Viral Haemorrhagic Fever Policy

V3

31.10.17
Summary.
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1. Introduction

1.1 Viral haemorrhagic fevers (VHF) are a group of viral diseases, which cause extensive haemorrhage and have a very high mortality. Most are endemic in a number of areas of the world, most notably Africa, parts of South America, rural parts of the Middle East and Eastern Europe. These viruses include Lassa fever, Crimean/Congo haemorrhagic fever (CCHF), Ebola and Marburg viruses. These four viruses are highly transmissible from person to person and therefore represent a serious risk to health care workers in contact with infected patients.

1.2 Environmental conditions in the UK do not support the natural reservoirs or vectors of any of these viruses and cases of VHF are extremely rare in the UK. The incubation period for VHF varies from between 3-21 days. Initial symptoms include pyrexia, malaise, headache and muscle or joint pain. Ebola and Marburg often cause a measles-like rash after 4-7 days. Obvious bleeding occurs at a later or terminal stage. For further guidance on the management of patients with VHF, please refer to the DOH guidelines referenced in this policy.

2. Purpose of this Policy/Procedure

2.1 The purpose of this policy is to provide guidelines on the assessment and management of patients with suspected or confirmed viral haemorrhagic fevers.

3. Scope

3.1 This policy applies to all staff working in the Royal Cornwall Hospital’s Trust.

4. Definitions / Glossary

- **Viral haemorrhagic fevers** - a group of illnesses that are caused by several distinct families of viruses eg. Ebola, Lassa fever, Crimean Congo haemorrhagic fever, Dengue fever, Yellow fever.

- **Vector**
  An animal, usually an insect or a tick, that transmits parasitic micro organisms – and therefore the diseases they cause – from person to person or from infected animals to human beings.

- **Endemic**
  Regularly occurring in a country or district

5. Roles and Responsibilities

5.1 **Role of the Consultant Microbiologist/Infection Control Doctor**

- Will advise G.P’s and where relevant the admitting medical staff on the suitability of admission to the Trust or to a Regional Centre.

- Will inform Public Health England and the Director of Infection Prevention and Control of any patient who is either diagnosed / or suspected of having a viral haemorrhagic fever.
- Will lead in the initial management of any patient with suspected / diagnosed viral haemorrhagic fever.

5.2 Role of the Medical Staff
- Will alert and liaise with the consultant microbiologist / infection prevention & control doctor regarding the continuing management of a patient suspected of having a viral haemorrhagic fever.
- Will communicate with the Infection Prevention & Control Team to ensure that all relevant staff are informed regarding the infection control precautions to be undertaken.

5.3 Role of the Infection Prevention & Control Team
- Will advise all relevant groups of staff on infection control precautions.
- Will work closely with the Consultant microbiologist / infection control doctor / Director of Infection Prevention and Control.

5.4 Role of the Director of Infection Prevention & Control
- Will instigate an Outbreak Control Group / Major Outbreak Control Group as required and update the Executive Team as necessary.

5.5 Role of the Outbreak Control Group
- Will initiate risk assessment and agree the management of the patient / staff and contacts.
- Will implement the Major Outbreak Policy and develop a major outbreak plan where relevant.
- Will ensure that relevant reports are communicated as outlined in the Outbreak Control Policy.

5.6 Hospital Infection Prevention & Control Committee
- Will be responsible for approval and overseeing the implementation of this policy.

6. Standards and Practice

6.1 Diagnosis
In the early stages of the illness there may be no specific clinical features and so the diagnosis must be considered in anyone who develops an unexplained fever within three weeks of returning from the areas listed in the introduction. If the possibility of VHF is raised, the clinician must consult a consultant microbiologist to discuss whether the patient can be admitted and investigated locally or whether transfer to the High Security Infectious Diseases Unit (HSIDU) at The
Royal Free Hospital is required. The following information should be established from the patient:

- Countries and towns visited.
- The purpose of the visit.
- Did the visit involve visiting rural areas?
- Did the patient have contact with illness consistent with VHF?
- Did the patient have contact with rats or other rodents?
- Did the patient eat bush meat or import any into the country?
- Did the patient take anti-malarials regularly? If yes obtain details.
- Date of return to the UK.
- Date of onset of illness.
- Details of illness.

