

The absolutely essential health and safety toolkit for the smaller construction contractor





Working Well Together is an industry-wide construction health and safety campaign developed by the Construction Industry Advisory Committee (CONIAC)

To find out what's happening in your area, visit <http://wwt.uk.com>

Turning concern into action



A message from Ken Logan, Head of Construction Group within Health and Safety Executive for Northern Ireland (HSENI).

This toolkit provides a ready checklist for health and safety problems on small construction sites. It will help you to manage or avoid them and to ensure your own health and safety as well as the health and safety of the people who work for you, your clients, and others such as the public. The toolkit also acts as a signpost to more detailed advice – and for detailed advice on health in the construction industry contact www.buildhealthni.com. [Buildhealth is an industry lead initiative to improve the health of workplaces in the construction industry].

If we all work together we can make the construction industry a healthier and safer place to work in.

A handwritten signature in black ink that reads "Ken Logan". The signature is written in a cursive, slightly slanted style.

Ken Logan

Head of Construction Group
Health and Safety Executive for Northern Ireland (HSENI)

Managing

When managing your business, do you:

- give enough time to planning, organising and controlling your work?
- check what actually happens and stop dangerous practices?
- have someone to turn to if you need health and safety advice? (**HSENI's Information and Advice Helpline** – telephone **0800 0320 121** – is there to help);
- take pride in your standards?
- think about health as well as safety risks – it may help you to think of them as 'slow-acting' accidents.

For more information, see:

- 1** HSENI's *Guide to Health and Safety in Construction*, available free of charge from HSENI
- 2** HSENI's website at www.hseni.gov.uk or HSE's website at www.hse.gov.uk/construction
- 3** Construction occupational health management essentials (COHME) website at www.hse.gov.uk/construction/healthrisks
- 4** CONIAC's Working Well Together website at <http://wwt.uk.com>

Reporting accidents

If someone you employ, or who is working on your site, has an accident or work-related illness, make sure that you:

- Notify the Incident Contact Centre (see below) immediately if the accident is fatal or involves a major injury, such as a fracture, amputation or loss of sight.
- Report any work-related accident which results in more than three days off work.
- Report a case of occupational ill health when you receive a report of a diagnosed work-related illness.
- If a member of the public is killed or sent to hospital as a result of an accident on your site, then you should notify that too.

You can notify the Contact Centre:

- In writing, using the form in the RIDDOR (NI) 97 booklet, and then either faxing it on (028) 9023 5383, or posting it to: **HSENI, 83 Ladas Drive, Belfast BT6 9FR**
Blank forms are also available on HSENI's website at www.hseni.gov.uk
- By telephone on **(028) 9024 3249**

For more information, see free leaflets:

1. *RIDDOR (NI) 97 HSENI 11 08*
2. *Incident at work? MISC769*

Employing

When you employ or control people doing work for you, do you make sure that:

- they are trained, competent and fit to do the job safely and without putting their own or others' health and safety at risk?
- they are properly supervised and given clear instructions?
- they have access to washing and toilet facilities?
- they have the right tools, equipment, plant and protective clothing?
- you talk about health and safety issues with them (or their representatives)?
- you have made arrangements for employees' health surveillance where required?

Note: *If a person working under your control and direction is treated as self-employed for tax and national insurance purposes, they may nevertheless be your employee for health and safety purposes. Whether they are employed or self-employed, you need to take action to protect people under your control.*

For more information, contact:

Training organisations (eg the Construction Industry Training Board) or
HSENI Information and Advice Helpline on 0800 0320 121

Subcontracting

When you subcontract work to others, do you:

- check the health and safety performance of the people you plan to use?
- give them the health and safety information they need for the work?
- talk about the work with them before they start?
- make sure that you have provided everything you agreed (eg safe scaffolds, the right plant, access to welfare, etc)?
- check their performance and remedy shortcomings?



Site health and safety checklist

The following pages provide you with an essential checklist of some of the hazards most commonly found on construction sites. The questions will help you decide whether your site is a safe and healthy place to work.

This is not a full list.



'...are holes protected with clearly marked and fixed covers to prevent falls?'

Access on site

- Can everyone get to their place of work safely – and work there safely?
- Are access routes in good condition and clearly signposted?
- Are edges which people could fall from provided with double guard rails or other suitable edge protection?
- Are holes protected with clearly marked and fixed covers to prevent falls?

