



Infection Prevention and Control "Building Capabilities" 2015



Spillages, Linen and Waste Management

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Objectives:

Brief overview – Acute setting

- Spillages (blood/body fluids)
- Linen
- Waste

Aim:

To prevent transmission of infection during handling



Overview

Protect yourself and others by:

- Education/Training
- Use of Standard precautions – BBF – all HCWs, all patients, all the time
- BBV carriage not readily identifiable
- Risk assessment approach – what do you need?
- Preventive actions – Routine immunisations, cover cuts/grazes, needle free systems
- Follow local policy
- Always follow manufacturers' instructions
- Know your sharp/splash exposure incident procedure



Spillages – Blood and body fluids

Body fluids – Any fluid found in, produced or excreted from the human body

Body fluids to be handled as blood:

- Peritoneal
- Pleural
- Synovial
- Amniotic
- Semen
- Vaginal secretions
- Breast milk
- Any other body fluid containing blood

Non blood containing (assess) ↓ Urine, faeces, vomit, sputum



General

Relevant to general ward /clinical areas

Labs, Pharmacy, Radiology – have specialist kits/procedures

Who is responsible?

- Follow local policy – should be clearly defined
- Wards/departments – Clinical staff
- Public areas – Cleaning contractors
- Must have been **trained**
- Deal with immediately – prevent injury or exposure to others
- Chlorine releasing agents not to be used directly on urine or vomit – vapours



Preparation

- Spill kit if available
- Safety signage
- Well ventilated – open window
- Cover cuts/grazes – PPE +/- goggles
- Paper towels – contain and soak
- Risk waste bag
- NADCC granules – Presept – absorb/disinfect
- Disinfectant agent – combined detergent/disinfectant
- Mattress, stainless steel, plastics – rinse area with plain water after contact time



Procedure

Blood/body fluids – (slide 4)

✓ PPE

✓ Chlorine releasing granules/solution 1:10,000ppm

✓ Contact time 2/3 mins (MI)*

✓ Wipe up or scoop –discard as HC risk waste

✓ Wash area with neutral detergent/allow to dry

✓ Remove PPE /dispose/ hand hygiene

* MI – Manufacturer's instructions

Other non blood spills

✓ PPE

✓ No direct contact of chlorine agent on urine/vomit

✓ Soak up excess with paper towels 1st

✓ Use solution of 1:1000 ppm available chlorine

✓ Contact time as MI –eg 5 mins

✓ Rinse /wash area/allow to dry

✓ Dispose of waste/Hand hygiene



Linen

Handle with care – minimise transmission of infection due to:

- Dust
- Skin scales
- Contact with blood/body fluid soiling

All processed linen should be visibly clean, not damaged and not discoloured

Correct segregation

- protects staff handling and processing linen
- Prevent cross contamination of clean linen



Categories

- Clean – unused (except when taken into isolation room)
- Foul/infected – soiled with blood/body fluid or known/suspected infectious patient (MDRO) whether soiled or not
- Dirty/used – all other used linen – colours, scrubs, theatre linen

Colour codes – linen collection bags

- White/clear – used white non contaminated linen
- Blue – coloured, e.g. patient gowns
- Red – foul/infected – water soluble alginate bags
- Green – Theatre linens- scrubs separately, alginate bag if soiled with blood/body fluids



Storage of Linen

Clean –

- Store separately from soiled/used linen
- Store in clean cupboard, slatted shelved/racks – off floor for cleaning
- Keep door closed – protect with impervious protective covering

Foul/infected/used –

- Store bags 2/3 full , tagged in designated, lockable area – ensure regular collection
- Category 4 – for incineration
- Curtains – change on regular dated schedule unless infectious patient – Disposable option



Bed making points

- Risk assess – need for PPE
- Hand hygiene following the 5 Moments
- Alcohol gel at point of care
- Linen skip to bedside
- No shaking, sorting of linen – ensure all items removed - prevent injury, damage to equipment
- If soiled /foul linen on floor – treat as spillage
- Linen bags 2/3 full



Waste

Healthcare Waste: solid or liquid arising from Healthcare or health related facilities/activities

Either: Healthcare **RISK** or Non risk waste (household category)

