

Workplace Health, Safety and Welfare

Health and Safety Guidance

GN10
2015



Record of Revisions

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Introduction

The City Council is committed to ensuring the health, safety and welfare of all employees, for which there is a legal responsibility under the Health and Safety at Work etc Act 1974 and further detailed within the Management of Health and Safety at Work Regulations 1999.

This Guidance applies to all non-domestic places of work and to parts of premises shared with other employers such as:

- toilets, corridors, foyers and lobbies
- private roads and car parks
- paths in industrial estates and business parks
- temporary workplaces (but not construction sites, they have their own set of requirements)

The Workplace (Health, Safety and Welfare) Regulations 1992 look at environmental factors that affect the health, safety and welfare of staff including ventilation, heating, lighting, workstation space, seating etc. The aim is to ensure that workplaces meet the basic health, safety and welfare needs of the workforce, including those with disabilities.

The Workplace Regulations do not apply to domestic premises and do not therefore cover home-workers.

Construction sites are regulated by the Construction (Design and Management) Regulations 2015 – see Guidance Note GN13. Where construction work is in progress within an existing workplace it is treated as a construction site only if it is clearly fenced-off, otherwise the requirements of both sets of regulations apply.

Further advice or clarification of points within this guidance can be gained from the Health and Safety Unit.

Principal Legislation

The Health and Safety at Work etc. Act 1974

The Workplace (Health, Safety and Welfare) Regulations 1992

The Education (School Premises) Regulations 1999

The Management of Health and Safety at Work Regulations 1999

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995

The Health and Safety (First Aid) Regulations 1981

The Control of Asbestos Regulations 2012

Regulatory Reform (Fire Safety) Order 2005

The Provision and Use of Work Equipment Regulations 1998

Control of Substances Hazardous to Health Regulations 2002

Control of Noise at Work Regulations 1989

Electricity at Work Regulations 1989

Gas Safety (Installation and Use) Regulations 1998

Health and Safety (Display Screen Equipment) Regulations 1992

Health and Safety (Safety Signs and Signals) Regulations 1996

Guidance

Liverpool City Council Guidance Notes

GN02 Asbestos Management

GN04 Hazardous Substances (COSHH)

GN05 Work Equipment

GN06 Legionella

GN07 Display Screen Equipment

GN09 Buildings, Grounds and Workplace Inspections

GN12 Accident and Incident Reporting and Investigation

GN13 Construction, (Design and Management) 2015

GN16 First Aid

GN19 Noise at Work

GN22 Fire Safety

GN23 Electricity

GN24 Manual Handling

GN26 Risk Assessment

GN32 Gas

GN35 Work Related Violence

HSE Guidance

INDG173L Officewise

HSG194 Thermal Comfort in the Workplace

INDG368 Use of Contractors; A Joint Responsibility

INDG 337 Sun Protection; A Guide for Outdoor Workers

INDG147 Keep Your Top On

HSG202 General Ventilation in the Workplace; Guidance for Employers

HSG38 Lighting at Work

L24 (2nd Ed) Workplace Health, Safety and Welfare Regulations 1992
Approved Code of Practice

INDG244 Workplace Health, Safety and Welfare; a Short Guide for
Managers

INDG293 Welfare at Work; Guidance for Employers on Welfare
Provisions

L8 Legionnaires Disease; the Control of Legionella Bacteria in Water
Systems

HSG 57 Seating at Work

HSG33 Safety in Roof Work

BS 6262: 1994 Code of Practice for Glazing in Buildings

BS 8210:1986 Guide to Building Maintenance

CIBSE Lighting Guide 7: 2005, Office Lighting

CIBSE Lighting Guide LG3: 1996, the Visual Environment for Display Screen Use

Aim

To ensure that a standardised, practical and knowledge based approach for considering specific risks within the workplace is taken by all managers, in line with current legislation and best practice. This will also facilitate safe working procedures, as may be required for certain activities. Employees shall not be given work activities that would place them at an unacceptable level of risk.