A steel fixer was killed when he fell through an unsupported decking sheet. A number of decking sheets had been used as temporary covering for the lift core of an existing building.

- Is the site tidy, and are materials stored safely?
- Is lighting good enough?



'...are there wash basins, hot and cold (or warm) running water, soap and towels?'

Welfare

- Are toilets readily available and are they kept clean and properly lit?
- Are there washbasins, hot and cold (or warm) running water, soap and towels?
- Are the washbasins large enough to wash up to the elbow and are they kept clean?
- Is there somewhere to change, dry and store clothing?
- Are drinking water and cups provided?
- Is there a place where workers can sit, make hot drinks and prepare food?
- Can everyone who needs to use them get to the welfare facilities easily and safely?
- Are welfare facilities kept warm and well ventilated?

For more information, see free HSE leaflets:

- 1 *Provision of welfare facilities at fixed construction sites* CIS18
- 2 *Provision of welfare facilities at transient construction sites* CIS46



'...will the weather conditions threaten the health and safety of those carrying out the work?'

Working at height

- Have you planned the work properly and identified suitable precautions to make sure work can be carried out safely?
- Have you thought about whether you can avoid working at height by using different equipment or a different work method?
- Can you use equipment that will prevent a fall from happening, such as scaffolding or a mobile elevating work platform?
- Can you put in place measures to reduce the distance and consequences of a fall should one happen, such as nets, soft landing systems or safety decks?
- Will the weather conditions threaten the health and safety of those carrying out the work?
- Have you thought about all the options and are you certain that you are gaining access to height using the safest means possible?

For more information, see free HSE leaflet:

The Work at Height Regulations 2005 (as amended): A brief guide
INDG401



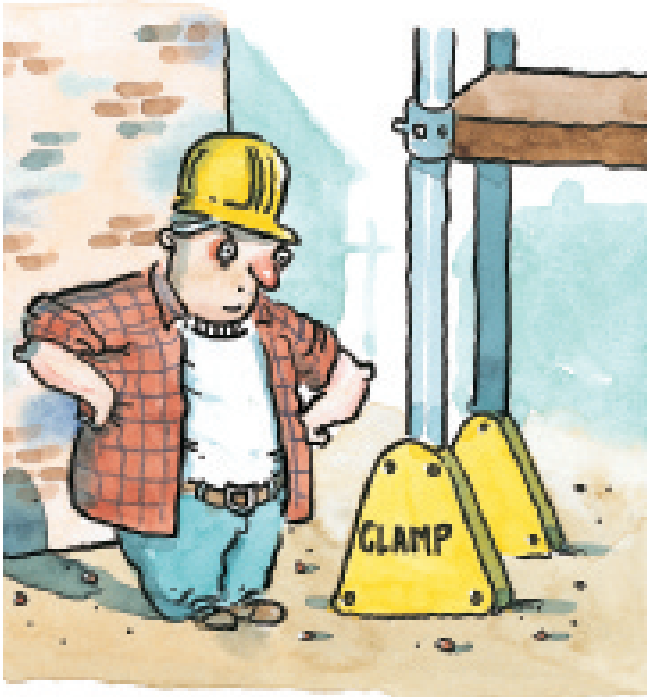
'...are there effective barriers or warning notices in place to stop people using an incomplete scaffold?'

Scaffolds

- Are scaffolds erected, altered and dismantled by competent people?
- Are all uprights provided with base plates (and, where necessary, timber sole plates)?
- Are all uprights, ledgers, braces and struts in position?
- Is the scaffold secured to the building or structure in enough places to prevent collapse?
- Are there double guard rails and toe boards, or other suitable protection, at every edge to prevent falling?

A self-employed painter was killed when he fell from the first lift of a scaffold as he was painting a bedroom window. There was no intermediate guard rail or toe board where he fell.

- Are additional brick guards provided to prevent materials falling from scaffolds?
- Are the working platforms fully boarded, and are the boards arranged to avoid tipping or tripping?
- Are there effective barriers or warning notices in place to stop people using an incomplete scaffold, eg where working platforms are not fully boarded?



'...have the wheels of tower scaffolds been locked when in use and are the platforms empty when they are moved?'

Scaffolds

- Is the scaffold strong enough to carry the weight of materials stored on it and are these evenly distributed?
- Are scaffolds being properly maintained?
- Does a competent person inspect the scaffold or proprietary tower scaffold regularly, eg at least once a week; and always after it has been altered, damaged and following bad weather?
- Are the results of inspections recorded?

