Procedures for protection against occupational infection with blood borne viruses

Including sharps injuries and all significant incidents involving blood and body fluids

<table>
<thead>
<tr>
<th>Version</th>
<th>Version 7</th>
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<tr>
<td>Completion Date</td>
<td>July 2015</td>
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<td>Approved By</td>
<td>Control of Infection Team</td>
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<td>Approved Date</td>
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**NHS SHETLAND DOCUMENT DEVELOPMENT COVERSHEET**

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<thead>
<tr>
<th>Name of document</th>
<th>Procedures for protection against Occupational Infection with blood Borne Viruses</th>
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<tr>
<td>Registration Reference Number</td>
<td>New ☐ Review ☑</td>
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<tr>
<td>Author</td>
<td>Bernadette Dunne</td>
</tr>
<tr>
<td>Executive Lead</td>
<td>Lorraine Hall</td>
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**Proposed groups to present document to:**

- Infection Control Team

**Date** | **Version** | **Group** | **Reason** | **Outcome** |
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<td>Nov 2008</td>
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<td>Changes made to reflect legislation</td>
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**Examples of reasons for presenting to the group**

- Professional input required re: content (PI)
- Professional opinion on content (PO)
- General comments/suggestions (C/S)
- For information only (FIO)

**Examples of outcomes following meeting**

- Significant changes to content required – refer to Executive Lead for guidance (SC)
- To amend content & re-submit to group (AC&R)
- For minor revisions (e.g. format/layout) – no need to re-submit to group (MR)
- Recommend proceeding to next stage (PRO)

*To be attached to the document under development/review and presented to the group

Please record details of any changes made to the document on the back of this form
<table>
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<td>Slight changes to wording and expanded section in the introduction and on reporting systems pg 8. Addition to section1.7.5. Appendix F and G reference to information about the source patient not being shared with OH has been removed as was inaccurate.</td>
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C. Management of blood exposure incidents information for source patient
D. Consent for screening for blood borne viruses following a blood exposure to a health care worker
INTRODUCTION

This procedure provides guidance to all those involved in the provision of health care working for NHS Shetland and should be adopted for infection prevention of occupationally transmitted Blood Borne Viruses. NHS Shetland is required under existing health and safety law to ensure that risks from sharps injuries are adequately accessed and appropriate control measures are in place. The Sharps Instruments in Healthcare Regulations 2013 build on the existing law and provide specific detail on requirements that must be taken in the management of sharps injuries, provision of follow up care to staff and responsibility of staff to report injuries.

This procedure aims to

- Embed the importance of occupational infection prevention of Blood Borne Viruses (BBV) into everyday practice of health care workers in NHS Shetland.
- Reduce variation in practice in preventing BBV and ensure processes are standardised across NHS Shetland.
- Improve the level of knowledge and skills in occupational infection prevention of BBV.
- Reduce the risk of Healthcare Associated Infection (HAI) from BBV for staff working for NHS Shetland.
- As an organisation NHS Shetland takes its duty to ensure all staff exposed to risks of infection are provided with support and advice in infection prevention and control.

The recommendations set out in this procedure are drawn from a review of the HSE guidance for employers and employees on Blood Borne Viruses in the workplace for employers and employees on The Health and Safety (Sharp Instruments in Health Care) Regulations 2013. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)

The application of infection control during care delivery is determined by the assessment of risk and includes the task/level of interaction and/or the anticipated level of exposure to blood or other body fluids.

There is a potential risk of transmission of a Blood Borne Virus (BBV) from a significant occupational exposure and staff need to understand the actions they should take when a significant occupational exposure incident takes place. This procedure aims to provide staff with guidance on what they need to do when a significant exposure occurs.

A significant occupational exposure is

- a percutaneous injury for example injuries from needles, instruments, bone fragments, or bites which break the skin;
- exposure of broken skin (abrasions, cuts, eczema, etc);
- exposure of mucous membranes including the eye from splashing of blood or other high risk body fluids.
1. **Occupational Exposure to a Blood Borne Virus**

Blood borne viruses are viruses that some people carry in their blood which may cause severe disease in some people and few or no symptoms in others. The viruses can spread to another person whether the carrier is ill or not. The main blood borne viruses of concern are:

- Hepatitis B virus (HBV), Hepatitis C virus (HCV), Hepatitis D virus which all cause hepatitis, inflammation of the liver. For the purpose of this procedure there are no actions with regards Hepatitis D.

- Human immunodeficiency virus (HIV) which can cause acquired immuno-deficiency syndrome (AIDS).

