Post-Exposure Prophylaxis (PEP) for Human Immunodeficiency Virus (HIV) and Guidance for Staff on the Management of Community Exposure to Blood Borne Viruses

<table>
<thead>
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This document has been endorsed by the Medical Director

Signature

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Policy statement: It is the responsibility of all staff to ensure that they are working to the most up to date and relevant policies, protocols, procedures and pathways.

Responsibilities for implementation:
Organisational: Operational Management Team and Chief Executive
Sector General Managers, Medical Leads and Nursing Leads
Departmental: Clinical Leads
Area: Line Manager

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1. Introduction

This guidance has been jointly produced by the Public Health Protection, Infectious Disease (ID) and Genitourinary Medicine (GUM) departments of NHS Grampian under the auspices of the NHS Grampian Sexual Health and Blood Borne Virus (BBV) Managed Care Network (MCN). It provides advice on the management of community exposure to blood borne viruses (BBVs), whether sexual or non sexual, including post exposure prophylaxis (PEP) for Human Immunodeficiency Virus (HIV).

1.1 Objective

This guidance is to ensure that NHS Grampian, through the Sexual Health and BBV MCN, continue to provide the highest quality of healthcare services to people in the Grampian area. It ensures that care provision is based on the best available evidence and best practice and that there is effective collaboration between clinicians, patients and other care providers. It will also help to ensure that there is consistency and continuity of care in all practices and procedures involving the management of community exposure to BBVs, including PEP.

The guidance brings together the existing guidance on the public health management of community exposure to BBVs and the proposed guidance on PEP for HIV following sexual exposure (commonly referred to as PEPSE) into a single NHS Grampian guidance document. The main purpose of this combined guidance document is to provide healthcare providers with easily accessible information on the:

- Assessment and management of persons with accidental non sexual exposures in the community to blood and body fluids that may be infected with Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) and HIV
- Assessment and management of sexual exposure to HBV, HCV, HIV including the use of PEPSE.
This guideline is based on national and international guidance and evidence from recent scientific research data. It will be reviewed every two years, or when necessary, to take into account changes in national guidance.

### 1.2 Groups to which this document applies

The guidance is written from a health care perspective and should be used in all NHS Grampian Health Care premises and all GP practices. It may also be a useful reference for non–NHS organisations and voluntarily organisations such as the police and local authority when dealing with potential exposure to BBVs following needle stick injuries, human bites and sexual exposure in the community.

Individuals presenting to any of the NHS Grampian healthcare premises with potential exposure to BBVs should have a timely initial assessment and treatment where appropriate. This treatment should be the same irrespective of whether the exposure occurred in the community or in a non-NHS workplace within the community.

Subsequent follow-up for all potential exposures in the community should be done by the individual’s GP unless otherwise indicated. Where the potential exposure has occurred in a non–NHS workplace, the individual should be referred to their occupational health provider (if available) for subsequent follow-up. Where the non-NHS workplace does not have an occupational health provider, follow-up should be via the individual’s GP, unless PEP has been prescribed.

### 1.3 Groups to which this document does not apply

For all NHS Grampian staff occupationally exposed to blood borne viruses, the guidance on the management of Healthcare Workers should be followed. This guidance can be found at:

2. Evidence Base

The BBVs covered in this document are:

- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV)
- Human Immunodeficiency Virus (HIV).

BBVs are mainly transmitted through sexual exposure or by direct exposure to infected blood or other body fluids e.g. following sharps or needle stick injuries. Body fluids which may pose a risk of BBV transmission if significant exposure occurs are outlined below:

- any fluid visibly contaminated with blood
- breast milk
- amniotic fluid
- vaginal secretions
- semen
- saliva, in association with dental intervention
- pleural, peritoneal, pericardial, synovial and cerebrospinal fluid (CSF)
- all unfixed tissues.

