APPENDIX 3 – SECTOR-SPECIFIC PRACTICAL GUIDANCE

Disclaimer: This Appendix provides an overview and relevant links to Blood Borne Virus-related guidance, covering a variety of work place activities. An active approach has been taken within this document to develop links to other specialist sites that serve specific work sectors. In selecting these sites, every effort has been made to ensure that their content is relevant, up to date and useful. However, the ACDP is not responsible for the accuracy of material on linked sites and does not necessarily endorse the views expressed within them. We cannot guarantee that links to external sites will remain active indefinitely, and there may be occasions when searches must be performed to relocate hyperlinked documents that have been moved or amended by their publishers.

General guidance on BBV in the workplace is available from:

Blood-borne viruses in the workplace: Guidance for employers and employees. ISBN 0 7176 2062 X. Single free copies are also available from HSE Books and a web version can be found at:

www.hse.gov.uk/pubns/indg342.pdf

In addition to the above, a listing of both generalised and specific guidance information exists, with most entries relating to laboratory and healthcare work, and these can be found collectively at:

http://www.hse.gov.uk/biosafety/information.htm

1. Laboratories:

The general principles of hygiene controls, hazard awareness, microbiological containment and risk assessment for lab work are now well described in the ACDP document Biological agents: Managing the risks in laboratories and health care premises (2005), and also within the Health Services Advisory Committee (HSAC) document Safe working and the prevention of infection in clinical laboratories and similar facilities (2003). Links to these documents are provided below, however, their content covers all biological agents, not just BBV, and as such their advice is more generalised. The above documents do, however, refer to details of work notification, general lab precautions, intentional propagation and concentration of BBVs and their containment. The HSAC guidance also provides information re: the exact nature of materials that may contain BBV, and such information is available elsewhere, e.g. The UK Health Departments Guidance for Clinical Health Care Workers: Protection against infection with blood-borne viruses: Recommendations of
the expert advisory group on Aids and the Advisory Group on Hepatitis (see below).

Relevant guidance for overlapping or specialist laboratory work areas:

a. Microbiological (including Virology)


b. Pathology, cell culture and cytogenetics

Dept. of Health. (2001). Revised advice on laboratory containment measures for work with tissue samples in clinical cytogenetics laboratories supplement to: ACDP guidance on protection against blood-borne infections in the workplace HIV and hepatitis. Product number 24396. From DH Publications, DH Publications Order line, PO Box 777, London SE1 6XH, Tel: 0870 155 54 55

c. Primate work


2. Healthcare and related:

The Department of Health, Health Protection Agency and Health and Safety Executive publish and maintain many guidance documents related to BBV and the health care sector.


Advisory Committee on Dangerous Pathogens. (2005). *Biological agents: Managing the risks in laboratories and health care premises.* Available at: [http://www.hse.gov.uk/biosafety/information.htm](http://www.hse.gov.uk/biosafety/information.htm)

Collective guidance and advice pages / downloads on all aspects of BBV infection control, including occupational exposure and related topics, available at: [http://www.hpa.org.uk/infections/topics_az/bbv/guidelines.htm](http://www.hpa.org.uk/infections/topics_az/bbv/guidelines.htm)

Guidance from the Medical Schools Council, the Council of Heads and Deans of Dental Schools, the Association of UK University Hospitals and the Higher Education Occupational Physicians Group: *Medical and Dental Students: Health clearance for Hepatitis B, Hepatitis C, HIV and Tuberculosis.*

Guidance documents for health care workers on Hepatitis B and C – as well as related links - are available from the Advisory Group on Hepatitis (AGH)

Also, in HIV, from the Expert Advisory Group on Aids (EAGA)

The Medicines and Healthcare products Regulatory Agency (MHRA) have prepared a publication that is endorsed by the MHRA’s Microbiology Advisory Committee (MAC) that provides advice on all aspects relating to decontamination of medical equipment. The “MAC Manual” is available at:

The MHRA also provide more specific guidance relating to other aspects of decontamination. For example, guidance on the decontamination of community equipment loaned for home or community use is available

The DH has produced good practice guidelines for Renal Dialysis / Transplantation Units, which includes guidance related to staff and patient safety.

