HIV and AIDS

VERSION No	2
REVIEWED BY	Clinical Lead (RQ)
NUMBER OF PAGES	6

Introduction

Everyone has the right to be cared for as an individual, regardless of their age, sexuality, race, disability or HIV status. This policy is to protect workers when caring for any individuals who are carrying ***the Human Immunodeficiency Virus (HIV)****.*

For many years healthcare workers in various countries have become infected with HIV as a result of their work. The main cause of HIV infection in occupational settings is via percutaneous (i.e. needle stick) injury resulting in exposure to HIV-infected blood. Research suggests that infection is rare after a needle stick injury, with a rate of about 3 per 1000 injuries. Although the risk of infection after a needle stick injury is rare, this is still understandably an area of considerable concern for many healthcare workers.

Surveillance on healthcare workers in the UK who have been exposed to blood-borne viruses has been carried out since 1984. By the end of June 2000, the PHLS Communicable Disease Surveillance Centre had received 827 reports of exposures to material from patients with antibody to HIV, Hepatitis C or Hepatitis B. 242 of the healthcare workers were exposed to HIV. Out of the total 827 exposures, 337 were nurses and 262 were doctors; these two groups remain the most frequently exposed.

If percutaneous exposure occurs, bleeding should be encouraged by pressing around the site of the injury (but taking care not to press immediately on the injury site). This is best performed under running water.

There are a small number of instances when HIV has been acquired through contact with non-intact skin or mucous membranes. Research suggests that the risk of HIV infection after mucous membrane exposure, i.e. splashes of infected blood in the eye, is much less than 1 in 1000. If this type of exposure occurs, wash the affected area thoroughly with soap and water. If the eye is affected, irrigate thoroughly.

If intact skin is exposed to HIV-infected blood then there is no risk of HIV transmission.
Treatment with anti-HIV drugs as soon as possible after an exposure should occur in order to reduce the risk of infection. This is referred to as Post Exposure Prophylaxis (PEP). PEP should commence within 24–36 hours of injury and preferably within a few hours of exposure. If exposure occurs whilst at work then the worker must inform the manager immediately and will be released from duty to visit their GP and commence PEP. In the UK, the Department of Health guidelines for PEP are that most needle stick injuries should be treated with the drug Lamivudine (3TC, Epivir) for four weeks.

Procedure

1. **Standard Infection Control Procedures (SICPs):** Standard infection control precautions (SICPs) should be used by all workers and at all times when dealing with every individual,

not just those who are HIV positive. If these precautions are always adhered to then care workers do not have to make assumptions about people's lifestyles and risk of infection. Care workers should have the right to be able to protect themselves against infection, whatever its nature. The following SICPs are advised to help protect care workers from blood-borne infections including HIV:

- Gloves should always be worn when handling blood and other body fluids
- Cuts or abrasions should be covered with a waterproof plaster
- Blood spills should be mopped up using gloves and paper towels and the area washed with either detergent or a chlorine solution made from NaDCC (Sodium dichloroiscyanurate) tablets. For large spillages NaDCC granules should be available. An alternative is to use a 1% solution of Sodium hypochlorite
- Spill kits containing the above items may also be available for use in the community. In instances where NaDCC tablets are not available, diluted household bleach should be used instead
- All incontinence pads should be double wrapped in polythene bags and put in yellow bags for incineration. Hands should be washed before and after changing pads, and disposable gloves should be used
- All linen with blood on it should be washed on a hot cycle of at least 70□C. If a machine is not available contact should be made with the infection control department through the care manager.

If there are still concerns with regards to this policy then contact the manager or deputy who will put you in contact with the infection control nurse.

(Sources: Public Health Service, Centres for Disease Control and Prevention, National Centre for HIV, STD and TB Prevention, HIV / AIDS Surveillance report.)

The following notes are designed to answer any questions from staff working with individuals who may have been infected with HIV. (It should also be noted that staff who care for individuals with HIV or AIDS over a long period of time may themselves require support in terms of emotional or psychological counselling.)

2. **Hazardous Bodily Fluids*:*** Staff members should not try to guess which individuals are infected with HIV; all individuals must be regarded as possibly being HIV positive. Body fluids should be seen as a potential hazard and dealt with accordingly, including:
   - blood
   - semen
   - vaginal secretions
   - saliva
   - tears
   - urine
   - breast milk
   - vomit
   - cerebrospinal and amniotic fluids

   However, it should be noted that of these only blood, blood products, semen, vaginal secretions, donor organs and breast milk have been shown to transmit infection

3. **Transmission of HIV and Occurrence of Infection***:* HIV is not easily transmitted from person to person and the virus is not caught in the same way as diseases like chicken pox or 'flu'. It can be transmitted through:
   - Shared use of syringes and needles
   - Blood transfusions and other blood products

- Unprotected penetrative sex, especially anal and vaginal intercourse
- Breast feeding between mother and baby.

