I. Introduction

A sharps injury occurs when a sharp object such as a needle, a scalpel, bone fragments, or teeth penetrate(s) the skin. A splash of body fluid to mucous membrane or non-intact skin is another form of exposure to body fluids that could have a similar consequence.

Exposure to human blood or tissue carries a potential risk of contracting a blood-borne infection such as Hepatitis B, Hepatitis C, and human immunodeficiency virus (HIV). Although the risk of acquiring infection in this way is low, the universal precautions detailed in Handling Precautions for Blood, Blood Products, and Human Tissues aim to mitigate the risk.

In summary:
- Needles, sharps and microtome blades should be handled with care, and handling kept to a minimum
- Users of needles or other sharps are responsible for their disposal
- Needles should never be re-sheathed, bent or broken before disposal
- Syringes and needles should be disposed of as a unit
- Sharps should never be carried or re-used
- Sharps disposal containers must be available at the point of use
- Sharps containers should be disposed of when three-quarters full
- Hand protection must be worn when clearing areas where sharps may be present
- Goggles should be worn when splashing may occur

II. Purpose & Scope

This policy details the procedures to be followed when any incident occurs that may expose University staff, students or visitors to potentially infectious materials in laboratories or other workplaces.

Policy to be used in conjunction with:
- Occupational Health Service Policy 1/01 – Immunisation
- Occupational Health Service Policy 1/03, Taking blood samples from colleagues or students for research and teaching

Individuals who may be exposed include laboratory staff, students, visitors, security patrolmen, parks staff, first aiders, medical students and research nurses.

This policy also details the responsibilities of the parties involved to prevent and manage injuries of this type.

III. Exposures caused by Sharps, Splash and Bite Injuries

1. A potentially infectious sharps, splash or bite injury is deemed to have taken place if it is:
   a. percutaneous (i.e. the skin is broken by a needle, instrument or bite)
   b. mucocutaneous (i.e. a splash to the eye, nose, mouth or broken skin)
   c. inhaled or ingested AND:

2. Causes an exposure to:
   a. any human bodily fluid (including blood, amniotic fluid, cerebrospinal fluid, breast milk, pericardial fluid, peritoneal fluid, pleural fluid, saliva, synovial fluid, semen, vaginal secretions, unfixed human tissue, any other visibly bloodstained fluid or exudates from burns or skin lesions)
   b. any bodily fluid from an animal
   c. any potentially infectious material including genetically modified organisms
3. This policy also covers:
   a. Exposure to other infections such as tuberculosis or malaria
   b. Other infection routes including Prion protein being absorbed through intact skin

IV. Requirements & Responsibilities

1. Head of Department
   a. Ensure that a risk assessment of the work has been made, and documented, by the supervisor of the group before any potentially infectious material is used. Contingency plans for and the need for urgent medical assessment of accidents and incidents in work involving infectious pathogens or high risk genetically modified micro-organisms must be written and brought to the attention of all individuals who may be affected. Additional control measures may be needed for people at increased risk of infection because of, for example, pre-existing disease, compromised immunity, pregnancy or the effects of medication.

   b. All individuals whose work potentially puts them at such risk must be registered with the University Occupational Health Service using the Infectious Material Worker Registration Form. This is for all employees or students working in a containment level 3 laboratory and those working in a containment level 2 laboratory with pathogens for which there is an appropriate immunisation. Such registration is compulsory.

   c. Ensure that all those potentially exposed to infectious material are familiar with this policy and are aware of the importance of reporting incidents of potential contamination and reporting such instances to the Safety Office and the Occupational Health Service.

   d. Ensure that all those exposed, as stated in Section III to infectious material, are familiar with this policy and are aware of the importance of reporting incidents of potential contamination and of seeking urgent advice or treatment from the appropriate healthcare source.

   e. Any such incident should be reviewed within the department where it occurred to ensure prevention of a recurrence. The relevant written risk assessment should be reviewed.

   f. The poster in Section VII should be displayed clearly in all places of work where potential exposure to potentially infected material may occur.

2. Occupational Health Service
   a. The information on the registration form, completed by the department, will be used by the Occupational Health Service (OHS) to initiate a fitness for work assessment regarding immunity and immunisation as appropriate.

   b. In the case of Hepatitis B immunisation and associated immune response checking, the University Occupational Health Service will further advise individuals who do not respond to immunisation.
## v. Exposure Treatment Process

### 1. First Aid Treatment

<table>
<thead>
<tr>
<th></th>
<th>Percutaneous Injury</th>
<th>Mucocutaneous or Broken Skin</th>
<th>Splash to Eye</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Immediately after any exposure to potentially infectious material encourage bleeding under cold, running water, using soap. Cover wound with an impermeable, dry dressing.</td>
<td>Immediately after any exposure to potentially infectious material wash copiously with water or saline.</td>
<td>Immediately after any exposure to potentially infectious material wash eyes liberally with water. If the patient wears contact lenses, the eyes should be washed before and after removal of the contact lenses.</td>
</tr>
<tr>
<td></td>
<td>Wounds must not be sucked, squeezed or scrubbed because this may cause tissue trauma and encourage the spread of infection.</td>
<td>Do not use antiseptic.</td>
<td></td>
</tr>
</tbody>
</table>

### 2. Reporting Incident

All incidents must be reported as soon as possible to the immediate supervisor.

