

Necropsy Mentorship

VM 22400

Criteria
Logbook

Index of Logbook

Student Information

- Contact Person at Purdue University
- Selection of Clinical Mentorship Site – Facility Criteria
- Introduction to Clinical Mentorship Tasks
- Note to Students
- Veterinary Necropsy Technique
- Guidelines for Packaging and Shipping of Samples

Clinical Mentorship Tasks

1. Video verification of required equipment and supplies
2. Assist in pro-section on non-preserved animal
3. Collection, preservation and shipping of samples

Clinical Mentorship Projects

4. Safe handling of rabies suspect cases
5. Storage and disposal of deceased animals

Student Information

Contact Information

Questions regarding the overall Clinical Mentorship process should be directed to-

Jennifer Smith, BS, RVT, LATG

Clinical Mentorship Coordinator

jpope@purdue.edu

Questions regarding this mentorship (tasks, due dates, etc.) should be directed to the instructor for this mentorship course.

Selecting the Clinical Mentorship Site – Facility Requirements

You must visit the Clinical Mentorship Site and determine if the following supplies and equipment are readily available to you for use during your Clinical Mentorship. The mentorship supervisor will verify the availability of required items by completing the Mentorship and Facility Requirement Agreement.

The veterinary care facility must be equipped with the following equipment:

- Necropsy knife (sturdy and able to be sharpened)
- Scalpel handle
- Mayo or Metzenbaum scissors
- Thumb Forceps
- Pruning shears or other instrument for cutting ribs

In addition, the following disposable items must be available:

- Appropriate material for packing and shipping samples in formalin
- Heavy-duty latex gloves
- Scalpel blades
- Jars of formalin in various sizes
- Sterile culture tubes or culture swabs
- Zipper-top plastic bags
- Indelible marking pen

Note: If an appropriate case for necropsy does not present to the mentorship site, a large rat may be purchased and used. Any differences in rat anatomy should be noted verbally on the video. A fresh cadaver (not preserved or frozen) should be used.

Introduction to Essential Tasks and Criteria

Before starting each task-

1. Read the Goal, Description, Criteria, and Materials to be Submitted for Evaluation and Verification. Understand what is expected for each task.
2. Make sure that all equipment and supplies needed to complete the task are available. Pay particular attention to the details of what needs to be documented and submitted.
3. Make sure to obtain appropriate permissions where necessary. Please inform the facility's owner/manager of activities. A good relationship with the veterinarian in charge is key to having a positive Clinical Mentorship experience.

After performing each task-

1. Label all items submitted so that the materials submitted for evaluation and validation at Purdue are identified as the student's submission. No edited versions of the Task Verification Form (TVF) will be accepted. All submissions must be original and unaltered.
2. Label all videos posted to Brightspace with the task number.
3. Submit materials by the deadlines listed in the course syllabus

Introduction to Special Projects

Certain mentorships will have required projects to complete in addition to the required tasks. Written projects should be typed, and checked for correct grammar and spelling. Photos should be embedded into the related written documents.

Before starting each project-

1. Read through the project in its entirety. This will give you a description of the project and what is needed to complete it successfully.
2. Determine what materials, if any, need to be submitted for completion of the project.
3. Most projects will come with a list of questions/points that need to be addressed and included in the written document.
4. If video is required for a project, it should be noted in the video verbally that this is for the project and not another required task. Some projects may require verbal narration of a student doing something. Each individual project will define if that is a necessary requirement for that project.

Note to Students

As there is no didactic course to accompany the Necropsy Clinical Mentorship, handouts have been included in the mentorship logbook to inform the student of techniques and procedures that will be needed to complete the tasks. The first is the technique used by the Purdue Animal Disease Diagnostic Laboratory (ADDL) for performance of necropsy. The second is a page of guidelines for packing and shipping samples to outside labs. **Thoroughly review and understand the technique prior to beginning the necropsy.**

The student should review anatomy to be able to identify anatomical landmarks mentioned in the necropsy technique. In addition, the student should understand all the terminology used to describe the technique or lesions observed (i.e., “transudate”, “in situ”, etc.)

