

SOP 6 Management of Sharps/Prevention of Sharps Injuries

Sharp instruments used in healthcare are a common cause of injury that can result in infection. Many sharp injuries are received during the clean-up process with sharp instruments (RIMD). Staff must take due care and attention during the removal of used RIMD and waste. A risk assessment of possible sources of sharp injuries should be carried out in each clinic. The possibility of sharp injuries cannot be eliminated in dental treatment but use of available safety devices is recommended and handling of sharps should be kept to a minimum e.g. needle safety systems, adhesive sharps pads.

What are sharps?

The Sharps Regulations 2014 define sharps as 'objects or instruments necessary for the exercise of specific healthcare activities, which are able to cut, prick or cause injury or infection' e.g. Needles, burs, orthodontic wires, scalpel, suture, local anaesthetic cartridge, matrix band, endodontic files, reamers, etc. (NB: this list is not exhaustive).

What is a significant sharp's injury?

- Penetration of the skin by a needle or other sharp that may contain blood or body fluid e.g. needle stick injury.
- Human scratches/bites (where blood is drawn)

Significant contamination

- Contamination of broken skin with blood
- Splashes of blood/body fluids onto mucous membranes (e.g. mouth/eyes).

6.1 All healthcare facilities in Ireland are required by law to comply with S.I. No. 135/2014 - European Union (Prevention of Sharps Injuries in the HealthCare Sector) Regulations 2014 in order to safeguard the health and well-being of patients and Dental Health Care Workers.

6.2 All Dental Staff must understand and comply with the HSE Policy for the Safe Use, Handling and Disposal of Sharps and Health Protection Surveillance Centre (HPSC) toolkit.

6.3 Key points to prevent a sharps injury include:

- Safe injection practices including;
 - Disposal of single use syringes and needles without dismantling whether fully used or not
 - Aseptic technique must be used when drawing up injections
 - Single dose vials should be used wherever possible e.g. local anaesthetic and midazolam
 - Do not break, bend or recap needles
 - Use blunt needles when using irrigation syringes
 - Use single ended examination probes

- The clinician (Dentist/Hygienist/Orthodontist/Orthodontic Therapist) is responsible for the safe use, handling and disposal of the single use sharp into the sharps container at the point of use e.g. Local Anaesthetic (LA), Orthodontic wires, irrigation syringe needles or any such sharp. They should not be passed to the dental nurse for disposal.
- Ensure sharps box/container is located in a safe, secure location and out of the reach of children.
- Sharps containers should be chosen to provide appropriate access for the range of sharps in use in a specific location.
- Sharps containers must conform with UN Standard 3291.
- Orthodontic wire sharps must be disposed of using a safe system by the clinician e.g. adhesive pads or an alternative system.
- Each sharps container must be correctly assembled, signed/dated on assembly.
- A temporary closure mechanism on the sharps container must be in place when not in use.
- Sharps containers must be securely closed when $\frac{3}{4}$ full, signed and tagged prior to disposal. It is the responsibility of the whole dental team to lock, sign (name should be legible) and to tag sharps containers. The tag number must be recorded and records kept for 10 years
- Sharps containers must be transported safely in an upright position to a designated secure collection point away from public access.

6.4 Staff must be familiar with the local procedures for managing sharps injuries, which follow the EMI toolkit. A laminated copy of the steps in the event of a sharps injury must be displayed in all clinics. EMI Toolkit Appendices 2 and 3 can be used for display. <http://www.hpsc.ie/a-z/EMIToolkit>

6.5 Sharps containers must be disposed of in line with HSE Waste Policy.

6.6 The local protocol for management of sharps/prevention of sharps injuries must be available in all clinics and should include local arrangements for staff to access post exposure prophylaxis where the recipient of the sharps injury is assessed in conjunction with the risk assessment based on the EMI toolkit Appendix 20, if required.

6.7 Staff are mandated to report injuries to local manager and Occupational Health Department and complete the appropriate National Incident Report Form (NIRF) in line with the HSE Incident Management Framework <https://www.hse.ie/eng/about/qavd/incident-management/hse-2018-incident-management-framework-guidance-stories1.pdf>

6.8 Local polices must identify the route and process for notification of serious incidents to the Senior Accountable Officer (SAO) within 24 hours of occurrence.

6.9 Management of a sharps injury

The EMI toolkit – Emergency Management of Injuries 2016 outlines in detail the procedures to be followed and include patient management forms for general practice, information leaflets for source and recipient of injuries. <http://www.hpsc.ie/a-z/EMIToolkit>

HSE Policy on the Prevention of Sharps Injuries

<https://www.hse.ie/eng/staff/safetywellbeing/healthsafetyand%20wellbeing/hse%20policy%20for%20the%20prevention%20of%20sharps%20injuries.pdf>

If any member of staff sustains an injury or contamination incident involving exposure to blood or body fluids, first aid treatment should be carried out immediately and medical help sought if required.

6.10.1 Needle Stick/Sharps Injury

- Gently encourage bleeding under running water.
- Do not suck or squeeze the wound.
- Wash the wound thoroughly with soap under running water for 2-3 minutes.
- Cover the area with a waterproof dressing or bandage.
- Dispose of sharp carefully into the appropriate puncture resistant sharps box.

6.10.2 Mucocutaneous Exposure

- Wash the affected area with copious amounts of water.

6.10.3 Eye Exposure

- Irrigate the affected eye with copious amounts of saline or water (before and after removal of contact lenses, if applicable).

6.10.4 Next Steps - Need to decide if the exposure was significant or not

- This will depend on the type of material involved e.g. blood stained or not and the type of injury sustained e.g. skin break or not
- Report to line manager or designated manager on the day.
- Complete patient management form - Appendix 1 EMI Toolkit
<http://www.hpsc.ie/a-z/EMIToolkit>
- Identify the source patient if possible.
- Document details of the inoculation incident.
- Seek advice as to whether post exposure prophylaxis is required.
- If exposure is deemed significant then you have two patients to consider; the source and the recipient.

6.10.5 Post Exposure Prophylaxis – Key Points

- Occupational blood exposure presents the risk of acquiring Hepatitis B, Hepatitis C or HIV.
- Each practice should have a policy which outlines how/where post exposure prophylaxis is dealt with e.g. Emergency Department.
- A risk assessment will be carried out including the risk status of the source patient and a blood sample may be taken from the source patient.

- Decisions regarding the need for post-exposure prophylaxis should be taken immediately, within 1-4 hours in the case of HIV exposure (regarding possible use of antiviral therapy) and within 48 hours in relation to Hepatitis B exposure (specific Hepatitis B immunoglobulin is available for passive protection and may be used in addition to Hepatitis B vaccination to confer passive/active immunity after exposure).
- There is currently no recommended post exposure prophylaxis for Hepatitis C.