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Title: Blood Borne Viruses (BBVs)

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Overarching policy: [Infection Prevention Control Policy](#)

Table of Contents

1	Introduction.....	3
2	Purpose	3
3	Who this procedure applies to:.....	4
4	Related documents.....	4
5	Human Immunodeficiency Virus (HIV)	5
5.1	HIV body fluids	5
5.2	How can HIV be transmitted?	5
5.3	Preventing HIV transmission.....	5
6	Hepatitis B Virus	5
6.1	What is Hepatitis B?	5
6.2	Stage of infection	6
6.3	How can Hepatitis B be transmitted?	7
7	Hepatitis C Virus	7
7.1	Stage of infection	7
7.2	How can Hepatitis C be transmitted?	7
7.3	Preventing Hepatitis C	7
8	Infection Prevention and Control.....	7
8.1	Measures to reduce risk of occupational exposure to BBVs.....	8
9	Risk of transmission of BBVs	8
10	Management of Patients.....	9
11	Screening of Health Care Workers (HCWs) who perform exposure prone procedures (EPPs).....	9
11.1	Dentistry	10
12	Equipment.....	10
13	Confidentiality.....	10
14	Definitions	10
15	How this procedure will be implemented.....	11
15.1	Training needs analysis	11
16	How the implementation of this procedure will be monitored.....	11
17	References	11
18	Document control (external)	13
Appendix 1 - Useful Contact and Telephone Numbers		14
Appendix 2 - Equality Analysis Screening Form		15
Appendix 3 – Approval checklist.....		19

1 Introduction

In this section describe:

- 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
- This procedure links to Our Journey To Change (OJTC) and has been developed with OJTC in mind, by following the latest guidelines and evidence based practice our aim is to provide a safe environment for both staff and patients and to manage cases of blood borne viruses safely and effectively.

To co-create a great experience for our patients, carers and families, so you will experience:

- **Outstanding** and compassionate care, all of the time.
- **Access** to the care that is right for you.
- **Support** to achieve your goals.
- **Choice** and control.

To co-create a great experience for our colleagues, so you will be:

- **Proud**, because your work is meaningful.
- **Involved** in decisions that affect you.
- **Well led** and managed.
- That your workplace is **fit for purpose**.

To be a great partner, so we will:

- Have a **shared understanding** of the needs and the strengths of our communities
- Be **working innovatively** across organisational boundaries to improve services.
- Be **widely recognised** for what we have achieved together.

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.

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.

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.



Respect

- Listening
- Inclusive
- Working in partnership



Compassion

- Kind
- Supportive
- Recognising and Celebrating



Responsibility

- Honest
- Learning
- Ambitious

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 [Standard Precautions for Infection Prevention and Control](#) 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](#)

5 Human Immunodeficiency Virus (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 one person to another via accidental inoculation of blood or certain other body fluids.

5.1 HIV body fluids

- Blood and blood products
- Semen
- Vaginal secretions
- Donor organs and issues
- Breast 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)

5.2 How can HIV be transmitted?

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

5.3 Preventing HIV transmission



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

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

Type	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.
Hepatitis B e Antigen (HbeAg)	Present when the virus is actively replicating. Sign of acute illness and therefore of high infectivity. Some carrier's 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.

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 includes 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 in order 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 sharps 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:

- 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 [Accidental Inoculation procedure](#)



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 standard IPC precautions is essential at all times.

10 Management of Patients

- The doctor and nurse in charge are responsible for the management of the patient;
- Inform the IPCN for further advice/support;
- Single room accommodation may be required if the patient is bleeding, incontinent or a clinical need is indicated;
- 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;
- 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.

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
IPC	Infection Prevention and Control
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	On line IPC training	On line 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	IPC	IPCC

17 References

Department of Health (July 2000) HIV Post-Exposure Prophylaxis: Guidance from the UK Chief Medical Officers’ Expert Advisory Group on AIDS
<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>

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>

18 Document control (external)

To be recorded on the policy register by Policy Coordinator

Date of approval:	24 January 2022 v4 19 January 2023 v4.1 (agreed in principle)	
Next review date:	24 January 2025	
This document replaces:	Blood borne Viruses (BBV's) Ref IPC-0001-002-v4	
This document was approved by:	Name of committee/group	Date
	IPCC (virtual) IPCC	24 January 2022 20 April 2023 actual amended document to be retrospectively approved
This document was ratified by:	Name of committee/group	Date
	n/a	
An equality analysis was completed on this document on:	18 January 2022	
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	Approved
4.1	19 Jan 2023	Removed reference to withdrawn procedure Specimens, collection, handling and transporting Ref IPC- 0001 -015 v3	Approved in principle at IPCC 19 th January 2023