Risk: due to *Infectious, biological, chemical, radioactive or sharps content*

Assess risk: at point of origin – where nature of waste best understood

Special circumstances – Ebola 2014- Category 4 waste disposal for incineration - HPSC



Why segregate

To **protect** personnel and identify **correct disposal stream**

Steps: Handling, packaging/safe storage, collection, transport, treatment and disposal

Correct segregation saves:

- ✓ **Money**
- ✓ **Jobs**
- ✓ **Litigation – injury/exposure**
- ✓ **Environmental impact – reduce, reuse, recycle**



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Healthcare waste disposal

Landfill/recycle: Household waste e.g. clear plastic bags/plastics/paper and cardboard

Alternative technology: Shredding and disinfection of waste at special plants – Yellow lidded 30/60 ltrs rigid and sharps bins – Ireland

Incineration: abroad – no plant in Ireland
Purple and Black lidded rigid bins/purple sharps bins

ALL Bags/Containers must conform to **UN requirements**

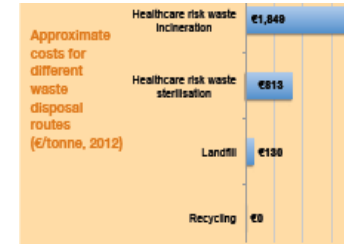
Huge cost implications: segregate correctly



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Costs of disposal – Ireland

Source: Health care Risk waste fact sheet 2014
Green Healthcare



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Healthcare Risk Waste: Yellow Bags and Bins: Alternative Technology - Ireland

Waste bags- carry by neck away from body, **no sharps, liquids, hard objects**, close when 2/3 full-cable tie/tag

Store in designated area awaiting collection

Swan – neck method of bag closure: safer to handle



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Sharps bins – alternative technology - Ireland

Standard sharps bins: No free fluids

Non cytotoxic/cytostatic (botox) contaminated sharps

Use tall bins for guidewires, large trocars etc



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Yellow rigid bins 30/60 litre- alternative technology Ireland

No free fluids

Blood admin sets connected to blood bag
Sealed/contained fluids, drains- drain closure sealed

Absorbent material/gelling agent – in case of leak

No exposed sharps



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Purple lidded sharps bins!
Incineration abroad

No free liquids
Contaminated cytotoxic sharps, needles, syringes
Unused medication in syringes e.g. in OT ICU – Anaesthetic/sedation drugs



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Yellow rigid 30/60 litre purple/black lid; Incineration – abroad – cost!

No sharps or free liquids
Cytotoxic contaminated HC Waste/PPI
Small amounts residual/left over pharmaceuticals after administration to patients- contained
Absorbent/gelling material to go in bin



Black Lid: Theatre /Lab cultures
Recognisable anatomical waste
Large metal surgical objects



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New waste poster – 2014
Waste handbook Page 44



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Summary

- Training/Education
- Risk assess
- Standard precautions

Stay safe !

Ensure a safe work environment for all
Questions

Thank you



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References

- W.H.O. Guidelines on Hand Hygiene in Health Care, 2009, available at: www.who.int/publications/handhygiene/2009
- Dept of Health and Children: Guidelines on Disposal of Health care Risk Waste 2010 are available at: www.dohc.ie/publications/segregation_packaging.html
- Health Protection Scotland. National Infection Prevention and Control Manual 2014 available at: www.documents.hps.scot.nhs.uk/hai/infection-control/c-manual/ipcm-p-32-3.pdf
- HSE National Cleaning Manual Appendices 2006. www.hse.ie/eng/services/publications/Hospitals/HSE_National_Cleaning_Standards_Manual_Appendices.pdf
- HSE Waste Management Awareness Handbook 2014. www.hse.ie/eng/services/publications/healthsustainabilityoffice/WastePrevention/Waste_Management_Handbook_2014.pdf
- Green Healthcare: Health care risk waste factsheet.2014 www.greenhealthcare.ie/wp-content/uploads/2014/05/Factsheet-Healthcare-Risk-Waste-2014.pdf
- HPSC - (DCM) Guidance Note H1402. Packaging and Transport of waste from suspect and confirmed cases of Ebola virus 2014 www.hpsc.ie/A-Z/vectorborne/ViralHaemorrhagicFever/Assessingapossiblecase/File,14922.en.pdf



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