



DHCR Biological Spill

Policy & Procedure

Department: HSE

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DHCR HSE Biological Spill Policy and Procedure

INTRODUCTION

This Biological Spill Procedure has been prepared by DHCR HSE, and provides clear steps in the event of a Biological Spill to help develop Occupational Health and Safety awareness of good practice for all handlers of waste in the delivering of services within the healthcare city.

1- Purpose:

1.1	To provide a guideline for the management of blood and body fluid spills
1.2	To ensure safe practices are followed to protect all personnel and reduce risk factors
1.3	To protect staff and stakeholders from the exposure of hazardous waste
1.4	To comply with the rules & regulations of Dubai Healthcare City

2- Scope of application:

2.1	This guidance applies to all, healthcare facilities, staff, patients, visitors, contractors and others attending DHCC, who work with Biological Hazards.
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3- Policy:

3.1	Biohazard spills are spills involving bio-hazardous materials such as but not limited to: blood and blood products
3.2	All working with Biological Hazard should follow the Biological Spill Procedure
3.3	All handling Biological Material must have Personal Protective Equipment
3.4	Biohazard blood and body fluid 'spill kits' must be provided and accessible during the management and handling of Biological Material

4- Responsibility

4.1	Every Business Partner and their staff, handling Biological Waste should adhere to this DHCR HSE Biological Spill Procedure and / or adopt their own operational procedure in accordance with Their needs
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5- Procedure

5.1	In the event of a Biological spill, it is required that immediate actions are taken to promptly clean and decontaminate spills of blood or other potentially infectious materials.
5.2	It is the Business Partner ('BP') responsibility to ensure the appropriate staff receive education and training in the management of biohazard spills and how to use the spill kit.
5.3	All personnel handling biological material must be provided with Personal Protective Equipment



DHCR HSE Biological Spill Policy and Procedure

	<p>("PPE") which must be worn at all times when dealing with a biohazard spill.</p>
5.4	<p>In some cases this will be the front line healthcare staff attending to the patient, to use the Biological spill kit, this is an operational decision and the competent housekeeping staff member may also be response for the management of biological spills.</p>
5.5	<p>In the event of a Biological Spill ('BS'), in the public / communal area of a Business Partners ('BP') facility, the BP trained staff, must have access to their BP Biological Spill Kit ('BSK') and undertake the cleaning.</p>
5.6	<p>Any Housekeeper / Healthcare Professional who has the responsibility for managing Biological Spills must have the appropriate Occupational Health Vaccinations and it is the responsibility of their employer appropriate delivery of care, at no cost to the employee.</p>
5.7	<p>Small dried spots and splashes are also classified as a Biological Spill and the Biological cleaning and decontamination procedures apply.</p>
5.8	<p>Small to Large Spills require a three step procedure:</p> <p>5.8.1 Small Spills: Use either equipment from the contents of the biohazard spill kit or absorbent paper towel and/or disposable cloths to wipe up, wash with detergent and water and decontaminate as per quick reference disinfection dilution chart. Follow instructions pasted inside the blood spill kit.</p> <p>5.8.2 Moderate and large spills: Use a mop and bucket, approved for Biological Spills. Follow instructions pasted inside the blood spill kit.</p>
5.9	<p>Procedure for Blood Spill and how to use a Blood Spill Kit (Biological Spill Kit)</p> <p>5.9.1 First contain the spill with disinfectant granules from the biohazard spill kit.</p> <p>5.9.2 When solution gels after applying a disinfectant granules and the area is contained.</p> <p>5.9.3 Scoop up with plastic scoop and dispose of into yellow waste bag.</p> <p>5.9.4 Using a mop and bucket and freshly prepared solution of hypochlorite 1:2 to reduce infectious factor, wash the area thoroughly.</p> <p>5.9.5 Dispose of water from the mop into the sluice with water running and avoid splashing when pouring.</p> <p>5.9.6 Follow this procedure using mop and bucket and wash area with approved detergent and water.</p> <p>5.9.7 Final wash to decontaminate with hypochlorite 1:10.</p> <p>5.9.8 Wash and rinse the mop and bucket thoroughly, remove mop head and seal in a plastic Bag to send to laundry. Double bag in a cloth linen hamper bag.</p> <p>5.9.10 Wash your hands and remove PPE and dispose of into yellow bag (medical waste bags).</p> <p>5.9.11 Dispose of all used equipment, material into yellow bag (medical waste bags).</p>



