

Welcome to the RBCH eLearning module - Sharps Level 1

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What is a Sharps Injury?

Sharps Injury

A sharps injury is an incident which causes a needle, blade (such as a scalpel) or other medical instrument to penetrate the skin. This also includes bites or scratches where the skin is broken. The terms 'needlestick injury' or a 'percutaneous injury' are also used.

Contamination Incident

Exposure to any potentially infected body fluid or product via non-intact skin or mucous membrane e.g. a splash of patient body fluid to your eyes or mouth.

Sharps injuries and contamination incidents usually occur following the use of the sharps and before its disposal.

For the purposes of this **eLearning** module both sharps and contamination incidents will be presented together as the management of both is the same

Employer's Responsibility

All public sector employers have a responsibility to protect their employees from harm.

The Trust has a duty under UK law to protect its workers and other people on site from harm so far as is practical. Safety equipment is provided where available, e.g. safe needle devices for taking blood, cannulas, and some prefilled injection kits.

UK Law

Key UK legislation relating to Employer's Responsibility include:

- Health & Safety at Work, 1974
- Control of Substances Hazardous to Health Regulations (COSHH), 2002
- Management of Health & Safety Regulations, 1999
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, 1995 (RIDDOR)
- EU Council Directive, Safe Needle Devices, 2010.

Employee Responsibility

- Staff have a responsibility to know and adhere to policies regarding safety at all times. This includes using the correct equipment.
- Risk assessments should be done at local levels to ensure that all equipment is available for point of use, and that any variations e.g. unpredictable patients, are identified and additional precautions taken.
- all staff potentially exposed to sharp devices or body fluids are offered a Hepatitis B vaccination
- all staff must complete this Sharps eLearning module at least once **every three years**
- staff should keep a record of their immunity to Hepatitis B and all other blood tests or immunisations done at Occupational Health.

Staff and volunteers must report all sharps injuries or contamination incidents and failure to do so is likely to result in disciplinary measures

Skin to Bin

Skin to Bin - at RBCH sharps **must** be disposed of at the point of use and, outside of theatre, sharps are **single use** only.

Sharps should be placed into the sharps bin from the white tray inside the patient zone.

- **Orange** lid bin for non-cytotoxic contaminated material
- **Purple** lid bin for cytotoxic contaminated material

In other healthcare settings risk assessment and procedures **may differ** so ask your manager or senior staff if you are unsure.

First Aid

After a sharps injury you must practice First Aid as soon as possible:

- encourage free bleeding of any wound but **do not suck** the wound
- wash skin wounds with soap and running water for an extended time but **do not scrub**
- flush eyes, nose, and mouth with running water for a time. If contact lenses are used, flush before and after removal.

You must always report an injury to **Occupational Health** and fill out an **AIR** form.

Blood-borne Viruses (BBV)

Blood-borne viruses of particular concern are:

- Hepatitis B
- Hepatitis C
- HIV

All of the above are transmitted through blood and body fluids can contain blood not visible with the naked eye. **Hepatitis B** is considered the most infectious.

Therefore, all body fluids are considered a risk.

Risks

A deep penetrating needlestick injury from a patient who has all three viruses of concern would make the risk of infection to staff:

- Hepatitis B – 1 in 3
- Hepatitis C – 1 in 30
- HIV – 1 in 300

Risks - Points to note:

- The last case of HIV nationally through an occupational exposure was in 1999.
- Hepatitis C – 20 cases nationally since 1997.
- Bournemouth and Poole are in the **top ten** for incidence of HIV in England – and an estimated 25% of those infected do not know

Follow Up

- The majority of sharps and contamination incidents are from patients who do not have a blood-borne virus.
- If results are available, and if the patient's blood is not infected, a three-month follow-up of the staff member is all that is needed to close the episode.
- This time period is purely to check on the possibility that the patient was not 'brewing' the infection at the time

Sharps Injury: Scenario - 2300 HRS on the Elderly Care Ward

- A healthcare assistant (HCA) is caring for an elderly patient who is receiving subcutaneous fluids via a butterfly needle.
- When she pulls back the sheet she receives a puncture to her finger - the needle has become dislodged and the wound bleeds a small amount.
- **What should the HCA do now?**

Scenario: Action - The HCA should:

- **report** to nurse in charge of ward, having ensured the dignity of the patient
- **perform** first aid - squeeze and wash the wound under running water
- **advise** Clinical Site Team - they should be informed and can facilitate progress through ED.

