PREVENTION AND MANAGEMENT OF EXPOSURE TO HEALTHCARE ASSOCIATED INFECTIONS (INCLUDING HEPATITIS B AND C) POLICY

<table>
<thead>
<tr>
<th>First Issued by/date</th>
<th>Issue Version</th>
<th>Purpose of Issue/Description of Change</th>
<th>Planned Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Update and replacement of Hepatitis B Policy Hepatitis C Infected Healthcare Workers Policy</td>
<td>September 2011</td>
<td></td>
</tr>
</tbody>
</table>

Named Responsible Officer: -

<table>
<thead>
<tr>
<th>Approved by</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of the Occupational Health Department</td>
<td>Infection Control Committee</td>
</tr>
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</table>

Policy File: -

<table>
<thead>
<tr>
<th>Impact Assessment Screening Complete-Date: December 2009</th>
<th>Full Impact Assessment Required- No</th>
</tr>
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<tbody>
<tr>
<td>Infection Control Policy N° 9</td>
<td></td>
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</tbody>
</table>

Key Performance Indicators

1. Attendance levels at infection control training

2. Compliance with The Health and Social Care Act 2008 Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance

UNLESS THIS VERSION HAS BEEN TAKEN DIRECTLY FROM THE PCT WEB SITE THERE IS NO ASSURANCE THIS IS THE CORRECT VERSION
NHS Wirral

Prevention and Management of Exposure to Healthcare Associated Infections (Including Hepatitis B and C) Policy

Introduction

NHS Wirral is firmly committed to reducing healthcare associated infections (HCAI) and in doing so acknowledges its responsibility under health and safety law including, to protect staff against acquiring HCAI's, as far as is reasonably possible, through the promotion of good clinical practice and the provision of suitable facilities. All NHS Wirral staff also have a responsibility under health and safety law to adhere to local policy/procedure and report unsafe practices/working environments.

Furthermore NHS Wirral will ensure that the risk of exposure to hazardous substances including pathogens is assessed and effective measures to protect workers and others from risks are implemented where possible.

This policy replaces the Infection Control Hepatitis B Policy and Hepatitis C Infected Healthcare Workers Policy and has been adapted with the permission of the Occupational Health Department at Cheshire and Wirral Partnership NHS Foundation Trust, as providers of the PCT Occupational Health Services. Prevention and management of inoculation injuries are detailed in Sharps Safety and Management of Contamination Injuries Policy.

Policy Aim

The purpose of this policy is to protect staff in the event of exposure to healthcare associated infections and to reduce the risk of possible transmission of disease to staff and patients.

Policy outcome

Staff will be informed of HCAI’s which may be encountered through health care practice, preventive practice and action to be undertaken in the event of a known or suspected exposure of a HCAI through the course of their NHS duties.

Target group

- All staff employed by NHS Wirral.
- Shared as best practice with Independent General Practice staff and General Dental Practice staff and where appropriate, Independent Pharmacists and Optometrists.
Specific responsibilities

Chief Executive

The Chief Executive has overall responsibility for ensuring infection prevention and control is a core part of the Trust’s governance and patient safety programmes.

Board

The Board has collective responsibility for ensuring assurance that appropriate and effective policies are in place to minimise the risks of healthcare associated infections.

Director of Infection Prevention and Control

It is the responsibility of the Director of Infection Prevention and Control to oversee the development and implementation of infection prevention and control policies.

Occupational Health Department

Between the hours of 8.30-16.30, Monday – Friday, the Occupational Health Department (OHD) has overall responsibility for supervising the management of Healthcare Workers who have sustained an occupational exposure to a HCAI.

The OHD have the responsibility:

- To advise/immunise PCT personnel who attend or who are referred to OHD by their Manager in accordance with workplace health/Occupational Health protocol.
- To provide risk management advice including where necessary advice on work restrictions/redeployment.
- Assess the immediate treatment/prophylaxis requirements which will be determined by the risk of transmission of Hepatitis B virus (HBV), Hepatitis C virus (HCV), Human immunodeficiency virus (HIV) and/or other HCAI posed by the donor and/or the circumstances in which the exposure occurred.
- Advise and counsel the healthcare worker (HCW) regarding the risk of the exposure and the indications for prophylaxis.
- Facilitate the collection of a blood sample from the HCW to be stored (and tested for Hepatitis B immunity status if this is unknown).
- Liaise with the Accident and Emergency (A&E) Department for prophylaxis if indicated.
- Manage the follow up, monitoring and testing and vaccination for HCWs who have sustained a high risk exposure whether or not Post Exposure Prophylaxis (PEP) was commenced.
- Offer support and arrange counselling if required to all HCWs who have sustained an occupational exposure to blood/body fluids.

