



Bwrdd Iechyd Prifysgol Bae Abertawe Swansea Bay University Health Board



Meeting Date	26 June 2019		Agenda Item	X.X
Report Title	COSHH Procedure			
Report Author	Laurie Higgs,	Head of Health	and Safety	
Report Sponsor	Gareth Howe	lls, Director of Nu	ursing	
Presented by	Laurie Higgs,	Head of Health	and Safety	
Freedom of	Open			
Information				
Purpose of the	The purpose of this report is to			
Report				
Key Issues	 Backgrour 	nd		
	Risks			
	Summary			
Specific Action	Information	Discussion	Assurance	Approval
Required	\boxtimes		\boxtimes	
(please choose one				
only)				
Recommendations	Members are asked to :			
	Note the procedure that was previously agreed in the group in September 2019			

COSHH Procedure

1. INTRODUCTION

The purpose of this report is to update the Operational Health and Safety group on arrangements to assess Control of Substances Hazardous to Health (COSHH) risk and advice on relevant control measures

2. BACKGROUND

Though the risks from hazardous substances used in the NHS has been reduced there is still a legal requirement to protect staff and others from exposure to chemical and biological materials

3. GOVERNANCE AND RISK ISSUES

Biological risks in the workplace are typically managed by Control of Infection polices and procedures. This procedure focusses on chemical hazards

4. FINANCIAL IMPLICATIONS

There are no direct financial implications arising from this report.

5. **RECOMMENDATION**

Members are asked to: Note the procedure that was previously agreed in the group in September 2019

Governance and Assurance				
Link to	Supporting better health and wellbeing by actively	promoting and		
Enabling	empowering people to live well in resilient communities			
Objectives	Partnerships for Improving Health and Wellbeing	\boxtimes		
(please choose)	Co-Production and Health Literacy			
	Digitally Enabled Health and Wellbeing			
	Deliver better care through excellent health and care service outcomes that matter most to people	es achieving the		
	Best Value Outcomes and High Quality Care	\boxtimes		
	Partnerships for Care			
	Excellent Staff			
	Digitally Enabled Care			
	Outstanding Research, Innovation, Education and Learning			
Health and Car				
(please choose)	Staying Healthy			
	Safe Care	\boxtimes		
	Effective Care	\boxtimes		
	Dignified Care	\boxtimes		
	Timely Care	\boxtimes		
	Individual Care	\boxtimes		
	Staff and Resources	\boxtimes		
Quality, Safety	and Patient Experience			
	patients, visitor and contractors			
Financial Impli	cations			
There are no di	rect financial implications arising from this report.			
Legal Implicati	ons (including equality and diversity assessment)			
Legal Complian	Legal Compliance COSHH Regulations 2012			
Staffing Implications				
None at present				
	plications (including the impact of the Well-being of Vales) Act 2015)	Future		
None				
Report History				
Appendices	None			
Appendices				

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

1. <u>Purpose</u>

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
- Where elimination is not possible <u>assess the risk</u> 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	Use a safer alternative
Change the task	 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	Standard Operating Procedures,
Training and information	TrainingInstruction for use, manufacturer's instructions

Competent Staff	Providing appropriate trainingProving appropriate information
Control exposure	 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 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	Maintaining equipment etc. required to control exposure
Emergencies	Developing spillage and other emergency procedures
Monitoring	 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	Substance with <u>HIGH</u> potential to cause harm
Risk Level 2	• Substance and/or how they are used with a <u>Medium</u> potential to cause harm
Risk Level 3	Substance and how they are used with a <u>Low</u> 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. <u>Help and Support</u>

Assistance and advice is available from

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

<u>Appendix A</u>

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	Substance with <u>HIGH</u> potential to cause harm		
Risk factors	 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	 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	Cytotoxic drugs	Carcinogen	
Laboratory	Xylene	Carcinogen	

Risk Level 1	Examples of Control Measures
Developing the Risk Assessment	 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	 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	 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	• Substance and/or how they are used with a <u>Medium</u> potential to cause harm	
Risk factors	 Generally immediate or short-term risk to health Higher risk chemicals used in small quantities 	
(Possible) Additional risk factors	 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	 Chlorine releasing agents Hydrogen Peroxide Certain cleaning chemicals 	 Respiratory injury/chemical burns Respiratory injury /chemical burns Chemical burns/Dermatitis
Endoscopy	Peracetic acid	Respiratory injury/Chemical burns
Estates	Drain cleanerCement dust	Respiratory injury /chemical burnsChemical burns
Laboratories	XyleneFormaldehyde	Respiratory injury/carcinogenicRespiratory injury/carcinogenic
Theatres	Anaesthetics	Respiratory injury
General areas	LatexAlcohol gels	 Dermatitis Dermatitis, consumption by patients etc.

Risk Level 2	Examples of Control Measures
Developing the Risk Assessment	 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	 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
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Risk Level 3	Substance and how they are used with a Low potential to cause harm		
Risk factors	Low risk to health		
(Possible) Additional risk factors	 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	Washing up liquidSoap powder/liquid	IrritantDrinking etc. by patients, children etc.	
Likely main control measures	 Knowledge of instructions for us Limited requirement for training, PPE (routine use and/or spillage Security of chemicals etc. 	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	Low requirement e.g. health surveillance not required		

SWUHB 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)
M (are) the	Trade Name, Chemical name etc.

Trade Name, Chemical name etc.

Are there R phrases for this	R11 -	R10 - Flammable. R11 - Highly flammable			R20 - Harmful by inhalation	R21 - Harmful in contact with skin.	
chemical? (tick or complete all relevant boxes)	R22 - Harmful if swallowed.				R36 - Irritating to eyes	R37 - Irritating to respiratory system.	
	R38 - skin	Irritatir	ng to				
	R						
R Phrase (other)	R						
	R						
Note:	R Phrases including Toxic, Danger of very serious irreversible effects, May cause cancer. Seek specialist advice.						
Does the substance have a	Yes		If yes				
STEL or WEL	No		describ	be			

Who might be expo	sed?(tick or complete all	releva	ant boxes)		
Staff using the chemical	\checkmark	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 expose be p	prevented or controlled?	(tick or complete all relev	rant 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		

SWUHB 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 COSH Assessment	Grange Bungalows (Rehabilitation)
What will the	describe process processes etc. e.g. washing floors)

emical(s) be	(describe process, processes etc. e.g. wasning floors) Limited range of typical household chemicals used in these premises. Patients will be supervised if required to use.
	nat will the iemical(s) be ied for?

What is (are) the names of the	Trade Name, Chemical name etc.
chemical involved	Washing up liquid
in the process/this	Detergents for general cleaning of surfaces
assessment	Tablets for dish washer

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.			V	R36 - Irritating to eyes	V	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.							
Does the substance have a STEL or WEL	Yes		If yes					
	No	\checkmark	describ	be				

Who might be exposed? (tick or complete all relevant boxes)								
Staff using the chemical	\checkmark	Persons in close proximity etc.		Visitors Patients	\checkmark	Others		

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

How will expose be prevented or controlled? (tick or complete all relevant boxes)							
Procedure/SOP/ Instructions	\checkmark	Containment (fume cabinet)		Good general ventilation		Local Exhaust Ventilation	
Use by competent staff only		Lockable cabinet/stores	V	Health surveillance.		Spillage procedure	
PPE gloves	\checkmark	PPE clothing		PPE eye		PPE respiratory	
Other (describe)	\checkmark	If patients require	d to us	se chemicals they v	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		