



# Blood/Body Fluid Exposure (BBFE)

## Incident Reporting Procedure Checklist

- 1. Perform immediate FIRST AID**
  - encourage bleeding without undue squeezing from the injury site, wash away as much contaminating blood/body fluid as possible. **For eyes, nose, mouth** – rinse thoroughly with clean running water (or saline)
2. In the event of a blood or body fluid exposure (after providing any necessary first aid), the incident **MUST** be reported to the workplace H&S Officer. Routine medical follow up **by the Recipient to their nominated GP** should usually be within 24-48 hours. Immediate consultation 24/7 to your nearest Infectious Disease Physician is required if the source is known or high-risk of being HIV positive
3. **Fill out a “Blood/Body Fluid Exposure Report Form”**. Ensure that as many details as practically possible are completed. Refer to your workplace protocol or supervisor, or contact your nearest Canterbury SCL or Medlab branch Infection Prevention & Control (ph 03 3590900) for advice if required
4. **Obtain blood, if consent is given**, for testing from both the **Recipient (injured person) and Source** of the exposure (if known). **A 10 ml sample of blood in a plain or SST tube is required from each person.**
  - a. Informed consent is required from both the Recipient and Source (if known), **prior** to collection of blood
  - b. The Recipient and the Source blood samples are routinely **tested for HBsAg, HBsAb, HCV and HIV if consent is given for these tests**
  - c. If Source or Recipient wish to have their results reported in **Code only**, we recommend the following standard format for labelling of all specimens and forms:  
Write **“Code”** then **First two letters of surname, First letter of first name, Date of birth, Gender**  
e.g. John Green, born 24/03/64, a male, would read **“Code GRJM24/03/64”**
5. **Send the completed “Blood/Body Fluid Exposure Report Form” along with blood samples from the Recipient and Source (if known), to Canterbury SCL or Medlab on next transport or within 24hrs**

**Laboratory requisition forms must be completed for each sample also – state ‘BBFE Source’ or ‘BBFE Recipient’ on clinical details, mark as ‘24 hr Urgent’, and a contact phone number for Recipient (in case urgent contact required or more details required)**

If blood samples and the “Blood/Body Fluid Exposure Report Form” are sent separately, please ensure that sufficient information is on the laboratory requisition forms to alert the laboratory that they are specimens from a specified blood or body fluid exposure (BBFE) incident and **specify/differentiate who the Source and Recipient are**

6. **The Recipient and Source forms must indicate who the results are authorised to go to**
  - i.e. specified nominated Medical Practitioner nominated by Source and Recipient respectively
  - NB The injured person may also elect and request to have their result copy go to their healthcare workplace, BUT be aware sometimes on baseline testing a recipient finds they were already positive for hepatitis or HIV and were not aware of this at all – and would not have wanted anyone at their work place to know this, but by then it is too late to stop this if they had requested their result copy to go there**
7. The Recipient’s nominated GP will be sent their own results and may be advised of any extra follow-up that is recommended based on the information available/provided and in view of the Source results (if available)
8. **The Recipient should contact their nominated GP for follow up after 24hours if no contact has been made by then** but immediate consultation 24/7 to your nearest Infectious Disease Physician (or ED Dept) is required if the Source is known HIV positive or a known high-risk of being HIV positive
9. Fill out a workplace accident Health & Safety report for separate process internal documentation record

**N.B. The Recipient is responsible for their own medical follow up**  
**Including any repeat testing required following the advice of their**  
**Medical Practitioner for all Blood Body Fluid Exposures**

## For Recipient 'injured person', Information Guide (x1 sheet)

**NB The Recipient is responsible for their own medical follow up** including any repeat testing that may be required following advice from their Medical Practitioner for all Blood Body Fluid Exposures

This sheet to be given to the Medical Practitioner you nominated to have the results sent to and attend Post Blood Body Fluid Exposure (BBFE)

### Dear Doctor, Medical Practitioner

The person presenting this to you, has been accidentally exposed to blood or body fluids. They have chosen to come to you for appropriate medical follow up. In the interests of time, baseline viral testing has likely already been initiated on their blood.

As a guideline the following is usually required and blood samples probably already tested (if consented):

- **Baseline tests (provided consent is given by the injured person i.e. Recipient) for**
  - Hepatitis B surface antibody
  - Hepatitis B surface antigen
  - Hepatitis C antibody
  - HIV antibody

Note: these tests will have usually already been tested and reported or available via Canterbury SCL or Medlab to aid the follow up process.
- **Completion of Accident Compensation Corporation (ACC) medical treatment claim forms**
  - One copy for ACC
  - One copy for the staff member
- **Appropriate medical follow up by you, and post exposure management if indicated - see references below.** Our Canterbury SCL or Medlab Medical Microbiologists, Infection Prevention & Control Team or an Infectious Diseases Physician should be contacted if any advice or clarifications are required. Where the Source is a known Hepatitis B or C positive or that the recipient has an illness compatible with Hepatitis B or C following the BBFE then phone Infectious Diseases Physician for advice regarding management.