A painter fell 6 m when a domestic-type tower scaffold overturned. He was using a ladder on the tower platform to paint the upper storey of a two-storey house.

- Are tower scaffolds being erected using either the '3T' or advance guard rail method, and are they being used in accordance with suppliers' instructions?
- Have the wheels of tower scaffolds been locked when in use and are the platforms empty when they are moved?

***For more information, see free HSE leaflet:
Tower scaffolds CIS10***



'...are ladders secured at the top and bottom to prevent them slipping sideways and outwards?'

Ladders

- Ladders and stepladders are the last resort. Can you buy or hire some alternative equipment that would provide a safer means of access?
- Is the work of short duration and low risk?
- Are they in good condition?
- Do ladders rest against a solid surface and not on fragile or insecure materials?
- Are ladders secured at the top and bottom to prevent them slipping sideways and outwards?



'...are the ladders positioned so that users don't have to overstretch?'

Ladders

- Do ladders rise at least a metre above their landing place? If not, are there other handholds available?
- Are the ladders positioned so that users don't have to overstretch?
- Do you have to use the top three rungs of a stepladder? If so your stepladder is too short.
- Is the user competent? Those using ladders should be trained to use the equipment safely.

Over a four-year period, 36 people died falling from ladders. That is 24% of falls in construction. A third of those who died were painters and decorators.

A construction worker was killed when he fell from an unsecured ladder while trying to climb onto a flat garage roof.

For more information, see free HSE leaflets:

- 1** *The Work at Height Regulations 2005 (as amended): A brief guide* INDG401
- 2** *Safe use of ladders and stepladders: An employer's guide* INDG402
- 3** *A toolbox talk on leaning ladder and stepladder safety* INDG403
- 4** *Top tips for ladder and stepladder safety* INDG405



'...is there edge protection to stop people or materials falling?'

Roofwork

- Is there edge protection to stop people or materials falling?
- During industrial roofing, have nets been provided to stop people falling from the leading edge of the roof and from partially fixed sheets?
- Where nets are used, have they been hung safely?
- Have you identified fragile materials such as cement sheets and roof lights which could be fragile?
- Have you taken precautions to stop people falling through fragile materials when working on the roof, eg by providing barriers, covers or working platforms?
- Are people kept away from the area below the roof work?
- Are roofworkers trained and experienced to recognise the risks and are they competent to do the work?

Over 50% of fatal injuries to roofers are falls through fragile materials and over 30% are falls from edges and openings.

A roofer was killed when he fell through an unprotected fragile roof light while stripping and resheeting an industrial pitched roof.

For more information, see free HSE leaflet:

The Work at Height Regulations 2005 (as amended): A brief guide INDG401

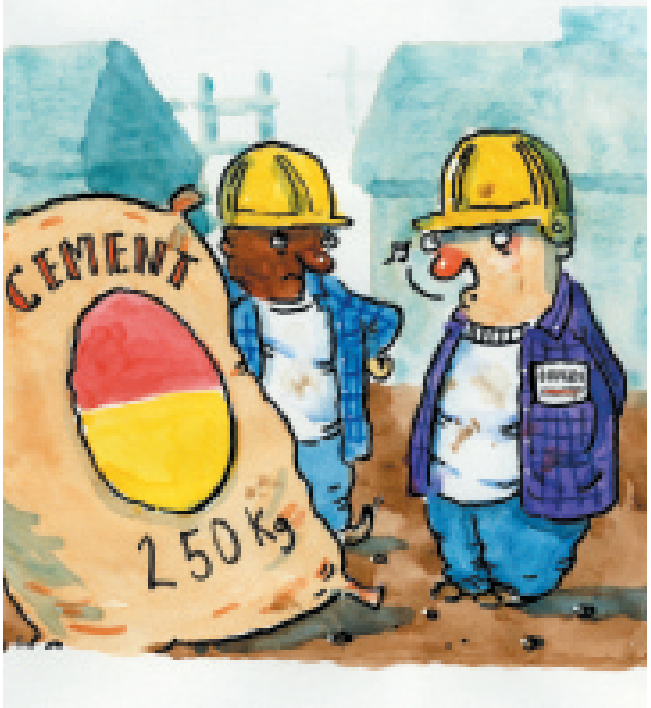


'...is the excavation regularly inspected by a competent person?'