There is a minimal risk of BBV infection from urine, faeces, saliva, sputum, tears, sweat and vomit, unless visibly contaminated with blood, although they may be hazardous for other reasons.

Significant exposure is defined as:

- percutaneous injury (e.g. needles, instruments, bone fragments, significant bites which break the skin)
- exposure of broken skin (abrasions, cuts, eczema, etc)
- exposure of mucous membranes including the eye
- unprotected vaginal and/or anal intercourse.
The average risk of transmission of BBV following a single percutaneous exposure from an infected person, in the absence of appropriate post exposure prophylaxis is estimated to be:

- 1 in 3 for HBV**
- 1 in 30 for HCV
- 1 in 300 for HIV***

** Where the source is e antigen positive
*** This may be lower if the source has been treated for HIV

Furthermore, the risk of HCV and HIV transmission from a needle discovered in the park or street is negligible, since these viruses do not remain viable for more than a few hours if out of the body. The risk of BBV transmission in the community can be avoided or reduced by:

- safer sex which involves the use of barrier methods (e.g. condoms) for preventing sexual transmission of BBVs including HIV
- not sharing needles or razors
- use of sterile injecting equipment and appropriate waste disposal which is provided from several venues across Grampian.
3. Management of Community Exposure to BBVs

3.1 Background

Members of the public frequently attend the Accident and Emergency (A&E) department, GMed or General Practice (GP) surgery following needle stick injuries or exposure to blood or body fluids in the community. The risk in most of these cases is considered low. However, it is important that all potential exposures to BBVs are treated as medical emergencies until a risk assessment has been carried out by a qualified member of staff. The risk assessment should be on a case-by-case basis.

3.2 Risk Assessment

Flow charts for the risk assessment of exposure to BBVs in the community are presented in Appendices 2 and 3. These should be reproduced and held within A&E department, GP surgery and GMed for ease of use.

To assist staff to communicate with non-English speaking patients, parents, relatives or friends, a “face to face” interpreter or the “Language Line” telephone interpretation service can be made available when consultation or care is provided. Material in translation can also be provided. If the patient has a communication disability, appropriate communication support such as British Sign Language (BSL) interpreters, audio, accessible/pictorial material, large print and other formats and support can be provided. For more information, contact either Nigel Firth on (01224 5)52245 or Roda Bird on (01224 5)51116.

Where patients have been potentially exposed to BBVs in healthcare settings e.g. following surgery, dialysis, or dental treatment, the risk assessment must consider infection control processes for any invasive procedure as well as the circumstances of the incident itself. This is because BBV risks deriving from accidental inoculation in the healthcare setting are likely to be higher than in the community setting. If infection control has been inadequate in a healthcare setting, a patient notification exercise may need to be considered and the Health Protection Team would lead on the look back exercise if this is required.
In the community, the most common BBV exposure scenario is one in which the source is unknown. Factors that need to be considered when making a decision following potential exposure to BBV in the community should include:

- The nature of the exposure – is it a significant exposure? (Significant Exposure as defined on Page 3).
- The time since exposure; ideally, PEP for HIV should be initiated as soon as possible but can be given up to 72 hours after exposure. For HBV, Hepatitis B specific immunoglobulin HBIG is preferably given within 48hrs but can be given up to 7 days after exposure.

### 3.2.1 HBV exposure

Generally the risk of HBV infection following a community exposure is low. The management of a significant exposure to HBV should take into account the vaccination and antibody status of the exposed individual. It is important to determine whether the exposed individual has received the full course of the vaccine and to determine the anti-HBs antibody level.

Recommendations on HBV vaccinations and HBIG management following exposure are outlined in Table 1 below. For latest recommendations visit: Immunisation against infectious disease UK; the Green book available online at [http://www.dh.gov.uk/greenbook](http://www.dh.gov.uk/greenbook)

### 3.2.2 HCV exposure

The risk of transmission of HCV is highest among injecting drug users (IDU). In spite of this, the risk of transmission of HCV from a discarded needle in the community is considered to be low because the ability of the virus to survive on environmental surfaces is poor. When carrying out a risk assessment, consideration should be given if the source patient is a:

- long term partner of an IDU or known infection with HCV
- current or previous IDU.