The student’s role during the necropsy is to **assist the DVM**, not necessarily perform the procedure independently. This includes helping with the process, documenting findings, and actively engaging in learning. The student must identify each of the listed anatomical structures—either during or after the necropsy—to demonstrate understanding. Additionally, the student is responsible for collecting, preserving, and packaging the samples for shipping. Please note that **samples should not be shipped to Purdue**. If the samples will not be submitted to a lab for analysis, the activity may be completed as a **simulation**.

Veterinary Necropsy Technique

From the Purdue University Animal Disease Diagnostic Laboratory

The following is a brief outline of the technique that is to be used when performing postmortem examinations. Do not begin the necropsy until a permission sheet signed by the owner is in your possession. A signed owner's release form must accompany any animal to be euthanized.

Remember that the entire carcass, including all systems and organs, must be carefully examined. Lesions may appear anywhere, and care should be taken to expose and examine all lesions. Examine each of the paired organs.

Every animal should be weighed and/or measured (i.e., crown-rump length for aborted feti) prior to prosection.

Preliminary Review and Observations:

1. Signalment – species, breed, sex, sexual status, age, color
2. History and clinical diagnosis
3. Clinical pathology
4. External appearance
 - a. Body condition (adequate or inadequate fat stores, emaciated, etc)
 - b. Mucous membranes
 - c. Body orifices
 - d. General conformation
 - e. Superficial lesions (tumors, dermatitis, etc.)
 - f. Hair coat
 - g. Parasites
 - h. Lips, gums, cheeks, teeth

Veterinary Necropsy Technique (continued)

Opening the Body Cavities:

1. Place animal carcass in lateral recumbency and incise skin at axilla
 - a. Continue the ventral midline skin incision anteriorly to the symphysis of the mandible and posteriorly to the perineum.
 - b. Do not damage the udder
 - c. To avoid cutting hair, incise the skin from the subcutaneous side
2. Raise the front leg and scapula and dissect and reflect dorsally
 - a. Remove the remaining skin between the excised front and rear limb to the level of the spinal column and reflect dorsally.
 - b. Examine the **exposed superficial lymph nodes** and **jugular veins**
3. Excise through the “up” rear limb (at the level of the pelvis) and continue to incise through the coxofemoral joint and reflect the rear limb dorsally
4. Examination of the **mammary glands or testes**
 - a. Mammary glands and mammary lymph nodes are completely cut away from the body
 - b. Examine for symmetry, swellings, tumors, atrophy
 - c. Examine the lymph nodes and incise them
 - d. Incise the gland through the cistern and teat canal, examining each portion
 - e. Palpate for thickenings, fibrosis, tumors
5. Examine **prepuce and penis**
6. Make a paracostal incision through the abdominal wall just behind and parallel to the last rib
 - a. Extend the incision dorsally to the vertebrae and ventrally to the midline
 - b. Raise the body wall to avoid cutting viscera
7. Make a paralumbar incision through the abdominal wall caudally to the pelvis
 - a. Reflect the muscle wall ventrally and expose the abdominal cavity
8. Cut the **diaphragm** on the right side in an arc from the sternum along its costal attachments to the vertebral column
 - a. Listen for an inrush of air indicative of negative pressure in the pleural cavity
9. Sever the ribs at their sternal and vertebral ends with a pruning shear or other suitable instrument and lift off the thoracic wall, thus exposing the entire thoracic cavity

Gross Examination of the Thoracic and Abdominal Cavities:

1. Examine both cavities and all contents carefully with minimal movement of the viscera
 - a. Note transudates, exudates, and hemorrhage
 - i. Open the **pericardial sac**
 - ii. Note amount, color, and consistency of abnormal fluid accumulations
2. Examine for adhesions, displacements, absence of organs, and size and symmetry of organs
3. Record lesions of organs and perform detailed examination of organs prior to removal
4. Take initial samples for microbiology, especially exudates in body cavities

Veterinary Necropsy Technique (continued)

Examination of the Thoracic Viscera:

