

# Infection prevention and control measures for asymptomatic contacts, clinically suspected, and confirmed cases of Andes virus (hantavirus) in healthcare settings

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## 1. Introduction

On 2nd May 2026, a cluster of passengers with severe respiratory illness aboard a cruise ship originating from Argentina was reported to the World Health Organization (WHO). Laboratory testing subsequently confirmed this to be an outbreak of Andes virus (ANDV), a species of hantavirus. There are multiple confirmed and suspected cases, including multiple deaths associated with this outbreak, contacts of cases are known to have disembarked and travelled onwards creating complex contact tracing requirements. Presently, a multi-agency, international response is in place to perform contact tracing, repatriate passengers and contain the spread of infection, in England this is being led by UKHSA.

This document outlines recommended infection prevention and control (IPC) measures to prevent the transmission of ANDV in healthcare settings in England, and to operationalise pathogen-specific guidance on ANDV from WHO and UK Health Security Agency (UKHSA).

This document should be read alongside:

- the [National infection prevention and control manual \(NIPCM\) for England](#) (published on the NHS England website)
  - specifically the [addendum on high consequence infectious disease \(HCID\) personal protective equipment \(PPE\)](#)



- [Hantavirus Outbreak Toolbox](#) updated by WHO May 2026
- the UKHSA [guidance](#) (via the gov.uk website).

**The IPC mitigations and advice provided in this document are specific to the response to the ANDV incident, which should be read in conjunction with other supporting documents highlighted throughout.**

**NB This document is subject to change as the epidemiology and evidence advances and develops.**

The NIPCM for England informs the content of this document and should be used by organisations and employers to support local implementation and risk assessment, ensuring the appropriate application of IPC measures across the health system.

All healthcare workers must be familiar with the principles of standard infection control precautions (SICPs) and transmission based precautions (TBPs) for preventing the spread of infection in healthcare settings.

Below is a list of guidance to support the application of these measures:

- [NHS England » Addendum on high consequence infectious disease \(HCID\) personal protective equipment \(PPE\)](#)
- [HCID printable resources](#) (HCID training website)

## 2. General information

Healthcare providers must establish a clinical pathway for the isolation and management of suspected ANDV cases within their setting following the WHO and UKHSA specific guidance, including the use of FFP3 respirators for high risk contacts and suspected and actual cases.

This pathway should include isolation of the patient, co-ordination with local IPC teams, and arrangements for consulting with local infectious disease, microbiology, or virology experts if ANDV is suspected.

This will ensure appropriate clinical management, testing and infection control measures are implemented.

Action Cards can be found [here](#)

## 2.1 Mode of transmission, incubation and infectious periods

Animal-to-human transmission of hantaviruses occurs when individuals come into contact with infected wild rodents, their droppings or contaminated environments. ANDV is the only hantavirus with documented human-to-human transmission.

The route of human-to-human transmission of ANDV has not yet been established, but it appears that prolonged or close contact (within 2 meters) with a symptomatic infected individual is necessary. Transmission through the air is a possibility and is currently considered a potential route of spread in the current (May 2026) outbreak.

The average incubation period of ANDV is  $n=18$  days but has been reported as ranging from  $n=4$  days up to  $n=40$  days post exposure. The period of infectiousness is unclear; pre-symptomatic transmission is not documented, however, as a precautionary principal it should be assumed that there is potential for presymptomatic transmission  $n=2$  days prior to symptom onset (including prodromal symptoms). It is currently unclear what the upper limit of the infectious period is, stepping down precautions must be considered in consultation with the HCID network and National Incident Response Team and in line with the most up to date epidemiological evidence issued by UKHSA.

## 2.2 Symptoms

The clinical features of ANDV typically include an initial prodromal phase featuring influenza-like or non-specific febrile illness with fever, chills and myalgia, and sometimes gastrointestinal symptoms (nausea, abdominal pain, diarrhoea and vomiting), lasting around 3 to 5 days. After the prodromal phase follows the cardiopulmonary phase characterised by rapid deterioration over 24hrs. Complications include Hantavirus Cardiopulmonary Syndrome (HCPS), respiratory failure, acute respiratory distress syndrome (ARDS), acute pulmonary oedema, shock, coagulopathy and haemorrhage, and cardiac arrhythmias. Neurological complications are uncommon but encephalopathy, encephalitis, meningitis and seizures may occur.

