POST EXPOSURE PROPHYLAXIS

QUICK GUIDE FOR EMERGENCY DEPT

Adapted from Irish National PEP Guidelines and St James’s Hospital GUIDE Clinic/Emergency Medicine protocol April 2010. Effective from January 2012.
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INITIAL MANAGEMENT OF PATIENT PRESENTING TO CUH ED FOR PEP or PEPSE

If a patient presents to ED Triage for PEP Mon-Fri 9am-4.30pm, the triage nurse should contact ID CNS (087 6996272) or ID SpR (bleep 203).

Outside of these hours this protocol should be used to assess the need for a HIV-PEP starter pack (held in ED resusc.) which should be dispensed and administered to patient if warranted.

OVERVIEW

Exposure
HBV, HCV, HIV exposure possible

First Aid

Assessment of relative risk of exposure  Assessment of risk of source

Baseline blood tested for HBV, HCV, HIV

Initiation of PEP if appropriate

Appropriate onward referral:
GP / Occupational Health / Local HIV
Assessment for HIV PEP following Occupational or Non-occupational Exposures
(only for patients presenting within 72 hrs of exposure)

Step 1: Assess risk of exposure

- **Low Risk:**
  - Contact with saliva, urine or faeces
  - Bite with no donor blood
  - Blood onto intact skin
  - Reassurance only
  - GP follow-up

- **Moderate Risk:**
  - Needlestick
    - solid needle
    - Hollow needle with no visible blood in hub/ syringe
  - Small amount of blood onto mucosa or non-intact skin
  - Superficial bite with donor blood
  - Assess risk of source (Step 2)

- **High Risk:**
  - Hollow needle with visible blood
  - Deep bite with donor blood in wound
  - Large amount of blood on mucosa or non-intact skin
Step 2: Assess risk of source

High Risk Source:
Known HIV +, HCV+ or HepB sAg+

Moderate Risk Source:
*Unknown source in High Risk environment* e.g. discarded needle in public place, Prison
*Unknown person with probable risk factors for infection* but actual status unknown

Low Risk Source:
*Unknown source in low risk environment* e.g. Nursing Home

DECISION TABLE FOR HIV PEP

<table>
<thead>
<tr>
<th>PEP for HIV Exposures</th>
<th>Known HIV + source</th>
<th>Unknown source status</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Risk Exposure</td>
<td>Truvada + Raltegravir*</td>
<td>Consider PEP</td>
</tr>
<tr>
<td>Moderate Risk Exposure</td>
<td>Truvada + Raltegravir*</td>
<td>Consider PEP</td>
</tr>
</tbody>
</table>

DON’T FORGET!
- Take **baseline bloods**: FBC, U/E, LFTs, HIV screen, Hepatitis C Ab, Hepatitis B sAg, cAb and sAb.
- Administer tetanus toxoid if indicated.
- Consider if Hepatitis B PEP or emergency contraception is indicated.
- Advise against unprotected sexual intercourse until specialist assessment.
- Organise follow-up **before** patient leave the department.

*Truvada & Kaletra should be substituted if patient is pregnant. In the case of a known HIV-positive source, the case should be discussed with the ID SpR or consultant.*

*See **Complete Guidelines for Post-Exposure Prophylaxis** for Hepatitis B PEP protocol*
Assessment for HIV PEP following Sexual Exposures
(only for patients presenting within 72 hrs of exposure)

Step 1: Assess risk of exposure

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Source known HIV+</th>
<th>Source high risk for HIV+</th>
<th>Source low risk for HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptive anal sex</td>
<td>Recommended</td>
<td>Considered</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Insertive anal sex</td>
<td>Recommended</td>
<td>Considered</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Receptive vaginal sex</td>
<td>Recommended</td>
<td>Considered</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Insertive vaginal sex</td>
<td>Recommended</td>
<td>Considered</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Oral sex with ejaculation</td>
<td>Considered</td>
<td>Considered</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Semen splash to eye</td>
<td>Considered</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Oral sex without ejaculation</td>
<td>Not recommended</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
</tbody>
</table>

DECISION TABLE FOR HIV PEPSE

<table>
<thead>
<tr>
<th>PEP for HIV Sexual Exposures</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Box Exposure</td>
<td>Truvada + Raltegravir (Truvada + Kaletra)</td>
</tr>
<tr>
<td>Yellow Box Exposure</td>
<td>Consider PEP (as above)</td>
</tr>
</tbody>
</table>