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- Report all high risk exposure incidents to the Health and Safety Department for the purpose of RIDDOR.

**Infection Prevention and Control Team**

The Infection Prevention and Control (IPC) team provide advice regarding the risk of transmission of HCAI
- To liaise with community staff and managers to co-ordinate assessment and treatment when required.
- To ensure that training, information and policies are available to staff in the risk of transmission of blood borne viruses and other HCAI and in the use of standard precautions.

**Service Managers**

- To identify those staff who will perform exposure prone procedures within their area and refer them to the OHD for appropriate investigations/immunisation/advice/update prior to being allowed to undertake these procedures.
- To ensure COSHH risk assessments have been undertaken and the findings made known to employees.
- To encourage and enable staff to attend the OHD for vaccination in accordance with local risk.
- To ensure staff are aware of the procedure to follow in case of exposure to infectious diseases.
- To seek advice from OHD/IPC team once informed of staff contact/potential contact with a HCAI.
- To ensure incident forms are completed in all cases following inoculation injury.
- Ensuring all Occupational exposure incidents are reported to the OH Department as soon as possible.
- Ensure that Donor (Source patient) risk assessment is carried out and forward to occupational health or A & E if Out of Hours

**Staff**

- To practice standard precautions
- To attend as arranged for immunisation and advice relating to their work activity and contact the OHD to advise/report:
  - any concerns regarding workplace immunisations
  - any side effects they may have experienced which they feel are/may be related to immunisations they have received
  - if they are likely to be at increased risk of developing infection e.g. immuno-compromised, for advice in relation to their work.
- To comply with risk management advice given by the OHD.
- To report potential exposure to HCAI to the OHD in line with their professional body recommendations.
Cross reference related PCT policies

- Use of Personal Protective Equipment (Standard Precautions) Policy
- Sharps Safety and Management of Contamination Injuries Policy
- Meticillin Resistant Staphylococcus Aureus (MRSA) Decolonisation Guidance
- Incident Reporting Policy
- Immunisation Policy

Evidence to support policy


www.nric.org.uk


www.hpa.org.uk

Background

For the purpose of this policy the term ‘health care associated infection’ (HCAI) encompasses any infection by an infectious agent acquired by a health care worker in the course of their NHS duties such as:

Blood borne viruses, for example:
- Hepatitis B (HBV)
- Hepatitis C (HCV)
- Human immunodeficiency virus (HIV)

Other pathogens, for example (list not exhaustive):
- Varicella (Chickenpox)
- Measles
- Mumps
- Rubella
- Tuberculosis

For MRSA please refer to Meticillin Resistant Staphylococcus Aureus Policy (MRSA) Decolonisation Guidance.

Inoculation incidents referred to within this policy include sharps injuries, bites and scratches (if the skin is broken) and splashes to exposed mucous membranes (e.g. eyes, mouth etc).
Blood Borne Viruses (BBVs)

Transmission occurs when the infected bodily fluid of an individual makes contact with the bodily fluid/mucous membrane of another person. Bodily fluids with the potential to transmit BBVs include:

- Blood
- Synovial fluid
- Cerebrospinal Fluid
- Semen
- Vaginal secretions
- Amniotic fluid
- Pericardial fluid
- Pleural fluid

(Urine, faeces, vomit and saliva do NOT represent a significant risk unless blood stained).

Significant

Occupational transmission of BBVs to health care workers can occur following:

- A penetrating injury from a sharp object or instrument that is contaminated with the blood or body fluids of an individual known or suspected to have a BBV.
- Exposure of mucous membrane (eyes, mouth etc) to blood or body fluids from an individual known or suspected to have a BBV.
- A human bite that breaks the skin.

