



POLICY	
Chemical, Hazardous Substances and Dangerous Goods Management	
Scope (Staff):	All Staff
Scope (Area):	CAHS (PCH-Dangerous Goods located only, CACH, CAMHS)

This document must be read in conjunction with [NMHS Dangerous Goods Policy](#)

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Aim

To ensure that all Chemicals, Hazardous Substances and Dangerous Goods within all workplaces across the Child and Adolescent Health Services (CAHS) are identified and appropriately managed in support of a safe and healthy work environment.

Background

Whilst most dangerous goods across CAHS are managed by NMHS Facilities, this policy highlights the duty of care of the employer and employee in safely managing, handling and storing dangerous goods.

Chemical incidents can occur for a number of reasons such as leaks during transportation, spills caused by inattention, incorrect use of chemicals or machinery.

Potential chemical high risk areas are: laboratories, Pharmacy, machinery spaces, CSSD, Allied Health, Patient Support Services, equipment sterilisation services.

This Policy does **not** cover Radioactive and Infectious Substances or non-hazardous pharmaceutical drugs.

Risk

Breach of legislative requirements including Duty of Care under the WA [Occupational Safety and Health Act 1984](#) and [Occupational Safety and Health Regulations 1996](#).

There is an increased risk of staff injury and illness if chemicals and dangerous goods are not stored, transported, used and disposed in accordance with applicable regulatory requirements.

Definitions

Bunding: an enclosure, embankment or wall designed to contain spills of liquids. Both the bunding and the floor must be sufficiently impervious to retain spillage or leakage.

Chemical: a form of matter that has constant chemical composition and characteristic properties. It cannot be separated into components by physical separation methods, i.e. without breaking chemical bonds. Chemicals substances can be chemical elements, chemical compounds, ions or alloys.

ChemAlert: a computer based chemical management web-based database system which contains a register of chemicals that are used within CAHS and assists with effective management. [ChemAlert](#) is used across WA Health.

Cytotoxic Drugs: drugs that have been demonstrated to be mutagenic, carcinogenic and teratogenic.

Dangerous Goods: goods classified on the basis of immediate physical or chemical hazards, such as fire, explosion, corrosion and toxicity that may affect life, health, property or environment.

GHS: the Globally Harmonized System of Classification and Labelling of Chemicals.

Hazard: anything that may result in injury or harm to the person.

Hazardous Substance: a substance is deemed to be a hazardous substance if it meets the classification criteria specified in the [Approved Criteria for Classifying Hazardous Substances \[NOHSC: 1008 \(2004\) 3rd Edition\]](#) however this policy is intended to cover any chemicals which may have negative health affects to staff.

Safety Data Sheets (SDS): a document that provides information about a hazardous substance and how it should be used and how to avoid harm when using it at the workplace. The properties and uses including: identity of the hazardous substance, chemical and physical properties, health hazard information, precautions of use and safe handling information.

Principles

- The Child and Adolescent Health Service are committed to the safe management of chemicals and dangerous goods in the workplace and to utilising the safest practicable chemical to undertake work tasks.
 - The management of Hazardous Substances and Dangerous Goods within CAHS complies with the relevant legislation, regulations, Australian Standards and National Codes of Practice.
- All chemicals must have a current (dated within 5 years) and valid Safety Data Sheet (SDS) supplied by the manufacturer when the product is brought onsite and whenever the SDS is updated.
 - SDS's should be located in close proximity to the Chemical Hazardous Substances and Dangerous Goods that are being stored within the department location.
 - If there is no computer access in close proximity, the SDS should be printed manually from [ChemAlert](#) and hard copies made available to staff.
- A Person Conducting a Business or Undertaking (PCBU) who manufacture, import or supply any substance for use at a workplace must provide sufficient information so that the substance can be used safely.
- Manufacturers, importers or suppliers of hazardous substances must provide information in an SDS about the substances such as, the identity of the substance and safe handling, transport, storage and disposal.
- Suppliers (except retailers) must provide employers with a SDS for all hazardous substances and dangerous goods obtained by the employer for use at the workplace.
- Stock Holdings (Registers) should be reviewed at least annually during Workplace Hazard Inspections (WHI), by comparing stock to the stock holdings list on [ChemAlert](#).
 - If there are any 'red or amber' listed chemicals on the Stock Holdings, a risk assessment **must** be completed.
 - The CAHS Hazardous Substances Dangerous Goods Review Audit is to be completed annually and an external Chemical Audit will be completed every three (3) years.

