
Veterinary Technologists and Technicians

(0*NET 29-2056.00)

Significant Points

- Animal lovers get satisfaction in this occupation, but aspects of the work can sometimes be unpleasant and physically and emotionally demanding.
- Entrants generally complete a 2-year or 4-year veterinary technology program, and must pass a State examination.
- Employment is expected to grow much faster than average.
- Keen competition is expected for jobs in zoos.

Nature of the Work

Owners of pets and other animals today expect state-of-the-art veterinary care. To provide this service, veterinarians use the skills of veterinary technologists and technicians, who perform many of the same duties for a veterinarian that a nurse would for a physician, including routine laboratory and clinical procedures. Although specific job duties vary by employer, there often is little difference between the tasks done by technicians and by technologists, despite some differences in formal education and training. As a result, most workers in this occupation are called technicians.

Veterinary technologists and technicians typically conduct clinical work in a private practice under the supervision of a veterinarian—often performing various medical tests along with treating and diagnosing medical conditions and diseases in animals. For example, they may perform laboratory tests such as urinalysis and blood counts, assist with dental prophylaxis, prepare tissue samples, take blood samples, or assist veterinarians in a variety of tests and analyses in which they often utilize various items of medical equipment, such as test tubes and diagnostic equipment. While most of these duties are performed in a laboratory setting, many tasks are not. For example, some veterinary technicians obtain and record patient case histories, expose and develop x-rays, and provide specialized nursing care. Additionally, experienced veterinary technicians may discuss a pet's condition with its owners and train new clinic personnel. Veterinary technologists and technicians assisting small-animal practitioners usually care for companion animals, such as cats and dogs, but can perform a variety of duties with mice, rats, sheep, pigs, cattle, monkeys, birds, fish, and frogs. Very few veterinary technologists work in mixed animal practices where they care for both small companion animals and larger, nondomestic animals.

In addition to working in private clinics and animal hospitals, veterinary technologists and technicians also may work in research facilities. There, they may administer medications orally or topically, prepare samples for laboratory examinations, and record information on genealogy, diet, weight, medications, food intake, and clinical signs of pain and distress. Some may be required to sterilize laboratory and surgical equipment and provide routine postoperative care. At research facilities, veterinary technologists typically work under the guidance of veterinarians, physicians, and other laboratory technicians.

Some veterinary technologists vaccinate newly admitted animals and occasionally are required to euthanize seriously ill, severely injured, or unwanted animals.

While the goal of most veterinary technologists and technicians goal is to promote animal health, some contribute to human health as well. Veterinary technologists occasionally assist veterinarians as they work with other scientists in medical-related fields such as gene therapy and cloning. Some find opportunities in biomedical research, wildlife medicine, the military, livestock management, or pharmaceutical sales.

Working Conditions

People who love animals get satisfaction from working with and helping them. However, some of the work may be unpleasant, physically and emotionally demanding, and sometimes dangerous. Veterinary technicians sometimes must clean cages and lift, hold, or restrain animals, risking exposure to bites or scratches. These workers must take precautions when treating animals with germicides or insecticides. The work setting can be noisy.

Veterinary technologists and technicians who witness abused animals or who euthanize unwanted, aged, or hopelessly injured animals may experience emotional stress. Those working for humane societies and animal shelters often deal with the public, some of whom might react with hostility to any implication that the owners are neglecting or abusing their pets.



Many veterinary technologists and technicians assist veterinarians in routine laboratory and clinical procedures.

Such workers must maintain a calm and professional demeanor while they enforce the laws regarding animal care. In some animal hospitals, research facilities, and animal shelters, a veterinary technician is on duty 24 hours a day, which means some may work night shifts. Most full-time veterinary technologists and technicians work about 40 hours a week, while some work 50 or more hours a week.

Employment

Veterinary technologists and technicians held about 53,000 jobs in 2002. Most worked in veterinary services. The remainder worked in boarding kennels, animal shelters, stables, grooming shops, zoos, and local, State, and Federal agencies.

Training, Other Qualifications, and Advancement

There are primarily two levels of education and training for entry to this occupation—a 2-year program for veterinary technicians and a 4-year program for veterinary technologists. Most entry-level veterinary technicians have a 2-year degree, usually an associate degree, from an accredited community college program in veterinary technology, in which courses are taught in clinical and laboratory settings using live animals. A few colleges offer veterinary technology programs that are longer and that may culminate in a 4-year bachelor's degree in veterinary technology. These 4-year colleges, in addition to some vocational schools, also offer 2-year programs in laboratory animal science.

In 2003, more than 80 veterinary technology programs in 41 States were accredited by the American Veterinary Medical Association (AVMA). Graduation from an AVMA-accredited veterinary technology program allows students to take the credentialing exam in any State in the country. Each State regulates veterinary technicians and technologists differently; however, all States require them to pass a credentialing exam following coursework. Passing the State exam assures the public that the technician or technologist has sufficient knowledge to work in a veterinary clinic or hospital. Candidates are tested for competency through an examination that includes oral, written, and practical portions. This process is regulated by the State Board of Veterinary Examiners, or the appropriate State agency. Depending on the State, candidates may become registered, licensed, or certified. Most States, however, use the National Veterinary Technician (NVT) exam. Prospects usually can have their passing scores transferred from one State to another, so long as both States utilize the same exam.

