High Consequence Infectious Disease (HCID) Policy V1.1

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Purpose: The purpose of this policy is to provide guidelines on the assessment and management of patients with suspected or confirmed HCIDs.

Target audience: Trust staff, visitors, contractors and volunteers.

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Supporting committee and chairperson: Infection Prevention and Control Committee, Louise Dickinson.

Executive director responsible for the policy: Chief Nursing Officer (Dual).

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☒ Cornwall Partnership NHS Foundation Trust.

☒ Royal Cornwall Hospitals NHS Trust.

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Version	Date	Author and/or reviewer	Section	Changes (key points)
V1.0	16/08/2024	Graham Kaye, Senior IPAC Specialist Practitioner. Rashima Hamdan, Senior IPAC Specialist Practitioner.	All	Merged RCHT and CFT Policies and updated to joint template. Title changed to incorporate all HCID's. Pathway added. Summary Mpox classification added. 1.4 added. 7 added specific to Mpox. Appendix 1 related documents updated. Added List of HCID Summary, Pathway for managing patient with Mpox infection summary, updated introduction, added HCID definition, added training requirements and updated all hyperlinks. Added mental health and ACS in the mpox pathway.

Version	Date	Author and/or reviewer	Section	Changes (key points)
V1.1	19/09/2024	Rashima Hamdan, Senior IPAC Specialist Practitioner.		Page 7 Algorithm chart removed and link to VHF risk assessment added instead. Updated policy based on the updated guidance released 17.09.2024 NHS England » Infection prevention and control measures for clinically suspected and confirmed cases of mpox in healthcare settings. Mpox flowchart on page 7 amended and added the link to the updated guidance. Added updated PPE guidance and advice for patient to wear a mask and cover lesions on the flowchart in page 9. Updated section 1.5 on page 16. Added the link of the update guidance to section 6.4 on page 29.

This document replaces:

RCHT - Joint High Consequence Infectious Disease Policy V1.0.

CFT - IC/024/24 Joint High Consequence Infectious Disease Policy V1.0.

Summary

List of High Consequence Infectious Diseases (HCID)

Contact HCIDs

- Argentine haemorrhagic fever (Junin virus).
- Bolivian haemorrhagic fever (Machupo virus).
- Crimean Congo haemorrhagic fever (CCHF).
- Ebola virus disease (EVD).
- Lassa fever.
- Lujo virus disease.
- Marburg virus disease (MVD).
- Severe fever with thrombocytopaenia syndrome (SFTS).

Airborne HCIDs

- Andes virus infection (hantavirus).
- Avian influenza A H7N9 and H5N1*.
- Avian influenza A H5N6 and H7N7*.
- Middle East respiratory syndrome (MERS)*.
- Mpox Clade I.
- Nipah virus infection.
- Pneumonic plague (Yersinia pestis).
- Severe acute respiratory syndrome (SARS)*.

*See Suspected Cases of Severe Imported Respiratory Virus Infections Policy.

Note: Not all VHFs are HCID, for list of VHFs [Viral haemorrhagic fevers: origins, reservoirs, transmission and guidelines - GOV.UK (www.gov.uk)]

Viral Haemorrhagic Fevers Risk Assessment

VHF endemic countries:
Information on VHF endemic countries can be found at Viral haemorrhagic fevers: origins, reservoirs, transmission and guidelines - GOV.UK (www.gov.uk) or see VHF in Africa map at Lassa_Ebola_Marburg_map_v2_960x640.png (960×640) (publishing.service.gov.uk)
Additional questions:
Has the patient travelled to any area where there is a current VHF outbreak? (http://www.promedmail.org) **or** Has the patient lived or worked in basic rural conditions in an area where Lassa Fever is endemic? (https://www.gov.uk/lassa-fever-origins-reservoirs-transmission-and-guidelines) **or** Has the patient visited caves / mines, or had contact with or eaten primates, antelopes or bats in a Marburg / Ebola endemic area? (https://www.gov.uk/ebola-and-marburg-haemorrhagic-fevers-outbreaks-and-case-locations) **or** Has the patient travelled in an area where Crimean-Congo Haemorrhagic Fever is endemic **and** sustained a tick bite* or crushed a tick with their bare hands OR had close involvement with animal slaughter? (*If an obvious alternative diagnosis has been made e.g. tick typhus, then manage locally).

