

AIDS /HIV and Hepatitis B ,C and D (Blood-borne Viruses)('BBVs')

(See also: [Skin Piercing](#)(76))

INTRODUCTION

BBVs are viruses that some people carry in their blood and which may cause severe disease in certain people and few or no symptoms in others. The virus can still spread to another person, whether or not the infected person has symptoms.

HIV/ AIDS

HIV stands for human immunodeficiency virus. Several weeks after infection with the virus, antibodies are produced but they are ineffective and do not destroy the virus. It is these antibodies that are detected by blood tests and, if they are found, a person is said to be 'HIV positive'. People with HIV usually have no symptoms for a prolonged period of time, while the virus acts slowly to weaken the body's immune system.

HIV particularly attacks the type of white blood cell called CD4 cells. When the CD4 count is very low the body's immune system is very weak.

AIDS stands for acquired immunodeficiency syndrome. When a person's immune system has been broken down he or she is susceptible to other illnesses, especially infections (eg. tuberculosis and pneumonia) and cancers, many of which are not normally a threat to a healthy person. At that severe stage of infection the person is often diagnosed as having AIDS.

Usually the cause of illness and eventual death in a person with HIV is not the virus itself, but illnesses to which the virus has made the person vulnerable. People with HIV infection will almost certainly die prematurely.

Recent advances in treatment by combination anti-retroviral therapy (sometimes called Highly Active Anti-Retroviral Therapy or HAART) have enormously improved survival rates in countries which can afford these drugs and have the infrastructure to deliver them safely and effectively.

HEPATITIS B,C and D

Hepatitis is the Latin word for liver inflammation. Hepatitis B,C and D are caused by a virus which causes an acute inflammation of the liver and can lead eventually to chronic illness.

Not all those with acute hepatitis have symptoms. Depending on type, a certain number will go on to develop chronic infection but

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even then many may experience mild symptoms only or no symptoms at all and may remain unaware of their infection. 15-20 years after infection, patients may develop cirrhosis which can lead to liver failure (currently 1 in 300) and other serious complications.

The consequences of contracting any of these infections is therefore extremely serious and ultimately could be life threatening.

A vaccine which is very effective against type B Hepatitis is available but should be regarded as a supplement to other control measures.

Unfortunately, there is no vaccine to prevent other BBV infection.

METHODS OF SPREAD

HIV , Hepatitis B, C and D are passed on:

- (i) By unprotected penetrative sexual intercourse with an infected person (between men or between men and women) (this risk for Hepatitis C is very small)
- (ii) By the introduction of infected blood or body fluids into the bloodstream of an uninfected person eg, by sharing needles, needle stick injuries, broken glass.
- (iii) From an infected mother to her baby, normally before or during birth or via breast-feeding (rare in case of Hepatitis C).
- (iv) Through contact with blood (or, in very rare cases, other body fluids) through open wounds, skin abrasions, skin damaged due to conditions such as eczema or through splashes to the eyes, nose and mouth. This might occur when mopping up by hand a spillage of blood or other body fluids.
- (v) Possibly transmission may occur through sharing of toothbrushes or razors, if contaminated with blood.

Type B hepatitis is highly infectious, much more so than HIV.

There is no evidence that the above can be spread in swimming pools, by sharing public transport, or from insect bites or by daily workplace activities, such as sitting next to someone, shaking hands or working with others.

HIV is NOT TRANSMITTED through intact skin or by normal domestic contact, eg holding hands, kissing, cuddling, coughing or sneezing, sharing bathrooms and toilets, crockery or kitchen utensils.

Urine, faeces, saliva, sputum (spit), tears, sweat and vomit carry a minimal risk of BBV infection, unless they are contaminated with blood.

Care should always be taken as the presence of blood is not obvious. HIV can remain infectious in dried blood and liquid blood for several weeks and Hepatitis B for even longer.

