City of BRADFORD METROPOLITAN DISTRICT COUNCIL

Control of Substances Hazardous to Health (COSHH) Risk Assessment

Health and Safety Guidance for Managers

Issued by Occupational Safety Team
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Introduction

This guidance is to help managers to identify, assess and control hazardous substances in the workplace, so they do not cause ill health to employees and others. A hazardous substance is one that has the potential to cause harm to the health of anyone who comes into contact with it. These substances (manufactured or natural) come in many forms including, gases, vapours, fumes, dusts, liquids, powders, pastes or solids. They can enter the body via inhalation, swallowing, absorbed through the skin or eyes or via open wounds. The term “hazardous substances” also covers biological agents that may be encountered at work, e.g. bacteria, fungi or viruses, and also include flowers, fruit and vegetables.

Legal Duties

The Health and Safely at Work Act 1974, the Management of Health and Safety at Work Regulations 1992 and the Control of Substances Hazardous to Health Regulations 2002, require employers and managers to carryout suitable risk assessments of the hazards in the workplace and implement suitable controls to help safeguard staff and others. Managers have a duty for safeguarding the health and safety of their staff and others who may be exposed to hazardous substances and any hazardous by-products arising from work processes. For example, stone/wood cutting dusts, fumes, aerosol sprays, rat poison, body fluids.

Manager Responsibilities

- Ensure that all potential hazardous substances (including cleaning materials) encountered in the workplace are identified and the risks suitably assessed. This includes any biological agents.
- Develop, implement and maintain suitable control measures that eliminate or minimise the risks to health and/or the environment.
- Advise all staff and anyone else likely to be affected, of the potential risks and the control measures and emergency arrangements being implemented.
- Ensure staff and others receive suitable information, instruction and training in the safe use of hazardous substances encountered at work.
- Ensure the engineering controls e.g. enclosures or partial enclosures, or Local Exhaust Ventilation (LEV), are fit for purpose, maintained in reasonable working order and inspected regularly.
- When required as part of the hierarchy of control measures, provide suitable and sufficient personal protective equipment (PPE) for working with hazardous substances.
- Monitor the effectiveness of the control measures and modify as necessary.
- Review the risk assessments and safe working procedures if they are believed to be no longer valid, if there is a significant change in working or product, following an incident, or as part of an agreed review program (at least annually).
- All documentation, whether hard copy or electronic, must be up to date and easily available to all persons, including emergency services, as required.

Occupational Safety Team

The Occupational Safety Team will offer advice and support in the interpretation of the regulations, this guidance and any aspect of risk management, including the use of hazardous substances in the workplace.
The Occupational Safety Team website http://www.bradford.gov.uk/hands/ is useful for information, policy and guidance.

The Health and Safety Executives webpages and publications are a very useful resource.
COSHH homepage http://www.hse.gov.uk/coshh/

Hazardous Substances

A substance is considered hazardous if it can cause a risk to health, but they can have other dangerous properties such as flammable, explosive, oxidising or dangerous to the environment.

A hazardous substance can be: (this is not an exhaustive list)

- Cleaning products, solvents, paints, sprays, adhesives, oils/greases, fuels, metalworking fluids, poisons, inks, food ingredients (liquids/powders), dried building materials.
- Woodworking and stone working dusts, flour and gain dusts, wet working with cleaning or building materials. Fumes from welding, soldering, or metal cutting.
- Biological agents such as bacteria and other micro-organisms (Legionella, Hepatitis, arising from flowers bulbs, fruit and vegetable, or body fluids).

Which substances will need risk assessment?

Substances that require a risk assessment are those that have potentially hazardous properties e.g. those that carry international warning symbol(s) and are marked as, harmful, corrosive, toxic, poison, oxidant, highly flammable etc. some still may display the old orange warning labels.

Product information and Material Safety Data sheets, discussions with suppliers, trade associations or checking the internet, will help the decision on whether the substance is harmful and needs to be assessed. The COSHH Hazard Identification Notes will help to identify potential COSHH hazards at work.

