

# NIPAH VIRUS (NiV) DISEASE LABORATORY GUIDANCE



NATIONAL INSTITUTE FOR  
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

Outbreak Response Unit, Division of Public Health Surveillance and  
Response and Centre for Emerging Zoonotic & Parasitic Diseases and Centre  
for Respiratory Diseases and Meningitis  
National Institute for Communicable Diseases (NICD)  
24-hour hotline number 0800 212 552

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## GUIDANCE FOR THE LABORATORY INVESTIGATION OF INDIVIDUALS TO BE EXCLUDED OF NIPAH VIRUS (NiV) INFECTION IN SOUTH AFRICA

### STEP 1: ASSESSMENT OF PERSON FOR CONSIDERATION OF NiV INFECTION

A **suspected case** of Nipah virus (NiV):

Any person presenting with

- an acute onset of fever ( $\geq 38^{\circ}\text{C}$ ) with new onset of altered mental status or seizure and/or
- fever with headache and/or
- cough or shortness of breath;

AND has an epidemiological link

- who visited or resided in Kerala, India, or a community affected by a NiV disease outbreak ([Pteropus Bats Presence and Nipah Virus Outbreaks | Nipah Virus \(NiV\) | CDC](#)), in the six weeks prior to onset of illness and;
- had direct contact with or cared for suspected/confirmed NiV cases (humans/pigs) in the six weeks prior to onset of illness;

**NOTE:** The differential diagnoses for travelers from South Asia or South-East Asia is broad and malaria, dengue, chikungunya, zika, leptospirosis, typhoid and common respiratory infections should be excluded in patient.

### STEP 2: COMPLETE THE CASE INVESTIGATION FORM

- Complete this [case investigation form](#) fully (also available from [www.nicd.ac.za](http://www.nicd.ac.za))
- Include [case investigation form](#) with specimens submitted for testing

### STEP 3: SUBMIT SPECIMENS FOR SPECIALIZED LABORATORY INVESTIGATION

- For testing, the following specimens are used:

SPECIMEN	CONSIDERATIONS
Blood / serum	SST or clotted blood tubes, 1 tube (approx. 10 ml) <i>Required for all individuals if NiV infection is to be excluded</i>
Nasopharyngeal swab	In viral transport medium <i>Required for all individuals if NiV infection is to be excluded</i>
Cerebrospinal fluid	Submit at least 1 ml <i>Submit for patient presenting with encephalitis</i>
Urine	Submit in urine specimen jar <i>Additional specimen, not required for all investigations</i>

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- The specimens should be packaged in compliance with the guidelines for the transport of dangerous biological goods (i.e. Category A shipments with triple packaging using absorbent material) (<http://www.iata.org/publications/dgr/Pages/index.aspx>) and couriered directly and urgently to:

**Centre for Emerging Zoonotic and Parasitic Diseases**

**Special Viral Pathogens Laboratory**

**National Institute for Communicable Diseases (NICD), National Health Laboratory Service (NHLS)**

**1 Modderfontein Rd**

**Sandringham, 2131**

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