HIV/HEPATITIS B AND THE WORKPLACE

Many people are concerned that they may be at risk of catching these diseases from colleagues at work. In the vast majority of occupations, work does not involve any risk of acquiring or transmitting BBVs from one employee to another. Current medical opinion indicates that the risk of becoming infected in virtually all occupations is very low. Everyday normal, social and work contact is perfectly safe. Employers should review working methods to see whether there is such a risk to their employees or the public. Occupations in which a risk may exist lie mainly in the health care services where special guidance has been issued.

Types of work where there may be contact with blood/body fluids:

- ◆ Custodial services (prisons/detention centres/homes)
- ◆ Education
- ◆ Embalming and crematorium work
- ◆ Emergency services
- ◆ First aid
- ◆ Hairdressing and beauticians work
- ◆ Health care (hospitals, clinics, dental surgeries, pathology departments, community nursing, acupuncture, chiropody, associated cleaning services)
- ◆ Laboratory work (forensic, research)
- ◆ Local authority services (street cleaning/park maintenance/refuse disposal/ public lavatory maintenance)
- ◆ Medical/dental equipment repair
- ◆ Military
- ◆ Mortuary work
- ◆ Needle exchange service
- ◆ Plumbing
- ◆ Sewage processing
- ◆ Social service
- ◆ Tattooing, ear and body piercing
- ◆ Vehicle recovery and repair

Specific legislation on hazards that arise from working with biological agents such as BBVs is contained in the Control of Substances Hazardous to Health Regulations 1999 (COSHH). Under COSHH you have a legal duty to assess the risk of infection for employees and others affected by your work.

Prevention/Control Measures:

- ◆ Prohibit eating, drinking, smoking and the application of cosmetics in working areas where there is a risk of contamination

- ◆ Avoid use of or exposure to, sharps such as needles, glass, metal etc, or if unavoidable take care in handling and disposal
- ◆ Consider the use of devices incorporating safety procedures, such as safe needle devices and blunt ended scissors
- ◆ Cover all breaks in skin by waterproof dressings and gloves
- ◆ Protect the eyes and mouth by using a visor/goggles/safety spectacles and a mask, where splashing is possible
- ◆ Use water resistant protective clothing, rubber boots, plastic disposable overshoes
- ◆ Use good basic hygiene practices such as proper handwashing
- ◆ Use of appropriate disinfection/decontamination techniques
- ◆ Safe disposal of contaminated waste- it may be classified as clinical waste and therefore be subject to strict control

The risk to first-aiders

First-aiders in particular are likely to be concerned about the possibility of having to deal with people who may be infected. The best reassurance, to demonstrate the extremely low risk involved, is likely to come from the provision of full and frank information about the infection and how it is transmitted. There have been no reported cases of infection arising from the administration of first aid. Standard hygiene precautions are equally effective against HIV infection. Employers should ensure that first aid training is reviewed and that first-aiders receive up-to-date advice on AIDS. Further advice for first-aiders may be obtained from HSE and ACAS.

Provided first-aiders take proper precautions, there should be virtually no risk involved in giving first aid. The only risks arise if infected blood or body fluids enter the body through breaks in the skin or the surfaces of the eyes or mouth. First aid in the workplace should only be carried out by trained first-aiders who have been instructed about standard precautions to prevent infection.

Precautions to be taken in giving first aid include:

- (i) Before attempting to deal with an open wound or where blood is present persons should:
 - Wash their hands before carrying out first aid treatment and always wash them afterwards.
 - Always cover their own cuts and abrasions with a waterproof dressing. If they have a skin condition, such as eczema, psoriasis or chapped hands, then disposable gloves should be worn.
 - Use suitable eye protection and disposable plastic aprons if splashing is possible.