1. Separate the **mandibles** at the symphysis
 - a. Cut along the lingual surface of both sides of the mandible
 - b. Remove the **tongue** and pull it down between the rami
 - c. Disarticulate the hyoid bones. The tongue, **larynx, trachea** and **esophagus** are dissected ventrally back to the thoracic inlet
 - d. Lift up viscera and detach **heart** and **lungs** from the body wall by cutting dorsal and ventral mediastinum
 - e. Sever the **aorta** post cava and esophagus back to about 2-3 cm anterior to the diaphragm
 - f. Sever and remove the thoracic viscera (“pluck”)
2. Examine thyroid, parathyroid, and thymus glands
 - a. Note size, shape, consistency
 - b. Incise glands examining for lesions
3. Arrange the organs in approximately normal position
 - a. Examine tongue by incising transversely
 - b. Open esophagus and examine carefully
 - c. Examine bronchial lymph nodes by palpating and incising
 - d. Observe and palpate lungs for consolidation, emphysema or other abnormal consistency
 - e. Open the larynx, trachea, **bronchi** and small bronchioles
 - i. Note exudates, hemorrhage, foreign bodies or lung worms in bronchial tree
 - ii. Examine areas of consolidation and other abnormal lung tissue by incising

Veterinary Necropsy Technique (continued)

Examination of the Thoracic Viscera (continued):

4. Examine the heart
 - a. Observe any disproportion of parts (dilation, hypertrophy, anomalies) and alterations in shape; note presence of normal adipose tissue
 - b. Open Heart
 - i. Cut through the right atrial free wall (including the auricle) horizontally
 - ii. Examine the endocardium and **vena cava**
 - iii. Examine the atrial side of the right A-V valve
 - iv. Check for sufficiency of valve if indicated
 - c. Cut through the right A-V valve and wall of the right ventricle, keeping the incision near the interventricular septum
 - i. Continue the incision around the right ventricle through the pulmonic valve and pulmonary artery
 - ii. Examine for patent ductus arteriosis
 - d. Open the left atrium and examine in the same manner as the right atrium
 - i. Cut through the left A-V valve, incising the ventricle through the mid-portion of the free wall
 - ii. Continue the incision to the apex
 - iii. Make a horizontal incision in the ventricle approximately mid-way between the coronary groove and the apex, incising from the first cut to the septum
 - iv. At the septum, cut upward through the aortic valve and aorta
 - v. This process should result in a small flap of left heart with aortic valve on one side and left A-V valve on the other
 - e. Examine vessels, valves and septa for anomalies
 - f. Examine **endocardium** and **myocardium**

Examination of Abdominal Viscera:

1. Remove the **spleen**; examine grossly and incise several times
2. Examine the **pancreas** grossly
3. Make a small incision into the duodenum at the level of the pancreatic duct and apply manual pressure to the **gall bladder** to see if bile enters the intestine
4. Remove and examine the **liver**
 - a. Examine the peritoneal surface for fibrosis or adhesions
 - b. Excise the liver from the diaphragm
 - c. Note the size, shape, weight, color and consistency
 - d. Open the gall bladder and the larger bile ducts
 - i. Examine for stones, inflammation, flukes, thickening of the wall
 - e. Palpate and incise the liver liberally from the abdominal surface; observe for necrosis, fibrosis, abscesses, etc.
5. Examine the **adrenal glands** (prior to removing the kidneys)
 - a. Cut adrenals in cross-section and note cortical-medullary ratio

Veterinary Necropsy Technique (continued)

Examination of the Abdominal Viscera (continued):

6. Remove urinary organs as a unit, including both **kidneys, ureters** and **urinary bladder**
 - a. Cut each kidney longitudinally in half from the convex surface to the hilus and note alterations in color, consistency, size, etc.
 - b. Strip off capsule and examine the kidney surface
 - i. Note the ease with which the capsule comes off
 - c. Open and inspect the ureters, bladder and urethra
 - i. Inspect all mucous and serous surfaces
 - d. Open vagina, cervix and uterine horns along their dorsal borders and examine carefully all surfaces
 - e. Examine ovaries for cysts, corpora lutea, atrophy, etc.
 - f. Examine male accessory sex organs; observe size, consistency, inflammation, etc.
7. Remove the **stomach** and **intestines** to the rectum
 - a. Place the rectum over the lumbar area when it is cut so that the abdomen will not be contaminated
 - b. Free the intestine from the **mesentery** as it is removed and observe its lymph nodes

