Theatre Spillage Policy

Department: Theatres
Author: Karon Rudge
Accountable Director/Owner: Dr James Hutchinson
Approved by: SCSD Governance
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Target Departments: Theatres
Target Staff Categories: Theatre Staff

Key Amendments to Document

Date	Amendment	By Whom
10th Sept 2020	New document	SCSD Governance
July 2023	Reviewed with no amendments	AF/RB
28th Nov 2023	Document extended for three months whilst under review	Dr Hutchinson
17.1.24	Review approved	TACCSS governance

PURPOSE AND SCOPE

This policy outlines the procedures that must be followed in the event of a chemical, blood or body fluid spillage that may arise from within the department.

AIM

This policy aims to ensure that **ALL** spillages are dealt with correctly and safely using the appropriate products and that any waste generated is correctly disposed of. In addition the procedures used must be implemented taking into account Infection Control Principles with regard to personal protective equipment (PPE) and Hand Hygiene.

RESPONSIBILITIES OF MANAGERS AND STAFF

Heads of Departments / Team Leaders are responsible for ensuring that all staff are familiar with the policy and procedures and that the management of spillages of chemicals, blood, body fluid is carried out in their areas, in accordance with legislation, policy and best practice.

- Managers are responsible for ensuring their staff are aware of this policy and procedure and that this information is provided to all new staff on induction
- Staff are obliged to adhere strictly to this policy and procedure
- Staff will attend mandatory annual infection control training.

TRAINING

No formal training is required for this policy, however, all staff involved directly or indirectly in patient care must attend an annual Infection Control update which includes Standard Principles of Infection Control, Hand Hygiene and PPE which incorporates the management of spillages of chemicals/blood/body fluids.

DEALING WITH SPILLAGES

Spillages are a major cause of slips and falls in the workplace and must be rapidly identified and removed in accordance with government health and safety legislation.

Prompt action is required to deal with spillages and leaks. Suitable supplies of decontaminating materials should be kept available and employees adequately instructed on dealing safely with such situations. Provision needs to be made for the subsequent decontamination of all protective clothing and equipment used in the clean-up.

When staff have the tools to clean spillages promptly, downtime can be reduced and the risk of accidents and injuries can be reduced. Having spill kits conveniently located in high risk areas gives staff the tools they need to contain spillages quickly, reducing wastage and improving clean up time.

SPILLAGE EQUIPMENT

Personal protective equipment (PPE) should be stored in the close vicinity of the formaldehyde storage cabinet or where this is not possible, there should be clear signage as to where it is being stored. The following equipment is stored within each department; some items may be specific to certain departments:

- Goggles
- Full face respirator – Use appropriate filters for spillage (formaldehyde or other).
- Spillage mats (suitable for all chemical spillages)

- FCG (Formalin Control Granules) granules – specifically designed to absorb and neutralise formaldehyde
- Vinyl / Nitrile gloves
- Protective apron- heavy duty
- Dustpan and brush
- Yellow disposable bags

IF A SPILLAGE OCCURS, IT MUST BE DEALT WITH IMMEDIATELY

CHEMICALS

Chemicals can represent a health hazard to staff in a variety of ways either by Inhalation or skin contact or as a result of combustion. When chemicals are spilt, these risks are intensified as the unrestrained chemical becomes free flowing.

Spills commonly occur due to:

- Accidents
- Human factors
- Faulty equipment

Spills can be minimised by:

- Placing spill trays under containers of liquids
- Never overfilling beakers
- Always ensuring that chemical containers are properly closed, since exposure to air encourages the oxidation of formaldehyde to formic acid
- Discarding cracked or chipped glassware
- Ensuring that the correct personal protective equipment is worn
- Carrying chemical containers in the correct manner

BACKGROUND

Formalin (Formaldehyde) is a liquid which is used to immerse some biological specimens during transport to the pathology laboratories. The likelihood of spillages occurring is minimised by the correct selection of containers to transport the specimen containers to the laboratories. The transport container should fully enclose the specimen container. Acute exposures to formalin solutions can cause eye and skin irritations. Formaldehyde can irritate the eyes, skin and respiratory tract and prolonged exposure could cause skin sensitisation and allergic contact dermatitis.

Exposure to vapours can result in respiratory and eye irritation. To minimize possible exposures, storage containers must be stored properly and personnel must be aware of action to take should a spill occur.

HAZARDS

Acute Toxicity: Formaldehyde can be highly toxic if swallowed, inhaled or absorbed though skin. Ingestion of as little as 30 mL (1 oz.) of a solution containing 37% formaldehyde has been reported to cause death in adults.

Carcinogenicity: Formaldehyde is classified as a suspected human carcinogen, based on evidence obtained from human and/or animal studies.

SAFE WORKING PRACTICES

- Store formaldehyde in an approved flammable storage cabinet with compatible chemicals.
- Containers of formaldehyde should be kept in closed containers away from sources of ignition
- Use formaldehyde with adequate ventilation, preferably in a fume hood or under local exhaust ventilation, to minimize inhalation of vapours.