- Purchasing of chemicals:
 - As far as practicable, use only CUA chemicals (preferably not 'red' listed chemicals on [ChemAlert](#)).
 - Before a chemical or hazardous substance or dangerous goods can be used on site it must be approved by OSH and Facilities Management, Infection Prevention and Control.
- Report any chemical spill or people exposure to the OSH Department and Emergency Management Unit (EMU) **as soon as possible** and also ensure a [CAHS OSH Employee Incident and Hazard Form](#) is completed.
- Decanting chemicals is not recommended and should be avoided whenever possible.

Roles and Responsibilities

Manager / Supervisor

- The Manager / Supervisor have the following responsibilities:
 - consult with OSH, Facilities Management and Infection Prevention & Control (if used for cleaning), before a chemical, hazardous substance or dangerous good is purchased and approved;
 - conduct a risk assessment on 'red' and 'amber' chemicals on the Stock Holdings list for your appropriate area;
 - annually complete the CAHS Hazardous Substances Dangerous Goods Review Audit;
 - Refer to [Appendix 1: CAHS Hazardous Substances Dangerous Goods Review Audit tool](#).
 - ensure contractors comply with the SDS and PPE requirements;
 - use CUA chemicals as far as practicable or follow the [Management of Chemicals and Hazardous Substances and Dangerous Goods process](#) as outlined below;
 - ensure that staff education occurs at induction level and on a continuing basis as required;
 - Information from the relevant SDS must be used in training employees in the assessment of hazards and safe use of the substances.
 - ensure that they obtain a permit/licence if one is required under legislation / Government policy for specific dangerous goods being used in their departments.

CAHS employees

- Staff who use chemicals, hazardous substances and dangerous goods have the following responsibilities:
 - use the chemical as per safe work procedures and use the appropriate PPE as indicated when using, decanting, transporting and / or storing;

- complying with any mandatory training requirements for the safe use of chemicals in the workplace; and
- report any hazards or incidents.
 - All incidents involving chemicals, hazardous substances or dangerous goods must be reported in accordance with [CAHS Incident and Hazard Reporting](#) Policy.

OSH Department

- The OSH Department has the following responsibilities:
 - provide specialist advice and support to areas in relation to use, purchase, storage, transport and disposal of chemicals;
 - coordinate, administer and update [ChemAlert](#), inclusive of updating the Stock Holdings list;
 - provide specialist advice and support on risk assessment of hazardous chemicals;
 - assist managers and / or supervisors of the area to conduct a risk assessment on 'red' and 'amber' chemicals listed on [ChemAlert](#) on the Stock Holdings list;
 - coordinate a 3 yearly CAHS external Chemical Audit; and
 - monitor and report annually on compliance with this policy.

Contractors

- Contractors are responsible for:
 - complying with any reasonable instruction and cooperating with any reasonable policy or procedure relating to the use, handling and storage of hazardous chemicals and dangerous goods in the workplace;
 - reporting all hazards, incidents, injuries, dangerous occurrences and system failures which occur or have the potential to occur, to their site contact;
 - notifying and obtaining approval from CAHS OSH and [North Metropolitan Health Service - Facilities Management](#) for any hazardous chemicals, dangerous goods and materials prior to these being brought on site and / or used and stored in the work areas; and
 - ensuring that SDS are available and referred to at all times when working with chemicals and hazardous substances and dangerous goods.

ChemAlert

- [ChemAlert](#) assists CAHS to meet its regulatory requirements in regards to Hazardous Substances and Dangerous Goods by the following:
- [ChemAlert](#) has a basic level of access, known as Anonymous, which is available to all CAHS workers providing basic read-only access to stock management, risk assessments and chemical requests, printing and exporting of stock reports.

- An additional level of access known as Credentialed User is used by the OSH Department for activities including creating and modifying risk assessments, stock management and modification, and printing functions.
- [ChemAlert](#) uses colour ratings to indicate the risk associated with a hazardous chemical. These ratings are a good indication of whether to seek additional safety information about the product:
 - **Green** – Low Health Hazard with normal use.
 - **Amber** – Moderate Health Hazard with normal use.
 - **Red** – High Health Hazard with normal use.
- The colour rating can indicate products that are classified as dangerous goods, designated as hazardous chemicals, or indicate scheduled poisons and carcinogens.
 - For further information on [ChemAlert](#) refer to CAHS [ChemAlert](#) Instructions.

