

# **CAREER GUIDE FOR DENTISTS**

SOC Code: 29-1021

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

**Standard Occupational Description:** Diagnose and treat diseases, injuries, and malformations of teeth and gums and related oral structures. May treat diseases of nerve, pulp, and other dental tissues affecting vitality of teeth.

**Dentist positions in the Commonwealth are assigned to the following Roles in the [Dental Services Career Group](#):**

[Dentist I](#)

[Dental Manager](#)

While Dentists within the Commonwealth are all located within the Dental Services 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:

[Physician Services](#)

[Health Care Compliance](#)

[General Administration](#)

[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 Dentists 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. Understanding written sentences and paragraphs in work related documents.
2. Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
3. Using scientific rules and methods to solve problems.
4. Considering the relative costs and benefits of potential actions to choose the most appropriate one.
5. Understanding the implications of new information for both current and future problem solving and decision-making.
6. Determining the kind of tools and equipment needed to do a job.
7. 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.
8. Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

9. Controlling operations of equipment or systems.
10. Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

## **Knowledge**

**Note:** *The technical and functional knowledge statements listed below are based on general occupational qualifications for Dentists 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. Information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
2. Plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
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.

## **Abilities**

**Note:** *The technical and functional abilities listed below are based on general occupational qualifications for Dentists 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. Keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
2. Quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
3. Listen to and understand information and ideas presented through spoken words and sentences.
4. Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
5. Make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
6. Communicate information and ideas in speaking so others will understand.
7. Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, and mathematical operations).
8. Make fast, simple, repeated movements of the fingers, hands, and wrists.
9. See details at close range (within a few feet of the observer).
10. Communicate information and ideas in writing so others will understand.

## Tasks

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

1. Administer anesthetics to limit the amount of pain experienced by patients during procedures.
2. Advise and instruct patients regarding preventive dental care, the causes and treatment of dental problems, and oral health care services.
3. Analyze and evaluate dental needs to determine changes and trends in patterns of dental disease.
4. Apply fluoride and sealants to teeth.
5. Bleach, clean or polish teeth to restore natural color.
6. Design, make, and fit prosthodontic appliances such as space maintainers, bridges, and dentures, or write fabrication instructions or prescriptions for denturists and dental technicians.
7. Diagnose and treat diseases, injuries, and malformations of teeth, gums and related oral structures, and provide preventive and corrective services.
8. Eliminate irritating margins of fillings and correct occlusions, using dental instruments.
9. Examine teeth, gums, and related tissues, using dental instruments, x-rays, and other diagnostic equipment, to evaluate dental health, diagnose diseases or abnormalities, and plan appropriate treatments.
10. Fill pulp chamber and canal with endodontic materials.

## 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 as a dentist 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.

The occupation is also considered as 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.

The occupation is a **Social** occupation and frequently involves working with, communicating with, and teaching people. These occupations often involve helping or providing service to others.

## **LICENSURE, REGISTRATION, OR CERTIFICATION REQUIREMENTS**

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

Licensure is required for Dentist positions in Virginia state government. All 50 States and the District of Columbia require dentists to be licensed. To qualify for a license in most States, a candidate must graduate from a dental school accredited by the ADA's Commission on Dental Accreditation and also must pass written and practical examinations. Candidates are required to pass the National Board Dental Examinations. Individual States and regional testing agencies administer the practical examinations that may also be required for licensure.

The Virginia Board of Dentistry provides requirements for licensure and continuing competency for this occupation. Licensing information for Dentist can be found on the Department of Health Professions' web site at <http://www.dhp.virginia.gov/>

## **EDUCATIONAL, TRAINING, AND LEARNING OPPORTUNITIES**

The U. S. Department of Labor, Bureau of Labor Statistics (<http://www.bls.gov>) provides the following:

Dentists diagnose, prevent, and treat problems with teeth or mouth tissue. They remove decay, fill cavities, examine x-rays, place protective plastic sealants on children's teeth, straighten teeth, and repair fractured teeth. They also perform corrective surgery on gums and supporting bones to treat gum diseases. Dentists extract teeth and make models and measurements for dentures to replace missing teeth. They provide instruction on diet, brushing, flossing, the use of fluorides, and other aspects of dental care. They also administer anesthetics and write prescriptions for antibiotics and other medications.

Dentists use a variety of equipment, including x-ray machines, drills, and instruments such as mouth mirrors, probes, forceps, brushes, and scalpels. They wear masks, gloves, and safety glasses to protect themselves and their patients from infectious diseases.

