


NHS
Greater Glasgow
and Clyde

Control of Substances Hazardous to Health (COSHH)



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Programme

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5. Group work
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COSHH

Why were the Regulations introduced?

- Work related ill health, such as respiratory problems, dermatitis, sensitisation, hepatitis, poisonings etc.
- Designed to prevent rise in occupational ill health due to exposure to hazardous substances

COSHH

Definition of a Substance Hazardous to Health

- listed as being very toxic, toxic, harmful, irritant or corrosive, sensitising, carcinogenic, mutagenic, toxic to reproduction
- for which the HSE has approved a workplace exposure limit (WEL)
- biological agent
- dust of any kind (substantial concentration)
- a substance, not mentioned, which creates a comparable hazard

COSHH

Types of substance

- Solids – latex, cleaning chemicals
- Liquids – urine, blood, cleaning chemicals
- Gases – anaesthetic agents (N₂O)
- Aerosols / airborne particles – cauterising particles
- Biological agents – HIV, Hepatitis C virus

COSHH

Routes of Exposure

- Ingestion
- Inhalation
- Skin absorption, contact, puncture
- Mucous membranes
- Infection

COSHH Regulations

The Regulations **do not** apply to:

- radiation
- high pressures
- extreme temperatures
- explosive or flammable properties
- lead, asbestos

NB. Other regulations apply to these risks

COSHH does not apply to patients' exposure to medicines or dental treatment, but covers staff exposure.

COSHH Regulations

Employers must

- Assess and undertake a suitable & sufficient risk assessment and:
 - Prevent exposure
 - If can't prevent, identify and implement controls to minimise exposure
 - Maintain, examine and test control measures
 - Monitor exposure (where required)
 - Health surveillance (where appropriate)
 - Provide information, instruction, training and supervision

COSHH Regulations

Hierarchy of Control Measures

- Eliminate the use of a harmful product or substance and use a safer one.
- Use a safer form of the product, eg paste rather than powder.
- Change the process to emit less of the substance.
- Enclose the process so that the product does not escape.
- Extract emissions of the substance near the source.
- Have as few workers in harm's way as possible.
- Provide PPE such as gloves, coveralls and a respirator. PPE must fit the wearer.

COSHH Regulations

Only when these control measures cannot eliminate exposure completely should Personal Protective Equipment (PPE) be issued. In some circumstances they should be considered as a secondary measures



COSHH Regulations

Must be 'suitable and sufficient,' and undertaken by a 'competent person' who is familiar with the task / environment .

It should include:

- assessment of risks to health
- focus on preventing exposure to substances
- steps that need to be taken to ensure adequate control of exposure
- identification of other necessary actions eg. monitoring / training etc.
- all assessments should be reviewed regularly – normally annually or if there is a change in the process, an incident etc.

COSHH Risk Assessment

Factors to consider in an assessment include:

- Type of substances to which employees are liable to be exposed
- Where, and in what form, the substances are present
- Effects of the substances on the body
- May require an estimate of exposure (seek advice from Occupational Hygienist)
- Consider storage, transport, handling and use in your area of work
- Spillage and disposal procedures

COSHH Risk Assessment

Assessors guide:

- Locate previous assessment (if it exists)
- List Hazardous Substances involved
- Request current Safety Data Sheets from supplier or manufacturer for all substances involved
- List associated activities

COSHH-List of Substances

Date	Name	Chemical / Substance / Product Name	Classification eg Harmful / Toxic	Where is it used eg Location / Operation	Maximum Quantity Stored	Risk Assessed? Yes / No

COSHH Risk Assessment

Assessors guide:

- Remove any substance that is not required
- If possible, substitute with less harmful substance, for example:
 - Replace effervescent bleach tablets with non effervescent
 - Replace latex gloves with non latex
- Determine if a risk actually exists

COSHH Risk Assessment

Risk Evaluation

Decide which level of risk exists –

Low - Quantities or usage, too small to constitute a foreseeable risk to health.

Medium - Risk is significant, but adequate control measures are in place, further controls may be required to bring the level down to low risk.

High / Very High - There is a risk to health and further control measures are required. Work should stop until the level is reduced. Seek expert advice.