Please see UKHSA VHF Risk Assessment flow chart: (VHF_Algo.pdf (publishing.service.gov.uk))

Pathway for managing patients with suspected Mpox infection

Patient presents in admitting areas with fever ≥ 38°C, chills, headache, exhaustion, muscles aches, joint pain, back pain and swollen lymph nodes.

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Assess for presence of unexplained rash or lesions on any part of the body including genital/perianal and oral.
or
Presence of proctitis.

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Suspect for Mpox and manage as HCID using HCID PPE.

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Before proceeding to testing and further assessments:

- In ED - direct patient to cubicle 20 in Majors 2 using the external entrance.
- In Urgent treatment centres (UTC), CATUs and MIU - direct patient to isolation room.

Staff undertaking the assessment and diagnostic procedures should don HCID PPE as detailed in NHS England » Addendum on high consequence infectious disease (HCID) personal protective equipment (PPE) **in acute setting only.**

In all other settings, airborne PPE is required, as outlined in Appendix 5b (england.nhs.uk).

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The possibility of mpox should be considered if they meet the case definitions of mpox. For the criteria and risk factors, follow the guidance stated in Mpox: guidance on when to suspect a case of mpox - GOV.UK (www.gov.uk).

Patients with confirmed or clinically suspected mpox but clade **NOT YET KNOWN** should be managed as a HCID mpox case whilst further information is pending. See guidance Operational mpox HCID (Clade I) case definition - GOV.UK (www.gov.uk).

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Pathway for managing patients with suspected Mpox (continued)

Sampling for diagnostic testing

For RCHT laboratory facing admission units:

- Take **viral swab** in viral transport medium from an open sore, surface of the vesicle, other wounds if present including throat swab if with pharyngeal lesions are present. Label these as for Mpox testing.
- Take viral throat swab if no rash or lesions but is high risk contacts of a confirmed or highly probable case of Mpox. Label these as for Mpox testing.
- Take additional viral swab from the lesions and ulcers to be tested for local viral/HSV-VZ testing, and an EDTA for syphilis.
- Ensured that these are correctly labelled and send to the microbiology lab via an appropriate sealed container which can be requested from the lab. Do not send via POD system.

Seek advice from RCHT Microbiologist on samples to take.

For UHP and NDDH laboratory facing admission units:

- Contact their microbiologist for advice and follow their process.

Patient is for Admission

For admission to RCHT:

***All suspected cases for admission should be admitted to RCH Wheal Prosper including from adult community services and mental health unless they are NDDH or UHP facing hospitals.**

- Notify Microbiologist and Infection Prevention and Control team as soon as possible.
- Notify Clinical Site Coordinators and Wheal Prosper.
- Inform local UKHSA health protection team (HPT) on 03003038162.
- For admission to Critical Care, follow Critical Care SOP.
- For Paediatrics, follow Paediatric Mpox SOP.
- For women and birthing people, follow maternity Mpox SOP.

For admission to UHP, NDDH and other acute hospitals:

- Contact them and follow their local procedures.

Patient is not for Admission

- Inform local UKHSA health protection team (HPT) and seek advice. Find your local health protection team in England - GOV.UK (www.gov.uk)
- Send home via patient's own vehicle. If not possible, contact Clinical Site team or IPAC for advice. Follow advice as detailed in Mpox (monkeypox): people who are isolating at home - GOV.UK (www.gov.uk) if cleared to go home.

Pathway for managing patients with suspected Mpox (continued)

If highly suspecting Clade I Mpox as described in Operational mpox HCID (Clade I) case definition - GOV.UK (www.gov.uk), discuss the case with Imported Fever Service (08447788990) for expedite testing and further advice.

