

**B07/S/b**

**2013/14 NHS STANDARD CONTRACT  
FOR HIGH SECURITY INFECTIOUS DISEASE UNIT (ALL AGES)**

**SECTION B PART 1 - SERVICE SPECIFICATIONS**

<b>Service Specification No.</b>	B07/S/b
<b>Service</b>	High Security Infectious Disease Unit (All Ages)
<b>Commissioner Lead</b>	
<b>Provider Lead</b>	
<b>Period</b>	12 months
<b>Date of Review</b>	

**1. Population Needs**

**1.1 National/local context and evidence base**

High Secure Infectious Diseases Units (HSIDU) are restricted to hazardous infections which require highly specialised treatment including the use of isolation beds. These infections are of particular public health importance because they can spread within a hospital setting, are difficult to recognise and detect rapidly, and have a high case-fatality rate. Most of these diseases are imported into the UK. For example all recorded cases of haemorrhagic fever viruses in the UK have been acquired abroad, with the exception of one laboratory worker who sustained a needle-stick injury.

The need for admission to an HSIDU is very rare, but units need to in a constant state of alert, and need to be fully operational within hours of notification that a suspected or confirmed case has been identified.

**2. Scope**

**2.1 Aims and objectives of service**

To provide a secure unit for the isolation and treatment of patients who have been either:

- Assessed as being at high risk from or

- Proven to be infected with, a Hazard Group 4 biological agent (Appendix 1) or other emerging biological agent.

There are two high secure units in England, located at the Royal Free Hospital in London and the Royal Victoria Infirmary in Newcastle-upon-Tyne, with both units serving the whole United Kingdom.

The service aims to :

- Maximise the survival of patients infected with highly infectious diseases by providing a high quality service
- Protect staff and the wider public when managing patients with highly infectious diseases.

### **Treatment**

Multidisciplinary approach involving Infectious Diseases (ID) specialist and / or speciality clinician. Input likely to include nursing, radiology and pharmacology. Management of drug resistant infections. In complex and rare infections, treatment is likely to include use of isolation facilities. Treatment adherence is often critical so appropriate support for patients required.

### **Control**

In complex and rare infections, treatment is likely to include use of isolation facilities – including negative pressure rooms - with appropriate air handling and air filtration systems (for protection of staff and public as per Health & Safety Executive and Advisory Committee on Dangerous Pathogens guidelines). Other specialist facilities include specimen containment equipment. Surveillance reporting provided.

## **2.2 Service description/care pathway**

### **Services to be provided**

- To have available at all times isolation and treatment facilities for one patient, such facilities to be provided in conjunction with a specialist infectious diseases unit.
- To ensure the provision of appropriately trained personnel to care for the patient and to ensure that patient care is delivered in accordance with current best practice, taking account of guidance from the Advisory Committee on Dangerous Pathogens (ACDP).
- To ensure provision of appropriate laboratory facilities for the investigation of clinical specimens that aid diagnosis and patient management, taking account of current guidance from the ACDP on the handling of specimens from patients infected or suspected of being infected with Hazard Group 4 biological agents. Arrangements should also be in place for the safe transport of specimens off site e.g. to Porton Down
- To provide appropriate waste management systems (e.g. storage, decontamination and disposal) in accordance with current legislative requirements and take account of guidance from the ACDP on the management

of waste from such units.

- To provide advice to medical microbiologists, virologists, consultants in communicable diseases control (CCDCs) and other clinicians about the management of patients suspected of suffering from an illness that may require care in a HSIDU, including those with a febrile illness newly returned from areas that are endemic for viral haemorrhagic fevers (VHFs).
- To advise and assist in training ambulance services as required regarding the handling and transport of patients to the unit.
- To provide advice to the Department of Health, Foreign and Commonwealth Office and Royal Air Force on the advisability of and safe arrangements for the repatriation of patients with suspected or proven high risk infections.
- To liaise with appropriate public health officials for surveillance of contacts.

This specification is limited to the inpatient care of adults under surveillance or receiving treatment at either the London or Newcastle-upon-Tyne High Secure Infectious Diseases Units.

### **Referral**

- Referral of patients to the unit may arise from CCDCs, medical microbiologists, clinical virologists, infectious disease specialists and other clinicians. The consultant on the unit will be expected to assess the health risk and sanction immediate transfer to the unit if appropriate. Where necessary, the consultant on the unit may be required to visit the patient concerned in order to assess the risk.
- The consultant on the unit will be required to liaise as appropriate with the Health Protection Agency (HPA) and the Department of Health regarding admissions to the unit and follow up of contacts.

### **Pathway**

The referral pathway into a HSIDU will generally be in accordance with the Health Protection Agency's Best Practice Guidance, "Management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence" May 2012 (Gateway reference 17553), illustrated diagrammatically at Appendix 2.

### **2.3 Population covered**

The service outlined in this specification is nationally funded and covers all UK citizens

### **2.4 Any acceptance and exclusion criteria**

Because HSIDU services cover suspected and confirmed cases of Hazard Group 4 biological agent infections, there are no specific exclusions from this service specification.

