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## Dentist

### Overview

Dentistry is the branch of the healing arts and sciences devoted to maintaining oral health. It is a dynamic health profession, offering opportunities to become a successful, highly respected member of the community. Dentists enjoy excellent compensation and the high demand for dental care is likely to continue in the future. The realization that oral health can have a serious impact on systemic health drives the expansion of new professional opportunities each year, and a degree in dentistry offers a number of career options, including:

Academic Dentistry

General Dentistry Private Practice (Self-Employed, Employee, Associate/Partner)

Dental Research

Dental Public Policy

International Health Care

Federal Government (Military Dentist)

Dental Specialties

Dentists are trained to treat all patients, adults and children, in many different treatment facilities and settings. In doing so, a general dentist may:

Use the latest techniques and equipment to examine the head and neck and oral cavity to identify and diagnose oral conditions that may manifest into systemic disease and determine the oral health of the patient.

Use the latest radiographic, computer-generated imaging, and other specialized diagnostic techniques to identify diseases of the teeth, supporting bone and gingival tissues, and other tissues in the oral cavity and head and neck.

Restore and replace teeth damaged by decay, lost from trauma or disease, with newly developed dental materials, implants, and crown and bridge techniques.

Perform corrective surgery on gums and supporting bones to treat gum disease.

Extract teeth when necessary using the most up-to-date anesthetic techniques.

Eliminate pain arising from oral diseases, conditions and trauma, making use of prescriptive medicines to reduce pain and discomfort.

Correct mal-positioned teeth to improve chewing, speech, digestion of food and appearance.

Oversee the administration and business of private practice and frequently employ and supervise a large number of staff and allied dental personnel to help treat their family of patients.

Evaluate the overall health of their patients including taking and evaluating comprehensive medical histories.

Provide instruction and advice on oral health care and preventive measures to maintain healthy oral tissues and prevent oral disease.

Provide instruction and advice on oral health care, including individualized diet analysis, brushing and flossing techniques, the use of fluoridated products and other specialized preventive measures to maintain healthy oral tissues and prevent oral disease.

Approximately 80% of all dentists are general dentists. Additional experience, training or education beyond a DMD or DDS allows general dentists to further specialize in the following fields:

**Endodontics** - diagnosis and treatment of injuries that are specific to the dental nerves and pulp (matter inside the tooth).

**Oral and Maxillofacial Pathology** - study and research of the causes, processes, and effects of diseases with oral manifestations.

**Oral and Maxillofacial Radiology** - taking and interpretation of conventional, digital, CT, MRI, and allied imaging modalities of oral-facial structures and disease.

**Oral and Maxillofacial Surgery** - diagnostic services and treatment for injuries, diseases, and defects of the neck, head jaw, and associated structures.

**Orthodontics and Dentofacial Orthopedics** - diagnosis and treatment of problems related to irregular dental development, missing teeth, and other abnormalities.

**Pediatric Dentistry** - treatment of children from birth to adolescence.

**Periodontics** - corrective surgery on gums and supporting bones to treat gum disease.

**Prosthodontics** - restoration and replacement of teeth damaged by decay, lost from trauma or disease, with fixed or removable appliances constructed with newly developed dental material.

**Dental Public Health** - development of policies and programs, such as health care reform, that affect the community at large.

To **meet a dentist** (<http://science.education.nih.gov/LifeWorks.nsf/Interviews/James+Tynecki>), see the **NIH "Lifeworks"** (<http://science.education.nih.gov/LifeWorks.nsf/feature/index.htm>) Website. For a listing of accredited dental schools in the United States, see the **American Dental Education Association** (<http://www.adea.org/DMS/Instlinks/default.htm>) or **American Dental Association** (<http://www.ada.org/prof/ed/careers/index.asp>) Websites.

## Working Conditions

Approximately 90% of all dentists are engaged in delivery of care through private practices. Fulltime dentists spend approximately 36 hours per week in their practices, of which 33 hours/week is spent treating patients. They have great flexibility in determining the number of hours per week they choose to work.