More specific guidance is available for:

a. GPs and Primary Care Organisations (PCOs)
The British Medical Association (BMA) publishes advice for members, *Testing for blood borne viruses BMA guidance for medical staff.*

The BMA Medical Students Committee has produced a downloadable document on *Testing medical students for blood borne viruses: Information and guidance.* Available from: [www.bma.org.uk](http://www.bma.org.uk). The Medical Students Committee represents medical student views on a working group, as set up by the Medical Schools Council, in order to develop an occupational BBV testing protocol for medical schools.


General Practitioner related enquiries can be made directly via:

Royal College of General Practitioners  
14 Princes Gate  
Hyde Park  
London  
SW7 1PU  
Phone: 0845 456 4041  
Fax: 02072253047  
Email: [info@rcgp.org.uk](mailto:info@rcgp.org.uk)

b. Dentists

The British Dental Association (BDA) recognises that all members of the dental team have a responsibility to follow infection control guidelines to ensure safe practice within dentistry. The nature of dental practice, involving the treatment of emergency cases, planned but unscreened cases as well as major, planned dental surgery within the hospital setting, means that there is an opportunity for staff and client exposure to BBV. Dental surgeons, dental hygienists, dental nurses, support technicians and clients must all take appropriate precautions to protect themselves and others.

The BDA has published detailed guidance on this subject, including topics such as patient confidentiality, dental surgery design, cleaning and disinfection.

In addition, the Department of Health has published new guidance on dental decontamination. ‘HTM 01-05 Decontamination in primary care dental practices

c Care homes

The following document is available via the Department of Health (DH) to ensure that all reasonable steps are taken to protect residents and staff from acquiring infections in care homes. It provides information and guidance on requirements and recommendations to proprietors and people in charge of homes, and to the Commission for Social Care Inspection (CSCI) on the prevention and control of infection. It includes information on blood borne virus transmission, associated risk assessment and infection control.


Additional DH guidance exists to ensure that all reasonable steps are taken to protect residents and staff from infections acquired in residential and nursing homes. It offers guidance to proprietors and officers in charge of homes and to officers involved in registration and inspection. Consideration is given to universal infection control procedures, and related matters such as deaths, food hygiene, immunisation, laundry and personal hygiene. Also covered are issues relating to specimens and waste. The final section gives advice on how to prevent the spread of infection if individual cases occur in residents, with an extensive list of possible diseases. No electronic downloadable version of this document is currently available but further information can be obtained from:


d. Cleaning services (including laundry services)

UNISON provides general infection prevention and control information - applicable to all NHS employees - within their document *Occupational Health and Safety Standards, the NHS Staff Council working in partnership.* Available at: [http://www.unison.org.uk/](http://www.unison.org.uk/).

*Controlling occupational exposure risk to laundry workers*

The various categories of soiled linen are described elsewhere (Part 3). Laundry workers may be in direct contact with used / infected linen if they are involved in front line sorting of linen prior to washing and disinfection. The
use of personal protective equipment is therefore necessary to mitigate the risk associated with handling these materials.

The current 1995 laundry guidance recommends the use of waterproof gloves and a waterproof apron, as well as availability of fresh overalls, to allow changes of work ware, as necessary. More recent laundry advice provided for care homes additionally places particular emphasis on the hand washing facilities having lever taps, hot and cold running water, liquid soap and disposable paper towels.

Occupational health provisions for laundry workers should include the option of appropriate vaccination, e.g. for hepatitis B. COSHH requires that if a risk assessment shows there to be a risk of exposure to biological agents for which vaccines exist, then these should be offered if the employee is not already immune.