Non significant

Exposure to BBVs is defined as:

- Contamination of intact skin
- Exposure to urine, faeces, vomit or saliva that is not blood stained
- Injury from a sterile or non contaminated instrument or sharp object

Other healthcare associated infections

Occupational transmission of other HCAI’s can be via airborne or droplet transmission e.g. following coughing/sneezing or from personal contact with an infected individual.

Transmission to staff from patients

- Infection control procedures are necessary not only to protect vulnerable patients but also to protect health care workers from infection.
- HCWs are usually healthy and are generally less susceptible to infection than the patients they care for. However they may acquire skin infections such as herpes simplex, respiratory/skin infections such as chickenpox, mycobacterium tuberculosis (TB) and enteric (gut) infections (Wilson 2006)
• Good infection control practice to minimise risk and prevent patients and HCWs acquiring infections must therefore be used routinely during all patient care, not just when it is known that the patient has an infection.

• It is also important to note that healthcare workers infected with blood borne viruses may transmit infection to the patient. The main route of such transmission is associated with exposure prone procedures (Table 1); in which injury to the health care worker could result in blood entering the patients open tissues. Management of staff performing exposure prone procedures who may have received an inoculation injury from Hepatitis C blood is covered on page 15.

### Table 1

<table>
<thead>
<tr>
<th><strong>Exposure prone procedures (EPPs):</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>are those where there is a risk that the injury to the worker may result in exposure of the patients open tissues to the blood of the worker. These procedures include those where the workers gloved hands may be in contact with sharp instruments, needle tips or sharp tissues (spicules of bone or teeth) inside a patient’s open body cavity, wound or confined anatomical space where the hands or fingertips may not be completely visible at all times (Department of Health 2005).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Non exposure prone procedures:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>These are procedures where the hands and fingertips of the worker are visible and outside the patient’s body at all times, and internal examinations or procedures do not involve possible injury to the workers gloved hands from sharp instruments and/or tissues. Examples of NON exposure prone procedures include:</td>
</tr>
<tr>
<td>• Venepuncture</td>
</tr>
<tr>
<td>• Setting up and maintaining intravascular lines</td>
</tr>
<tr>
<td>• Minor surface suturing</td>
</tr>
<tr>
<td>• Incision of external abscesses</td>
</tr>
<tr>
<td>• Routine vaginal or rectal examinations</td>
</tr>
<tr>
<td>• Routine podiatric treatment including nail surgery</td>
</tr>
</tbody>
</table>

**Staff performing exposure prone procedures (Table 1)**

The following identifies the main occupations within the PCT and its contracted services where exposure prone procedures may, but not necessarily always, occur as part of patient care:

• Dentistry (this may include Dentists, Dental Nurses, Hygienists or Therapists)
• Medicine (General Practitioners) e.g. excision of large lipomas
• Podiatry is identified in the Department of Health Guidance as performing exposure prone procedures ONLY when performing Podiatric Surgery.
Transmission from staff to patients

Exposure prone procedures and HCWs identified with Chronic Hepatitis B infection.

HCWs who are identified as a chronic carrier of Hepatitis B may only return to exposure prone procedures while on oral antiviral treatment if:

- A risk assessment has been undertaken by the OHD.
- The HCW is E antigen negative and had pre-treatment HBV NDA levels between $10^3$ and $10^5$ geq/ml and their Antibodies have fallen to $10^3$ geq/ml or less.
- The HCW should have their HBV DNA levels checked every three months. If the HBV DNA level is greater than $10^3$ geq/ml they should cease exposure prone procedures.
- The HCW is under the continuing care of the Occupational Health Consultant or other appropriate clinician. If the HCW should cease treatment then Exposure Prone Procedures should cease immediately and obtain advice from the OHD.

Risk Factors

Blood borne viruses (BBV)

There is no evidence that HBV, HCV or HIV can be transmitted under conditions of usual social contact unless significant exposure to blood or bodily fluids occurs.