DHCR HSE Biological Spill Policy and Procedure

- 5.10 Decontaminating spills of blood and other body fluids differ based on the setting in which they occur and the volume of the spill
- 5.10.1 For spills containing large amounts of blood or other body substances, workers should first remove visible organic matter with absorbent material (e.g., disposable paper towels discarded into leak-proof, properly labeled containment) and then clean and decontaminate the area. Therefore, there is a need to remove most organic matter from a large spill before final disinfection of the surface.
- 5.10.2 Recommended Procedure for Body Fluid (No visible blood) and how to use a Biological Spill Kit
- 5.10.2.1 First contain the spill with disinfectant granules from the biohazard spill kit.
- 5.10.2.2 Use dustpan and brush for powder, solid, broken glass and needles.
- 5.10.2.3 Liquid spills must be contained and further spillage minimized.
- 5.10.2.4 Granules or powder should be used as they have the advantage of containing the spill rather than adding to it.
- 5.10.2.4 Use paper towels for absorbing spillage of blood and other body fluids.
- 5.10.2.5 When solution gels, scoop up with plastic scoop and dispose into yellow bag.
- 5.10.2.6 Chlorine-releasing powder / granules / fluid containing 10,000 ppm. available chlorine must be used for all blood and body fluid spillage.
- 5.10.2.7 Chlorine-releasing agents should be freshly prepared and accurately diluted per dilution chart for each spillage. Discard on completion of procedure.
- 5.10.2.8 When chlorine-releasing agents at a dilution of 10,000 ppm. are added to hot water, or acidic body fluids, e.g. urine, this may result in rapid release of toxic levels of chlorine. Therefore, first dilute with cold water.
- 5.10.2.9 Using a mop and bucket and freshly prepared hypochlorite solution of 1:10 to reduce infectious factor, wash the area.
- 5.10.2.10 Dispose of water into sluice with water running.
- 5.10.2.11 Dispose and empty cleaning detergent solution into sluice or toilet, then flush
- 5.10.2.12 Avoid splashing when pouring. Wash and rinse mop.
- 5.10.2.13 Follow this procedure using mop and bucket wash area with approved detergent and water.
- 5.10.2.14 Final wash to decontaminate with hypochlorite 1:80.
- 5.10.2.15 Wash and rinse the mop and bucket thoroughly, remove mop head and seal in a plastic bag to send to laundry. Double bag in a cloth linen hamper bag.
- 5.10.2.16 Wash your hands and remove PPE and dispose of into yellow bag.