Chemical Based Hazardous Substances

The COSHH Risk Assessment Form (CRA1) should be used to record the risk assessment for chemical based substances.

Biological or Physical Agents and Hazardous By-Products

The Risk Assessment Form and supporting guidance should be used to assess the risks and controls where biological agents (e.g. bacteria, viruses, fungi, parasites), physical agents (e.g. wood, brick, stone, flour or grain dusts), or hazardous by-products of processes (e.g. dusts, exhaust gases/fumes) are encountered during work activities.

Where a substance packaging or product information carries no warning symbols, or does not indicate any potential dangers, no written assessment is necessary. A documented safe working procedure is still needed to make sure it is used only for its intended purpose and according to the manufacturer's instructions.

The CRA1 and Risk Assessment forms are available for use on the Occupational Safety Website.

Please note: Asbestos and Lead are not covered by the COSHH Regulations, as they both have their own regulations.

COSHH Risk Assessment

Where a hazardous substance requires an assessment, the following procedure should be used:

- Make a list of all substances and what they are used for.
  If there are several substances for the same purpose, if possible select one and dispose of the rest to reduce the amount of hazardous substances being stored and used.
- Complete a COSHH Risk Assessment Form (CRA1) for each substance, using the information on the container and the supplier's Safety Data Sheet. Manufacturers and suppliers are legally required to provide this information and can often be found on their websites. Product labelling should also display suitable information for its safe use.
- The CRA1 assessment form should include information that covers what the substance is used for, the conditions in which it is used, e.g. indoors, outdoors, confined spaces, how much is used, quantities stored, first aid, emergency procedures and disposal.
- The COSHH risk assessment should be used as a basis for developing safe working procedures for staff. The risk assessment should make references to the appropriate safe working procedure if not already stated.
- Ensure all handlers, users and others who may be affected by the substance or process have the necessary information, instruction, training and adequate supervision.
- Where protective clothing and protective equipment is required as part of control measures, guidance and instruction should be given to ensure correct fitting, e.g. face fit testing, use, removal, cleaning, storage and disposal. Material Safety Data sheets will indicate what PPE is required.
- COSHH risk assessments must be in a suitable format that can be easily accessed by staff. The recorded information should be in a form which is easy to understand to the reader and be up to date. It should be available to the Occupational Safety Team, Trade Unions or the Health and Safety Executive on request.
- All new hazardous substances should be fully risk assessed, communicated to staff and added to the file before being put into use. Information for substances no longer being used should be deleted.
- COSHH risk assessments should be reviewed annually, or sooner if there is a significant change, e.g. if the substance formulation changes, if working methods change or if problems arise from using a substance.

COSHH Risk Assessment Guidance

It is important that suitable and sufficient risk assessments are carried out on the health risks created by hazardous substances and implement suitable control measures to protect people's health. The assessment process is essential to the safe use of hazardous substances and for the protection of people's health at work. Managers must also review Fire and First Aid Risk Assessments (via the Building Custodian) in the light of COSHH Assessments where required.

Potential Hazards

A substance could be hazardous if it is allowed to enter the body in any of the following ways:

- Inhaling
- Absorbed /injected through the skin or eyes
- Swallowing
- Passed through broken skin into the blood stream

The effects of exposure can be long or short term. A short-term exposure may be so acute as to cause instant death. A long-term exposure may cause a latent effect appearing harmless in its early stages, but possibly leading to a chronic condition or cancer many years after the exposure began.

Sensitisation & Allergic Reactions

Certain individuals can become sensitive or allergic to some substances over a period of time or after repeated exposures, leading to ill health. For example, a latex allergy which causes dermatitis; sensitisation to a substance leading to hay fever type symptoms (e.g. rhinitis) in an individual when exposed, or an aerosol that exacerbates asthma.

Where it becomes apparent that an individual is suffering from sensitivity or allergy to a particular substance encountered at work, it is important action is taken to prevent the risk of being exposed to it.

