitting facepieces. Fit test records should be retained by the employer and available for inspection.

RPE fit testing should be conducted by a competent person. (Competence can be demonstrated through achieving accreditation under the Fit2Fit RPE Fit Test Providers Accreditation Scheme).

If an employee wears more than one type of tight-fitting facepiece then each type of facepiece should be subjected to fit testing.

The HSE are likely to take enforcement action in circumstances:

- 1) Where persons are wearing tight-fitting facepieces and have not undergone and passed an appropriate fit test;
- 2) Where fit test results are not readily available;
- 3) Where the results show that a particular mask did not fit the wearer and the wearer is continuing to use that type and size of facemask. Steps should have been taken to select a more appropriate facepiece and/or carry out retraining.

Face fit testing will need to be repeated wherever there are significant changes to the individual, such as following weight loss or gain, or following any changes to the work being undertaken, equipment used or hazard being encountered.

FACIAL HAIR

Where the RPE selected relies upon a close seal to the face it is essential that there are no gaps that will allow dirty or contaminated air in. Facial hair and stubble make it impossible to get a good seal.

Ensuring that you are clean-shaven when wearing tight-fitting masks is therefore essential to prevent hazardous substances entering the mask and your lungs.

If there are good reasons for having a beard (e.g. for religious reasons), alternative forms of RPE, that do not rely on a tight fit to the face, are available.

GUIDANCE NOTE	EYE PROTECTION	Code: P005	Issue: A
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EYE AND FACE PROTECTION

Any activities that include risks to the eyes that cannot be eliminated by other measures are likely to require eye protection. Activities that may involve splashes of chemicals or molten metals, dusts, gases, mists, sprays, bright light, etc. can all damage the eyes. Activities that might require PPE to protect the eyes and face include:

- Work with hazardous substances that cause burns and irritation, such as corrosives (acids and alkalis) or irritants (solvents, paints, bleach, etc.).
- Work with hazardous substances that can be absorbed through the skin, such as some solvents.
- Work with molten metals or other molten substances.
- Work with metal-cutting machinery.
- Work with power-driven tools and equipment.
- Work with hand tools for breaking, cutting, grinding or drilling hard materials; driving in pins, bolts or rivets; driving in masonry nails, cutting steel wires and banding; using cartridge operated hand tools; chipping metal and painted surfaces.
- Tasks involving the blasting or erosion of concrete and other masonry, buildings and structures by shot or compressed air or high pressure water jets.
- Dressing and grinding any materials with grinding machines, or by applying them to a grinding wheel, disc or band; breaking up with power or hand tools of concrete, masonry, bricks, tiles, glass, hard plastic, etc.
- Welding that gives off intense light or other optical radiation that could damage the eyes (e.g. causing arc eye).
- Use of UV light sources.
- Work on any process with equipment that produces light amplification (e.g. lasers) or radiation.
- Using any gas or vapour under pressure, including air guns.

Eye protection may be required not only for people carrying out the work, but also for others in the area who may come into contact with the processes and substances and therefore be at risk from the hazards. This should be identified when assessing risks.

DECIDING WHAT TYPE OF EYE/FACE PROTECTION IS NEEDED

There is a wide range of eye and face protection. Which type is suitable will depend on the risks involved. Suppliers of PPE should be able to provide further information on exactly which type will be suitable.

The main types of eye and face protection are as follows.

- Safety glasses or spectacles provide protection against impact from small objects. Different levels of impact resistance are available. They are similar to prescription glasses; however they have side shields that provide lateral protection. They are suitable for general working conditions where there may be minor dust, chips or flying particles. They provide little or no protection against liquids or vapours.
- Eye shields are similar to safety glasses; however they have a single frameless one-piece lens. These provide a similar level of protection to safety glasses. Some eye shields can be worn over prescription glasses.

- Safety goggles provide protection for the eyes from all angles as they provide a seal around the entire area of the eyes. They are used when the eyes need to be completely covered but the rest of the face does not need to be protected. Different types of goggles are available to provide protection from liquids, dusts, gases, vapours, molten metal and high impact levels. There are different designs to help prevent problems with fogging, however they need to be chosen carefully to ensure they are suitable for the work. Goggles can also be obtained with a range of filters to provide protection against lasers and welding.
- Face shields protect the face but do not fully enclose the eyes. Therefore, they do not provide protection against dusts, mists or gases, but can provide protection against impact, spraying, chipping, grinding or chemical splashes. They are frequently used in conjunction with eye protection, as they are not by themselves protective eyewear. They can include welding filters or reflective metal screens that deflect heat. These are useful in blast and open-hearth furnaces and other work involving radiant heat.