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- Patient **must** be transferred to Wheal Prosper rooms 6 or 7 in RCH via rear entrance.
- Patient from UTC, CATUs and MIUs who require admission to RCH must follow admission process above and notify RCH site coordinators.
- For paediatric cases, follow the procedures of the Mpox- Paediatric SOP.
- For maternity cases, follow the procedures of Mpox- Maternity SOP.
- For patients requiring intensive care, admit to the side rooms in the critical care unit. A rolling lockdown protocol is needed on patient transfer. Follow ITU pathway for admitting patients with high consequence infectious disease and VHF.
- Staff assisting with transfers must wear HCID PPE as detailed in the National Infection Prevention and Control Manual for England.
- For admission to UHP, NDDH or other acute Trusts, follow their protocol.
- Contact patient transport/ SWAST and inform of the patient status to arrange safe transfer of the patient.
- Ask patient to wear fluid resistant surgical mask (FRSM) until isolated, if not contraindicated to patient condition.
- If there are lesions present, covering the mpox lesion with clothing or dressings may reduce the risk of transmission in shared or public spaces, including on transfers.

Mpox classification and appropriate infection prevention and control pathways

Information about the high consequence infectious disease (HCID) status of Mpox is available in the HCID status of Mpox guidance. If the clade is unknown, all cases meeting the operational definition of an HCID should be managed as per an HCID case. (Numbered notes refer to the notes beneath the table).

Type of Mpox: World Health Organisation (WHO) designation [note 1]	Type of Mpox: previous designation	Advisory Committee on Dangerous Pathogens (ACDP) Hazard Group [note 2]	Transportation of samples [note 3]	Transportation of viral cultures	Categorisation of waste [note 3]	HCID pathway [note 4]	National IPC manual for England [note 5]
Clade I.	Congo Basin or Central African clade.	3.	Category B.	Category A.	Category B.	Yes.	Appendix 11b, 'Aide memoire for optimal patient placement and personal or respiratory protective equipment for HCIDs'. Standard precautions and transmission-based precautions.

Type of Mpox: World Health Organisation (WHO) designation [note 1]	Type of Mpox: previous designation	Advisory Committee on Dangerous Pathogens (ACDP) Hazard Group [note 2]	Transportation of samples [note 3]	Transportation of viral cultures	Categorisation of waste [note 3]	HCID pathway [note 4]	National IPC manual for England [note 5]
Clade II. Two subclades: • Clade IIa • Clade IIb [note 6]	West African clade.	3.	Category B.	Category A.	Category B in a clinical setting. Those isolating at home can dispose of their waste in the domestic waste stream. See Mpox (monkeypox): people who are isolating at home - GOV.UK (www.gov.uk)	No.	Standard precautions and transmission-based precautions.

Notes:

[note 1] See Monkeypox: experts give virus variants new names.

[note 2] See The approved list of biological agents. Advisory Committee on Dangerous Pathogens and Health and Safety Executive (HSE).

[note 3] See Multilateral Agreement M347 under section 1.5.1 of ADR on the carriage of monkeypox virus, By derogation of paragraph 2.2.62.1.4.1, Section 3.2.1. (Table A, 'Dangerous goods list') and Chapter 4.1 of 'Accord relatif au transport international des marchandises dangereuses par route' (ADR), infectious substances containing Mpox virus except for cultures of Mpox virus may be carried under UN 3373 or UN 3291, as appropriate.

[note 4] See High consequence infectious diseases (HCID).

[note 5] See National infection prevention and control manual for England.

[note 6] Variants from the Clade IIb, B.1 lineage were the cause of most cases during the 2022 global outbreak.

Contents

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- Cornwall Partnership NHS Foundation Trust: Email cpn-tr.infogov@nhs.net
- Royal Cornwall Hospitals NHS Trust: Email rch-tr.infogov@nhs.net

1. Introduction

1.1. High consequence infectious disease (HCID) is defined according to the following criteria:

- Acute infectious disease.
- Typically has a high case-fatality rate.
- May not have effective prophylaxis or treatment.
- Often difficult to recognise and detect rapidly.
- Ability to spread in the community and within healthcare settings.
- Requires an enhanced individual, population and system response to ensure it is managed effectively, efficiently and safely.

HCIDs are further divided into contact and airborne groups:

- Contact HCIDs are usually spread by direct contact with an infected patient or infected fluids, tissues and other materials, or by indirect contact with contaminated materials and fomites.
- Airborne HCIDs are spread by respiratory droplets or aerosol transmission, in addition to contact routes of transmission.

