

UCLH PEP STARTER PACK INSERT

Advice about the use of Antivirals (post exposure prophylaxis)

after possible exposure to HIV infection

This should be read if you have had an injury involving blood or unprotected sexual intercourse with someone KNOWN TO BE HIV INFECTED or HIGH RISK out of hours, and are contemplating taking antivirals to protect yourself against catching HIV infection. During office hours, you can contact a HIV physician at the Mortimer Market Centre (via the Bloomsbury clinic 020 7530 5070) to advise.

If you have had an accident with blood or body secretions from a patient or unprotected intercourse with someone who is KNOWN or HIGHLY LIKELY to be infected with human immunodeficiency virus (HIV), then you are advised to start taking antivirals as soon as possible after the exposure. However, if the individual is not definitely known to be HIV infected, you should discuss the advisability of taking the drugs with someone on the list below.

If you have had an occupational exposure then, by the time you read this, you should have:

1. Cleaned the wound thoroughly
2. Reported to your immediate local senior person
3. Reported to A&E in person

The reason for your taking the drugs is to reduce the risk of getting infected with HIV from this exposure. Therefore you have to make a decision based on the risks of getting the infection versus the risks of side effects. There are just 5 days-worth of antivirals in this starter pack and you will need to come to the Mortimer Market Centre in order to get the tablets for the full 28 day course. We will be able to advise you in more detail about taking the full course in a proper counselling session at the Mortimer Market Centre when you attend. (If you have had an occupational exposure to a high-risk patient who subsequently tests HIV negative, then you will be able to discontinue the drugs as soon as that result is known.)

If you are pregnant or think that you may be pregnant, do NOT take these drugs. Contact a Consultant in HIV during office hours or at other times ring one of the contacts below.

YOU MUST NOW BALANCE THE POSSIBLE BENEFIT AGAINST THE RISKS OF TAKING THE DRUGS.

A. THE RISKS OF BECOMING INFECTED WITH HIV ARE LOW

1. Five health care workers are known to have acquired HIV after occupational exposure in the UK. The most recent reported case occurred in 1999. A further 14 might have done so but at least 11 of these probably became infected whilst working in Africa.
2. The overall risk of infection after percutaneous exposure (such as injury with a needle contaminated with infected blood) to HIV is about 1:300. For contact with mucosae, the risk is probably 1:1000 and you probably cannot catch the infection through intact skin.
3. The risk of infection after unprotected sex with someone known to be HIV positive varies from 3:100 to less than 1:1000 depending upon the type of sex.
4. The risk of infection depends on the nature of the exposure. If a significant amount of blood has been inoculated, the risk is higher. Thus, the risk from a hollow needle would be greater than from a solid needle.
5. Theoretically, the risk of infection is greatest from blood or bodily fluids containing large amounts of virus. The amount of virus is likely to be higher in someone during the early seroconversion illness or someone with AIDS. Conversely, the amount of virus is likely to be lower in someone who is taking prescribed antiviral drugs.

B THE ANTIVIRAL DRUGS

Several drugs decrease the amount of virus in the blood of people infected with HIV and increase their survival. The first effective drug used was zidovudine (AZT). Comparing those who had taken AZT after an injury with HIV infected blood, with those who had not, suggested that the drug probably did reduce the risk of infection. However, this study was not very good and it is difficult to be totally confident that the results are correct. People infected with HIV now take more than one drug and we therefore recommend a combination of three drugs following possible exposure to HIV infection: Stavudine (d4T), Lamivudine (3TC) and Nelfinavir. There is no proof that three drugs are better than one in preventing infection after this sort of exposure. However, we think that it is worth taking the three and later reviewing the circumstances of the accident with a professional advisor. Note that these drugs are licensed for treatment of HIV positive people but not for prevention of infection after exposure.



WHAT ARE THE ADVANTAGES OF TAKING ANTIVIRALS?

1. These drugs inhibit the growth of HIV in the laboratory.
2. Those who took AZT after an injury with HIV infected blood had a reduced risk of getting infected compared with those who did not take it.
3. In some animal models using very high doses of virus, AZT given early did reduce virus multiplication, and in two studies actually prevented infection (but it is not known how relevant animal experiments are to human infection).
4. Similarly another antiviral drug, Tenofovir, prevented infection in some animals following a vaginal exposure.
5. Immediate combination therapy with three drugs after needlestick accidents or sexual exposure is now recommended as standard in most centres caring for individuals with HIV in the UK, USA and Canada.