FORMALDEHYDE SPILLAGE

If a spillage occurs it is important that the spillage is dealt with immediately. All staff working in the department should evacuate the area, with immediate effect. There may be a risk of fire or toxic fumes.

Isolate the spill area and prevent other personnel from entering the contaminated area.

Before attempting to deal with a formalin spillage ensure the correct Personal Protective equipment is worn,

Small Spillages - up to 500ml

1. Evacuate the immediate area of the spillage to minimise contact with the fluid and specimen, and to reduce the risk of slips. Remove or reduce any sources of heat or ignition.

2. If there are other members of staff in the vicinity ask them to get absorbent material, such as paper towels, to help clean up the spillage.

3. Put on protective gloves either vinyl or nitrile, and protective apron.

4. If possible collect the specimen and place it back into the container.

5. Use absorbent materials to mop up the spillage and place the materials into a waste bag, and double bag. Avoid getting formalin in contact with the eyes or skin.

6. Put the labelled waste bag in a secure place.

7. Notify the Health and Safety Team.

8. Contact the Waste Manager to arrange for the correct disposal.

9. Ensure the incident is reported using Datix.

Large Spillages – 500ml to 5 litres

1. Evacuate the immediate area of the spillage to minimise contact with the fluid and specimen, and to reduce the risk of slips. Remove or reduce any sources of heat or ignition.

2. If there are other members of staff in the vicinity ask them to get absorbent material, such as paper towels, and a mop and bucket to help clean up the spillage. If there is no one else present try and make the area safe before going for assistance.

3. If in a corridor or public access area, contact reception to help keep the area clear during disposal.

4. Put on protective gloves, either vinyl or nitrile, and protective apron, using eye protection as appropriate.

5. If possible collect the specimen and place it back into the container.

6. Use absorbent materials to mop up the spillage and place the materials into a waste bag and double bag. Avoid getting formalin in contact with the eyes or skin.

7. Put labelled waste bag in a secure place.

8. Wash the contaminated area two times with detergent and water. Dry the area with paper towels. Place these paper towels into the labelled hazardous waste container. Seal the container to minimize the release of formalin vapours.

9. Notify the Health and Safety Team and the Senior Manager for the Service.

10. Contact the Waste Manager to arrange for the correct disposal.

11. Ensure the incident is reported using Datix.

Spillages of, under 5 litres, can be treated with Formalin Control Granules (FCG), as well as spillage mats and sausages, which are kept with the spillage pack, located near to the formalin cabinet. The granules should be sprinkled liberally on to the spillage. The area should then be evacuated for 10 minutes.

FCG will react with the spill to neutralise the formaldehyde and form an inert gel which can be safely scooped up with dust pan and brush and placed into a yellow clinical waste bag for disposal by incineration.

For spillages over 5 litres - evacuate the area and contact the Fire and Rescue Service for support 40% formaldehyde spillages should only be tackled by the fire service as it requires specialist breathing apparatus.

IMMEDIATE ACTION FOR CONTAMINATED PERSON

If at any time a person or their clothing becomes contaminated during any type of spillage, the following procedure must immediately be followed:

- Call for assistance.
- Notify senior staff who will inform members of staff within the
- Contaminated area
- Evacuate as necessary.

WASH THE AFFECTED AREA WITH COPIOUS AMOUNTS OF WATER.

SEEK MEDICAL ATTENTION IF REQUIRED. INFORM THE MEMBER OF STAFF DESIGNATED AS THE FIRST-AIDER.

Any injuries should be dealt with at the A & E Dept. Anybody who has been affected by the spillage should also attend A & E even if they do not currently show any obvious signs of injury.

If formaldehyde gas is inhaled, personnel involved must be removed from the area of exposure and into fresh air. If symptoms persist call a doctor or take person to A&E.

Before working in the area a reading should be taken using the hand held formaldehyde meter.

The safe working formalin concentration must be below 1part per million.

BLOOD/BODY FLUIDS/URINE/VOMIT

INTRODUCTION

Dealing with spillages of blood or blood stained body fluids may expose health care workers to blood borne viruses or other pathogens. It must always be assumed that any blood from any person poses a potential risk and consequently the safe and effective management of such spillages is essential.

PROTECTIVE CLOTHING

- Wear plastic disposable apron.
- Wear disposable gloves.
- Protect eyes and mouth with goggles/visor and mask (or full face visor) if splash or spray is anticipated.

CLINICAL WASTE

- Always dispose of protective clothing and contaminated waste according to Waste Policy and procedure.