*Risks associated with contaminated laundry*
Contaminating microorganisms will always be associated with Used / Infected linen and can be physically removed to some extent by washing, using warm water and detergent. This cleaning process only becomes an effective disinfection process as temperatures are raised above 40°C, as described in Part 3. This means that, providing soiled linen undergoes some level of laundering, the risks associated with its re-use are lessened. Maximum reduction of infection risk for contaminated linen can, however, only be achieved by applying carefully controlled high temperature washes and rinses, as described in Part 3. Such systems will always be required where soil levels can be high and those using laundered linen may be susceptible to infection.

Useful guidance is available at:

NHS Executive HSG(95)18. *Hospital laundry arrangements for used and infected linen.*


### 3. Mortuary and Funeral Services
There are approximately 600,000 deaths per year in the United Kingdom and about two-thirds of these occur in hospital. Less than 1% of UK deaths are associated with a known or suspected infection, and fewer still relate to known BBV infection (HPA data – 2006*). Precautions, however, are always necessary for those handling cadavers and other human remains, particularly when one considers that 70% of these will be treated with some level of embalming, which involves the embalmer handling the cadaver. Some BBVs
are known to remain viable for weeks within body fluids, and since final disposal of the body is usually just 7-10 days after death, then a BBV exposure risk does exist for such workers. This is especially so where body fluids are present outside of the cadaver, as would be the case for those performing invasive post-mortem procedures, handling trauma fatalities or preparing cadavers for burial. The exposure risk is further increased by the necessary use of sharp implements during such procedures.

Within the health care environment opinion may differ among staff on the management of a body associated with an infection, and the indiscriminate use of body bags has been known to cause anxiety for family and carers of the deceased. Useful guidance can be found at:

Health and Safety Executive. (2005). *Controlling the risks of infection at work from human remains: A guide for those involved in funeral services (including embalmers) and those involved in exhumation.* Available for download at: [http://www.hse.gov.uk/biosafety/information.htm](http://www.hse.gov.uk/biosafety/information.htm)


*The Infection Hazards Of Human Cadavers - Guidelines on Precautions to be taken with Cadavers of those who have died with a known or suspected infection* (October 2004 - Review Date: October 2006).

4. Local Authorities:
Local Authority employees are at risk of exposure to BBV through a range of activities, including:
- Refuse collection
- Street cleaning
- Ground maintenance/gardeners
- Public sector housing (especially clearance and renovation)
- Work in education
- Social welfare, especially work with intravenous drug users such as needle exchange schemes
- Anatomical Pathology Technologists (APTs) who are based within the Local Authority sector, e.g. Public mortuaries

Most Local Authorities in the UK have web-based guidance giving general information on blood borne viruses and risks from handling BBV contaminated materials. General information is available from the documents below:


a. Refuse collection

BBV associated risks in refuse collection (both Local Authority and private contractors) are mainly associated with needlestick injuries from two sources; a) discarded needles from intravenous drug users (IDU) or b) clinical waste incorrectly entering the general waste stream.

The following HSE guidance gives general information on the potential sources and risks:

*Handling Needles in the Waste and Recycling Industry (WASTE19)*

Environment Agency general information on clinical waste handling:


The GMB union provide health and safety guidance for refuse collectors, and this includes basic awareness of needlestick injury and the principles of work-related risk assessment. This information is presented as: Waste Industry Health and Safety: Refuse Collection

b. Education

Workers in the education sector may be at risk of exposure to BBV mainly when dealing with blood spillage from pupils with latent infection. Staff may also come across discarded needles from trespassers on educational premises.

The guidance link below is intended to assist local authority social services departments, NHS and Primary Care Trusts and other local service providers in promoting and safeguarding the welfare of children in need in relation to blood borne viruses. It provides general information on dealing with the risk of exposure to BBV.

*Dept Health guidance Children in Need; HIV and Hepatitis and Blood borne Viruses*
Blood borne virus educational material, aimed at young people, is produced by HIT; formerly the Mersey Drug Training and Information Centre. HIT was established in 1985 and has an international reputation for raising awareness on drug-related issues. Its BBV-related booklets are produced within the drug use context, and have a strong theme of blood-borne disease prevention.

c. Street Cleaning

Needlestick injury from needles left by intravenous drug users is a potential risk for staff employed in street cleaning or emptying bins.