It is very unlikely that you will become infected through every day social contact with another worker, patient or client who has a BBV. BBV's are mainly transmitted sexually or by direct exposure to infected blood or other body fluids contaminated with infected blood. In the work place, direct exposure can happen through accidental injury by a contaminated sharp instrument, such as a needle or broken glass. Infected blood may also spread through contamination of open wounds, skin abrasions, skin damage due to conditions such as eczema, or through splashes to the eyes nose or mouth.

2. **Measures to prevent and control risks of BBV**

- Good hand hygiene practice.

- Wearing gloves, gowns and goggles as appropriate.

- Covering exposed skin such as abrasions or open wound with water proof dressing.

- Consider using devices which incorporate safety features, such as safer needle devices and blunt end scissors.

- Safe disposal of all sharp instruments.

- Decontamination of surfaces which may have had body fluids spilled onto them.

- Vaccination for HBV. This decision will be made on risk assessment and supplements the above risk control measures.
3. **Significant exposure to blood or body fluid**

Infection may occur following significant exposure to blood or certain body fluids. The following body substances should be treated the same as blood:

<table>
<thead>
<tr>
<th>breast milk</th>
<th>CSF</th>
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<tbody>
<tr>
<td>amniotic fluid</td>
<td>pleural fluid</td>
</tr>
<tr>
<td>vaginal secretions</td>
<td>peritoneal fluid</td>
</tr>
<tr>
<td>semen</td>
<td>pericardial fluid</td>
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<tr>
<td>saliva in association with</td>
<td>synovial fluid</td>
</tr>
<tr>
<td>dentistry</td>
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</tr>
</tbody>
</table>

There is minimal risk of blood borne virus infection from urine, faeces, saliva, sputum, tears, sweat and vomit unless contaminated with blood (although they may be hazardous for other reasons).

Significant exposure is:

- Percutaneous injury (e.g needles, instruments, bone fragments, significant bites which break the skin etc)
- Exposure of broken skin (abrasions, cuts, eczema etc)
- Exposure of mucous membranes including the eye

Percutaneous exposure is of higher risk than mucocutaneous exposure, and exposure to blood is more serious than exposure to body fluids which are not blood stained.

The risk of HBV, HCV or HIV transmission after an unknown source exposure in the UK is very low, but possible.
4. Responsibilities for the implementation of this Procedure

4.1 NHS Shetland must ensure that:

Systems and resources are in place to facilitate implementation and compliance monitoring with infection prevention and control amongst all staff, including all agency or external contractors. NHS Shetland will ensure effective safe management of sharps through assessing risks, using prevention control measures and support following injury to staff.

4.2 Managers

Managers of all services must ensure that staff:

- Are aware of and have access to infection prevention and control policy documents.
- Have had instruction/education on the elements of infection prevention and control.
- Have access to safe devices.
- Have adequate support and resources available to implement, monitor and take corrective action to ensure compliance with infection prevention and control.
- With health concerns or who have had an occupational exposure, are referred to the relevant agency e.g. Occupational Health or General Practitioner.
- Undertaking Exposure Prone Procedures (EPP)* have undergone the required health checks/clearance and
- Are responsible for including infection prevention and control as an objective in their Personal Development Plans (or equivalent).

*Definition of Exposure Prone Procedure(EPP) those invasive procedures where there is a risk that injury to the worker may result in the exposure of the patients open tissue to the blood of the worker as a result there would be a risk to the patient if the worker was a carrier of Hepatitis B, Hepatitis C or HIV.

4.3 Staff

Staff must ensure that they:

- Understand and apply the principles of infection prevention and control.
- Maintain competence, skills and knowledge in infection prevention and control through attendance at education events and/or completion of on-line training modules e.g. NHS Education Scotland (NES).
- Communicate the infection prevention and control practices to be taken by colleagues, those being cared for, relatives and visitors without breaching confidentiality.
- Have up to date occupational immunisations/health checks/clearances requirements as appropriate.
• Report to line managers and document any deficits in knowledge, resources, equipment and facilities or incidents that may result in transmission of infection.
• Report any injuries promptly to line management, occupational health and record any injury using the “Occupational exposure to blood and body fluids: incident reporting form” and record in DATIX.
• Do not provide direct care while at risk of potentially transmitting infectious agents to others. If in any doubt they must consult with their line manager, Occupational Health Department or Infection Control Team.