For protection against light and other non-ionising radiation (e.g. lasers, ultraviolet, welding flashes), it is important to make sure that you choose the correct type of filter.

SELECTING SUITABLE EYE/FACE PROTECTION

The selection of suitable eye protection depends primarily on the hazard, but comfort, style and durability should also be considered. Employees should be consulted and involved in the selection process.

Safety glasses are available in a variety of styles, weights and sizes, etc. They can include adjustable side arms and be fitted with prescription lenses for people who need them. They should be treated to reduce fogging problems. Most manufacturers offer a range of prescription safety spectacles which are individually matched to the wearer.

Eye shields can be useful for visitors and other people who only need eye protection for short periods as some styles can be worn over prescription glasses. However, wearing both an eye shield and prescription glasses is unlikely to be comfortable for long periods and so it is usually better to provide prescription safety glasses to employees.

Goggles are heavier and less comfortable than glasses; however they provide much better protection. They are more prone to misting and should be treated with anti-mist coatings.

Face shields are the heaviest and bulkiest form of protection, however they should be comfortable if they are fitted with an adjustable head harness.

IS THE EYE PROTECTION COMPATIBLE WITH THE WORK TO BE DONE?

Eye and face protection can interfere with how well people can see and this needs to be considered when selecting it.

It is often necessary to wear eye and face protection with other types of protection, especially respiratory protection. The best solution can be to use PPE that combines the different types of protection required.

EYE AND FACE PROTECTION: STORAGE AND MAINTENANCE

All eye protectors need to be properly cared for and stored. Personal issue eyewear should be stored in a suitable spectacle case or eyewear container when not in use. Those for visitors should also be suitably stored - usually in a purpose made "store-and-issue" wall mounted container.

The lenses of eye protectors must be kept clean; dirty lenses can restrict vision and cause eye fatigue, which can lead to accidents. If eye shields or other eye protection for visitors are provided, they should be thoroughly cleaned before they are reissued. It may be necessary to find out from the suppliers the best way of cleaning the lenses of safety eyewear. However, the best method for cleaning should in most cases be to wet the lenses with water or a proprietary lens cleaning fluid and wipe them dry with a tissue or lint-free cleaning cloth.

Anti-misting cleaning fluids may be needed if misting is a problem; lens cleaning fluid containing anti-misting and anti-static properties can be used.

Wiping lenses clean with a dry cloth, especially plastic or polycarbonate lenses, should be avoided as it may scratch them. Lenses that become scratched or pitted, or that have particles impacted on them, must be replaced as they may restrict vision and their impact resistance may also be impaired.

It is recommended that any issue of PPE to an operative is recorded in a register as this is proof that the associated PPE has been issued.

GUIDANCE NOTE	HIGH VISIBILITY CLOTHING	Code: P006	Issue: A
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INTRODUCTION

The Management of Health and Safety at Work Regulations require employers to assess the risks to their employees. Employers' risk assessments should identify all the tasks for which the workers will need HV clothing. Employers should also ensure that the clothing is not only suitable for the task but that it will be worn when required.

The selection and use of HV clothing are covered by the Personal Protective Equipment at Work Regulations 1992. In practice, this means that HV clothing will be mandatory for the majority of people whose work involves them spending time in or around vehicles or moving plant equipment.

Remember: HV clothing and other personal protective equipment (PPE) are always the last line of defence. Wherever possible other measures to reduce or control the risks should be adopted first.

SELECTION OF HV CLOTHING

Many factors should be taken into account to ensure that the correct clothing is chosen for a particular task.

Choice of clothing should take into account ambient and artificial lighting conditions at the workplace, and the effect of conditions such as fog and snow.

For some jobs an HV waistcoat, for example, may be all that is needed, but those workers who are particularly at risk, may need full body HV clothing so that they are as visible as possible to a driver or operator who is likely to be some distance away. HV clothing should provide adequate protection during the day and at night, as well as in adverse weather. AS A RULE: the darker the conditions or worksite, the greater the amount of HV clothing required.

To be effective HV clothing should be of a colour that will allow the wearer to stand out against the ambient background found in the working environment. In practice the best colours for this purpose are likely to be day-glo fluorescent orange or yellow. Where necessary the clothing should also incorporate retroreflective material to make the wearer visible when seen in headlights in poor lighting conditions or during darkness. This may require reflective strips at or below waist level on waistcoats or jackets, or strips on trousers.

HV clothing should be comfortable and fit the wearer properly. It should cause the minimum of restriction in the wearer's movement.

