

Veterinary Technician Essential & Recommended Skills List

This list is provided by the AVMA to veterinary technician programs. Use this as a resource to determine how you can better optimize the use of your credentialed technicians in your practice!

Instructions

In the right column, denote the following:

- ✓ Our technicians are allowed & empowered to complete these tasks in our practice
- ★ I will implement the empowerment of these tasks in our practice.
(Pick a few to start & keep adding until you comfortably mark off the entire list.)

1. Office & Hospital Procedures, Client Relations, & Communication

Management	
Schedule appointments, admit, discharge and triage according to client, patient and facility needs through phone and in-person contact*	
<ul style="list-style-type: none"> • Recognize and respond to veterinary medical emergencies* 	
Create and maintain individual client records, vaccination certificates, and other appropriate forms*	
<ul style="list-style-type: none"> • Develop computer skills* 	
<ul style="list-style-type: none"> • Be able to utilize veterinary practice management software* 	
<ul style="list-style-type: none"> • Be familiar with veterinary on-line services* (e.g. laboratory submissions, client financing plans, continuing education, discussion groups) 	
Perform basic filing of medical records, radiographs, lab reports, etc.*	
Create and maintain all appropriate facility records and logs in compliance with regulatory guidelines* (e.g., radiography, surgery, anesthesia, laboratory, controlled substance)	
Manage inventory control*	
Recognize roles of appropriate regulatory agencies*	
Maintain appropriate disposal protocols for hazardous materials*	
Establish and maintain appropriate sanitation and infection control protocols for a veterinary facility, including patient and laboratory area*	
Handle daily client-based financial transactions*	

1. Office & Hospital Procedures, cont.

Communication	
Demonstrate an understanding of interpersonal skills and team dynamics*	
Utilize interpersonal and public relations skills*	
Demonstrate telephone etiquette* (e.g. through role playing, educational resources, etc.)	
Recognize the legality of the veterinary-client-patient relationship*	
Develop and provide client education in a clear and accurate manner at a level the client understands* (i.e., oral and written form, including educational handouts)	
Apply crisis intervention/grief management skills with clients*	
Laws and Ethics	
Understand and observe legal boundaries of veterinary health care team members*	
Interact professionally with clients and fellow staff members*	
Demonstrate a commitment to high quality patient care*	
Respect and protect the confidentiality of client and patient information*	

2. Pharmacy & Pharmacology

Administration	
Schedule appointments, admit, discharge and triage according to client, patient and facility needs through phone and in-person contact*	
Read and follow veterinarian's pharmacy orders*	
Recognize groups of drugs, their mechanisms, and clinically relevant side effects*	
Recognize the safe and effective manner in which vaccines must be administered; recognize and explain common side effects*	
Accurately perform appropriate calculations; use weights and measures correctly*	
Explain appropriate drug administration route methods, and when used*	
Demonstrate the ability to monitor therapeutic responses*	
Demonstrate the ability to accurately record medical information*	
Demonstrate understanding of controlled substance regulations*	
Demonstrate compliance with all federal and state regulatory guidelines for drug purchase, storage, administration, withdrawal, dispensing, disposal, and inventory control* (e.g., biologics and therapeutic agents, pesticides, and hazardous wastes)	

2. Pharmacy & Pharmacology

Dispensing	
Given a drug order, properly prepare medications for dispensing, including performing accurate calculations*	
Demonstrate compliance with regulations governing prescription drugs versus over-the-counter drugs*	
Demonstrate understanding of regulations governing maintenance of controlled substances log book*	
Demonstrate compliance with all federal and state regulatory guidelines for drug purchase, storage, administration, withdrawal, dispensing, disposal, and inventory control* (e.g., biologics and therapeutic agents, pesticides, and hazardous wastes)	
Relay drug information to clients* (e.g., handling, storage, administration, side-effects, drug interactions, safety, reasons for use of drug)	

