Appendix 56

Sharps Risk Assessment Guidance

STEP ONE - IDENTIFY THE HAZARDS

In most hospital and health care environments there will be varying degrees of exposure to blood-borne viruses (BBVs). The main BBVs of concern are hepatitis B and C and HIV.

Accidental injury by a sharp implement, such as a hollow bore needle contaminated with a blood-borne virus, can lead to the transmission of blood-borne viruses (BBVs). While the risks of contracting a blood-borne virus are variable, the anxiety of having to go through blood tests and possible treatment can cause the worker a great deal of stress.

All sharps injuries are therefore a hazard that could lead to the risk of transmission of blood-borne viruses. Some injuries will be a higher risk than others.

STEP TWO - DECIDE WHO MIGHT BE HARMED AND HOW

There are many types of health care and hospital work that can expose individuals to the risk of sharps injuries. They include:

• Clinical procedures such as injections, phlebotomy, cannulation, vaccination, acupuncture and surgical procedures
• Ancillary services – domestics, logistics and hospital laundry
• Diagnostic testing (e.g. pin prick tests)
• Mortuary work

Groups that carry out the majority of procedures using sharps are those most at risk. These include: nurses, phlebotomists, physiotherapists, doctors, and health care assistants. In addition, cleaning staff will have a high exposure to risks if sharps are not properly disposed of.

Community-based, as well as hospital staff, may be injured by inappropriate use or non-disposal of sharps.

Injury can occur with a wide range of items, but those with a higher risk of injury include:

• hollow bore hypodermic needles
• IV cannulae
• winged steel needles (butterfly)
• phlebotomy needles.

Some services have more specific hazards, for example scalpel blades used in podiatry services.
STEP THREE - EVALUATE THE RISKS AND DECIDE ON PRECAUTIONS

The hierarchy of controls on the prevention of sharps injuries highlights the most effective way of controlling these risks. The hierarchy starts with the most effective action and moves down the hierarchy to less effective controls.

If it is not possible to eliminate the risk, then a combination of the other steps should be employed.

1. **Elimination of hazard**

   Is it necessary to carry out the procedure?

   Is it necessary to use sharps to carry out the procedure?

   Complete removal of a hazard from the workplace is the most effective way to control hazards; this approach should be used whenever possible. Examples include:
   - removing sharps and needles when possible e.g. using needleless
   - intravenous systems/needle free connectors
   - eliminating all unnecessary injections
   - eliminating unnecessary sharps.

2. **Engineering controls**

   Isolate or remove the hazard, or isolate or remove parts of the work which increase the hazard. Examples include:
   - adequate numbers of easily accessible sharps disposal containers
   - environmental factors including good lighting and adequate space to carry out the procedure
   - non-sharp alternatives (filter straws/blunt needles for drawing up medication)
   - use of safety-engineered devices for all procedures that may cause an injury to any individual (devices with needles that retract, sheath or blunt immediately after use).

3. **Administrative controls**

   Ensure there is an adequate risk assessment (Appendix 58) in place, safe systems of work which are in line with relevant, up to date guidance are in place, and that relevant policies are followed.

   The relevant policies are listed in section 9 of the *Infection Prevention and Control Manual*.

4. **Work practice controls**

   These controls aim to change the behaviour of workers to reduce exposure to
occupational hazards.

They include, as examples:

- Filter straws and blunt needles
- no needle recapping or re-sheathing
- safe construction of sharps containers
- placing sharps containers at eye level and within arms’ reach
- disposing of sharps immediately after use in designated sharps containers
- sealing and discarding sharps containers when they are three-quarters full disposing of sharps bins within 3 months of the assembly date
- establishing means for the safe handling and disposal of sharps devices before the beginning of a procedure.

5. Personal Protective Equipment (PPE)

Personal protective equipment provides barriers and filters between the worker and the hazard. Used properly it can prevent exposure to blood splashes, but will not prevent needlestick injuries. Examples include:

- eye goggles/full face protection
- masks
- gloves

STEP FOUR - RECORD YOUR FINDINGS AND IMPLEMENT THEM

The findings of the risk assessment should be documented using the Generic Risk Assessment format detailed in Appendix 54, and contain the action plan to reduce the risks of injury.

The risk assessment can be department / ward-based, or refer to one secular practice if required.

The results of the risk assessment should be shared with all workers identified as being at risk.

The manager is responsible for the completion of the action plan.

STEP FIVE - REVIEW YOUR ASSESSMENT AND UPDATE IF NECESSARY

The risk assessment is to be reviewed annually, and the effectiveness of the risk assessment and control measures in place reassessed.

The risk assessment should also be reviewed after an incident, or when there is a change which affects its efficiency, such as changes to work practices or new equipment is introduced.