Examination of the Gastrointestinal Tract:

1. The esophagus has been opened
2. Open the stomach along the greater curvature
 - a. Observe the mucosal and serosal surfaces; ingesta must be removed
 - b. Examine for hemorrhage, parasites, foreign bodies, abnormal ingesta, etc.
3. Open the small intestine
 - a. Observe all surfaces and ingesta
 - b. Leave 1-inch segments closed for histopathology
4. Open the **cecum** and colon back to the **anus**, and examine carefully

*****Note: If the musculoskeletal system, central nervous system and eyes are not of particular interest in the patient, dissection of these is not required.***

The necropsy procedure may stop at this point.

Veterinary Necropsy Technique (continued)

Examination of the Musculoskeletal System:

1. Open the stifle, hock and humero-scapular joints
 - a. To open the stifle, cut the straight patellar ligament 1/3 of the way proximal to the tibial tuberosity and medial to the trochlea of the femur, and reflect the patella
 - b. Observe synovia, articular surfaces, articular cartilages, and synovial membranes
2. Examination of the muscular system
 - a. Examine and incise the muscles of various parts of the body, especially lumbar and thigh muscles; check development, color, etc.
3. Examination of the skeletal system
 - a. Examine body for broken bones or healed fractures
 - b. For marrow inspection, remove femoral head with shears and crack femur longitudinally

Examination of the Eyes:

1. Remove the eyeball from the orbit if indicated (not routine)
 - a. Incise periorbital tissues and avoid direct contact with the eye
 - b. Look for corneal opacities, cataracts, tumors, etc.

Examination of the Central Nervous System:

1. Remove the head from the body at the atlanto-occipital articulation
 - a. Incise the spinal cord before excessive traction is placed on the skull
2. Reflect skin and muscles of the head and examine skull for traumatic lesions
3. Remove the brain as described below
 - a. Make a transverse cut behind the orbits (exact location varies in species) using a hacksaw
 - b. Make lateral cuts from the ends of the transverse cuts just medial to the occipital condyles (leave room for brain to be removed intact)
 - c. List off bony cap carefully with a chisel
 - d. Incise the dura over the dorsal brain surface and incise the tentorium cerebelli
 - e. Hold the skull with the nose pointing upward and tap it gently on the table
 - i. Carefully cut the olfactory tracts and other cranial nerves and allow the brain to slip out
 - ii. Avoid traction on the brain
 - f. Remove the pituitary gland by cutting diaphragmatic sella on both sides, clipping the bony projection posterior to the gland, and cutting soft tissues around the gland with scissors
4. Observe the dura
5. Incise the brain transversely (1-cm slices) and look for lesions
 - a. When entire brain is to be fixed, make only one transverse cut into lateral ventricles so fixative may enter tissues

Veterinary Necropsy Technique (continued)

Species-Specific Procedures:

1. Horse
 - a. When the abdomen is opened, move the left parts of the large colon cranially so that the pelvic flexure is lying anterior; move the cecum dorsocranially, the small intestine over the right flank, and the small colon posterior and down
 - i. The mucosa of the guttural pouches is examined when the head is disarticulated
 - b. The cranial mesenteric artery should be opened from the aorta past the ilealcecal and colic artery bifurcations
2. Ruminants
 - a. When the abdomen is opened, place small intestine and colon over the right lumbar area; examine the forestomachs and abomasums for position and adhesions
 - b. Remove forestomachs and abomasums as a unit; separate serosal attachments to stretch the organs out. Open and examine each organ. Remove ingesta and rinse the rumen mucosa with water to examine.