Up to date clinical features of ANDV can also be found in the [UKHSA guidance on ANDV](#).

### 3. Case definition

**Any symptomatic individual who meets the definition of a possible or probable case MUST be managed according to HCID pathways.**

Current case definitions are as below:

#### **Possible case**

- A person presenting with symptoms compatible with ANDV infection (fever, fatigue, myalgia, gastrointestinal symptoms (abdominal pain, vomiting, diarrhoea, nausea) or respiratory symptoms/ acute respiratory distress syndrome (ARDS)

AND

- had contact<sup>1</sup> with someone who travelled on the cruise ship MV Hondius from 1 April 2026, in the 45 days before symptom onset

AND

- no other pathogen consistent with illness presentation identified<sup>2</sup>

#### **Probable case**

- A person presenting with symptoms compatible with ANDV infection (fever, fatigue, myalgia, gastrointestinal symptoms (abdominal pain, vomiting, diarrhoea, nausea) or respiratory symptoms/ acute respiratory distress syndrome (ARDS)

AND

- no other pathogen consistent with illness presentation identified<sup>2</sup>

AND EITHER

- travelled on the cruise ship MV Hondius from 1 April 2026

OR

- had contact<sup>1</sup> with a confirmed or probable case from the MV Hondius in the 45 days before symptom onset

#### **Confirmed case**

- A person testing positive by PCR for hantavirus in blood or other clinical sample

AND EITHER

- travelled on the cruise ship MV Hondius from 1 April 2026

OR

- had contact<sup>1</sup> with a passenger from the MV Hondius in the 45 days before symptom onset

OR

- is on one of the relevant UK Overseas Territory (UKOT) islands

<sup>1</sup>For these purposes contact means close contact i.e. within 2 metres, please discuss with your Health Protection Team if further information is needed

<sup>2</sup>Even if another pathogen is identified, these individuals remain under surveillance for the duration of the potential incubation period

### Important note

Not meeting the operational ANDV case definition does not preclude the patient from other HCID or infectious disease considerations.

Patients should be managed according to their clinical presentation.

The differential diagnosis can be wide; please speak to your local infection specialist to support clinical decision making.

## 4. Diagnostics

Healthcare workers treating patients with suspected ANDV who may meet the HCID operational definition (as outlined above) should contact their local infection team, who should then contact the **UKHSA Imported Fever Service (0844 778 8990)** who will review the risk assessment and advise on the next steps for investigation and management including the need for admission.

Diagnostic samples should be handled in **containment level 3 (CL3)**. Diagnostic samples should be transported as **Category A** (assigned to UN2814).

Additionally, please refer to the following resources for further guidance:

- [Rare and Imported Pathogens Laboratory \(RIPL\): Specimen referral guidelines and service user manual](#) (downloads PDF)

## **Surveillance of asymptomatic contacts identified as a high-risk exposure to Andes virus (hantavirus):**

- Weekly Oral Fluid Swab (OFS) / Gingival fluid (GCF) and blood (self-sampling device) for PCR (UKHSA co-ordinating kits, advice and collection).
- Serum sample for serology at the end of monitoring period.

## **5. Risk assessment (hierarchy of controls)**

Risk assessments must be conducted in all areas where there is possibility of encountering or caring for individuals with clinically suspected or confirmed cases of ANDV.

These assessments should be carried out by a competent person who has the necessary skills, knowledge, and experience to identify and manage the risks associated with ANDV. This individual could be the employer, or someone specifically appointed for this task.

The results of these risk assessments should be communicated to all employees who may be involved in the care and management of ANDV cases. This information can also be integrated into local risk management systems.

To effectively control and reduce the spread of ANDV in healthcare settings, the hierarchy of control measures should be applied. Safe systems of work established through these measures are crucial components of IPC.