Excavations

- Is there enough support for the excavation, or has it been sloped or battered back to a safe angle?
- Is a safe method used for putting in the support, without people working in an unsupported trench?
- Is there safe access into the excavation, eg a sufficiently long, secured ladder?
- Are there barriers or other protection to stop people and vehicles falling in?
- Are properly secured stop blocks provided to prevent tipping vehicles falling in?
- Could the excavation affect the stability of neighbouring structures or services?
- Are materials, spoil and plant stored away from the edge of the excavation to reduce the chance of a collapse?
- Is the excavation regularly inspected by a competent person?

A labourer was crushed and killed by a fall of earth while he was pipelaying in a 4 m deep trench. A trench box was provided, but he was working 3 m beyond the box.



'...can you order materials such as cement and aggregates in 25 kg bags?'

Manual handling

- Are there heavy materials such as roof trusses, concrete lintels, kerbstones or bagged products which could cause problems if they have to be moved by hand?

If so, can you:

- choose lighter materials?
 - use trolleys, hoists, telehandlers and other plant or equipment so that manual lifting of heavy objects is kept to a minimum?
 - order materials such as cement and aggregates in 25 kg bags?
 - avoid the repetitive laying of heavy building blocks or other masonry units weighing more than 20 kg?
- Have people been instructed and trained how to use lifting aids and other handling equipment safely?
- Have people been trained how to lift safely?

For more information, see free HSE leaflet:

Handling kerbs: Reducing the risks of musculoskeletal disorders (MSDs)
CIS57



'...are your employees provided with sensible safety footwear with a good grip?'

Loading and unloading goods

- Have you checked that the load has not moved or destabilised during the journey to site?
- Is there an exclusion zone around the loading/unloading area to keep people who are not involved away from the work?
- Have you planned your method of unloading?
- Does your lifting equipment have a current thorough examination certificate?
- Do you have to access the back of the lorry at all, or can the preparation work be done from ground level? If not:
 - do you have a safe way of getting up and down from the back of the vehicle?
 - what do you have in place to prevent workers from falling off the back of the vehicle?
 - are your employees provided with sensible safety footwear with a good grip?



'...can reversing be avoided, eg by using a one-way system or a turning area. If not, are properly trained banksmen used?'

Traffic, vehicles and plant

- Are vehicles and pedestrians kept apart?

If not, do you:

- provide barriers to separate them as much as you can?
 - tell people (eg your workers and anyone who lives or works in the property where you are working) about the problem, and what they need to do about it?
 - display warning signs?
- Are people kept away from slewing vehicles or, if not, can you use a zero tail-swing machine?

An experienced groundworker was crushed and killed by a slewing 360 excavator as it moved into position. He tried to pass between the machine and a trench box.

- Can reversing be avoided, eg by using a one-way system or a turning area? If not, are properly trained banksmen used?

A person was struck and killed by a van reversing at a roadworks site. The turning area in the site was blocked by parked cars and the driver reversed without assistance.



'...are vehicles and plant properly maintained...?'

Traffic, vehicles and plant

- Are vehicles and plant properly maintained, eg do the steering, brakes, hydraulics, mirrors and any other vision aid work properly? Are tyres in good condition and at the correct pressure?
- Have drivers received proper training and are they competent and fit to use the vehicles or plant they are operating?
- Are loads properly secured?
- Drivers of plant and equipment should not use mobile phones while driving or operating plant or workers should not use mobile phones in the vicinity of moving plant.
- Have you made sure that passengers are only carried on vehicles designed to carry them?
- Have you made sure that plant and vehicles are not used on dangerous slopes?
- If you need to work on or drive across sloping ground, have you checked that the plant and vehicles are safe to use?

For more information, see free HSE leaflet:

Construction site transport safety: Safe use of compact dumpers CIS52



'...are the right tools or machinery being used for the job?'

Tools and machinery

- Are the right tools or machinery being used for the job?
- Are all dangerous parts guarded, eg gears, chain drives, projecting engine shafts?
- Are guards secured and in good repair?
- Are tools and machinery maintained in good repair and are all safety devices operating correctly?
- Are all operators trained and competent?

A driller was killed when his trousers became entangled in the rotating core barrel he was using.