The risk of a transmission of a BBV from a significant source is as follows:

- HBV – In an un-immunised HCW, the risk of transmission of HBV from a known infectious source (via a percutaneous route e.g. following sharps injury) is approximately 30% (Health Protection Agency (HPA) 2007).
- HCV – In a non immune HCW, the risk of percutaneous transmission of HCV from a known positive source is approximately 3% (HPA 2007). This risk is significantly reduced in relation to mucous membrane exposure.
- HIV – The risk of percutaneous transmission of HIV to a HCW from a known positive source as approximately 0.3% (HPA 2007). This risk reduces to 0.1% in relation to mucous membrane exposure.

Other healthcare associated infections

Transmission of other HCAI’s is directly associated with the contact/exposure to others infected with the pathogen. The likelihood of developing the illness depends on the individuals’ immunity status to the pathogen, the level of contact/exposure to the pathogen and the virility of the pathogen itself.
Prevention

- The adoption of standard precautions when handling blood/body fluids, tissues and sharp instruments, is the most effective means of reducing occupational exposure/transmission. Further information can be found in Use of Personal Protective Equipment (Standard Precautions) Policy.
- Vaccination, where available, can assist in reducing the risk of infection and is strongly recommended (as applicable to local risk) however it should never be regarded as a substitute for standard precautions but as an additional protection.
- Following exposure to HCAI, HCWs should seek advice from the OHD (A&E Department out of hours) on the access/administration of prophylaxis and vaccination if indicated/available.

Management/Treatment of Inoculation Injuries

It is imperative that there should be as little delay as possible from the time of exposure to the assessment of transmission of risk and the commencement of appropriate treatment. (See Sharps Safety and Management of Contamination Injuries Policy).

Risk Assessment: Source Patient

A designated doctor/practitioner should assess if the reported exposure was significant based on type, route, nature and extent of exposure. Significant and non–significant exposure are classified as:

Significant:
- A penetrating injury from a sharp object or instrument that is contaminated with the blood or body fluids of an individual known or suspected to have a blood borne virus.
- Exposure of mucous membrane (eyes, mouth etc) to blood or body fluids from an individual known or suspected to have a blood borne virus.
- Exposure of non-intact skin (cuts, abrasions, dermatitis etc) to blood or body fluids from an individual known or suspected to have a blood borne virus.
- A human bite (where the skin is broken).

Non significant:
- Contamination of intact skin.
- Exposure to urine, faeces, vomit or saliva that is not blood stained.
- Injury from a sterile or uncontaminated instrument or sharp object.
The source patient’s infectivity status should be established by blood testing as follows in all cases of significant exposure.

<table>
<thead>
<tr>
<th>TIME</th>
<th>HEPATITIS B</th>
<th>HEPATITS C</th>
<th>HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate post incident</td>
<td>Surface Antigen*</td>
<td>PCR &amp; Antibody</td>
<td>Antigen/Antibody combined test</td>
</tr>
</tbody>
</table>

*Source patient testing for Hepatitis B Surface Antigen only required if injured HCW is NOT immune to Hepatitis B.

- Informed consent must be obtained prior to venepuncture (this should not be conducted by the health care worker who sustained the injury).
- If consent is withheld/delayed, the OHD or A&E Department (depending on who is responsible for dealing with the injured healthcare worker) should be notified.
- The laboratory form should clearly indicate that the blood has been taken following an inoculation incident and include the name/date of birth of the injured health care worker (within the ‘comments’ section) along with the date of the incident.
- Source patient blood results must be copied to the Occupational Health Department.
- The outcome of the risk assessment (i.e. indication of significant risk present) should be forwarded to the OHD/A&E Department (depending on who is responsible for dealing with the injured HCW) as soon as it is completed.

**Risk Assessment: Injured HCW (recipient)**

- The recipient’s Hepatitis B immunity status should be established in all cases of significant exposure.
- A sample of the recipient’s blood should be taken for storage (and antibodies to Hepatitis B if immunity status is unknown) following significant exposure (see table 2, 4 and 5)
- The name and date of birth of the source patient should be recorded on the laboratory form of the recipient along with a statement indicating blood has been taken following an inoculation/exposure incident.
- If the source patient’s consent for testing is withheld/delayed the decision as to whether or not to recommend Post Exposure Prophylaxis (PEP) should be made based on the risk assessment taking account of the type, nature and extent of exposure and the assumed risk of the donor.
- If consent is delayed e.g. due to the patient being unconscious, PEP can be considered until consent has been obtained and the test result known.
Post Exposure Prophylaxis

Blood for storage should be taken from all health care workers following exposure to any significant blood borne virus source and follow up testing appointments issued. Follow up care/treatment should be co-ordinated via the OHD.