There are no drugs or vaccines that are effective either before or after exposure to prevent hepatitis C infection. However there is evidence that...
treatment in the acute phase is effective at eradicating the virus.

### 3.2.3 Table 1: Vaccine management of HBV exposure risk

<table>
<thead>
<tr>
<th>HBV status of person exposed</th>
<th>HBsAg positive source</th>
<th>Unknown source</th>
<th>HBsAg negative source</th>
<th>Continued risk</th>
<th>No further risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤1 dose HB vaccine pre-exposure</td>
<td>Accelerated course of HB vaccine* and HBIG x 1</td>
<td>Accelerated course of HB vaccine*</td>
<td>Initiate course of HB vaccine</td>
<td>Initiate course of HB vaccine</td>
<td>No HBV prophylaxis; reassure.</td>
</tr>
<tr>
<td>≥2 doses HB vaccine pre-exposure (anti- HBs not known)</td>
<td>One dose of HB vaccine followed by second dose one month later</td>
<td>One dose of HB vaccine</td>
<td>Finish course of HB vaccine</td>
<td>Finish course of HB vaccine</td>
<td>No HBV prophylaxis; reassure.</td>
</tr>
<tr>
<td>Known responder to HB vaccine (anti-HBs &gt;10mlU/ml)</td>
<td>Consider booster dose of HB vaccine</td>
<td>Consider booster dose of HB vaccine</td>
<td>Consider booster dose of HB vaccine</td>
<td>Consider booster dose of HB vaccine</td>
<td>No HBV prophylaxis; reassure.</td>
</tr>
<tr>
<td>Known non-responder to HB vaccine (anti-HBs &lt;10mlU/ml) 2-4 months post-immunisation</td>
<td>HBIG x1 and consider booster of HB vaccine. A second dose of HBIG should be given at one month</td>
<td>HBIG x1 and consider booster of HB vaccine. A second dose of HBIG should be given at one month</td>
<td>No HBIG. Consider booster dose of HB vaccine.</td>
<td>No HBIG. Consider booster dose of HB vaccine.</td>
<td>No HBV prophylaxis; reassure.</td>
</tr>
</tbody>
</table>

- A course of vaccine consists of doses spaced at 0, 1 and 6 months
- *An accelerated course of vaccine consists of doses spaced at 0, 1, 2 and 12 months
- A super-accelerated course consists of 0, 7, 21 days and 12 months; in the latter two instances a 4th dose is required for those at ongoing risk, with
3.2.4 HIV Exposure

Current evidence suggests that HIV can survive for only a few hours after infected blood has dried on a surface. Therefore the risk of HIV acquisition from a discarded needle in the community is considered to be very low. However, it is recommended that each situation be assessed on a case-by-case basis.

When carrying out a risk assessment, consideration should be given if the source is known HIV positive or a current or previous IDU.

For community needle stick injuries involving children, there are no studies available that indicate whether therapy with antiretroviral will decrease the risk of seroconversion. Therefore the decisions to initiate PEP for HIV in children should be made weighing the likelihood of infection against the potential medication toxicities. It is suggested that all cases are discussed with a paediatrician with an interest in Infectious Diseases.

PEP should be given to those patients who are exposed to HIV and in whom the exposure is significant and the source known to be HIV positive or high risk (Table 2). It consists of 28 days of combination antiretroviral therapy and should be given as soon as possible (preferably within the first four hours, but up to 72 hours) following exposure. Appendix 4 specifically outlines situations where PEP following sexual exposure to HIV should be considered.