Information, etc.

The employer must provide employees with information, instruction, training and supervision regarding the following:

- risk to health created by exposure
- precautions which should be taken
- results of monitoring
- results of health surveillance

Safety Data Sheets

- Suppliers of hazardous chemicals must supply their customers with safety data sheets
- The safety data sheet is the starting point for the COSHH assessment

Safety Data Sheets

Headings which should appear on safety data sheets

1. Identification of the substance / mixture and of the company / undertaking	2. Hazards identification
3. Composition/information on ingredients	4. First-aid measures
5. Fire-fighting measures	6. Accidental release measures
7. Handling and storage	8. Exposure controls / personal protection
9. Physical and chemical properties	10. Stability and reactivity
11. Toxicological information	12. Ecological information
13. Disposal considerations	14. Transport information
15. Regulatory information	16. Other information

Safety Data Sheets

Information provided on safety data sheets includes:

- Workplace Exposure Limits (WEL)
- The WEL should not be exceeded. If substance causes cancer, heritable genetic damage or asthma, exposure must be reduced to lowest level reasonably practicable

Health Surveillance

Early detection of ill health associated with exposure to hazardous substances, can involve:

- examination by a doctor or Occupational Health nurse
- checks of employees' skin for dermatitis by a Responsible Person
- completion of a questionnaire

Health / monitoring records must be kept for at least 40 years

Classification, Labelling & Packaging (CLP) Regulations










- Requires classification and labelling of substances to be consistent with CLP
- Sets general packaging standards to ensure the safe supply of hazardous substances and mixtures.

CLP Regulations

Substances and mixtures will be classified by:

- A Globally Harmonised System (GHS) of classification and labelling of chemicals
- Labels will contain
 - a pictogram
 - hazard statements
 - precautionary statements

CLP Pictograms

What do the COSHH symbols mean?		
 Dangerous to the environment	 Toxic	 Gas under pressure
 Corrosive	 Explosive	 Flammable
 Caution – used for less serious health hazards like skin irritation	 Oxidising	 Longer term health hazards such as carcinogenicity

CLP – Signal Words

The CLP Regulations introduces two new signal words required for labelling:

Danger - if the chemical has a more severe hazard

Warning - if the chemical has a less severe hazard

Where several hazards requiring signal words are present, only the signal word for the most severe hazard will be displayed.

CLP – Hazard Statements

A hazard statement is a phrase that describes the nature of the hazard in the substance or mixture. A hazard statement will be determined by the application of the classification criteria.

Examples of hazard statements include:

- Causes serious eye damage
- Toxic if swallowed
- Toxic to the aquatic life with long lasting effects
- May cause allergy or asthma symptoms or breathing difficulties if inhaled

It replaces the 'risk or R-phrase' used in CHIP

CLP – Precautionary Statements

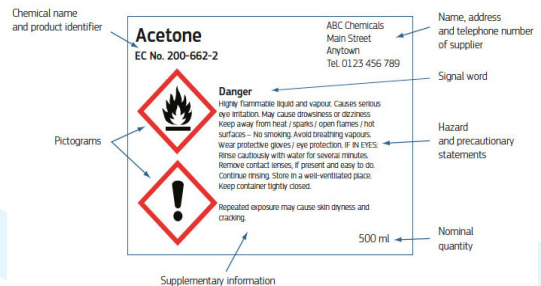
A precautionary statement is a phrase that describes a recommended measure(s) to minimise or prevent adverse effects resulting from exposure to a hazardous substance or mixture due to its use or disposal.

Examples of precautionary statements include:

- Wear eye protection
- Do not eat, drink or smoke when using this product
- Avoid release to the environment
- In case of inadequate ventilation wear respiratory protection