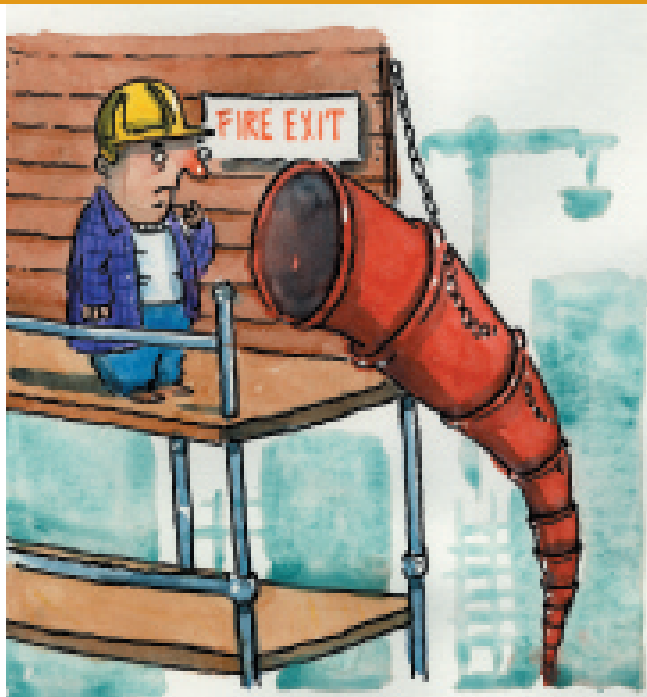
'...are the operators trained and competent?'

Hoists

- Has the equipment been installed by a competent person?
- Are the operators trained and competent?
- Is the rated capacity clearly marked?
- Does the hoist have a current report of thorough examination and a record of inspection?

A jobbing builder was killed when he was crushed between the cage and the fixed structure of a goods hoist. The hoist moved unexpectedly because the safety interlocks had been defeated. The hoist had been poorly maintained and did not have a current thorough examination report.

- Is there a suitable base enclosure to prevent people from being struck by any moving part of the hoist?
- Are the landing gates kept shut except when the platform is at the landing?



*'...are there enough suitable escape routes
and are these kept clear?'*

Emergencies

- Are there emergency procedures, eg for evacuating the site in case of fire?
- Do people on site know what the procedures are?
- Is there a means of raising the alarm, and does it work?
- Is there a way to contact the emergency services from site?
- Are there enough suitable escape routes and are these kept clear?
- Is the first-aid provision good enough?

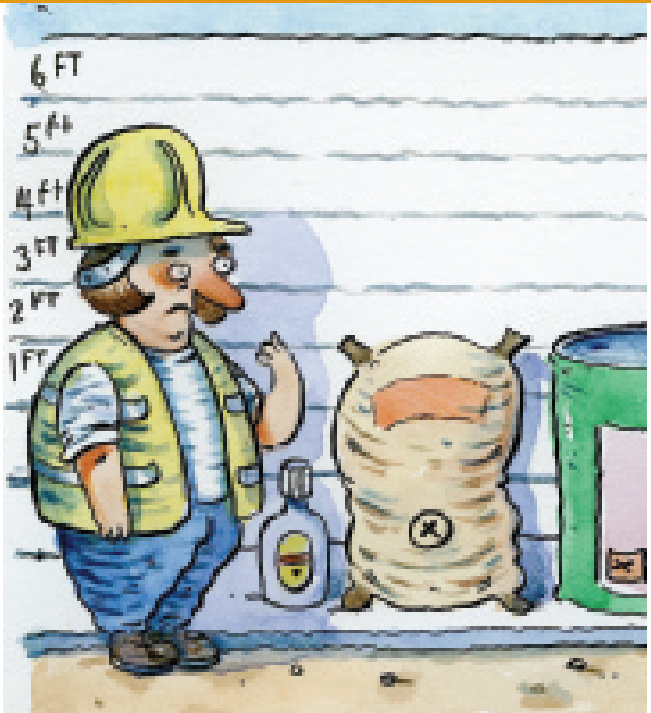


'...are suitable fire extinguishers provided?'

Fire

- Is the quantity of flammable materials, liquids and gases kept to a minimum?
- Are they properly stored?
- Are flammable gas cylinders returned to a ventilated store at the end of the shift?
- Are smoking and other ignition sources banned in areas where gases or flammable liquids are stored or used?
- Are gas cylinders, associated hoses and equipment properly maintained and in good condition?
- When gas cylinders are not in use, are the valves fully closed?
- Is flammable and combustible waste removed regularly and stored in suitable bins or skips?
- Are suitable fire extinguishers provided?