Appendix 1 - Useful Contact and Telephone Numbers

	Telephone Number
People Asset Management (PAM) Occupational Health	01254 311300
Accident and Emergency University Hospital of North Durham	0191 333 2134
Minor Injuries Shotley Bridge Hospital	01207 594 657
Accident & Emergency Darlington Memorial Hospital (DMH)	01325 743 481
Accident & Emergency Bishop Auckland General Hospital (BAGH)	01388 455000
Accident & Emergency James Cook University Hospital (JCUH)	01642 282482
Accident & Emergency North Tees and Hartlepool	01642 617 617
Accident & Emergency York Teaching Hospital	01904 631 313
Accident & Emergency Scarborough	01723 368 111
Infectious Diseases Physician James Cook University Hospital	01642 850850
Infection prevention and control team	email: tewv.ipc@nhs.net
GU Medical Depts:	
UHND	0191 333 2660
DMH	01325 74 32 03
BAGH	01388 455 700
JCUH	01642 854 548
North Tees	01642 624 400
Hartlepool	01429 522 577
Scarborough (Northway)	01723 342 785
York	01904 721111
Harrogate	01904 721111

Appendix 2 - Equality Analysis Screening Form

Please note; The Equality Analysis Policy and Equality Analysis Guidance can be found on the policy pages of the intranet

Name of Service area, Directorate/Department i.e. substance misuse, corporate, finance etc.	Nursing - Infection Prevention and Control			
Policy (document/service) name	Blood Borne Viruses			
Is the area being assessed a...	Policy/Strategy		Service/Business plan	Project
	Procedure/Guidance		*	Code of practice
	Other – Please state			
Geographical area covered	Trustwide			
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 (This is the date you are asked to write or review the document/service etc.)	18/01/22			
End date of Equality Analysis Screening (This is when you have completed the equality analysis and it is ready to go to EMT to be approved)	18/01/22			

You must contact the EDHR team if you identify a negative impact - email tevw.eandd@nhs.net

1. Who does the Policy, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan benefit?					
All patients, staff and visitors					
2. Will the Policy, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan impact negatively on any of the protected characteristic groups below?					
Race (including Gypsy and Traveller)	No	Disability (includes physical, learning, mental health, sensory and medical disabilities)	No	Sex (Men, women and gender neutral etc.)	No
Gender reassignment (Transgender and gender identity)	No	Sexual Orientation (Lesbian, Gay, Bisexual and Heterosexual etc.)	No	Age (includes, young people, older people – people of all ages)	No
Religion or Belief (includes faith groups, atheism and philosophical belief's)	No	Pregnancy and Maternity (includes pregnancy, women who are breastfeeding and women on maternity leave)	No	Marriage and Civil Partnership (includes opposite and same sex couples who are married or civil partners)	No
<p>Yes – Please describe anticipated negative impact/s</p> <p>No – Please describe any positive impacts/s</p> <p>Protects All patients, staff and visitors from risk of transmission of Blood Borne Viruses regardless of protected characteristics.</p>					

<p>3. Have you considered other sources of information such as; legislation, codes of practice, best practice, nice guidelines, CQC reports or feedback etc.? If 'No', why not?</p>	<p>Yes</p>	<p>X</p>	<p>No</p>	
<p>Sources of Information may include:</p> <ul style="list-style-type: none"> • Feedback from equality bodies, Care Quality Commission, Equality and Human Rights Commission, etc. • Investigation findings • Trust Strategic Direction • Data collection/analysis • National Guidance/Reports 	<ul style="list-style-type: none"> • Staff grievances • Media • Community Consultation/Consultation Groups • Internal Consultation • Research • Other (Please state below) 			
<p>4. Have you engaged or consulted with service users, carers, staff and other stakeholders including people from the following protected groups?: Race, Disability, Sex, Gender reassignment (Trans), Sexual Orientation (LGB), Religion or Belief, Age, Pregnancy and Maternity or Marriage and Civil Partnership</p>				
<p>Yes – Please describe the engagement and involvement that has taken place</p>				
<p>IPC team reviews incidents that could give rise to transmission of BBV across the trust and works will all staff through training and engagement to reduce the risk.</p>				
<p>No – Please describe future plans that you may have to engage and involve people from different groups</p>				

5. As part of this equality analysis have any training needs/service needs been identified?					
No	Please describe the identified training needs/service needs below				
A training need has been identified for;					
Trust staff	No	Service users	No	Contractors or other outside agencies	No
Make sure that you have checked the information and that you are comfortable that additional evidence can provided if you are required to do so					

Appendix 3 – Approval checklist

	Title of document being reviewed:	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	

	Title of document being reviewed:	Yes/No/ Not applicable	Comments
8.	Equality analysis		
	Has an equality analysis been completed for the document?	Yes	
	Have Equality and Diversity reviewed and approved the equality analysis?	Yes	
9.	Approval		
	Does the document identify which committee/group will approve it?	Yes	
10.	Publication		
	Has the document been reviewed for harm?	Yes	
	Does the document identify whether it is private or public?	Yes	Public
	If private, does the document identify which clause of the Freedom of Information Act 2000 applies?	N/A	