Management of Chemicals and Hazardous Substances and Dangerous Goods Process

Introduction of new Chemicals and Hazardous Substances and Dangerous Goods:

- Prior to the introduction of any new chemicals, hazardous substances or dangerous goods into the workplace, the following questions should be asked:
 - Is the product the lowest risk one that is available?
 - Consult with supplier, [North Metropolitan Health Service - Facilities Management](#), OSH Department and Infection Prevention and Control.
 - Are there any other suitable alternatives that can be used?
 - Has a risk assessment been undertaken on the product?
 - Where will the chemical be stored – is it safe and does it comply with the Manufacturer Safety Data Sheet (SDS)?
 - Are there any engineering controls and/or monitoring controls required? (i.e. ventilation, lighting, signage, security?)
 - Is a licence or permit required to use the chemical?
 - What training is required?
- Before the introduction of any new chemical to any CAHS site, consultation is to occur with staff who will be using the chemical, CAHS OSH Department and [North Metropolitan Health Service - Facilities Management](#).
- The EMU and Infection Prevention and Control may also need to be consulted depending on the type of chemical.

Hazardous Substances Dangerous Goods Chemicals Register:

- Maintain a register (Stock Holdings on [ChemAlert](#)) of chemical and hazardous substances and dangerous goods.

- Register annually reviewed by comparing current stock to the stock holdings list on [ChemAlert](#).
 - (Note: This is completed in the Workplace Hazard Inspections and audits completion).
- All staff who may potentially be exposed to the substance have ready access to the “Register”.

Safe Operating Procedures

- The Manager / Supervisor is responsible for ensuring that chemicals, hazardous substances and dangerous goods Safe Operating procedures are developed, implemented and followed.
- This process involves the following:

Hazard Identification

- Identify all hazards associated with the use of hazardous substances and dangerous goods within your area of responsibility.

Risk Assessment and Control

- A thorough risk assessment shall be undertaken for all hazardous substances and dangerous goods.
- Following the risk assessment control strategies must be implemented to minimise all identified risks.
 - CAHS OSH can assist with the risk assessment and is available for advice.
 - The [ChemAlert](#) system contains a risk assessment module to guide this process.
- Risk Controls should follow the hierarchy of control and be considered in the following order:
 - Elimination – Remove the need to use the chemical.
 - Substitute – the chemical for a safer alternative.
 - Engineering – i.e. exhaust fans for ventilation.
 - Administrative - supporting controls, i.e. training, warning signs.
 - PPE – as indicated on the SDS, i.e. gloves, goggles, mask.

Education

- Staff using chemicals, hazardous substances or dangerous goods shall receive education based on the SDS information provided, this includes:
 - health hazards;
 - safe operating procedures;
 - safe storage;
 - processes following exposure or spills for each substance; and

- where to find the hazardous substance dangerous goods register and SDS.
- Staff education should occur at induction to the local area and on a continuing basis as required.

Transport

- Supervisor / Managers to be advised when chemicals are delivered to the site, so the chemical can be transported in accordance with the SDS.
- Dangerous goods / flammable stock must be secured on a trolley, which is specifically designed with compartments for each container.
 - **PCH only:** Oxygen cylinders shall be secured and transported on a trolley in a safe manner.
 - **PCH only:** Patients requiring oxygen therapy during transfer within PCH shall have the oxygen cylinders secured on their beds/trolleys.
 - Under **no** circumstances may staff transfer unsecured containers on a trolley.

Storage

- Storage area must have sufficient illumination for the tasks, adequate ventilation, including local exhaust ventilation, where applicable to be performed
- All chemicals to be stored in accordance with the SDS and hazard class Chemicals stored in containers in which they are supplied.
 - Refer to [Appendix 2: Dangerous Goods Storage Compatibility Guide](#).
- Incompatible chemicals shall be kept segregated from one another (e.g. locked cupboard, secure rooms with access controls).
- The quantities of hazardous chemicals should be kept to a minimum, commensurate with their usage and shelf life.
- Packaging shall be inspected regularly to ensure their integrity with leaking or damaged containers are removed to a safe area for repacking or disposal.

Labelling / Decanting

- The area where dangerous goods or hazardous substances are stored shall be clearly identified by approved signage.
- Hand-written labels are **not permitted**.
- All dangerous goods shall be classified in accordance with relevant statutory requirements.
 - The label must clearly identify the dangerous good, its risks and safety information.
- Decanting chemicals is not recommended, and should be avoided whenever possible.
 - Approval should be sought from the OSH Department if bulk or repetitive decanting is required.

- If a chemical is decanted the container must be labelled to clearly identify the hazardous substance, its risks and safety information as per the SDS.

