Contamination Incidents (including Needle-Stick Injuries)

Frequently Asked Questions

1. What is a contamination injury?
2. What should I do immediately if I have sustained a contamination injury?
3. What should I do immediately if one of my staff has had a contamination injury?
4. How do I assess whether the injury is “significant”?
5. How do I assess whether the source of the contamination is high risk?
6. What blood tests should I have immediately if I have been injured?
7. What blood tests should the source have immediately?
8. How do I counsel the source patient regarding testing?
9. Where can I get further advice or help?
10. What are my risks of contracting a blood borne virus infection after a needlestick?

1. What is a Contamination Incident?

An occupational exposure to a blood borne virus may occur when a staff member is contaminated with the body fluids of another person. The significance of the exposure will depend upon the individual circumstances and can be assessed as described below.

2. What should I do immediately if I have sustained a needle-stick injury?
   
   i. First Aid:
      (a) Needle-stick/ broken skin/ bite/ scratch with broken skin:
         • Encourage bleeding
         • Wash injury thoroughly with warm water and soap.
         • Cover with waterproof plaster
      (b) Eye and mucous membrane contamination:
         • Flush the area with copious amounts of running water
   
   ii. Report Incident to Manager

   iii. Contact Working Well (occupational health) on 08454 225165 between 08.30am – 16.30pm Monday to Friday. Outside of these hours, contact ED at Cheltenham General Hospital or Gloucestershire Royal Hospital and additionally leave a message on the Working Well answerphone with your name, date of birth, contact number and name of source patient (if known). Signposting information to ED is available on the Working Well answerphone out of hours in case you forget.

Useful telephone numbers

- Working Well (Occupational Health) 08454 225165
- ED Gloucestershire Royal 08454 226600
- ED Cheltenham General 08454 223049
3. What should I do immediately if one of my staff suffers a contamination incident?
   
i. Assess whether exposure is “significant”. Working Well will advise if unsure. *(For more information see Question 4 below)*
   
   If Significant, then proceed as follows:

   ii. Ensure Health Care Worker has reported to Working Well (Occupational Health) / A&E for further advice as above.

   iii. Carry out a risk assessment of the source. *(Working Well will advise if required and see Question 5.)* If the source is known or assessed to be high risk for HIV, then HCW should attend Working Well/ ED as soon as possible and preferably within an hour.

   iv. Ensure details of the incident are recorded accurately on accident form (Ir1) or electronic Datix incident recording system (depending on your employing Trust).

   v. Ensure blood is taken as soon as possible from the source, if known, after counselling and consent for testing for Hepatitis B antigen, HIV antibodies and Hepatitis C antibodies *(see example forms Question 6 & 7).* Counselling and venesection should NOT be carried out by the injured HCW. *(see Question7 & 8)*

   vi. Organise blood test from injured Health Care Worker for storage. *(see example forms).*

4. How do I assess whether the injury is “Significant”? 

   **Significant Exposure = High Risk body fluid AND significant route**

   **HIGH RISK BODY FLUID:**
   
   • Blood CSF
   • Peritoneal fluid
   • Synovial fluid
   • Amniotic fluid
   • Unfixed organs and tissue
   • Semen
   • Tissue fluid from burns
   • Pericardial fluid
   • Pleural fluid
   • Saliva associated with dentistry
   • Breast milk
   • Visibly stained fluid
   • Vaginal secretions

   **SIGNIFICANT ROUTE:**
   
   • Percutaneous eg sharps injuries from needles, instruments, bone fragments, human bites where skin is broken
   • Exposure of broken skin such as abrasions cuts, eczema
   • Exposure of mucous membranes such as eyes, nostrils, mouth

   Body fluids contaminating INTACT skin are not a significant risk.

   The following body fluids are considered low risk unless they are visibly contaminated with blood:
   
   • Urine
   • Vomit
   • Faeces
   • Saliva unrelated to dentistry
5. **How do I assess whether the source of the Contamination is High Risk?**

The prevalence of HIV infection and other blood borne viruses is higher in certain groups.

i. Check the patient’s history and notes. Are there any previous blood results for hepatitis B, hepatitis C or HIV?

ii. Consider whether the following risk factors may apply:

- Originated from sub-Saharan Africa
- Men who have sex with men
- Unprotected sexual activity with individuals from sub Saharan Africa
- Intravenous drug users
- Sex industry worker
- If the source patient is known to have or is under investigation for an AIDS indicator illness, then consider as high risk.

iii. Remember that Gloucestershire has a low HIV prevalence compared with other places and this is particularly true for intravenous drug users and sex industry workers.

**Working Well nurse and medical staff will assist with the risk assessment and advise accordingly.**

6. **What blood tests should I have immediately if I have been injured?**

Blood should be taken for STORAGE in a yellow top bottle with gel activator. The request form should be completed as below.

