





Public - To be published on the Trust external website

Title: Blood Borne Viruses (BBVs)

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Status: Approved

Document type: Procedure

Overarching policy: Infection Prevention Control Policy





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1 Introduction

This procedure is required to inform staff in the management of caring for patients with blood borne viruses and to reduce the risk of exposure to blood borne viruses.

The practice of applying safe Infection, Prevention and Control (IPC) precautions is essential to reduce risk in all health care settings. Blood-borne viruses include Human Immunodeficiency virus (HIV), hepatitis B and hepatitis C. Infection prevention and control measures for reducing transmission of these viruses are the same and risks to staff are predominantly associated with accidental inoculation injuries.

An inoculation incident is defined as:

- A sharp or needle stick injury where the skin has been penetrated.
- · Contamination of abrasions with blood and body fluids
- Scratches or bites where the skin is broken (i.e. causing bleeding or other visible skin puncture)
- Splashes of blood/body fluids into the eyes, nasal mucosa, or mouth.

This procedure supports Our Journey To Change (OJTC) as set out in the overarching <u>Infection</u> Prevention and Control Policy.

2 Purpose

Following this procedure will help the Trust to: -

- Protect Health Care Workers from the transmission of Blood Borne Viruses (BBVs).
- Ensure that no Health Care Worker is placed at any avoidable risk.

3 Who this procedure applies to:

- This procedure applies to all trust staff especially clinical and hotel services staff who have face to face contact with patients and their environment.
- This procedure aligns with values as we listen to staff and respect their views. We ensure any
 member of staff who has difficulties with the measures in this procedure can discuss their
 needs so that standards are maintained while individual difference are recognised and
 supported.





4 Related documents

This procedure describes what you need to do to implement the Blood Borne Virus section of the Infection Prevention and Control Policy.



The <u>Standard Precautions for Infection Prevention and Control</u> defines the universal standards for IPC which you **must** read, understand and be trained in before carrying out the procedures described in this document.

This procedure also refers to: -

- ✓ Accidental Inoculation
- ✓ Decontamination of Equipment
- ✓ Health and Safety Policy
- ✓ Sharps safe use and disposal)

5 Human Immunodeficiency Virus (HIV) and AIDS (acquired immune deficiency syndrome)

5.1 What is HIV?

HIV (human immunodeficiency virus) is a virus that damages the cells of the human immune system and weakens the body's ability to fight everyday infections and disease.

Currently there is no cure for HIV, but there are very effective drug treatments that enable most people with the virus to live a long and healthy life.

HIV virus can be transmitted from 1 person to another via accidental inoculation of blood or certain other body fluids.

5.2 What is AIDS?

AIDS (acquired immune deficiency syndrome) is the name used to describe several potentially life-threatening infections and illnesses that happen when your immune system has been severely damaged by the HIV virus.

While AIDS cannot be transmitted from 1 person to another, the HIV virus can.

5.3 HIV body fluids

- Blood and blood products
- Semen
- Vaginal secretions

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- Donor organs and issues
- Breast / Chest milk
- Other body fluids which are visibly stained (e.g. blood-stained faeces or blood-stained urine, exudate or other tissue fluid from burns or skin lesions)
- Other body fluids encountered during invasive procedures (e.g. cerebral spinal fluid, peritoneal fluid, pleural fluid, saliva in association with dentistry)

5.4 How can HIV be transmitted?

- From infected pregnant person / mother to baby during pregnancy, before or during birth or through breast/ chest feeding.
- Inoculation of infected blood (mainly from drug misusers sharing contaminated equipment).
- Unprotected sexual intercourse with an infected person.

5.5 Preventing HIV transmission



There is no vaccine. Apply standard IPC precautions to reduce the risk in health care settings.

5.6 Treatment of HIV

There's currently no cure for HIV, but there are very effective drug treatments that enable most people with the virus to live a long and healthy life.

With an early diagnosis and effective treatments, most people with HIV will not develop any AIDS-related illnesses and will live a near-normal lifespan.

6 Hepatitis B Virus

6.1 What is Hepatitis B?

Hepatitis B is an infection of the liver caused by a virus that's spread through blood and body fluids.

