

Dental-Related Occupations

Includes:

- Dental assistant
- Dental hygienist
- Dental laboratory technician

Dental Assistant

The dental assistant increases the efficiency of the dental care team by aiding the dentist in the delivery of oral health care. The dental assistant performs a wide range of tasks requiring both interpersonal and technical skills. Duties range from aiding and educating patients to preparing and sterilizing dental instruments and performing administrative work.



Job Description

Dental assistants are responsible for:

- Helping patients feel comfortable before, during, and after treatment
- Assisting the dentist during treatment
- Exposing and processing dental radiographs (x-rays)
- Recording the patient's medical history and taking blood pressure and pulse
- Preparing and sterilizing instruments and equipment for the dentist's use
- Providing patients with oral care instructions following such procedures as surgery or placement of a restoration (filling)
- Teaching patients proper brushing and flossing techniques
- Making impressions of patients' teeth for study casts
- Performing administrative and scheduling tasks, including using a personal computer, communicating by telephone, and maintaining an inventory supply system.



Employment Characteristics

Most of the more than 247,000 active dental assistants are employed by general dentists. In addition, dental specialists employ dental assistants. Most assistants work chairside, although they may also participate in the business aspects of the practice. Besides dental offices, other employment settings available to dental assistants include:

- Schools and clinics (public health dentistry)
- Hospitals (assisting dentists who are treating bedridden patients or in more elaborate dental procedures performed only in hospitals)
- Dental school clinics
- Insurance companies (processing dental insurance claims)
- Vocational schools, technical institutes, community colleges, and universities (teaching others to be dental assistants)

Among independent general practitioners, the average number of employees per dentist has remained relatively stable between 1997 and 1998, averaging 4.2 positions. In 1999, this number has increased to 4.3 positions.

Dental assisting also offers both flexibility and stability. Dental assistants have the flexibility to work full or part time. As of 2001, dental assistants had been working in their current practices for an average of 6.6 years.



Salary

The salary of a dental assistant varies, depending on the responsibilities associated with the specific position, the individual's training, and the geographic location of employment. The average national wage of a full-time dental assistant employed by a general practitioner in 2004 was \$15.48 per hour. Refer to Section IV, Table 5 of this *Directory* for more information, or see www.ama-assn.org/go/hpsalary.

In addition to salary, dental assistants may receive benefit packages from their employers, including health and disability insurance coverage, dues for membership in professional organizations, an allowance for uniforms, profit sharing plans, and paid vacations.



Employment Outlook

Most areas of the country are currently reporting shortages of dental assistants. Owing to the success of preventive dentistry in reducing the incidence of oral disease, senior citizens—a growing population—will retain their teeth longer and will be even more aware of the importance of regular dental care.



Educational Programs

Length. Nine to 11 months.

Prerequisites. High school diploma or equivalent.



Certification

Dental assistants can become certified by passing the Certified Dental Assistant examination, administered by the Dental Assisting National Board (DANB). Passing this examination qualifies a dental assistant to use the designation Certified Dental Assistant (CDA). Dental assistants are eligible to take this examination if they have completed a dental assisting program accredited by the Commission on Dental Accreditation, or have 2 years full-time work experience, or are a graduate from a dental hygiene or dental program accredited by the Commission on Dental Accreditation. State regulations vary and some states offer registration or licensure in addition to this national certification program.



Miscellaneous Facts

- The 259 dental assisting education programs in the United States accredited by the American Dental Association's Commission on Dental Accreditation enrolled 7,240 students in 2004-2005.
- Women represented 96.4% of students enrolled in dental assisting programs in 2004-2005.
- Minority students represented 23% of enrollees in dental assisting programs in 2004-2005.
- Excellent career opportunities exist for nontraditional dental assisting students, seeking career change or job reentry after a period of unemployment, or from a culturally diverse background. Many dental assisting education programs offer more flexible program designs that meet the needs of nontraditional students by offering a variety of educational options, such as part-time or evening hours.

Dental Hygienist

Dental hygienists provide dental hygiene services as they work with dentists in the delivery of dental care to patients. Hygienists are licensed to use their knowledge and clinical skills to provide dental care to patients and their interpersonal skills to motivate and instruct patients on methods to prevent oral disease and maintain oral health.



Career Description

Although the range of services performed by dental hygienists varies from state to state, patient services rendered by dental hygienists frequently include:

- Performing patient screening procedures, such as assessing oral health conditions, reviewing health and dental history, and taking blood pressure, pulse, and temperature; oral cancer screening; head & neck inspection; and dental charting
- Exposing and developing dental radiographs (x-rays)
- Removing calculus and plaque (hard and soft deposits) from teeth
- Applying preventive materials to teeth (eg, sealants and fluorides)
- Teaching patients appropriate oral hygiene techniques
- Counseling patients regarding proper nutrition and its impact on oral health
- Making impressions of patients' teeth for study casts
- Administration of anesthesia (depending upon state practice act)



Employment Characteristics

Most of the approximately 158,000 licensed dental hygienists in the United States in 2004 are employed by general dentists. Additionally, dental specialists (such as periodontists or pediatric dentists) employ dental hygienists. Most hygienists work one to one with patients in providing dental hygiene services.

