

CAREER GUIDE FOR VETERINARIANS

SOC Code: 29-1131

Pay Band(s): 5,6 and 7 ([Salary Structure](#))

Standard Occupational Description: Diagnose and treat diseases and dysfunctions of animals. May engage in a particular function, such as research and development, consultation, administration, technical writing, sale or production of commercial products, or rendering of technical services to commercial firms or other organizations. Includes veterinarians who inspect livestock.

Veterinarian positions in the Commonwealth are assigned to the following Roles in the [Veterinary Science Career Group](#):

[Veterinarian I](#)

[Veterinarian II](#)

[Veterinarian III](#)

[Veterinary Manager](#)

While Veterinarians within the Commonwealth are all located within the Veterinary Science Career Group, individuals may want to pursue other opportunities within the Commonwealth depending upon individual training, education, knowledge, skills, abilities, and interests.

Other Career Group(s) that may be of interest are:

[General Administration](#)

[Education Administration](#)

[Agricultural Services](#)

[Life and Physical Sciences](#)

[Program Administration](#)

SKILLS, KNOWLEDGE, ABILITIES AND TASKS

(Technical and Functional Expertise)

Skills

Note: *The technical and functional skills listed below are based on general occupational qualifications for Veterinarians commonly recognized by most employers. Typically, you will not be required to have all of the skills listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

1. Using scientific rules and methods to solve problems.
2. Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
3. Understanding written sentences and paragraphs in work related documents.
4. Considering the relative costs and benefits of potential actions to choose the most appropriate one.

5. Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
6. Understanding the implications of new information for both current and future problem solving and decision-making.
7. Talking to others to convey information effectively.
8. Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
9. Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
10. Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.

Knowledge

Note: *The technical and functional knowledge statements listed below are based on general occupational qualifications for Veterinarians commonly recognized by most employers. Typically, you will not be required to have all of the knowledge listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

The Knowledge of:

1. Plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
2. Information and techniques needed to diagnose and treat ~~human~~ **animal** injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
3. Structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
4. Chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.
5. Arithmetic, algebra, geometry, calculus, statistics, and their applications.
6. Principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

Abilities

Note: *The technical and functional abilities listed below are based on general occupational qualifications for Veterinarians commonly recognized by most employers. Typically, you will not be required to have all of the abilities listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

The Ability to:

1. Apply general rules to specific problems to produce answers that make sense.
2. Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
3. Communicate information and ideas in speaking so others will understand.
4. Make fast, simple, repeated movements of the fingers, hands, and wrists.
5. Quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
6. Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).

7. See details at close range (within a few feet of the observer).
8. Listen to and understand information and ideas presented through spoken words and sentences.
9. Speak clearly so others can understand you.
10. Quickly make sense of, combine, and organize information into meaningful patterns.

Tasks

Note: *The following is a list of sample tasks typically performed by Veterinarians. Employees in this occupation will not necessarily perform all of the tasks listed.*

1. Advise animal owners regarding sanitary measures, feeding, and general care necessary to promote health of animals.
2. Collect body tissue, feces, blood, urine, or other body fluids for examination and analysis.
3. Establish and conduct quarantine and testing procedures that prevent the spread of diseases to other animals or to humans, and that comply with applicable government regulations.
4. Euthanize animals.
5. Examine animals to detect and determine the nature of diseases or injuries. Inoculate animals against various diseases such as rabies and distemper.
6. Inspect and test horses, sheep, poultry, and other animals to detect the presence of communicable diseases.
7. Operate diagnostic equipment such as radiographic and ultrasound equipment, and interpret the resulting images.
8. Provide care to a wide range of animals or specialize in a particular species, such as horses or exotic birds.
9. Specialize in a particular type of treatment such as dentistry, pathology, nutrition, surgery, microbiology, or internal medicine.

INTERESTED?

Like people, occupations have traits or characteristics. These characteristics give important clues about the nature of the work and work environment, and give you an opportunity to match your own personal interests to a specific occupation. When you choose a job in an occupation that matches your own interests you have taken an important step in planning a successful and rewarding career.

The occupation of Veterinarian is considered an **Investigative** occupation and frequently involves working with ideas, and requires an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.

This occupation is also considered a **Realistic** occupation and frequently involves work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.

LICENSURE, REGISTRATION, OR CERTIFICATION REQUIREMENTS

It is nationally recognized that veterinary services is a health field career and is regulated to ensure competent delivery of health care services. Therefore professional standards and competencies including licensure are expected.

The Department of Labor reports that all States and the District of Columbia require that veterinarians be licensed before they can practice. The only exemptions are for veterinarians working for some Federal agencies and some State governments.

