

## **LABELLING SAMPLES 'High Risk'**

High risk labels alert laboratory workers to samples which may need additional safety and handling precautions.

### **High Risk Labelling NOT required**

It can now be confirmed that ***samples from BBV positive patients no longer need to be specially labelled or packaged for any Lothian laboratory.***

The laboratories follow 'universal precautions' and treat all samples as potentially hazardous. There are also more secure collection facilities.

### **High Risk Labelling IS REQUIRED**

All biological agents causing infection are classified into hazard groups 1-4 by the Health and Safety Executive (HSE). Those in groups 3 and 4 are deemed to be a serious hazard and infective samples taken from such should be labelled high risk. But the list of biological agents in these groups is extensive and includes many rare infections unlikely to be encountered in general practice in the UK. Below is a relevant summary of when labelling would be appropriate.

It is very important that the request form contains **clear clinical details** so staff can help identify which samples may require additional precautions when processing.

#### **Clinical details that should alert the clinician to the possibility of a 'high risk' pathogen**

**Suspected infection** in these groups:

- **Bloody diarrhoea/dysentery** - E Coli O157 is common and very infectious to laboratory staff.
- **Injection site infections** in drug users - risk of anthrax
- **Haemoptysis** - if TB is suspected
- **Laboratory workers** – especially those handling 'hazard group 3 or 4' organisms (the individual worker should be able to inform you of this)
- **Animal exposure** - (farm animals/exotic animals). Animals and animal products or by- products from overseas are a particular concern. Apart from E Coli O157 diarrhoea and bovine TB, it is unusual to get high risk infections from UK farm animals.
- **Foreign travel mainly outwith Western Europe\***– particularly if basic or rural conditions, animal exposure, volunteer/healthcare work, visiting family. Consider viral haemorrhagic fever in endemic areas. Please see FAQ section for further details.  
**\*In cases of suspected viral haemorrhagic fever the Regional Infectious Diseases Unit should be contacted before ANY samples are taken.**

If a high risk pathogen is suspected:-

- 1. Please document clinical details clearly on the request form.**
- 2. Ensure containers are properly sealed and bagged.**
- 3. Label form and containers as "high-risk" with a yellow high risk sticker**

## FAQs

### **Does this just apply to blood samples?**

No. This advice is universal for blood, tissue and body fluid samples across all laboratory disciplines.

### **What if I am unsure whether a sample should be regarded as high risk?**

Please add the clinical history on the form and label as high risk - the lab will then decide precaution requirements.

### **Do “high-risk” samples require special transport to the laboratory?**

No\* – but please ensure containers are properly sealed, bagged and labelled.

\* the exception to this is patients with suspected viral haemorrhagic fever. These cases ***must be discussed with medical staff at the Regional Infectious Diseases Unit, WGH immediately and before any samples are taken.*** They will provide a risk assessment and advise on sampling if necessary.

### **Where can I get yellow ‘high risk’ stickers?**

These are available from procurement.

### **Do I need to label Microbiology/Virology body fluid samples of known BBV positive patients ‘high risk’?**

Samples do not need to be labelled as high risk unless the criteria above apply. But knowing someone’s HIV or other immunocompromised status may help with interpreting the significance of Microbiology cultures.

### **What conditions caused by ‘high risk’ organisms can present in the UK?**

Anthrax  
Brucellosis  
Diarrhoea associated with E Coli O157  
Travel associated exotic fungal infections  
Meliodosis  
Tuberculosis  
Typhoid (Enteric Fever)  
Viral Haemorrhagic Fevers

This list is not exhaustive.

Please note that certain laboratory workers may be in contact with more exotic pathogens depending on their work. If you are sending samples of infective body fluids and unsure whether they have been dealing with a high risk pathogen please contact the laboratory.

### **When should I suspect Viral Haemorrhagic fever (VHF)?**

If the patient has a fever (>38 C) or history of a fever in the last 24hrs and has either returned from a viral haemorrhagic fever endemic area in the last 21 days or had contact with an individual, animal (or specimens from such) that is known or strongly suspected to have VHF.

VHF endemic areas include East and West Africa, Central Asia and the Middle East. A detailed list can be found on pages 35-39 of the following document:  
[http://www.hpa.org.uk/webc/HPAwebFile/HPAweb\\_C/1194947382005](http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1194947382005)

### **Other Useful Information**

For further details please see the laboratory handbooks at:  
<http://intranet.lothian.scot.nhs.uk/NHSLothian/Healthcare/A-Z/Laboratories/LabHandbooks/Pages/LaboratoryHandbooks.aspx>

The full Health and Safety Executive (HSE) guidance can be found at:  
<http://www.hse.gov.uk/safetybulletins/clinicalinformation.htm>

A complete list of organisms and their Hazard Group can be found at:  
<http://www.hse.gov.uk/PUBNS/misc208.pdf>

Country specific information on recent outbreaks (that is updated regularly) is available on Travax: <http://www.travax.nhs.uk>

Any queries please send us an email: [GP.MicroAdvice@luht.scot.nhs.uk](mailto:GP.MicroAdvice@luht.scot.nhs.uk) or [GP.VirologyAdvice@luht.scot.nhs.uk](mailto:GP.VirologyAdvice@luht.scot.nhs.uk) or telephone: 0131 242 6048.