



COSHH PROCEDURE

Management of Hazardous Substances (Control of Substances Hazardous to Health Regulations 2002 (COSHH))

1. Purpose

This procedure is to provide necessary guidance on action to comply with the Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended). COSHH places a duty on the Health Board to eliminate or effectively control exposure to hazardous substances.

Certain chemicals and biological substances used at work can cause harm. Harm may be short term (e.g. chemical burn, coughing etc.) or cause longer term health problems (e.g. infection, dermatitis, occupational asthma, cancer etc.).

How the same substance is used can also change the risk e.g. spraying versus painting, the latter normally producing lower emissions of solvents. In some cases staff may not directly use or be exposed to the hazardous substance but may be harmed by being in close proximity to it

Certain substances such as Asbestos may be harmful but will have specific regulations regarding their safety management.

2. Staff and Patient Safety

2.1 **COSHH and Staff Safety**

Exposure of staff to hazardous substances must be eliminated or where that is not possible risks adequately assessed and controlled.

COSHH applies where there is a risk of exposure to hazardous substances during their (non-exhaustive list):-

- Actual use
- Preparation, mixing etc.
- Storage
- Transportation
- Administration e.g. as a drug
- Disposal after use
- Following spillage, clean-up procedures etc.

2.2 COSHH and Patient Safety

For patients COSHH does not apply to the health effects from medication (e.g. cytotoxic drugs but would apply regarding protection of staff to exposure).

COSHH regulations will still apply for patients where unintended exposure could occur. This could be due to risks such as poor or insecure storage of chemicals, cleaning materials etc.

2.3 COSHH and Visitor Safety etc.

The duty of care is extended to visitors and contractors persons who may be exposed to hazardous substances. This include accidental exposure to hazardous materials when used by the Health Board, failure to prevent access to hazardous materials etc.

3. Substances to Which the COSHH Regulations Apply

3.1 Forms of Hazardous Substances

Hazardous substance may occur in wide-variety of forms including (non-exhaustive list):-

- Gas, fume, mist
- Liquid
- Solid, powder, dust
- Biological e.g. blood and body fluids
- Forming part or all of a mixture
- Waste materials

A substance should be regarded as hazardous to health if it is:-

- Hazardous in the form in which it occurs in the work activity (e.g. used as a dust rather than as a solid (e.g. pellet)
- Forms part of a mixture of compounds, microorganisms, allergens etc. with individual substances that have health risk
- Is a waste material with properties that have a health risk (e.g. clinical waste)

4. Principles of Control of Substances Hazardous to Health (COSHH)

The general principles are to:-

1. Control exposure of staff (and others) to hazardous substances.
2. Where possible eliminate the use of a hazardous substance
3. Where elimination is not possible **assess the risk** to identify the necessary control measure(s)
4. Change the risk by implementing control measures Control measures adopted should be proportionate to the level of risk. These can include (non-exhaustive list):-

Control Type	Example of controls
Substitution	<ul style="list-style-type: none"> • Use a safer alternative
Change the task	<ul style="list-style-type: none"> • Changing how it is used e.g. using a safer form such as pellet instead of a dust, brushing on rather than spraying etc.
Management controls	<ul style="list-style-type: none"> • Standard Operating Procedures,
Training and information	<ul style="list-style-type: none"> • Training • Instruction for use, manufacturer's instructions
Competent Staff	<ul style="list-style-type: none"> • Providing appropriate training • Providing appropriate information
Control exposure	<ul style="list-style-type: none"> • Consider the whole cycle of use and potential exposure to the substance. Is it hazardous during preparation, use, disposal etc.? • Minimising the quantity of hazardous substance used • Enclose the substance so that it cannot escape e.g. use of engineering controls such as a fume cabinet • Providing good general ventilation to work area • Limiting the number of employees that may be exposed • Providing hygiene facilities e.g. washing facilities • Provide appropriate Personal Protective Equipment (PPE) • Provide facilities to safely dispose of or treat contaminated clothing and equipment • Preventing access to hazardous substances by patients and visitors e.g. lockable cabinets
Maintenance	<ul style="list-style-type: none"> • Maintaining equipment etc. required to control exposure
Emergencies	<ul style="list-style-type: none"> • Developing spillage and other emergency procedures
Monitoring	<ul style="list-style-type: none"> • Supervision • Providing health surveillance • Monitoring of levels of hazardous substances