Most dentists are general practitioners, handling a variety of dental needs. Other dentists practice in any of nine specialty areas. *Orthodontists*, the largest group of specialists, straighten teeth by applying pressure to the teeth with braces or retainers. The next largest group, *oral and maxillofacial surgeons*, operates on the mouth and jaws. The remainder may specialize as *pediatric dentists* (focusing on dentistry for children); *periodontists* (treating gums and bone supporting the teeth); *prosthodontists* (replacing missing teeth with permanent fixtures, such as crowns and bridges, or removable fixtures, such as dentures); *endodontists* (performing root canal therapy); *public-health dentists* (promoting good dental health and preventing dental diseases within the community); *oral pathologists* (studying oral diseases); or *oral and maxillofacial radiologists* (diagnosing diseases in the head and neck through the use of imaging technologies).

Dental schools require a minimum of 2 years of college-level pre dental education, regardless of the major chosen. However, most dental students have at least a bachelor's degree. Pre dental education emphasizes course work in science and many applicants to dental school major in a science such as biology or chemistry, while other applicants major in another subject and take

many science courses as well. A small number of applicants are accepted to dental school after 2 or 3 years of college and complete their bachelor's degree while attending dental school. All dental schools require applicants to take the Dental Admissions Test (DAT). When selecting students, schools consider scores earned on the DAT, applicants' grade point averages, and information gathered through recommendations and interviews. Competition for admission to dental school is keen.

Dental school usually lasts 4 academic years. Studies begin with classroom instruction and laboratory work in basic sciences, including anatomy, microbiology, biochemistry, and physiology. Beginning courses in clinical sciences, including laboratory techniques, also are provided at this time. During the last 2 years, students treat patients, usually in dental clinics, under the supervision of licensed dentists.

Most dental schools award the degree of Doctor of Dental Surgery (DDS). The rest award an equivalent degree, Doctor of Dental Medicine (DMD).

States may license or certify dentists who intend to practice in a specialty area. Requirements include 2 to 4 years of postgraduate education and, in some cases, the completion of a special State examination. Most State licenses permit dentists to engage in both general and specialized practice. Dentists who want to teach or conduct research usually spend an additional 2 to 5 years in advanced dental training, in programs operated by dental schools or hospitals.

Dentistry requires diagnostic ability and manual skills. Dentists should have good visual memory, excellent judgment regarding space and shape, a high degree of manual dexterity, and scientific ability. Good business sense, self-discipline, and good communication skills are helpful for success in private practice. High school and college students who want to become dentists should take courses in biology, chemistry, physics, health, and mathematics.

Some dental school graduates work for established dentists as associates for a year or two in order to gain experience and save money to equip an office of their own. Most dental school graduates, however, purchase an established practice or open a new one immediately after graduation. According to the ADA, each year about 12 percent of new graduates enroll in postgraduate training programs to prepare for a dental specialty.

For additional information on educational opportunities the American Dental Association, (<http://www.ada.org/>) and American Dental Education Association (<http://www.adea.org/>) are good resources.

In Virginia the educational institution that offers dental programs and degrees is Virginia Commonwealth University (<http://www.vcu.edu/>).

## **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](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: **Dentists**

PAY BAND	PRACTITIONER ROLE
6	Dentist I

PAY BAND	MANAGER ROLE
7	Dental Manager

**Sample Career Path**

## **Dentist I**

The Dentist I role provides career tracks for dentists whose responsibilities range from entry level to first line supervision of others. Employees deliver direct dental care associated with: oral examinations; orthodontia; prosthodontia; periodontics; dental reconstruction; the administration of oral prophylactics; extractions and limited oral surgery; applying dental sealants; identifying sources of and treating infections; diagnosis and treatment planning; and taking and interpreting x-rays.

## **Dental Manager**

The Dental Manager role provides career tracks for dentists who serve as dental program administrators whose management and oversight responsibilities range from managing dental clinics to overseeing the delivery of a comprehensive array of statewide services associated with dental health.

## **ADDITIONAL OCCUPATIONAL INFORMATION CAN BE FOUND AT:**

O\*NET (Occupational Information Network)

[http://online.onetcenter.org/gen\\_search\\_page](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/>

Department of Health Professions

<http://www.dhp.state.virginia.us/>

The U. S. Department of Labor, Bureau of Labor Statistics

<http://www.bls.gov>

Virginia Area Health Education Centers Program

<http://www.ahec.vcu.edu/hcmanual.htm>

## **Professional Organizations**

American Dental Association

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

Virginia Dental Association

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