The remaining 10% of dentists teach in dental education programs, conduct research, and/or deliver care in the Armed Forces, the Indian Health Service, the U.S. Public Health Service, or other clinical settings. Dentists engaged in teaching, research or related positions generally work regular 40-hour workweeks.

## Academic Requirements

To practice dentistry in the U.S., you must graduate from an accredited dental school. The length of educational training beyond high school is generally 8 years, including (a) a bachelor's degree, and (b) four years of dental school. Some dental schools consider individuals without a bachelor's degree, if they have completed a minimum of two years of full-time college study. However, preference is given to candidates who have a college degree by the time they enter dental school.

NOTE: An increasing number of dental schools are offering **dual degree programs** (<http://www.jdentaled.org/cgi/content/abstract/70/9/909?etoc>) -- i.e., D.D.S.-D.M.D./Ph.D, DDS-DMD/MPH, DDS-DMD/MBA

In order to be accepted into dental school, you have to take the American Dental Association's **Dental Admissions Testing Examination** (<http://www.ada.org/prof/ed/testing/dat/index.asp>).

There are **56 accredited dental schools** ([http://www.ada.org/prof/ed/programs/search\\_ddsmd\\_us.asp](http://www.ada.org/prof/ed/programs/search_ddsmd_us.asp)) in the U.S., and one new dental school is planning to accept its first entering class in 2008. In making admissions decisions, dental schools consider many factors, which may vary from one school to another. For example, many state-supported dental schools are required to accept a majority of students who reside in their home state.

General criteria used in making admissions decisions include:

- Overall grade point average

- Biology-chemistry-physics courses completed and grades earned

- Total credit hours earned prior to enrollment in dental school (preference given to individuals with Bachelor's degrees or more)

- Quality of academic preparation, e.g., degree of difficulty of courses, course load.

**Dental Admission Test (DAT)** (<http://www.ada.org/prof/ed/testing/dat/index.asp>) scores

Schools also look at a candidate's personal qualities, which can be reflected in the application and through letters of recommendation. For example, they may consider:

- Awards, honors, scholarships
- Extracurricular, volunteer, community service, leadership experiences
- Work experience
- Research experience
- Evidence of overcoming hardships, commitment to education, perseverance
- Knowledge of the profession of dentistry, including job experience or job shadowing

You do not have to be a science major in college to be admitted into dental school, but you do need to take certain biology, chemistry, and physics courses while in college. Work with a health professions advisor while in college, to develop a well-rounded course of study that best meets your needs. Pre-dental students also are encouraged to join pre-dental clubs, talk with practicing dentists, and if possible "job shadow."

In many states, after graduating from dental school and passing your [licensing examination \(http://www.ada.org/prof/ed/testing/dat/index.asp\)](#), you can begin practicing dentistry immediately. No internship or residency is required. In several states, a one year post-doctoral residency is required in lieu of a licensing examination. Dental school graduates can opt for additional training, either in general practice dentistry or in one of the nine recognized advanced dental education specialties:

- Endodontics
- Oral and Maxillofacial Surgery
- Oral and Maxillofacial Radiology
- Oral Pathology
- Orthodontics
- Pediatric Dentistry
- Periodontics
- Prosthodontics
- Public Health Dentistry

NOTE: Dental school tuition may be daunting, but you may be eligible for a generous [loan repayment program \(http://www.nidcr.nih.gov/Funding/Training/LRPSuccessStories.htm\)](#) offered by the National Institute of Dental and Craniofacial Research. (NICDR). For other ideas on funding your dental education, see the [Find Funding \(http://www.explorehealthcareers.com/en/FundingSearch.aspx\)](#) section of this Website.