HCIDs including VHFs are rare in the UK. When cases occur, they tend to be sporadic and are typically associated with recent travel to an area where the infection is known to be endemic or where an outbreak is occurring.

1.2. **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. VHF are a group of illnesses caused by several distinct families of viruses: arenaviruses, filoviruses, bunyaviruses and flaviviruses (such as Lassa fever, Crimean-Congo haemorrhagic fever (CCHF), Yellow fever, Dengue virus, Ebola, and Marburg viruses). They are highly transmissible from person to person, and therefore represent a serious risk to healthcare workers in contact with infected patients.

1.3. 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.

1.4. In the UK, only persons who have; (i) travelled to an area where VHF occur; and/ or (ii) been exposed to a patient or animal infected with VHF (including their blood, body fluids or tissues); or (iii) worked in a laboratory with the infectious agents of VHFs; are at risk of infection from VHFs.

1.5. **Mpox** primarily occurs in Central and West Africa. The incubation period for mpox ranges from 6 to 13 days, although it can be as short as 5 days or as long as 21 days. Symptoms of Mpox begin 5 to 21 days (average 6 to 16 days) after exposure with initial clinical presentation of fever, malaise, lymphadenopathy and headache. Within 1 to 5 days after the appearance of fever, a rash develops, often beginning on the face or genital area then spreading to other parts of the body. The rash changes and goes through different stages before finally forming a scab which later falls off. The illness is usually mild and most of those infected will recover within a few weeks without treatment. The mortality from Mpox is low (<1% in Africa) with pregnant women, children and immunocompromised hosts being at highest risk.

Clade I Mpox virus (MPXV) is a high consequence infectious disease (HCID) which may be more severe and transmissible than the clade II Mpox, which has been present in the UK since 2022.

Clade I Mpox virus (MPXV) has historically only been reported in five countries in Central Africa. There is now increasing transmission of clade I Mpox, with countries reporting laboratory-confirmed Clade I Mpox in: the DRC, Republic of Congo, Central African Republic, Burundi, Rwanda, Uganda, Kenya, Cameroon and

Gabon. The countries where there may be a risk of Clade I Mpox exposure (base on sharing a border with the DRC) currently include Angola, South Sudan, Tanzania, and Zambia. Given the rapid spread of Clade I in the African region please check the [Operational mpox HCID (Clade I) case definition - GOV.UK (www.gov.uk)] regularly for any updates to the countries included in the list above.

There is evidence of sustained sexual transmission of clade I MPXV in the DRC. Sexual transmission should not be used to infer whether an mpox case is likely to be clade I or II.

Mpox is not considered an HCID in the following circumstances:

- A case has a laboratory confirmed Clade II Mpox virus (MPXV) infection

or

- A confirmed or clinically suspected Mpox case of an unknown clade and none of the epidemiological characteristics listed above in Operational management as HCID apply.

In our organisation if clade is still unknown, Mpox will be considered as an HCID.

1.6. This version supersedes any previous versions of this document.

2. Scope

This policy applies to all staff working in the Royal Cornwall Hospital's Trust (RCHT) and Cornwall Partnership NHS foundation trust (CFT).

3. Definitions and glossary

Viral haemorrhagic fevers (VHFs) - a group of illnesses that are caused by several distinct families of viruses: arenaviruses, filoviruses, bunyaviruses and flaviviruses.

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.

IPAC - infection prevention and control.

HCID – high consequence infectious disease.

4. Ownership and responsibilities

4.1. Role of the Consultant Microbiologist/ Infection Control Doctor

- Advise GP's and where relevant the admitting medical staff on the suitability of admission to the Trust or to a Regional Centre.
- Inform UK Health Security Agency (UKSHA) and the Director of IPAC (DIPC) of any patient who is either diagnosed/or suspected of having a HCID.
- Lead in the initial management of any patient with suspected/ diagnosed HCID.