4.4. **Occupational Health**

Occupational Health will:
• Provide advice support and guidance on procedures in protection against BBV.
• Provide vaccination for NHS Staff against HBV.
• Provide training in the promotion of safe practice in prevention of BBV transmission.
• Provide advice, support and training on post exposure procedure to health care workers in NHS Shetland.
• Post incident advice, support and counseling for staff members who have been exposed to the risk of a BBV.
• Record and document incident in the individual staff member’s occupational health records.
• Monitor trends of incidents and raise any concerns to the Infection Control Team and the Health and Safety Committee.

4.5 **Infection control Team.**

The infection control team will:
• Engage with staff to develop systems and processes that lead to sustainable and reliable improvements in infection prevention and control.
• Provide expert advice on the application of infection prevention and control in the care setting.
• Monitor trends of incidents of exposure to BBV’s. In addition will monitor staffs concerns regarding devices or any other concerns.
5. **Incident Reporting:**

Where a staff member is exposed to blood or body fluids, or if they have a concern about devices or equipment which they feel could put themselves or others at risk, they must report this via Datix.

Following the injury the member of staff is required to record the incident on Datix within 24 hours of the injury.

Under the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR), NHS Shetland has a legal duty to report certain injuries, diseases and dangerous occurrences to the relevant enforcing authority. The Health and Safety Manager is responsible for RIDDOR reporting within NHS Shetland. Incidents such as a puncture wound from a needle known to contain blood contaminated with a BBV should be reported as a dangerous occurrence.
6. Action taken by the member of staff and line manager following exposure to the risk of a BBV

Please follow flow chart in Appendix A.

6.1 First aid and immediate action by exposed staff member

The exposed staff member should perform IMMEDIATE FIRST AID:

**Immediate first aid**

*For punctured or non-intact skin, wash the affected area gently with plenty of soap and water. Bleeding from a small wound should be promoted for a few seconds by gently squeezing the surrounding skin. Do not use antiseptics. **Do not suck or scrub.**

*If the eyes are contaminated, irrigate with fresh eye wash fluid for 1-2 minutes (or if none available with normal saline or running water). If contact lenses are worn, irrigate the eyes before and after removal of the lenses.

*Contaminated mucous membrane (e.g. eye, nose, mouth) should be washed with plenty of water. Water used for rinsing the mouth must **not** be swallowed.

*Spillage of blood or body fluids on to intact skin needs to be washed off with soap and water, but no further action is required.*

Ensure that the item which caused the injury is disposed of safely. Note that it is imperative that an urgent risk assessment is made to assess if PEP is required to be given post incident.

If PEP is required it needs to be given within an hour of the exposure occurring to be most effective. The views of the exposed worker needs to be accounted for when considering offering PEP. It is still effective up to 72 hours after the event.

The staff member must *report* the incident immediately to their line manager (or the senior nurse on duty or senior clinician for their work area)
6.2 Subsequent action by exposed staff member and supervisor

An urgent risk assessment needs to be carried out to determine the risks of the exposure. Consideration needs to be given whether the source is known or unknown, the type of body fluids, the type of injury, if PPE was worn and the history of source patient if known.

If the source patient is known then the appropriate doctor needs to determine, directly with the source patient, where possible and / or by reviewing their medical notes the risks the source patient poses to the exposed worker.

Consideration needs to be given to vaccination history of the exposed employee ie are they vaccinated against Hep B or previously been given immunoglobulin.

The ‘Occupational exposure to blood and body fluids: incident reporting form’ needs to be filled in Appendix B. Please note this form is also available on the NHS Shetland Intranet in ‘Departments’ http://intranet/departments/oh/needlestick.html where there is a link to the form: click on Needlestick form.

- Section 1 needs to be filled in by the exposed employee.
- Section 2 needs to be filled in by the exposed employee and most senior person in charge of the location.
- Section 3 needs to be filled in by on duty senior doctor/nurse in charge of the location in consultation with the exposed employee.
- Section 4 needs to be filled in by the appropriate doctor in charge of the source patient.
- Section 5 needs to be filled in by consultant physician advising re PEP if required.

The exposed employee needs to complete a Datix report within 24 hours of the incident.

6.2.1 Non-significant exposure

In the event of a NON-SIGNIFICANT EXPOSURE, such as an injury from a clean sharp, where the sharp did not penetrate the skin, spillage of body fluids onto intact skin then the senior nurse/senior clinician on duty will ensure sections 1, 2 and of the Incident Reporting Form Appendix B have been completed and advise the exposed member of staff to visit occupational health within 72 hours and remind them to take the risk form with them. Remind the exposed employee to fill in the Datix form.
6.2.2 Significant Exposure

In the event of a SIGNIFICANT EXPOSURE AND WHERE THE SOURCE IS KNOWN. It is not appropriate for the exposed employee to carry out an assessment of risk with the source patient. The senior nurse/clinician needs to determine where possible through speaking directly with the source patient and reviewing their medical notes the risk to the exposed worker from the source patient. There is a list of the risk factors in Appendix C.

