# **Optometrists**

(O\*NET 29-1041.00)

# **Significant Points**

- Admission to optometry school is competitive.
- To be licensed, optometrists must earn a Doctor of Optometry degree from an accredited optometry school and pass the appropriate exams administered by the National Board of Examiners in Optometry.
- Employment is expected to grow as fast as average in response to the vision care needs of a growing and aging population.

#### Nature of the Work

Optometrists, also known as *doctors of optometry*, or *ODs*, are the main providers of vision care. They examine people's eyes to diagnose vision problems, such as nearsightedness and farsightedness, and they test patients' depth and color perception and ability to focus and coordinate the eyes. Optometrists may prescribe eyeglasses or contact lenses, or they may prescribe or provide other treatments, such as vision therapy or low-vision rehabilitation.

Optometrists also test for glaucoma and other eye diseases and diagnose conditions caused by systemic diseases such as diabetes and high blood pressure, referring patients to other health practitioners as needed. They administer drugs to patients to aid in the diagnosis of vision problems and to treat eye diseases. Optometrists often provide preoperative and postoperative care to cataract patients, as well as to patients who have had laser vision correction or other eye surgery.

Most optometrists are in general practice. Some specialize in work with the elderly, children, or partially sighted persons who need specialized visual devices. Others develop and implement ways to protect workers' eyes from on-the-job strain or injury. Some specialize in contact lenses, sports vision, or vision therapy. A few teach optometry, perform research, or consult.

Most optometrists are private practitioners who also handle the business aspects of running an office, such as developing a patient base, hiring employees, keeping paper and electronic records, and ordering equipment and supplies. Optometrists who operate franchise optical stores also may have some of these duties.

Optometrists should not be confused with ophthalmologists or dispensing opticians. *Ophthalmologists* are physicians who perform eye surgery, as well as diagnose and treat eye diseases and injuries. Like optometrists, they also examine eyes and prescribe eyeglasses and contact lenses. *Dispensing opticians* fit and adjust eyeglasses and, in some States, may fit contact lenses according to prescriptions written by ophthalmologists or optometrists. (See the sections on physicians and surgeons; and opticians, dispensing, elsewhere in the *Handbook*.)

**Work environment.** Optometrists work in places—usually their own offices—that are clean, well lighted, and comfortable. Most full-time optometrists work about 40 hours a week. Many work weekends and evenings to suit the needs of patients. Emergency calls, once uncommon, have increased with the pas-

sage of therapeutic-drug laws expanding optometrists' ability to prescribe medications.

Optometrists who work in solo practice or with a partner tend to work longer hours because they must tend to administrative duties in addition to their medical ones. According to the American Optometric Association surveys, optometrists worked about 49 hours per week, on average, in 2004, and were available to see patients about 38 hours per week.

## Training, Other Qualifications, and Advancement

The Doctor of Optometry degree requires the completion of a 4-year program at an accredited optometry school, preceded by at least 3 years of preoptometric study at an accredited college or university. All States require optometrists to be licensed.

Education and training. Optometrists need a Doctor of Optometry degree, which requires the completion of a 4-year program at an accredited optometry school. In 2006, there were 16 colleges of optometry in the U.S. and 1 in Puerto Rico that offered programs accredited by the Accreditation Council on Optometric Education of the American Optometric Association. Requirements for admission to optometry schools include college courses in English, mathematics, physics, chemistry, and biology. Because a strong background in science is important, many applicants to optometry school major in a science, such as biology or chemistry as undergraduates. Others major in another subject and take many science courses offering laboratory experience.

Admission to optometry school is competitive. Applicants must take the Optometry Admissions Test, which measures academic ability and scientific comprehension. As a result, most applicants take the test after their sophomore or junior year in college, allowing them an opportunity to take the test again and raise their score. A few applicants are accepted to optometry school after 3 years of college and complete their bachelor's degree while attending optometry school. However, most students accepted by a school or college of optometry have completed an undergraduate degree. Each institution has its own undergraduate prerequisites, so applicants should contact the school or college of their choice for specific requirements.

Optometry programs include classroom and laboratory study of health and visual sciences and clinical training in the diagnosis and treatment of eye disorders. Courses in pharmacology, optics, vision science, biochemistry, and systemic diseases are included.



Optometrists use specialized equipment to test vision and detect diseases of the eye.

One-year postgraduate clinical residency programs are available for optometrists who wish to obtain advanced clinical competence. Specialty areas for residency programs include family practice optometry, pediatric optometry, geriatric optometry, vision therapy and rehabilitation, low-vision rehabilitation, cornea and contact lenses, refractive and ocular surgery, primary eye care optometry, and ocular disease.

