

GUIDANCE FOR THE LABORATORY INVESTIGATION OF SUSPECTED CASES OF TANAPOX IN SOUTH AFRICA

STEP 1: COMPLETE THE CASE INVESTIGATION FORM

- Fully complete the case investigation form (available from www.nicd.ac.za/tanapox) and send with specimens to laboratory (see step 2)

STEP 2: SUBMIT SPECIMENS FOR SPECIALIZED LABORATORY INVESTIGATION

- The following specimens are used for the investigation at NICD:

Sample type	Collection materials	Comments
Swab of lesion/s	Dry swab No preservatives required	Preferred sample Required for all investigations Tanapox lesions are usually not vesicular, it is not recommended to attempt to extract lesion fluid
Lesion crust/s	Specimen tube/container No preservatives required	Optional If crusting lesion has ulcerated to produce a scab, both crust and scab can be used
Punch biopsy of lesion	Fresh in container, or with either formalin (histology) or glutaraldehyde (electron microscopy)	Optional

- Please note that histology of lesions may be important investigation for differential diagnosis, contact the laboratory if histology is desired to confirm specimens required.
- The specimens should be packaged in accordance with the guidelines for the transport of infectious biological goods (i.e. Category B shipments; in triple packaging using absorbent material according to [Packing Instructions 650](#); UN 3373, BIOLOGICAL SUBSTANCE, CATEGORY B) and transported to:

**Centre for Emerging Zoonotic and Parasitic Diseases
Special Viral Pathogens Laboratory
National Institute for Communicable Diseases (NICD)
National Health Laboratory Service (NHLS)
No. 1 Modderfontein Rd
Sandringham, 2131**

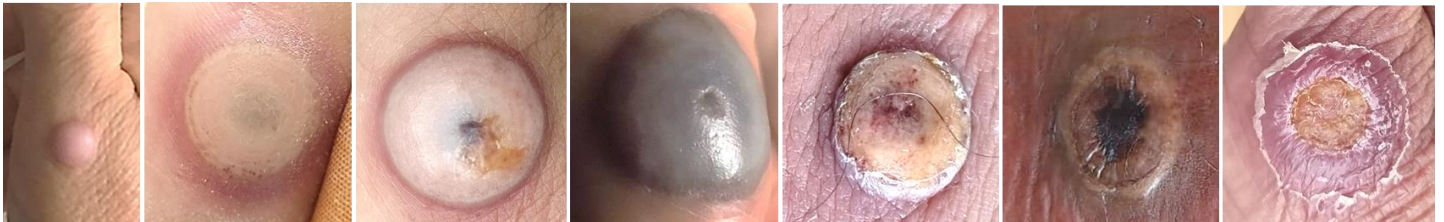
- Samples should be kept cold during transport (cold packs are sufficient). No ice or dry ice required.

Laboratory contact details:

Dr Jacqueline Weyer jacquelinew@nicd.ac.za / 011 386 6376 / 082 903 9131
Dr Naazneen Moolla naazneenm@nicd.ac.za

Suspected case:

1. A person presenting with 1-3 unexplained nodules/pox-like lesion/s.



A lesion begins as a small, discoloured, raised area (papule) that enlarges, usually with inflammation and oedema or swelling of the surrounding skin. This then develops either into a large nodule (1-2 cm) with a distinct depression in the middle (umbilication), or into a crusted ulcer (1 cm) with a raised rim and a central depression. Tanapox lesions are hard and nodular, never fluid-filled or purulent (pus-filled). Typically, there are 1-3 nodules (never >10), usually on exposed body parts (hands, elbows, legs, dorsal surface of feet). Lymph nodes near lesions are often swollen (localised lymphadenopathy), particularly when there is extensive inflammation/hyperthermic erythema associated with a lesion.

AND

2. Lesion formation preceded by one or more of the following signs and symptoms
 - Headache
 - Acute onset of low grade fever (>37,5°C)
 - Myalgia (muscle and body aches)
 - Rash on abdomen (viral exanthem)
 - Fatigue

AND

3. Person lives at, or has visited a human-wildlife interface:
 - after heavy rains/flooding when temperatures are high, as these environmental conditions favour mosquito breeding. In South Africa, tanapox cases have been recorded in late summer (*viz.* February and March, after the peak summer rainfall when average daily temperatures are >25°C). Exposures to female mosquitoes seeking blood meals may be experienced or likely, before lesion formation.
 - where there are non-human primates (such as vervet monkeys) at the same location - evidence suggests they are the natural reservoir of TANV.

Probable case:

A person meeting the above criteria of case definition for a suspected case and no laboratory confirmation.

Confirmed case:

A case meeting the definition of a suspected case and laboratory confirmed for *Tanapoxvirus* by polymerase chain reaction (PCR) and sequencing.