

## 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.



### History

The first educational standards for the education of dental laboratory technicians, adopted by the ADA House of Delegates in 1946, were rescinded and revised in 1957. Between 1946 and 1957, four programs for training dental laboratory technicians were developed, and the establishment of new programs remained static through 1965. From 1966 to 1979, the number of accredited dental laboratory technology programs increased from 4 to 59. Since that time, the number has decreased to 20.



### 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. Data from the US Bureau of Labor Statistics for 2007 shows that wages at the 10th percentile were \$19,590, the 50th percentile (median) at \$33,480, and the 90th percentile at \$55,630 ([www.bls.gov/oes/current/oes519081.htm](http://www.bls.gov/oes/current/oes519081.htm)). For more information, refer to [www.ama-assn.org/go/hpsalary](http://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 tech-

nicians 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.



### Inquiries

#### Careers/Curriculum

American Dental Association  
211 E Chicago Avenue  
Chicago, IL 60611-2678  
312 440-2390  
[www.ada.org/prof/ed/careers](http://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](http://www.adea.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 Road, L103  
Tallahassee, FL 32303  
800 950-1150  
[www.nadl.org](http://www.nadl.org)

**Certification**

National Board for Certification in Dental Laboratory Technology  
325 John Knox Road, L103  
Tallahassee, FL 32303  
800 684-5310  
[www.nbccert.org](http://www.nbccert.org)