**HIV**

There is currently no immunisation/immunoglobulin available for HIV however there is evidence that the administration of antiretroviral medication can significantly reduce the risk of developing HIV following an exposure incident.

In view of the need for very prompt treatment and the serious consequences of HIV sero-conversion, significant occupational exposure to known or possible sources of HIV constitutes a medical emergency. Exposed HCWs should immediately attend Arrowe Park Hospital A&E Department (ideally within the hour) for assessment and treatment with PEP if indicated. (See Table 2 for action to be taken by A&E and Occupational Health). Refer to Sharps Safety and the Management of Contamination Injuries Policy.

**Table 2**

<table>
<thead>
<tr>
<th>Timescales</th>
<th>Known HIV infected source</th>
<th>Unknown source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate post incident: A&amp;E</td>
<td>• Obtain baseline serum for storage&lt;br&gt;• Seek advice from Consultant Microbiologist if necessary&lt;br&gt;• Discuss implications with HCW&lt;br&gt;• Gain consent for treatment from HCW&lt;br&gt;• Commence starter pack PEP within one hour (ideally)&lt;br&gt;• Refer to GUM for follow up.&lt;br&gt;• Forward summary of advice/treatment to OHD</td>
<td>• Obtain baseline serum for storage&lt;br&gt;• PEP not usually indicated unless circumstances strongly indicate a HIV positive source (Refer to Sharps Safety and Management of Contamination Injuries Policy.</td>
</tr>
<tr>
<td>Immediate post incident after treatment at A&amp;E: Occupational Health</td>
<td>• Obtain baseline serum for storage (if not already obtained)&lt;br&gt;• Take base bloods for:&lt;br&gt;FBC&lt;br&gt;Liver Profile and enzymes&lt;br&gt;U&amp;E&lt;br&gt;Serum Amylase&lt;br&gt;• Obtain follow up bloods (Table 3)</td>
<td>• Obtain baseline serum for storage (if not already obtained)&lt;br&gt;• Follow up as required (Table 3)</td>
</tr>
</tbody>
</table>
Follow up care/treatment should be co-ordinated via the OHD (Table 3)

Table 3

<table>
<thead>
<tr>
<th>Timescales</th>
<th>HIV positive/high risk donor</th>
<th>HIV negative</th>
<th>Unknown source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>Blood for storage</td>
<td>Blood for storage</td>
<td>Blood for storage</td>
</tr>
<tr>
<td>2 weeks post incident (only if taking PEP)</td>
<td>• FBC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Liver Profile &amp; enzymes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• U&amp;E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Serum Amylase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 weeks post incident (only if taking PEP)</td>
<td>• FBC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Liver Profile &amp; enzymes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• U&amp;E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Serum Amylase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 weeks post incident</td>
<td>Antigen/Antibody combined test</td>
<td>No further bloods however obtain follow up serum if symptoms or signs of liver disease/HIV develop</td>
<td></td>
</tr>
<tr>
<td>12 weeks post incident</td>
<td>Antigen/Antibody combined test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months post incident</td>
<td>Antigen/Antibody combined test</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hepatitis B

The recipient’s Hepatitis B status should be established and vaccination/immunoglobulin offered as indicated (Table 4).

Hepatitis B immunoglobulin offers short term protection against the virus and should be considered in non immune HCWs exposed to a known/suspected high risk source.