Information for medical staff regarding PEP

- It is advised that all cases where PEP is considered are discussed with a doctor from the Sexual Health Service (SHS) or the Infection Unit (INFU).
- The total duration of PEP is 28 days.
- The drugs are Truvada (Emtricitabine and Tenofovir co-formulation) one tablet daily (24 hourly intervals) and Raltegravir 400mg twice a day at 12 hourly intervals.
- The starter packs consists of 7 days' supply.
• These can be taken with or without food.
• Refer patient to HIV expert within 48-72 for re-evaluation of PEP indication.
• Significant side effects are uncommon but can include diarrhoea, nausea, vomiting, headaches, abnormal dreams, insomnia and skin rashes.
• HIV testing is required 2 months after the end of PEP

Post-exposure prophylaxis **starter packs** are available at:
• Infection Unit (INFU), Aberdeen Royal Infirmary (ARI)
• A&E, Dr Gray’s Hospital, Elgin
• Sexual Health Service, Aberdeen Community Health and Care Village
• A&E, Peterhead Hospital
• A&E, ARI
• GMEDS, ARI
• A&E, Chalmers Hospital, Banff
• Aboyne Health Centre
• A&E, Fraserburgh Hospital
• Jubilee Hospital, Huntly
### Table 2: Risk assessment of the source for HIV

<table>
<thead>
<tr>
<th>PROBABILITY THAT SOURCE IS HIV POSITIVE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIGH RISK</strong></td>
<td><strong>LOW RISK</strong></td>
</tr>
<tr>
<td>Known HIV infection*</td>
<td>UK Born Heterosexual</td>
</tr>
<tr>
<td>Men who have Sex with Men</td>
<td>Individual from Low HIV prevalence country (prevalence &lt; 1%)</td>
</tr>
<tr>
<td>IDU</td>
<td>- North Africa (other)</td>
</tr>
<tr>
<td>Sex Worker</td>
<td>- Australia, Pacific Islands (other)</td>
</tr>
<tr>
<td>Individual from High HIV prevalence country (prevalence &gt;1%)</td>
<td>- Asia (other)</td>
</tr>
<tr>
<td>- Sudan</td>
<td>- Caribbean (other)</td>
</tr>
<tr>
<td>- Sub-Saharan Africa**</td>
<td>- Central/South America (other)</td>
</tr>
<tr>
<td>- Papua NG</td>
<td>- Eastern Europe (other)</td>
</tr>
<tr>
<td>- Myanmar (Burma), Thailand, Cambodia, Pakistan, India</td>
<td>- Western Europe</td>
</tr>
<tr>
<td>- Haiti, Dominican R, Jamaica, Barbados, Bermuda, Trinidad &amp; Tobago, Bahamas</td>
<td>- North America</td>
</tr>
<tr>
<td>- Belize, Honduras, Guyana</td>
<td></td>
</tr>
<tr>
<td>- Russia, Ukraine, Uzbekistan</td>
<td></td>
</tr>
<tr>
<td><strong>ALL sexual partners where the source cannot be identified other than ‘African’ or ‘Caribbean’ should be regarded as HIGH RISK</strong></td>
<td></td>
</tr>
<tr>
<td><strong>If source has HIV infection and is taking effective HIV treatment, ascertain current HIV drug regime and latest viral load if known as an undetectable viral load poses a significantly lower risk of infection and PEP will not be necessary in the majority situations.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Very high prevalence rates of 15 – 34% in Republic of South Africa, Namibia, Swaziland, Botswana, Lesotho, Zimbabwe, Mozambique, and Zaire</strong></td>
<td></td>
</tr>
</tbody>
</table>
3.3 General serological testing and virology process request

Serological testing of the source patient for HBV, HCV and HIV is the most reliable method to assess risk of exposure but this is not always possible or practical. The serologic testing outlined here should be followed for sexual and non sexual exposure to blood and body fluids potentially infected with BBV including needle stick injuries in the community.

For the source patient

If initial assessment indicates that an exposure has been significant – that is, with the potential for HBV, HCV or HIV transmission – consideration should be given to the Hepatitis B/C/HIV status of the source patient.