Although anyone could theoretically become infected with HIV, some people are more at risk than others; however, the risk of AIDS depends upon the actions performed rather than the character of a person. The most common groups of people with HIV infections are men who have sex with men (MSM), haemophiliacs who have received blood products, and people who have received blood transfusions. Whilst it is true that the virus can be found in the saliva of an infected person, there are no reported cases of anyone becoming infected from kissing alone.

Many people are unsure whether they could become infected with HIV from, for instance, using a cup or sharing a toilet with a person infected with HIV; even if people know that the virus cannot be transmitted in these ways, they may still worry about being near an infected person "just in case". However, worry about day-to-day contact with people with HIV infections is unnecessary; HIV infections cannot be caught by touching an infected person, by being near them when they cough or sneeze, by using any object they have used or by sharing the same washing and toilet facilities in the home. The HIV virus is not passed on "on the skin".

4. **Legal Notes*:*** The Health and Safety at Work etc. Act 1974 (HSWA 1974) requires that all employers carry out their activities in such a way as protects the health of themselves, their employees, individuals and visitors as far as is reasonable practicable. The specific rules that govern this area are the Management of Health and Safety at Work Regulations 1999 and the 1994 Control of Substances Hazardous to Health (COSHH) regulations. It is important that employers segregate, store and dispose of clinical waste in an environmentally-safe manner.

Further advice on the disposal of clinical waste in yellow plastic bags can be obtained from the Health and Safety Executive (HSE).

Employers are obliged to protect their staff against biological hazards at work; HIV has been designated as a class-three hazard because it can cause serious human disease or death, is capable of transmission to the general population and is a hazard for which effective protection or treatment designed to prevent the disease is available. To this end, employers have to assess the risk and hazard posed by such biological agents to employees and produce a list of technical prevention measures. This assessment should include:

- The hazard posed by the biological agents
- The nature, degree and duration of workers' exposure to biological agents
- The strategy needed to protect staff, in line with risk assessment.

Typical issues addressed in the risk assessments are:

- Do staff members have regular physical contact with blood or hazardous body fluids in the course of their duties at work?
- Are staff members likely to come in to physical contact with blood or hazardous body fluids in the course of their duties at work?
- Have staff members been involved in any potentially-hazardous incidents involving blood or hazardous body fluids?

5. **HIV and AIDS Hazards*:*** The following policy notes are designed to protect and inform all staff, individuals, relatives and other visitors about the risks associated with AIDS and HIV hazards. It is important that all staff know about these conditions, as their jobs may involve working with and helping people who have been exposed to the HIV infection.

6. **What are HIV and AIDS?*:*** Acquired immunodeficiency syndrome (AIDS) is a condition in which the body's defence system against disease is lost. Persons with AIDS develop many different kinds of diseases that the body would usually cope with. There is no cure for AIDS, although a number of drugs are used to either slow down the progression of the disease or alleviate some of the symptoms caused by opportunistic infections (see below).

AIDS is caused by the human immunodeficiency virus (HIV). HIV is an unusual virus, because a person can be infected with it for several years and yet remain perfectly healthy. The virus grows gradually within the body, killing the white blood cells that are part of the immune system until the body's ability to fight off other illnesses is destroyed. Once the body's immune system has been undermined severely by HIV, opportunistic infections may develop and become life threatening; such infections may affect many parts of the human body.

7. **Clinical Symptoms of HIV Infection and AIDS*:*** Once inside a person's body HIV begins to multiply in the blood. Substances called antibodies are produced by the body to try to destroy the virus. At first the antibodies do reduce the amount of virus in the body, but they cannot remove it completely because the virus can hide itself inside cells in the blood. Around the time that antibodies are produced, some people may experience a flu-like illness (e.g. fever, headache and tiredness) that disappears after a week or so. After this initial minor illness there is often a period of several years during which the infected person appears and feels well. During this time, the virus continues to attack the immune system until it is weakened seriously and obvious health problems begin to develop.

   Tests are available that can detect the presence of antibodies to HIV in a person's blood. A positive test result indicates that HIV antibodies are present and that the person is infected with the virus.
   AIDS can be diagnosed by the presence of one or more specific diseases in a person in the absence of any other known cause of immunodeficiency. Diagnosis is confirmed by a positive HIV test. If the test is negative or inconclusive then the identification of an opportunistic infection (coupled with unexplained immunodeficiency) is still indicative of AIDS. The list below shows the most common opportunistic infections:

   - Pneumocystis Pneumonia (PCP): Present in the lungs of most people this organism does no harm unless their immune system is compromised. If this is the case then the PCP organism multiplies and causes pneumonia. The symptoms are a dry cough, breathlessness and fever, but many people with PCP will recover with treatment, although they remain at risk from a recurrence
   - Candidiasis (or commonly 'thrush' when affecting the mouth): oral thrush is less serious than thrush that affects the gullet, causing discomfort when eating or swallowing
   - Cryptosporidiosis: an organism that causes severe bouts of watery diarrhoea and which is very resistant to treatment
   - Genital herpes: causes severe ulceration of the anal area
   - Subacute encephalitis: a neurological disorder that causes gradual loss of intellectual function leading to dementia
   - Spinal cord and peripheral nerve infection: characterised by weakness of the legs and abnormalities of sensation
   - Cryptococcus: this fungus may cause meningitis, resulting in persistent headaches, fever and an acute sensitivity to light
   - Cerebral toxoplasmosis (CT): can cause fits, headaches, drowsiness and weakness of limbs
   - Cytomegalovirus (CMV): can cause ulcerations of the gastro-intestinal tract or inflammation of the retina; the latter condition may lead to impairment of vision or blindness
   - Herpes simplex: normally a dormant virus but in AIDS patients the virus may be reactivated resulting in severe facial lesions
   - Kaposi's sarcoma: a rare form of skin cancer and the most common tumour to affect those with AIDS. It usually starts in the form of small, painless purple marks on the skin surface, but these marks tend to increase in size and spread to internal organs. The condition can start as ulcerated lesions in the gastro-intestinal tract that bleed and lead to anaemia; it can also spread to the brain and lungs.

The key symptoms of HIV infection fall into four categories:

a) When a person's immune system begins to produce HIV antibodies the person is said to have 'seroconverted' and to be 'seropositive' (or 'antibody positive'). Many people who are antibody positive remain well and free from symptoms

b) An illness may occur at the time of seroconversion and take the form of a glandular fever. This illness usually receded within a few weeks, but symptoms include

- A rise in temperature
- Swelling of the lymph glands
- A sore throat
- A rash
- Aching muscles and joints

c) When people have been antibody positive for months or years they may develop persistent generalised lymphadenopathy (PLG); this involves generalised swelling of the lymph glands, especially in the arm pits or at the back of the neck. For PLG to be diagnosed, a strict medical criteria has to be met, which is that the swelling

- Is unexplained
- Is persistent (for at least 3 months)
- Evident in two different areas of the body, excluding the groin
- Causes at least one gland to be of size greater than 1cm in diameter.

d) People with or without PLG who are antibody positive may develop other symptoms of HIV infection. This development is called AIDS-related complex (ARC) and the following symptoms may be evident:

- Fever and night sweats, lasting for more than one month
- Unexplained weight loss of more than 10% of body weight
- Darrhoea, lasting for more than one month
- Swollen lymph glands
- Thick white patches on tongue, gum or cheeks (known as oral leucoplakia)
- Oral thrush (candidiasis)
- Profound and long-lasting fatigue
- Infection in the hair follicles (follicilitis)
- Dry skin (xeroderma)
- Shingles
- Redness or scaling around the eyebrows, nose, moustache, trunk and limbs (sebhoerric dermatitis).

8. **Discriminatory Attitudes*:*** Under the equal opportunities, equality and diversity or harassment policies of the organisation, discriminatory attitudes towards those who have HIV infections or AIDS (whether staff members, individuals, or their relatives or friends) will not be tolerated. Any staff member who exhibits such attitudes will be dealt with under the organisation's Disciplinary Procedure. 'Discriminatory attitudes' includes verbal abuse or sarcasm, discriminatory treatment, hostile workplace pressure or physical abuse.

9. **Recruitment*:*** This organisation will take all reasonable precautions to ensure that no discrimination will occur against any applicant for employment on the grounds that the applicant may have HIV infections or AIDS. We will only appoint an applicant after determining their medical fitness to perform the job. No applicant will be required to take an HIV test and neither will an applicant be asked to disclose whether they are HIV positive.

10. **Time off Work*:*** The policy on reasonable time off work to attend medical or hospital appointments will apply equally to staff members with HIV infections or AIDS. In addition, staff who care for relatives with AIDS or HIV infections may apply for reasonable time off

work. Staff members with AIDS or HIV infections who become ill will be treated under the organisation's Sickness Policy.

11. **Employee Responsibilities*:*** A staff member who becomes aware that they are HIV positive or that AIDS has developed should take personal responsibility to ensure that their actions do not result in the spread of infection to individuals, individuals' families or friends, or colleagues. The staff member in these circumstances is not required to notify the manager; however, if a staff member does decide to notify them then strict confidentiality will be maintained and respected, unless the manager receives written consent for disclosure. A staff member will only be transferred from normal duties if assessed as being medically unfit to perform these duties.

Further Guidance

Information or support can be accessed from the Infection Control Nurse, Public Health Service, Centres for Disease Control and Prevention, National Centre for HIV, STD and TB Prevention, HIV / AIDS Surveillance report