It replaces the 'safety or S-phrase' used in CHIP

Labelling Example



COSHH Risk Assessment Form

1) Department: _____ Refno: _____

Substance / Activity	
Is there a safe system of work for the activity?	Yes / No
Can the hazardous substance be substituted with a safer alternative?	Yes / No
Product / Trade Name / Mixture etc	Hazard Classification (Corrosive, Hazardous to the environment, Health Hazard, Explosive, Oxidising etc)
Chemical Nature (Aerosol, dust, fume, gas, liquid, powder, etc)	Route of Entry / Exposure (Absorption, Ingestion, Inhalation, Injection, Splash)
Individuals or groups exposed	Staff groups / Patients / visitors
Duration of exposure eg. hours / day	
Estimated level of exposure*	High / Medium / Low / Negligible
*Contact Occupational Hygienist / Health & Safety Practitioner for advice if required	
Does the substance have a Workplace Exposure Limit? (WEL)	Yes* / No
*Contact Health & Safety Practitioner for advice if required	
Is a Safety Data Sheet Available?	Yes / No

COSHH Risk Assessment Form

2) Existing Precautions

Summarise current controls in place (Include any procedures for Storage, Transport, Handling, Disposal and Maintenance, as well as the	Describe how they might fail to prevent adverse outcomes.
Emergency Procedures	
First Aid	Spillages

COSHH Risk Assessment Form

3) Level of Risk
 Is the control of this risk adequate? Give more than one risk level if the assessment covers a range of circumstances. You can use the 'matrix' to show how 'likelihood' and 'consequences' combine to give a conclusion. Also, be critical of existing measures: if you can think how they might fail, or how they could be improved, these are indications of a red or orange risk.

Risk Matrix

Likelihood	Impact / Consequences				
	Negligible	Minor	Moderate	Major	Extreme
Almost Certain	Medium	High	High	V High	V High
Likely	Medium	Medium	High	High	V High
Possible	Low	Medium	Medium	High	High
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Low	Medium	Medium

Risk Level(s), tick here: **Very High** **High** **Medium** **Low**

Health Surveillance / Atmospheric Monitoring	
Is Health Surveillance or Atmospheric Monitoring of staff required? (If yes, contact the Occupational Health Service / Occ. Hygienist)	Yes / No

New & Expectant Mothers	
Are additional control measures required for new & expectant mothers?	Yes / No
If yes, please specify:	

COSHH Risk Assessment Form

Health Surveillance/ Atmospheric Monitoring	
Is Health Surveillance or Atmospheric Monitoring of staff required? (If yes, contact the Occupational Health Service / Occ. Hygienist)	Yes / No

New & Expectant Mothers	
Are additional control measures required for new & expectant mothers?	Yes / No
If yes, please specify:	

COSHH Risk Assessment Form

4) Action Plan - if risk level is High (Orange) or Very High (Red)

Use this part of the form for risks that require action. Use it to communicate, with your Line Manager or Risk Coordinator or others if required. If using a copy of this form to notify others, they should reply on the form and return to you. Check that you do receive replies. Describe the measures required to make the work safe. Include hardware – engineering controls, and procedures. Say what you intend to change. If proposed actions are out with your remit, identify them on the plan below but do not say who or by when; leave this to the manager with the authority to decide this and allocate the resources required.

Proposed actions to control the problem List the actions required. If action by others is required, you must send them a copy	By Whom	Start date	Action due date

COSHH Risk Assessment Form

5) Action by Others Required - Complete as appropriate: (please tick or enter YES, name and date where appropriate)

Report up management chain for action	
Report to Estates for action	
Contact advisers / specialists	
Alert your staff to problem, new working practice, interim solutions, etc	

Assessor	Designation	Date	Review
Manager			

6) Staff Information and awareness
 Processes for ensuring staff are aware of the COSHH Risk Assessment. Confirm which will apply:

- Induction processes
- Departmental training
- Departmental meetings
- Health and Safety Committee
- Other local processes (please specify): _____

COSHH Quiz

1. If you are supplied with a SDS is a COSHH assessment always required?
2. Can Latex gloves be classed as a hazardous substance ?
3. Can staff choose whether or not to wear PPE when dealing with hazardous substances ?
4. Are patients exposed to medicines covered by COSHH ?
5. Is health surveillance required for all staff using hazardous substances ?
6. How often should COSHH assessments be reviewed ?
7. Can air monitoring be used to help assess the WEL is not exceeded?
8. What working conditions may cause contact dermatitis?

Questions?

Further information regarding COSHH or any aspect of Health and Safety can be found on our HRConnect pages