4.2. Role of the Medical Staff

- Alert and liaise with the Consultant Microbiologist/ IPAC Doctor regarding the continuing management of a patient suspected of having a HCID.
- Communicate with the IPAC team to ensure that all relevant staff are informed regarding the infection control precautions to be undertaken.

4.3. Role of the Infection Prevention and Control Team

- Advise all relevant groups of staff on infection control precautions.
- Work closely with the Consultant Microbiologist / IPAC doctor / DIPC.

4.4. Role of the Director of Infection Prevention and Control

Instigate an Outbreak Control Group/Major Outbreak Control Group as required and update the Executive Team, as necessary.

4.5. Role of the Outbreak Control Group

- Initiate risk assessment and agree the management of the patient/ staff and contacts.
- Implement the Major Outbreak Procedure as outlined in the Management of Outbreaks Policy and develop a major outbreak plan where relevant.
- Ensure that relevant reports are communicated as outlined in the Management of Outbreaks Policy.

4.6. Infection Prevention and Control Committee

Responsible for approval and overseeing the implementation of this policy.

5. VHF Standards and practice

5.1. 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-malarial 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, thrombocytopaenia and raised aspartate transaminase (AST) in bloods.

5.2. Infectivity

Dependent on the virus, modes of transmission can include blood, urine, semen, vomit, faeces, and 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:

5.2.1. **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.

5.2.2. **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.

5.2.3. **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.

5.3. Risk Assessment

The Consultant Microbiologist should be notified as soon as possible and preferably before the patient is admitted in order to assess the level of risk and determine whether admission locally is appropriate.

5.3.1. Minimum Risk Categories

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

5.3.1.1. Isolation

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

5.3.1.2. **Infection Control measures for patients with a low possibility of VHF.**

Staff Protection	Control Measures
Standard precautions.	• Gloves. • Apron. • Hand washing.
Additional protection for splash inducing procedures.	• Fluid repellent surgical facemask. • Eye protection. • Face shield.
Additional protection for potential aerosol generating procedures based on risk assessment for other infections known to be transmitted by aerosol.	• FFP3 respirator or EN certified equivalent. • Eye protection. • Face shields. • Full length gown.

5.3.1.3. **Infection Control Precautions**

Standard infection control and source isolation precautions must be applied. Single use (disposable) equipment and supplies should be used. The use of a needle-free intravenous system to eliminate the risk of needle-stick injuries should also be considered. PPE as described above.

5.3.1.4. **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 Consultant Microbiologist.

5.3.1.5. **Patient Transport**

Patients without confirmed VHF may be transported using standard infection control precautions in an ambulance, provided they do not have bruising, bleeding, uncontrolled diarrhoea or vomiting. Otherwise, a category 4 ambulance from the SWAST ambulance service must be used.. In the event that patient had diarrhoea and vomiting whilst being transported, the vehicle needs to be deep/ terminally cleaned as per patient transport company protocol.

5.3.1.6. **Cleaning**

Deep/terminal/red clean of side room required on discharge wearing appropriate PPE, blood spillages must be cleaned using 10,000 ppm chlorine releasing agent. Hydrogen peroxide vapour (HPV) is required after cleaning. If unable to do HPV, seek advice from IPAC.

5.3.2. **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, (Wheal Prosper rooms 6 or 7) 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.

5.3.2.1. **Infection Control measures for patients with a HIGH possibility of VHF.**

Staff Protection	Control Measures
Standard precautions plus droplet precautions.	• Hand hygiene. • Double gloves. • Fluid repellent disposable coverall or gown.

Staff Protection	Control Measures
	• Full length plastic apron over coverall/ gown. • Head cover e.g., surgical cap. • Fluid repellent footwear e.g., surgical boots/shoe covers. • Full face shield or goggles. • Fluid repellent FFP3.

Refer to NHS England » Addendum on high consequence infectious disease (HCID) personal protective equipment (PPE).

5.3.2.2. **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.

5.3.2.3. **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.

5.3.2.4. **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 and enacted via NHSE EPRR Duty Officer. 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 as described in 6.3.

5.3.2.5. **Cleaning**

Deep/terminal/red clean of side room required on discharge wearing appropriate PPE, blood spillages must be cleaned using 10,000 ppm chlorine releasing agent. Hydrogen peroxide vapour (HPV) is required after cleaning. If unable to do HPV, seek advice from IPAC.

