



RABIES SECTION

SAMPLES

- 1) Entire/1 hemisphere of brain, including cerebellum and brainstem or spinal cord or peripheral nerves or salivary glands in 50% glycerol-saline (if no glycerol-saline, send fresh sample in bottle without delay on ice or hand deliver to laboratory).
- 2) Head with intact brain.
- 3) Animal with head and brain intact.

***NB:** Sample specimens sent in 10% Buffered Formalin are not ideal as they will need to be sent to ARC-OVR (takes at least a week to get results) and is an indirect test which is not as sensitive as FA; specimens 2 & 3 will delay the turnaround time because the PM assistant will have to remove the brain first.

****NB:** Samples/carcasses that are severely decomposed will not be tested as this could affect the sensitivity of the test i.e. false negative results may be obtained.

SAMPLE PACKAGING AND TRANSPORT

Pathology samples must be transported in SABS compliant packaging whenever they are transported on a public road – no matter how short the distance. The Dangerous Goods Regulations governing the transport of pathology samples requires that the United Nations *triple-layer packaging* be complied with as follows:

- a. **The primary receptacle:** A watertight, leak-proof receptacle containing the sample. If the receptacle is not leak-proof, seal the top with packaging tape. If the primary receptacles are tubes, they must be separated. Using glass receptacles for highly infectious substances e.g. Rabies specimens, must be avoided at all times.
- b. **Secondary packaging:** A second durable, watertight, leak-proof receptacle to enclose and protect the primary receptacle. The receptacle is packaged with enough material to absorb all fluid should the primary receptacle break.
- c. **Rigid, outer packaging:** Secondary packaging is placed in rigid, outer packaging with sufficient cushioning material. Outer packaging protects their contents from outside influences, such as physical damage while in transit. Each completed package shall be correctly marked, labelled and accompanied with the appropriate documents. Infectious substances, affecting humans and animals e.g. Rabies, Brucella, TB etc. must not be packaged and transported in the same shipping container together with other



specimens.

Package marking and labelling

Packages must be marked and labelled to provide information about the contents of the package, the nature of the hazard and the packaging standards applied. All markings shall be made in such a way that they are clearly visible. Each package shall display the following on the outer packaging:

- a. Details of the consignee & consignor.
- b. United Nations number and shipping name.
 - UN 2814 “Infectious substance, affecting humans and animals” Category A
- c. Indicate the contents of the package when specimens may be infected with Rabies.
- d. Orientation label.
- e. Temperature storage requirements (optional).
- f. When dry ice or liquid nitrogen is used, the appropriate UN number i.e. UN1845, net quantity and type of refrigerant used, must be indicated.

Documentation

The following shipping documents are required:

- a. Current sample submission / report form (enclosed in a plastic bag between the secondary packaging and the outer packaging of the shipping container or securely attached to the outside of the package).
- b. Waybill.

RECEIPT OF SAMPLES

Samples received at reception at Allerton PVL are forwarded to the Rabies section unopened, where they will be tested.

SAMPLE PROCESSING

The Direct Florescent Antibody Test (dFAT) is used. The test itself on a single sample, in a perfect scenario, usually takes 2 hours to complete.

TURNAROUNDS TIMES

Should samples be received before 2pm, results will normally be available the day of submission. Samples arriving after 2pm however, will only be processed the following day.



***NB:** For samples received after 2pm on Friday's, results will be available on the following Monday (taking into consideration no public holidays).

REPORTING PROTOCOL ONCE FINAL RESULT IS GENERATED

1. Please ensure that the current Rabies submission / report form is comprehensively completed and submitted with samples.
2. The section "For laboratory use only" at the top of the Rabies submission / report form will be completed by the Receptionist and responsible veterinary technologists.
3. The section at the bottom of the Rabies submission / report form must be signed by the responsible Rabies Technical Signatory and Laboratory State Veterinarian once the test has been finalised.
4. Rabies reports are emailed to the Epidemiology section for emailing to the Sender, State Veterinary Office and relevant Authorities i.e. if the sample is positive, results will be sent to the CDC; Department of Health; DALRRD and the Environmental Health Officer etc. of the respective area.

***NB:** Should the client not receive results within the expected turnaround time, the client must contact their relevant State Veterinary Office. Failing that, the following personnel may be contacted:

Registry Clerk: Ms Joelene Blessie
Tel: +27 033 347 8305
Email: allerton.results@kzndard.gov.za

State Veterinarian: Dr. Lethiwe Mthembu
Tel: +27 033 347 6284
Email: lethiwe.mthembu@kzndard.gov.za

Veterinary Technologist: Mr Skhanyiso Khumalo
Tel: +27 033 347 6272
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***NB: Initiation of treatment should not be delayed pending laboratory diagnosis (Bishop et al. 2002. RABIES Guide for the Medical, Veterinary and Allied Professions).**