The Canterbury SCL or Medlab Infection Control/Immunology Service would usually co-ordinate the blood testing of the Source for this exposure, if known and if consent was given. Suggestions in the test result report may be included if any specific additional follow up is required based on the test results available.

If follow up testing is required, **the final follow up would usually be six months after the body fluid exposure incident.**

If you do not receive any results or contact within 48 hours of the exposure please contact the Microbiology/Immunology Service at Canterbury SCL or Medlab.

### Useful References:

**Bloodborne Infectious Diseases CDC Management and treatment Guidelines:**

<http://www.cdc.gov/niosh/topics/bbp/guidelines.html> (note **PEP Steps, A Quick Guide to Postexposure Prophylaxis**)

**Management of Acute HCV infection (IDSA)**

<http://www.hcvguidelines.org/full-report/management-acute-hcv-infection>

## **For Source Person, Information Guide (x1 sheet)**

While providing care to you a staff member has accidentally been exposed to your blood or body fluid.

This can place the staff member (**not you**) at risk of being infected by viruses that might be present in your blood or body fluids. These viruses could be present in your blood even though you may appear completely well and not be aware of this.

We therefore respectfully request your consent and permission to test your blood for these viruses: Hepatitis B virus, Hepatitis C virus and the Human Immunodeficiency Virus (more commonly known as HIV).

It is completely within your rights to decline to have this testing done.

**There has been no infection risk to you from this exposure event.**

If you agree to have your blood tested please advise the staff member who provided you with this information sheet.

If you give your consent someone trained in Phlebotomy, (blood collection) will contact you to arrange a suitable time to collect a blood sample. This person will be able to provide more information about the testing involved and answer any questions you may have.

The results of any blood testing, if performed, will be sent to your nominated Medical Practitioner if you consent to that. Alternatively any results can be usefully used for medical follow up of the injured/affected person but not sent to your Medical Practitioner if you would prefer that.

We stress that you do not have to agree to undertake the testing if you do not wish to. If you were to agree to providing a blood sample for testing this would usually significantly reduce any concerns the staff member or injured person affected may have and /or allow them to take any appropriate medical interventions that may be required. Your results would remain confidential to your nominated Medical Practitioner if you consented to that.

Any decision you make will not affect the care provided to you.

Thank you for taking the time to read this information guide.

# FAQ's Blood Body Fluid Exposure (BBFE)

## e.g. Needlestick injuries and splashes to mucus membranes Frequently Asked Questions and questions related to Counselling

After a Blood Body Fluid Exposure (BBFE) it is common for a range of emotions to be experienced by the injured person including frustration, feeling vulnerable, fear, anger, blame, denial, etc.

Often there are a number of questions that are raised that the injured or exposed person wishes to know about. What are the actual risks and what other actions may need to be considered including the timeframes involved?

The following is a guide and is not intended to replace expert consultation where appropriate or individualised management and counselling which depends on specific circumstances.

The major blood-borne pathogens of concern that are associated with BBFE/needlestick injury are hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV).

### What is the actual risk of infection after injury or exposure?

#### Generally low to very low

The average estimated infection risk from published studies when the Source is positive for one of the above bloodborne viruses is:

#### HIV:

- **0.3% for needlestick/ percutaneous exposure to HIV-infected blood** (i.e. 3 per 1,000 chance of infection if the source is positive, or 99.7% chance of not contracting infection even when the source is positive)
- **0.1% for mucocutaneous exposure to HIV-infected blood** (i.e. 1 per 1,000 chance of infection) i.e. 99.9% chance of not catching HIV infection after splash to eye or mouth from an HIV positive source

#### HCV:

- **1.8% for needlestick/percutaneous exposure to HCV-infected blood** (i.e. less than 2 per 100 chance of infection if the source is HCV positive)

#### HBV:

- **5-10% for needlestick/percutaneous exposure to HBV infected blood of a non-immune injured person if hepatitis B positive source** but this increases to 30-60% for needlestick and percutaneous exposure of a non-immune individual to hepatitis B **if** the source is HBeAg positive
- **However if the injured person has ever been fully vaccinated with 3 shots to hepatitis B**, and if they are not immunocompromised or have renal disease, **then published evidence shows the chances of catching clinically significant hepatitis B are essentially zero**, regardless of what the immune status now shows on a blood test
- But if the injured person's full 3 shot hepatitis B vaccination status is uncertain and no hepatitis B antibodies are detected in a blood test, usually a vaccination series and/or immunoglobulin will be advised to provide extra certainty of protection to hepatitis B both now and future (if vaccinated now)

When hepatitis B immunoglobulin (HBIG) **or** a hepatitis B vaccine series is given to a **non immune, injured person** who was exposed to a hepatitis B source, their risk of infection is reduced 75%. If this HBIG is **combined** with initiating a hepatitis B vaccination series, protection is thought to be 85-95%. After a BBFE incident a 3 shot hepatitis B vaccination series is advised regardless if you have not been vaccinated for this before for current and future protection.