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- (ii) Mouth-to-mouth resuscitation has never resulted in a case of HIV infection. Polythene shields ("resuscitades") are available through many first aid equipment suppliers. These devices can be placed over the face of the patient to allow for resuscitation without physical contact. These must not be used unless employees have been specifically trained in their use. The absence of such equipment is no reason to withhold mouth-to-mouth resuscitation.
- (iii) If a person is bleeding from the mouth, a clean cloth should be used to wipe away any blood. The flow of blood can be stopped by putting pressure on a wound using suitable material, like a clean cloth. Hands and any other part of the body contaminated should be washed with soap and water. (Mucous membranes, such as in the mouth or eyes, should be rinsed with water only.)

Dealing with spillages of body fluids:

- Wear disposable gloves if possible.
- Use absorbent paper towels to cover the spillage.
- Pour diluted bleach (1 part bleach to 10 parts water) on to the paper towels and leave it for at least 2 minutes before wiping up. Where it is not appropriate to use bleach (for instance to disinfect a small spill on a carpet or clothing), hot soapy water is a reasonable alternative.
- Waste disposal: small soiled items such as tissues and tampons can be flushed down the toilet. Larger items soiled with material which may be infected should be sealed securely in plastic bags and disposed of as clinical waste.
- Disposable gloves should be washed with soap and hot water to remove all traces of blood before they are removed and then disposed of. The hands should then be washed again.
- Clothing or linen soiled with blood or body fluids can be washed in the washing machine on a hot cycle.

'Sharps' injuries:

- Certain situations (e.g, accidents involving broken glass or needles) may present a risk of puncture wounds from 'sharps', which may be contaminated with body fluids. Used needles and other sharps should be placed in a proper sharps container. Stout gloves must always be used when handling sharps.
- If there is an accident with a 'sharp', the wound should be encouraged to bleed and then washed with soap and running water. Splashes to the eyes and nose should be washed out using tap or eyewash water - do not swallow the water. The matter should be recorded in the accident book and medical advice should be sought.
- If, on investigation of an incident, there are seen to be grounds for suspecting a risk of infection, a medical practitioner should be consulted *without delay*. Any employee who is concerned about potential infection with HIV or

Hepatitis B, can seek counselling from the Department of Genito-Urinary Medicine at George Eliot Hospital. Tel: 024 7686 5162.

Working abroad

AIDS is a worldwide disease. In some countries, blood for transfusions may not be checked for HIV infection or medical equipment may be re-used without being properly sterilised. Employers should ensure that employees who travel abroad are told of the risks involved and in particular should be warned of the high risk of infection through casual sexual encounters. Further information may be obtained from the Department of Health's two free booklets about travel abroad: 'Before You Go' and 'While You're Away'.

Employment Law

If an individual with AIDS or HIV infection is dismissed, then he or she may (with the appropriate qualifying service) be able to claim unfair dismissal at an industrial tribunal.

A person with HIV infection is also covered by the Disability Discrimination Act 1995 when the condition leads to an impairment which has some effect on the ability to carry out normal day-to-day activities. Any such individual who is dismissed or discriminated against, because of a reason relating to their disability, may be able to claim discrimination under the Disability Discrimination Act, without any qualifying period of service. The Act makes it unlawful for an employer with 15 or more employees to treat a disabled person less favourably for a reason relating to their disability, without a justifiable reason. Employers are required to make a reasonable adjustment to working conditions or the workplace where that would help to accommodate a particular disabled person.

An AIDS policy

All organisations are advised to develop a policy on AIDS so that if and when problems arise they can be handled in a considered way. Policies should be developed in conjunction with an education programme and employees and their representatives should be consulted. Many unions have developed their own policies on AIDS and union representatives can often make a valuable contribution to the formulation of company policies. Policies will vary with the nature of the organisation. Hepatitis infection may also be considered similarly.