There are various types of the Hepatitis B Virus

Туре	Description
Hepatitis B Surface Antigen (HbsAg) and immunoglobulin (IgM)	Detected in the blood early in an acute attack and then remains present in the blood of a carrier.

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Hepatitis B e Antigen (HbeAg)	Present when the virus is actively replicating. Sign of acute illness and therefore of high infectivity. Some carriers maybe HbeAg positive.
Hepatitis B Core Antigen (HbcAg)	Antibody to HbcAg (Anti HBc) is one of the more sensitive markers of prior exposure to Hepatitis B virus.

6.2 Stage of infection

Diagnosis is confirmed by detection of antigens or their antibodies. The precise mix of antigen/antibody detected varies according to the stage of infection.

Acute	Sub Clinical	Chronic (Carrier)
Usually follows variable incubation period of approximately 3 months.	Some people exhibit no symptoms or may experience fatigue, malaise, or unaccountable depression.	Some individuals with acute infection progress to chronic.
Joint pains and rashes can occur progressing to jaundice.	Still infectious.	All chronic carriers potentially infectious to others.
Recovery period can take up to 6 months.	More likely to become chronic carriers.	Hepatitis B surface antigen remains positive in people with chronic infection.
Some people experience post viral depression.	Infection could go undetected.	Risk of chronic carriage may increase when there is impairment of the immune system.
		Likelihood of progression to permanent liver damage and other serious liver disorders.



It is important that staff are immunised against Hepatitis B virus and have their blood checked two months after completion of immunisation to ensure an adequate antibody response.

6.3 How can Hepatitis B be transmitted?

 Contact with blood and body fluids through inoculation from sharps / splashes / bites, unprotected sexual intercourse, and pregnancy.

The degree of risk is influenced by the injury type:

 Penetrating wounds with large volumes of blood, and hollow bore needles carry greater risk than superficial injuries and splashes.

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7 Hepatitis C Virus

Hepatitis C is a virus that can infect the liver. If left untreated, it can sometimes cause serious and potentially life-threatening damage to the liver over many years. There are treatments available for Hepatitis C and cure is possible. Most people with Hepatitis C virus will have a normal life expectancy.

7.1 Stage of infection

Chronic (Progressive)

Causes inflammation of the liver that can lead to cirrhosis, liver cancer and liver failure.

7.2 How can Hepatitis C be transmitted?

- The greatest risk of transmission is through infected blood and spread by the sharing of blood-contaminated needles and injecting equipment among injecting drug users.
- Less common routes include needle-stick / sharps injuries, tattooing and piercing, sharing of razors and toothbrushes where IPC procedures are not adhered to.

7.3 Preventing Hepatitis C



Apply standard IPC precautions to reduce the risk in health care settings.

There is no vaccine. Blood tests can be carried out on the donor if they are Hepatitis C positive.

Injecting drug users are targeted in areas of harm minimisation and prevention.

8 Infection Prevention and Control

Many people who carry blood-borne viruses may not be aware that they have them, or they may not choose to disclose this information to healthcare staff.

Therefore standard IPC precautions must be applied for all patients to minimise the risks of transmission and to provide a standard non-discriminatory approach to care.







Apply standard IPC precautions to reduce the risk in all health care settings.

Avoid the unnecessary use of sharps- they are essential tools for effective medical care however they should only be used where they are required (HSE, 2013).

A vaccine is available for health care staff for Hepatitis B. For further information contact the Occupational Health Department.

It is important that all staff, regardless of vaccination, take care with blood and body fluids from all patient/patients, to protect themselves and others from all BBVs.

8.1 Measures to reduce risk of occupational exposure to BBVs

You must:

- ✓ Apply good basic hygiene practices with regular hand washing
- ✓ Avoid sharps usage whenever possible and always use safety needles to reduce the risk of injury
- ✓ Sharps must be used with care and disposed of safely needles should not be re-sheathed and should be disposed of into a sharp's container immediately after use at the point of care.
- ✓ Skin contamination should be avoided or immediately washed off
- ✓ Healthcare staff should keep existing wounds or skin lesions covered with waterproof dressings. Any staff who have widespread eczema or other chronic skin lesions should avoid working in areas where blood contamination is likely
- ✓ Always wear PPE (gloves, apron, mask & visors as appropriate) when handling blood or body fluids or when there is a potential of splashing and contamination
- ✓ Deal with any spillages of blood and bodily fluids immediately using a chlorine releasing agent.
- ✓ Dispose of any contaminated equipment as clinical waste

9 Risk of transmission of BBVs

Risk is greater from patient to health care worker than from health care worker to patient. The most common risk is via inoculation with blood or other body fluids either by sharps 'needle stick' injury or bite injury that breaks the skin, contamination of abrasions with blood or body fluids, splashes of blood or body fluids into eyes, nasal mucosa, or mouth.