Key considerations and measures include:

- Elimination
  - where feasible, physically remove the hazard
  - for example, by substituting in-person assessments or treatments with virtual consultations (such as telephone or video calls)
- Substitution
  - although not always possible, consider virtual consultations as an alternative in primary or outpatient care settings
- Engineering
  - implement measures to control, mitigate, or isolate the hazard
  - such as ensuring that ventilation systems comply with national recommendations for air changes in areas where ANDV cases are cared for
- Administration

- establish and follow safe systems of work, including the implementation of IPC measures
- Personal protective equipment (PPE)
  - ensure the availability and adequacy of PPE, including respiratory protective equipment (RPE), to protect healthcare staff

## 6. Infection prevention and control measures

All healthcare staff must be familiar with the principles of SICPs and TBPs, as outlined in NHS England's [NIPCM for England](#) and with the specific mitigations outlined to respond to the current ANDV incident.

The following sections provide specific guidance on applying these measures for managing clinically suspected or confirmed cases and contacts of ANDV.

### 6.1 Triage

Staff should be aware that **any** patients presenting with respiratory illness or diarrhoeal illness may be infectious and must take immediate action to prevent further transmission.

Whenever possible, conduct telephone triage to assess symptoms and the risk of ANDV before face-to-face contact. Contact the local health protection team (HPT) for advice.

On arrival, patients must be provided an FFP3 respirator if not already wearing one and promptly assessed for infection risk. Triage and testing should be carried out by clinical staff trained in ANDV case definitions and testing. This should be done in a designated area.

Refer to sections 6.3 and 6.4 for patient placement and PPE requirements during triage/initial assessment of suspected cases for suspected ANDV cases.

### 6.2 Source control

[WHO guidance](#) in the context of the ANDV cluster May 2026 is for the management of contacts and clinically suspected and confirmed ANDV cases using non-valved respirators as source control. All healthcare organisations are responsible for ensuring they have sufficient supplies of the non-valved FFP3 respirators, and that instruction is provided on the correct use of the non-valved FFP3 respirator as source control, including removal, disposal, and the need to perform hand hygiene.

Clinically suspected and confirmed ANDV cases and contacts should be provided with a non-valved FFP3 respirator upon arrival in healthcare settings if tolerated and deemed safe.<sup>1</sup> Note this may not be possible in later stages of illness and **individuals experiencing nausea or vomiting should not be asked to wear a non-valved FFP3 respirator.**

Outpatients, including those in urgent and emergency care (UEC) and primary care, should wear a non-valved FFP3 respirator throughout the consultation or treatment unless removed for clinical reasons.

Inpatients are not required to wear a non-valved FFP3 respirator while in a single or isolation room. However, patients with clinically suspected or confirmed ANDV moving between care areas should wear a non-valved FFP3 respirator, unless contraindicated.

The use of a non-valved FFP3 respirators must never compromise clinical care, such as during oxygen therapy or in cases where the mask causes significant distress (for example, in paediatric or mental health settings).

1. If a non-valved FFP3 respirator cannot be tolerated, consider a fluid-resistant surgical mask (FRSM) and apply the same principles as above.

## 6.3 Patient placement

### Primary care, community and outpatient settings

If a suspected case presents in person at a primary care, outpatient, or community setting they should be isolated/socially distanced and a virtual assessment should take place (for example, by phone) staff should not physically assess the patient without PPE (see section 6.4).

Clinicians should urgently notify their Regional Health Protection Team by phone of any suspected cases of ANDV that are being tested. Advice should be sought including transfer to secondary care and immediate precautions via established local arrangements.

### Inpatient settings

For clinically suspected or confirmed ANDV infection in inpatient settings, isolation in a negative pressure isolation room/suite with ensuite facilities is optimal in accordance with established local arrangements and activation of the HCID network.

## 6.4 PPE in all healthcare settings

All healthcare organisations are responsible for ensuring they have sufficient supplies of the required PPE, and that their staff are trained and competent in its correct use.

Primary care providers, like all NHS providers, are now responsible for sourcing and purchasing their own PPE, including FFP3 respirator masks and fit testing, to maintain safe working conditions for IPC.

PPE requirements for clinically suspected or confirmed ANDV cases are determined by risk assessment that includes HCID classification, patient's presenting symptoms, and type and duration of patient contact and care.

Tables 1 and 2 (below) outline the required PPE for different clinical settings and scenarios for ANDV.