## 2.5 Interdependencies with other services

Treatment of infectious diseases requires interdependencies with other services including but not limited to:

- Highly Specialised Infectious Disease services detailed in separate service specifications
- Specialised Infectious Diseases
- Tropical Diseases
- Human T-cell Lymphotropic Virus Type 1 (HTLV1)
- Complex Bone & Joint Infections

### Interdependent Services

- Cancer Services
- Services for Blood and Marrow Transplantation
- Services for Women's Healthcare
- Neurosciences Services
- Burns Care Services
- Renal Services
- Intestinal Failure and Home Parenteral Nutrition Services
- Cardiology and Cardiac Surgery Services
- HIV Treatment and Care Services
- Allergy Services
- Immunology Services
- Liver, Biliary and Pancreatic Medicine and Surgery services
- Mental Health Services
- Children; particularly sections on: cardiology & cardiac surgery, ENT, gastroenterology, hepatology, neurosciences, ophthalmology, orthopaedic, renal, respiratory, HIV, and surgery services
- Dermatology Services
- Rheumatology Services
- Respiratory Services
- Orthopaedic Service

Early presentation, testing and diagnosis are critical in prevention, management and control of infectious diseases, requiring clear pathways with local services in primary care, community care and voluntary sector.

A number of infectious diseases require network management arrangements and clear pathways and responsibilities should be identified.

## 2.6 Key Components of a Specialised Infectious Diseases Service

- Combined Inpatient and outpatient care.
- Microbiological, histopathological and radiological diagnostics.
- Provision for administering intravenous antibiotics at home safely (OPAT)
- Dedicated inpatient beds staffed by specialist nurses and professionals allied to

medicine.

- More than one whole time equivalent consultant who are on the Specialist Register for Infectious Diseases.
- Multidisciplinary outpatient clinics.
- Access to other specialised services as required.
- A clinical governance structure and service lead.
- Quality measures such as patient experience surveys and clinical outcome measures.

### 3. Applicable Service Standards

#### 3.1 Applicable national standards e.g. NICE, Royal College

- Management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence - Advisory Committee on Dangerous Pathogens, May 2012
- <http://www.dh.gov.uk/health/files/2012/07/FINAL-VHF-guidance-for-publication.pdf>
- Health Protection Legislation (England) Guidance 2010
- [http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/@ps/documents/digitalasset/dh\\_114589.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_114589.pdf)
- Getting Ahead of the Curve (2002)
- [http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4060338.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4060338.pdf)
- Immunisation against infectious disease (The Green Book) (2006)
- [http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_134694.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_134694.pdf)
- Hepatitis C - Action Plan for England (July 2004)
- [http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4084713.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4084713.pdf)
- Reducing health care associated infections (HCAIs): code of practice for the prevention and control of health care associated infections' (2007)

#### NICE Guidance

[www.nice.org.uk](http://www.nice.org.uk)

Technology Appraisals:

- TA252 : Hepatitis C (genotype 1) – telaprevir : April 2012
- TA253 : Hepatitis C (genotype 1) – boceprevir : April 2012
- TA173 : Hepatitis B - tenofovir disoproxil fumarate: July 2009
- TA154 : Hepatitis B - telbivudine: Aug 2008
- TA153 : Hepatitis B - entecavir: Aug 2008
- TA106 : Hepatitis C - peginterferon alfa and ribavirin: Aug 2006
- TA96 : Hepatitis B (chronic) - adefovir dipivoxil and pegylated interferon alpha-2a : Feb 2006

- TA75 : Hepatitis C - pegylated interferons, ribavirin and alfa interferon Clinical Guidelines: Sept. 2004

#### **Clinical Guidelines**

- CG139 : Infection control: March 2012
- CG117 : Tuberculosis : March 2011
- CG102 : Bacterial meningitis and meningococcal septicaemia: June 2010

#### **4. Key Service Outcomes**

A detailed list of patient and service outcome measures derived from the initial key service outcomes should be listed here. This will be informed by the CRGs work around Quality.

#### **5. Location of Provider Premises**

The Provider's Premises are located at:

##### **Operational:**

Infectious Diseases Department  
Royal Free Hospital  
London  
NW3 2QG

##### **Under Construction:**

Infectious Diseases  
Department Royal Victoria  
Infirmary Newcastle-Upon-  
Tyne  
NE1 4LP

#### **5.2 Services to be provided at the Provider's Premises**

High Secure Infectious Disease Unit.