5. Adopting Appropriate Levels of Control

5.1 Risk Levels

Three levels of risk have been identified. It should be noted that some hazardous substances may have high risk associated with them but the particular way that they are used, quantities and concentrations etc. may actually make them low or medium risk.

Risk levels are:-

Risk Level 1	<ul style="list-style-type: none"> • Substance with HIGH potential to cause harm
Risk Level 2	<ul style="list-style-type: none"> • Substance and/or how they are used with a Medium potential to cause harm
Risk Level 3	<ul style="list-style-type: none"> • Substance and how they are used with a Low potential to cause harm

The purpose of this classification is to give guidance to where the risk assessment and associated control measures must be carefully identified and implemented and to avoid circumstances where arrangements put in place for a low risk substance are not proportionate to the level of risk

Appendix A shows the risk control measures typically required. Where there may be doubt as to the potential classification of the substance unless identified by risk assessment as not being required the highest level of risk control should be implemented

5.2 Risk Assessment

Unless the risk is clearly low (e.g. correction fluid used in low volumes in offices) the health risks from hazardous substances must be:-

- Assessed
- Risks identified
- Control measure identified for all circumstance where exposure may take place
- Risk assessment recorded
- Risk assessment brought to the attention of staff
- Reviewed if the risk assessment may become invalid

As risk assessments may frequently influence the Standard Operating Procedures (SOP), Quality control systems e.g. required for accreditation, training etc. it is recommended that the key findings of the risk assessment is incorporated into relevant documents, training, procedures etc. Key findings will include when to use Personal Protective Equipment, management of spills etc.

Risk assessments and examples are shown in Appendix A.

5.3 Risk Assessment Review

The risk assessment may become invalid due to

- Change of use of the substance e.g. method of application
- Change in where it is used
- Change in formulation e.g. by supplier
- Information is received that the risk has changed
- Emerging health concerns with staff etc. e.g. respiratory problems during use.

Risk assessment should be reviewed as necessary.

6. Help and Support

Assistance and advice is available from

- Health and Safety Department
- Occupational Health
- Infection Control department

COSHH Risk and Control Measures

	Used in tables below	
Code	This means	Example
SDS	Safety Data Sheet	Information on risks provided by supplier
SOP	Standard Operating Procedure	Instruction for use (includes suppliers instructions)
PPE	Personal Protective Equipment	Gloves, goggles etc.
RPE	Respiratory Protective Equipment	Respirator, mask etc.
LEV	Local Exhaust Ventilation	Fume cabinet etc.
WEL	Work Exposure Limit	Average exposure over 8 hours
STE	Short Term Exposure limit	Short term exposure over 15 minutes

Substance Risk Levels and Potential Control Measures (non-exhaustive list)

Risk Level 1	<ul style="list-style-type: none"> Substance with HIGH potential to cause harm 	
Risk factors	<ul style="list-style-type: none"> Substances where high standards of control must be in place and maintained Risk of short or long term injury Risk of significant health effects (e.g. carcinogenic) Possible or known risk to unborn child (mutagenic) Staff may need high levels of competency Likely requirement for monitoring Likely to require health surveillance 	
(Possible) Additional risk factors	<ul style="list-style-type: none"> Requires the routine use of control measures such as enclosure, engineering (LEV), PPE etc. Spillage procedures required and likely to include RPE and specific waste disposal procedure etc. Substances may have a WEL and/or STEL 	
Examples	Substance Example	Typical risks
Cancer Services	<ul style="list-style-type: none"> Cytotoxic drugs 	<ul style="list-style-type: none"> Carcinogen
Laboratory	<ul style="list-style-type: none"> Xylene 	<ul style="list-style-type: none"> Carcinogen