3. Nursing

Patient Assessment	
Recognize common domestic animal species and breeds*	
Describe and use common animal identification methods*	
Recognize and assess body language and behaviors (including pain assessment scales) for various animal species*	
Demonstrate effective and appropriate humane restraint techniques to include efforts to reduce stress during handling for various animal species:	
<ul style="list-style-type: none"> • Properly restrain dogs and cats for procedures* 	
<ul style="list-style-type: none"> • Encage and remove dogs and cats from cages* 	
<ul style="list-style-type: none"> • Apply dog muzzle safely* 	
<ul style="list-style-type: none"> • Apply Elizabethan collar* 	
<ul style="list-style-type: none"> • use restraint pole and other restraint aids*[GROUP] 	
<ul style="list-style-type: none"> • halter, tie, and lead horses/ponies/donkeys/mules* 	
<ul style="list-style-type: none"> • restrain pocket pets and exotics 	
<ul style="list-style-type: none"> • restrain (cattle, small ruminants, and horses/ponies/donkeys/mules)* <ul style="list-style-type: none"> ◦ apply twitch (horses/ponies/donkeys/mules)*[GROUP] ◦ apply bovine tail restraint* ◦ apply ruminant halter (cow, small ruminant)* 	
<ul style="list-style-type: none"> • restrain pigs 	
<ul style="list-style-type: none"> • load large animals 	
<ul style="list-style-type: none"> • safely operate cattle chute*[GROUP] 	

3. Nursing, cont.

Obtain a thorough patient history*	
Demonstrate the ability to obtain objective patient data:	
• temperature (dog, cat, horse/pony/donkey/mule, cow)*	
• pulse (dog, cat, horse/pony/donkey/mule, cow, small ruminant)*	
• respiration (dog, cat, horse/pony/donkey/mule, cow, small ruminant)*	
• auscultate heart/lungs (dog, cat, horse/pony/donkey/mule, cow, small ruminant)*	
• assess hydration status	
Properly collect diagnostic specimens for analysis (ex: urine, blood, feces, specimens for cytology)*	
• Perform venipuncture:	
◦ cephalic (dog, cat)*	
◦ jugular (dog, cat, horse/pony/donkey/mule, ruminant)*	
◦ saphenous (dog, cat)*	
◦ sublingual (dog)	
◦ ear (pig)	
◦ coccygeal (cow)	
◦ anterior vena cava (pig)	
• Collect urine sample:	
◦ catheterize male dog*[GROUP]	
◦ catheterize female dog	
◦ catheterize female cat	
◦ catheterize male cat	
◦ collect voided urine sample (dog or cat)*	
◦ perform cystocentesis (dog or cat)*[GROUP]	
◦ catheterize large animal	
Prepare diagnostic specimens for shipment*	
Patient Care - Husbandry	
Grooming:	
• Demonstrate understanding of therapeutic bathing, basic grooming, and dipping of dogs or cats*	
• trim nails (dog, cat)*	
• trim hooves (ruminant, horse/pony/donkey/mule)	

3. Nursing, cont.

• apply equine tail and leg wraps*	
• express canine anal sacs*	
• clean and medicate ears (dog, cat)*	
• clean sheath (horse/pony/donkey/mule)	
Perform microchip scanning and implantation	
Environmental conditions: implement sanitation procedures for animal holding and housing areas*	
Demonstrate understanding of permanent identification*	
Demonstrate understanding of breeding/reproduction techniques*	
Demonstrate understanding of care of orphan animals	
Demonstrate understanding of nursing care of newborns*	
Patient Care - Nutrition	
Understand life stage energy and nutrient requirements of well animals (dog, cat, horse/pony/donkey/mule, cow)*	
Identify common grains and forages	
Understand key nutritional factors in disease conditions*	
Patient Care - Nutrition	
• be familiar with therapeutic foods*	
Understand current developments in nutritional supplements and additives including benefits and potential toxicities*	
Understand and identify substances that when ingested result in toxicity:	
• identify common poisonous plants*	
• be familiar with substances (organic and inorganic) that cause toxicity*	
Develop and communicate hospital nutrition protocols*	
Patient Care - Therapeutics	
Administer parenteral medications:	
• subcutaneous (dog, cat, ruminant)*	
• intramuscular (dog, cat, horse/pony/donkey/mule)*	
• intradermal (ruminant, dog)	
• intramammary (mastitis therapy only) (ruminant)	
• intravenous (dog, cat, ruminant, horse/pony/donkey/mule)*	
Administer enteral medications: Administer enteral medications:	