A road worker was killed when a petrol storage tank exploded. The tank had been emptied, cleared of sludge, ventilated, and declared gas-free, but hot metal from welding ignited petrol in the pumps/pipework – which were still connected.



'...have you identified all harmful substances and materials...?'

Hazardous substances

- Have you identified all harmful substances and materials, such as asbestos, lead, solvents, paints, cement and silica dust (eg from kerb or paving cutting)?
- Have you checked whether a licensed contractor is needed to deal with asbestos on site? (Most work with asbestos requires a licence, although you can do some very limited work with materials that contain asbestos without one).
- Have you identified and put into place precautions to prevent or control exposure to hazardous substances, by:
 - doing the work in a different way, to remove the risk entirely?
 - using a less hazardous material?
 - using tools fitted with dust extraction?
 - using tools fitted with water suppression?



'...have workers had information and training..?'

Hazardous substances

- Have workers had information and training so they know what the risks are from the hazardous substances used and produced on site, and what they need to do to avoid those risks?
- Have you got procedures to prevent contact with wet cement (as this can cause dermatitis and cement burns)?
- Have you arranged health surveillance for people using certain hazardous substances (eg lead, silica, cement, sensitisers such as two-pack adhesives or coatings)?

For more information, see free HSE leaflets:

- 1** *Asbestos kills: Protect yourself! You are more at risk than you think* INDG419
- 2** *Understanding health surveillance at work* INDG304
- 3** *Cement* CIS26
- 4** *Asbestos kills: A quick guide to protecting yourself* Pocket card INDG418

and HSE priced guidance:

- 1** *Asbestos essentials: Task manual* HSG210
- 2** *Introduction to asbestos essentials* HSG213
- 3** *How are you managing? Dealing with the risk of asbestos in buildings* DVD ISBN 978 0 7176 2862 9



'...is suitable hearing protection provided and worn in noisy areas?'

Noise

- Have you identified and assessed workers' exposure to noise?
- Have workers had information and training so they know what the risks are from noise on site, and what they need to do to avoid those risks?
- Can the noise be reduced by using different working methods or selecting quieter plant, eg by fitting breakers and other plant or machinery with silencers?
- Are people not involved in the work kept away from the source of the noise?
- Is suitable hearing protection provided and worn in noisy areas?
- Have hearing protection zones been marked?
- Have you arranged health surveillance for people exposed to high levels of noise?

For more information, see free HSE leaflet:

Noise at work INDG362



'...have you limited the time that each worker uses high-vibration tools?'

Hand-arm vibration

- Has exposure to HAV been avoided or reduced as much as possible by selecting suitable work methods and plant?
 - Have you chosen the lowest vibration tool that is suitable and can do the job efficiently?
 - Have you limited the time that each worker uses high-vibration tools such as concrete breakers, angle grinders or hammer drills as far as possible?
- Have workers had information and training so they know what the risks are from hand-arm vibration (HAV) on site, and what they need to do to avoid those risks?
- Have vibrating tools been properly maintained including keeping bits and drills sharp?
- Have you arranged health surveillance for people exposed to high levels of hand-arm vibration, especially when exposed for long periods?

For more information, see HSE leaflets and video:

- 1** *Control the risks from hand-arm vibration* INDG175
- 2** *Hand-arm vibration: Advice for employees* INDG296
- 3** *Hard to handle: Hand-arm vibration – manage the risk* Video
ISBN 978 0 7176 1881 1



'...are tools and equipment checked by users, visually examined on site and regularly inspected and tested by a competent person?'

Electricity and other services

- Have all necessary services been provided on site before work begins and have you also identified existing services present on site (eg electric cables or gas mains) and taken effective steps, if necessary, to prevent danger from them?
- Are you using low voltage for tools and equipment, eg battery-operated tools or low-voltage systems?
- Are cables and leads protected from damage?
- Are all connections to the system properly made and are suitable plugs used?
- Are tools and equipment checked by users, visually examined on site and regularly inspected and tested by a competent person?
- Have hidden electricity cables and other services been located (eg with a locator and plans) and marked, and have you taken precautions for safe working?
- Where there are overhead lines, has the electricity supply been turned off, or have other precautions been taken, such as providing 'goal posts' or taped markers?