Risk Level 1	Examples of Control Measures	
Developing the Risk Assessment	<ul style="list-style-type: none"> Consider the basic requirements of COSHH (elimination, substituting safer alternative etc. Knowledge of Safety Data Sheet Formal risk assessment to identify and record control measures Manufacturer's instructions 	
Likely main control measures	<ul style="list-style-type: none"> Standard Operating Procedure/Instructions for use Training/information for staff PPE (routine use and/or spillage) Spillage procedure, training, equipment etc. Supervision Security of chemicals etc. Incident reporting and investigation 	
Other possible control measures	<ul style="list-style-type: none"> Enclosure of substance LEV maintained and tested RPE routine use and/or spillage Monitoring for WEL/STEL Specific first aid procedure Health surveillance 	

Risk Level 2	<ul style="list-style-type: none"> Substance and/or how they are used with a Medium potential to cause harm 	
Risk factors	<ul style="list-style-type: none"> Generally immediate or short-term risk to health Higher risk chemicals used in small quantities 	
(Possible) Additional risk factors	<ul style="list-style-type: none"> May require the routine use of PPE, LEV Unlikely to require RPE in normal use Large groups of staff using substances across a range of areas Possible use in poorly ventilated or inappropriate areas Users may take short cuts e.g. higher concentrations of liquids in a belief the task will be quicker etc. Spillage procedures may be required Substances may have a WEL and/or STEL Possibility that patients and visitors may be exposed to the substance e.g. accessing substance from insecure storage cupboards 	
Examples	Substance Example	Typical risks
Support Services	<ul style="list-style-type: none"> Chlorine releasing agents Hydrogen Peroxide Certain cleaning chemicals 	<ul style="list-style-type: none"> Respiratory injury/chemical burns Respiratory injury /chemical burns Chemical burns/Dermatitis
Endoscopy	<ul style="list-style-type: none"> Peracetic acid 	<ul style="list-style-type: none"> Respiratory injury/Chemical burns
Estates	<ul style="list-style-type: none"> Drain cleaner Cement dust 	<ul style="list-style-type: none"> Respiratory injury /chemical burns Chemical burns
Laboratories	<ul style="list-style-type: none"> Xylene Formaldehyde 	<ul style="list-style-type: none"> Respiratory injury/carcinogenic Respiratory injury/carcinogenic
Theatres	<ul style="list-style-type: none"> Anaesthetics 	<ul style="list-style-type: none"> Respiratory injury
General areas	<ul style="list-style-type: none"> Latex Alcohol gels 	<ul style="list-style-type: none"> Dermatitis Dermatitis, consumption by patients etc.

Risk Level 2	Examples of Control Measures
Developing the Risk Assessment	<ul style="list-style-type: none"> Consider the basic requirements of COSHH (elimination, substituting safer alternative, risk assessment etc. Knowledge of Safety Data Sheet Formal risk assessment to identify and record control measures Manufacturer's instructions
Likely main control measures	<ul style="list-style-type: none"> Standard Operating Procedure/Instructions for use Training/information for staff PPE (routine use and/or spillage) Spillage procedure, training, equipment, waste procedure etc. Supervision Security of chemicals etc. Incident reporting and investigation

Other possible control measures

- Enclosure of substance
- LEV maintained and tested
- RPE (routine use and/or spillage)
- Monitoring for WEL/STEL
- Specific first aid procedure
- Health surveillance