5.3.2.6. **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.

5.3.2.7. **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.

6. Mpox Standards and Practice

6.1. Diagnosis

Mpox is diagnosed by Polymerase Chain Reaction (PCR) testing for the Mpox virus (MPXV) on a viral swab taken from one or more vesicles or ulcers. Swabs should be sent in viral transport media.

Follow the instructions below:

1. Ensure that you are wearing the minimum appropriate PPE as per NHS England » Addendum on high consequence infectious disease (HCID) personal protective equipment (PPE) for acute settings only.
   In all other healthcare settings, airborne PPE is required, as outlined in Appendix 5b (england.nhs.uk).

2. Take a viral swab in viral transport medium from an open sore or from the surface of a vesicle. If other wounds are present, ensure that the sample is definitely taken from a vesicle, an ulcer or a crusted vesicle. Rub the swab over the lesion and place the swab in the collection tube. If there are pharyngeal lesions, a throat swab should also be taken. Label the tube with the patient's name and date of birth, the date and site of the sample. Note that unlabelled tubes cannot be processed.

3. A viral throat swab can be taken for high-risk contacts of a confirmed or highly probable case who have developed systemic symptoms but do not have a rash or lesions that can be sampled. Please note that even if the throat swab is negative, the individual must continue with monitoring and isolation as instructed by their local health protection team and should be reassessed and sampled if further symptoms develop.

4. Samples for investigation of other infections, including sexually transmitted infections, should be packaged separately, with separate request forms.

5. Samples should be sent to your normal local laboratory. Testing for other infections, for example HSV, varicella-zoster virus (VZV), or syphilis, should follow normal local procedures. If MPXV testing is not provided locally, the laboratory should also forward the samples to the Rare and Imported Pathogens Laboratory (RIPL) for MPXV PCR.

6.2. Infectivity

For transmission of Mpox in the 2022 outbreak, evidence suggested that, up to August 2022, transmission was mostly from sexual contact, with the vast majority of cases being gay, bisexual, or other men who have sex with men, most commonly between 30 and 50 years of age, reporting multiple sexual partners (5 or more within the last 3 months), previous or current sexually transmitted infections (including HIV), and use of HIV pre-exposure prophylaxis. There was some evidence of transmission from non-sexual contact, but no evidence of transmission through the air, although the transmission route remains unknown for some cases. Eight studies reported the incubation period of Mpox cases, with estimates of the median or mean incubation period ranging from 6 to 10 days in 2022, shorter than the 12 days estimated in the 2003 outbreak. (Mpox (monkeypox) transmission, and mpox infectious and incubation periods: A rapid review (publishing.service.gov.uk)). The 2024 Clade I type of Mpox is relatively new and little is known, so HCID precautions should be followed until guidance says otherwise.

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.

Clinicians should assess patients and make a judgement as to whether they require admission. Where a clinician feels admission is needed, they should use their usual route for securing access to infectious disease advice and provision and to determine whether hospitalisation is needed.

Experience of previous outbreaks has demonstrated that individuals have needed hospitalisation for:

- Severe, refractory pain, commonly proctitis.
- Eye disease.
- Severe secondary bacterial infections or co-infection with STIs.
- Multiple lesions or those that require surgical intervention.
- Lesions associated with complications due to pain or swelling, e.g. constipation, urinary retention or inability to swallow.
- Rarely, encephalitis and pneumonitis.

Any patient who has mild disease should self-isolate at home until recovery. This covers the majority of cases that we have seen during the 2022 outbreak. Their responsible clinician should advise the patient to contact them if their condition deteriorates.

The responsible clinician should check for travel history, etc., to confirm the individual is infected by the specific outbreak clade. Any cases with a reported a travel history to countries where Mpox is endemic in the 21 days before symptom onset should be discussed with local infection consultant (microbiology, virology or infectious diseases). Any case with a confirmed travel history should be treated as a HCID until the case has been sequenced the clade has been identified. The relevant local infection prevention and control team should be informed of any suspect cases admitted. Current areas of concern and case definitions can be found at Operational mpox (monkeypox) HCID case definition - GOV.UK (www.gov.uk).