Key Definitions

‘Workplace’ – describes a wide range of workplaces, including offices, schools, hospitals, hotels and places of entertainment, factories and shops etc. It also includes the common parts of shared buildings, private roads and paths on industrial estates, business parks and temporary workplaces (but not construction sites).

‘Work’ – any work as an employee or self-employed person.

‘Premises’ – any place including an outdoor place.

‘Traffic route’ – a route for pedestrian traffic, vehicles or both including stairs, staircase, fixed ladder, doorway, gateway, loading bay or ramp.

‘Domestic premise’ – any private dwelling.

‘Hypothermia’ – body temperature below 35°C (95°F).

‘Hyperthermia’ – abnormally high body temperature.

‘Dehydration’ – loss of water from the body.

‘Heat stress’ – when a body is unable to cool itself. There are multiple factors which contribute to heat stress

‘UV Radiation’ – rays from the sun that can burn the skin.

Responsibilities

Ensuring that a workplace risk assessment is carried out and all control measures required are implemented is a managerial responsibility. All relevant members of staff should be consulted when carrying out the risk assessment and must be informed of the findings.

Once the workplace risk assessment is in place it should be reviewed at least annually. This should be supported by Building, Grounds and Workplace Inspections (see Guidance Note GN09), which should be carried out at least annually but best practice every 3 months.

Employees and their Trade Union Safety Representatives should be encouraged to assist with undertaking workplace risk assessments wherever possible.

Members of staff have a duty to co-operate with their manager and comply with all controls in place to ensure safe working; for certain activities, this will include a formal 'safe working procedure'. Employees also have a duty to inform their manager of any concerns regarding existing controls, the method of work or new hazards that may not have been identified during the risk assessment process i.e. inform their manager of any shortcomings.

Risk Assessment

The risk assessment will determine compliance with the standards set out in the Workplace (Health, Safety and Welfare) Regulations 1992 and the Education (School Premises) Regulations 1999. Managers should ensure that unacceptable risks, created by the workplace, are eliminated wherever possible or controlled by taking the appropriate measures.

Managers should use the workplace risk assessments to help develop safe working procedures, as may be required for certain activities. The safe working procedure should clearly indicate all controls identified in the risk assessment and provide information and instruction as to the safe method of work.

The level of detail required for each risk assessment should be proportionate to the risk, as should control measures implemented to ensure safe working. All control measures must be periodically monitored and reviewed to ensure effectiveness is maintained

'Model' risk assessments for working both indoors and outdoors are included as part of this guidance document (see appendices 2 and 3). Hazards and controls that are not applicable to your specific work activity or workplace should be deleted and specific detail added i.e. localising the risk assessment to the workplace and actual work undertaken detailing the controls in place.

Training

All managers and employees should receive sufficient training to enable them to carry out their duties in accordance with legislation and specified safe working procedures.

Training is an important factor in helping staff work safely in their environment, sometimes where limited levels of supervision are in place, to ensure controls are maintained. Both training and experience are required to make sure staff are competent in carrying out the task, this is particularly important to ensure limits as to what can and cannot be done are clearly understood i.e. knowing when to stop and seek further advice.

Training and instruction may be provided either 'in-house' or from an external provider and can also include gaining knowledge from observing experienced colleagues i.e. 'on the job' training through 'shadowing'. Regular refresher/continuation training is essential to ensure competence remains current. Specific training in risk assessment is available for all managers.

Training in the correct use of any equipment provided must be as per manufacturer's instructions.

The extent of training required will depend on the level of risk; all training should be detailed as a control within each activity risk assessment.

Records of all training must be kept.

Review

This guidance will be reviewed every 2 years or sooner should new legislation or knowledge become available.

Appendix 1

Standards within the Workplace (Health, Safety and Welfare) Regulations 1992 and the Education (School Premises) Regulations 1999

1. Maintenance of workplace equipment, devices and systems

Please refer to Guidance Note GN05 for further information.

2. Ventilation

Adequate ventilation (providing fresh air) may be needed to:

- improve general oxygen levels for breathing,
- remove excess heat and keep a comfortable temperature,
- dilute and remove odours (e.g. food), and
- dilute any contaminants caused by workplace activities.

