



## PHE Microbiology Services VHF Sample Testing Queries

### Advice on testing samples for VHF

Doctors requesting advice on testing samples from possible viral haemorrhagic fever (VHF) cases should contact their local infectious diseases physician or consultant microbiologist/virologist in the first instance. If the case merits consideration based on this discussion, either they or the specialist should contact the Imported Fever Service (IFS) on 0844 7788990. The laboratory WILL NOT accept samples for urgent VHF testing that have not been discussed with both the IFS and the local Infection Consultant.

**Please note that “High Possibility” on the ACDP VHF Risk Assessment algorithm does NOT necessarily mean high risk or high probability.**

The IFS doctor will:

- discuss the case with them and help with risk assessment, and decide whether testing is required. They will determine the degree of urgency, the samples to take and advise on the best way to transport samples to the Rare & Imported Pathogens Laboratory (RIPL). They will also ensure that local laboratory staff can liaise directly with RIPL technical staff on packaging, specimen tracking etc.
- discuss with the local consultant in charge of the case any immediate treatment to be instituted for likely differential diagnoses, isolation procedures and other investigations that should be undertaken locally and the safety of doing them in the particular case referred
- if the case is deemed as having a significant probability of being positive, request the referring clinician to inform the local Health Protection Team (HPT)
- arrange with RIPL staff for the samples to be tested, and define the tests to be undertaken. This will always include testing for key agents that can masquerade as a VHF where feasible

Please note the IFS doctor is unable to give results out via the IFS telephone number. Results are reported by RIPL clinicians.

R IPL clinicians will:

- inform the referring clinician of the results as soon as they are available. Unless a specific HPT member has already discussed the case with a RIPL clinician and provided a contact number, the referring clinician will pass on any results to the HPT (if they have been involved)
- notify any positives to the outbreak control teams & duty doctor at PHE Colindale, to senior MS and Health Protection Directorate (HPD) staff, the PHE Incident Director, DH, and the clinical team at the Royal Free Hospital HLIU (and ensure arrangements are in place to inform other HPT colleagues if not already done; this is usually enacted by HPD Colindale)
- advise on further infection control, decontamination measures etc. as required in conjunction with local teams, working with hospital staff and local HPT members.
- for the duration of the current Ebola outbreak response, summarise referrals as required for the relevant EOC teams

### Samples to take

The minimum samples are:

Serum (4.5 mL serum separation gel tube)

EDTA blood (4.5 mL EDTA tube)

Ideally, a urine sample as well. Testing should not be delayed to obtain a urine sample.

R IPL clinicians may also advise taking additional samples depending on exposure and presentation of the case, either in parallel with the VHF testing or dependent on the results.

### Transport

Samples should be sent either by either Category B or Category A transport. The Imported Fever Service clinician will advise on which category is most appropriate; this depends on the likelihood of the diagnosis from exposure history and the clinical presentation of the patient. Carriage and the cost thereof is the responsibility of the referring laboratory. There is no laboratory charge for VHF testing and the associated differential panel.

In the majority of cases, the advice will be that samples may be sent as Category B. If possible, the referring laboratory should provide to RIPL the courier, tracking number and estimated arrival time, once the sample has been collected.

When advised by IFS, samples from *probable/highly suspect* cases should be sent Category A using an approved carrier.

Approved Category A carriers include:

- PDP: 01784 420 466
- DGI : 0208 814 0404
- Topspeed: 01565 631840 or 0800 856 2464
- DX: 01753 654654, 07887 822835 or 07837 046886

Samples should be packaged according to international guidelines (see [http://www.who.int/ihr/publications/who\\_hse\\_ihr\\_2012.12/en](http://www.who.int/ihr/publications/who_hse_ihr_2012.12/en)).

RIPL laboratory staff will provide advice to technical staff in the referring hospital on request.

### Tests and timings

All VHF samples are tested for the haemorrhagic fevers present in the area where the patient was potentially exposed, and for other relevant fevers. RIPL may advise additional tests before or after VHF testing for the local laboratory to undertake (e.g. blood culture).

For the present Ebola outbreak testing includes, but is not necessarily limited to, the following PCRs on acute samples:

Ebola†, Marburg†, generic filovirus†, Lassa fever†, CCHF, Dengue, Chikungunya, Rift Valley fever, Rickettsia (generic covers spotted fevers and typhus group), malaria†, ± leptospirosis.

**For urgent samples, where it has been agreed to process the samples immediately on receipt, results are normally available within 7-8 hours of arrival in the laboratory** for the block based assays marked †. Positives in the real time assays are usually available sooner and will be released as soon as they are known. RIPL and the IFS are NOT responsible for taking samples in the referring hospital, arranging for samples to be packed locally or arranging transport, or for any delays incurred in this process.

Results are telephoned as soon as they are available, and the referring clinical team are ALWAYS informed first. Please do not call the RIPL clinical or laboratory staff for results out of hours as we cannot give out results on tests that are incomplete or on which the samples are still in transit.

### Guidance

The Advisory Committee on Dangerous Pathogens guidance document 'Management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence' and the Viral Haemorrhagic Fevers Risk Assessment algorithm can be found here:

<https://www.gov.uk/government/publications/viral-haemorrhagic-fever-algorithm-and-guidance-on-management-of-patients>

## Contacts

### **Imported Fever Service**

**0844 7788990**

*This number automatically routes to the clinician's mobile phone. Please allow time for the connection to be made and the doctor to answer it!*

### **RIPL on call clinician**

**07789 031672**

*This also re-routes to the on-call person's phone so allow time.*

### **If all else fails or to contact laboratory technician**

**01980 612100**

*PHE Porton switchboard, who will ensure that someone gets back to you.*

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