Guidance exists from Health Protection Scotland – Sharps in the community guidance note series GN4 10/99

This guidance note provides information on good practice for the removal of sharps from the community and the removal of blood spillages associated with discarded sharps, together with advice on the collection of discarded sharps, on the storage and disposal of discarded sharps and advice should an employee suffer a needlestick injury.

d. Ground maintenance and gardeners

As with those handling refuse, those working on ground maintenance and in gardening activities may also be exposed to discarded needle in parks and other outdoor public areas. The workers’ Union UNISON acknowledges this potential route of worker exposure in its guidance to members, Needlestick injuries in local government. The document offers general advice that is relevant for these service occupations, and discusses the nature of the risk, the scale of the risk within the UK, controls required of council employers and how the worker should respond if injury of this kind occurs.

St Johns Wales (Cymru) have set up a partnership with commercial waste handlers to provide useful information on the problem of Drug Related Litter, its handling and its removal. A dedicated Web site includes useful links to those who can offer further advice and assistance with this issue.

e. Needle exchange sites

Workers administering needle exchange schemes and working at exchange sites are at risk of exposure to BBV either from inadvertent needlestick injury during disposal of used needles or from malicious needlestick from IDU. Generic guidance above provides relevant information. Many town and city councils produce guidance for their residents. Guidance produced by the Brighton and Hove needle exchange scheme is an example of good practice.

5. Emergency Services / responders:

Because of the nature of their work, personnel within the emergency response services may be at risk from exposure to BBV. In particular, the following groups fall within this ‘at risk’ category:

a. Police

Many occupational roles exist within the police services, including those who do not work as active, front line enforcement officers. Those sections of the service at risk of BBV exposure are:

- All Operational Police Officers. Within this group there are those who are placed at greater risk due to their specialist roles e.g. Custody and Coroners Officers;
- Special Constables; and
- Support Staff who are exposed to blood and body fluids as part of their work e.g. Scenes of Crime Officers

At the time of writing, the UK police services, in partnership with occupational healthcare consultants, is drafting new guidance for its employees, Blood-borne viruses: guidance to the police service. It is intended that the new document will replace a current circular, HOC 113/92; the final version will be referenced here once available.

Relevant local advice for employees is produced by many UK police forces, usually by occupational health professionals. During the preparation of this guidance occupational health providers serving the police services cited the Thames Valley guidance as a point of reference. Others noted that this online document – and others - might require updating in line with new medical recommendations.

In Scotland, 2007, a working group reported to the Scottish Executive made numerous recommendations for the improved protection of front line emergency workers against BBV. One of the recommendations was that employers of police, prison and fire & rescue service staff should ensure that hepatitis B vaccination is available to all those who are likely to face the risk of blood-borne virus infection in the course of their duties. The working group also recommended that police forces should ensure this is provided through the occupational health service. At the time of writing, this and other working group recommendations are still under consideration by the Scottish Executive.

b. Fire

Fire fighter search teams, and those responding to road traffic accidents and other situations likely to involve trauma injury, can potentially be exposed to blood and body fluids. As with the police service, some localised guidance has been generated by certain city and/or regional fire services and, where available, will be locally available. The examples provided below were not produced as national advice documents, but do offer useful information that is relevant for this sector:

Shropshire Fire and Rescue Service produce their own advice and information on BBV related to work

Similarly, Humberside Fire and Rescue Service provide decontamination and BBV awareness advice for employees within their Decontamination SOP

The Highlands & Islands Fire & Rescue Service (Scotland) publishes infection control guidance and risk assessment advice for its employees.