Monitoring and Health Surveillance

- Exposure monitoring and / or Health Surveillance may be required for some Hazardous Substances.
- Advice should be obtained from the OSH Department about issues related to monitoring staff exposure to hazardous substances and dangerous goods, and staff health.

Spill or Leak Emergency Management

- The Manager or Supervisor is responsible for developing and implementing a management plan for spills, leaks and other emergencies.
 - Spills kits contain absorbent material used to contain spills.
- Advice on spill, leak and emergency management should be sought from the OSH Department, EMU (responsible for Code Yellow) and [North Metropolitan Health Service - Facilities Management](#).
- Report any chemical spill or people exposure to the OSH Department and EMU **as soon as possible**, and also ensure a [CAHS OSH Employee Incident and Hazard Form](#) is completed.
 - Print / access the SDS to follow the first aid measures identified (as applicable).

Waste

- Waste disposal procedures shall be in accordance with regulatory requirements and the manufacturer's instructions
- Contact the local [North Metropolitan Health Service - Facilities Management](#) for advice on appropriate waste disposal of dangerous goods (including out of date goods).

Requirements for Certain Substances

Cytotoxic Drugs

- All cytotoxic drugs are considered Scheduled Carcinogens under the WA [Occupational Safety and Health Regulations 1996](#) (Division 3), therefore, as well as complying with the rest of this policy, there are certain requirements for the use of cytotoxic drugs including reporting all spills or possible exposures to Worksafe.
- Manager / Supervisor in areas using cytotoxic drugs must ensure all spills; possible exposures or hazards are reported to the OSH Department and EMU in accordance with the CAHS [Incident Hazard Reporting](#) policy.

Compliance Monitoring


- Each CAHS site or service executive director is to ensure compliance with this policy.

Related internal policies, procedures and guidelines
Occupational Safety and Health (CAHS Policy Manual)
Incident Hazard Reporting (CAHS Policy Manual)
Personal Protective Clothing and Equipment (PPE) Management (CAHS Policy Manual)
Emergency Management (CAHS Policy Manual)
Risk Management (CAHS Policy Manual)
Waste Management (CAHS Policy Manual)
Contractor Safety (CAHS Community Health Operational Policy Manual)
PCH Emergency Procedures Manual - Code Yellow
CACH Emergency Procedures Manual - Code Yellow
CAMHS Emergency Procedures Manual - Code Yellow

References
Occupational Safety and Health Act 1984 (Western Australian Legislation)
Occupational Safety and Health Regulations 1996 (Western Australian Legislation)
AS/NZS 4360: 2004 Risk Management (Access via: https://www-saiglobal-com.pklibresources.health.wa.gov.au/online/)
Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008 (2004) 3rd Edition (Safe Work Australia)
National Code of Practice for the Storage and Handling of Workplace Dangerous Goods [NOHSC: 2017 (2001)] (Safe Work Australia)
Dangerous Goods Safety Act 2004 (Western Australian Legislation)
Dangerous Goods Safety (General) Regulations 2007 (Western Australian Legislation)
Medicines and Poisons Act 2014 (Western Australian Legislation)
Medicines and Poisons Regulations 2016 (Western Australian Legislation)
Environmental Protection Act 1986 (Western Australian Legislation)
Environmental Protection (Controlled Waste) Regulations 2004 (Western Australian Legislation)

Useful resources (including related forms)
CAHS OSH Employee Incident and Hazard Form
ChemAlert (Chemical Management System – CAHS)
North Metropolitan Health Service - Facilities Management
Safe Work Australia - http://www.safeworkaustralia.gov.au/sites/SWA
CAHS Emergency Management Unit Information Hub

This document can be made available in alternative formats on request for a person with a disability.

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Appendix 1: CAHS Hazardous Substances Dangerous Goods Review Audit

- To be completed by Manager and elected OSH Rep and forwarded to CAHS OSH.

CAHS Hazardous Substances Dangerous Goods Review Audit

INSTRUCTIONS DETAILS

KEY				
Yes (Y)	Satisfactory	No (N)	Problem noted, action required	
<i>Can be completed electronically by: clicking on the applicable box; and typing free text in the column sections</i>				
Date Completed			Directorate	
Area / Department / Ward			Block / Level	
Completed by			Manager/Supervisor Name	
			Manager / Supervisor Signature/HE Number	
			OSH Representative Name	
			OSH Representative Signature/HE Number	

