

# Audiologists

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## Significant Points

- Employment of audiologists is expected to grow rapidly because the expanding population in older age groups is prone to medical conditions that result in hearing problems.
- More than half worked in healthcare facilities, and most others were employed by educational services.
- A master's degree in audiology is currently the standard credential; however, a clinical doctoral degree is expected to become the new standard.

## Nature of the Work

Audiologists work with people who have hearing, balance, and related ear problems. They examine individuals of all ages and identify those with the symptoms of hearing loss and other auditory, balance, and related neural problems. They then assess the nature and extent of the problems and help the individuals manage them. Using audiometers, computers, and other testing devices, they measure the loudness at which a person begins to hear sounds, the ability to distinguish between sounds, and the impact of hearing loss or balance problems on an individual's daily life. Audiologists interpret these results and may coordinate them with medical, educational, and psychological information to make a diagnosis and determine a course of treatment.

Hearing disorders can result from a variety of causes including trauma at birth, viral infections, genetic disorders, exposure to loud noise, certain medications, or aging. Treatment may include examining and cleaning the ear canal, fitting and dispensing hearing aids, fitting and tuning cochlear implants, and audiologic rehabilitation. Audiologic rehabilitation emphasizes counseling on adjusting to hearing loss, training on the use of hearing instruments, and teaching communication strategies for use in a variety of listening environments. For example, they may provide instruction in lip reading. Audiologists also may recommend, fit, and dispense personal or large area amplification systems and alerting devices.

Audiologists provide direct clinical services to individuals with hearing or balance disorders. In audiology (hearing) clinics, they may independently develop and carry out treatment programs. Audiologists, in a variety of settings, work with other health professionals as a team in planning and implementing services for children and adults, from birth to old age. Audiologists keep records on the initial evaluation, progress, and discharge of clients. These records help pinpoint problems, track client progress, and justify the cost of treatment when applying for reimbursement.

Some audiologists specialize in work with the elderly, children, or hearing-impaired individuals who need special therapy programs. Others develop and implement ways to protect workers' ear from on-the-job injuries. They measure noise levels in workplaces and conduct hearing protection programs in factories, as well as in schools and communities.

Audiologists who work in private practice also manage the business aspects of running an office, such as developing a patient base, hiring employees, keeping records, and ordering equipment and supplies.

Audiologists may conduct research on types of—and treatment for—hearing, balance, and related disorders. Others design and develop equipment or techniques for diagnosing and treating these disorders.

## Working Conditions

Audiologists usually work at a desk or table in clean, comfortable surroundings. The job is not physically demanding but does require attention to detail and intense concentration. The emotional needs of clients and their families may be demanding. Most full-time audiologists work about 40 hours per week, which may include weekends and evenings to meet the needs of patients. Some work part time. Those who work on a contract basis may spend a substantial amount of time traveling between facilities.

## Employment

Audiologists held about 11,000 jobs in 2002. More than half of all jobs were in offices of physicians; hospitals; offices of other health practitioners, including audiologists; and outpatient care centers. About 1 in 5 jobs was in educational services, including elementary and secondary schools. Other jobs for audiologists were in health and personal care stores, including hearing aid stores; scientific research and development services; and State and local governments.

A small number of audiologists were self-employed in private practice. They provided hearing healthcare services in their own offices or worked under contract for schools, healthcare facilities, or other establishments.

## Training, Other Qualifications, and Advancement

Of the 48 States that require a license to practice audiology, almost all require that individuals have a master's degree in audiology or the equivalent; however, a clinical doctoral degree is expected to become the new standard. A passing score on a national examination on audiology offered through the Praxis Series of the Educational Testing Service is needed, as well. Other requirements are 300 to 375 hours of supervised clinical experience and 9 months of postgraduate professional clinical experience. An additional examination may be required in order to dispense hearing aids. Forty States have continuing education requirements for licensure renewal. Medicaid, medi-



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care, and private health insurers generally require practitioners to be licensed to qualify for reimbursement.

About 107 colleges and universities offer graduate programs in audiology in the United States. About 39 of these offer a Doctor of Audiology (Au.D.) degree. Requirements for admission to programs in audiology include courses in English, mathematics, physics, chemistry, biology, psychology, and communication sciences. Graduate course work in audiology includes anatomy; physiology; physics; genetics; normal and abnormal communication development; auditory, balance, and neural systems assessment and treatment; diagnosis and treatment; pharmacology; and ethics.

Audiologists can acquire the Certificate of Clinical Competence in Audiology (CCC-A) offered by the American Speech-Language-Hearing Association. To earn a CCC, a person must have a graduate degree and 375 hours of supervised clinical experience, complete a 36-week postgraduate clinical fellowship, and pass the Praxis Series examination in audiology, administered by the Educational Testing Service. According to the American Speech-Language-Hearing Association, as of 2007, audiologists will need to have a bachelor's degree and complete 75 hours of credit toward a doctoral degree in order to seek certification. As of 2012, audiologists will have to earn a doctoral degree in order to be certified.

Audiologists may also be certified through the American Board of Audiology. Applicants must earn a Master's or Doctoral degree in audiology from a regionally accredited college or university, achieve a passing score on a national examination in audiology, and demonstrate that they have completed a minimum of 2,000 hours of mentored professional practice in a two-year period with a qualified audiologist. Certificants must apply for renewal every three years. They must demonstrate that they have earned 45 hours of approved continuing education within the three-year period. Beginning in the year 2007, all applicants must earn a doctoral degree in audiology.

Audiologists should be able to effectively communicate diagnostic test results, diagnoses, and proposed treatments in a manner easily understood by their clients. They must be able to approach problems objectively and provide support to clients and their families. Because a client's progress may be slow, patience, compassion, and good listening skills are necessary.

### **Job Outlook**

Employment of audiologists is expected to grow faster than the average for all occupations through the year 2012. Because hearing loss is strongly associated with aging, rapid growth in the population age 55 and over will cause the number of persons with hearing impairment to increase markedly. In addition, members of the baby boom generation are now entering middle age, when the possibility of neurological disorders and associated hearing impairments increases. Medical advances are also improving the survival rate of premature infants and trauma and stroke victims, who then need assessment and possible treatment. Many States now require that all newborns be screened for hearing loss and receive appropriate early intervention services.

Employment in educational services will increase along with growth in elementary and secondary school enrollments, including enrollment of special education students. Federal law guarantees special education and related services to all eligible children with disabilities. Greater awareness of the importance

of early identification and diagnosis of hearing disorders will also increase employment.

The number of audiologists in private practice will rise due to the increasing demand for direct services to individuals as well as increasing use of contract services by hospitals, schools, and nursing care facilities. Only a few job openings for audiologists will arise from the need to replace those who leave the occupation, because the occupation is small.

### **Earnings**

Median annual earnings of audiologists were \$48,400 in 2002. The middle 50 percent earned between \$39,510 and \$58,430. The lowest 10 percent earned less than \$32,500, and the highest 10 percent earned more than \$73,130.

According to a 2003 survey by the American Speech-Language-Hearing Association, the median annual salary for full-time certified audiologists who worked on a calendar-year basis, generally 11 or 12 months annually, was \$52,000. For those who worked on an academic-year basis, usually 9 or 10 months annually, the median annual salary was \$47,500. The median starting salary for certified audiologists with one to three years experience was \$43,000 on a calendar-year basis. Certified audiologists who worked 25 or fewer hours per week had a median hourly salary of \$28.00.

### **Related Occupations**

Audiologists specialize in the prevention, diagnosis, and treatment of hearing problems. Workers in related occupations include occupational therapists, optometrists, physical therapists, psychologists, recreational therapists, rehabilitation counselors, and speech-language pathologists.

### **Sources of Additional Information**

State licensing boards can provide information on licensure requirements. State departments of education can supply information on certification requirements for those who wish to work in public schools.

General information on careers in audiology is available from:

- ▶ American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, MD 20852. Internet: <http://www.asha.org>
- ▶ Academy of Audiology, 11730 Plaza America Dr., Suite 300, Reston, VA 20190. Internet: <http://www.audiology.org>