Guidelines for Packing and Shipping of Samples

1. Label all sample containers with the following information, using indelible ink:
 - a. Client name
 - b. Animal name
 - c. Case number (if used)
 - d. Date of collection
 - e. Site of collection (e.g. liver, right kidney)
2. Ship in plastic containers whenever possible
3. Be sure that lids are tight on containers that contain liquid. The ratio of formalin to soft tissue should be at least 10:1. If the sample is bone, the ratio should be at least 20:1.
4. Containers with liquid should be placed into zippered plastic bags separate from submission forms to prevent forms from becoming damaged and unreadable in case of leaks. Sufficient absorptive material should be placed inside the bag to absorb all the liquid if it should leak.
5. Complete submission forms, including all requested information. Paperwork should be placed in a separate bag from the samples.
6. Include address, phone number and FAX number for your clinic to facilitate return of results
7. Pack container and submission form in box for mailing, allowing room for packing materials such as foam peanuts, bubble plastic, or newspaper as appropriate
8. Check with lab to determine if sample must be received at room temperature, cool, or frozen and include coolant source if needed

1. VIDEO VERIFICATION OF REQUIRED EQUIPMENT AND SUPPLIES

Goal: Ensure that the student will have access to all equipment and supplies necessary to complete the skills in this course.

Description: The student will provide a narrated video showing equipment and supplies specific to this mentorship, to verify that required items are available to them and adequate for completion of tasks in their facility.

Criteria:

- The student showed their face clearly and introduced the task. **(CRITICAL)**
- The supervising mentor was physically present and actively supervising the student for the entire task. The student showed and introduced their supervising mentor. **(CRITICAL)**
- The student walked through the facility and showed the following clearly:
 - VTDL-provided sign informing clients that students may be involved in patient care and handling (it must be displayed in an area that is visible to clients, like the lobby). **(CRITICAL)**
 - Necropsy knife or scalpel with blade
 - Pruning shears or other instrument for cutting ribs **(CRITICAL)**
 - Jars of formalin in various sizes **(CRITICAL)**
 - Appropriate material for packing and shipping samples in formalin
- The student provided live narration throughout the task.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for Video Verification of Required Equipment and Supplies, signed by the Clinical Mentorship supervisor.
2. One video showing the student (with their mentor) as they introduced themselves and walked through the facility, showing the listed items clearly. The student narrated the video live as they showed items.

Student Name: _____

Date: _____

Supervisor Name: _____ RVT, CVT, LVT, LVMT, DVM, VMD

I verify that the student will have access to the items shown for tasks in this course.

Signature of Clinical Mentorship Supervisor: _____

2. ASSIST IN PRO-SECTION OF NON-PRESERVED ANIMAL

Goal: To assist a DVM in performing basic prosection techniques on a non-preserved animal for purposes of necropsy and sample collection.

Description: The student will assist a DVM in performing basic prosection techniques on a non-preserved animal, identifying internal structures as they are exposed.

Note: The student's role during the necropsy is to **assist the DVM**, not perform the procedure independently. This includes helping with the process, documenting findings, and actively engaging in learning. The student must identify each of the listed anatomical structures—either during or after the necropsy—to demonstrate understanding.

Criteria:

- The student showed their face clearly and introduced the task. **(CRITICAL)**
- The supervising mentor was physically present and actively supervising the student for the entire task. The student showed and introduced their supervising mentor. **(CRITICAL)**
- The student checked and recorded signalment for the patient.
- The student reviewed the patient history and clinical diagnosis.
- The student reviewed laboratory data submitted with the animal (if applicable).
- The student examined and recorded the patient's external appearance, including:
 - Body condition
 - Mucous membranes
 - Body orifices
 - General conformation
 - Superficial lesions (tumors, dermatitis, etc.)
 - Hair coat
 - Parasites
 - Lips, gums, cheeks and teeth

***Note:** *External examination should be done with the DVM present, or the DVM should examine the animal before proceeding.*

- The student placed the animal in left lateral or dorsal recumbency.
- The student correctly identified the following structures during the pro-section:

2. ASSIST IN PRO-SECTION OF NON-PRESERVED ANIMAL (CONTINUED)

***Note:** *If the listed structures are too small to identify, or absent, the student should state such verbally and point out the location where the structure would normally be found.*