TOPIC	Y	N	ISSUES, FURTHER COMMENTS
<p>1 Confirm the chemicals list on ChemAlert CAHS tree.</p> <p><i>(Instructions: go to the below link, click on Anonymous User, then click on Stock Holdings, then click on the down arrow for CAHS – Perth Children’s Hospital or CACH, CAMHS, then search by your work level / area)</i></p> <p>ChemAlert (external link)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
2 SDS available for all listed chemicals.	<input type="checkbox"/>	<input type="checkbox"/>	
3 All red and amber rated chemicals are risk assessed and reviewed for possible substitution (attach documents)	<input type="checkbox"/>	<input type="checkbox"/>	

Chemical, Hazardous Substances and Dangerous Goods Management

4	Storage of chemicals in accordance with SDS (inclusive of Dangerous Goods Storage Compatibility Guide refer to Appendix 2)	<input type="checkbox"/>	<input type="checkbox"/>	
5	Signage of chemicals in accordance with SDS	<input type="checkbox"/>	<input type="checkbox"/>	
6	Transportation of chemicals in accordance with SDS	<input type="checkbox"/>	<input type="checkbox"/>	
7	Labelling of chemicals in accordance with SDS	<input type="checkbox"/>	<input type="checkbox"/>	
8	Decanting of chemicals in accordance with SDS	<input type="checkbox"/>	<input type="checkbox"/>	
9	PPE used in accordance with SDS	<input type="checkbox"/>	<input type="checkbox"/>	
10	Staff training information provided in accordance with SDS	<input type="checkbox"/>	<input type="checkbox"/>	
11	Workplace monitoring necessary, and if so has this been implemented?	<input type="checkbox"/>	<input type="checkbox"/>	
12	Is there a spill kit readily available and located adjacent to area where the chemical(s) are used	<input type="checkbox"/>	<input type="checkbox"/>	
13	Chemicals disposed of in accordance with SDS recommendations	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix 2: Dangerous Goods Storage Compatibility Guide

Dangerous Goods Storage Compatibility Guide

The following tables list the requirements (under AS/NZS 3833:2007) for the separation of, and segregation within, stores containing more than one class of dangerous goods, in quantities exceeding those given for minor storage. These requirements do not apply to minor storage or retail storage.

Dangerous Goods classes not covered in this guide are subject to different standards.

Note: Generally, Explosives and Radioactive Substances are incompatible with everything.

		Class	2	3	4	5	6	8				
COMPRESSED GASES	2.1 Flammable		C	KA	S	S	S	I	KA	KA		
	2.2 Non-flammable /Non-toxic and Combustible Liquids		KA	C	KA	SM	S	SM	SM	KA		
FLAMMABLE LIQUIDS	3		S	KA	C	KA	S	S	I	KA	KA	
FLAMMABLE SOLIDS	4.1 Flammable Solids		S	SM	KA	C	KA	S	S	S	KA	SM
	4.2 Spontaneously Combustible		S	S	S	KA	C	KA	S	I	KA	KA
	4.3 Dangerous When Wet		S	SM	S	S	KA	C	KA	S	SM	SM
OXIDISING SUBSTANCES	5.1 Oxidising Agents		S	SM	S	S	S	KA	!	S	KA	KA
	5.2 Organic Peroxides		I	S	I	S	I	S	S	C	KA	KA
TOXIC SUBSTANCES	6		KA	SM	KA	KA	KA	SM	KA	KA	C	SM
CORROSIVE SUBSTANCES	8		KA	KA	KA	SM	KA	SM	KA	KA	SM	!

DEDICATED COMPRESSED GAS STORE UNDER AS 4332:2004				
Class / Sub-risk	2.1	2.2	2.2 / 5.1	2.3 or 2.3/8
2.1	C	C	KA	KA
2.2	C	C	C	C
2.2 / 5.1	KA	C	C	KA
2.3 or 2.3/8	KA	C	KA	C

MAXIMUM MINOR STORAGE QUANTITIES				
Description	Quantity (kg or L)			
	PG I	PG II	PG III	Combustible Liquids
Total quantity of all dangerous goods	25	250	1000	1500

LEGEND			
C	SHOULD BE COMPATIBLE. Consult the SDS or supplier about requirements for individual substances.	S	SHOULD BE SEGREGATED by at least 5m and kept in separate compounds or building compartments.
!	COULD BE INCOMPATIBLE or react dangerously. Consult the SDS or supplier about requirements for individual substances.	I	ISOLATION REQUIRED. Dedicated stores or storage cabinets are recommended. Adequate separation from other buildings and boundaries is required.
		SM	SEGREGATION MAY BE NECESSARY. Consult the SDS or supplier.
		KA	SHOULD BE KEPT APART by at least 3m. Consult the SDS or supplier.



DG Storage Compatibility Guide (v2) 30/11/2015