## APPENDIX 1

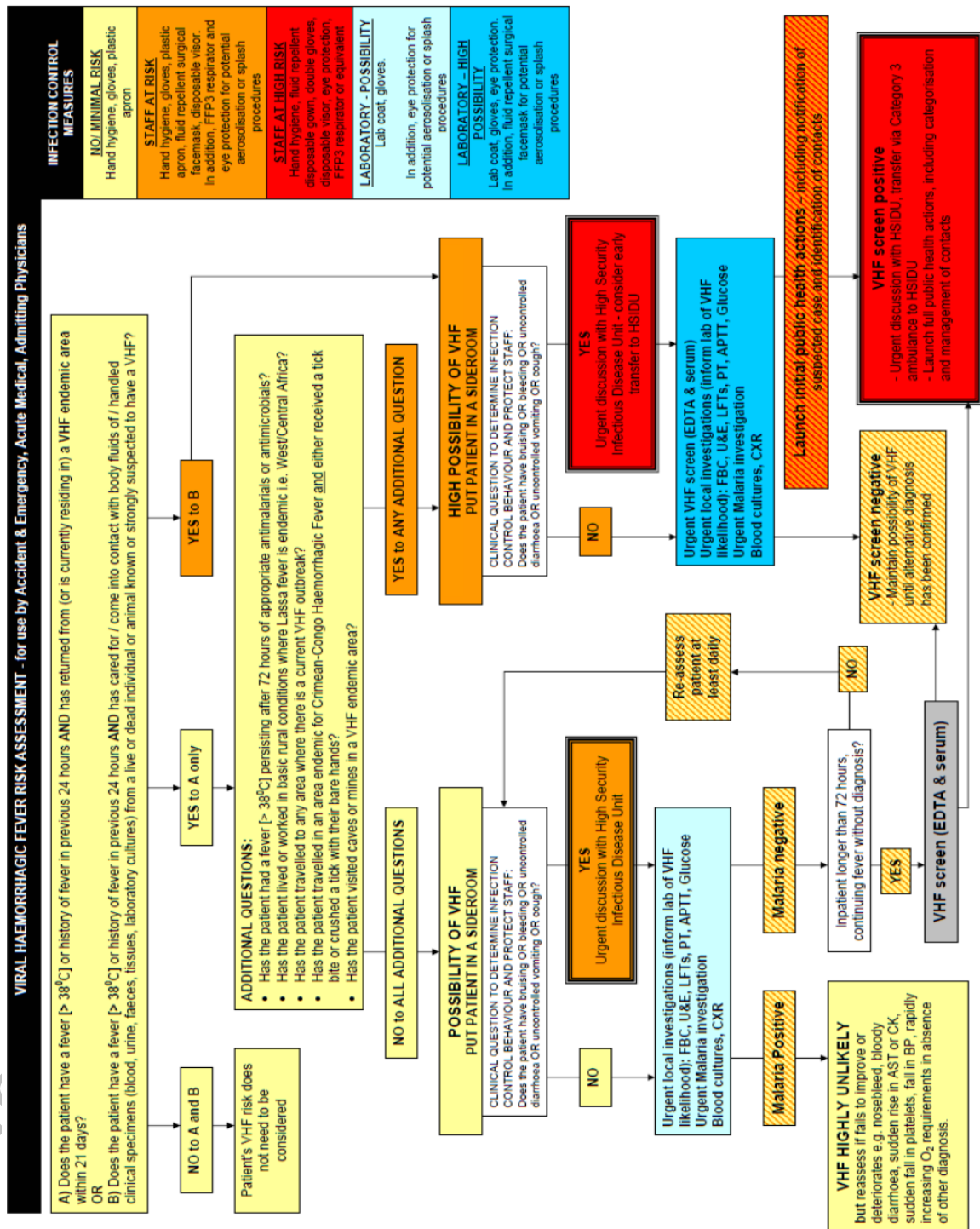
### HAZARD GROUP 4 BIOLOGICAL AGENTS

Hazard Group 4 Biological agents as defined by the ACDP(Health and Safety Executive. Biological agents: Managing the risks in laboratories and healthcare premises; 2005).

- Alkhurma haemorrhagic fever
- Argentinian haemorrhagic fever
- Bolivian haemorrhagic fever (Machupo)
- Brazilian haemorrhagic fever (Sabia)
- Chikungunya
- Crimean/Congo haemorrhagic fever
- Dengue fever
- Ebola
- Guanaito haemorrhagic fever
- Hantaviruses
- Hendra
- Herpesvirus simiae infection (Bvirus)
- Junin
- Kyasanur forest disease
- Lassa fever
- Lujo
- Machupo
- Marburg
- Nipah
- Omsk haemorrhagic fever
- Rift Valley fever
- Russian Spring summer encephalitis
- Sabiá
- Smallpox
- Yellow fever

# APPENDIX 2

## Health Protection Agency's Best Practice Guidance





## Headings for HSIDU Annual Report

### HEADINGS FOR ANNUAL

#### REPORT PART A

##### Introduction

##### Resources/Facilities

- Staff
- Accommodation
- Equipment

##### Developments

- Accomplished
- In progress
- Plans

##### Quality of Service

Statistics – to include number of admissions to the high security isolation bed and requests for advice

##### Finance

##### General Comments/Summary

#### PART B

##### Research Activities

##### Teaching

##### Activities

##### Awards/Grants/Achievement

##### Publications

##### Conference Attended/Papers Presented