After assessing the risk the incident reporting form should be completed. Bloods will then need to be obtained from the source patient with their written consent. Please refer to information advice in Appendix C prior to discussing risk with source patient and consent form in Appendix D.

Once consent is obtained from the source patient, 5-10ml clotted blood should be taken for hepatitis B, hepatitis C and HIV testing. The sample should be sent to the pathology laboratory with a copy of signed request form stating clearly that it is from the source of a body fluid exposure and for which virus testing is required.

Guidance from the UK Expert Advisory Group on AIDS recommends that a HIV result should be obtained ideally within 8 hours and not more than 24 hours after the source blood is taken. We cannot obtain results within 8 hours in Shetland, but it is important to obtain a result as quickly as possible.

Should the source patient refuse consent to give blood then obtain details of any known infection and treatment, and any other relevant medical history. This should include discussion of possible risk factors and referring to their medical file (e.g. history of injecting drug abuse, sexual history, travel to endemic country).

Should the source patient be a high risk then the exposed member of staff needs to be referred to accident and emergency for the on call consultant physician to review the need for post-exposure prophylaxis(PEP) against HIV, Hep B booster or immunoglobulin(HBIG) or any other treatment such as DTP, antibiotic or anti emetic. PEP needs to be taken as soon as possible and is at its most effective within one hour of incident.

The senior nurse/senior clinician will complete section four of the Appendix B, and the oncall consultant physician completes section five. The member of staff should be advised to visit occupational health within 72 hours and remind them to take the risk form with them. They should remind the employee to fill in the Datix form. For further advise contact the occupational health department on ext. 3080(in hours) or the Infectious Diseases Unit on 0345 45 66 000(out of hours).

6.2.3 Significant exposure and the source is known

In the event of a SIGNIFICANT EXPOSURE AND THE SOURCE IS UNKNOWN if possible identify the origins of the sharp or clinical area where it was used. Do not in any circumstances open or search through a bag or sharps box. Otherwise refer to advice as above as in significant exposure and source is known.
6.3 HIV Post-Exposure Prophylaxis (PEP)

Starter packs of antiretroviral drugs for post exposure prophylaxis are available at:-
A&E, Gilbert Bain Hospital 01595 743100. If exposure has occurred outside of Lerwick
separate arrangements may be needed to ensure delivery of PEP.

Sufficient drugs should be given to cover weekends and bank holidays as appropriate.
The drugs used for PEP are currently licensed for treatment of HIV, but not for prevention.
They can therefore only be prescribed by a consultant, on a named patient basis.
(Consultant Physician, Consultant Occupational Health Physician or Director of Public
Health dependent on their availability)

If necessary, the use of PEP can be discussed with the on-call Consultant in Infectious
Diseases at Aberdeen Royal Infirmary (0345 456 6000) or on-call Consultant Virologist
01224 552452.

The decision to commence or continue with post exposure prophylaxis rests with the
exposed health care worker, after a clear discussion of the risks involved and drug toxicity
with the prescribing consultant or occupational health.

<table>
<thead>
<tr>
<th>PEP is composed of:</th>
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<tr>
<td>Truvada  {tenofovir 245 mg/ emtricitabine 200mg} one tablet five times daily</td>
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<tr>
<td>Raltegravir 400mg one tablet twice a day.</td>
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</table>

This combination was changed in 2015 to provide better tolerability, stability and efficacy.
The drugs should be commenced as soon as possible post injury, ideally within one hour

Any drug regimen will have to take into account the following factors:
whether the exposed health care worker is allergic to one of these drugs;
whether the health care worker is pregnant;
when there is a possibility that the virus may be resistant to one or more of the drugs, or
where the exposed health care worker has been handling resistant virus in a laboratory.

In these circumstances advice should be sought from the on-call Consultant in
Infectious Diseases at Aberdeen Royal Infirmary via reception on (0345 456 6000) or
on-call Consultant Virologist 01224 552452.
6.3.1 Side effects of antiretroviral drugs

All of the antiretroviral agents have been associated with side effects. Many of these can be managed symptomatically.

Side effects of nucleoside/nucleotide analogue reverse transcriptase inhibitors (NRTIs) – including Tenofovir and Emtricitabine - have been mainly gastrointestinal (e.g. nausea, vomiting). Dizziness and headache have also been reported.

Refer to the BNF in the first instance for further information on the range of side effects, cautions and drug interactions.