3. Nursing, cont.

• balling gun (ruminant)*	
• dose syringe (ruminant, horse/pony/donkey/mule)*	
• hand pilling (dog, cat)*	
• dose syringe (pig)	
• oral speculum and stomach tube (ruminant)	
• nasogastric intubation (dog or cat, horse/pony/donkey/mule)	
Administer topical medications (including ophthalmic)*	
Perform ocular diagnostic tests (including tonometry, fluorescein staining and Schirmer tear test)*	
Administer enemas*[GROUP]	
Gastric intubation (dog or cat)* [GROUP]	
Gastric lavage (dog)	
Collect/evaluate skin scrapings*	
Fluid therapy:	
• administer subcutaneous fluids*	
• place intravenous catheters (cephalic*, saphenous*, jugular)	
• maintain and care for catheters*	
• determine/maintain fluid infusion rate*	
• monitor patient hydration status*	
• develop familiarity with fluid delivery systems*	
Apply and remove bandages and splints*	
• Remove casts	
• Develop understanding of wound management and abscess care*	
• Perform physical therapy:	
• hydrotherapy	
• post-operative	
• orthopedic	
• neurological	
• explain care of recumbent patient*	
Perform critical care:	
• maintain chest, tracheostomy, esophagostomy tubes	

3. Nursing, cont.

• collect and crossmatch blood for transfusion* [GROUP]	
• blood typing	
• perform blood transfusions (autotransfusions may be considered)	
Apply established emergency protocols (simulation acceptable):	
• maintain emergency medical supplies/crash cart*	
• perform first aid and cardiopulmonary resuscitation*	
• use resuscitation bag*	
• apply emergency splints and bandages*	
Patient Care - Dentistry	
Perform Comprehensive Oral Health Assessment and Treatment (COHAT) (scaling and polishing) (manual and machine)*	
Understand client education regarding home care*	
Float teeth (horses/pony/donkey/mules)	
Trim teeth (rabbits, rodents, pigs)	

4. Anesthesia

Patient Management	
Calculate dosages of appropriate anesthetic-related drugs*	
Administer anesthetic-related drugs (injection, endotracheal tube, mask)*	
Place endotracheal tubes in patients *	
Utilize clinical signs and appropriate equipment to monitor patient status during anesthetic procedures* (e.g., esophageal stethoscope, blood pressure monitor, capnometer, electrocardiogram, pulse oximeter)	
Evaluate patient and implement pain management protocols as directed*	
Recognize and respond appropriately to patients in compromised states*	
Perform appropriate resuscitation procedures as needed (e.g., calculate and administer appropriate anesthetic antagonists and emergency drugs as directed)*	
Complete controlled substance log* (does not need to be official controlled substance log; mock logs may be utilized)	
Record and maintain anesthesia records*	
Equipment/Facility Management	
Maintain and operate anesthetic delivery and monitoring equipment:	
• pulse oximeter*	

4. Anesthesia, cont.

• capnometer*	
• esophageal stethoscope*	
• electrocardiograph (e.g., recognize abnormal rhythms/audible sounds, properly apply leads)*	
• anesthetic machines, including rebreathing systems, non-rebreathing systems and masks*	
• endotracheal tubes*	
• resuscitation bag*	
• scavenging systems*	
• oxygen sources*	
• blood pressure monitoring devices*	
• laryngoscopes*	
• ventilator	
• defibrillator	
• temperature monitoring device* (e.g. thermometer, etc.)	

5. Surgical Nursing

Knowledge of routine surgical procedures and related equipment, including surgeries in these categories:	
• ovariohysterectomy – (dog, cat)*	
• cesarean section – all common species*	
• orthopedic procedures*	
• orchiectomy – all common species*	
• tail docking*	
• onychectomy – (dog, cat)*	
• laparotomies – all common species*	
• dystocias in common species*	
• dehorning – (cattle, goats)*	
• prolapsed organs – common types, species, and incidence*	
Students must have participated in surgeries in these categories:	
• ovariohysterectomy – (dog, cat)*	
• orchiectomy – (dog*, cat*, other common species)	

5. Surgical Nursing, cont.

Patient Management	
Properly identify patients and surgical procedures*	
Patient assessment:	
• organize medical records/consent forms*	
• review pre-operative evaluation*	
• evaluate current patient status*	
• organize and implement anesthesia*	
Palpate the urinary bladder and express it as needed*	
Prepare surgical site using aseptic techniques*	
Position patient for common procedures*	
Provide surgical assistance:	
• demonstrate proper operating room conduct and asepsis*	
• provide aseptic surgical assistance with care of exposed tissues*	
• demonstrate ability to perform aseptic surgical scrub and drying of hands*	
• demonstrate ability to don surgical cap and mask, and aseptically don gown and gloves*	
• aseptically handle and pass instruments and supplies*	
• operate and maintain suction and cautery machines*	
• understand the principles of operation and maintenance of fiber optic equipment*	
• perform basic suturing techniques	
Coordinate pain management with the anesthesia/surgical team*	
Provide post-operative care:	
• pain management*	
• fluid therapy*	
• adequate nutrition*	
• wound management*	
• bandaging*	
• discharge instructions*	
• suture removal*	
Procedural Management	
Prepare surgical instruments and supplies*	

5. Surgical Nursing, cont.

Prepare gowns, masks, gloves, and drapes*	
Operate and maintain autoclaves*	
Sterilize instruments and supplies using appropriate methods*	
Perform pre-surgical set-up*	
Identify and know proper use for instruments*	
Identify common suture materials, types, and sizes*	
Provide operating room sanitation and care*	
Maintain proper operating room conduct and asepsis*	
Perform post-surgical clean-up (e.g., equipment, instruments, room, proper disposal of hazardous medical waste)*	

6. Laboratory Procedures

Specimen Management	
Select and maintain laboratory equipment*	
Implement quality control measures* [GROUP]	
Understand how to ensure safety of patients, clients and staff in the collection and handling of samples*	
Prepare, label, package, and store specimens for laboratory analysis*	
Specimen Analysis	
Perform urinalysis:	
<ul style="list-style-type: none"> determine physical properties (e.g., color, clarity, specific gravity)* 	
<ul style="list-style-type: none"> test chemical properties* 	
<ul style="list-style-type: none"> examine and identify sediment* 	
Perform CBC to include:	
<ul style="list-style-type: none"> hemoglobin* 	
<ul style="list-style-type: none"> packed cell volume* 	
<ul style="list-style-type: none"> total protein* 	
<ul style="list-style-type: none"> white cell count* 	
<ul style="list-style-type: none"> red cell count* 	
Perform microscopic exam of blood film:	
<ul style="list-style-type: none"> prepare film and stain using a variety of techniques* 	
<ul style="list-style-type: none"> perform leukocyte differential – normal vs abnormal* 	