The risk of transmission also depends on the type of injury. Penetrating injuries with large volumes of blood carry greater risk than superficial injuries from blunt needles.

Risks are estimated as:

- 1 in 3 if source patient is infected with Hepatitis B who is 'e' antigen positive.
- 1 in 30 if source patient is infected with Hepatitis C.
- 1 in 300 if source patient is infected with HIV.

Each area of health care should examine their own working practice, i.e. activities involving:

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- Safe handling and disposal of sharps.
- Body tissue disposal.
- Body fluid disposal.
- Disposal of contaminated items.
- Equipment cleaning, decontamination, and maintenance.

In the event of an inoculation injury please refer to the <u>Accidental Inoculation</u>



All health care staff should carry out a risk assessment to determine the level of possible exposure to blood and body fluids. The application of <u>standard IPC precautions</u> is always essential.

10 Management of Patients

- The doctor and nurse in charge are responsible for the management of the patient.
- Inform the IPCT for further advice/support.
- Single room accommodation may be required if the patient is bleeding, incontinent or a clinical need is indicated. Visitors would still be allowed.
- For all procedures where there is contact with blood, body fluids, secretions and excretions
 Personal protective equipment should be used, apron and gloves, however a risk
 assessment will be required as to whether any further PPE is required.
- Each patient will be assessed as an individual, and dignity and confidentiality will be maintained at all times.
- Patients should be allowed to participate in the same activities as other patients.
- Care must be taken when using needles or sharp instruments (see Trust's procedure Sharps
 safe use and disposal)
- Staff must cover any cuts and abrasions with waterproof dressings (plasters).
- Blood spillage must be managed immediately following the guidelines on decontamination (see Decontamination of Equipment)
- Dry soiled clothing and used linen present no danger and can be processed in the normal way. If contaminated with body fluids, follow the procedure for infected linen.

11 Screening of Health Care Workers (HCWs) who perform exposure prone procedures (EPPs)

All new healthcare workers employed by the Trust and who perform EPPs will be screened at employment for infection with HIV, Hepatitis B (by HbsAG) and Hepatitis C. This includes temporary, agency and locum staff unless they can provide recent documentary evidence of the negative results of such screening. Other than dentists it would be unusual for staff working in the Trust to be performing EPPs. The Occupational Health Department has details of the screening tests and procedures.

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11.1 Dentistry

The British Dental Association has issued guidelines on the 'Control of Cross Infection in Dentistry'.

12 Equipment



Equipment for inspection, repair or service which has been contaminated with body fluids **must** be decontaminated and certified as such before sent for repair. (Decontamination of Equipment).

13 Confidentiality



Confidentiality is of utmost importance when caring for patients with a suspected blood borne virus.

Information **must not** be disclosed other than for the health care of that patient or where disclosure is necessary to prevent the spread of infection.

14 Definitions

Term	Definition
Cirrhosis	A chronic degenerative disease in which normal liver cells are damaged and are then replaced by scar tissue.
EPPs	Exposure Prone Procedures are those where there is a risk that injury to the worker may result in exposure of the patient's open tissues to the blood of the worker.
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
AIDS	Acquired immune deficiency syndrome
IPCT	Infection Prevention and Control Team
IPCN	Infection Prevention and Control Nurse
PPE	Personal Protective Equipment





15 How this procedure will be implemented

- This procedure will be published on the Trust's intranet and external website.
- Line managers will disseminate this procedure to all Trust employees through a line management briefing.