NHS England's [NIPCM addendum on HCID PPE](#) outlines the unified ensemble organisations should have or be transitioning to – **in acute settings only**.

Organisations that have transitioned to the unified HCID PPE ensemble should continue to follow the NIPCM addendum on HCID PPE. Where organisations **have not** yet implemented the unified HCID PPE ensemble, **staff must be trained**, practised and competent **against current local policy for airborne HCID PPE**.

Providers should only purchase PPE items for ensembles that their staff are trained to use. Do not purchase items such as hoods for the [unified HCID ensemble](#) if this has not yet been implemented in your organisation; continue with airborne PPE in line with staff training.

### **Important note**

The requirements for suitable and adequate PPE in the **ambulance service may differ** due to the settings and conditions in which they operate.

The ambulance service should continue to follow advice on HCID PPE set out by the National Ambulance Resilience Unit (NARU).

**Table 1: PPE requirements for asymptomatic surveillance and testing of ANDV contacts**

Minimum PPE required for:	PPE required
Surveillance and testing of high-risk asymptomatic contacts	<u>Airborne PPE:</u> <ul style="list-style-type: none"><li>• single pair of disposable gloves,</li><li>• disposable, long-sleeved, fluid-resistant gown</li><li>• eye/face protection (full face visor)</li><li>• FFP3 respirator (fit-tested and fit-checked)</li></ul>

**\*Asymptomatic contacts are required to wear non-valved FFP3 respirators – see section 6.2**

**Table 2: PPE requirements for clinically suspected and confirmed ANDV**

Minimum PPE required for:	PPE required
<p>Where an individual with clinically suspected ANDV presents in person at a primary care, community or outpatient setting and requires immediate clinical care.</p> <p>--</p> <p>In acute settings (physical and mental health) for triage and assessment of suspected cases against the ANDV operational case definition.</p>	<p><u>Airborne PPE:</u></p> <ul style="list-style-type: none"> <li>• single pair of disposable gloves,</li> <li>• disposable, long-sleeved, fluid-resistant gown</li> <li>• eye/face protection (full face visor)</li> <li>• FFP3 respirator (fit-tested and fit-checked)</li> </ul>
<p>In acute settings where a patient with clinically suspected ANDV has been admitted for clinical care while awaiting results of diagnostic testing.</p> <p>--</p> <p>In acute settings where a patient with confirmed ANDV is being clinically cared for while awaiting transfer to a designated HCID treatment centre.</p>	<p><u>Unified HCID PPE ensemble:</u></p> <ul style="list-style-type: none"> <li>• filtering face piece 3 (FFP3) respirator</li> <li>• hood</li> <li>• longer-length visor</li> <li>• long rear-fastening fluid-resistant surgical gown tied to the side</li> <li>• medium thickness apron</li> <li>• inner gloves</li> <li>• middle gloves taped to the gown with microporous tape</li> <li>• outer gloves</li> <li>• wellington boots</li> </ul> <p>OR:</p> <p>If the unified ensemble has not yet been implemented, staff must be trained and competent in the use of any alternative ensemble.<sup>1</sup></p> <p><b>As a minimum</b>, airborne PPE as described above must be used; additional contact measures for this pathogen may include a form of head covering and fluid-resistant footwear such as clogs or wellington boots.</p>

<sup>1</sup> Organisations that have transitioned to the unified HCID PPE ensemble should continue to follow the NIPCM addendum on HCID PPE. Where organisations have not yet implemented the unified HCID PPE ensemble, staff must be trained, practised and competent against current local policy for airborne HCID PPE.

Guidance for safe donning and doffing of airborne PPE is available in [appendix 6 of the NIPCM](#).

Refer to appendices 2 and 3 of the [NIPCM addendum on HCID PPE](#) for resources on donning and doffing the unified HCID ensemble.

Refer to the [NIPCM addendum on HCID PPE](#) for the management of used HCID PPE, including disposal and decontamination of any potentially reusable components, for example wellington boots.

## 6.5 Hand hygiene

ANDV is an enveloped virus and is susceptible to alcohol-based hand rubs (ABHR), therefore, recommendations for hand hygiene should be followed as per section [1.2 of the NIPCM](#), specifically: Wash hands with non-antimicrobial liquid soap and water if:

- hands are visibly soiled or dirty
- caring for patients with vomiting or diarrhoeal illnesses
- caring for a patient with a suspected or known gastrointestinal infection, eg norovirus or a spore-forming organism such as *Clostridioides difficile*.