COMPATIBILITY WITH OTHER FORMS OF PPE

If two or more types of PPE are worn, they should not interfere with each other. Therefore for example, protective clothing for chemical spills should also provide the necessary level of conspicuity. Similarly, wet or cold weather clothing should have suitable HV qualities or be capable of being worn under HV garments.

BRITISH STANDARDS

HV clothing should be manufactured to a recognised standard. The British Standard for high visibility warning clothing is BS EN 471. This is a harmonised European standard produced with the legal requirements for PPE in mind. Clothing which conforms to the standard is marked with a pictogram like this: the first number (X) indicates the class of conspicuity, this depends on the minimum area of conspicuous materials that are incorporated into the clothing, with Class 3 being the best and Class 1 the lowest; the second number (Y) indicates the retroreflection performance with Class 2 being more visible than Class 1 when seen in headlights during darkness. The standard gives specifications for coveralls, jackets, waistcoats, tabards, trousers and harnesses. High visibility clothing must be 'CE' marked to show it meets the new European rules on the manufacture of PPE. Remember: the CE mark only means that the clothing meets the standard. It does not mean it can be used in all situations. HV clothing must be suitable for the actual conditions of use.

DUTIES OF EMPLOYERS

You must:

- Provide any HV clothing needed for the job free of charge to any employees who may be exposed to significant risks to their safety.
- Maintain HV clothing in a clean state and in good working order. It should be checked before being given to employees.
- Provide storage facilities for clothing when not in use.
- Provide adequate information, instruction and training to enable employees to use HV clothing correctly. This should include an explanation of the risks, why the clothing is needed, how and when it should be worn.
- Supervise employees to ensure that they wear the clothing correctly and whenever it is needed.

DUTIES OF EMPLOYEES

- Employees should wear the HV clothing provided as instructed by your employer.
- Look after clothing issued to you, check for and report any damage or defects to your employer.
- Use the storage facilities provided when the clothing is not in use.
- Remember: damaged or ill-fitting clothing will not protect you properly.

REFERENCES

Management of health and safety at work: approved code of practice.

Personal protective equipment at work: guidance on regulations.

British Standard BS EN 471 high visibility clothing.

GUIDANCE NOTE	HEARING PROTECTION	Code: P007	Issue: A
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INTRODUCTION

Hearing protection should be issued to all employees where extra protection is needed, over and above what has been achieved using noise control. It may also be used as a short term measure to protect employees whilst other methods of controlling noise are being developed. You should not however use hearing protection as an alternative to controlling noise by technical and organisational means.

EMPLOYERS DUTIES

Employees are required to:-

- Provide your employees with hearing protection if they ask for it, and their noise exposure is above the lower action level of 80Dba.
- Provide your employees with hearing protection, and ensure that they use it properly, when noise levels exceed the upper action level of 85 Dba.
- Identify hearing protection zones, that is, areas where the use of hearing protection is mandatory, and use signs to mark such areas where possible.
- Provide employees with training and information on how to use and care for the particular hearing protection that they are issued.
- Ensure that employees use and maintain their hearing protection correctly, so as to maximise their protection.

EMPLOYEES DUTIES

- Co-operate with your employer by wearing the hearing protection he has provided.
- Wear hearing protection properly, whenever you are in a hearing protection zone.
- Look after your hearing protection, do not modify it, and report any problems or damage to your supervisor immediately.
- Do not share hearing protection.
- Do not remove hearing protection, even for a short time whilst still within a hearing protection zone.

EFFECTIVE USE

- Ensure that hearing protection provides sufficient protection. The aim should be to achieve below 85Dba at the ear.
- Target the use of hearing protection at the noisy tasks and jobs that are carried out in a working day.
- Select hearing protection that is suitable for your particular working environment. This should include consideration of comfort and hygiene.
- Ensure that the selected hearing protection is compatible with other protective equipment such as hard hats, dust masks, and eye protection.
- Provide a range of hearing protection so that employees can select the one that suits them best.
- Do not provide hearing protection that cuts out too much noise. This can cause a feeling of isolation, and a subsequent unwillingness to wear it.
- Do not make the use of hearing protection compulsory in areas that do not require it, or introduce a “blanket” approach. Rather target its use, and only encourage employees to wear it when they need to.

MAINTENANCE

To ensure that hearing protection remains serviceable, and continues to work effectively you should check that:-

- It remains in good, clean condition.
- Earmuff seals are undamaged.
- The headband tension is not reduced.
- No unofficial modifications are made.
- Compressible earplugs are soft, pliable, and clean.

Supervisors should set an example by the wearing of hearing protection at all times whilst in a hearing protection zone, and should carry out spot checks to ensure that rules are being followed, and that hearing protection is being used correctly by employees.