DHCR HSE Biological Spill Policy and Procedure

	<p>5.10.2.17 All waste, wipes, disposable gloves and plastic aprons must be discarded, sealed and disposed of as Healthcare risk waste.</p>
5.11	<p>Recommended Hypochlorite solutions Dilution Rates</p> <p>5.11.1 Use sodium hypochlorite solutions (e.g., household chlorine bleach) may be used for decontamination. Use a 1:100 dilution (500–615 ppm available chlorine) to decontaminate nonporous surfaces after cleaning a spill of either blood or body fluids in patient-care settings.</p> <p>5.11.2 If a spill involves large amounts of blood or body fluids, or if a blood or culture spill occurs in the laboratory, use a 1:10 dilution (5,000–6,150 ppm available chlorine) for the first application of germicide before cleaning.</p>
5.12	<p>Recommended Sodium Hypochlorite Cleaning Products</p> <p>Use of registered Hypochlorite Cleaning Products due to the requirement for effective Performance.</p> <p>5.12.1 If the surface is nonporous and sodium hypochlorite solution is used (e.g., household bleach), a 1:100 dilution is appropriate for decontamination assuming that the worker assigned to clean the spill is wearing gloves and other personal protective equipment appropriate to the task, most of the organic matter of the spill has been removed with absorbent material, and the surface has been cleaned to remove residual organic matter.</p>
5.13	<p>Managing spills of blood, body fluids, or other infectious materials in clinical, public health, and research laboratories requires more stringent measures because of:</p> <p>5.13.1 The higher potential risk of disease transmission associated with large volumes of blood.</p> <p>5.13.2 Body fluids and high numbers of microorganisms associated with diagnostic cultures.</p> <p>Therefore, each BP must assess their working environment in keeping with the hazards and risks Associated and apply operational risk mitigation controls.</p>
5.14	<p>Recommended application of Germicide</p> <p>5.14.1 A suggested technique when flooding the spill with germicide is to lay absorbent material down on the spill and apply sufficient germicide to thoroughly wet both the spill and the absorbent material.</p> <p>5.14.2 Germicides should be used according to the manufacturers' instructions for use dilution and contact time. Gloves should be worn during the cleaning and decontamination procedures in both clinical and laboratory settings.</p> <p>5.14.3 PPE in such a situation may include the use of respiratory protection (e.g., an N95 respirator) if clean-up procedures are expected to generate infectious aerosols.</p> <p>5.14.4 Protocols for cleaning spills should be developed and made available on record as part of good</p>



DHCR HSE Biological Spill Policy and Procedure

	<p>practice. Workers in high risk areas such as laboratories and in patient-care areas of the facility should receive periodic training in environmental-surface infection-control strategies and procedures as part of an overall infection-control and safety curriculum, by way of best practice.</p>
5.15	<p>PPE – Personal Protective Equipment Wear disposable gloves and plastic apron when cleaning spillage and any other PPE as appropriate And operationally identified during the risk assessments.</p>
5.16	<p>Disposal of Gloves All gloves contaminated with blood / body fluids, during the application of cleaning a Biological Spill, the PPE must be disposed of as healthcare risk waste. Gloves not visibly contaminated / soiled with blood / body fluids can be disposed as non healthcare risk waste.</p>
5.17	<p>Incident Reporting Fill out the incident report form for all Biological Spills, where harm occurred and send to DHCR HSE Department, by way of notification.</p>
5.18	<p>Enforcement It is the responsibility of the Business Partners to ensure compliance with the DHCR Biological Spill Procedure or ensure they have an appropriate Biological Spill Procedure Operational.</p>

6- Communication: (Check all that apply)

<input checked="" type="checkbox"/>	Announcement
<input type="checkbox"/>	Awareness
<input checked="" type="checkbox"/>	Training
<input type="checkbox"/>	Other specify

7- Definitions:

Occupational Health & Safety Definitions	<p>Biological agents:</p> <p>Means preparations made from living organisms and their products including vaccines, cultures including those that have been genetically modified, cell cultures and human endoparasites, which may provoke any infection, allergy or toxicity. And intended for use in diagnosing, immunizing or treating humans or animals</p>
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DHCR HSE Biological Spill Policy and Procedure

Chemical Waste:	Classified and segregated by a qualified pharmacist or biomedical laboratory with an understanding of chemistry and the potential hazards of chemicals.
Cleaning:	the removal of visible soil and organic contamination from a device or surface, using either the physical action of scrubbing with a surfactant or detergent and water, or an energy-based process (e.g., ultrasonic cleaners) with appropriate chemical agents.
Container:	Means any portable device in which a medical waste is stored, transported, disposed or otherwise handled
Contaminated:	Means soiled or made inferior or potentially infectious through physical contact or mixture with medical waste
Dangerous Goods:	A dangerous good is any solid, liquid or gas that can harm people, other living organisms, property, or the environment
Germicide:	A chemical that destroys microorganisms. Germicides may be used to inactivate microorganisms in a living tissue (antiseptics) or on environmental surfaces (disinfectants).
Handling:	Means to store, transfer, collect, separate, process, incinerate, treat or dispose of
Healthcare:	The medical activities such as diagnosis, monitoring, treatment, prevention of disease or alleviation of handicap in humans including related research performed under the supervision of a medical practitioner
Healthcare Waste:	The solid or liquid waste arising from healthcare
Laboratory:	Means any research, analytical or clinical facility that performs health care related analysis or service
Medical Waste:	For the purpose of this Code the term “medical waste” is used and shall denote the wastes as described in (a) and (b) below. Medical waste therefore, includes and is considered to be: (a) Any waste which consists wholly or partly of human or animal tissue, blood or other body fluids, excretions, dressings, swabs, syringes, needles or other sharp instruments, drugs or other pharmaceutical products and