If symptoms believed to arise from PEP are distressing, cannot be managed symptomatically and the health care worker feels unable to continue to adhere to the regimen, expert advice should be sought about suitable substitutions.

6.3.2 Use of antiretroviral drugs in pregnancy

Decisions to offer PEP during pregnancy should take account of balance of risks to mother and baby but should not be withheld where risks of HIV infection are thought to be significant.

Urgent pregnancy testing should be arranged for any female worker who cannot rule out the possibility of pregnancy, as part of the evaluation prior to the exposed worker reaching a personal, informed decision about starting PEP.

6.4 Known Hep C infected source or Hep C status of source not known.

Obtain baseline serum from exposed health care worker and store in virology for at least two years.
6.5 Hep B post exposure prophylaxis

Refer to The Department of Health ‘Green Book’ *Immunisation Against Infectious Diseases 2006* for information on use of Hepatitis B vaccine and specific Hepatitis B Immunoglobulin (HBIG), including dosages, precautions, contra-indications and adverse effects.

The table below describes what prophylaxis should be offered based on HBV status of person exposed and type of exposure.

*Adapted from Table 18.5, ‘The Green Book’: Immunisation Against Infectious Diseases 2006 (chapter updated in 2013)*

In the first instance the clinician will need to consider the first dose of Hep B vaccination accelerated course or hepatitis B. Then Occupational health will continue with the provision of the accelerated course.

<table>
<thead>
<tr>
<th>HBV status of person exposed</th>
<th>Significant Exposure</th>
<th>Non-significant exposure</th>
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<tbody>
<tr>
<td></td>
<td>HBsAg +ve source</td>
<td>Unknown source</td>
</tr>
<tr>
<td>One or no doses HB vaccine pre-exposure</td>
<td>Accelerated course of HB vaccine*</td>
<td>Accelerated course of HB vaccine*</td>
</tr>
<tr>
<td>Two or more doses HB vaccine pre-exposure (anti- HBs not known)</td>
<td>One dose of HB vaccine followed by a 2nd dose one month later.</td>
<td>One dose of HB vaccine</td>
</tr>
<tr>
<td>Known responder to HB vaccine (anti-HBs &gt; 10 IU/ml)</td>
<td>Consider booster dose of HB vaccine</td>
<td>Consider booster dose of HB vaccine</td>
</tr>
<tr>
<td>Known non-responder to HB vaccine (anti-HBs &lt; 10 IU/ml 2-4 months post immunization)</td>
<td>HBIG x 1 Consider booster dose of HB vaccine 2nd dose of HBIG at one month</td>
<td>HBIG x 1 Consider booster dose of HB vaccine 2nd dose of HBIG at one month</td>
</tr>
</tbody>
</table>

* Accelerated course of vaccine consists of 3 doses spaced at 0, 1 and 2 months. A booster dose may be given at 12 months to those at continuing risk of exposure to HBV.
7. **Action by Occupational Health Service**

In the event of a NON-SIGNIFICANT EXPOSURE, then Occupational Health will ensure sections 1, 2 and 3 of the Incident Reporting Form have been completed. Bloods for storage will be taken from the injured member of staff. No further action is required. Incident recorded and documented in the exposed employees occupational health file. They will check with the employee that the incident is recorded in Datix.

In the event of a SIGNIFICANT EXPOSURE, then Occupational Health will arrange for the exposed employee to have baseline bloods taken and provide counseling advice on infection risks. They will follow up with further bloods at three and six months. If the source patient is known and their blood samples have been taken then Occupational Health will promptly inform the exposed member of staff of the source patient’s blood results.

They will ensure section four and five of the incident reporting form is filled in and that the incident is recorded and documented in the exposed employees occupational health file.

<table>
<thead>
<tr>
<th>Bloods taken significant exposure</th>
<th>Bloods taken non - significant exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloods for storage at time of injury</td>
<td>Bloods for storage at time of injury. No further action</td>
</tr>
<tr>
<td>HIV testing three months after injury</td>
<td></td>
</tr>
<tr>
<td>Hep B antisurface antigens six months after injury</td>
<td></td>
</tr>
<tr>
<td>Hep C serology six months after injury</td>
<td></td>
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</tbody>
</table>

**Accidents involving laboratory fluids**

Accidents involving laboratory fluids, particularly live cultures, must be brought to the immediate attention of senior medical staff in charge of the laboratory (or A & E if not available). The above procedures for immediate first aid (see First Aid procedure) and risk assessment will then be followed.