TYPES OF HEARING PROTECTION

EARMUFFS

- Make sure that earmuffs totally cover the ears.
- Make sure that earmuffs fit tightly with no gaps between the seal and your head.
- Do not stretch the headband.
- Do not trap hair, jewellery, glasses, hats, leads from personal stereos etc. under the seal.
- Keep the seals and foam inside the earmuffs clean.
- If you see splits or cracks in the seals ask for another pair.

EARPLUGS

- Insert earplugs properly - ask for instructions.
- If you have any ear problems or infections, ask for medical advice before use. Earmuffs will almost certainly be a better option.
- Keep earplugs clean.
- Follow manufacturer's instructions for washing earplugs.
- Only use disposable earplugs once, and then throw away.
- Ensure that you have clean hands before inserting earplugs.
- Replace earplugs at regular intervals.

SEMI-INSERTS / CAPS

- Follow the same guidance as for earplugs and make sure any headband retains its tension.

REFERENCES

Regulations/ACoPs:

HSE Guidance: Protect your Hearing IND(G)299
Noise at Work IND(G)362(rev1)

GUIDANCE NOTE	HEAD PROTECTION	Code: P008	Issue: B
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Every employer shall ensure so far as is reasonably practicable that each of his employees who is at work on operations or works wears suitable head protection, unless there is no foreseeable risk of injury to his head other than by his falling.

Every employer, self-employed person or employee who has control over any other person who is at work on operations shall ensure so far as is reasonably practicable that each such other person wears suitable head protection, unless there is no foreseeable risk of injury to that other person other than by his falling.

An exemption under the Employment Act for turban-wearing Sikhs means that they do not need to wear head protection while on a construction site if they are wearing a turban.

No other workers are exempt; this includes Sikh construction workers if they are not wearing their turbans.

In most cases, suitable head protection will mean an industrial safety helmet conforming to the current British Standard or equivalent standard.

Some helmets are produced so additional safety attachments can be implemented for the specific task at hand:

- Ear muffs to reduce the exposure to excessive noise levels.
- Visors or fenders to protect the eyes or face.
- Chin straps to keep the helmet in place.
- Additional comfort features such as sweat bands.

The design of the helmet may vary dependant on the associated trades scope of work such as rope access techniques, tree surgeons etc.

You can use different colour helmets to detect certain trades such as:

- Black for supervisor.
- Orange for slinger banksman.
- Green for first aider.
- Red for fire marshal etc.

Head protection must be maintained and in good condition. It should be stored in a safe place which is not in direct sunlight or in excessive temperatures. It should be inspected on a regular basis for defects and should normally be replaced at intervals designated by the manufacture.

It is recommended that any issue of PPE to an operative is recorded in a register as this is proof that the associated PPE has been issued.

GUIDANCE NOTE	CONTRACTOR POST APPOINTMENT VETTING	Code: S005	Issue : A
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**CONTRACTOR HEALTH AND SAFETY COMPETENCE ASSESMENT ONGOING -
REVIEW**

Name of Company:
Address:

Tel: _____ **Fax:** _____
E-Mail Address: _____
Nature of Business: _____
Last assessment Date: _____ **Last Assessment Grade:** _____

Has the number of direct employees changed since the last assessment?	Yes/No
If yes and you now employ five or more direct employees please attach a copy of your Health and Safety Policy Statement. <i>(describe the health and safety responsibilities of management, and provide an index listing of your general arrangements and health and safety procedures)</i> Also please attach a copy of your Environmental Policy, Policy Statement	
Has your Health & Safety Policy been reviewed / updated since the last assessment? <i>If yes please supply details</i>	Yes/No
Has your Environmental Policy been reviewed / updated since the last assessment? <i>If yes please supply details</i>	Yes/No
Please supply evidence and details of any training courses or Health & Safety courses attended by employees since the last assessment.	
Please supply evidence and details of any training courses or Health & Safety courses attended by Management / Supervisory staff since the last assessment.	
Have your procedures for Informing staff, consulting staff and discussing with staff in relation to Health & Safety matters changed since the last assessment? <i>If yes please supply details</i>	Yes/No

Please provide any accident details since the last assessment.

Has your vetting procedure for Contractors or Sub-Contractors changed since the last assessment?	Yes/No
Any other comments that you would like to bring to our attention regarding Health & Safety. (Consider the work you have undertaken for this organisation since the last assessment; achievements, how you have managed risks associated with projects and how you have overcome any shortcomings)	

Name of person completing questionnaire: Job title: Date of completion:
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Required action (for assessor's use only):

- **Review of H&S performance since last assessment date:**
- **Remedial Actions from Competency Assessment**

Grading:

Evaluated by:

.....

Date: