

Visakha Society *for* Protection and Care of Animals (VSPCA, India)

Suggested Tasks for Veterinary Students Volunteering at the VSPCA

By Bosmat Gal, DVM

**Assistant to the President of the Animal Rescue League of Boston
for International Programs
Member of the VSPCA Advisory Board**

The following are suggestions for the VSPCA veterinarians and management in regards to veterinary students who are volunteering to work at the shelter. It is the discretion of the VSPCA veterinarians and management to decide about the specific activities of the volunteers. Most of these written notes are also part of the VSPCA protocols.

SOS EMERGENCY ANIMALS

Please note that the following scenario(s) are generalized

In order to quicken the procedures to stabilize an injured animal:

1. All the animals after an injury are stressful and painful, and unless they are unconscious, you have to be sure the animal does not pose a threat (think about rabies) to the person attending it. Sometimes the dog will need a muzzle in order to be approached and be treated.

The student can follow the attending veterinarian and help with the assessment of the injured animal

2. Once it is approachable:
 - Take a general look at the animal to recognize any injuries, fractures, lacerations, bleeding, etc. (always take in consideration the probability of internal injuries).
 - Initial assessment including checking the vital signs and obtaining any history if known
 - Monitor body temperature, monitor mucus membranes (pink, pale, icteric or brick-color) and CRT, estimate hydration status
 - Estimate the animal weight
 - To initiate fluid drip – have a clipper ready, shave the foreleg above cephalic vein (or any other accessible vein) and disinfect the area

- Insert an IV catheter or a butterfly, start a fluid drip
 - Perform a thorough physical exam making an assessment and a list of the problems the animal has and establish the best plan of treatment(s)
 - The vets should make decisions about the medicines and dosages to give IV, IM or SQ according to the case (i.e.: pain medicine, steroids, antibiotics), and warm bedding and covers if the animal is hypothermic.
3. Once the animal's condition is stabilized:
- The student should periodically check the animal looking at: level of consciousness, color of MM and CRT, temperature, listen to heart rate and lung sounds, check pulse, urine output, etc. Monitor the patient and assess the treatment response.
 - The student can also write the records while helping the veterinarian. Once the treatment plan is set, the vet student can prepare the medications for the next days of treatment. Record keeping and verbal communication play an essential role in highlighting important changes in the animal's condition.
4. **Crash–Cart:** A student (usually a fourth year student) can start the project (this is actually Dr. Gal's next project at the VSPCA) with the veterinarians to establish a Crash-Cart: a ready emergency box (or a set of drawers) containing drugs and equipment necessary for any emergency of CPR (Cardiopulmonary Resuscitation).
- Pharmaceuticals:* Atropine, Epinephrine, 2% Lidocaine, Dexamethasone Sodium Phosphate, Sodium Bicarbonate, Calcium chloride or Calcium Gluconate, Lactated Ringer's solution
- Airway access:* Laryngoscope and blades, Endotracheal tubes, Lubricating jelly, Roll gauze, Ambu bag (if the animal is not in close proximity to the oxygen supply)
- Venous access:* Butterfly catheters (various sizes), IV catheters, IV drip sets, Syringes (variety of sizes), Hypodermic needles (variety of sizes), Adhesive tape, tourniquet
- Miscellaneous:* Gauze, Stethoscope, Non-sterilized latex gloves, Surgical gloves, Scalpel blades, Suture material....

QUARANTINE ANIMALS

Quarantine animals are separated from the rest of the population because of a suspicion of or already diagnosed infectious diseases.

- The students should familiarize themselves with the quarantine animals by verbal communication and reading the records.
- These animals should be checked daily. The students can go through the cages and take a look at the individual animal to see if any abnormalities are present (a dog that was not coughing the day before, started coughing; a skin lesion got worse or better; etc.), they can also check with the care givers about the appetite of the animal, if diarrhea was present, etc.
- If for example an animal needs a medicated bath, it can be given by the student.
- If a quarantined dog is showing only a skin disease, but no signs of any other infectious diseases, the dog should be vaccinated immediately with the “6 in 1” vaccine (Distemper, Hepatitis, Parainfluenza, Parvo, Lepto) and a rabies vaccine, after 10 days observation in the shelter (without any suspicious signs).

If there is a suspicion and/or diagnosis of a zoonotic disease, always wear gloves while touching any animal, changing the gloves in between animals.