Highlands & Islands Fire & Rescue Service Headquarters
16 Harbour Road, Longman West, Inverness, IV1 1TB
c. Ambulance

In January 2008 The Ambulance Services Association (ASA) merged with the NHS Confederation (NHSC) to form the Ambulance Service Network. At the time of writing, information on the new Ambulance Service Network was in a state of transition, with bulletins. The ASA has previously compiled guidance jointly with the Health Protection Agency, which has enabled NHS Ambulance Services to issue their own local procedures based on the national guidance. This arrangement has allowed local guidelines to be added to or amended in terms of any locally agreed policies or information required, e.g. local contact numbers, or specific requirements of the devolved health departments. Guidance formulated in this way has contained information on BBV transmission, occupational health support and post exposure procedures, but recent professional reorganisation may result in new arrangements in this respect. Related enquiries should be directed at the local ambulance services (Trusts) themselves or to the Ambulance Service Network.

d. Vehicle recovery

The potential exposure of motor vehicle recovery, repair and maintenance workers to BBVs, and the essential risk assessments and control measures required to protect them, are considered within the following document:

*Infection at work: Controlling the risks. A guide for employers and the self-employed on identifying, assessing and controlling the risks of infection in the workplace.*

Despite the potential, within the UK there appear to be no recent cases of BBV transmission as a result of exposure during motor vehicle recovery or repair. Related enquiries made during the preparation of this guidance suggest that industry representatives in this sector do not currently provide their own infection control guidance for their members.

e. First aiders

St John Ambulance and other organisations offer courses to train people as both first aiders and appointed persons (to oversee first aid needs and manage any incidents that may occur). They also offer courses to ensure that first aid knowledge is kept up-to-date, and course elements include training courses for the workplace that involve control of bleeding and treatment of
wounds.

St. John Ambulance: Training courses for the workplace.  
http://www.sja.org.uk/sja/training-courses/courses-for-the-workplace.aspx

The British Red Cross have been running workplace first aid courses for many years and have course and booking details available on their website at:  
http://www.redcrossfirstaidtraining.co.uk/?campaign=google&kw=red+cross+first+aid+training+E&citid=505532

Numerous regional ambulance services also provide infection control information related to first aid treatment, and this can be tailored towards responses in the workplace. An example is that provided by the North West Ambulance Service NHS Trust at:  

General enquiries should be directed to the Ambulance Service Network  
Tel. 020 7074 3240

6 Custodial Services:

a. Prison / detention centres

The National AIDS Trust (NAT - http://www.nat.org.uk) reports that prisoners in the UK are disproportionately affected by blood-borne virus infections; NAT states that this is due in part to drug use prior to incarceration, as well as needle use and unprotected sex within prison. NAT report that the most recent data available show prisoners to be fifteen times more likely to be infected with HIV, and over twenty times more likely to be infected with Hepatitis C, than the general population in the UK. In an attempt to improve this situation NAT and others have produced guidance and advice for the inmates and staff of the prison community:

HM Prison Service - Blood Borne and Related Communicable Diseases.


HIV and hepatitis in UK prisons – addressing prisoners’ healthcare needs.  
Prison Reform Trust and National Aids Trust

Specific occupational advice is presented in: HM Prison Service Instruction PSO 8900 – Occupational Health – Blood borne viruses.
7. Beauty Industry:

Many aspects of governance for the beauty industry are addressed by training and guidance booklets produced by the UK Hairdressing and Beauty Industry Authority (Habia - http://www.habia.org/). Habia is the Government approved standards setting body for hair, beauty, nails, spa therapy, barbering and African-Caribbean hair, and creates the standards that form the basis of all qualifications including NVQs, SVQs and apprenticeships, as well as codes of practice.

A central point of contact for information, Habia provides guidance on careers, business development, legislation, salon safety, equal opportunities, and is responsible to government on industry issues such as training and skills. Relevant links to infection control guidance published by this organisation can be found below:

a. Hairdressing

The Hairdressing and Beauty Industry Authority (UK) – hairdressing pages

b. Beauticians

The Hairdressing and Beauty Industry Authority (UK) – beautician pages

General information on hygiene related to beauty therapy is provided by HABIA

c. Tattooing, Ear and body piercing

Body piercing and tattooing are areas that, until recently, would likely have been omitted from occupational guidance. However, these treatments are now performed at many permanent premises across the UK, and some peripatetic (mobile) business is also conducted. These treatments invariably involve the use of needles (sharps) to pierce the body, either in the form of intra-dermal ink injection using a tattooing machine for tattooing, or using deeper needle penetration during body piercing; the latter creates a tunnel through which the jewellery item is inserted. Such treatments therefore carry with them an associated risk of localised or blood-borne infection, unless the operator takes appropriate infection control measures.

**Exposure risk to the worker**

The appropriate means for disposal of contaminated sharps and other waste is considered elsewhere (Part 3). Accidental sharps injury is the most likely way in which occupational BBV infection might be acquired during skin
piercing activity. In order to minimise the risk of such injury, precautions should be observed to maintain a 'sharps safe' working environment.

**Exposure risk to the client**

For modern body piercing and tattooing activities the availability of cheap, high quality needles means that a one-use-only needle approach is cost-effective, convenient and safe. Some tattooing operators used to clean and re-sterilize needles, but this practice is now rare and is discouraged by industry representatives and enforcement authorities. One-use-only sharps minimises the risk of BBV cross infection between clients. Detailed advice can be obtained from existing guidance and trade union sources at:

HSE Local Authority Circular (LAC); *detailed guidance on cosmetic piercing tattooing and scarification* (LAC 76-2).

HSE Local Authority Circular (LAC); *detailed guidance on micropigmentation* (LAC 14-1).

Operator advice booklets hosted by the local authority sector


8. Sports and Recreation

Some information relating to BBV transmission in sport is provided in Part 3 of this guidance. In addition, The Institute of Sport and Recreation Management provides general infection control information related to facilities such as spa pools and swimming pools, and membership is required for those wishing to access some areas of its site, including guidance at: [http://isrm.co.uk/](http://isrm.co.uk/).

The organisation HIVSport has been formed to provide education and training for people in all roles in sport around, and this has specific focus on HIV and other health related matters. Further information can be obtained at: [http://www.hivsport.org.uk/index.php](http://www.hivsport.org.uk/index.php).

The evidence base for BBV transmission through sport, as well as risk assessments and preventative advice on this topic, are presented in a review by Kordi and Wallace accessible via: *Br. J. Sports Med. 2004; 38: 678-684*.

9. Other services or circumstances where specific guidance may be required

a) Decontamination services
The UK government has web pages dedicated to offering information and advice regarding actions to take following an incident involving biological agents. The information on offer covers, but is not confined to, dealing with large scale incidents involving Chemical, Biological Radiological or Nuclear (CBRN) materials. The scope of the guidance available is intended to include accidents and domestic spillages etc.

The UK Resilience Website is a news and information service for emergency practitioners from the Cabinet Office and contains information, advice and links to related guidance, including decontamination of people, buildings and the open environment. This information is available at:

The UK Government has set up an agency to help streamline responsible authorities’ ability to decontaminate the built and open environment following a deliberate or accidental CBRN release or major accidental releases of hazardous materials (HAZMAT). The UK Government Decontamination Service will provide advice and guidance to support those responsible for decontamination during contingency planning and actual incidents. The Government Decontamination Service web pages can be found at:

b) Controlling risks to sewage workers

Workers whose activities bring them into contact with untreated sewage and sewage products are at risk of contracting a work-related infection. In particular, raw sewage, mainly from water containing excrement, can also contain industrial effluent and debris, such as sanitary towels, condoms, plastic etc. Most contracted illnesses are relatively mild cases of gastroenteritis, but potentially fatal diseases, such as leptospirosis (Weil’s disease) and hepatitis, have been reported overseas. These may occur because of the potential for cross infection via the skin and mucous membranes. Not all cases are reported because people often fail to recognise the link between illness and work.

Detailed guidance is available:


Advice is also available as a short leaflet:
c) Remote installations

Guidance published by the Health Institute (London) is available on *Occupational infection with blood borne viruses for health care workers in remote sites or installations (offshore)*


d) Advice for overseas travellers

Individuals are travelling long distances more than at any time before, and this is often work-related.