

Contamination Incidents <i>Frequently Asked Questions</i>	WWR- 004 Feb 2019
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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 **01452 894480** between 08.30am – 16.30pm Monday to Friday. Outside of these hours, contact ED at Cheltenham General Hospital or Gloucestershire Royal Hospital and additionally email Working Well with your full name, date of birth, contact number and name of source patient (if known) and stating clearly the nature of the contamination injury Contact information for Emergency Departments and Minor Injury Units is at section 12 below and is also available on the Working Well website workingwellglos@nhs.uk.

iv. Complete a Datix Report

3. What should I do immediately if one of my staff suffers a contamination incident?

There is a GOLDEN HOUR for the management of contamination injuries. It is very important that the risk assessment is completed as soon as possible. If HIV prophylaxis is indicated, it gives the best results if given within 1 HOUR of the injury.

Assess whether exposure is “significant”. Working Well or ED will advise if unsure. (For more information see **Question 4** below)

If Significant, then proceed as follows:

- Ensure Health Care Worker has reported to Working Well (Occupational Health) / ED for further advice as above.
- Carry out a risk assessment of the source of the blood and/or body fluid. (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.**
- Ensure details of the incident are recorded accurately on accident form (Ir1) or electronic Datix incident recording system (depending on your employing Trust).
- 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 form [Question 7](#)). Counselling and venesection should NOT be carried out by the injured HCW. ([Question 8](#))
- Organise blood sample from injured Health Care Worker for storage ([Question 6](#)).

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

Significant Exposure = High Risk body fluid AND significant route

High risk body fluids include:

Blood CSF	Pericardial fluid
Peritoneal fluid	Pleural fluid
Synovial fluid	Saliva associated with dentistry
Amniotic fluid	Breast milk
Unfixed organs and tissue	Visibly stained fluid
Semen	Vaginal secretions
Tissue fluid from burns	

Significant routes include:

Body fluids coming into contact with INTACT skin are not a significant risk. Scratches by patients are not normally considered a significant route unless there is a high risk body fluid present as well.

- Percutaneous e.g. 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

The following body fluids are considered low risk unless they are visibly contaminated with blood:

Urine	Faeces
Vomit	Saliva unrelated to dentistry

5. How do I assess whether the Source of the Contamination is High Risk?

The prevalence of HIV, Hepatitis B and C infection 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 user either now or in the past
 - 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 parts of the country and this is particularly true for intravenous drug users and sex industry workers.

Working Well nursing 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 large (8ml) yellow top bottle with gel activator. The request form should be completed as below.

For the injured/ affected person's test:

GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST		PAS LABELS ON ALL COPIES		NHS			
Date / Time Collected 22/10/15		Specimen(s) VB		MRN / NHS No. OK to leave blank			
Clinical Summary (inc. Date of Onset of Travel) Name of Employer: GHNSFT / 2g / GCS etc Contamination Injury From: (Donald Duck - 9/6/34) Antibiotics (tick and name) Current () Intended () Past month ()		Surname MOUSE		Forename MICKEY			
		Date of Birth 18/11/28		Sex <input checked="" type="radio"/> M <input type="radio"/> F			
		Address of Patient The Mouse House Disneyland		POSTCODE DL1 2FS		Consultant/G.P. Prof A Hawley	
		Ward/Location		Address for Report Working Well Occupational Health		Copy Report to / Special Instructions	
MICROBIOLOGY INVESTIGATION REQUIRED - please specify Bacteriology C&S		Antenatal serology <input type="checkbox"/> Syphilis <input type="checkbox"/> Rubella <input type="checkbox"/> A/N HepB <input type="checkbox"/> A/N HIV		Other test (inc. Serology) Please specify Storage			
For Laboratory use only:		NHS <input checked="" type="checkbox"/> Private		Category II			
		Doctor's signature and name (Print) pp		Bleep No. WZG 5790			

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:

GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST		PAS LABELS ON ALL COPIES		NHS			
Date / Time Collected 22/10/15		Specimen(s) VB		MRN / NHS No.			
Clinical Summary (inc. Date of Onset of Travel) Contamination Injury Source to: (Mickey Mouse 18/11/28) Antibiotics (tick and name) Current () Intended () Past month ()		Surname DUCK		Forename Donald			
		Date of Birth 9/6/34		Sex <input checked="" type="radio"/> M <input type="radio"/> F			
		Address of Patient The Duck Pond Disneyland		POSTCODE DL1 2FS		Consultant/G.P. Prof A Hawley	
		Ward/Location		Address for Report Working Well Occupational Health		Copy Report to / Special Instructions OK to copy in treating Consultant / GP	
MICROBIOLOGY INVESTIGATION REQUIRED - please specify Bacteriology C&S		Antenatal serology <input type="checkbox"/> Syphilis <input type="checkbox"/> Rubella <input type="checkbox"/> A/N HepB <input type="checkbox"/> A/N HIV		Other test (inc. Serology) Please specify HCV HIV HepB sAg			
For Laboratory use only:		NHS <input checked="" type="checkbox"/> Private		Category II			
		Doctor's signature and name (Print) pp		Bleep No. WZG 5790			

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

The patient must be able to give informed consent to have the blood tests required following a contamination injury. If they do not have the capacity to do so, either due to confusion or if unconscious then the blood samples cannot be taken.

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 0300 421 6500 or 0300 421 6542).

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.”

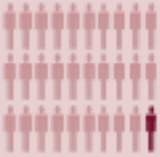
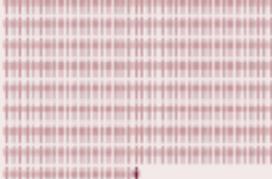
A record of the discussion and patient’s consent (or non-consent) to testing for HBV, HCV and HIV should be made in the medical records of the Source

9. 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, the quoted figures for seroconversion 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.

Figure 9. Published and observed risk of bloodborne virus transmission among healthcare workers following a percutaneous injury (5-7)¹

Virus	Published risk of transmission	Healthcare workers exposed, 2004-2013	Seroconversions, 2004-2013	Observed risk of transmission
HBV	One in 3 	590	0	-
HCV	One in 30 	2566	9	1 in 285
HIV	One in 300 	1478	0	-

¹ This figure includes data from England, Wales and Northern Ireland only.

The level of current infectivity will increase or decrease the risk 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.

10. What happens if the Source is either unknown or is not able to consent to the blood tests?

If the recommended tests cannot be carried out on the Source of the blood/body fluids either because the person has not provided consent for whatever reason, or are unknown, a series of blood tests are recommended for the injured/affected person. It is important that you advise Working Well if there is a problem arranging for the blood tests to be taken from the Source.

Where Working Well has been advised that the incident needs to be managed as having an unknown Source, we will contact you advising when are due a blood test.

If you work for GHNHSFT or Gloucestershire Health and Care NHS Foundation Trust, you will be sent a form asking you to arrange for the sample to be taken.

If you do not work for one of the above organisations, we will send you a letter advising you to book an appointment for a blood test at one of our clinics.

The blood tests are due 6 weeks, 12 weeks and 6 months post incident.

6 weeks	12 weeks	6 months
Hepatitis C PCR	HIV antibody testing	Hepatitis BsAg
HIV Antibody testing (combined Ag/Ab assay)	Hepatitis BsAg	Hepatitis C antibodies
	Hepatitis C antibodies	

11. What happens if the Source is confirmed as having a blood borne virus?

Working Well will discuss with you if further prophylaxis treatment, referral to specialist services or follow up blood tests are required should the Source have a positive Hepatitis B, C or HIV result.

12. Where can I get further advice or help:–

Working Well (Occupational Health)	01452 894480 8.30-4.30 Mon-Fri
Emergency Dept. Gloucestershire Royal	0300 422 6600 24 hours
Emergency Dept. Cheltenham General	0300 422 3046 24hours

For Clinical staff carrying out the risk assessment it may be appropriate to contact;

- 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.