Employers recommend American Association for Laboratory Animal Science (AALAS) certification for those seeking employment in a research facility. AALAS offers certification for three levels of technician competence, with a focus on three principle areas—animal husbandry and welfare, facility administration and management, and animal health. Those who wish to become certified must satisfy a combination of education and experience requirements prior to taking an exam. Work experience must be directly related to the maintenance, health, and well-being of laboratory animals and must be gained in a laboratory animal facility as defined by AALAS. Candidates who meet the necessary criteria can begin pursuing the desired certification, based on their qualifications. The lowest level of certification is Animal Laboratory Assistant Technician (ALAT); the second level is Laboratory Animal Technician (LAT); and the highest level of certification is Laboratory Animal Technologist (LATG). The examination consists of multiple-choice

questions and is longer and more difficult for higher levels of certification.

Persons interested in careers as veterinary technologists and technicians should take as many high school science, biology, and math courses as possible. Science courses taken beyond high school, in an associate or bachelor's degree program, should emphasize practical skills in a clinical or laboratory setting. Because veterinary technologists and technicians often deal with pet owners, communication skills are very important. Additionally, technologists and technicians should be able to work well with others, because teamwork with veterinarians is common. Organizational ability and the ability to pay attention to detail also are important.

Technologists and technicians usually begin work as trainees in routine positions under the direct supervision of a veterinarian. Entry-level workers whose training or educational background encompasses extensive hands-on experience with a variety of laboratory equipment, including diagnostic and medical equipment, usually require a shorter period of on-the-job training. As they gain experience, technologists and technicians take on more responsibility and carry out more assignments under only general veterinary supervision, and some eventually may become supervisors.

Job Outlook

Employment of veterinary technologists and technicians is expected to grow much faster than the average for all occupations through the year 2012. Job openings also will stem from the need to replace veterinary technologists and technicians who leave the occupation over the 2002-12 period. Keen competition is expected for veterinary technologist and technician jobs in zoos, due to expected slow growth in zoo capacity, low turnover among workers, the limited number of positions, and the fact that the occupation attracts many candidates.

Pet owners are becoming more affluent and more willing to pay for advanced care because many of them consider their pet to be part of the family, spurring employment growth for veterinary technologists and technicians. The number of dogs as pets, which also drives employment growth, is expected to increase more slowly during the projection period than in the previous decade. However, the rapidly growing number of cats as pets is expected to boost the demand for feline medicine, offsetting any reduced demand for veterinary care for dogs. The availability of advanced veterinary services, such as preventive dental care and surgical procedures, may provide opportunities for workers specializing in those areas. Biomedical facilities, diagnostic laboratories, wildlife facilities, humane societies, animal control facilities, drug or food manufacturing companies, and food safety inspection facilities will provide more jobs for veterinary technologists and technicians. Furthermore, demand for these workers will stem from the desire to replace veterinary assistants with more highly skilled technicians and technologists in animal clinics and hospitals, shelters, kennels, and humane societies.

Employment of veterinary technicians and technologists is relatively stable during periods of economic recession. Layoffs are less likely to occur among veterinary technologists and technicians than in some other occupations because animals will continue to require medical care.

Earnings

Median hourly earnings of veterinary technologists and technicians were \$22,950 in 2002. The middle 50 percent earned

between \$19,210 and \$27,890. The bottom 10 percent earned less than \$16,170, and the top 10 percent earned more than \$33,750.

Related Occupations

Others who work extensively with animals include animal care and service workers. Like veterinary technologists and technicians, they must have patience and feel comfortable with animals. However, the level of training required for these occupations is less than that needed by veterinary technologists and technicians. Veterinarians also work extensively with animals. They prevent, diagnose, and treat diseases, disorders, and injuries in animals.

Sources of Additional Information

For information on certification as a laboratory animal technician or technologist, contact:

► American Association for Laboratory Animal Science, 9190 Crestwyn Hills Dr., Memphis, TN 38125. Internet: <http://www.aalas.org>

For information on careers in veterinary medicine and a listing of AVMA-accredited veterinary technology programs, contact:

► American Veterinary Medical Association, 1931 N. Meacham Rd., Suite 100, Schaumburg, IL 60173-4360. Internet: <http://www.avma.org>

For information on veterinary technology programs, contact:

► Association of American Veterinary Medical Colleges, 1101 Vermont Ave. NW., Suite 710, Washington DC 20005. Internet: <http://www.aavmc.org>

For information on becoming a veterinary technician, contact:

► National Association of Veterinary Technicians in America, P.O. Box 224, Battle Ground, IN 47920. Internet: <http://www.navta.net>