An accident report must be completed and sent to the University Safety Office.

*Details of the source of the potentially infected material should be retained, including patient details if available, to facilitate any necessary follow up. If blood will be required from another person for testing, the source must be aware of any tests which may be done and have given prior written informed consent. The injured party should not seek this consent themselves but should involve a senior clinician responsible for the person (if a patient).*

### 3. Seeking Medical Assistance

Report the incident to the senior person on duty. Ensure you have details of the potentially infectious material source and contact details for the individual(s) affected.

If there is no exposure to infectious material First Aid treatment and completion of accident forms are sufficient responses. In the event of potential exposure to an infectious material:

Contact Occupational Health Services (OHS) **immediately** on: *01865 (2)82676 or 07856 262335 (OHS hours are 08:30 to 16:30 Mon-Thurs & 08:30 to 15:30 Fri)*

If outside of OHS operating hours, telephone the on-call microbiologist via the John Radcliffe Hospital switchboard (01865 741166) and go to the Accident and Emergency Department at the John Radcliffe Hospital if deemed appropriate by the microbiologist.

In the event of serious trauma such as a large animal bite or laceration, go straight to the Accident and Emergency Department at the John Radcliffe Hospital.

*Always inform the OHS of the incident, if no initial contact is established, by the next working day so that any necessary follow up health assessment and support can be initiated.*

### 4. Incident Investigation and Risk Assessment Review

Any such incident should be reviewed within the department where it occurred to ensure prevention of a recurrence.
The relevant written risk assessment should be reviewed and updated if appropriate. The new risk assessment should be highlighted to affected individuals and changes communicated.

### VI. Process Flowchart

**Sharps, Splash & Needle Injury Flowchart**

1. **Manager or Department**
   - **Patient**: Sharps, Splash or Needle injury
   - Notify senior manager on shift
   - Complete Incident Report and send to the Safety Office
   - Record details of the source of the infection
   - In OHS office hours?
     - No: Assess the risk of the incident
     - Yes: Contact OHS
   - Contact John Radcliffe Hospital
   - Review Incident
   - Update Risk Assessment for activity if necessary

2. **OHS**
   - Assess the risk of the incident
   - High Risk Exposure
     - Advice and no further medical treatment
     - Follow-up Treatment if required
   - Low Risk Exposure
     - Commence Treatment
     - Assess the risk of the incident
     - High Risk Exposure
     - Commence Treatment
     - Low Risk Exposure
   - Assess the risk of the incident
   - High Risk Exposure
     - Advice and no further medical treatment
     - Follow-up Treatment if required
   - Low Risk Exposure
     - Commence Treatment
     - Assess the risk of the incident
     - High Risk Exposure
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     - Commence Treatment
     - Assess the risk of the incident
     - High Risk Exposure
     - Advice and no further medical treatment
     - Follow-up Treatment if required
   - Low Risk Exposure
     - Commence Treatment
VII. Sharps, Splash & Bite Injury Poster

Action to be taken following Sharps, Splash or Bite Injury with exposure to potentially infectious material

1. Gently encourage bleeding
2. Wash with soap and water
   - Don’t scrub wound
   - Don’t use antiseptic
3. Wash eyes before and after removing contact lenses
4. Cover with impermeable dressing

Report the incident to the senior person on duty. Ensure you have details of the potentially infectious material source and contact details for the individual(s) affected.

If there is no exposure to infectious material, proceed to Step 3, otherwise:

Contact Occupational Health Services (OHS) immediately on:
01865 (2)82676 or 07856 262335
(OHS hours are 08:30 to 16:30 Mon-Thurs & 08:30 to 15:30 Fri)

If outside of OHS operating hours, telephone the on-call microbiologist via the John Radcliffe Hospital switchboard (01865 741166) and go to the Accident and Emergency Department at the John Radcliffe Hospital if deemed appropriate by the microbiologist.

In the event of serious trauma such as a large animal bite or laceration, go straight to the Accident and Emergency Department at the John Radcliffe Hospital.

Complete an accident report and send to the University Safety Office

Always inform the OHS of the incident, if no initial contact is established, by the next working day so that any necessary follow up health surveillance and support can be initiated.

Details of the source of the potentially infected material should be retained, including patient details if available, to facilitate any necessary follow up.