**Members of the public or patients**

Members of the public who have been injured by a discarded needle and/or sustained a significant exposure to blood or body fluid within a healthcare setting should report to the person in charge of the ward or clinic, who will arrange immediate first aid and contact the senior nurse on duty or the appropriate senior clinician. The risk assessment will then be carried out as above. Members of the public who are not already under the care of a clinician should be referred to A&E.
CONTAMINATION/NEEDLESTICK/SHARPS INJURY

The risk assessment should be treated as **URGENT** so that if prescribed post exposure prophylaxis (PEP) is required, it can be given **within one hour of the injury**.

Employee is exposed to blood or body fluids including sharps injury (Occupational exposure incident)

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**IMMEDIATE FIRST AID**

- **Is the skin affected?**
  - Encourage the area to bleed
  - Do not suck the damaged skin or tissue
  - Wash/irrigate with warm running water and non-antimicrobial soap. Cover with a waterproof dressing

- **Are the eyes/mouth affected?**
  - Rinse/irrigate copiously with water
  - Use eye/mouth washout kits if available
  - If contacts are worn, irrigate, remove and then irrigate the eye again

**Ensure that the item that caused the injury is disposed of safely.**

Report the incident to the most senior person in charge of the location – the duty supervisor/manager for the unit/area/department/ward.

Obtain Occupational Exposure to Blood and Body Fluids Form (Appendix B)

**Section 1:** to be completed by the exposed employee.

**Section 2:** to be completed by the most senior person in charge of the location, in consultation with the exposed employee.

**Section 3:** First stage Risk Assessment to be completed by the on duty senior doctor/nurse in charge of the location, in consultation with the exposed employee.

**Significant exposure**

If the source patient is **unknown**, refer the exposed employee to A&E immediately.

If source patient is known continue to Section 4 Second stage risk assessment.

**Not a significant exposure**

The exposed employee must arrange an OH appointment within 72 hours of the incident for post needle stick management. (OH ext 3080)

The exposed employee must bring the completed form Appendix B to the OH appointment.

**Complete DATIX as below**

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**Section 4 Second Stage Risk Assessment** To be completed by appropriate Doctor in charge of source patient, who arranges to obtain history, request consent for blood tests and take bloods either directly at the time of incident or refer to outpatients or GP and ensure consent obtained to release copy of results to OH to allow appropriate follow up of exposed employee in OH.

- YES — **HIGH RISK SOURCE PATIENT**
  - Refer the exposed employee to A&E immediately

- NO

**Section 5** to be completed by the Consultant Physician – PEP advice/treatment and consider/prescribe other treatment such as Hepatitis B booster vaccine, DTP vaccine, antibiotic, antiemetic, etc.

**PEP packs kept in A&E to be given ideally WITHIN ONE HOUR OF INJURY**

Hepatitis B vaccine also available in A&E

Further advice is available from the Infectious Diseases Unit on 0345 456 6000 or ARI Virology on 01224 552452

The exposed employee must arrange an OH appointment as soon as possible after the incident for post needle stick management (OH ext 3080)

The exposed employee must bring the completed form (Appendix B) to the OH appointment.

**Complete DATIX as below**

---

**Complete DATIX Report within 24 hours of the incident**

Report/document the incident as per local procedures and ensure that any corrective actions or interventions are undertaken.
### APPENDIX B

**Occupational Exposure to Blood and Body Fluids Form**

*Office use only*

**OHS /NI no**

## SECTION 1  To be completed by the exposed employee

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surname</td>
<td></td>
</tr>
<tr>
<td>Forename(s)</td>
<td></td>
</tr>
<tr>
<td>Date of Birth</td>
<td>Telephone number</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
</tr>
<tr>
<td>GP Address</td>
<td></td>
</tr>
<tr>
<td>Date of Incident</td>
<td>Time of Incident</td>
</tr>
<tr>
<td>Location of Incident</td>
<td></td>
</tr>
</tbody>
</table>

## SECTION 2  To be completed by the exposed employee and most senior person in charge of the location

### Was first aid procedure followed?

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
</table>
| Type of body fluid causing exposure | Blood
|                              | Blood stained fluid                         |
|                              | Non-blood stained fluid                     |
|                              | Other                                        |
| Type of injury              | Penetrating injury                           |
|                              | Exposure of broken skin                     |
|                              | Exposure of mucocutaneous membrane          |
| Description of Incident     | During venepuncture                          |
|                              | Administering IV treatment                  |
|                              | Disposal of sharp instrument                |
|                              | Intra operative exposure                    |
|                              | Other                                        |
| Protective clothing         | Gloves                                       |
| Were you wearing any of the following? | Goggles/ mask
|                              | Gown/apron                                   |