Where there is no local infection consultant available, the UKHSA Imported Fever Service may be contacted directly – enquiries process and contact information is available via https://www.gov.uk/guidance/imported-fever-service-ifs.

In response to a positive test result, clinicians should assess patients against the above risk stratification.

Clinicians should use their usual route for securing access to infectious disease advice and provision if the patient requires inpatient care.

For ease, the following trusts in England form the Specialist Regional Infectious Disease network:

- Royal Devon and Exeter NHS Foundation Trust (adults).
- University Hospitals Bristol and Weston NHS Foundation Trust (adults in conjunction with North Bristol NHS Trust, children).

6.4. Infection Control Precautions

For the most up-to-date version of the advice, refer to the guidance stated in NHS England » Infection prevention and control measures for clinically suspected and confirmed cases of mpox in healthcare settings.

Patients requiring hospitalisation must, at a minimum, be treated in a respiratory isolation room, (Wheal Prosper rooms 6 and 7) by staff using the recommended PPE (NHS England » Addendum on high consequence infectious disease (HCID) personal protective equipment (PPE)). A respiratory isolation room is a ventilated single occupancy room with en suite bathroom. The ventilation options are a negative pressure room, or a positive pressure ventilated lobby (PPVL) patient room connected to an en-suite bathroom with extract ventilation and with a positive pressure ventilated lobby.

Once an HCID has been confirmed by appropriate laboratory testing, patients should be transferred rapidly to a designated HCID Treatment Centre. Occasionally, highly probable cases may be moved to an HCID Treatment Centre before laboratory results are available.

Contact HCIDs

There are 2 principal Contact HCID Treatment Centres in England:

- the Royal Free London High Level Isolation Unit (HLIU).
- the Newcastle Royal Victoria Infirmary HLIU.

Further support for managing confirmed contact HCID cases is provided by the Royal Liverpool Hospital and the Royal Hallamshire Hospital, Sheffield.

Airborne HCIDs

There are 5 interim Airborne HCID Treatment Centres in England. Adult and paediatric services are provided by 7 NHS Trusts:

- Guy's and St Thomas' NHS Foundation Trust (adult and paediatric services).
- Royal Free London NHS Foundation Trust, with a paediatric service provided by Imperial College Healthcare NHS Foundation Trust.
- Royal Liverpool and Broadgreen University Hospitals NHS Trust, with a paediatric service provided by Alder Hey Children's NHS Foundation Trust.
- Newcastle upon Tyne Hospitals NHS Foundation Trust (adult and paediatric services).
- Sheffield Teaching Hospitals NHS Foundation Trust (adult service only).

Case transfer arrangements

Hospital clinicians seeking to transfer confirmed HCID cases, or discuss the transfer of highly probable HCID cases, should contact the NHS England EPRR Duty Officer. It is expected that each case will have been discussed with the Imported Fever Service before discussing transfer.

6.5. Pathology Specimens

Diagnostic samples from all suspected or confirmed Mpox cases should be transported as Category B samples.

This is as per the Department for Transport Multilateral Agreement M347 under section 1.5.1 of ADR on the carriage of Mpox virus.

See the Mpox (monkeypox): diagnostic testing - GOV.UK (www.gov.uk) for information on how to submit samples for testing.

6.6. Patient Transport

Hospital clinicians seeking to transfer confirmed HCID cases, or discuss the transfer of highly probable HCID cases, should contact the NHS England EPRR Duty Officer. It is expected that each case will have been discussed with the Imported Fever Service before discussing transfer.

6.7. Cleaning

High risk/red clean of side room required on discharge wearing appropriate PPE, blood spillages must be cleaned using 10,000 ppm chlorine releasing agent. Hydrogen peroxide vapour (HPV) is required after cleaning. If unable to do HPV, seek advice from IPAC.

6.8. Linen

Linen should be managed as infective as per the National infection prevention and control manual for England.

7. Related legislation, national and local guidance

Advisory Committee on Dangerous Pathogens (2015) Management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence. London: Department of Health.