Table 4

<table>
<thead>
<tr>
<th>HCW Status</th>
<th>SIGNIFICANT EXPOSURE</th>
<th>NON SIGNIFICANT EXPOSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>All HCW’s regardless of status</td>
<td>Obtain baseline serum for storage</td>
<td></td>
</tr>
<tr>
<td>HBV Status Exposed person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBsAg positive source patient</td>
<td>Accelerated course HB vaccine + HBIG</td>
<td>Accelerated course HB vaccine</td>
</tr>
<tr>
<td>Unknown source</td>
<td>Accelerated course HB vaccine</td>
<td>Start course HB vaccine</td>
</tr>
<tr>
<td>HBsAg negative source</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continued risk</td>
<td>No further risk</td>
<td></td>
</tr>
<tr>
<td>&lt; 1 dose HB vaccine pre-exposure</td>
<td>1 dose HB vaccine followed by 2nd dose 1 month later</td>
<td>1 dose HB vaccine</td>
</tr>
<tr>
<td>&gt;2 doses of HB vaccine pre-exposure (antiHbs unknown)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Known responder to HB vaccine (antiHBs > 10mIU/ml) | Booster dose HB Vaccine | Consider booster dose HB vaccine | Consider dose HB Vaccine | Consider dose HB Vaccine | No HBV prophylaxis | Reassure
---|---|---|---|---|---|---
Known non-responder to HB vaccine (antiHBs<10mIU/ml 2-4 months post vaccine) | HBIG x 1 Consider booster dose of HB vaccine A second dose of HBIG should be given at one month | HBIG x 1 Consider booster dose of HB vaccine A second dose of HBIG should be given at one month | No HBIG | No HBIG | No HBIG | No HBV prophylaxis | Reassure

Follow up care/treatment should be co-ordinated via the OHD (Table 5)

**Table 5**

<table>
<thead>
<tr>
<th>Timescales</th>
<th>HBV positive source</th>
<th>HBV negative</th>
<th>Unknown source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>Blood for storage</td>
<td>Blood for storage</td>
<td>Blood for storage</td>
</tr>
<tr>
<td>2 weeks post incident</td>
<td></td>
<td></td>
<td>Follow pathway determined by initial risk assessment and treat as either high risk (i.e. follow HBV positive/suspected source pathway) or low risk (follow HBV negative source pathway).</td>
</tr>
<tr>
<td>4 weeks post incident</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 weeks post incident</td>
<td>Surface Antigen*</td>
<td>No further bloods however obtain follow up serum if symptoms or signs of liver disease/HIV develop</td>
<td></td>
</tr>
<tr>
<td>12 weeks post incident</td>
<td>Surface Antigen*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months post incident</td>
<td>Surface Antigen* &amp; Surface Antibody*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Follow up bloods not necessary when HCW is known to be immune.

**Hepatitis C**

There is currently no prophylactic treatment i.e. immunisation/Immunoglobulin for Hepatitis C.

Follow up care/treatment should be co-ordinated via the OHD (Table 6)

Exposed HCWs should be counselled and advised to report any suggestive symptoms immediately and to attend for follow up blood testing as advised.
Table 6

<table>
<thead>
<tr>
<th>Timescales</th>
<th>HCV positive source</th>
<th>HCV negative</th>
<th>Unknown source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>Blood for storage</td>
<td>Blood for storage</td>
<td>Blood for storage</td>
</tr>
<tr>
<td>2 weeks post incident</td>
<td></td>
<td></td>
<td>Follow pathway determined by initial risk assessment and treat as either high risk (i.e. follow HCV positive/suspected source pathway) or low risk (follow HCV negative source pathway).</td>
</tr>
<tr>
<td>4 weeks post incident</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 weeks post incident</td>
<td>Hepatitis C PCR</td>
<td>No further bloods however obtain follow up serum if symptoms or signs of liver disease/HIV develop</td>
<td></td>
</tr>
<tr>
<td>12 weeks post incident</td>
<td>Hepatitis C PCR &amp; Antibody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months post incident</td>
<td>Hepatitis C Antibody</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Staff performing exposure prone procedures that are found to be carrying Hepatitis C virus or antibodies will be referred on to the relevant specialist for treatment. During this period the HCW involved must refrain from any exposure prone procedures.
- If after 6 months following cessation of treatment their RNA status is negative the HCW will be able to return to performing exposure prone procedures, however they will be required to undergo further screening 6 months later.