Dental hygienists also may be employed to provide dental hygiene care for patients in hospitals, nursing homes, public health clinics, and schools. Depending on the level of education and experience achieved, dental hygienists also can apply their skills and knowledge to other career activities, such as teaching. Research, public health, and business administration are other options. In addition, employment opportunities may be available with companies that market dental-related materials and equipment.

In some states, dental hygienists may also own their own dental hygiene business or practice on an independent contracting basis. These practitioners are not actually employed by dentists but provide dental hygiene services through contractual agreements.

Among independent general practitioners, the average number of employees per dentist has remained relatively stable between 1994 and 1998, averaging 4.2 positions. In 1999, the average number of employees increased to 4.3. Because 70.2% of solo general practitioners employ a dental hygienist, and 25.1% employ two or more hygienists, employment opportunities in this field are excellent.

As a career, dental hygiene also offers both stability and flexibility. As of 2001, for example, dental hygienists had been working in their current practices for an average of 7.3 years. Many hygienists also have considerable flexibility to undertake a full- or part-time schedule with evening or weekend hours.



Salary

The salary of a dental hygienist varies, depending on the responsibilities associated with the specific position, the geographic location of employment, and the type of practice or other setting in which the hygienist works. Salary information from the American Dental Association indicates that the median salary for full-time dental hygienists in 2004 was \$30.30 per hour. Refer to Section IV, Table 5 of this *Directory* for more information, or see www.ama-assn.org/go/hpsalary.

In addition, many full-time dental hygienists receive benefit packages from their dentist/employers, which may include health insurance coverage, dues for membership in professional organizations, paid vacations and sick leave, and tuition assistance for continuing education. Most state dental boards require mandatory continuing education for maintenance of the dental hygiene license.



Employment Outlook

According to the 2006-2007 edition of the *Occupational Outlook Handbook* and the *Monthly Labor Review*, published by the US Department of Labor's Bureau of Labor Statistics, dental hygiene is expected to increase 27% or more between 2004-2014. Some areas of the country are currently reporting shortages of dental hygienists.

Owing to the success of preventive dentistry in reducing the incidence of oral disease, senior citizens—a growing population—will retain their teeth longer and will require regular dental hygiene care.

Excellent career opportunities exist for nontraditional dental hygiene students, who might meet one or more of the following criteria: over 23 years of age, seeking career change or job reentry after a period of unemployment, or from a culturally diverse background. Some dental hygiene education programs offer more flexible program designs that meet the needs of nontraditional students by offering a variety of educational options, such as part-time or evening hours.



Educational Programs

Length. The majority of community college-based dental hygiene programs offer a 2-year associate degree. University-based dental hygiene programs may offer baccalaureate and master's degrees, which generally require at least 2 or more years of further education.

Prerequisites. Admission requirements vary, depending on the institution. High school-level courses such as health, biology, psychology, chemistry, mathematics, and speech will be beneficial in a dental hygiene career. Many programs prefer individuals who have completed at least 1 year of college, and some baccalaureate degree programs require applicants to have completed 2 years of college.

Curriculum. Dental hygiene education programs provide supervised patient care experiences. Programs also include courses in the liberal arts (English, speech, sociology, and psychology); basic sciences (anatomy, physiology, chemistry, biochemistry, immunology, nutrition, pharmacology, microbiology, and general pathology); and clinical sciences (dental hygiene; tooth morphology; head, neck, and oral anatomy; oral embryology and histology; oral pathology; radiography; periodontology; pain management; radiology; and dental materials). After completing a dental hygiene program, dental hygienists can pursue additional training in such areas as education, health administration, basic sciences, and public health.

Dental-Related Occupations



Licensure

Dental hygienists are licensed by each state to provide dental hygiene care and patient education. Eligibility for state licensure usually includes graduation from a Commission-accredited dental hygiene education program. In addition to requiring a passing score on the state-authorized licensure examination, which tests candidates' clinical dental hygiene skills as well as their knowledge of dental hygiene and related subjects, almost all states require candidates for licensure to obtain a passing score on the Dental Hygiene National Board Examination (a comprehensive written examination).

Upon receipt of license, a dental hygienist may use RDH, signifying Registered Dental Hygienist, after his/her name.

Miscellaneous Facts

- The United States has approximately 290 dental hygiene education programs accredited by the American Dental Association's Commission on Dental Accreditation.
- Approximately 97.4% of the 13,895 students enrolled in dental hygiene programs in 2004-2005 were women.
- Minority students represented 17% of enrollees in dental hygiene programs in 2004-2005.

Dental Laboratory Technician

Dental laboratory technicians make dental prostheses—replacements for natural teeth, including dentures and crowns. The hallmarks of the qualified dental laboratory technician are skill in using small hand instruments, accuracy, artistic ability, and attention to detail to create practical and esthetically pleasing replacements.