- Exposed superficial lymph nodes (mandibular, popliteal, superficial cervical)
 - Jugular veins
 - Mammary glands (female animal) or testes, prepuce and penis (male animal)
 - Diaphragm
 - Pericardial sac
 - Mandible
 - Tongue
 - Larynx
 - Tonsils
 - Esophagus
 - Trachea
 - Bronchi
 - Lungs
 - Pulmonary vessels
 - Heart
 - Aorta
 - Vena cava
 - Omentum
 - Spleen
 - Pancreas
 - Liver
 - Gall bladder
 - Kidneys
 - Adrenal gland
 - Ureters
 - Urinary bladder
 - Stomach and pyloric region
 - Small Intestine (duodenum, jejunum, ileum)
 - Large intestine (cecum, colon, rectum)
 - Mesentery
- The student collected initial samples for microbiology as directed by the DVM (if applicable)
 - The student accurately documented all observations made by the DVM.
 - The student provided live narration throughout the task.

2. ASSIST IN PRO-SECTION OF NON-PRESERVED ANIMAL (CONTINUED)

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Materials Submitted for Evaluation and Verification:

1. Task Verification form for the Assisting in Pro-section on a Non-Preserved Animal task, signed by the clinical mentorship supervisor.
2. One video showing the student (with their mentor present) assisting with a pro-section procedure. The video will clearly show all criteria for the task, and the student will narrate the procedure, including identification of all required structures. The camera should be zoomed in as needed to show each structure clearly.
3. Copy of written documentation of findings by student and DVM during the pro-section.

Student Name: _____

Date: _____

Supervisor Name: _____ RVT, CVT, LVT, LVMT, DVM, VMD

I verify that the student performed this task under my active and continuous supervision.

Signature of Clinical Mentorship Supervisor: _____

3. COLLECTION, PRESERVATION AND SHIPPING OF SAMPLES

Goal: To collect, preserve, and ship samples collected during a necropsy procedure.

Description: The student will collect samples of liver, kidney and intestine during a necropsy procedure, and properly preserve and ship the samples for histopathologic evaluation according to laboratory and practice protocols.

Criteria:

- The student showed their face clearly and introduced the task. **(CRITICAL)**
- The supervising mentor was physically present and actively supervising the student for the entire task. The student showed and introduced their supervising mentor. **(CRITICAL)**
- The student examined the liver grossly and collected samples of lesions and adjacent normal tissue, ½ cm thick and 1 cm x 1 cm square. If the liver was grossly normal, the student collected a representative sample (1/2 x 1 x 1 cm)
- The student examined the kidneys grossly and collected samples of lesions and adjacent normal tissue in longitudinal wedge sections ½ cm thick. If the kidneys were grossly normal, the student collected a representative sample (1/2 cm longitudinal wedge).
- The student examined the intestines grossly and collected samples of lesions and adjacent normal tissue in ½ cm cross-sections. Care was taken not to touch the mucosal surface, and the sample was rinsed gently under water to remove ingesta and feedstuffs. If the intestine was grossly normal, the student collected a representative sample (1/2 cm cross-section).
- The student placed the tissue samples into separate formalin jars, one jar per site/organ. The kidney samples were separated by left or right kidney.
- The student labeled each formalin jar with the following information:
 - Client name
 - Animal name
 - Case number (if used)
 - Date of collection
 - Site of collection (e.g., liver, right kidney)
- The student completed submission forms for samples collected and properly packaged the samples for shipping.
- The student provided live narration throughout the task.

3. COLLECT, PRESERVATION AND SHIPPING OF SAMPLES (CONTINUED)

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Materials Submitted for Evaluation and Verification:

1. Task Verification form for the Collection, Preservation and Shipping of Samples task, signed by the clinical mentorship supervisor.
2. One video showing the student (with their mentor present) collecting samples and properly preserving and packaging them. The video will clearly show all criteria for the task, including labels on jars. The student narrated the video live as they demonstrated the task.
3. Copy of submission form completed by the student to be sent with samples to a laboratory (even if samples will not actually be sent to the lab).

Student Name: _____

Date: _____

Supervisor Name: _____ RVT, CVT, LVT, LVMT, DVM, VMD

I verify that the student performed this task under my active and continuous supervision.