DON’T FORGET!
- Take baseline bloods: FBC, U/E, LFTs, HIV screen, Hepatitis C Ab, Hepatitis B sAg, cAb and sAb
- Consider if Hepatitis B PEP or emergency contraception is indicated
- Advise against unprotected sexual intercourse until specialist assessment
- Organise follow-up before patient leaves the department
PEP for HEPATITIS B VIRUS

Potential HBV exposure

Immunisation Status
Has the exposed patient been successfully immunised against Hep B (Hep B sAb > 10 iu/ml)?

YES

No further action required regarding Hep B risk

NO

Stat dose of hepatitis B vaccine

Source person known / available

NO

Complete Hepatitis B vaccination course

YES

Hepatitis B status of source known

NO

Request urgent testing of source

Is source Hep B s Ag?

YES

Hepatitis B Immunoglobulin and hepatitis B vaccination

NO

Routine Hepatitis B vaccination
PEP FOR HEPATITIS B VIRUS

- The vaccine is relatively safe, including in pregnancy—it is unnecessary if the patient has been adequately vaccinated.
- Hepatitis B Immunoglobulin (Hepatect) is produced from blood donors, and treated to inactivate virus present. There is a risk of contamination e.g. other unknown viruses, CJD etc.
- Hepatitis B IgG should only be prescribed when the source is known to be HepB sAg positive.
  - The prevalence of Hepatitis B in Ireland is too low to warrant giving Hepatitis B IgG to patients where the source is unknown. The prevalence of Hepatitis B core Ab positivity in blood donors in Ireland is 0.51%, increasing to 6% in prisoner/IVDU populations. However the prevalence of chronic active infection with Hepatitis BsAg positivity is substantially less.

HEPATITIS B VIRUS PRESCRIBING DETAILS

- **Hepatitis Vaccine**
  - Engerix B 1mL IM (deltoid) or HB Vax II 1mL IM (deltoid).
  - Will need 2 further injections to complete the course.

- **Hep. B Immunoglobulin (HBIG)**
  - Hepatect CP (0.16-0.20mL/kg)
  - Infuse IV at rate of 0.1mL/kg/hr for 10 minutes.
  - If well tolerated, gradually increase to a max of 1mL/kg/hr.

PEP FOR HEPATITIS C VIRUS

PEP for hepatitis C virus is not available. Regular monitoring in follow up period could show seroconversion. In this case early referral to ID/hepatology is warranted for consideration of early treatment. The estimated risk of transmission in healthcare workers exposed to HCV-infected blood is 1-3%.
DISCHARGE AND FOLLOW-UP OF PATIENTS PRESENTING TO CUH ED FOR PEP or PEPSE

Outside of normal working hours this protocol should be used to assess the need for a PEP starter pack which should be dispensed and administered to patient if warranted. Follow-up with Infectious Diseases is extremely important and should be arranged as detailed below prior to the patient leaving the Department. Patients will be seen in the next ID clinic. For staff members following occupational injury, follow-up should be organised with Occupational Health.

To arrange follow-up with ID prior to patient’s discharge from ED:

- Call the phone of the ID CNS (087 6996272) and leave voice-mail with patient’s name, MRN, and brief case details, stating that patient should be booked into next clinic.
- Send overview referral letter to ID secretary via FAX (021-4921343) or delivering the letter in person to the ID office (not to rely on internal post)
- Patients should be given the contact details of the ID CNS (087 6996272) as a direct contact person in the ID department and should be advised to call them during working hours for counselling issues or questions due to medications/side effects.
- Print Patient Information Leaflet (Appendix 2) and provide to patient.
APPENDIX 1: PEP and PEPSE Proforma; Referral document if HIV PEP used

Fax to 021-4921343 or personally deliver to ID office

Affix patient addressograph here:  

DATE of referral:  

HANDWRITE patient phone number:

Dear Dr Jackson / Prof Horgan,

PLEASE SEE THIS PATIENT IN THE NEXT ID CLINIC.