More information about the dental school application process is available at the [American Dental Education Association \(http://www.adea.org/DAS/student-applicant/default.htm\)](#) website. You also can connect with other dental students via

- [Student Doctor Network \(http://www.studentdoctor.net/\)](#)
- [Student National Dental Association \(http://www.sndaonline.com/\)](#)
- [American Student Dental Association \(http://www.asdanet.org/\)](#)

## Preparation Timeline

The timeline listed below offers a general guide for undergraduates planning to attend dental school. It is not a rigid timetable. Variations may occur, based on the curriculum of the college or university you are attending, as well as your background and career interests. Use it as a guide to planning your undergraduate education

While many pre-dental students are science majors (e.g., biology, pre-dental, chemistry, etc.), a science major is not required for admission to dental school. Dental school pre-requisite courses vary by dental school, but generally include, at minimum, one year of study in each of the following areas: biology, general chemistry, organic chemistry and physics. Check the admission requirements of the schools that you are considering for additional required courses. Many admissions committees are favorably impressed by applicants with varied academic backgrounds including majors such as business, social sciences and the humanities.

## **Freshman Year**

Meet with a Pre-Dental Advisor. Some colleges and universities have pre-dental advisors, while others have pre-health professions advisors who work with students interested in all of the health professions. Seek out an advisor to identify the courses you will need to complete as well as the sequence of those courses, to become a viable applicant to dental school.

Enroll in either biology or chemistry courses, as recommended by advisor.

Join a pre-dental or pre-health professions club at your school. This is a great opportunity to meet other like-minded students, to network, to become involved in community service and to form study groups for your science courses. Meeting upper-class pre-dental students gives you the opportunity to learn about the dental school application process.

Learn more about careers in the dental profession. Speak with your own dentist and learn more about the advantages and challenges of the profession. Based on what you learn, why does a career in dentistry appeal to you?

Learn about personal finance. Does your university offer a course? Consider how your student budget, spending habits and use of credit cards impact your student loan debt. You may also want to look into scholarship and fellowship options. How can you balance a demanding academic schedule, work, and a comfortable, yet frugal, student lifestyle?

## **Freshman Year - Summer**

Participate in a summer academic enrichment program like the Summer Medical and Dental Education Program <http://www.smdep.org/>. This program is a free (full tuition, housing, and meals) six-week summer medical and dental school preparatory program that offers eligible students intensive and personalized medical and dental school preparation.

Work or volunteer in a health care environment. Ideally, work in a dental office or clinic. Your goal is to gain exposure to the health care environment in general and to learn more about the work of dental professionals. Talk to practicing dentists, learn about the delivery of dental care, and find out about the issues impacting the profession.

Learn more about dental education by reviewing the American Dental Education Association (ADEA) Official Guide to Dental Schools and Opportunities for Minority Students in United States Dental Schools. Both publications are available at pre-dental advisor offices and at college libraries, or may be purchased online through the ADEA, [www.adea.org](http://www.adea.org).

Check the websites for dental schools and related organizations to learn more about admissions requirements, the dental school environment, and the profession of dentistry.

## **Sophomore Year**

Start thinking about selecting a major. Remember, you do not have to be a science major to attend dental school, but you do need to complete specific science courses.

Work with your advisor to identify special opportunities for the upcoming summer. If you qualify and were unable to attend the previous summer, consider applying to an SMDEP program ([smdep.org](http://smdep.org)). Many universities and dental schools offer summer workshops to enhance study skills, to expose undergraduates to the profession, to prepare for the Dental Admissions Test (DAT), and to expose students to various fields of dental research. Check application deadlines.

Become actively involved in your pre-dental club. Sign up for committee work, help organize events, participate in activities.

Work with your advisor to identify special opportunities for the upcoming summer. Many universities and dental schools offer summer workshops to enhance study skills, to expose undergraduates to the profession, to prepare for the Dental Admissions Test (DAT), and to expose students to various fields of dental research. Check application deadlines.

## **Sophomore Year - Summer**

Participate in a summer program, enroll in summer school, or work/volunteer in the dental profession. Get a job! Keep that student loan debt as low as possible during your undergraduate years.

Start putting together a financial plan for applying to dental school. Take into consideration fees for the DAT, the Associated American Dental Schools Application Service (AADSAS) application, processing fees to the schools to which you apply, plus the cost of participating in on-site interviews.

## **Junior Year**

Complete biology and chemistry courses in preparation for taking the DAT in late spring of junior year.

Review the dental school application process and create a timeline for the submission of your application materials. Most dental schools participate in AADSAS, a centralized application service offered through ADEA. Look over the application and begin formulating your application information.