**For the injured/affected person’s test:**

<table>
<thead>
<tr>
<th>Gloucestershire Hospitals NHS Foundation Trust</th>
<th>PAS LABELS ON ALL COPIES NHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time Collected</td>
<td>Specimen(s)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Summary / Current Antibiotic Therapy / Date Of onset</td>
<td></td>
</tr>
<tr>
<td>Recipient of needlestick injury from patient</td>
<td></td>
</tr>
<tr>
<td>Name of patient</td>
<td>Mickey Mouse</td>
</tr>
<tr>
<td>DOB of patient</td>
<td>1/1/2000</td>
</tr>
<tr>
<td>Immunosuppression: Specify</td>
<td></td>
</tr>
<tr>
<td>Travel (recent or past give dates and destination)</td>
<td></td>
</tr>
<tr>
<td>Relevant Occupational History</td>
<td></td>
</tr>
<tr>
<td>Hospitalized within the past month Yes/No</td>
<td></td>
</tr>
<tr>
<td>Antibiotics (tick and name)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current</th>
<th>Intended</th>
<th>Past/Month</th>
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</thead>
</table>

**Microbiology Investigation Required – please specify**

**Blood for storage please**

(For urine and Chlamydia specimens please insert relevant codes as described elsewhere.)

<table>
<thead>
<tr>
<th>Urine</th>
<th>Chlamydia (Disease Investigation NOT Screening)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1</td>
<td>U2</td>
</tr>
<tr>
<td>U1</td>
<td>U2</td>
</tr>
</tbody>
</table>

For Laboratory use only:

Copy Report to / Special Instructions

NHS Private Category

Doctor’s signature and name (print) Bleep No.

WZG 579Q
7. What blood tests should the source have immediately?

Blood should be taken for Hepatitis B surface antigen, Hepatitis C antibody and HIV antibody only AFTER counselling the patient. Blood should be taken in a yellow top bottle with gel activator. The tests required are Hepatitis B SAg, Hepatitis C antibody and HIV antibody.

The staff member who has sustained the contamination incident should NOT be the person who approaches the source patient to test.

For the source patients test:

8. How do I counsel a source patient source for consent to the blood tests?

Many staff are uncertain how to approach this. A suggested form of words, taken from the Gloucestershire Hospitals NHS Foundation Trust policy, would be:

“Unfortunately one of the members of staff has had an accidental injury where your blood (or specify relevant body fluid) has been “involved”. I am here to ask if you would let me take a blood sample for testing for the viral infections that can be transmitted to staff in this way. This is something that we ask for routinely whenever a patient’s blood (or specify relevant body fluid) is involved in such an accident. We need your agreement to do this and would appreciate your help.

The purpose of the testing is to reassure staff where the results are negative. This may allow them to stop taking precautionary medication that often causes unpleasant side effects. In the unlikely event that a test is positive you will receive specialist advice and management including treatment if required. The staff member may also be offered additional treatment.

The tests are for hepatitis B, hepatitis C and HIV. The test results are usually available within a few days but may take several weeks if extra investigations are required for clarification. The results will normally be given to you by a member of the medical staff. The results are
confidential, but they will appear in your medical records and the affected staff member will also be informed.

Do you have any concerns? A common concern is whether having these tests done will affect any existing life insurance policies or future life insurance applications. The Association of British Insurers has issued guidance stating; “Existing life insurance policies will not be affected in any way by taking an HIV test, even if the result is positive.” For new life insurance applications, companies should only enquire about positive test results, not whether a test has been performed. A positive test result may affect the outcome of a life insurance policy application. If you have any other concerns I can ask for a member of the Counselling and Support Service to see you (County HIV/ AIDS counselling and support services: telephone 01452 311744).

Do I have your permission to take a blood sample for hepatitis B, C and HIV testing? I should remind you that you can refuse to have some or all of these tests performed and that if you do choose not to be tested it will not affect your future care.”

A record of the discussion and patient’s consent (or non-consent) to testing for HBV, HCV and HIV should be made in the medical records of the source

9. Where can I get further advice for help?

- Working Well (Occupational Health) 08454 225165
- ED Gloucestershire Royal 08454 226600
- ED Cheltenham General 08454 223049
- Medical Microbiologist On Call Via NHS Switchboard
- The Policy document - Prevention and Management of Occupational Exposure to Blood Borne Viruses which can be found on your employer’s NHS intranet pages.
- www.workingwell2gether.nhs.uk

10. What are my risks of contracting a blood borne virus infection after a needlestick?

Following a contamination incident with a sharp or needle that is obviously contaminated with blood, if the source is:

- Hepatitis B positive, there is a 30% chance of contracting the illness
- Hepatitis C positive, there is a 3% chance of contracting the illness
- HIV positive, there is a 0.3% chance of contracting the illness.
- If the injury involves a splash to the eye or mucous membrane, the risk of contracting the illness is significantly lower.
- If the source of the sharps injury is unknown, the risks are very low.

The prevalence of HIV in Gloucestershire remains low. Healthcare staff should all be vaccinated against hepatitis B and it is an effective vaccine. Hepatitis C carriage rate in the IV drug user population is now quite high.

You will always be offered follow up blood tests after a contamination incident from an unknown source or a source where it has not been possible to test the status to reassure you that you have not become unwell.