FREE ROAMING SHELTER DOGS

The level of the veterinary care given to the free roaming dogs will improve once every dog will have a medical record. Optimally, each dog should wear a collar with a name tag (or a number) for identification.

- The student can initiate this project of opening (and maintaining) a record for each animal at the VSPCA. In each animal’s file there should be a description of the dog, age, sex, and all available information, for example: date the dog was sterilized, the date of last vaccination (indicating the type of vaccine: rabies vaccine and the 6 in 1). Any other information should also be recorded, for example: if the dog had any past medical treatments or routine prophylactic treatments (flea/tick/deworming).
- All dogs should have a full physical exam at least once a year (better twice a year especially if older), and at the same time get vaccine boosters.
- The free roaming dogs should have routine treatments for flea/tick – depending on the type of medication used, the once a month or the every 3 months.

All the free roaming dogs will be tested for heartworm during Dr. Gal’s next visit (please note that the microscope will be needed for that purpose).

CATTERY

The level of the veterinary care given to the cattery cats will improve once every cat will have a medical record. Optimally, each cat should wear a collar with a tag number for identification.

- The student can initiate this project of opening (and maintaining) a record for each of the VSPCA's cats.
- All cats should have a full physical exam at least once a year (better twice a year especially if older), and at the same time get vaccine boosters
- All cats should have routine treatments for flea/tick – depending on the type of medication used, the once a month or the every 3 months.

MOTHER AND PUPPIES

The mothers and puppies should be monitored and checked on a daily basis. This is a good area where all students can practice performing physical exams and monitor the conditions of the animals (can also weigh the puppies). The student can help in planning the schedule of all the medications/vaccinations needed to be administered during the next weeks/months.

The mother and puppies area should be clean and dry.

All the information should be recorded in individual files.

PUPPY POUND

In order for the puppies to be transferred to the puppy pound, they should have a clean bill of health.

- They should be fully vaccinated, dewormed and have flea/tick treatments.
- Once the puppies are transferred to the puppy pound it does not mean they wouldn't get sick. Kennel cough is a common infectious disease when dogs live together. It means the puppies at the pound should also be checked on a daily basis. Any signs of coughing, ocular and/or nasal discharge should be recognized, the same for any changes in appetite, any vomiting and/or diarrhea.
- The student can collect all information available about an individual puppy and update the medical records. He can help the VSPCA veterinarian with the physical exam and prepare the necessary medications for the individual puppy.

If there is only one puppy exhibiting symptoms, then the puppy should be quarantined. Most likely, more puppies or all the puppies will be exhibiting the same symptoms.

Do not introduce healthy puppies into the pound until all puppies are healthy again, without symptoms, and the kennel area is cleaned and disinfected. Make sure the water inside the small central pond is changed daily, since the water will get contaminated by the sick puppies (even before sign of disease will appear).

SURGERY

If volunteering veterinary students get involved in surgery, the staff has to plan ahead and take into consideration the vet students' pace and experience from school.

It is the discretion of the shelter veterinarians and management to decide if a student should be allowed to perform any surgery.

- The student can monitor the vital signs of the anesthetized animal during surgery
- The student can monitor the recovery of the animal after surgery

LABORATORY

I am not sure about the level of proficiency of the VSPCA veterinarians with the basic laboratory techniques and procedures. Training the VSPCA veterinarians in laboratory techniques and procedures is on my agenda for the next trip.

The VSPCA laboratory is currently limited to a microscope, a centrifuge, and a few

Chemistry strips (reagents) to enable the clinician to identify urine parameters, and a few blood parameters (Blood Urea Nitrogen and Blood Glucose).

The following tests and procedures can currently be conducted at the VSPCA laboratory:

- Skin scrapings of animals with skin diseases and abnormalities which require microscopic evaluation.
- Cytology by Fine Needle Aspiration (FNA).
- Collecting blood for evaluation of Hematocrit (HCT) and Total Solids and using the micro-hematocrit centrifuge; e.g.: in SOS animals, and other animals suspected of anemia and poor body condition.
- Urine centrifugation and microscopic evaluation of urine sediment, to get acquainted with the procedure itself and the identification of the normal (and abnormal) cells and other findings (like crystals, parasites).
- Staining techniques for microscopic evaluation.