BLOOD/BODY FLUIDS

- Deal with any spillage of blood/body fluids immediately
- Care must be taken to avoid skin, eye, and mucous membrane contamination during the cleaning and disinfection of spillages. Protective clothing must be worn.
- Staff must always follow routine standard precautions when dealing with blood and body fluids as outlined in Standard Infection Control policy
- Staff must always cover cuts and lesions with a waterproof dressing whilst on duty.
- Accidental exposure to blood/body fluids must be reported according to Sharps injuries management and other blood or body fluid exposure incidents
- Staff dealing with spillages of blood/body fluid should be vaccinated against hepatitis B virus (DOH, 1998).
- Always dispose of protective clothing and contaminated waste according to Waste Policy & Procedures.

PROCEDURE FOR DEALING WITH URINE/VOMIT SPILLAGE

- Wearing gloves and an apron, cover the area with incontinence pad to absorb all liquids. DO NOT USE granules on urine or vomit spillage, as this may result in fumes being released.
- Discard all waste in a yellow clinical waste bin
- The area should then be mopped over with a freshly prepared solution of tristel.
- Remove gloves and plastic apron and discard into a clinical waste bag.
- Immediately wash and dry hands thoroughly

ANAESTHETIC SPILLAGE

Introduction:

Anaesthetic Agents including Nitrous Oxide, Isoflurane, Sevoflurane, and Desflurane are used in Theatres. They are usually supplied in unbreakable containers; however glass containers can be used in certain areas. This procedure describes the cleaning up of any spillages:

1. Contain the spillage and maximise ventilation.

2. Do NOT clear up the spillage until you have read this procedure.

3. EVACUATE all staff and patients from the immediate vicinity

4. Leave room to collect spillage kit (located near to the formalin cabinet/work area)

NOTE: Small volumes of liquid anaesthetic agents may evaporate readily at normal room temperatures, and may dissipate before any clean up attempts are initiated. For large spills, one or more bottles break, ensure adequate ventilation or evacuate area. Large volumes of anaesthetic agents may cause sedative effects. Large spills should be absorbed using a sorbent that is designed for clean-up of organic chemicals e.g. Spill pillows, vermiculite, and carbon-based sorbents are some suitable materials. Restrict persons not wearing protective equipment from areas of spills or leaks until clean-up is complete. Keep in suitable, closed containers for disposal (sharps boxes).

5. For persons cleaning up spillage they should don personal protective equipment:

a. Respirator fitted with an organic vapour filter (if the ventilation is poor)

b. Goggles

c. Apron

d. Over shoes

e. Butyl or nitrile gloves

6. The waste material should be placed in a sharps box container, tightly sealed, properly labelled, and disposed of with other chemical waste sent to a facility incinerator or removed by a chemical waste contractor.

7. Leave the area of spillage, closing all doors and allow room to be ventilated for at least 30 minutes before re-entry.

8. Do not allow liquid to enter drains

9. Inform the manager of the area (or On Call Manager out of hours)

10. Inform the Health & Safety Manager on 01527 507913.

11. If the spillage is likely to cause a delay in service notify the relevant wards or departments ASAP.

FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Skin: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Reorder products used, for the spill kit, via iProc.

Discarding used products

- Discard any used PPE appropriately.
- Always wash hands after dealing with spillages or contaminated waste.
- Mop heads are single use and should be discarded immediately after use.

ALWAYS COMPLETE/SUBMIT A DATIX FOLLOWING A SPILLAGE

REFERENCE

HSE (2020)Formaldehyde - its safe use in foundries
https://www.hse.gov.uk/pubns/iacl88.htm

ICNA Audit Tools for Monitoring Infection Control Guidelines within the Community.

www.ips.uk.net (2005)

Department of Health (1998). Guidance of Clinical Health Care Workers: Protection against infection with Blood-Borne Viruses. Recommendations of the Expert Advisor

Appendix 1 - Audit Tool for Management of Spillages Policy

Use the following five questions to assess your understanding and implementation of this policy.

(Score yourself - Yes or No)

1. Do you understand the responsibilities under this policy? (page 1)

Yes/No

2. Do you know what PPE you need to wear when dealing with a formaldehyde spillage? (page 2)

Yes/No

3. Do you understand the procedure for dealing with a spillage? (Page 4)

Yes/No

4. Are you aware of where to find PPE and how to replace any equipment that has been used? (page 2 – specific to your area)

Yes/No

5. Do you understand what you should do when dealing with various amounts of a formaldehyde spillage? (pages 4/5)

Yes/No

6. What might you be exposed to, during a blood spillage? (page 7)

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7. What product would you NOT put on urine/vomit? (page 7)

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8. Why would you require a respirator mask when cleaning up an anaesthetic spillage? (Page 8)

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9. Are you aware of first aid measures to be taken in all of the above instances? (Page 9)

Yes/No

10. What documentation needs to be completed after any spillage? (Page 9)

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If you score no for any of these questions, please re-read the relevant sections of the policy. If you are still unclear, please contact your Infection Control practitioner.

A copy of this should be kept in your personal file and may be used as part of a continuous profession development folder.

Signed……..……Role……..……..……..……..…....

Date……..……..……