Licensure. All States and the District of Columbia require that optometrists be licensed. Applicants for a license must have a Doctor of Optometry degree from an accredited optometry school and must pass both a written National Board examination and a National, regional, or State clinical examination. The written and clinical examinations of the National Board of Examiners in Optometry usually are taken during the student's academic career. Many States also require applicants to pass an examination on relevant State laws. Licenses must be renewed every 1 to 3 years and, in all States, continuing education credits are needed for renewal.

*Other qualifications.* Business ability, self-discipline, and the ability to deal tactfully with patients are important for success. The work of optometrists also requires attention to detail and manual dexterity.

**Advancement.** Optometrists wishing to teach or conduct research may study for a master's degree or Ph.D. in visual science, physiological optics, neurophysiology, public health, health administration, health information and communication, or health education.

## **Employment**

Optometrists held about 33,000 jobs in 2006. Salaried jobs for optometrists were primarily in offices of optometrists; offices of physicians, including ophthalmologists; and health and personal care stores, including optical goods stores. A few salaried jobs for optometrists were in hospitals, the Federal Government, or outpatient care centers including health maintenance organizations. Nearly 25 percent of optometrists are self-employed. According to a 2005 survey by the American Optometric Association most self-employed optometrists worked in private practice or in partnership with other health care professionals. A small number worked for optical chains or franchises or as independent contractors.

#### **Job Outlook**

Employment of optometrists is expected to grow as fast as average for all occupations through 2016, in response to the vision care needs of a growing and aging population. Greater recognition of the importance of vision care, along with growth in employee vision care plans, will also spur job growth.

*Employment change.* Employment of optometrists is projected to grow 11 percent between 2006 and 2016. A growing population that recognizes the importance of good eye care will

increase demand for optometrists. Also, an increasing number of health insurance plans that include vision care, should generate more job growth.

As the population ages, there will likely be more visits to optometrists and ophthalmologists because of the onset of vision problems that occur at older ages, such as cataracts and glaucoma. In addition, increased incidences of diabetes and hypertension in the general population as well as in the elderly will generate greater demand for optometric services as these diseases often affect eyesight.

Employment of optometrists would grow more rapidly if not for productivity gains expected to allow each optometrist to see more patients. These expected gains stem from greater use of optometric assistants and other support personnel, who can reduce the amount of time optometrists need with each patient.

The increasing popularity of laser surgery to correct some vision problems may reduce some of the demand for optometrists as patients often do not require eyeglasses afterward. But optometrists still will be needed to provide preoperative and post-operative care for laser surgery patients.

**Job prospects.** Job opportunities for optometrists should be very good over the next decade. Demand is expected to be much higher, and because there are only 16 schools of optometry, the number of students who can get a degree in optometry is limited. In addition to growth, the need to replace optometrists who retire or leave the occupation for other reasons will create more employment opportunities.

## **Earnings**

Median annual earnings of salaried optometrists were \$91,040 in May 2006. The middle 50 percent earned between \$66,530 and \$118,490. Median annual earnings of salaried optometrists in offices of optometrists were \$86,760. Salaried optometrists tend to earn more initially than do optometrists who set up their own practices. In the long run, however, those in private practice usually earn more.

According to the American Optometric Association, median net annual income for all optometrists, including the self-employed, was \$105,000 in 2006. The middle 50 percent earned between \$84,000 and \$150,000.

Self-employed optometrists, including those working in partnerships, must provide their own benefits. Optometrists employed by others typically enjoy paid vacation, sick leave, and pension contributions.

## **Related Occupations**

Other workers who apply scientific knowledge to prevent, diagnose, and treat disorders and injuries are chiropractors, dentists, physicians and surgeons, psychologists, podiatrists, and veterinarians.

#### **Projections data from the National Employment Matrix**

Occupational Title	SOC Code	Employment, 2006	Projected employment,	Change, 2006-2016	
			2016	Number	Percent
Optometrists	29-1041	33,000	36,000	3,700	11

## **Sources of Additional Information**

For information on optometry as a career and a list of accredited optometric institutions of education, contact:

➤ Association of Schools and Colleges of Optometry, 6110 Executive Blvd., Suite 510, Rockville, MD 20852.

Internet: http://www.opted.org

Additional career information is available from:

➤ American Optometric Association, Educational Services, 243 North Lindbergh Blvd., St.Louis, MO 63141.

Internet: http://www.aoa.org

The board of optometry in each State can supply information on licensing requirements.

For information on specific admission requirements and sources of financial aid, contact the admissions officers of individual optometry schools.