Risks of bloodborne viral infection increase in the following situations (i.e. more virus numbers can be introduced), if:

- A deep injury
- Terminal or new HIV-related illness in the Source person (both scenarios have higher viral load numbers then)
- Visible blood on the device which caused the injury
- Injury with a hollow bore needle which had been placed in a Source person's artery or vein

**All exposures to urine, saliva, bites, stool/faeces, vomit, nasal discharge, tears and sweat have greatly reduced to no bloodborne viral infection transmission risk UNLESS visibly contaminated with blood.**

**If Source testing is available and viral blood tests are negative then bloodborne viral infection risk is almost zero.**

Risk also decreases with time if the source of the injury is not direct from a person but via the environment (e.g. needle in a garden) because these viruses become more inactive off people with time. Hepatitis B can survive the longest, up to about 6 months, but most of the initial viral numbers would be inactive by then and insufficient to cause infection.

### **Why is initial blood testing advised as well as six month final testing?**

The initial blood testing of the **injured person** serves as a **baseline** test for two reasons:

1. It may show your current measurable immunity to hepatitis B (HBsAb), this can be even more useful if you have no record or cannot remember if you have had the full x3 doses of hepatitis B vaccination previously or not
2. In the uncommon event that you were to catch a bloodborne virus as a result of this injury then you have proof for ACC reasons of whether you already had a blood virus infection at the time of this injury/exposure or not

**Generally final blood testing of the injured person is advised at 6 months**, when required (i.e. if Source tests are not negative or are unavailable) because this is usually the longest it would take for a blood test to show if an infection had occurred. However most bloodborne viral infections will be detectable by 3 months, so if a high risk situation or added assurance due to anxiety is required, consider more frequent testing including 3 month check post incident as well in consultation with your GP.

### **Counselling**

Initial counselling can be offered via onsite medical support where available, the Emergency Department, your nominated Medical Practitioner, or by phone via Canterbury SCL or Medlab Medical Microbiologist or Infection Prevention & Control Service 24/7.

If the injured person feels more anxiety with time it is important to consider more counselling for emotional support and/or more information and educational resources. Initial information may be forgotten or misunderstood due to anxiety at the time of the incident.

It is recommended that an Infectious Disease Specialist be consulted after a possible HIV exposure not only immediately but also as a follow up if pregnant, breast feeding and for children.

In the 6 months following a BBFE it is also advised to notify your Medical Practitioner if you develop any fever, rashes, swollen glands, fatigue, sore joints, jaundice or any change in colour of your urine or faeces.

### **Additional points:**

- Do not donate blood, semen, organs or tissue until the final tests are clear
- Depending on the risk, consider practising safer sex, latex/condom protection, until final tests are clear (especially when HIV or hepatitis B risk). In the generally unlikely event of a bloodborne virus infection occurring after an accident, viral numbers initially increase to higher numbers, thus increasing chances of sexual transmission at that time. Discuss with your Medical Practitioner and partner
- Report any glandular fever like illness within 6 months of exposure
- Avoid pregnancy until the final tests are clear
- Do not share needles, razors or toothbrushes
- Hepatitis C infection, if it was to occur, is now treatable and generally curable

### **HBV**

The risk of HBV transmission to the sexual partner(s) of persons recently exposed to HBV who were **not immune/vaccinated to HBV** before the injury and are now receiving hepatitis B immunoglobulin (HBIG) and/or the HBV vaccine series is unknown

### **Useful References for more information:**

**Bloodborne Infectious Diseases CDC Management and treatment Guidelines:**

<http://www.cdc.gov/niosh/topics/bbp/guidelines.html> (note [PEP Steps, A Quick Guide to Postexposure Prophylaxis](#))

**HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C (IDSA)**

<http://www.hcvguidelines.org/>

# Index Guide for BBFE

- page 1** **BBFE Report Form** for Source and Injured person details, consent permission, if granted, for bloodborne viral testing and who/where the results are to be sent.  
This sheet to be sent to laboratory for collation of results.
- page 2** **Incident reporting procedure process overview** - First Aid reminder, blood tubes required, timeframes required and discusses some potential consequences to consider if result copies requested to be sent to workplace as well
- page 3** **For Recipient 'injured person', an Information Guide** – this may be given to their GP at time of consultation post BBFE. Makes clear that they themselves, the injured person, is responsible for their own follow up with their nominated Medical Practitioner for appropriate medical care
- page 4** **For Source person, Information Guide** – provides clarity in writing to them or their carer. Giving the Source person this information in writing prevents any later misunderstanding ambiguities that can arise. Sometimes the Source person misunderstands what they were told verbally at the time and later worry that they themselves are now at risk of infection.

## pages 5 & 6

### **FAQ's Blood Body Fluid Exposure (BBFE)**

This can be an anxious and stressful time for the injured person especially, and depending on the circumstances. This summarises some commonly asked questions and concerns about actual risks, and generally these risks are much less than is generally believed. Some risks can be reduced further with prophylaxis.

Plus internet address references for more in depth information if required.