Clinical features may include: fever, headache, myalgia, pharyngitis, diarrhoea, bloody diarrhoea, vomiting, rash, bleeding, shock, lymphopaenia, thrombocytopenia and raised AST.

6.2 Infectivity
Dependant on the virus, modes of transmission can include blood, urine, semen, vomit, faeces, tick bites. There has been no evidence of aerosol transmission from VHF patients. If there is no immediate threat to life (malaria being excluded) patients may remain at home. Patients can be managed more effectively if they are categorised according to level of infectivity and risk:

6.2.1 Minimum risk category
- Includes febrile patients who have a history of foreign travel but have not been to an endemic area, or
- Patients who have been in endemic areas or have been in contact with known or suspected source of VHF, but in whom the onset of illness occurred more than 21 days after contact.

6.2.2 Moderate Risk category
- Includes febrile patients that have been in an endemic area during the 21 days before the onset of illness, but have none of the additional risk factors that place them in the high risk category, or
- Patients who have not been in a known endemic area but who may have been in adjacent areas or countries during the 21 days before the onset of illness, and who have evidence of severe illness with organ failure and/or haemorrhage which could be due to a VHF, and for which no alternative diagnosis is currently evident.

6.2.3 High Risk category
Includes febrile patients who have been in an endemic area within 21 days before illness and:
- Have household contact for more than four hours with people who are known or suspected of having a VHF or
- Nursed or cared for patients known or suspected of having a VHF or
- Are a laboratory worker who has had contact with body fluids or tissues of a human or animal known or strongly suspected of having VHF or
- Were previously categorised as ‘moderate’ risk, but who have developed organ failure and/or haemorrhage.
- Patients who have not been in an endemic area will also be considered a high risk if they cared for a patient or animal known or strongly suspected of having a VHF, or came into contact with their bodily fluids or tissue 21 days preceding illness, or
- Handled clinical specimens known or strongly suspected to contain a VHF virus.

6.3 Risk Assessment
The Consultant Microbiologist should be notified as soon as possible and preferably before the patient is admitted to assess the level of risk and determine whether admission locally is appropriate. For risk assessment refer to appendix 1.

6.3.1 Minimum risk categories
If admission is necessary, patients may be admitted to hospital locally. The following precautions must be taken:

6.3.1.1 Isolation
The patient must be admitted to a single room, with en-suite facilities on the isolation ward.

### Infection control measures for patients with a low possibility of VHF

<table>
<thead>
<tr>
<th>Staff Protection</th>
<th>Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard precautions</td>
<td>• Gloves&lt;br&gt;• Apron&lt;br&gt;• Hand washing</td>
</tr>
<tr>
<td>Additional protection for splash inducing procedures</td>
<td>• Fluid repellent surgical face-mask&lt;br&gt;• Eye protection</td>
</tr>
<tr>
<td>Additional protection for potential aerosol generating procedures based on risk assessment for other infections known to be transmitted by aerosol</td>
<td>• FFP3 respirator or EN certified equivalent&lt;br&gt;• Eye protection</td>
</tr>
</tbody>
</table>

6.3.1.2 Infection Control Precautions
Standard infection control and source isolation precautions must be used (Please refer to Standard infection control precautions policy).
6.3.1.3 **Pathology specimens**
Standard procedures for the transportation of specimens can be used and must be transported in a suitable sealed container. Investigations required will include URGENT Malaria investigation. If the patient has extensive bruising or active bleeding they should be regarded as ‘high possibility of VHF’ and discussed with the Microbiologist.