Workspaces should be sufficiently well ventilated so that stale or humid air is replaced at a reasonable rate. Insufficient ventilation may lead to tiredness, lethargy, headaches, dry or itchy skin and eye irritation.

Adequate ventilation is particularly important where there is a high concentration of employees as high levels of occupation increase the risk of airborne pollutants and irritants.

In most cases, windows or other openings will provide adequate ventilation but where necessary mechanical ventilation systems should be installed. Where mechanical ventilation is installed it should be regularly cleaned, tested and maintained and re-circulated air should be filtered.

3. Temperature

As a general rule, the temperature in the workplace should provide reasonable comfort without the need for special clothing and a sufficient number of thermometers should be provided to determine the temperature inside a building. In large open plan offices, more than one thermometer may be necessary.

Minimum temperature (indoors); the Regulations set a minimum temperature of:

- 16°C in office environments
- 13°C where there is strenuous manual work
- 18°C in classrooms*
- 15°C in areas where there is physical activity e.g. the gym*
- 21°C for sickrooms*

(*educational establishments)

These temperatures may not ensure reasonable comfort depending on other factors, e.g. relative humidity and air movement.

Maximum temperature (indoors); there is no maximum temperature laid down in the Regulations but the Council recognises that temperatures in excess of 26°C can be uncomfortable therefore regular monitoring of the office environment is recommended.

Hot weather (indoors)

Some simple ways to ensure thermal comfort in hot weather include:

- putting insulation around hot plant or pipes,
- providing fans (e.g. desk or ceiling mounted),
- ensuring windows can be opened,
- shading windows with blinds or using reflective film to reduce the heating effect of the sun,
- siting workstations away from direct sunlight and from places or plant that radiate heat,
- providing chilled water dispensers (water is preferable to caffeine or carbonated drinks), and
- relaxing dress codes, but you must ensure that personal protective equipment is provided and used where necessary.

Hot /Cold weather (outdoors)

Ultraviolet (UV) radiation (sunlight) can cause changes to the surface and in the deeper layers of the skin; it reduces the skins elasticity and can cause premature aging. Deeper in the skin it can cause changes in cell structure and increase the risk of skin cancers. UV radiation should be considered as an occupational hazard for people working outdoors.

Sunburn is the damaging effect on the skin of the UV radiation; exposure can cause:

- Sunburn and blistering
- Premature skin aging
- Fever
- Heat exhaustion and heatstroke
- Skin cancer

Heat exhaustion and heatstroke are serious conditions that occur when the body is unable to control its temperature. The sharp rise in body temperature can cause hyperthermia and dehydration; normal body temperature is 36°C to 36.8°C (96.8 to 98.2°F).

Symptoms of heat exhaustion include:

- Headaches and dizziness
- Nausea and vomiting
- Muscle weakness or cramps
- Tiredness and loss of appetite
- Pale skin
- Weak pulse
- High temperature

Symptoms of heatstroke include all the above plus:

- Confusion or disorientation
- Hallucinations
- Convulsions and muscle twitching
- Flushed, hot and dry skin.
- Racing/thumping pulse

Hazards working in cold weather conditions include:

- Hypothermia
- Frostbite

Ways to minimise the effects of working in these environments include:

- Assessing any exposure to extreme heat or cold
- Introducing suitable work patterns
- Reducing work rate
- Providing suitable personal protective clothing for the weather conditions
- Providing adequate supplies of drinking water
- Ensuring the ability to have hot drinks in cold weather
- Ensuring there are suitable rest breaks and welfare facilities

- Advising staff to use sun block (minimum SPF15, recommended SPF30) – seek advice from own GP or Occupational Health Service
- Ensuring there is suitable supervision of the work
- Providing health surveillance, and
- Providing a medical assessment for young people before they start work.

4. Lighting

Every workplace shall have suitable and sufficient lighting that should enable people to work, use facilities and move from place to place safely and without experiencing eyestrain.