### Hepatitis B

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you completed a course (3 doses) of Hepatitis B immunisation?</td>
<td></td>
</tr>
<tr>
<td>Are you aware of your anti-HBs status?</td>
<td></td>
</tr>
<tr>
<td>Have you ever received Hepatitis B immunoglobulin?</td>
<td></td>
</tr>
<tr>
<td>Have you ever had previous exposure to blood borne viruses?</td>
<td></td>
</tr>
</tbody>
</table>

**Signature of exposed employee:** ..................................................  **Date:**..........................
SECTION 3 First Stage Risk Assessment - to be completed by on duty senior doctor / nurse in charge of the location in consultation with the exposed employee

<table>
<thead>
<tr>
<th>Surname</th>
<th>Forename(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td>Telephone number</td>
</tr>
<tr>
<td>Date Incident reported</td>
<td>Time incident reported</td>
</tr>
</tbody>
</table>

Brief details of Incident:

<table>
<thead>
<tr>
<th>Please answer all questions Yes or No: mark the box with an X</th>
<th>Yes</th>
<th>No</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Type of body fluid causing exposure</td>
<td>Blood</td>
<td>Blood stained fluid</td>
<td>Non-blood stained fluid</td>
</tr>
<tr>
<td>8 Did the exposure involve</td>
<td>Hollow bore needle</td>
<td>Instruments</td>
<td>Bone fragments</td>
</tr>
</tbody>
</table>

Is this a significant exposure? (See back page) YES / NO Is the source known YES / NO

If it is a significant exposure and the source is known – continue with the second stage risk assessment on next page.

If it is a significant exposure and the source is unknown – If possible identify the origins of the sharp i.e. the clinical area where the item was used. Refer the exposed employee to A&E for the on call Consultant Physician to complete Section 5.

If the exposure is not significant:

- Please sign this form below.
- Advise the exposed employee to arrange an Occupational Health appointment within 72 hours of the incident for post needle stick management (OH telephone number 01595 743080).
- Return this form to the exposed employee and remind them to bring this form to the OH appointment.
- Remind the exposed employee to complete a DATIX report within 24 hours of the incident.

Signature of person completing form: ........................................... Date: ..........................
**Section 4 Second stage of Risk Assessment – to be completed by appropriate Doctor in charge of the source patient.**

**Name of Doctor carrying out second stage of risk assessment:**

............................................

**Is the source patient identified?**

If NO: classify as **Source unknown**

If YES: give details below (patient label can be used if available)

<table>
<thead>
<tr>
<th>Surname of source patient</th>
<th>Forename</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date of Birth</strong></td>
<td><strong>Tel. No.</strong></td>
</tr>
</tbody>
</table>

**CHI number**

<table>
<thead>
<tr>
<th>Location</th>
<th>Diagnosis/Clinical Status</th>
</tr>
</thead>
</table>

**STATUS OF SOURCE PATIENT**

Please complete appropriate boxes: mark each box with X

<table>
<thead>
<tr>
<th>+ve</th>
<th>-ve</th>
<th>Unknown</th>
<th>Consent for testing &amp; result to OHS</th>
<th>Source blood sample taken</th>
<th>Result of blood test (OHS to complete)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **HIV**
- **HBsAg**
- **HCV**

**Information leaflet given to source patient?** **YES / NO**

**Is the source patient high risk?** **YES / NO**

If YES:

- Refer exposed employee immediately to the A&E Department for the on call Consultant Physician to review the incident and complete Section 5 on next page.

If NO:

- The exposed employee must arrange an OH appointment as soon as possible after the incident for post needle-stick management. (OH telephone number 01595 743080)
- Return this form to the exposed employee and remind them to bring this form to the OH appointment.
- Remind the exposed employee to complete a DATIX report within 24 hours of the incident.
### SECTION 5 Management of exposed employee by the on call Consultant Physician

**Name of Consultant advising re PEP:** ………………………………………

**Please answer all questions Yes or No: mark the box with an X**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was post – exposure prophylaxis advised?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Was HIV PEP prescribed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Was a Hepatitis B booster given / course commenced?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Was HBIG given?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Was any other treatment given (e.g. DTP, antibiotic, antiemetic)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. What follow up is required?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Signature of person completing form:**………………………………… **Date:** …………………

➢ Please ensure this form has been signed.
➢ The exposed employee must arrange an OH appointment as soon as possible after the incident for post needle-stick management. (OH telephone number 01595 743080)
➢ Return this form to the exposed employee and remind them to bring this form to the OH appointment.
➢ Remind the exposed employee to complete a DATIX report within 24 hours of the incident.

