Risk assessment RA09

https://sportsciencesafety.stir.ac.uk

Faculty / Service Area	Faculty of Health Sciences and Sport	Location	Sport Science laboratories, other, BES stores
Description of work task / equipment /area being assessed			
Clinical waste disposal (blood, urine, sweat, saliva, muscle)			
Change log	Version 1.1 29 Aug 2022 New format, Added section on improper disposal Version 1.2 3 Nov 2022 Added spillage procedure and safety data sheets (SDS) Version 1.3 25 Aug 2023 Added Amended Waste Regulations and disinfectant instructions		
Head of faculty	Prof Jayne Donaldson	Safety officer	Dr Nidia Rodriguez Sanchez
Completed by	Dr Stuart Galloway	Date	12th May 2015
Reviewed by	Kerry Bartie Dr Nidia Rodriguez Sanchez Chris Grigson	Date	25th Aug 2023
		Date of next review	25th Aug 2024
Equipment used	Sharps bin, clinical waste bag		
Categories of people involved	Staff, UG, PG, Visitors		
Duration of activity	Varying duration depending upon quantity of waste.	Frequency of activity	Varying frequency depending upon volume of waste produced. Generally around once a month.

Legal compliance to standards and regulations required	Health and Safety at Work act 1974 (HASAWA) https://www.hse.gov.uk/legislation/hswa.htm Management of Health and Safety at Work Regulations 1999 (MHSWR) https://www.legislation.gov.uk/uksi/1999/3242/contents/made Special Waste Amendment (Scotland) Regulations 2004 SSI 112 https://www.legislation.gov.uk/ssi/2004/112/contents/made The Control of Substances Hazardous to Health Regulations 2004 (COSHSH) https://www.hse.gov.uk/coshh/

What are the hazards?	Hazard category	Who might be harmed and how?	What are you already doing to control the risks?	*Risk rating	What additional controls (if any) are required to reduce the risks?	*Risk rating	Action by who?	Action by when?	Date of completion
Needlestick	F6. Chemical & biological hazards	Investigators, others Skin broken by needle leading to potential infection Biological hazard	SOP Instruction and training on use of equipment, Sharps bins and clinical waste bags Employee wears laboratory coat and nitrile gloves during handling of clinical waste. In the event of needle stick injury, bleeding is encouraged in the first instance. Injury report	Medium					

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			is filed. The victim is referred to accident and emergency and occupational health. Ongoing health monitoring of needlestick victims as advised by clinician. All involved in blood handling are recommended to have vaccination for Hepatitis B and follow-up blood tests						
Infection from contaminated waste	F6. Chemical & biological hazards	All Contamination from clinical waste leading to accidental infection	Only trained staff to handle clinical waste All wear laboratory coat and nitrile gloves during handling of clinical waste. Pre-bag small items e.g. tips and tubes to avoid piercing of clinical waste bag	Low					

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			All instructed to wear eye protection if there is a risk of splash from clinical waste fluids						
Improper clinical waste disposal	F6. Chemical & biological hazards	All Expose others to risk of infection Effects of contact hazardous chemicals or their interactions and products. Leading to burns, fire or explosion Allow clinical waste into public spaces, drains and water courses	Clear instruction on who can dispose of clinical waste and how different types of waste should be separated and disposed Clinical waste stored only in areas with restrictive access Clinical waste only stored in clearly marked containers Clinical waste disposed of regularly in under filled containers COSHH risk assessments to be carried out for all	Low					

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			hazardous chemicals used in processes that generate clinical waste The effect of combining chemicals from different process in clinical waste must be taken account of. A separate disposal route is required if hazard identified. To reduce the risk of fire, explosion and chemical reactions generating hazardous substances						
Spillage clinical waste	F6. Chemical & biological hazards	All	Contain spillage with absorbent material. Add 10% bleach as disinfectant. Leave for 5 min. Rinse area with water. If due to chemical incompatibility bleach cannot be used, 70% ethanol and Decon						

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			detergent can be used as an alternative. Remove to clinical waste disposal.						

Append supplier safety data sheets for all substances here:

SDS_AbsoluteEthanol.pdf

SDS_Decon75.pdf

SDS_Milton.pdf

Standard operating procedure

Procedure:

BLOOD:
Waste blood products are disposed of into the small clinical waste bags on the bench in sealed tubes and contaminated tips. Once full the small clinical waste bags are transferred to the main clinical waste bin and the bag is then removed once 2/3rd full. Sharps from blood sampling are placed into a sharps container e.g. Cin-Bin type container. Once the sharps container is full (to line indicated on container) then it is sealed. All sealed bags and containers are removed to Biological Sciences and recorded at the store. A new sharps container and new clinical waste bags are then collected.

URINE:
Waste urine is disposed of down the toilet. All urine collection containers are then washed thoroughly using an antibacterial cleansing agent (Decon 90) and are then allowed to dry before re-using.

SALIVA:
Saliva swabs or Salivettes are placed into the clinical waste bag and removed as indicated above.

GENERAL PROCEDURES:
In all of the above procedures the laboratory staff involved wear personal protective clothing including laboratory coat and nitrile examination gloves. If any splashing of body fluids is likely to occur then protective eye wear is also worn. Spillages should be contained with absorbent material e.g. paper towelling, disinfected with 10% Milton if the material is compatible or 70% ethanol and bagged as hazardous waste. Once disinfected, area can be cleaned with 5% Decon detergent and rinsed with water.