HSE Guidance HS(G)38 'Lighting at Work' gives recommended lighting levels in relation to offices and buildings, however, HS(G)38 also refers to guidance produced by the Chartered Institute of Building Service Engineers (CIBSE); the following lux levels are based on CIBSE recommendations and recommended lux levels to schools are taken from The Education (School Premises) Regulations 1999:

Area	Recommended Maintained Illuminance (lux)
General office space	300 for purely screen based work 500 for mixed or mainly paper based tasks
Classrooms	300 for general teaching 500 where visually demanding tasks are undertaken
Libraries / Information Centre's	200 between bookcases 300 general 500 on reading desks and counters
Tea points / rest rooms	200 general 300 for serving and preparation areas
Entrance halls / receptions	200 general 300 over reception desks and seating areas

Stairs / escalators	150 on all treads
Corridors	100 at floor level
Cleaners cupboards and plant rooms	200
Workshops	300 general areas 500 around workbenches / work areas
Storerooms	200 for general bulk storage 500 for storage and selection of small items

Where possible workstations should be positioned to take advantage of natural daylight. However, where this would result in excessive heat or glare, then workstations should be repositioned or the window shaded.

Poor lighting may result in symptoms that can be commonly described as eyestrain. These symptoms include:

- irritation, e.g. inflammation of eyes and lids,
- itchiness,
- breakdown of vision, including blurred or double vision,
- headaches, fatigue and giddiness.

Where necessary, local lighting (lamps) should be provided at individual workstations and at places of particular risk.

Stairs should be lit so as shadows are not cast over the main part of the treads.

Outdoor traffic routes used by pedestrians should be adequately lit during darkness.

Light switches should be located so as they are easily found.

Fittings or lights should be replaced if they become defective and lights should not be dazzling or be allowed to become obscured e.g. by stacked goods.

Emergency lighting should be provided in rooms where a sudden loss of light would present a risk. It should be independently powered (usually

battery powered) and be bright enough for employees to take any action necessary to ensure their safety.

5. Cleanliness and Waste Materials

The standard of cleanliness will depend on the use of the workplace. All surfaces should be cleaned at suitable intervals and cleaning should not create or expose anyone to a health or safety risk e.g. from cleaning agents.

6. Room Dimensions and Space

Workrooms should have sufficient free space to allow people easy access to and from workstations, to undertake their work without restricting movement and move within the workroom.

11m³ of space per person is the minimum allowed within most workplaces, (the 11m³ includes furniture), however if much of the space is taken by furnishings and machinery, 11m³ per person may not be sufficient.

To calculate the allowed N^o of people in a room:

Calculate the volume of the room LxWxH (if the ceiling is higher than 3 metre's then use 3).

Divide the volume by 11 and round down (to nearest whole number).

This is the maximum N^o of people that should be based working in the room.

7. Workstations and Seating

Workstations should be arranged so that each task can be carried out safely and comfortably allowing an adequate freedom of movement and the ability to stand upright. Work materials and frequently used equipment should be within easy reach without undue bending or stretching. There should be sufficient clear unobstructed space to enable work to be undertaken safely. The Display Screen Equipment Regulations 1992 also applies; see Guidance Note 07.

Workstations (including seating and access) should be suitable for any special needs of the individual worker, including those with disabilities.

8. Condition of Floors and Traffic Routes

Floors and traffic routes should be of sound construction and have adequate strength and stability taking account of the loads placed upon and the traffic passing over them.

The surfaces of floors and traffic routes should be free from holes, bumps and obstructions. The surfaces should not be uneven or slippery or in a condition which is likely to cause a person to slip, trip or fall (causing personal injury) or cause a person to drop or lose control of anything being lifted or carried.

Surfaces likely to become wet should be of a type that does not become unduly slippery. Where a leak occurs, immediate steps must be taken to contain it or clean it up.

For general floors and traffic routes arrangements should be made to minimise the risks from snow and ice.

Slopes and ramps should not be steeper than is necessary and those used by people with disabilities should comply with the Equality Act 2010.

Every open side of a staircase should be securely fenced and at least one handrail must be provided.