Meet with your advisor to find out how your school handles letters of evaluation. (Some schools have a pre-dental committee that writes a joint evaluation on your behalf; other schools simply assemble letters that you have requested from faculty.) Identify individuals who are willing to write letters of evaluation on your behalf; communicate submission deadlines to them. Be able to document your dental office observation experiences.

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Start making decisions about the type of dental school you want to attend: location, size of school, composition of the student body, curriculum, emphasis of the program. View web sites, talk with classmates and upper-class students who are now enrolled in dental school.

Participate in visitations from dental school admissions officers, visit dental schools, talk to dental students and admissions/minority affairs officers.

Continue to actively participate in pre-dental organization activities.

Identify a strategy to prepare for the DAT. Obtain a sample DAT test from the American Dental Association (no charge). Consider purchasing a DAT review book and/or a CD that offers sample tests. Some students opt to enroll in DAT review courses, offered at dental schools, colleges and universities, and by private companies. Some of these courses are offered free of charge, while others are quite costly. If you decide to purchase a book, CD or participate in a commercial DAT preparation workshop, make sure the content matches the actual content of the DAT.

Register for the DAT with the American Dental Association. After submitting your application, you will receive instructions on contacting a Prometric Testing Center to schedule your test date. The DAT is a computerized examination and can be taken at a date and time of your choosing. Your registration is valid for twelve months.

The ideal time to take the DAT is at the end of the spring semester, junior year, or immediately after you have completed your organic chemistry courses. If your test scores are not what you would like, you must wait 90 days to re-take the test. The DAT can only be taken up to three times, so plan to score well the first time you take the test.

## **Junior Year - Summer**

Submit your AADSAS application. Applications become available May 15, and AADSAS starts processing on June 1. An early application significantly enhances your chances of being admitted to dental school. Don't procrastinate and let that application deadline sneak up on you!

If possible, work, volunteer, or participate in a summer pre-dental program at a dental school.

Submit your AADSAS application. Note: fee reductions are offered to individuals who can demonstrate extreme financial need.

If you're re-taking the DAT, have a study strategy in place. Remember, you must allow 90 days between test dates.

## Senior Year

Complete advanced science courses. Although most schools only require a year of biology, most dental students will tell you that additional courses, particularly in the biological sciences, more well prepare you for the fast-paced dental school curriculum.

Finish up all course requirements for your degree.

Prepare to go on interviews. Participate in mock interviews offered by your pre-dental organization or Career Center.

Obtain a good interviewing outfit. Professional business attire is the norm.

Sometime after December 1, you will (hopefully) receive offers of admission. Depending on the date of acceptance, you will have specific response time. Most -- but not all -- schools require a tuition deposit at the time you accept the offer of admission.

Initiate the financial aid application process to the dental school you choose to attend. Don't procrastinate! Many financial aid awards are based on the date of application. Work with your dental school's financial aid office to stay on top of the application process.

Prepare for graduation!

## Senior Year - Summer

Prepare for your enrollment in dental school. This could mean participating in a pre-freshman experience, working and earning a few more dollars before starting school, or traveling and relaxing. Have fun!

## Professional Associations

American Dental Education Association (<http://www.adea.org/>)

American Dental Association (<http://ada.org/>)

American Student Dental Association (<http://www.asdanet.org/>)

American Association for Dental Research (<http://iadr.org/>)

Hispanic Dental Association (<http://www.hdassoc.org/>)

National Dental Association (<http://www.ndaonline.org/>)

Society of American Indian Dentists (<http://www.aaip.org/about/said.htm>)

Student National Dental Association (<http://www.sndaonline.org/>)

## Funding Opportunities

Search for funding opportunities in this field (<http://www.explorehealthcareers.org>)

## Enrichment Programs

Search for enrichment programs in this field (<http://www.explorehealthcareers.org>)

## Source

[www.adea.org](http://www.adea.org)

## Learn more about this field:

Dentistry (<http://www.explorehealthcareers.com/en/Field.3.aspx>)

**Average Salary:** \$204,500

**Years in school:** 8 - 8 \*

**Job outlook:** Excellent

\* after high school graduation

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