

# Collection, Preservation and Despatch of Forensic Specimen

## Procedure to attend Vetero-legal case

- A. **FIR** from inspector or sub-inspector of police; written signed request letter from police officer not below the rank of Inspector or Executive Magistrate.
  - B. The P.M. examination of wild animals should be conducted as a special case.
  - C. **Wild animals including Peacock:** One should conduct the P.M. examination only when the DFO or higher officer is making request for post-mortem examination. It should be noted that all the viscera including skin, bones, teeth etc., are returned to the person who requested for the necropsy and no item should be left behind.
  - D. Postmortem should be conducted during day light only
  - E. Fill the P.M. report clearly in neat handwriting and in clear language. Avoid writing general sentences. Be specific in your findings and conclusions. Sign the report with date and always keep a copy of report with you for record and future evidences in the court of law.
1. Specimen should be collected in Clean wide mouthed, colourless glass bottles of one litre capacity, fitted with leak-proof lid
  2. PM should be done in the presence of inspector or sub-inspector concerned; write down the Badge number of the police officer who accompanied the postmortem
  3. Materials to be collected:
    - a. Lung
    - b. Liver
    - c. Kidney
    - d. Heart
    - e. Intestinal loop
    - f. Stomach content - Rumen contents/vomit to establish that the toxin has been ingested
    - g. Dry dung without addition of spirit
    - h. All available urine in two preservatives one in Thymol and one in Rectified spirit in
    - i. Feed material or water suspected to have been taken by the animal
    - j. Sample of saturated saline prepared

4. Materials collected should be labeled as follows:

Sl.no	Kind Of The sample	Quantity	Preservative
			Saturated Saline / Thymol / Alcohol / Formalin / No preservative etc.

5. Kind of sample and Quantity

- a. Whole blood 10-20 ml
- b. Serum 10-20 ml
- c. Milk 50-100 ml
- d. Urine 50-100 ml
- e. Water 200 ml
- f. Faeces 50 g
- g. Feed 0.5 - 1kg.

6. Type of poison and Organs to be collected

- i. Arsenic - Liver, kidney, feed, stomach contents, urine.
- ii. Lead - Bone, blood, and stomach contents
- iii. Fluoride - Urine, stomach contents, forages and water sample
- iv. Nitrate - Water, forage, silage, whole blood, plant material, frozen and sent without chopping in a polythene cover
- v. Copper - Kidney, liver, whole blood, faeces
- vi. Cyanide - Blood, liver, forage, stomach contents in 1% mercuric chloride and refrigerated
- vii. Organo-phosphorus pesticides - Body fat, stomach contents, blood (heparinised), urine, feed and half brain
- viii. Organo-chlorine pesticides - Fat, stomach contents, liver, kidney, whole blood, serum.
- ix. Carbon monoxide - Blood (refrigerated)
- x. Urea - Blood (refrigerated), rumen liquor (frozen)



## 7. Collected materials should be labeled as follows:

### Content of the label

- a. Species
- b. Breed
- c. Sex
- d. Age
- e. Name of the material
- f. Name of preservative
- g. Date of death
- h. Date of PM
- i. Time of collection
- j. Suspected for \_\_\_\_\_
- k. Signature with seal

8. **Important** All specimens should be collected in duplicate and store one set in your office. This duplicate specimen shall be destroyed only after obtaining magistrate's order after court proceedings

9. It is always preferable to send the specimens through a special messenger. In vetero-legal cases, the specimens should be sealed in the presence of a witness.

### Mode of preservation

- a) Ice/72 hrs.
- b) Alcohol (95% ethyl alcohol) 1 ml/g of tissue is the ideal preservative for toxicological specimens. **Formalin should never be used as it hardens the tissue without giving scope for scraping and interferes in the analysis.**
- c) Blood and serum should be refrigerated and never frozen. A sample of the preservative used should be sent

### Despatch of preserved specimen

1. After getting order from the Magistrate, the bottles containing specimen should be packed in white cotton cloth (வெள்ளை காடா துணி) tied with thread and the thread is to be sealed with Araku (அரக்கு) with metal symbol. The seal used should be the same throughout, either a private seal or an official seal which is always kept in safe custody
  - a. Keep the bottles in card board box and seal it
  - b. Keep the cardboard box in wooden box. Lock the wooden box and seal it
  - c. Paste the address label covering the keyhole
  - d. Use separate box for different cases

10. These materials should be sent through police constable with a covering letter from VAS with proper references, to the nearest Forensic Lab. The covering letter from VAS should contain a specimen of the seal used
11. After getting result from forensic lab, the PM report should be sent to the sub-inspector
12. Xerox copy of all papers should be kept with VAS to face any judicial proceeding in future.
13. Attend the court with Apron
14. While receiving summon from court, we should attend court proceeding after getting proper permission from superior officer. **But do not skip the court proceedings even if permission from AD/JD is delayed.** After attending the court, the letter from the court should be submitted with the monthly diary to the superior officer

## **PRECAUTIONS TO BE OBSERVED IN CONDUCTING A VETERO-LEGAL POSTMORTEM**

1. In vetero-legal cases, all samples should be collected in the presence of police
2. Collect the tissues as early as possible after death of animal
3. Collect the tissues directly in fixative / preservative
4. Cut the viscera into small pieces to ensure penetration of preservative
5. Hard organs like liver, kidneys etc. should be collected along with capsule
6. Stomach and intestinal contents should be sent after proper ligation at both the ends
7. **The bottles should be filled only up to two-thirds of the height, and not to full height (to avoid bursting due to gas formation or decomposition)**
8. Tissues for histopathology must be collected in 10 % formalin or formal saline. This can be sent to Pathology Laboratory under normal temperature
9. If the samples are not forwarded to Chemical Examiner, the viscera and other articles are preserved for a period of six months and destroyed with the consent of District Magistrate



P.M.No. :

Date :

From :

The Veterinary Assistant Surgeon,

..... Veterinary Dispensary,

.....

To

The Deputy Director,

Forensic Laboratory,

.....

Sir,

Sub : Vetro- legal case - Chemical analysis requested - Regarding.

Ref : Cr. No. .... of ..... Police Station

P.M. No. .... of ..... Veterinary Dispensary

Decease Identification Details :

I am herewith forwarding the Viscera for toxicological analysis for the specimens brought through Police Constable No. .... of .....Police Station.

Place :

Signature of Veterinary Assistant Surgeon

Name :

Seal

# LABEL TO BE PASTED OVER PACKED SAMPLE

..... VETERINARY DISPENSARY

P.M.No. .... Date ..... Cr.No. .... of

..... Police Station.

Content : .....

Deceased Identification Details : .....

Preservative Used : .....

Signature of Veterinary Doctor : .....

# Packing of Specimen to be sent for Forensic Laboratory



Seal the container to avoid spillage of solution and label the container.



Pack the sealed containers in white cloth (வெள்ளை கலாத்தூணி) and tie it with twine bringing the tied end to one place.



The tied end is sealed with Arakku (அரக்கு) and put Private or Govt seal

Take corrugated box



Pack the sealed bottles in corrugated box and seal it and wrap the box with white cloth or white paper



Tie the corrugated box and put arrakku seal at the tied end and also apply Govt seal or Private seal which was applied earlier



Tie the corrugated box and put arrakku seal at the tied end and also apply Govt seal or Private seal which was applied earlier and follow the procedures given in the t