



Summary Guidance for Acute Trust Staff: Frequently asked questions (FAQs) on laboratory testing of samples from patients with possible Ebola virus disease

This document should be used by clinical staff involved in the laboratory testing of samples from patients with possible Ebola virus.

Guidance on the risk assessment and management of viral haemorrhagic fevers (VHF), including Ebola, was updated by the Advisory Committee on Dangerous Pathogens (ACDP) in August 2014 and is the principal source of guidance for clinical staff managing patients.

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

Q: Which samples do I need to send for VHF testing?

A: This question is addressed in Appendix 2, page 39 of 2014 ACDP VHF guidance. All cases of suspected VHF should be discussed with local medical virologist/ microbiologist/ infectious diseases physicians who can help to perform a risk assessment of likelihood of VHF. If appropriate they can then help arrange urgent local investigations eg malaria film. If appropriate, the local infection specialist can then contact the Imported fever Service (IFS) for further specialist advice. If IFS agree, the samples required are *“usually EDTA and clotted blood +/- urine”*

Q: Are laboratories expected to perform some diagnostic testing (malaria screening for example, as part of the diagnostic algorithm) before VHF screen results are available?

A: Yes, the risk to laboratory staff is considered to be minimal in ‘low possibility of VHF’ cases and low in ‘high possibility of VHF cases’. Please see the ACDP guidance.

Q: Is it safe to perform malaria investigations on suspected VHF patients in a routine diagnostic laboratory?

A: Yes, it is safe to perform malaria investigations and indeed these tests are critical in the management of patients with suspected VHF. Malaria investigations should be carried out urgently when VHFs are suspected. Laboratory tests may be performed under Containment Level 2 conditions, following good laboratory practice at all times. Although the ACDP guidance does not explicitly recommend use of eye protection, mask or gloves in performing malaria films, use of this PPE and of a secure sample stand to minimise risk of spillage is best practice.

Q: What is a ‘closed’ analyser for chemistry and haematology testing? What PPE should lab staff be wearing to load/unload the machines?

A: A ‘closed’ system analyser is one in which once the sample has been loaded, all manipulations occur in a sealed environment. Laboratory staff should wear standard CL2 laboratory PPE and adhere to good laboratory practice at all times.

Q: Is it acceptable to process samples on routine analysers whose waste is plumbed directly into general public sewers?

A: Yes, it is expected that a minimum set of laboratory tests are performed on all suspected cases of VHF. These can be performed on routine analysers. Waste from these machines is not considered to pose a significant risk because of the small sample size and dilution step and will therefore require no special waste disposal precautions. See Appendix 7 of 2014 ACDP VHF guidelines.

Q: How should we handle a group and save request in a patient with suspected VHF sent because the patient is bleeding?

A: Although haematology ‘group and save’ testing is not one of the recommended tests in managing suspected VHF patients this test should be carried out if considered essential for safe patient management by senior clinical staff managing patients with suspected VHF.

Where possible, this should be performed on a closed system where the risks to laboratory staff are minimal. If this needs to be done manually, appropriate eye protection, a surgical mask and gloves must be worn to protect against the small theoretical risk of splashing.

Q: If the situation arises where a pathology department has processed blood samples from what is later confirmed to be a VHF patient, will decontamination of lab equipment following ACDP guidelines allow commercial contractors to service this equipment safely?

A: Waste from these machines is not considered to pose a significant risk because of the small sample size and dilution step and will therefore require no special waste

disposal precautions. Please see Appendix 7, page 59. No special decontamination processes are required.

Q: What do we do if a laboratory worker for whatever reason is exposed to blood/body fluid from a high possibility of VHF patient?

A: This eventuality is covered by 2014 ACDP VHF guidance in Appendix 9, pages 69-70. The key difference from other non-VHF laboratory staff incidents is 'urgent referral' of affected laboratory staff to local medical virologist/ microbiologist/ infectious diseases physician and occupational health clinician.

Q: How should samples from suspected cases of VHF be transferred to the pathology laboratory from A&E?

A: The pathology laboratory should be informed when samples are on their way to the laboratory so that laboratory staff are ready to handle specimens appropriately and in a timely fashion.

More detail on the transport of samples to the local pathology laboratory is available in Appendix 6 of the 2014 ACDP VHF guidance.

Samples from suspected VHF patients must NOT be sent in pneumatic chute systems under any circumstances because of the potential risk of widespread contamination in the event of any leakage or breakage within the chute system.