Risk Level 3	<ul style="list-style-type: none"> Substance and how they are used with a Low potential to cause harm 	
Risk factors	<ul style="list-style-type: none"> Low risk to health 	
(Possible) Additional risk factors	<ul style="list-style-type: none"> May require the routine use of PPE No requirement for engineering (LEV) controls, RPE not required Information on safe use etc. primarily available from the label of the container Spillage procedures unlikely to be required Possibility that patient and visitors may be exposed to the substance e.g. security of cupboard, use in open access kitchens etc. 	
Examples	Substance Example	Possible risks
Detergents	<ul style="list-style-type: none"> Washing up liquid Soap powder/liquid 	<ul style="list-style-type: none"> Irritant Drinking etc. by patients, children etc.
Likely main control measures	<ul style="list-style-type: none"> Control measures generally simple Knowledge of instructions for use, SOP etc. Limited requirement for training/information for staff PPE (routine use and/or spillage) may not be required Security of chemicals etc. Incident reporting and investigation 	
Other possible control measures	<ul style="list-style-type: none"> Low requirement e.g. health surveillance not required 	

SBUHB COSHH Risk Assessment Form

This assessment *only addresses the risk of harm to health* from possible exposure to the substances listed. Additional risk assessments may be required to control the risk from other hazards e.g. electrical equipment etc. associated with work.

Location of this COSHH Assessment	
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What will the chemical(s) be used for?	(describe process, processes etc. e.g. washing floors)
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What is (are) the names of the chemical involved in the process/this assessment	Trade Name, Chemical name etc.
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Are there R phrases for this chemical? (tick or complete all relevant boxes)	R10 - Flammable. R11 - Highly flammable	R20 - Harmful by inhalation	R21 - Harmful in contact with skin.	
	R22 - Harmful if swallowed.	R36 - Irritating to eyes	R37 - Irritating to respiratory system.	
	R38 - Irritating to skin			

R Phrase (other)	R		
	R		
	R		

Note:	R Phrases including Toxic, Danger of very serious irreversible effects, May cause cancer. Seek specialist advice.
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Does the substance have a STEL or WEL	Yes		If yes describe	
	No			

Who might be exposed? (tick or complete all relevant boxes)							
Staff using the chemical	<input checked="" type="checkbox"/>	Persons in close proximity etc.		Visitors Patients		Others	

At what stage might exposure take place? (tick or complete all relevant boxes)							
Transportation		Preparation for use		Actual use		Finishing e.g. rinsing	
Waste disposal		Spillage		Accessed by patients etc.		Inadequate/Insecure storage	
Other (describe)							

How will exposure be prevented or controlled? (tick or complete all relevant boxes)							
Procedure/SOP/Instructions		Containment (fume cabinet)		Good general ventilation		Local Exhaust Ventilation	
Use by competent staff only		Lockable cabinet/stores		Health surveillance.		Spillage procedure	
PPE gloves		PPE clothing		PPE eye		PPE respiratory	
Other (describe)							
Other (describe)							

Other Comments to support this assessment

Date of Assessment			
Assessor(s) (print name and job title)			
Assessor(s) signature			

Date of Assessment Review			
Assessor(s) (print name and job title)			
Assessor(s) signature			

SBUHB COSHH Risk Assessment Form

This assessment *only addresses the risk of harm to health* from possible exposure to the substances listed. Additional risk assessments may be required to control the risk from other hazards e.g. electrical equipment etc. associated with work.

Location of this COSHH Assessment	Grange Bungalows (Rehabilitation)
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What will the chemical(s) be used for?	(describe process, processes etc. e.g. washing floors) Limited range of typical household chemicals used in these premises. Patients will be supervised if required to use.
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What is (are) the names of the chemical involved in the process/this assessment	Trade Name, Chemical name etc. Washing up liquid Detergents for general cleaning of surfaces Tablets for dish washer
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Are there R phrases for this chemical? (tick or complete all relevant boxes)	R10 - Flammable.		R20 - Harmful by inhalation		R21 - Harmful in contact with skin.	
	R11 - Highly flammable		R36 - Irritating to eyes		R37 - Irritating to respiratory system.	
	R22 - Harmful if swallowed.	<input checked="" type="checkbox"/>	R38 - Irritating to skin			

