Rabies: Ante-mortem & Post-mortem Specimen Collection Guide

Ante-mortem specimens
Suitable ante-mortem specimens for rabies testing include saliva, nuchal skin biopsy and cerebrospinal fluid (CSF). Submitting a full range of specimens for a suspected rabies cases is recommended.

Post-mortem specimens
It is important to conduct laboratory investigations on persons who died from a suspected rabies virus infections. A brain specimen is the preferred specimen, which may be conducted by a Forensic Pathologists. However, if not available, clinicians may obtain a post-mortem nuchal skin biopsy for rabies diagnosis.

Saliva specimens
- Collect at least 500μl of saliva into a universal specimen container – often easiest using a syringe or suction device. Sputum is not an acceptable specimen.
- If possible, collect 3 specimens in total: 1 specimen daily on 3 consecutive days (not 3 specimens on the same day).

CSF specimens
- Collect at least 500μl of CSF.

Brain specimens
- Whole, half or sections of the both the cerebellum and the cerebrum may be submitted.
- Place the specimen in a screw top container and submerge the specimen in 50% glycerol saline (half volume glycerol and half PBS). If glycerol saline is not available: freeze and send ASAP. DO NOT place in formalin.

Transportation
- The specimens should be packaged in accordance with the guidelines for the transport of dangerous biological goods (double packaging using absorbent material) and transported directly to:
  - Special Pathogens Unit
  - National Institute for Communicable Diseases (NICD)
  - National Health Laboratory Service (NHLS)
  - No. 1 Modderfontein Rd
  - Sandringham, 2131
  - Gauteng, South Africa
- Keep the specimen cool and send ASAP.
- ALL specimens should be labelled AND accompanied by a fully completed Suspected Human Rabies Case History Form.

Please inform the NICD-NHLS Hotline (082-883-9920), which is a 24-hour service for all healthcare professionals countrywide, when submitting specimens for rabies diagnosis. Please note that the NICD-NHLS Hotline is NOT a service for the general public. General public should contact the Department of Health for any queries.