

SESSION 2

COMPANION ANIMAL MEDICINE, PART 1: INTRODUCTION

DESCRIPTION OF SESSION

This session provides participants with an introductory understanding of the companion animal veterinarian.

CATEGORY

- Health
- Veterinary Medicine

OBJECTIVES

By the end of this session, participants will be able to:

- Understand the role of the companion animal veterinarian in animal health care.
- Describe the different roles and services companion animal veterinarians provide to companion animals and their owners.
- Understand the human–animal bond and the role the veterinarian plays in this bond.
- Understand the educational requirements for companion animal veterinarians, including high school and college courses that would be beneficial.
- Identify some of the challenges and benefits of being a companion animal veterinarian.
- Explain how to do a physical exam on an animal.
- Learn some basic diagnostic examination skills and laboratory tests for different species of companion animals.
- Observe and practice basic suturing techniques.
- Tour a companion animal veterinary facility.

SUPPLIES

- Laptop computer or equipment to view videos
- Stethoscopes, otoscope, ophthalmoscope, X-rays (digital or film with film viewer), general exhibit of surgical instruments/supplies, dental equipment, various clinical laboratory supplies (including an electrocardiogram), various comparative examples of equipment (companion animal vs. large animal/equine vs. wildlife, including restraint tools), ambulatory vehicles (optional).
- Live “docile” animals (dogs) for physical exam activity
- Patient health record (generic form is acceptable, one per participant)
- Suture supplies (optional, one set per participant)
 - Nonsterile latex-free gloves, various sizes
 - 1 or 2 suture packages (2-0 or 3-0 works best, any material)
 - 1 needle holder or hemostat
 - 1 pair of forceps
 - 1 chicken breast with skin
 - Disposable towels
- Cleaning supplies, including antibacterial spray, trash bags, and a sharps container

- Alcohol-based hand sanitizer
- 3-cc syringes, 20-gauge needles, water with food coloring for injection, oranges

ADVISOR NOTE

Before Explorers enter a working environment, review the hazards and risks faced in veterinary medicine; the precautions that are taken to prevent injury, illness, and disease transmission to caregivers and other animals; and the use of appropriate controls. Explorers should be provided appropriate training and personal protective equipment (PPE) before entering the working environment. Please consider whether they may need to be excluded from certain procedures, areas, or exams (e.g., X-rays or clinical laboratory procedures), and make appropriate safety accommodations. Due to the known hazards of ionizing radiation (X-rays), Explorers may not participate in the taking of radiographs. Trained laboratory technicians or their equivalent must be in immediate attendance whenever any clinical laboratory procedures are being carried out.

As you engage your post in activities each meeting, please include comments, discussions, and feedback to the group relating to **Character, Leadership, and Ethics**. These are important attributes that make a difference in the success of youth in the workplace and in life.

ACTIVITIES

ACTIVITY 1

Speaker: Introduction to Companion Animal Medicine

Have the speaker address these topics:

- What are companion animals? What are the most common species of companion animals? What are the most unusual species?
- What are the rights and responsibilities of companion animal pet owners?
- What are some of the ethical concerns of a companion animal veterinarian?
- Why are companion animals kept as pets? What is the human–animal bond, and why is it important?
- How is emergency /after-hours care provided to pets?
- Why are dental care, weight control, preventative vaccinations, and parasite control important for pets?
- What are the requirements to become a companion animal veterinarian?

ACTIVITY 2

Physical Exams and Laboratory Sample Collection

- Show appropriate online videos demonstrating how to perform a complete physical exam on a pet. [PetCARE TV](#) offers a number of [videos](#) you may find useful.
- Show a video or audio recording of different heart sounds.
- Discuss and demonstrate an organized (head-to-tail or system-by-system) exam procedure. Listen to the animal’s heart and lungs. Discuss any species or breed variations that might be encountered.