Licensing is controlled by the States and is not strictly uniform, although all States require successful completion of the D.V.M. degree—or equivalent education—and passage of a national board examination. Two organizations grant certification to individuals trained outside of the United States who demonstrate that they meet specified requirements for the English language and clinical proficiency: (1) the American Veterinary Medical Association's Educational Commission for Foreign Veterinary Graduates (ECFVG) and (2) the American Association of Veterinary State Boards' Program for the Assessment of Veterinary Education Equivalence (PAVE). ECFVG certification fulfills the educational requirement for licensure in all States except Nebraska. PAVE, which began development in 2002, currently meets the requirements for thirteen states, including Virginia. All applicants for licensure satisfy the examination requirement by passing the North American Veterinary Licensing Exam (NAVLE) or the former National Board Examination (NBE) and Clinical Competency Test (CCT) which the NAVLE replaced. The NAVLE, administered by computer, takes 1 day to complete and consists of 360 multiple-choice questions, covering all aspects of veterinary medicine. The NAVLE also includes visual materials designed to test diagnostic skills, comprising 10 percent of the total examination.

The majority of States also require candidates to pass a State jurisprudence examination covering State laws and regulations. Some States also do additional testing on clinical competency. There are few reciprocal agreements between States, making it difficult for a veterinarian to practice in a different State without first taking another State examination.

Virginia does not require a state examination and will consider waiving the NBE or the CCT if the licensure by endorsement candidate has graduated from an American Veterinary Medical Association accredited school of veterinary medicine or has received ECFVG or PAVE certification and is licensed in another state. All licenses must be in good standing, and the candidate must have engaged in clinical practice for at least two of the past four years and have otherwise met the requirements of §18 VAC 150-20-110 of the Regulations Governing the Practice of Veterinary Medicine.

Requirements differ by State and may involve attending a class or otherwise demonstrating knowledge of recent medical and veterinary advances. The Virginia Board of Veterinary Medicine provides requirements for licensure and continuing education for individuals interested in a Virginia license. Licensing information for Veterinarians can be found on the Department of Health Professions web site at <http://www.dhp.virginia.gov/>.

EDUCATIONAL, TRAINING, AND LEARNING OPPORTUNITIES

The Department of Labor, Bureau of Statistics provides the following:

Veterinarians play a major role in the healthcare of pets, livestock, and zoo, sporting, and laboratory animals. Some veterinarians use their skills to protect humans against diseases carried by animals and conduct clinical research on human and animal health problems. Others work in basic research, broadening the scope of fundamental theoretical knowledge and, in applied research, developing new ways to use knowledge.

Veterinarians must graduate from a 4-year program at an accredited college of veterinary medicine with a Doctor of Veterinary Medicine (D.V.M. or V.M.D.) degree and obtain a license to practice. The prerequisites for admission vary by veterinary medical college. Many of these colleges do not require a bachelor's degree for entrance, but all require a significant number of credit hours—ranging from 45 to 90 semester hours—at the undergraduate level. However, most of the students admitted have completed an undergraduate program. Applicants without a bachelor's degree face a difficult task gaining admittance.

Preveterinary courses emphasize the sciences. Veterinary medical colleges typically require classes in organic and inorganic chemistry, physics, biochemistry, general biology, animal biology, animal nutrition, genetics, vertebrate embryology, cellular biology, microbiology, zoology, and systemic physiology. Some programs require calculus; some require only statistics, college algebra and trigonometry, or precalculus. Most veterinary medical colleges also require core courses, including some in English or literature, the social sciences, and the humanities. Increasingly, courses in practice management and career development are becoming a standard part of the curriculum to provide a foundation of general business knowledge for new graduates.

In addition to satisfying preveterinary course requirements, applicants also must submit test scores from the Graduate Record Examination (GRE), the Veterinary College Admission Test (VCAT), or the Medical College Admission Test (MCAT), depending on the preference of each college. Currently, 21 schools require the GRE, 5 require the VCAT, and 2 accept the MCAT. Some veterinary medical colleges place heavy consideration on a candidate's veterinary and animal experience in admittance decisions. Formal experience, such as work with veterinarians or scientists in clinics, agribusiness, research, or some area of health science, is particularly advantageous. Less formal experience, such as working with animals on a farm or ranch or at a stable or animal shelter, also is helpful. Students must demonstrate ambition and an eagerness to work with animals.

There is keen competition for admission to veterinary school. Most veterinary medical colleges are public, State-supported institutions and reserve the majority of their openings for in-state residents, making admission for out-of-state applicants difficult.

While in veterinary medical college, students receive additional academic instruction in the basic sciences for the first 2 years. Later in the program, students are exposed to clinical procedures, such as diagnosing and treating animal diseases and performing surgery. They also do laboratory work in anatomy, biochemistry, medicine, and other scientific subjects. At most veterinary medical colleges, students who plan a career in research can earn both a D.V.M. degree and a Doctor of Philosophy (Ph.D.) degree at the same time.