Exposure type/description:

Date and time of exposure:

Hours since exposure:

SIGNED:  

Print name:  

Contact details:

<table>
<thead>
<tr>
<th>Status of SOURCE person (if known):</th>
<th>HIV status:</th>
<th>Known or perceived risks/concerns relating to source patient:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hep B status:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hep C status:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PEP management:</th>
<th>HIV:</th>
<th>Hep B:</th>
<th>Other:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Checklist</th>
<th>Baseline tests:</th>
<th>HIV, HepBsAg, HepBcAb, Hep C Abb</th>
<th>✗</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FBC, U+E, LFT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pregnancy test if female</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Syphilis if risk involved is a sexual exposure</td>
<td></td>
</tr>
</tbody>
</table>

Tetanus policy followed  
Hepatitis B vaccination (unless immune)  
Has protocol for hepatitis B and HIV PEP been followed?  
Advice given to use condoms for the window period  
Emergency contraception if indicated  
Called ID CNS (087 6996272) to leave voicemail  
Patient informed regarding clinic appointment within week  
Patient given phone number/contact details of ID specialist nurse  
Information leaflet given to patient  

Relevant medical history and/or any other comments:
APPENDIX 2. PATIENT INFORMATION LEAFLET if HIV PEP USED

Introduction
This leaflet has been written to give you some basic information about Post Exposure Prophylaxis (PEP) for HIV.

What is HIV?
Human Immunodeficiency Virus (HIV) is a virus that attacks the immune system. Although it is a treatable infection, once infected you have the infection for life. It can be passed on by exposure to infected blood or other infected body fluids e.g. semen. We test for HIV by doing a blood test.

If I have been exposed to HIV, what is the chance that I will become infected with HIV?
This is very difficult to answer and depends on:
1) the type of exposure
2) the chance the source/person is HIV positive.
Overall the risk of infection is low, but certain exposures may carry a higher risk of infection. Even if you have had definite exposure to HIV, this does NOT mean that you will definitely get infected. e.g. the risk of HIV transmission following a needle stick injury from a known HIV positive person is approximated at about 3 infections per 1000 people exposed. PEP further reduces this risk.

What is Post Exposure Prophylaxis (PEP)?
PEP is the term we use for taking “anti- HIV” medication to reduce your chances of becoming infected with HIV. It is only useful in certain circumstances. It has been shown to prevent most (but not all) people becoming infected with HIV. The tablets work best if taken immediately after the exposure. There is no strong evidence for its use beyond 72 hours post exposure.

What does PEP treatment involve?
Your doctor will decide what “anti HIV” tablets you should take and will give you clear instructions on how to take them. You may be seen directly by a specialist who will explain this to you. Or you may be issued a “7 day starter pack” from the Emergency Department containing enough PEP until you are seen by a specialist. You should NOT run out of medication. Usually PEP is taken for a 28 day course and then stopped. During this time you will be seen for regular blood tests to check for side effects. Once you have finished your PEP you will get further appointments for follow up blood tests to check for HIV and other blood borne infections.
Part of the assessment and follow up care is to offer protection against Hepatitis B, and advice regarding Hepatitis C and general sexual health.
**What happens if I am Pregnant?**
You can still take PEP if you are pregnant, but you must tell the Doctor if you are pregnant or think you are pregnant, as the HIV drugs that you are offered may be different.

**What if I am taking other medication?**
There is a possibility that other medication may affect or be affected by PEP. It is very important to tell the Doctor if you are taking other medication (including “over the counter” and “herbal” medicines). They will check if these are ok to take with PEP.

**Side effects of PEP medication**
- Fatigue
- Nausea/vomiting
- Diarrhoea
- Feeling bloated
- Abdominal cramps
- Difficulty sleeping
- Abnormal liver blood tests
- Abnormal kidney blood tests
- Skin rash

*Please note*
This is only a brief account of the side effects and refer to the medication package for further specific information.

If you suffer from any of these side effects you should tell the doctor who might be able to offer treatment to help.

**What do I do if I miss a dose?**
Take the missed dose immediately, and then take the next dose at the normal time. If you don’t remember until the next dose is almost due don’t take extra doses, just carry on as normal.

**Who will look after me whilst I am taking PEP?**
Once you have started taking PEP you will be seen either by your Occupational Health Department or local HIV specialist. They will monitor you while you are taking PEP, arrange your blood tests, and offer support. The service, including medication, is free of charge.