For most exposures occurring in the community, the scenario is usually the source patient is unknown.

Virology request

The virology laboratory should be contacted to advice on the appropriate test for each exposure scenario. To facilitate testing, the patient information below is essential. For all samples:

- Use a purple 10 ml tube.
- State whether blood sample is from source or exposed individual.

On the sample request form provide the following information:

- name, surname, Community Health Index Number (CHI), requesting clinician
- date & time of incident
- tests requested
- where copies of report should be sent (e.g. OH provider, GP)
- HBV immunisation status, if known.

Advised timings of samples and tests to be requested are listed in Table 3.
### 3.3.1 Table 3: BBV Testing Schedule

<table>
<thead>
<tr>
<th>Source individual</th>
<th>Exposed individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>- HBV, HCV and HIV Negative</td>
<td>- no further action</td>
</tr>
<tr>
<td>- HBsAg positive</td>
<td>- if exposed individual has been previously vaccinated, test now for anti-HBs to guide prophylaxis advice</td>
</tr>
<tr>
<td></td>
<td>- in all circumstances, also test at 3 and 6 months for HBsAg &amp; anti-HBc</td>
</tr>
<tr>
<td>- HCV positive (observed or suspected)</td>
<td>- store baseline</td>
</tr>
<tr>
<td></td>
<td>- Transaminases, HCV-PCR and HCV serology at 1 month</td>
</tr>
<tr>
<td></td>
<td>- Repeat HCV PCR &amp; antibody at 3 months</td>
</tr>
<tr>
<td></td>
<td>- test HCV antibody at 6 months without PCR</td>
</tr>
<tr>
<td>- HIV positive</td>
<td>- Full sexual health screen (sexual exposure)*</td>
</tr>
<tr>
<td></td>
<td>- re-test (HIV serology) at 2 months following exposure or 3 months if taking PEP *</td>
</tr>
<tr>
<td>- Identity of source individual is unknown OR</td>
<td>- if exposed individual has been previously vaccinated for HBV, test now for anti-HBs to guide prophylaxis advice</td>
</tr>
<tr>
<td>- Source BBV status is unknown (Rapid testing of source patient for HIV and HCV is recommended)* OR</td>
<td>- if PEP is indicated following individualised risk assessment (see appendix 3 &amp; 4) repeat HIV serology 2 months after PEP completion*</td>
</tr>
<tr>
<td>- Source individual refuses testing</td>
<td>- Test for HBsAg, anti-HCV at 3 and 6 months</td>
</tr>
</tbody>
</table>

In women, **HIV serology + HBV and HCV, pregnancy test** is recommended within 48 hours of exposure*

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*EACS Guidelines 8.0 October 2015*
### 3.4 General Public Health Advice for Post-Exposure to BBVs

All individuals potentially exposed to BBVs should receive initial advice and counselling in the healthcare setting (A&E, GMed, GP practice) where they are first seen. Counselling and advice should include discussion around:

- Rationale for PEP Immunisation/Immunoglobulin
- Risk of infection
- Potential risk (side effects) and benefit of chemoprophylaxis
- The duration of chemoprophylaxis
- The need for initial investigations if indicated
- The need to report to their GP if they develop any illness/symptoms e.g. fever, aches, rashes, swollen glands-for possible HIV exposure or abdominal discomfort, jaundice, changes in urine and stool colour (for HBV and HCV exposures) during the 6-month follow-up period
- Advice on safer sexual practices, blood donation, sharing of needles, razor etc
- Advice on adherence to medication and to report any medication side effects to their GP
- The importance of follow-up where additional screening for other Sexually Transmitted Infections (STIs) may be offered

Follow up and subsequent counselling as required should be provided in Occupational Health (OH) or GP practice, unless patient has been started on PEP.
4. References

1. British HIV Association (BHIVA) and British Association of Sexual Health and HIV (BASHH). UK guidance for the use of HIV post exposure prophylaxis after sexual exposure. 2015. Available online @ https://www.bashh.org/documents/PEPSE%202015.pdf [Date accessed 21 August 2017].


