5.2.4. What basic supplies do rabies surveillance personnel need in the field?

- Items for data collection/recording:
  - Notebooks and pens
  - Digital camera for rapid recording of handwritten data (e.g. hospital and veterinary records).
  - Sample submission forms (click here for an example) and ziplock bags for sealing forms.
- Items for sample collection and shipping (see this section for sample collection protocols):

Photo courtesy of KwaZulu-Natal Rabies Project

  - Tool box containing the following items:
    - Personal safety: gloves, mask, goggles and overall.
    - Sampling equipment: large and small knives, scissors, forceps, drinking straws, scalpel blades and handles, large bottle (1-2 litres) for soaking instruments, spray bottle (350-500 ml) for disinfecting area and equipment, disinfectant and water bottle (5 litres).
    - Packaging: tubes containing 50% glycerine-saline, tubes containing 10% formalin, mailing containers, plastic ziplock bags, large carcass bags, marker pens and masking tape (for sealing tubes and bags).
    - Waste bags
- Mobile phones for easy communication.
- Handheld Global Positioning Satellite systems (GPSs) are useful for providing location data, but are not absolutely essential.

5.2.5. What supplies do we need for laboratory-based rabies diagnosis using the fluorescence antibody test?

- Equipment
  - Laboratory furniture (work bench, cubicles, chairs, shelf)
  - Necropsy instruments (scalpel, bone saw, scissors, knife, tweezers)
  - Steriliser/autoclave

- Specimen storage containers
- Post-stain rinse containers
- Refrigerator
- Freezer (-20°C)
- Pipette and tips
- Fluorescent microscope
- Non-fluorescing microscopic slides
- Incubator (37°C) – may not be necessary in tropical countries
- Book/submission forms for reporting the diagnosis, following national or regional guidelines.

- Personal protective wear: lab coats, gum boots, rubber gloves, disposable gloves, masks
- Chemicals
  - Acetone
  - Distilled water or highly purified water
  - Positive and negative brain samples for controls
  - FITC [1]-conjugated anti-rabies antibodies
  - (PBS) phosphate buffered isotonic saline solution at pH 7.4 to 7.6 (0.01 M phosphate buffer, pH 7.4, with 0.138 M NaCl [2] and 0.0027 M KCl [3])
  - Mountant (immersion oil)

Click here for more detailed information on equipment, reagents and protocols for diagnosis of rabies in animals by fluorescent antibody testing.

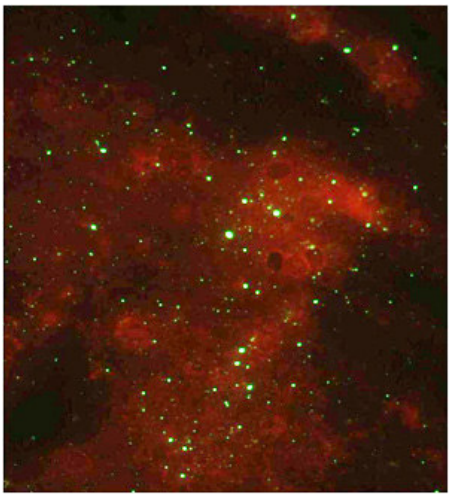

Photo courtesy of Serengeti Carnivore Disease Project

[1] Fluorescein isothiocyanate

[2] Sodium chloride

[3] Potassium chloride

5.2.6. What can I do if I do not have a fluorescent microscope in my laboratory?

Although the fluorescent antibody test (FAT) remains the gold standard rabies diagnostic technique, an alternative test, the direct rapid immunohistochemical test (dRIT), has been developed. Only an ordinary light microscope is required to examine brain smears stained by dRIT making it more suitable for laboratories with limited diagnostic infrastructure (e.g at the regional level). National rabies laboratories should however be equipped to perform the FAT for confirmation of dRIT results obtained at regional laboratories. Click here for more detailed information on equipment, reagents and protocols for rabies diagnosis using the dRIT and FAT. Click here to know about laboratories available for rabies diagnosis.

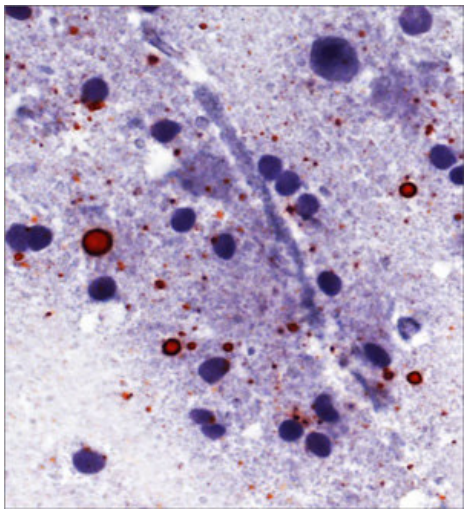

Photo courtesy of Serengeti Carnivore Disease Project