- Demonstrate the proper way to take a patient's temperature. Discuss what the expected normal findings should be.
- Have Explorers make a chart (or add to the ones they made for another session) to record the animal's temperature, heart rate (pulse), and number of respirations. Design the chart to accommodate numerous animals of different species and breeds that will be examined in other sessions of this curriculum.
- Discuss and demonstrate proper restraint of an animal for a physical exam. Have participants work in groups of two. Review safety concerns and restraint methods if necessary.
- Have each participant do a complete physical exam on the patient and record their findings on a patient health record. (Trained adults must be present during these exams to offer assistance and guidance.)
- Discuss the group's findings and share any anomalies.
- Demonstrate the proper technique(s) for obtaining blood, urine, and stool samples. (Participants will not be doing these procedures.)

ACTIVITY 3

Surgery and Suturing

- Show a video demonstrating basic suturing technique. Select a video from a reputable online source or other resource. View the video in advance to make sure it is appropriate.
- Demonstrate a simple interrupted suture using a surgeon's knot. Emphasize and demonstrate all safety measures, including personal protective equipment and proper needle and scissor techniques. Explain sterile technique and why preparing a sterile surgical area is important. (Note: A sterile surgical environment is not necessary for this exercise.) Focus on grabbing the needle with a needle holder, placing one stitch, and tying.
- Basic suturing exercise:
 - Divide participants into pairs or singles.
 - Provide each pair or single with a suture setup and a chicken breast with skin.
 - Incise chicken skin for about 5 centimeters.
 - Demonstrate for the group each step of a single interrupted suture as each participant follows along and sutures simultaneously.
 - Provide 10 to 15 minutes for participants to practice suturing.
 - Properly dispose of supplies, and have participants wash hands thoroughly after the activity.

ACTIVITY 4

Injecting Medications Exercise

- Demonstrate the safe and proper way to place a needle on a syringe. Using water colored with food coloring, demonstrate how to fill a syringe.
- Demonstrate how to clean an injection site.
- Demonstrate how to safely place the needle into the orange, aspirate, and then inject the orange with the solution.
- Demonstrate the safe manner to dispose of a used needle and syringe.

ACTIVITY 5

Dental Care

- Have Explorers watch a demonstration or video showing how to brush a dog's teeth. Discuss why this husbandry procedure is good for pets.
- Brush a dog's teeth.

ACTIVITY 6

Tours

- Tour a veterinarian's companion animal hospital or clinic.
- Attend a dog or cat show and see and identify as many different breeds as possible. If attending a dog or cat show is not possible, review a breed chart from the American Kennel Club (AKC) or the American Cat Association (ACA) or an internet resource. Make a list of the different breeds you see and later have a discussion about the different breeds. During that discussion, include thoughts on which breeds might make better pets in different sized homes, apartments, or modular homes; which might be better for families with children; and which might have special skills or traits for different occupations, sports, law enforcement, recreation, or human health care needs. Have Explorers imagine they are getting a new pet. Ask them to select their pet species and then select a breed of that species. Have each member share with the post why they selected this particular species and breed. Also discuss the different responsibilities they would have as an owner of this type of animal.
- Visit a dog training school that addresses obedience, retrieving, agility, herding, or other skills. Observe the behavior of the animals in training, the behavior of the trainer toward the animals in training, and how the human and the animal interact.
- Visit a retail store that sells dog and cat food. Look at the ingredients in many different brands, and see what differences there are. Determine which foods might be best for a young animal, a pregnant or nursing animal, a very active sporting animal, an older animal, or an overweight/obese animal.

ADVISOR NOTE

Some sample questions are below. They are designed to help the participants apply what they have learned to their own interests. You are welcome to use these questions or develop your own questions that relate to your post or specific area of focus.

REFLECTION

- *Which area of companion animal veterinary medicine interests you most?*
 - *What did you learn during this session about the different services a companion animal veterinarian provides?*
 - *What is the significance of the human–animal bond?*
 - *Why are ethics important to the companion animal veterinarian?*
 - *What can you do now, during your time as a student, to prepare yourself for a career in veterinary medicine? Why is this topic important?*
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