R Phrase (other)	R		
	R		
	R		

Note:	R Phrases including Toxic, Danger of very serious irreversible effects, May cause cancer. Seek specialist advice.
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Does the substance have a STEL or WEL	Yes		If yes describe	
	No	<input checked="" type="checkbox"/>		

Who might be exposed? (tick or complete all relevant boxes)						
Staff using the chemical	<input checked="" type="checkbox"/>	Persons in close proximity etc.		Visitors Patients	<input checked="" type="checkbox"/>	Others

At what stage might exposure take place? (tick or complete all relevant boxes)							
Transportation		Preparation for use		Actual use	<input checked="" type="checkbox"/>	Finishing e.g. rinsing	
Waste disposal		Spillage	<input checked="" type="checkbox"/>	Accessed by patients etc.	<input checked="" type="checkbox"/>	Inadequate/Insecure storage	<input checked="" type="checkbox"/>
Other (describe)							

How will exposure be prevented or controlled? (tick or complete all relevant boxes)							
Procedure/SOP/Instructions	<input checked="" type="checkbox"/>	Containment (fume cabinet)		Good general ventilation		Local Exhaust Ventilation	
Use by competent staff only		Lockable cabinet/stores	<input checked="" type="checkbox"/>	Health surveillance.		Spillage procedure	
PPE gloves	<input checked="" type="checkbox"/>	PPE clothing		PPE eye		PPE respiratory	
Other (describe)	<input checked="" type="checkbox"/>	If patients required to use chemicals they will be supervised					
Other (describe)							

Other Comments to support this assessment

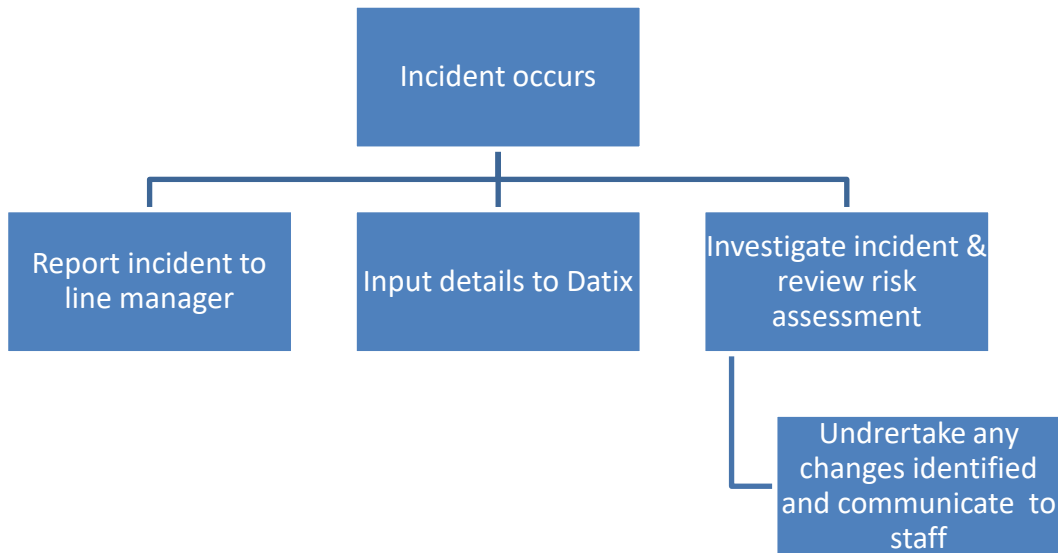
Date of Assessment	October 2018		
Assessor(s) (print name and job title)			
Assessor(s) signature			

Date of Assessment Review			
Assessor(s) (print name and job title)			
Assessor(s) signature			

COSHH Risk Monitoring/Reporting Measures

All incidents must be reported through line management and recorded on Datix.

Fig 1:



All incident data will be reported and reviewed at local level through the health & safety governance structure, this will ensure appropriate reporting through to the health board health and safety committee.

Fig 2:

