

**HEALTH AND SAFETY EXECUTIVE CONSULTATION ON
PROTECTION AGAINST BLOOD-BORNE INFECTIONS
IN THE WORKPLACE: HIV AND HEPATITIS**

EVIDENCE SUBMITTED BY THE SOCIETY FOR GENERAL MICROBIOLOGY (SGM)

Introduction

The Society for General Microbiology, founded in 1945, is an independent professional scientific body dedicated to promoting the 'art and science' of microbiology. It has now established itself as one of the two major societies in the world in its field, with some 5,000 members in the UK and abroad.

General Comments

The document is comprehensive and no areas of omission have been identified. However, as a reference work it would benefit from a more comprehensive contents page(s) to allow easier access to the relevant sections for those looking for specific guidance. The printed copy issued for consultation did not have page numbers, but this may be a late drafting issue.

Specific Questions

Why is this guidance of interest to you?

Consultant virologists report on a daily basis around these issues and are actively involved in all aspects of the management of blood borne virus infections.

Q1. Have you been able to download/view the PDF from the website?

Yes.

Q2. Our philosophy for presenting the guidance is outlined in the introduction on the website. Do you think this approach is valid?

Yes. It explains why there is a need for the guidance and is recognised as being correct.

Q3. Are you likely to use guidance such as this produced by the ACDP?

Yes. This is an extremely comprehensive document, pulling together many aspects of the issue, e.g. decontamination, infection control and individual risk assessment management. As such, it is likely to be regarded as the "Gold Standard" against which operating procedures should be measured and protocols assessed.

In addition, there is considerable technical information available in the document.

Another useful feature is the web links to relevant sources of information which are included throughout the document.

It would be helpful to refer to "standard infection control precautions" under paragraph 7 to come into line with other guidance.

Since this is likely to be used UK wide, it would be helpful to standardise references, which are variable in the different sections of the document, for all UK health protection agencies.

Q1.1 Do you think the scope of section 1 is about right?

Yes.

Q1.2 Do you think that section 1 provides enough detail for the points covered?

Generally, yes. However, linking all body fluids in one table (Table 1) may not be helpful, as blood remains the most significant risk. Other body fluids e.g. breast milk are probably only of significance in specific situations e.g. vertical transmission. A suggestion might be to present as follows:

Fluid	Route of Transmission	Risk Factor
blood	parenteral	high
genital secretions	sex	high
breast milk	mother to child	high
blood stained other fluids	accidental	variable

Paragraph 17 – Current tests for HIV antibody become positive around 3 weeks post exposure, so a delay of testing to 3 months is now considered to be too long.

Figure 1.4 is not helpful and better explanation of hepatitis B markers in the course of infection is required.

Q1.3 Do you think that section 1 is fairly easy to understand?

Yes. However, apart from the hepatitis B section as mentioned above, the diagrams relating to hepatitis C acute and chronic infections are confusing and would best be amalgamated into a single graph of the outcome post infection with hepatitis C.

Q2.1 Do you think the scope of section 2 is about right?

Yes.

Q2.2 Do you think that section 2 provides enough detail for the points covered?

Yes. However, no reference is made to getting informed consent from patients to test their blood in the event of an exposure.

Q2.3 Do you think that section 2 is fairly easy to understand?

Yes. This section includes good guidance for "Risk Assessment".

Q3.1 Do you think the scope of section 3 is about right?

Yes.

Q3.2 Do you think that section 3 provides enough detail for the points covered?

Yes. However, paragraphs 93 – 95 include too much detail about the duration of infectivity of blood borne viruses on sharps, etc. and will not help risk assessment. The data does not reflect infectivity of the blood borne viruses, rather whether parts of them can be detected on surfaces, etc., which is not

the same. This information is also repeated in a different format in paragraph 123, which is duplication, but also confusing.

Q3.3 Do you think that section 3 is fairly easy to understand?
Yes.

Q4.1 Do you think the scope of section 4 is about right?
Yes.

Q4.2 Do you think that section 4 provides enough detail for the points covered?

Yes. However, paragraph 163 refers to baseline blood for storage. The ideal sample is now considered EDTA blood because confirmatory and nucleic acid testing can be performed on that sample.

Please note there is discrepant advice in the document in paragraphs 50 and 163. Follow up post needlestick for hepatitis C exposure should involve performing PCR at 6 weeks and HCV antibody only at 12 and 24 weeks.

Q4.3 Do you think that section 4 is fairly easy to understand?
Yes.

Q5. Appendix 3: Sector specific practical guidance. Can you think of any additional groups that require guidance specific to them?
No.

Q6. Frequently asked questions. Do you think this guidance needs a section with FAQs?

Yes. It would be very helpful to polarise the information in this way, e.g. what happens post bite? There are various groups who could help with this, e.g. the HIV Diagnosis Network Group chaired by Dr Parry at HPA Colindale.

Q7. Do you have any other comments you wish to make?

Yes. This will prove to be a very useful document and should be progressed as quickly as reasonably possible.

However, a few points should be addressed first:

- The use of 'bodily' instead of 'body' when describing body fluids. There is an inconsistent approach, in most cases 'body fluid' is used, but on many occasions the less acceptable 'bodily' is used – specifically Info Box 1.1; Info Box 3.2; paragraph 106 line 3; paragraph 141 line 9; paragraph 162 lines 3 and 4; paragraph 160 lines 6, 11 and 19.
- Some of the references are not in superscript – again a late draft issue.
- Under paragraph 20 – it would be useful to add the explanation for the higher levels of heterosexually acquired infections being greater in women than men – is because of the number of women being detected as HIV infected through the antenatal screening programme.
- The Info Box 3.5 on disinfectants did not include many of the common disinfectants used to disinfect heat labile instruments such as Peracetic acid, Chlorine Dioxide (Tristel), superoxidised saline (Sterilox) and

although Gluteraldehyde is included on the list, it is now not commonly used in the UK (there seems to be some dispute about the correct spelling of gluteraldehyde/glutaraldehyde – I've always spelt it with an 'e' – this document has an 'a').

Sources

This evidence has been prepared on behalf of SGM by Dr Elizabeth Boxall, Birmingham Heartlands Hospital, and Dr Sheila Burns and colleagues, Scottish Clinical Virology Consultants Group (SCVCG).

About the SGM

Society membership is largely from universities, research institutions, health and veterinary services, government bodies and industry. The Society has a strong international following, with 25% of membership coming from outside the UK from some 60 countries.

The Society is a 'broad church'; its members are active in a wide range of aspects of microbiology, including medical and veterinary fields, environmental, agricultural and plant microbiology, food, water and industrial microbiology. Many members have specialized expertise in fields allied to microbiology, including biochemistry, molecular biology and genetics. The Society's membership includes distinguished, internationally-recognised experts in almost all fields of microbiology.

Among its activities the Society publishes four high quality, widely-read research journals (*Microbiology*, *Journal of Medical Microbiology*, *Journal of General Virology* and *International Journal of Systematic and Evolutionary Microbiology*). It also publishes a highly respected quarterly magazine, *Microbiology Today*, of considerable general educational value. Each year the Society holds two major scientific meetings attended by up to 1500 microbiologists and covering a wide range of aspects of microbiology and virology research.

The governing Council of the SGM has a strong commitment to improving awareness of the critically important role of microbiology in many aspects of human health, wealth and welfare. It has in this connection recently initiated a 'Microbiology Awareness Campaign' aimed at providing information to the government, decision makers, education authorities, media and the public of the major contribution of microbiology to society.

An issue of major concern to the Society is the national shortage of experienced microbiologists, particularly in the field of clinical microbiology and in industry. To attempt to improve this situation long-term, the Society runs an active educational programme focused on encouraging the teaching of microbiology in university and college courses and in the school curriculum, including primary schools. Some 570 schools are corporate members of SGM.

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