9. Falls or Falling Objects

Secure fencing/guarding should be provided wherever possible at any place where a person might fall two metres or more, or where such a fall is likely to result in an injury and should be adequate to prevent objects falling onto people. Where this cannot be provided or has to be removed temporarily, other measures should be taken to prevent falls.

Additional Regulations govern the temporary removal of fencing, stacking and racking, loading and unloading vehicles, fixed ladders and roof work; see Guidance Note 11.

10. Windows and Transparent or Translucent Doors, Gates or Walls

Transparent/translucent (glass) surfaces should be made of a safety material or be adequately guarded against breakage when used in doors below shoulder height or when used in any surface below waist level (except in glasshouses). Such surfaces should be marked where necessary to make it apparent and reduce the risk of collision. Minimum thicknesses are set in relation to the area of a glass panel.

An assessment of the vulnerable glazing areas should be undertaken and any recommendations made during that assessment acted upon.

11. Windows, Skylights and Ventilators

It should be possible to reach and operate the controls of opening windows, skylights and ventilators safely, where necessary with window poles etc. When open, windows etc should not project into an area where people are likely to collide with them.

12. Ability to Clean Windows

Suitable provision should be made so that windows and skylights can be cleaned safely if they cannot be cleaned from the ground or other suitable surface. Windows may be fitted with pivots so they can be cleaned from the inside or else provide suitable access equipment such as suspended cradles or travelling ladders.

13. Organisation of Traffic Routes

Every workplace must be organised in such a way that pedestrians and vehicles can circulate in a safe manner and potential hazards on traffic routes used by vehicles must be sign posted. Routes should be of sufficient width and headroom with special consideration given to those with impaired vision or using wheelchairs. Any restrictions should be clearly sign posted.

Sensible speed limits must be set and clearly displayed on vehicle routes. Where necessary suitable sign posted traffic calming measures such as road humps should be provided.

Traffic routes must be wide enough to pass parked vehicles and should not pass close to any edge or to anything that is likely to collapse or be left in a dangerous state if hit (such as storage racks).

Where there is poor visibility, one-way systems should be introduced to reduce the need for reversing. Where large vehicles need to reverse, extra measures need to be taken e.g. keeping pedestrians out of the way, restricting reversing to places where it can be done safely, fitting reversing alarms to vehicles or employing banksmen.

Areas where the speed of traffic would put pedestrians at risk or in doorways, gateways, tunnels, bridges or other enclosed spaces, vehicles should be separated by a kerb or barrier; separate routes should be provided where necessary.

Any traffic route used by both pedestrians and vehicles should be wide enough to allow any vehicle likely to use it to pass pedestrians safely. In buildings, lines should be drawn on the floor to indicate routes followed by vehicles such as forklift trucks.

14. Doors and Gates

Doors and gates that swing in both directions or are on traffic routes should have a transparent panel unless they are low enough to see over.

Power operated doors and gates should have safety features to prevent people being injured as a result of getting trapped or stuck.

It should be possible to open a power-operated door or gate if the power fails unless there is an alternative way through. Where tools are required for manual opening, they should be readily available at all times.

15. Escalators and Moving Doorways

Must operate safely, be equipped with the necessary safety devices and be fitted with one or more emergency stop controls which are easily identifiable and accessible.

16. Sanitary Conveniences

Sanitary conveniences must be adequately ventilated and lit, kept clean and in an orderly condition. Separate rooms containing conveniences must be provided for men and women except where each convenience is in a separate room where the door can be secured from the inside. There must be a supply of toilet paper and, for female employees, a means of disposing of sanitary dressings.

The following tables show the numbers of toilets and wash basins that should be provided in relation to the number of employees:

Table 1: Number of toilets and washbasins for mixed use (or women only)

N° of people at work	N° of toilets	N° of washbasins
1 - 5	1	1
6 - 25	2	2
26 - 50	3	3
51 - 75	4	4
76 - 100	5	5

Table 2: Toilets used by men only

N° of people at work	N° of toilets	N° of urinals
1 - 15	1	1
16 - 30	2	1
31 - 45	2	2
46 - 60	3	2
61 - 75	3	3
76 - 90	4	3
91 - 100	4	4

Sanitary Conveniences for Schools

Mainstream schools

- The number equivalent to 10% of pupils under 5
- The number equivalent to 5% of pupils 5 and over

Special schools

- The number equivalent to 10% of pupils , whatever their ages

Calculations should be rounded up to the nearest whole, even number.