Career Description

Dental laboratory technicians seldom interact directly with patients; rather, they work with dentists by following detailed written instructions to make dental prostheses, which are replacements for natural teeth that enable people who have lost some or all of their teeth to eat, chew, talk, and smile in a manner similar to the way they did before. The dental technician uses impressions (molds) of the patient's teeth or oral soft tissues to create full dentures, removable partial dentures or fixed bridges, crowns, and orthodontic appliances and splints.

Dental technicians use sophisticated instruments and equipment and work with a variety of materials for replacing damaged or missing tooth structure, including waxes, plastics, precious and nonprecious alloys, stainless steel, and porcelain.



Employment Characteristics

Most of the more than 43,000 active dental laboratory technicians in the United States today work in commercial dental laboratories, which on average employ between three to five technicians. In addition, some dentists employ dental technicians in their private dental offices. Other employment opportunities for dental technicians include dental schools, hospitals, the military, and companies that manufacture dental prosthetic materials. Dental laboratory technician education programs also offer teaching positions for qualified technicians.



Salary

The starting salary of a dental technician varies depending on the responsibilities associated with the

specific position and the geographic location of employment. Salary information from the American Dental Association indicates that the median salary for full-time dental technicians in 2003 was \$15.40 per hour. Refer to Section IV, Table 5 of this *Directory* for more information, or see www.ama-assn.org/go/hpsalary. In addition to salary, many dental technicians receive benefit packages from their employers, which may include health and disability insurance coverage, reimbursement for continuing education programs, and paid vacations and holidays. Experienced technicians may become self-employed by opening their own dental laboratories, leading to greater financial rewards.



Employment Outlook

Since most dentists use laboratory services, employment opportunities in this field are excellent. Owing to the success of preventive dentistry in reducing the incidence of oral disease, senior citizens—a growing population—will retain their teeth longer and will require more sophisticated prostheses for longer periods, thus increasing the demand for dental laboratory services.

Excellent career opportunities exist for nontraditional dental technology students, who might be seeking career change or job reentry after a period of unemployment, or from a culturally diverse background.



Educational Programs

Length. Most dental laboratory technicians receive their education and training through a 2-year program at a community college, vocational school, technical college, or dental school, for which they may receive a certificate or an associate degree.

Prerequisites. High school diploma or its equivalent, although the Commission strongly encourages formal college-level education.



Certification

Dental laboratory technicians can become certified by passing an examination, administered by the National Board for Certification in Dental Laboratory Technology, that evaluates their technical skills and knowledge. Passing this examination qualifies a dental technician to use the designation Certified Dental Technician (CDT). A CDT specializes in one or more of five areas: complete dentures, partial dentures, crowns and bridges, ceramics, and orthodontics.

Dental technicians are eligible to take the examination if they have completed a dental laboratory technology program accredited by the Commission on Dental Accreditation and have 2 years of professional experience or have completed 5 years of work experience as dental technicians, or have graduated from a nonaccredited program and have 3 years of professional experience and passed a comprehensive examination.

Miscellaneous Facts

- In 2004-2005, 551 first-year dental laboratory technician students were enrolled in the approximately 23 dental technology education programs in the United States accredited by the American Dental Association's Commission on Dental Accreditation.
- Dental technology presents equal career opportunities for women and men. In 2004-2005, 47% of the students enrolled in dental technology programs were women, 53% were men.

- Minority students represented approximately 47.5% of enrollees in dental technology programs in the 2004-2005 graduating class.



Inquiries

Careers/Curriculum

American Dental Association
211 E Chicago Avenue
Chicago, IL 60611-2678
312 440-2390
www.ada.org/prof/ed/careers

American Dental Education Association
1400 K Street NW, Suite 1100
Washington, DC 20005
202 289-7201
www.adea.org

American Dental Assistants Association
35 E Wacker Drive, Suite 1730
Chicago, IL 60601
312 541-1550
www.dentalassistant.org

American Dental Hygienists' Association
444 N Michigan Avenue, Suite 3400
Chicago IL 60611
312 440-8900
www.adha.org

Laboratory Conference Section Board of the American Dental Trade Association
4222 King Street W
Alexandria, VA 22302
703 379-7755

National Association of Dental Laboratories
325 John Knox Rd L103
Tallahassee, FL 32303
800 950-1150
www.nadl.org

Certification

Dental Assisting National Board, Inc
676 N St Clair, Suite 1880
Chicago, IL 60611
312 642-3368
800 FOR-DANB (367-3262)
312 642-1475 Fax
www.danb.org

National Board of Certification for Dental Laboratory Technicians
1530 Metropolitan Blvd
Tallahassee, FL 32308
850 224-0711
www.nadl.org

Program Accreditation

Commission on Dental Accreditation
American Dental Association
211 E Chicago Avenue
Chicago, IL 60611-2678
312 440-4653
312 440-2915 Fax
www.ada.org