Management and treatment of other Health Care Associated Infections

General Principles

- Potential exposure to healthcare associated infections should be reported to the OHD as soon as possible after exposure occurs.
- If exposure occurs outside of occupational health opening hours, advice should be sought from the nearest A&E Department.
- Redeployment/medical exclusion may be required depending on the circumstances.
- HCWs should be encouraged to attend the OHD for their immunisation status to be assessed and updated where indicated, to prevent the likelihood of becoming ill following future exposure to HCAI.
- PEP is not available for all health care associated infections. Where PEP/treatment is available it is listed below:

Varicella (Chickenpox)

Varicella is an acute highly infectious disease transmitted by droplet spread or personal contact. Varicella is preventable in 75% cases by immunisation.
Management of HCWs following Varicella exposure:
- Vaccinated HCWs or those with a definite history of chickenpox are considered immune and there is no need for them to be restricted from work.
- They should however seek further advice from OHD/Infection Control before having patient contact if they feel unwell or develop a fever or rash within 3 weeks following exposure.
- Management of unvaccinated HCWs or those without a definite history of chickenpox and having significant exposure to Varicella includes:
  - Referring the HCW to the OHD for assessment/immunisation
  - Excluding the individual from contact with high risk patients e.g. pregnant women, immuno-suppressed patients/colleagues etc from 8-21 days after exposure (Immunisation against Infectious Diseases 2006)
  - Reporting to the OHD should they feel unwell or develop a fever/rash.

Post Exposure Prophylaxis:
As well as providing preventative protection against the virus, Varicella vaccination can also be used to reduce the likelihood of infection developing post exposure if the vaccine is administered within 3 days of exposure. Regardless of the time since exposure, non immune HCWs should be offered vaccination to reduce their risk from future contamination and prevent exposing patients to varicella in the future.

A second dose of vaccine is required 4-8 weeks later.

HCWs with localised Herpes Zoster (Shingles), on a part of the body that can be covered with a suitable dressing/clothing can be allowed to continue working unless they are in contact with high risk patients in which case a full risk assessment should be undertaken in conjunction with the IPC team.

Measles

Measles is an acute viral illness that is spread by airborne or droplet transmission. It is preventable by vaccination in over 90% of cases.

The Department of Health recommends that all people living in the UK are immune against measles.

Management of HCWs following Measles exposure:
- HCWs who are able to demonstrate satisfactory evidence of measles immunity (via either having received 2 doses of Measles, Mumps and Rubella (MMR) vaccination or a positive antibody test) can continue working without restriction.
- Management of unvaccinated HCWs or those without Positive antibody test includes:
  - Referring the HCW to the OHD for assessment/immunisation
Reporting to the OHD should they feel unwell or develop a fever/rash.

Post Exposure Prophylaxis:
- As well as providing preventative protection against the virus, MMR vaccination can also be used to reduce the likelihood of infection developing post exposure if the vaccine is administered within 3 days of exposure.
- Regardless of the time since exposure, non immune HCWs should be offered vaccination to reduce their risk from future contamination and prevent exposing patients to Measles, Mumps and Rubella in the future.
- A second dose of vaccine is required 4 weeks later.
- Measles immunoglobulin is available for post exposure prophylaxis in individuals for who vaccination is contraindicated. Further advice should be sought from the Consultant Microbiologist if required.

Reporting/Monitoring Arrangements and Support

Reporting arrangements:
- All exposures to HCAI and inoculation incidents will be reported via the Trust’s incident reporting process.
- Copies of incident forms relating to exposure to HCAI/inoculation incidents will be forwarded to the OHD for follow-up.

Monitoring Arrangements:
- All exposure/inoculation incidents are reported via the incident reporting system, copies of which are forwarded to the OHD.
- Numbers and trends of incidents are collated and reported into the Health, Safety and Welfare Committee.
- Summaries of numbers and trends of inoculation incidents are included within the Quarterly Incident Report to the PCT Primary Care Management Board.

Support:
- Follow up care /support following exposure to HCAI/inoculation incidents will be provided via the OHD.

Training

Training in health care associated infections will be provided by the Infection Prevention Team through Essential Training.

Risk Assessment

Included in service risk assessment, clinic and procedure risk assessment.
References


List of those consulted in drafting process

Infection Control Committee
Occupational Health Department, Cheshire and Wirral Partnership NHS Foundation Trust