The basic number of sanitary fittings may include those contained in a washroom provided for persons using the premises who are disabled if they are also provided for pupils. In a school with both male and female pupils over 8, this flexibility is qualified. The sanitary fittings provided in

such a washroom may count towards the basic number only if there are at least two other washrooms for pupils.

For trough urinals every 600mm should be counted as one fitting.

Washbasins for Schools

Schools where the majority of pupils are under 11:

- There must be at least as many washbasins as the basic number of sanitary fittings. The Regulations do not prescribe a ratio of washbasins to sanitary fittings for each individual washroom. It is for the body responsible to determine this, and

Schools where the majority of pupils are 11 or older:

- Washrooms with one sanitary fitting must contain at least one washbasin
- Washrooms with two sanitary fittings must contain at least two washbasins
- Washrooms with three or more sanitary fittings must contain at least two-thirds the number of sanitary fittings in every washroom

In washrooms for male and female pupils under 8, and in all washrooms, that are solely for female pupils, the sanitary fittings must all be water closets.

In washrooms that are solely for male pupils, the fittings may include urinals. The Regulations do not specify a ratio of urinals to water closets.

17. Washing Facilities

Sufficient washing facilities, including showers (providing a supply of clean hot and cold water, soap and a means of drying) must be provided if required by the nature of the work or for health reasons. They must be provided in the immediate vicinity of every sanitary convenience whether or not they are provided elsewhere. Separate rooms containing facilities must be provided for men and women except where each convenience is in a separate room where the door can be secured from the inside.

Washing Facilities for Schools

Facilities for pupils aged 5 years and younger

- Nursery schools and other schools with pupils under 5 must have one shower, bath or deep sink for every 40 of those pupils.

The number must be rounded up to the nearest multiple of 40.

Changing accommodation and showers for Schools

Schools with pupils over 11 who engage in physical education must have changing rooms with showers and these must be accessible from the school grounds and from any part of the school buildings used for physical education.

A ratio of one shower to every seven pupils is recommended (see DfES Building Bulletin 82, *Area Guidelines for Schools* available at www.teachernet.gov.uk/sbareaguidelines).

18. Drinking Water

Drinking water should normally be obtained by means of a tap connected to the water main. Where water is obtained from a tank it must be kept covered, clean, tested and disinfected as necessary. Drinking cups or beakers should be provided unless the supply is by means of a drinking fountain.

Drinking water taps should not be installed where contamination is likely or within a sanitary convenience (where possible).

19. Accommodation for Clothing

Accommodation for clothing and employees' personal clothing should enable it to hang in a clean, warm, dry and well-ventilated place where it can dry out in the course of the working day if necessary. Where work clothing that is not taken home becomes dirty, damp or contaminated due to work it should be accommodated separately from the worker's own clothing.

20. Facilities for Changing Clothing

A changing room or rooms should be provided for workers who change into special work clothing. Changing rooms should be provided with

adequate seating and should contain or connect to areas containing clothing accommodation, washing facilities etc.

21. Facilities for Rest and to Eat Meals

Suitable chairs should be provided for workers to use during breaks. These should be in a place that does not require the wearing of any PPE e.g. hearing protection.

In offices and other reasonably clean workplaces, work seats and other seats within the work area will be sufficient provided that workers are not subject to excessive disturbance during breaks, for example by contact with the public.

Eating facilities should include a facility for preparing or obtaining a hot drink, such as an electric kettle, a vending machine, a canteen or facilities to heat their own food. Eating facilities should be kept clean. Canteens or restaurants can be used as rest facilities provided there is no obligation to purchase food in order to use them.

Facilities for pregnant women and nursing mothers to rest should be conveniently situated in relation to sanitary facilities and, where necessary, include the facility to lie down.