5. Distribution List

- General Practitioners
- Front line hospital staff
- Accident & Emergency department staff
- GMed staff
- Infectious Disease Consultants and Microbiologist
- Consultants in Public Health Medicine
- Health Protection Nurses
Appendix 1: Abbreviations

A&E  Accident and Emergency
ARI  Aberdeen Royal Infirmary
BBV  Blood Borne Virus
BNF  British National Formulary
CHI  Community Health Index
CSF  Cerebrospinal fluid
GP   General Practice
HBIG Hepatitis B immunoglobulin
HBV  Hepatitis B virus
HCV  Hepatitis C virus
HIV  Human Immunodeficiency virus
IDU  Injecting Drug user
INFU Infection Unit
OH   Occupational Health
PEP  Post Exposure Prophylaxis
PEPSE Post Exposure Prophylaxis following Sexual Exposure
SHS  Sexual Health Service
Appendix 2: Flow Chart for the Management of Community Exposure to BBV

INITIAL INCIDENT

Take Immediate ACTION:
- Gently squeeze wound - DO NOT SUCK AREA,
- Wash affected area with soap & water - DO NOT SCRUB
- Rinse mucous membranes with warm water - DO NOT SWALLOW WATER
- Cover broken skin with waterproof dressing, e.g. plaster
- If workplace setting, Refer to Guidance for management of HCW’s Occupationally exposed to BBV

Is exposure SIGNIFICANT?
- Percutaneous injury (e.g. needle, instruments, bone fragments, significant bites which break the skin)
- Exposure of broken skin (abrasions, cuts, eczema, etc)
- Exposure of mucous membranes, including the eye

No

Yes

Is the SOURCE INDIVIDUAL known to be HIV positive or high risk?

No

Yes

Is SOURCE INDIVIDUAL identified?

No

EXPOSED INDIVIDUAL to be interviewed by
Senior doctor or Nurse
(At practice/GMED, A&E/OP/ward, SHS, and Public Health)
- Assess personal risk factors and circumstances of exposure; document any known BBV positive results
- Offer and obtain consent for hepatitis B, hepatitis C, HIV testing
- Document consent in exposed patient's notes.
- Consider need for hepatitis B post-exposure prophylaxis (see Green Book http://www.dh.gov.uk/greenbook)
- Send to Virus Laboratory with clear request for “from EXPOSED individual, BBV exposure/injury
- Where the exposure has taken place in a non NHS workplace setting, request: “Copy to OHS, please”.
- Arrange follow up with GP or Occupational Health Services (where applicable) as soon as possible to record incident
- Arrange follow-up with GP or Occupational Health Services for hepatitis B, hepatitis C, HIV blood samples at 3 and 6 months after incident.

Yes

HIV Post-Exposure Prophylaxis (PEP) should be offered within four hours of exposure to EXPOSED INDIVIDUAL, if possible.
Discuss with Infectious Disease Consultant, (all hours) OR Sexual Health Consultant (9am – 5pm) before proceeding with HIV PEP guidance

Advice and support is available from NHS Grampian:

Infectious Diseases Consultant 0345-456 6000, all hours
Sexual Health Consultant 0345-3379900, daytime hours
Virology Consultant 01224-553818, daytime or 0345 456 6000, out of hours
Consultant in Public Health Medicine 01224-558520, daytime or 0345 456 6000, out of hours
Grampian Occupational (GO) Health Medicine Service, Forsterhill Lea Aberdeen 01224 553663 daytime hours Elgin 01343 567386 daytime hours

A&E should be involved where there is significant BBV exposure AND where GP/GMED (or GO Health Service for NHS workplace exposures) are not available for risk assessment.