Employees should report to their manager any ill health issues related to working with hazardous substances. Managers may need to refer cases to Employee Health & Wellbeing and when required arrange health monitoring surveillance for their staff as part of on-going control measures.

Workplace Exposure Limits (WEL's)

The Health and Safety Executive has established WELs for 500 substances hazardous to health. These substances have set limits to help prevent excessive exposure to specified hazardous substances. Correctly applying the COSHH principles of risk management will mean the controls over exposures are likely to be below the WEL.

A Workplace Exposure Limit (WEL) is the maximum concentration of an airborne substance, averaged over a reference period, to which employees may be exposed by inhalation and must not be exceeded.
The HSE publication EH40 list of approved workplace exposure limits can be downloaded from the HSE website.

Evaluating Risk

To evaluate the risk of adverse health effects, look at the amount being used, frequency and type of exposure.

The following questions below should be asked:

- Has the substance got a danger label and/or warning information?
- Is it necessary to use this substance or can a safer alternative be used?
- Does the process or activity produce gas, fume, dust, mist, vapour?
- Is it harmful if breathed in?
- Will the substance harm the skin or eyes?
- Is harm being caused by the way the substance is being used/processed or produced?
- Who is at risk?
- How frequently does this happen and how long?
- What control measures are in place and are they working?
- What monitoring is required?
- Is the substance stored safely?
- Are all waste products (including the container) disposed of in a safe manner?
- What fire precautions and emergency arrangements are required (consider a fire risk assessment)?

Control Measures Reducing the Risks to Health

The first consideration is whether the hazardous substance needs to be used at all. Can a safer alternative be used instead, for example a paste in place of a powder?

If substitution is not possible, then control measures will be needed to minimise the risk to health from the substance.

For example, the hierarchy of control required if substitution is not possible would be:

1. Change the substance or reduce the quantity.
2. Change the process to reduce substance exposure.
3. Use engineering controls to prevent exposure to the substance e.g. Enclosures (full, partial), local exhaust ventilation (LEV) or combinations of.
4. Reduce the number of persons working in the area when the substance is used
5. Provide personal protective equipment which must fit the wearer correctly, for example, gloves, coveralls, respirator, aprons. These are complementary to the measures above and should only be used on their own as a last resort.

Nine steps to complying with COSHH Regs 2002

Step 1	Assess the risks	Assess the risks to health from hazardous substances used in or created by your workplace activities.
Step 2	Decide what precautions are needed	Do not carry out work which could expose employees to hazardous substances without first considering the risks and the necessary precautions required, and what else is needed to comply with COSHH.
Step 3	Prevent or adequately control exposure	Prevent employees being exposed to hazardous substances. Where exposure cannot be prevented, then actions must be taken to adequately control it.
Step 4	Ensure that control measures are used and maintained	Ensure that control measures are used and maintained properly e.g. enclosures, LEV, and that safety procedures are followed.
Step 5	Monitor the exposure	Monitor the exposure of employees to hazardous substances.
Step 6	Carry out appropriate health Surveillance	Carry out appropriate health surveillance where risk assessment has shown this is necessary or where COSHH sets out specific requirements.
Step 7	Prepare plans and procedures to deal with accidents, incidents and emergencies	Prepare plans and procedures to deal with accidents, incidents and emergencies involving hazardous substances, where necessary.
Step 8	Ensure employees are properly informed, trained and supervised	Provide employees with suitable and sufficient information, instruction and training.
Step 9	Monitor and review	Monitor and review working activities, processes and documentation, to ensure they remain valid

Schools and CLEAPSS

Chemicals and substances used in school science and technology also come under the requirements of COSHH.
CLEAPSS provide the necessary hazard information to schools on the Science and Technology Hazcards and general guidance in the Laboratory Handbook, both of which can be downloaded from their website. Note this information is no substitute for carrying out suitable risk assessments and developing safe working procedures and lesson plans.

For all other substances hazardous to health (as defined by this guidance) found in school kitchens, cleaning, caretaking and maintenance services, this guidance document should be followed.