6. Laboratory Procedures, cont.

• evaluate erythrocyte morphology – normal vs abnormal*	
• estimate platelet numbers*	
• calculate absolute values*	
• correct white blood cell counts for nucleated cells*	
Calculate hematologic indices*	
Coagulation tests – perform one of the following*: [GROUP]	
• buccal mucosal bleeding time	
• activated clotting time (ACT)	
• prothrombin time (PT)	
• partial thromboplastin time (PTT)	
• fibrinogen assay	
Perform blood chemistry tests (BUN, glucose, common enzymes)*	
Perform serologic test (ELISA, slide/card agglutinations)*	
Identify blood parasites:	
• <i>Dirofilaria sp/Acanthocheilonema sp</i> (formerly <i>Dipetalonema sp</i>)*	
• Other blood parasites of veterinary importance	
Perform parasitologic procedures for external parasites and identify:	
• mites*	
• lice*	
• ticks*	
• fleas*	
• flies*	
Perform diagnostics procedures for parasites:	
• Antigen kit*, direct*, Knotts*	
• flotation solution preparation	
• fecal flotation *	
• fecal sedimentation *	
• direct smear *	
• centrifugation with flotation*	
• adhesive tape retrieval of pinworm ova	

6. Laboratory Procedures, cont.

<ul style="list-style-type: none"> perform fecal egg count using McMaster method 	
Identify common parasitic forms:	
<ul style="list-style-type: none"> nematodes* 	
<ul style="list-style-type: none"> trematodes* 	
<ul style="list-style-type: none"> cestodes* 	
<ul style="list-style-type: none"> protozoa* 	
Perform coprologic tests	
Perform microbiologic procedures/evaluations:	
<ul style="list-style-type: none"> collect representative samples* 	
<ul style="list-style-type: none"> culture bacteria and perform sensitivity tests* 	
<ul style="list-style-type: none"> identify common animal pathogens using commercially available media and reagents* [GROUP] 	
<ul style="list-style-type: none"> collect milk samples and conduct mastitis testing (e.g., CMT, bacterial culture)* [GROUP] 	
<ul style="list-style-type: none"> perform common biochemical tests* [GROUP] 	
<ul style="list-style-type: none"> perform staining procedures* 	
<ul style="list-style-type: none"> culture and identify common dermatophytes* 	
Perform cytologic evaluation:	
<ul style="list-style-type: none"> assist in collecting, preparing and evaluating transudate, exudate and cytologic specimens (joint, cerebrospinal, airway, body cavity) 	
<ul style="list-style-type: none"> perform fine needle tissue aspirates and impression smear preparation (differentiate benign vs. malignant) 	
<ul style="list-style-type: none"> prepare and stain bone marrow specimens 	
<ul style="list-style-type: none"> collect, prepare, and evaluate ear cytology* 	
<ul style="list-style-type: none"> collect, prepare, and evaluate canine vaginal smears* [GROUP] 	
<ul style="list-style-type: none"> evaluate semen 	
<ul style="list-style-type: none"> understand timing and types of pregnancy testing 	
<ul style="list-style-type: none"> assist with artificial insemination 	
Perform necropsy procedures:	
<ul style="list-style-type: none"> perform a postmortem examination or dissection on non-preserved animal* [GROUP] 	
<ul style="list-style-type: none"> collect samples, store and ship according to laboratory protocols *[GROUP] 	
<ul style="list-style-type: none"> explain how to handle rabies suspects and samples safely* 	
<ul style="list-style-type: none"> handle disposal of dead animals 	
<ul style="list-style-type: none"> perform humane euthanasia procedures 	

7. Imaging

Implement and observe recommended radiation safety measures*	
Implement radiographic quality control measures*	
Properly utilize radiographic technique charts*	
Demonstrate an understanding of the modifications of diagnostic imaging techniques as they apply to mice or rats, guinea pigs, lizards, and amphibians*	
Position live animals and produce diagnostic radiographic images (dogs*, cats*, horses/ponies/donkeys/mules*, and birds)	
Position live animals or intubated non-preserved specimens, and utilize dental radiographic equipment to produce diagnostic intra-oral full mouth dental radiographic images (dog or cat)*	
Appropriately label, file, and store images*	
Demonstrate an understanding of completing a radiographic log for systems, reports, files, and records*	
Perform radiographic contrast studies – perform one of the following*: [GROUP]	
<ul style="list-style-type: none"> • GI Series 	
<ul style="list-style-type: none"> • Pneumocystogram 	
<ul style="list-style-type: none"> • Intravenous pyelogram 	
<ul style="list-style-type: none"> • Other 	
Perform on a sedated canine radiographic techniques utilized in screening for canine hip dysplasia* [GROUP]	
Demonstrate proper maintenance of radiographic equipment, including recognition of faulty equipment operation*	
Use and care of ultrasonography equipment	
Use and care of endoscopic equipment	