DHCR HSE Biological Spill Policy and Procedure

radioactive wastes from hospitals or clinics, being waste which unless rendered safe may prove to be hazardous to any person coming into contact with it; and
(b) any other waste arising from medical treatment, nursing care, dental, veterinary, pharmaceutical, investigation, teaching, research, the collection of blood for transfusion, and from any similar practice, being waste which may cause infection to any person coming into contact with it.

- Biological (recognisable anatomical waste)
- Infectious
- Chemical, toxic or pharmaceutical including cytotoxins
- Sharps (e.g. needles, scalpels, sharp broken materials)
- Radioactive (refer to Radioactive Waste Directive(s))

PPE:

Personal Protective Equipment PPE means all equipment designed to be worn or held by an employee for protection against one or more hazards likely to endanger the employee's safety and health at work;

Storage:

Means the temporary holding of medical waste at a designated accumulation area before treatment, disposal or transport to another location

Transport:

Means the movement of medical waste from its point of generation to its point of ultimate disposition

8- Reference:

9.1	Local Order 11 of 2013 Concerning Public Health & Community Safety in the Emirate of Dubai
9.2	EPSS Technical Guidelines No: 33 - the Disposal of Outdated (redundant) Pharmaceuticals & Medicines.
9.3	Waste Management Department Technical Guidance Number 2
9.4	Dubai Municipality Environment Department Code of Practice on the Management of Medical Waste from Hospitals, Clinics and Healthcare Premises in Dubai
9.5	Local order no.61 of 1991 Environment protection
9.6	Ministerial Decree (57/2004) Regulations for Radioactive waste management
9.7	Ministerial Decree (56/2004) Regulations for safe transport of radioactive material



DHCR HSE Biological Spill Policy and Procedure

9.8	Ministerial Decree (56/2004) Regulations for safe transport of radioactive material
9.9	Dubai Municipality Local Order 115 - Management of medical waste
9.10	Federal Law No (1) 2002, Regarding the Regulations and Control of the use of Radiation sources and Protection against their Hazards
9.11	Federal Law (No.) 24 of 1999 and modified by Federal Law (No.) 11 for 2006 regarding Protection & Development of the Environment
9.12	Executive Order of Federal Law No. 24 of 1999 for Regulation of Handling Hazardous Materials, Hazardous Wastes and Medical Wastes, issued by Cabinet Decree No. 37 of 2001
9.13	Local Order (No.) 7 of 2002 on Management of Waste Disposal Sites in the Emirate of Dubai; as amended by Local Order No. (5) of 2003
9.14	Local Order No. (115) of 1997 Concerning Medical Wastes Management in the Emirate of Dubai
9.15	Dubai Municipality Technical Guidelines No 47 Disposal of used chemical containers
9.16	Dubai Municipality Technical Guidelines No 59 on management of medical waste from clinics and laboratories
9.17	DHCA Governing Regulation No. 1 of 2013.
9.18	DHCR HSE Incident Reporting Policy
9.19	DHCR HSE Risk Assessment Policy
9.20	DHCR HSE Biological Spill Procedure
9.21	DHCR HSE Hazardous Material Procedure



DHCR HSE Biological Spill Policy and Procedure

Revision History

S No:	Summary	Amend Type*	Page	Issue No.	Issue Date
1.	Formatted and Technical Review Completed	Modify	all	1	21/5/2018
2.					
3.					
4.					
5.					
6.					

* Amend Type: New- Add – Modify – Cancel