15.1 Training needs analysis

Staff/Professional Group	Type of Training	Duration	Frequency of Training
All staff	Online IPC training	Online training 1 hour	yearly

16 How the implementation of this procedure will be monitored

	Auditable Standard/Key Performance Indicators	Frequency/Method/Person Responsible	Where results and any Associate Action Plan will be reported to, implemented and monitored; (this will usually be via the relevant Governance Group).
1	IPC quarterly report	F = Quarterly, M = report. R = IPC team	IPCC

17 References

Department of Health (July 2000) <u>HIV Post-Exposure Prophylaxis: Guidance from the UK Chief Medical Officers' Expert Advisory Group on AIDS</u> http://www.dh.gov.uk/health/2012/05/hiv-post-exposure-prophylaxis-guidance/

Department of Health (2013) Immunisation against infectious disease (The Green Book) https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book

Health and Safety Executive (2013) Health and Safety (Sharps Instruments in Healthcare) Regulations 2013 Guidance for employers and employees (HSE)

Hepatitis C in the UK: 2009 Report. Health Protection Agency.

Hepatitis B and C: Ways to promote and offer testing to people at increased risk of infection http://guidance.nice.org.uk/PH43

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Shooting up: Infections among injecting drug users in the UK 2008. An update 2009. Health Protection Agency.

Eye of the Needle: 208 – UK Surveillance of significant occupational exposures to blood borne viruses in health care workers Health Protection Agency

HIV in the UK 2009 Report Health Protection Agency (HPA)

Hepatitis C in the UK annual report 2009. Health Protection Agency

Hepatitis B Infected Health Care Workers and anti-viral therapy (2007). DOH

HIV post exposure prophylaxis guidance from the UK Chief Medical Officers Expert Advisory Group on Aids (2008). DOH

British HIV Association (2006) Immunisation guidelines for HIV-infected adults http://www.bhiva.org/vaccination-guidelines.aspx





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18 Document control (external)

To be recorded on the policy register by Policy Coordinator

Required information type	Information
Date of approval	13 February 2025
Next review date	13 February 2028
This document replaces	Blood borne Viruses (BBV's) Ref IPC-0001- 002-v4.1
This document was approved by	Infection Prevention & Control Committee
This document was approved	13 February 2025
This document was ratified by	n/a
This document was ratified	n/a
An equality analysis was completed on this policy on	17 December 2024
Document type	Public
FOI Clause (Private documents only)	n/a

Change record

Version	Date	Amendment details	Status
4	24 Jan 2022	Full review with minor changes. Transferred to new template. Hyperlinks updated. OJTC text added. Telephone contact numbers updated	Withdrawn
4.1	19 Jan 2023	Removed reference to withdrawn procedure Specimens, collection, handling and transporting Ref IPC- 0001 -015 v3	Withdrawn
5	13 Feb 2025	Full review with minor changes. Hyperlinks accessed and updated as needed. Contact numbers updated.	Published





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Appendix 1 - Useful Contact and Telephone Numbers

	Telephone Number
People Asset Management (PAM) Occupational Health	01925 377217
County Durham and Darlington NHS Foundation trust (main switchboard) for Accident and Emergency at	0191 333 332333
University Hospital of North DurhamDarlington Memorial hospital (DMH)	
South Tees Acute NHS Foundation trust (main switchboard) for	
Accident & Emergency at	
James Cook University HospitalFriarage Hospital Northallerton	01642 850850
And	
Infectious Disease Physician	
North Tees and Hartlepool NHS Foundation Trust (main switchboard) for	01642 617 617
Accident & Emergency	
York and Scarborough NHS Foundation Trust	
York Teaching Hospital - Accident and Emergency	01904 631313 (York)
Scarborough - Accident & Emergency	01723 368111 (Scarborough)
Infection prevention and control team at TEWV	email: tewv.ipc@nhs.net
Sexual health departments	
County Durham and Darlington	0191 3728700 (County Durham)
	01325 743203 (Darlington)
Teesside Sexual Health Hub (Middlesbrough, Redcar, Hartlepool, Stockton)	0300 3301122
Scarborough (YorSexualhealth)	01904 721111
York (YorSexualhealth)	01904 721111
Harrogate (YorSexualhealth)	01904 721111





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Appendix 2 - Equality Impact Assessment Screening Form

Please note: The <u>Equality Impact Assessment Policy</u> and <u>Equality Impact Assessment</u> <u>Guidance</u> can be found on the policy pages of the intranet