Signature of Clinical Mentorship Supervisor: _____

4. SAFE HANDLING OF RABIES SUSPECT CASES PROJECT

Goal: The student will demonstrate their understanding of professional, ethical, and legal standards in veterinary practice by submitting a written paper detailing the clinic's SOP for handling rabies suspect cases. The paper should reflect professional standards, use accurate medical terminology, and be free of spelling and grammatical errors.

Criteria:

- The student will submit a two- to three-page typed paper with clearly labeled section headings that addresses the specific scenario provided. The paper should reflect professional standards, use accurate medical terminology, and be free of spelling and grammatical errors.
- Required sections and scenarios
 - **Section 1 – Rabies Testing Only**
 - *Scenario: A stray dog of unknown history is brought in for euthanasia after biting a human.*
 - **Address the following:**
 - Describe your clinic's SOP for protecting personnel from rabies exposure.
 - Explain how the dog is submitted for rabies testing, including brain collection, preservation, and submission procedures. Include PPE used.
 - Evaluate the protocol and suggest any changes, explaining your rationale.
 - **Section 2 – Necropsy on Rabies Suspect**
 - *Scenario: Your clinic recently treated a dog that had been a regular patient. The dog had shown signs of neurological distress and was considered a rabies suspect, although it had not bitten anyone. The dog passed away unexpectedly while in the clinic. The cause of death is unknown, and the owner has requested a necropsy to better understand what happened.*
 - **Address the following:**
 - Describe your clinic's SOP for protecting personnel from rabies exposure during necropsy.
 - Explain how rabies testing and necropsy are safely performed.
 - Evaluate the protocol and suggest any changes, explaining your rationale.

4. SAFE HANDLING OF RABIES SUSPECT CASES PROJECT (CONTINUED)

- **Section 3 – Human Exposure to Rabies**
 - *Scenario: A treated patient later tests positive for rabies.*
 - **Address the following:**
 - Outline the actions your clinic should take.
 - Describe what a human healthcare provider should recommend for staff who may have been exposed to rabies. Do these recommendations differ between individuals who have previously received the rabies vaccine and those who are unvaccinated? Reference CDC guidelines: <https://www.cdc.gov/rabies/index.html>

Materials Submitted for Evaluation and Verification:

1. A two- to three-page typed paper with clearly labeled section headings that addresses the required criteria. The paper should reflect professional standards, use accurate medical terminology, and be free of spelling and grammatical errors.

5. STORAGE AND DISPOSAL OF DECEASED ANIMALS PROJECT

Goal: The student will demonstrate their understanding of professional, ethical, and legal standards in veterinary practice by submitting a written paper detailing the clinic's SOP for the storage and handling of deceased animals. The paper should reflect professional standards, use accurate medical terminology, and be free of spelling and grammatical errors.

Criteria:

- The student will submit a two- to three-page typed paper with clearly labeled section headings that addresses the required criteria. The paper should reflect professional standards, use accurate medical terminology, and be free of spelling and grammatical errors.
- Required section headings
 - **Storage for Disposal Only**
 - Describe how deceased animals not intended for necropsy are stored.
 - Include types of storage containers used and location of storage area.
 - Explain labeling methods and any relevant safety or sanitation protocols.
 - **Storage for Necropsy**
 - Describe procedures for storing animals that require necropsy.
 - Include containers, location, and labeling methods.
 - Note any differences in handling compared to disposal-only cases.
 - **Owner Disposition Options**
 - Outline options available to owners (e.g., cremation, burial, return of body).
 - Describe how animals are stored and labeled during the holding period.
 - Include any documentation or consent procedures.
 - **Disposition Without Owner Preference**
 - Describe SOP for animals without owners or when no preference is indicated.
 - Include storage, labeling, and final disposition methods.
 - Address ethical considerations and compliance with local regulations.
 - **Protocol Evaluation and Recommendations**
 - Critically evaluate the clinic's current protocol.
 - Suggest improvements and explain your reasoning.
 - Consider efficiency, ethics, safety, and emotional impact on staff and clients.

Materials Submitted for Evaluation and Verification:

1. A two- to three-page typed paper with clearly labeled section headings that addresses the required criteria. The paper should reflect professional standards, use accurate medical terminology, and be free of spelling and grammatical errors.