A driver was electrocuted when the hydraulic lifting arm he was using to offload spoil from his lorry contacted an 11 kV overhead line.



'...is the work fenced off from the public?'

Protecting the public

- Is the work fenced off from the public?
- Are roadworks barriered off and lit?
- Are the public protected from falling material?
- When work has stopped for the day:
 - is the boundary secure?
 - are all ladders removed or their rungs boarded so that they cannot be used?
 - are excavations and openings securely covered or fenced off?
 - is all plant immobilised to prevent unauthorised use?
 - are bricks and materials safely stacked?
 - are flammable or dangerous substances locked away in secure storage places?

A boy died when he fell from a scaffold at a residential block. He and other boys had gained access to the scaffold by climbing from a communal walkway.

For more information, see HSE DVD:

Kidsafe ISBN 978 0 7176 6221 0

HSE construction publications

Health and safety in construction HSG150
ISBN 978 0 7176 6182 4

The safe use of vehicles on construction sites HSG144
ISBN 978 0 7176 1610 7

Safe work in confined spaces: Confined Spaces Regulations 1997. Approved Code of Practice, Regulations and guidance L101 ISBN 978 0 7176 1405 9

Health and safety in roof work HSG33
ISBN 978 0 7176 1425 7

Protecting the public: your next move HSG151
ISBN 978 0 7176 1148 5

Safe use of lifting equipment: Lifting Operations and Lifting Equipment Regulations 1998. Approved Code of Practice L113
ISBN 978 0 7176 1628 2

Managing health and safety in construction. Construction (Design and Management) Regulations 2007. Approved Code of Practice L144 ISBN 978 0 7176 6223 4

Backs for the future: Safe manual handling in construction HSG149 ISBN 978 0 7176 1122 5

Construction (Head Protection) Regulations 1989. Guidance on Regulations L102 ISBN 978 0 7176 1478 3

Safe use of work equipment: Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance L22 ISBN 978 0 7176 6295 1

HSE Videos and DVDs

How are you managing? Dealing with the risk of asbestos in buildings DVD ISBN 978 0 7176 2862 9

Hard to handle Video ISBN 978 0 7176 1881 1

Kidsafe DVD ISBN 978 0 7176 6221 0

To order HSE publications please call

HSE Books

Tel: 01787 881165

Fax: 01787 313995

www.hsebooks.co.uk

HSENI and HSE publications

For information about health and safety ring HSENI's Information and Advice Helpline: 0800 0320 121 Tel: (028) 9024 3249
Fax: (028) 9023 5383
E-mail: hseini@detini.gov.uk Textphone (028) 9054 6896

HSENI Leaflets are available free of charge from HSENI's Information and Advice Centre. A full range of HSE and HSENI materials (including DVDs and Videos) is available for viewing at the centre.

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA
Tel: 01787 881165 Fax: 01787 313995 Website:
www.hsebooks.co.uk (HSE priced publications are also available from bookshops and free leaflets can be downloaded from HSE's website: www.hse.gov.uk).

This booklet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

© *Crown copyright* This publication may be freely reproduced, except for advertising, endorsement or commercial purposes. The information is current at 02/09. Please acknowledge the source as HSE.

HSENI's Information and Advice Centre at 83 Ladas Drive, Belfast has been designed to provide a comprehensive range of health and safety information to all our customers.

Facilities

- A comprehensive range of health and safety reference books
- Health and safety journals
- Visitors' study area
- Video lending facility and viewing area
- Internet access for health and safety information
- A selection of HSENI and HSE publications/leaflets (free of charge to you)

Opening times

Monday-Thursday 9am-5pm

Friday 9am-4:30pm

Car parking

Our car park at Ladas Way is available to visitors.

Contact

To contact the Information and Advice Centre please call our Helpline number 0800 0320 121

Contact Details

*For all your enquiries on
workplace health and safety*

HSENI

**Information and
Advice Centre**

Helpline: 0800 0320 121

Telephone: (028) 9024 3249

Textphone: (028) 9054 6896

Fax: (028) 9023 5383

E-Mail: hсени@detini.gov.uk

Web: www.hсени.gov.uk

Visit: **HSENI Information
and Advice Centre
83 Ladas Drive
Belfast BT6 9FR**