WHAT ARE THE DISADVANTAGES OF TAKING ANTIVIRALS?

1. These drugs do have side effects. The combination of the three drugs in this pack has been selected because they are easy to take and have relatively few side effects.

Stavudine main side effect is tingling in the hands and feet (peripheral neuropathy). However, in trials this was more likely to occur in patients with advanced HIV disease than in patients who were well, and most commonly it occurred after they had been taking the drug for 24 weeks.

Lamivudine asionally it may reduce the number of white cells in the blood, these are the cells the body uses to fight infection. It may also cause stomach ache.

Nelfinavir main side effect is diarrhoea. In trials this was reported in 25% of patients taking Nelfinavir. If this is severe, it may be possible to control the symptoms with an anti-diarrhoeal agent such as loperamide. Some people have also developed a rash.

2. The long-term side effects of taking these drugs are not known.
3. These drugs can interact with certain other medicines that you might be taking. Ensure that you ask about interactions before taking these drugs.
4. The effects of these drugs on a developing foetus are not known. Pregnant women will be offered a slightly different regimen but should contact an advisor before taking any drugs. The HIV physician will counsel during office hours.
5. Taking these antivirals does not guarantee that you will not become infected with HIV.
6. If you already have HIV infection, taking these drugs would be unnecessary and would have the potential for resistant virus to develop

UCLH PEP PRESCRIPTION PROCEDURE FOR A&E

1. Give the starter pack insert to the sharps injury/mucosal splash recipient⁴¹ to read

2. Confirm no contraindications to PEP

Exposure occurred less than 72 hours ago

No significant concern that the individual already has HIV infection (e.g. multiple previous high risk episodes with no recent negative HIV test, or stigmata of chronic HIV infection)

No significant concern that s/he may be having an HIV seroconversion illness (i.e. flu like illness with rash)

Not pregnant

If individual IS pregnant contact Mortimer Market SpR (Replace D4T with AZT)

Individual agrees to baseline HIV testing

Individual agrees to go to Mortimer Market Centre for follow-up

3. Check for possibility of drug interaction(s)

Any regular drugs?: No Yes

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 BNF checked and/or pharmacy consulted. Any potential interaction discussed

4. Prescribe the **antiviral** drugs

Observe that first dose of each of the three drugs is taken

5. Take pre-PEP bloods

Do FBC, U&E, LFTs, glucose and lipids

Send EDTA blood sample to Virology requesting "HIV test and save" with clinical details "Pre-PEP, post NSI" or Pre-PEP, post SE" (sexual exposure) as appropriate. There is no need to send any additional sample for "serum save". If individual is a member of UCLH staff, write "Staff" instead of any hospital number to ensure confidentiality (printed report will go to Occupational Health and no record of the investigation will appear in the hospital patients' results system, CDR)

6. Check follow-up arrangements are understood

Individual must phone Mortimer Market Centre on 020 7530 5070 or 5071 for follow-up care and to obtain blood results.

7. Consider need for hepatitis B booster/immunisation

If individual is attending A&E after sexual exposure, use cas card for documentation.

If individual is UCLH staff attending A&E after an occupational exposure, complete actions B6-11 of the A&E NSI management guidance

8. Sign _____ and _____ date: _____

9. Photocopy this page

Give the copy to the exposure recipient to take with them when they attend Mortimer Market Centre, and put the original into the pocket of the A&E card.



If the individual is seeking HIV PEP following a sexual exposure rather than occupational sharps injury/mucosal splash exposure, the following guidance (based on draft BASHH guidelines April 2004) may be helpful.

Source	HIV+	Unknown HIV status
Receptive Anal Sex	Recommended	Recommended (homosexual, or high prevalent area)
Insertive Anal Sex	Recommended	Not recommended
Receptive Vaginal Sex	Recommended	Not recommended
Insertive Vaginal Sex	Recommended	Not recommended
Fellatio with ejaculation	Not recommended	Not recommended
Splash of semen into eye	Not recommended	Not recommended
Fellatio without ejaculation	Not recommended	Not recommended
Cunnilingus	Not recommended	Not recommended