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standards for the education of dental laboratory technicians, adopted by the ADA House of Delegates in 1946, were rescinded and revised in 1957.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 approximately 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 46,000 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. May 2011 data from the US Bureau of Labor Statistics (BLS) show that wages at the 10th percentile were $21,070, the 50th percentile (median) at $35,590, and the 90th percentile at $59,360 (www.bls.gov/oes/current/oes519081.htm).

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.

For more information, refer to www.ama-assn.org/go/hpsalary.

**Employment Outlook**

The BLS projects that employment of dental laboratory technicians is expected to experience little or no change from 2010-2020. Baby boomers are more likely to retain their teeth than previous generation, so growth has been taking place at a steady rate. 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 two-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. High school students interested in becoming dental laboratory technicians should take courses in mathematics and science. Courses in metal and wood shop, art, drafting, and computers are recommended. Courses in management and business may help those wishing to operate their own laboratories.

**Certification**

Dental laboratory technicians can become certified by passing an examination, administered by the National Board for Certification in Dental Laboratory Technology, which 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 two years of professional experience or have completed five years of work experience as dental technicians, or have graduated from a non-accredited program and have three years of professional experience and passed a comprehensive examination.

**Inquiries**

**Careers/Curriculum**

American Dental Association
211 East Chicago Avenue
Chicago, IL 60611-2678
312 440-2390
www.ada.org/careers
Health Care Careers Directory 2012-2013

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

Certification
National Board for Certification in Dental Laboratory Technology
325 John Knox Road, L103
Tallahassee, FL 32303
800 684-5310
www.nbccert.org

Program Accreditation
Commission on Dental Accreditation
American Dental Association
211 East Chicago Avenue
Chicago, IL 60611-2678
(312) 440-4653
www.ada.org