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Appendix 3: Flow Chart for Management of Sexual Exposure to HIV

Patient presents in A&E, GP or GMed

More than 72 hours since sexual exposure

HIV PEPSE not usually indicated
- Refer to SHS (01224 655525) for further assessment regarding Hep B vaccination and STI screening
- We also provide emergency contraception and contraception
- If out of hours give patient clinic contact 03453379900

A risk assessment to assess exposure risk is indicated.
- See Appendix 4 for situations when post-exposure prophylaxis following sexual exposure (PEPSE) should be considered
- n/b PEPSE needs to be given as soon as possible (ideally less than 4 hours after the exposure)

Is PEPSE Indicated?

YES

- Give HIV PEP/PEPSE starter pack (Truvada 1 tablet daily and Raltegravir 400mg twice daily for 7 days)
- Ask Patient to contact SHS on 01224 655525 to make appointment for re-evaluation of PEP indication within 48-72 hrs of starting PEP and full sexual health screen

For further advice - Call SHS 655525 (in hours) or INFU 0345 456 6000 (out of hours)

NO
Appendix 4: Situations when post-exposure prophylaxis following sexual exposure (PEPSE) should be considered

**Source:** UK guideline for the use of post-exposure prophylaxis for HIV following sexual exposure (2015)

<table>
<thead>
<tr>
<th>Source HIV status</th>
<th>HIV positive</th>
<th>Unknown HIV status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIV VL unknown / detectable (&gt;200copies/ml)</td>
<td>HIV VL undetectable (&lt;200copies/ml)</td>
</tr>
<tr>
<td>Receptive anal sex</td>
<td>Recommend</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Insertive anal sex</td>
<td>Recommend</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Receptive vaginal sex</td>
<td>Recommend</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Insertive vaginal sex</td>
<td>Consider</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Fellatio with ejaculation</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Fellatio without ejaculation</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Splash of semen into eye</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Cunnilingus</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Sharing of injecting equipment</td>
<td>Recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Human bite</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Needles stick from a discarded needle in the community</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
</tbody>
</table>

* High prevalence countries or risk-groups are those where there is a significant likelihood of the source individual being HIV positive. Within the UK at present, this is likely to be MSM, IDUs from high-risk countries (see ** below) and individuals who have immigrated to the UK from areas of high HIV prevalence, particularly sub-Saharan Africa (high prevalence is >1%). HIV prevalence Country specific HIV prevalence can be found in UNAIDS Gap Report: [http://www.unaids.org/en/resources/campaigns/2014/2014gapreport/gapreport](http://www.unaids.org/en/resources/campaigns/2014/2014gapreport/gapreport)

% The source’s viral load must be confirmed with the source’s clinic as <200c/ml for >6 months. Where there is any uncertainty about results or adherence to ART then PEP
should be given after unprotected anal intercourse with an HIV positive person

† More detailed knowledge of local prevalence of HIV within communities may change these recommendations from consider to recommended in areas of particularly high HIV prevalence. Co-factors in Box 1 that influence the likelihood of transmission should be considered

& Co-factors in Box 1 that influence the likelihood of transmission should be considered

‡ PEP is not recommended for individuals receiving fellatio i.e. inserting their penis into another’s oral cavity. For individuals giving fellatio PEP is not recommended unless co-factors 1 & 2 in Box 1 are present e.g. HIV seroconversion and oropharyngeal trauma / ulceration, see notes in guideline above

**HIV prevalence amongst IDUs varies considerably depending on country of origin and is particularly high in IDUs from Eastern Europe and central Asia. Region-specific estimates can be found in the UNAIDS Gap Report
http://www.unaids.org/sites/default/files/media_asset/05_Peoplewhoinjectdrugs.pdf

§ A bite is assumed to constitute breakage of the skin with passage of blood. See notes in guideline above about extreme circumstances where PEP could be considered after discussion with a specialist