Scenario: Action - Attend Emergency Department (ED)

- Remember to take the name and patient number of the patient with you – e.g. addressograph label.
- The ED clinician will take details and a sample of your blood for storage.
- At this stage there is no need to test your blood unless there is a query about your protection to Hepatitis B.
- Blood should be sent to microbiology for storage.

Scenario: Risk Assessment -The ED clinician should assess the risks to the HCA:

- how deep was the wound?
- what had it been used for?
- information on the patient (via ward staff or eCamis)

The ED clinician will also enquire about the staff member's Hepatitis B protection.

The clinician's report will be faxed to Occupational Health and the HCA will be contacted and invited to attend for further management of the incident.

Scenario: AIR reporting

An AIR (Adverse Incident Report) form should always be completed as soon as possible after the incident and forwarded to the appropriate location as detailed at the bottom of the form.

AIR forms can be completed on-line by any member of staff.

Scenario: Discuss with Manager

- nurse in charge of ward – or clinical site staff member may attempt to obtain blood sample from the patient (donor). This can only be done if the patient is able to give informed consent which should be documented
- sampling may be left until the morning especially if the incident and patient are deemed to be low-risk.

Scenario: Blood Sampling

- **Never attempt to obtain a sample from the patient yourself - this is not ethically acceptable**

- when a blood sample has been obtained by **another** clinician it should be in a red-top bottle and accompanied by a **Microbiology Request**
- this should be completed as shown in the **Donor Blood Sample Form** section of this module.

Sharps/Contamination Action Pack

- An Action Pack has been produced at RBCH to assist with the process of reporting a sharps or contamination incident, arranging blood testing and follow-up.
- The pack can also be utilised as an information guide to new staff at induction and as a learning tool to promote safe sharps awareness
- The Action Pack can be found on every ward within the Trust or can be downloaded from the Trust intranet within the Occupational Health section. If you are unable to find the Action Pack ask the senior clinician in charge.

Blood Sample Forms

Here are some examples of blood sample forms.

Adverse Incidents

What is the reporting process for any adverse events or near misses?

- you **must** report Adverse Incidents using an AIR (Adverse Incident Report) form which is present in every Trust department. AIR forms are received by the Risk Management department and logged
- you should also report any near misses to the department manager by using the **Datix Online Reporting** system.

MICROBIOLOGY		THE ROYAL BOURNEMOUTH AND CHRISTCHURCH HOSPITALS NHS FOUNDATION TRUST - 01202 704844	
SENDER HOSPITAL & WARD / DEPT. or G.P. Name, Clinic & Address		PATIENT'S NAME	
Name		HOME ADDRESS	
SEX <input checked="" type="checkbox"/> MALE <input type="checkbox"/> FEMALE		DATE AND TIME COLLECTED	
NATURE OF SPECIMEN AND SITE		ANTIBIOTIC TREATMENT	
EXAMINATION REQUESTED		CLINICAL DETAILS	
HEPATITIS B ANTIBODIES		RECIPIENT OF A1 -	
CONSULTANT G.P.		NEEDLE STICK OR CONTAMINATION INJURY	
ADDITIONAL SIGNATURE		(DONOR IS:- NAME AND DOB).	
OCCUPATIONAL HEALTH		ESSENTIAL INFORMATION FOR WHOLELY REQUESTS - SEROLOGY	
DATE OF ONSET		TRAVEL HISTORY WHERE RELEVANT	
DATE OF TRAVEL		DATE OF TRAVEL	
ANY OTHER INFORMATION			

Report injuries differently depending on the time the injury occurred:

In Hours (0830 - 1600 HRS) - Occupational Health

Out of Hours (1600 - 0830 HRS) - Clinical Site Team, ED or Manager

HSE Website

Learn more about **Blood-borne Viruses** via the **Health and Safety Executive** website.

Summary

That completes this module on:

Sharps Level 1.

Please complete the knowledge quiz and hand to your volunteer coordinator