6.3.1.4 **Patient Transport**
Patients may be transported using standard infection control precautions in an ambulance.

6.3.1.5 **Cleaning**
Standard Terminal clean of side room required on discharge wearing appropriate PPE, blood spillages must be cleaned using 10:000 ppm chlorine releasing agent.

6.3.2 **Moderate and high risk categories**
Moderate risk patients should be admitted either to the Department of Health designated HSIDU at the Royal Free Hospital or to intermediate isolation facilities immediately following consultation with the physician in charge and consultant microbiologist.

**High-risk patients must be admitted to the Department of Health designated HSIDU at the Royal Free Hospital.**

6.3.2.1 **Infection Control Precautions**

<table>
<thead>
<tr>
<th>Infection control measures for patients with a HIGH possibility of VHF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff Protection</strong></td>
</tr>
</tbody>
</table>
| Standard precautions plus droplet precautions where the patient DOES NOT have extensive bruising, active bleeding uncontrolled diarrhoea or uncontrolled vomiting. | - Hand hygiene  
- Gloves  
- Plastic apron  
- Fluid repellant surgical mask  
- Eye protection |
| Additional protection for potential aerosol generating procedures (including central line insertion) | - FFP3 respirator or EN certified equivalent. |
| Standard plus droplet plus respiratory precautions when the patient DOES have extensive bruising, active bleeding, uncontrolled diarrhoea or uncontrolled vomiting | - Hand hygiene  
- Double gloves  
- Fluid repellant disposable gown  
- Eye protection  
- FFP3 respirator of EN certified equivalent.  
- Shoe covers |
6.3.2.2 **Pathology specimens**
An initial malaria test, essential biochemistry and haematology tests can be undertaken locally using standard infection control precautions, ensuring the specimens are transported in a suitable sealed container. The specimens must be identified as ‘high risk’ and double bagged in self-sealing plastic bags. The request form **must not under any circumstances** be placed in the same bag as the specimen. The laboratory must be informed before any specimens are sent. The pneumatic chute **must not be used** to transport specimens; these must be delivered by hand. Additional diagnostic tests must be sent to the special pathology laboratory at CAMR (Centre of Applied Microbiology Research). This will be arranged by the Consultant Microbiologist.

6.3.2.3 **Notification**
The consultant for communicable disease control (CCDC) must be notified of a suspected moderate or high-risk case in order that contacts can be identified and if necessary placed under surveillance.

6.3.2.4 **Patient transfer**
If, after discussion with the physicians at the HSIDU at the Royal Free Hospital, it is agreed that the patient should be transferred to the HSIDU, transport will be arranged in liaison with the consultant microbiologist or CCDC. A category 4 ambulance from the SWAST ambulance service must be used. Precautions should be taken in line with the ambulance service guidelines. Patients categorised as ‘possibility of VHF’ maybe transferred by standard means as long as there are no other high risk factors.

6.3.2.5 **Cleaning**
Standard Terminal clean of side room required on discharge wearing appropriate PPE (as above), blood spillages must be cleaned using 10:000 ppm chlorine releasing agent.

6.3.2.6 **Waste**
All waste from patients identified as high possibility of VHF infection must be classified as Category A infectious waste. The waste department should be contacted to arrange for separate collection.

6.3.2.7 **Linen**
Where a patient has a high possibility of VHF infection, disposable linen should be used. Where re-useable linen has been used, this must not be returned to the laundry but treated and disposed of as Category A Infectious waste.

7. **Dissemination and Implementation**
This policy will be implemented via the following routes:

- Information regarding the policy will be disseminated to the Infection Prevention and Control Link Practitioners
- The policy will be included in the Trust’s Document Library
The policy will be circulated to all Ward Sisters/Charge Nurses/Departmental Managers and Matrons.