Veterinary graduates who plan to work with specific types of animals typically choose to pursue additional education in 1 of 20 AVMA-recognized veterinary specialties—such as pathology, internal medicine, dentistry, ophthalmology, surgery, radiology, preventive medicine, or laboratory animal medicine—usually in the form of a 2-year internship. Interns receive a small salary but usually find that their internship experience leads to a higher beginning salary, relative to those of other starting veterinarians. Veterinarians who seek board certification in a specialty must also complete a 3- to 4-year residency program that provides intensive training in specialties, such as internal medicine, oncology, radiology, surgery, dermatology, anesthesiology, neurology, cardiology, ophthalmology, and exotic small-animal medicine.

The Virginia Board of Veterinary Medicine provides requirements for continuing education for licensed veterinarians.

In Virginia, the university that offers a veterinary program is Virginia Polytechnic Institute and State University (<http://www.vt.edu/>).

Association of American Veterinary Medical Colleges (<http://www.aavmc.org/>) offers educational opportunities and information on this occupation.

COMMONWEALTH COMPETENCIES

Competencies are a set of identified behaviors, knowledge, skills, and abilities that directly and positively impact the success of employees and the organization. Competencies can be observed and measured. When consistently demonstrated, competencies make employees particularly effective in their work. Competencies help lay out a road map to career success. You can use the Commonwealth Competencies to help improve your individual performance by adopting behaviors that make high performing employees successful in their jobs. In this way, you can use the Commonwealth Competencies for your further professional development.

The Commonwealth Competencies are:

1. Technical and Functional Expertise
2. Understanding the Business
3. Achieving Results
4. Serving the Customer
5. Teamwork
6. Interpersonal and Communication Skills
7. Leadership and Personal Effectiveness

The above competencies may be applied to employees throughout the Commonwealth of Virginia. They can be rank-ordered by agencies and hiring managers to represent the needs of a specific job. The rank ordering will change depending upon the occupation, an organization's priorities, the actual job requirements, and the supervisor's preferences.

Career success is both about what you do (applying your technical knowledge, skills, and ability) and how you do it (the consistent behaviors you demonstrate and choose to use) while interacting and communicating with others. Hopefully, by studying the Commonwealth competencies, identifying your developmental opportunities, and working to refine your own competence, you can take charge of your career!

For additional information about the **Commonwealth Competencies** go to: http://jobs.state.va.us/cc_planningctr.htm. For the competencies, we first list the competencies and then define each. Finally, we list competency indicators; to describe what successful performance looks like.

COMMONWEALTH CAREER PATH

Career opportunities in the Commonwealth are not limited to moving “up” to the next highest role and pay band, changing positions, or to becoming a supervisor. That’s because most roles describe a broad group of occupationally related positions that perform a range of work that requires increased knowledge and skills. For that reason, Commonwealth roles describe the career paths within the same or higher-level role for the same or different Career Group. The broad salary range and the Commonwealth’s pay practices provide flexibility in recognizing career development and advancement. ([Salary Structure](#))

For example: **Veterinarians**

PAY BANDS	PRACTITIONER ROLES
5	Veterinarian I
6	Veterinarian II
7	Veterinarian III

PAY BANDS	MANAGER ROLES
7	Veterinary Manager

Sample Career Path

Veterinarian I

The Veterinarian I track is for veterinarians whose expertise level ranges from entry level to advanced level. Employees are responsible for enforcement of regulations that protect animal’s health and welfare and the health of consumers by investigating animal diseases, contamination of food of animal origin, the sanitation of various food products and cooperative enforcement activities involving both public and private sectors.

Veterinarian II

The Veterinarian II role provides career tracks for veterinarians who act as supervisors and are involved in the statewide administration of a regional laboratory or veterinary service programs. These laboratories, animal disease control and welfare programs are in support of the Virginia livestock and meat/poultry industries, veterinary practitioners, and the public.

Veterinarian III

The Veterinarian III role provides career tracks for veterinarians who serve as experts providing specialized and statewide diagnostic services in the Animal Industry Services Laboratory System.

Veterinary Manager

The Veterinary Manager role provides career tracks for managers who serve as State Veterinarians and direct Animal Industry Services (AIS) programs. Responsibilities include: administrative management, staff supervision, budget, planning, goals/objectives, quality assurance to ensure compliance with AIS laws and regulations, agency policies, and the promotion of economic development in the Commonwealth of Virginia.

ADDITIONAL OCCUPATIONAL INFORMATION CAN BE FOUND AT:

O*NET (Occupational Information Network)

http://online.onetcenter.org/gen_search_page

Virginia Employment Commission

<http://www.alex.vec.state.va.us/>

Career One Stop

<http://www.careeronestop.org/>

Virginia Career Resource Network

<http://www.vacrn.net/>

Association of American Veterinary Medical Colleges

<http://www.aavmc.org/>

Department of Health Professions

<http://www.dhp.virginia.gov/>

American Association of Veterinary State Boards

<http://www.aavsb.org/>

Professional Organizations

American Veterinary Medical Association

<http://www.avma.org/>

Association of American Veterinary Medical Colleges

<http://www.aavmc.org/>

Virginia Veterinary Medicine Association

<http://www.vvma.org/>

American Veterinary Medical Foundation

<http://www.avmf.org/>