Section 1	Scope	
Name of service area/directorate/department	Infection prevention and control	
Title	BBV Blood Borne Viruses IPC-0001-002-v5	
Туре	Procedure	
Geographical area covered	Trust wide	
Aims and objectives	To set standards in practice to ensure the delivery of patient care is carried out safely and effectively by the trust staff. To comply with the HCAI Code of Practice of the Health and Social Care Act 2008.	
Start date of Equality Analysis Screening	17 Dec 2024	
End date of Equality Analysis Screening	17 Dec 2024	





Section 2	Impacts
Who does the Policy, Procedure, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan benefit?	All patients, staff and visitors
Will the Policy, Procedure, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan impact negatively on any of the protected characteristic groups? Are there any Human Rights implications?	Race (including Gypsy and Traveller) NO Disability (includes physical, learning, mental health, sensory and medical disabilities) NO Sex (Men and women) NO Gender reassignment (Transgender and gender identity) NO Sexual Orientation (Lesbian, Gay, Bisexual, Heterosexual, Pansexual and Asexual etc.) NO Age (includes, young people, older people – people of all ages) NO Religion or Belief (includes faith groups, atheism and philosophical beliefs) NO Pregnancy and Maternity (includes pregnancy, women / people who are breastfeeding, women / people accessing perinatal services, women / people on maternity leave) NO Marriage and Civil Partnership (includes opposite and same sex couples who are married or civil partners) NO Armed Forces (includes serving armed forces personnel, reservists, veterans and their families) NO Human Rights Implications NO (Human Rights – easy read)
Describe any negative impacts / Human Rights Implications	N/A
Describe any positive impacts / Human Rights Implications	N/A





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Section 3	Research and involvement
What sources of information have you considered? (e.g. legislation, codes of practice, best practice, nice guidelines, CQC reports or feedback etc.)	National legislation, codes of practice, NICE guidance.
Have you engaged or consulted with service users, carers, staff and other stakeholders including people from the protected groups?	No
If you answered Yes above, describe the engagement and involvement that has taken place	
If you answered No above, describe future plans that you may have to engage and involve people from different groups	n/a - this version has only minor changes made and document remains aligned to national best practice for infection prevention and control

Section 4	Training needs
As part of this equality impact assessment have any training needs/service needs been identified?	No
Describe any training needs for Trust staff	N/A
Describe any training needs for patients	N/A
Describe any training needs for contractors or other outside agencies	N/A

Check the information you have provided and ensure additional evidence can be provided if asked.



Appendix 3 – Approval checklist

Title of document being reviewed: BBV Procedure	Yes / No / Not applicable	Comments
1. Title		
Is the title clear and unambiguous?	Yes	
Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2. Rationale		
Are reasons for development of the document stated?	Yes	
3. Development Process		
Are people involved in the development identified?	Yes	
Has relevant expertise has been sought/used?	Yes	
Is there evidence of consultation with stakeholders and users?	Yes	
Have any related documents or documents that are impacted by this change been identified and updated?	Yes	
4. Content		
Is the objective of the document clear?	Yes	
Is the target population clear and unambiguous?	Yes	
Are the intended outcomes described?	Yes	
Are the statements clear and unambiguous?	Yes	
5. Evidence Base		
Is the type of evidence to support the document identified explicitly?	Yes	
Are key references cited?	Yes	
Are supporting documents referenced?	Yes	
6. Training		
Have training needs been considered?	Yes	
Are training needs included in the document?	Yes	
7. Implementation and monitoring		
Does the document identify how it will be implemented and monitored?	Yes	

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8. Equality analysis		
Has an equality analysis been completed for the document?	Yes	
Have Equality and Diversity reviewed and approved the equality analysis?	Yes	02/01/2025 ah
9. Approval		
Does the document identify which committee/group will approve it?	Yes	
10. Publication		
Has the policy been reviewed for harm?	Yes	
Does the document identify whether it is private or public?	Public	
If private, does the document identify which clause of the Freedom of Information Act 2000 applies?	n/a	
11. Accessibility (See intranet accessibility page for more information)		
Have you run the Microsoft Word Accessibility Checker? (Under the review tab, 'check accessibility'. You must remove all errors)	Yes	
Do all pictures and tables have meaningful alternative text?	Yes	
Do all hyperlinks have a meaningful description? (do not use something generic like 'click here')	Yes	