In all other circumstances, use alcohol-based handrubs (ABHRs) for routine hand hygiene during care.

[Appendices 1 and 2 of the NIPCM](#) detail the correct techniques for hand hygiene (washing and rubbing).

## 6.6 Environmental decontamination procedures for ANDV cases

Staff responsible for decontamination of healthcare environments where clinically suspected or confirmed ANDV cases are managed must be properly trained in the correct use of all products and the necessary PPE (see section 6.4 above).

ANDV is susceptible to a range of disinfectants commonly used in healthcare settings, including chlorine-releasing agents. If chlorine-releasing agents are not suitable for the material being decontaminated, a solution of 70% alcohol (ethanol or isopropyl alcohol) can be used.

Cleaning using a neutral detergent must be performed prior to disinfection. **Where clinically suspected and confirmed cases are cared for a second disinfection must be performed immediately after the first.** The NHS HCID network has existing protocols for the environmental decontamination of HCID facilities.

### 6.6.1 Primary care, community, and outpatient settings

If a clinically suspected or confirmed ANDV case or a contact visits the setting, the following decontamination procedures should be carried out after they leave:

- Decontaminate reusable non-invasive care equipment in the room before removal (as per section 6.6).
- Remove waste (see section 6.7).
- Remove bed screens and curtains – dispose of or clean according to section 6.8 (safe management of linen), and section 6.7 (safe management of waste).

Clean and disinfect waiting areas, facilities (such as toilets), treatment or assessment areas, and any reusable equipment used. Use either:

- a combined detergent/disinfectant solution at a dilution of 10,000 parts per million available chlorine (ppm available chlorine (av.cl.)); or
- a general-purpose neutral detergent in warm water followed by solution of 10,000ppm av cl

Clean from highest to lowest points and from the least to most contaminated areas, ensuring all equipment and surfaces (including floors) are decontaminated.

**For clinically suspected or confirmed cases this process must be repeated i.e. disinfect twice.**

### 6.6.2 Inpatient settings

Only clinical staff trained and competent in HCID PPE should enter the at-risk clinical environment for suspected or confirmed HCIDs.

These staff may need to perform tasks such as environmental cleaning that are typically handled by other groups.

Patient isolation rooms/areas must be decontaminated at least daily, or more frequently based on infection prevention and control team (IPCT) advice. Use either:

- a combined detergent/disinfectant solution at a dilution of 10,000 parts per million available chlorine (ppm available chlorine (av.cl.)); OR
- a general-purpose neutral detergent in warm water followed by solution of 10,000ppm av cl

Increase the frequency of in areas prone to higher contamination such as:

- toilets and commodes
- frequently touched surfaces (for example, door/toilet handles, locker tops, over bed tables and bed rails)

### **Terminal decontamination**

After a patient is transferred, discharged, or deemed no longer infectious, the following steps should be taken:

- Decontaminate reusable non-invasive care equipment in the room before removal (as per section 6.6).
- Remove waste (see section 6.7).
- Remove bedding, bed screens, and curtains– dispose of or clean according to section 6.8 (safe management of linen), and section 6.7 (safe management of waste).

Decontaminate the room using either:

- a combined detergent/disinfectant solution at a dilution of 10,000 parts per million available chlorine (ppm available chlorine (av.cl.)); OR
- a general-purpose neutral detergent in warm water followed by solution of 10,000ppm av cl

Clean from highest to lowest points and from the least to most contaminated areas.

**For clinically suspected or confirmed cases this process must be repeated i.e. disinfect twice.**

**For confirmed cases housed in non-specialist (non-HCID) units, terminal disinfection should include fumigation. This procedure will need to be carried out following a thorough risk assessment and in consultation with the local IPC team.**

### 6.6.3 Specific advice for settings without access to chlorine (UKHSA biological principles)

Environmental decontamination advice in relation to asymptomatic contacts of ANDV:

- Remove any clutter to enable thorough cleaning.
- Remove any visible soil or blood/body fluids.
- Thoroughly clean surface using a neutral detergent and water.
- Wipe the cleaned surface with either 70% ethanol alcohol or 70% isopropyl alcohol and allow to dry.