CHECKLIST - HIV/AIDS & HEPATITIS B

1. Are there any particular occupational risks of BBVs infection in your work activities? YES NO
2. (a) If so, have appropriate working practices and procedures been drawn up? YES NO
(b) Have appropriate staff received adequate information and instruction regarding any such risks? YES NO
3. Have first aid personnel been made aware of suitable precautions to be considered when giving first aid? YES NO
4. Have you considered 'awareness' training or information provision on HIV/AIDS and other BBVs for your employees? YES NO
5. If you carry out certain specified skin piercing, (currently tattooing, ear piercing, acupuncture and electrolysis) have you registered with the local authority? YES NO

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REFERENCES/FURTHER DETAILS

Any employer who feels unable to make an informed assessment of the risks should contact the Employment Medical Advisory Service for advice at the local office of the Health and Safety Executive (tel:01604 738300).

'Blood-borne viruses in the workplace: guidance for employers and employees.' HSE, 2001. (INDG342). Single copies free from HSE Books. www.hse.gov.uk/pubns/indg342.pdf

Also available in packs of 10 on ISBN 71762062X .

This leaflet is aimed at employers, employees and safety representatives in areas of work where exposure to blood or other body fluids may occur. It explains: what blood-borne viruses (BBVs) are; the type of work where exposure to BBVs may occur; how BBVs are spread; the legal duties of employers and employees; what action to take after infection with a BBV and special considerations for first-aiders. It provides a detailed further reading list.

Health Services Advisory Committee
Safe disposal of clinical waste
HSE BOOKS 1999 ISBN 07176 1670 3

Guidance has been produced by the Advisory committee on Dangerous Pathogens group, entitled 'Protection against blood-borne infections in the workplace: HIV and hepatitis' which provides information for employers to incorporate into local rules. This guidance is available from The Stationery Office or some bookshops (ISBN 0 11 321953 9).

If you want more information on AIDS or would like to talk to a trained advisor, you can call the National AIDS Helpline on 0800 567 123. Calls are free, confidential and available 24 hours a day, seven days a week.

Phonelines in languages other than English are:

Punjabi, Bengali, Hindi, Urdu, Gujarati
0800 282 445 Wednesday 6.00pm - 10.00pm

Cantonese 0800 282 446 Tuesday 6.00pm - 10.00pm

Arabic 0800 282 447 Wednesday 6.00pm - 10.00pm

Minicom service for people with hearing difficulties
0800 521 361 10.00am - 10.00pm, seven days a week.

National AIDS Helpline
Tel: 0800 567123 – for literature or personal and confidential advice

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Sexually Transmitted Disease (STD clinic)
Special Clinic or Genito Urinary Clinic (GU clinic) Addresses and
telephone numbers are listed in local phone books under VD
(Venereal disease)

Terrence Higgins Trust BM/AIDS
Terrance Higgins Trust/Lighthouse
52-54 Gray's Inn Road, London WC1X 8JU
Helpline Tel: 020 7242 1010

www.tht.org.uk

Email: info@tht.org.uk

National AIDS Trust
New City Cloisters, 188-196 Old Street, London EC1V 9FR
Tel: 020 7814 6767
Fax: 020 7216 0111
www.nat.org.uk

Department of Health web-site: www.doh.gov.uk

- *1. Leaflet - 'The facts about HIV and AIDS' (Health Education Authority)
- 2. AIDS: guidelines for acupuncturists)
- 3. AIDS: guidelines for ear piercers)
- 4. AIDS: guidelines for electrolysis) **Department of**
- 5. AIDS: guidelines for hairdressers) **Health Monographs**
- and barbers) Free copies available
-) by telephoning 0800
-) 555777 (24 hours)
- *6. AIDS: guidelines for tattooists)
- *7. HSE Local Government and Entertainment Services NIG
Information Sheet No. 1: Needlestick injuries.

* Available to view by prior arrangement at Nuneaton and Bedworth
Borough Council, Environmental Health Services, Council House, Coton
Road, Nuneaton. CV11 5AA

** Free copy available from Nuneaton and Bedworth Borough Council at
the above address.

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