8. Monitoring compliance and effectiveness

<table>
<thead>
<tr>
<th>Element to be monitored</th>
<th>It is highly unlikely that this situation will occur. In the event of any suspected case each case will be monitored against the policy and reported to the HICC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>Infection Prevention &amp; Control Team</td>
</tr>
<tr>
<td>Tool</td>
<td>Risk Assessment in this document</td>
</tr>
<tr>
<td>Frequency</td>
<td>as cases occur</td>
</tr>
<tr>
<td>Reporting arrangements</td>
<td>Information will be reported to the Hospital Infection Prevention &amp; Control Committee</td>
</tr>
<tr>
<td>Acting on recommendations and Lead(s)</td>
<td>Required actions will be identified and completed within a month.</td>
</tr>
<tr>
<td>Change in practice and lessons to be shared</td>
<td>Via the Infection Prevention &amp; Control Steering Group</td>
</tr>
</tbody>
</table>

9. Updating and Review

This policy will be reviewed within three years.

10. Equality and Diversity

This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement.

10.1 Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.
## Appendix 1. Governance Information

<table>
<thead>
<tr>
<th>Document Title:</th>
<th>Viral Haemorrhagic Fever Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Issued/Approved:</td>
<td>17 November 2017</td>
</tr>
<tr>
<td>Date Valid From:</td>
<td>22 November 2017</td>
</tr>
<tr>
<td>Date Valid To:</td>
<td>21 November 2020</td>
</tr>
<tr>
<td>Directorate / Department responsible (author/owner):</td>
<td>Louise Dickinson, Consultant Nurse, Joint Director Infection Prevention &amp; Control</td>
</tr>
<tr>
<td>Contact details:</td>
<td>01872 25 4969</td>
</tr>
<tr>
<td>Brief summary of contents</td>
<td>The purpose of this policy is to provide guidelines on the assessment and management of patients with suspected or confirmed viral haemorrhagic fevers.</td>
</tr>
<tr>
<td>Suggested Keywords:</td>
<td>Viral Haemorrhagic Fever.</td>
</tr>
<tr>
<td>Target Audience</td>
<td>RCHT   PCH  CFT  KCCG</td>
</tr>
<tr>
<td>Executive Director responsible for Policy:</td>
<td>Nurse Executive</td>
</tr>
<tr>
<td>Date revised:</td>
<td>31 October 2017</td>
</tr>
<tr>
<td>This document replaces (exact title of previous version):</td>
<td>Viral Haemorrhagic Fever Policy Version 2</td>
</tr>
<tr>
<td>Approval route (names of committees)/consultation:</td>
<td>Hospital Infection Prevention &amp; Control Committee</td>
</tr>
<tr>
<td>Divisional Manager confirming approval processes</td>
<td>Chief Nurse</td>
</tr>
<tr>
<td>Name and Post Title of additional signatories</td>
<td>Not required</td>
</tr>
<tr>
<td>Name and Signature of Divisional/Directorate Governance Lead confirming approval by specialty and divisional management meetings</td>
<td>{Original Copy Signed} n/a</td>
</tr>
<tr>
<td>Name:</td>
<td></td>
</tr>
<tr>
<td>Signature of Executive Director giving approval</td>
<td>{Original Copy Signed}</td>
</tr>
<tr>
<td>Publication Location (refer to Policy on Policies – Approvals and Ratification):</td>
<td>Internet &amp; Intranet ✓ Intranet Only</td>
</tr>
</tbody>
</table>

Viral Haemorrhagic Fever Policy
Version Control Table

<table>
<thead>
<tr>
<th>Date</th>
<th>Version No</th>
<th>Summary of Changes</th>
<th>Changes Made by (Name and Job Title)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.01.14</td>
<td>1</td>
<td>New Policy</td>
<td>Louise Dickinson Consulting Nurse Joint Director Infection Prevention and Control</td>
</tr>
<tr>
<td>14.08.14</td>
<td>2</td>
<td>Updated in accordance with new national guidance</td>
<td>Louise Dickinson Consulting Nurse Joint Director Infection Prevention and Control</td>
</tr>
<tr>
<td>31.10.17</td>
<td>3</td>
<td>Reformatted into new policy template</td>
<td>Louise Dickinson Consulting Nurse Joint Director Infection Prevention and Control</td>
</tr>
</tbody>
</table>