### Significant exposure to blood or body fluid

Infection may occur following significant exposure to blood or certain body fluids. The following body substances should be treated as blood:

- Breast milk
- Amniotic fluid
- Vaginal secretions
- Semen
- Saliva in association with dentistry
- CSF
- Pleural fluid
- Peritoneal fluid
- Synovial fluid

There is minimal risk of blood borne virus infection from urine, faeces, saliva, sputum, tears, sweat, and vomit unless contaminated with blood (although they may be hazardous for other reasons).

Percutaneous exposure is of higher risk than mucotaneous exposure, and exposure of blood is more serious than exposure to body fluids which are not blood stained.

The risk of HBV, HCV or HIV transmission after an unknown source exposure in the UK is very low, but possible.
A Health Care Worker involved in your care has been accidentally exposed to your blood or body fluids in a way, which could pose a risk to their health if you are infected with hepatitis B, hepatitis C or HIV. In order to protect the Health Care Worker from this risk, we need to test your blood to see if you are infected with these viruses. We will need a blood sample to do this test.

It is possible to be infected with these viruses without knowing or being ill. If you are infected with these viruses it is important for you to know this, as there are treatments available for these conditions.

These viruses are transmitted by exposure to blood and some body fluids, most commonly by sexual contact with an infected person, or by sharing of needles between injecting drug users. People who are at higher risk of being infected are:

- People who have had a blood transfusion or use of blood products before 1985
- People who have had a blood transfusion outside the UK where screening does not take place.
- Men who have sex with men
- People who are sexually active from areas of the world where these infections are more common, e.g. sub-Saharan African, S.E Asia, parts of Eastern Europe.
- Injecting Drug User
- Sexual partner of any of the above
- Tattoos/Body Piercings

If none of these risk groups apply to you, the risk of you being infected with hepatitis B, hepatitis C or HIV is very low. If one or more of these risk groups apply, you may have a higher chance of being found to be positive in testing.

If you know that you are infected with hepatitis B, hepatitis C or HIV, please tell us, as we may need to act quickly to protect the Health Care Worker. You do not have to tell us how you may have become infected with the virus.

If you would like further information about risk of being infected with hepatitis B, hepatitis C or HIV please ask the doctor or clinician who is seeking your consent for a blood test.

**YOUR CARE WILL NOT BE AFFECTED WHETHER YOU AGREE OR YOU REFUSE TO UNDERGO THIS BLOOD TEST**

If you agree to a test for hepatitis B, hepatitis C and HIV, the results will be given to you, your doctor and to our Occupational Health Service which is responsible for the care of the Health Care Worker. The results will be given to you by the doctor or senior nurse who discussed the test with you before the blood test was taken. If the results show that you are infected with one of these viruses, appropriate investigation and treatment will be organised for you.
APPENDIX D

CONSENT FOR SCREENING FOR BLOOD BORNE VIRUSES FOLLOWING A BLOOD EXPOSURE TO A HEALTH CARE WORKER

TO BE RETAINED IN PATIENT’S RECORD

TO: ..............................................................................................(SOURCE PATIENT’S NAME)

ADDRESS: ..............................................................................................

DOB: ..........................................................(YOU MAY FIX A HOSPITAL LABEL IF AVAILABLE)

A Health Care Worker involved in your care has been accidently exposed to your blood or body fluids, in a way, which could pose a risk to their health if you are infected with hepatitis B, hepatitis C or HIV. In order to ensure that the Health Care Worker recieves appropriate treatment, we need to test your blood to find out if you are infected with these viruses.

If you have any reason to believe you may be infected with hepatitis B, hepatitis C or HIV, or wish to discuss the implications of having your blood tested for these conditions please ask the doctor/nurse before signing this form.

The medical staff responsible for your care will discuss the risks in confidence with you, if you wish.

The results of these blood tests will be given to you by the team responsible for your care. The results will also be given to our Occupational Health Service to help them care for the Health Care Worker. The Health Care Worker will already be aware of your identity.

I understand that I am being asked to undergo blood testing for hepatitis B, hepatitis C and HIV. I understand that the results of this test will be given to me and will remain confidential to my medical records and to the Occupational Health Service anonymously.

I consent to my blood being tested for hepatitis B, hepatitis C and HIV.

SIGNED: ............................................................

NAME IN CAPITALS: .................................................. DATE: ..........

Doctor / Senior Nurse requesting consent:

.......................................................... ............................................................

SIGNED: ............................................................ DATE:.............

NAME IN CAPITALS: .................................

POSITION.................................................................