Environmental decontamination advice in relation to symptomatic contacts of ANDV:

- Remove any clutter to enable thorough cleaning.
- Remove any visible soil or blood/body fluids.
- Thoroughly clean surface using a neutral detergent and water.
- Wipe the cleaned surface with either 70% ethanol alcohol or 70% isopropyl alcohol and allow to dry.
- Wipe the surface for a second time with either 70% ethanol alcohol or 70% isopropyl alcohol and allow to dry. Soft furnishings should be avoided in accommodation for symptomatic contacts of ANDV. Hard non-porous surfaces are easier to decontaminate. Soft furnishings should be steam cleaned once the symptomatic individual has vacated the room/accommodation.

The same advice applies to transport (coach and aircraft). Additionally, seat covers should be removed and laundered or steam cleaned on completion of the journey. Disinfection advice informed by [Stability of Andes virus and its inactivation by WHO recommended hand-rub formulations and surface disinfectants \(2025\)](#)

## 6.7 Decontamination of reusable equipment in all healthcare settings

Dedicate patient care equipment to individual patients and minimise the amount of equipment and stock in the room.

Decontaminate reusable patient care equipment using either:

- a combined detergent/disinfectant solution at a dilution of 10,000 parts per million available chlorine (ppm available chlorine (av.cl.)); OR
- a general-purpose neutral detergent in warm water followed by solution of 10,000ppm av cl, OR
- a general-purpose neutral detergent in warm water followed by 70% alcohol solution (ethanol or isopropyl alcohol)

Follow standard operating procedures (SOPs) and manufacturers' guidelines for the decontamination of medical/surgical equipment, for example dialysis machines.

## 6.8 Safe management of waste

Waste generated in the care of patients with confirmed ANDV infection, including laboratory waste and used PPE, is considered **Category A waste**.

Waste generated during assessment of a suspected case may be quarantined in Category A-compliant conditions pending the results of ANDV diagnostic testing. If results are negative, quarantined waste may be disposed of per the appropriate clinical waste category. If waste cannot be securely quarantined while awaiting results of diagnostic testing, it must be disposed of as **Category A waste**.

If the waste contains chemical or pharmaceutical contaminants, it must be placed in a yellow container (or purple if cytotoxic or cytostatic), and either incinerated or sent to a permitted site for disposal as per national regulation.

Live cultures must be disposed of as **Category A waste**.

ANDV waste management should adhere to [Health Technical Memorandum 07:01 'Safe Management of Healthcare Waste'](#) (NHS England website).

## 6.9 Safe management of linen

Linen from a clinically suspected or confirmed ANDV case **must not be returned to the laundry**.

Infectious linen should be stored securely until diagnostic results are available. If ANDV is confirmed, the linen must be disposed of as Category A waste as outlined in section 6.7. If

storing infectious linen while awaiting diagnostic test results is not feasible, it should be disposed of as Category A waste as a precautionary measure.

When handling linen from a clinically suspected or confirmed ANDV cases, ensure a waste receptacle is placed as close as possible to the point of use for immediate deposit.

## 6.10 Care of the deceased

The principles of SICPs and TBPs continue to apply while deceased individuals remain in the care environment.

Deceased individuals with confirmed or suspected ANDV infection or who are deemed an asymptomatic contact should be managed in accordance with HCID network protocols and Health and Safety Guidance 283 (HSG283) [Managing infection risks when handling the deceased](#)

## 7. IPC guidance for ambulance and patient transport services (PTS)

The IPC guidance outlined in this document applies to all ambulance and PTSs.

These services should adhere to ambulance SOPs for managing individuals with infectious diseases, including HCIDs.

## 8. Visitor guidelines

Visits to patients who are clinically suspected or confirmed ANDV patients should be restricted. However, clinicians should use their discretion in circumstances where visitor restriction is considered inappropriate, and individualised guidance should be obtained from the local infection service or IPCT for parents, carers, or guardians.

Visiting requests for any HCID patient including ANDV must be discussed with the clinicians and the HCID Network.