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.
This document is only valid on the day of printing

Controlled Document
This document has been created following the Royal Cornwall Hospitals NHS Trust Policy on Document Production. It should not be altered in any way without the express permission of the author or their Line Manager.
## Appendix 2. Initial Equality Impact Assessment Form

<table>
<thead>
<tr>
<th>Name of the strategy / policy / proposal / service function (hereafter referred to as policy) (Provide brief description):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Directorate and service area: Corporate, Infection Prevention and Control</td>
<td>Is this a new or existing Policy? Existing</td>
</tr>
<tr>
<td>Name of individual completing assessment: Louise Dickinson</td>
<td>Telephone: 01872254969</td>
</tr>
</tbody>
</table>

### 1. Policy Aim*
Who is the strategy / policy / proposal / service function aimed at?
To ensure staff have access to appropriate information to enable them to make decisions about how to effectively manage patients suspected of having Viral Haemorrhagic Fever.

### 2. Policy Objectives*
Appropriate isolation of infected patients in order to protect other patient’s, staff and visitors.

### 3. Policy – intended Outcomes*
All patients are risk assessed for the need for isolation & appropriate action taken.

### 4. *How will you measure the outcome?*
Review of each case as and when this occurs

### 5. Who is intended to benefit from the policy?
Patients and Staff

### 6a) Is consultation required with the workforce, equality groups, local interest groups etc. around this policy?
√

b) If yes, have these *groups been consulted?

C). Please list any groups who have been consulted about this procedure.
Are there concerns that the policy could have differential impact on:

<table>
<thead>
<tr>
<th>Equality Strands:</th>
<th>Yes</th>
<th>No</th>
<th>Rationale for Assessment / Existing Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>√</td>
<td></td>
<td>May affect any age group.</td>
</tr>
<tr>
<td>Sex (male, female, transgender / gender reassignment)</td>
<td>√</td>
<td></td>
<td>May affect any gender</td>
</tr>
<tr>
<td>Race / Ethnic communities / groups</td>
<td>√</td>
<td></td>
<td>May affect any group</td>
</tr>
<tr>
<td>Disability - learning disability, physical disability, sensory impairment and mental health problems</td>
<td>√</td>
<td></td>
<td>May affect any one regardless of their disability</td>
</tr>
<tr>
<td>Religion / other beliefs</td>
<td>√</td>
<td></td>
<td>May affect anyone regardless of religion</td>
</tr>
<tr>
<td>Marriage and civil partnership</td>
<td>√</td>
<td></td>
<td>May affect anyone regardless of whether married or in a Civil partnership</td>
</tr>
<tr>
<td>Pregnancy and maternity</td>
<td>√</td>
<td></td>
<td>May affect anyone regardless of whether pregnant or not</td>
</tr>
<tr>
<td>Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian</td>
<td>√</td>
<td></td>
<td>May affect anyone regardless of sexual orientation</td>
</tr>
</tbody>
</table>

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:
- You have ticked “Yes” in any column above and
- No consultation or evidence of there being consultation - this excludes any policies which have been identified as not requiring consultation. or
- Major service redesign or development

8. Please indicate if a full equality analysis is recommended. Yes | No

9. If you are not recommending a Full Impact assessment please explain why.

Full impact assessment not required as does not affect any of the equality strands.

Signature of policy developer / lead manager / director

Date of completion and submission 30.12.13

Names and signatures of members carrying out the Screening Assessment
1. Louise Dickinson

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead,
c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa, Truro, Cornwall, TR1 3HD

A summary of the results will be published on the Trust’s web site.

Signed ___________________________ Date ___________________________

Viral Haemorrhagic Fever Policy

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