8. Laboratory Animal Procedures

Mice or rats, and rabbits	
Recognize and restrain (mouse/rat, rabbit)*	
Determine sex and understand reproduction (mouse/rat, rabbit)*	
Perform and/or supervise basic care procedures:	
<ul style="list-style-type: none"> • handling (mouse/rat, rabbit)* 	
<ul style="list-style-type: none"> • nutritional needs/diet* 	
<ul style="list-style-type: none"> • provide food, water, and enrichment in a species-appropriate manner (mouse/rat, rabbit)* 	
<ul style="list-style-type: none"> • trim nails 	
<ul style="list-style-type: none"> • identification* 	

8. Laboratory Animal Procedures

Perform methods of injection:	
• subcutaneous (mouse/rat, rabbit)*	
• intramuscular (rabbit)	
• intradermal (rabbit)	
• intraperitoneal (mouse/rat*) [GROUP]	
• intravenous	
Collect blood samples	
• Intravenous (mice/rat, rabbit) [GROUP]*	
Perform oral dosing (mouse/rat)* [GROUP]	
Have working knowledge of anesthetic and recovery procedures*	
Identify and describe clinical signs of common diseases*	
Perform necropsy and collect specimens	
Clean and medicate ears (rabbit)	
Anesthetize mouse/rat, and rabbit	
Non-human primates	
Understand restraint of non-human primates	
Demonstrate knowledge of zoonotic diseases and modes of transmission	

9. Avian, Exotic, & Small Mammals Procedures

Recognize, understand, and perform restraint techniques of birds*, reptiles, amphibians, and ferrets	
Understand unique husbandry issues for each species (birds, reptiles, amphibians, guinea pigs, hamsters, gerbils, and ferrets) and provide client education*:	
• nutritional needs/diet	
• watering	
• caging (temperature, humidity, light)	
• aquarium care	
• understand reproduction	
• basic grooming (beak, wing, and nail clipping)	
• appropriate transportation methods	
Demonstrate the ability to perform a physical exam and accurately record results : birds*, reptiles, amphibians, and ferrets	

9. Avian, Exotic, & Small Mammals Procedures, cont.

Perform nail trim (bird*, exotic, small mammal)[GROUP]	
Perform injections using appropriate sites	
• subcutaneous	
• intramuscular	
• intradermal	
• intraperitoneal	
• intravenous	
Administer drugs or medicaments using appropriate sites and routes	
Perform oral dosing	
Understand appropriate sites for intravenous catheter placement	
Understand tube feeding in birds	
Perform laboratory procedures	
Anesthetize birds and exotic animals	
Recognize normal and abnormal behavior patterns	
Explain inadvisability of keeping wildlife as pets	
Collect blood samples	

Note:

Required tasks by the AVMA are denoted by an asterisk (*).

The term “demonstrate” along with a didactic (knowledge-based) skill means that the instructor is free to determine the best method(s) for the student to demonstrate mastery or understanding of that particular skill to the instructor. The term “demonstrate” is not synonymous with “hands-on”.

Skills indicated by the designation [GROUP] may be performed by a group of program students. The appropriate size of the group will be determined by the task being performed taking into account humane treatment of the subject animal. Each member of the group must play an active role in the completion of the task.

Skill assessment is expected to be performed on live animals.