Department of Health & Health and Safety Executive. (2015) Management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence (publishing.service.gov.uk) (Accessed: 7th June 2023)

Centres for Disease Control and Prevention (2021) Viral hemorrhagic fevers (VHFs) | CDC (Accessed: 7th June 2023)

HCID Training Videos - (hcid-training.co.uk)

High consequence infectious diseases (HCID) - GOV.UK (www.gov.uk)

Printable Resources - (hcid-training.co.uk)

NHS England » National infection prevention and control manual (NIPCM) for England

Mpox (monkeypox): diagnostic testing - GOV.UK (www.gov.uk)

Mpox (monkeypox) transmission, and mpox infectious and incubation periods: A rapid review (publishing.service.gov.uk)

Mpox (monkeypox): background information - GOV.UK (www.gov.uk)

Mpox (monkeypox): diagnostic testing - GOV.UK (www.gov.uk)

Mpox: contact tracing - GOV.UK (www.gov.uk)

Mpox: case definitions - GOV.UK (www.gov.uk)

Mpox classification and appropriate infection prevention and control (IPC) pathways (publishing.service.gov.uk)

NHS England » Addendum on high consequence infectious disease (HCID) personal protective equipment (PPE)

Links to key external standards:

- CQC Regulation 12.

8. Training requirements

HCID training (Home - (hcid-training.co.uk)).

FFP3 fit testing.

9. 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 Leaders/Departmental Managers and Matrons.

10. Document Monitoring arrangements

Information category	Detail of process and methodology for monitoring compliance
Element to be monitored	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 IPAC Committee.
Lead	Infection Prevention and Control Team.
Tool	Risk Assessment in this document.
Frequency	As cases occur.
Reporting arrangements	Information will be reported to the Infection Prevention and Control Committee.
Acting on recommendations and lead(s)	Required actions will be identified and completed within a month.
Change in practice and lessons to be shared	Via the Infection Prevention and Control Steering Group.

11. Updating and review

This policy will be reviewed within 3 years and/or as new central guidance is produced.

12. Equality and diversity

This document complies with the Cornwall Partnership NHS Foundation Trust and Royal Cornwall Hospitals NHS Trust equality and diversity statements. The statements can be found in the RCHT Equality Diversity And Inclusion Policy and CFT Equality, Diversity and Inclusion Statement.

The initial equality impact assessment screening form is at appendix 1.

13. Appendix 1: Equality Impact assessment Form

Title of policy or document for assessment: Joint High Consequence Infectious Disease Policy V1.1.

Document library section: Clinical / Infection Prevention and Control.

Is this a new or existing document? Existing.

Date of assessment: 16 August 2024.

Person responsible for the assessment: Graham Kaye, Senior IPAC Specialist Practitioner.

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

Who is affected by the document?
☐ Staff ☐ Patients ☐ Visitors ☐ Carers ☐ Other ☒ All

The document aims to improve access, experience and outcomes for all groups protected by the Equality Act 2010.

Concerns
Are there concerns that the procedural document could have a differential impact on the following areas?
If a negative impact has been identified, please complete a full EIA by contacting the Equality, Diversity, and Inclusion Team. For RCHT please contact rcht.inclusion@nhs.net and for CFT please contact cft.inclusion@nhs.net

Concern area	Response	If yes, what existing evidence (either presumed or otherwise) do you have for this?
Age	☐ Yes ☒ No	
Disability	☐ Yes ☒ No	
Sex	☐ Yes ☒ No	
Gender reassignment	☐ Yes ☒ No	
Pregnancy and maternity	☐ Yes ☒ No	
Race	☐ Yes ☒ No	
Religion and belief	☐ Yes ☒ No	
Sexual orientation	☐ Yes ☒ No	
Marriage and civil partnership	☐ Yes ☒ No	
Groups at risk of stigma or social exclusion such as offenders or homeless people	☐ Yes ☒ No	
Human rights	☐ Yes ☒ No	

Are there any associated objectives of the document? If yes, what existing evidence (either presumed or otherwise) do you have for this?
No associated objectives.

Signature of person completing the equality impact assessment:
Name: Graham Kaye.
Date: 16 August 2024.