

Pharmacy Technicians

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Significant Points

- Job opportunities are expected to be good, especially for those with certification or previous work experience.
- Many technicians work evenings, weekends, and some holidays.
- Two-thirds of all jobs are in retail pharmacies.

Nature of the Work

Pharmacy technicians help licensed pharmacists provide medication and other healthcare products to patients. Technicians usually perform routine tasks to help prepare prescribed medication for patients, such as counting tablets and labeling bottles. Technicians refer any questions regarding prescriptions, drug information, or health matters to a *pharmacist*. (See the statement on pharmacists elsewhere in the *Handbook*.)

Pharmacy aides work closely with pharmacy technicians. They are often clerks or cashiers who primarily answer telephones, handle money, stock shelves, and perform other clerical duties. (See the statement on pharmacy aides elsewhere in the *Handbook*.) Pharmacy technicians usually perform more complex tasks than do pharmacy aides, although, in some States, their duties and job titles overlap.

Pharmacy technicians who work in retail pharmacies have varying responsibilities, depending on State rules and regulations. Technicians receive written prescriptions or requests for prescription refills from patients. They also may receive prescriptions sent electronically from the doctor's office. They must verify that the information on the prescription is complete and accurate. To prepare the prescription, technicians must retrieve, count, pour, weigh, measure, and sometimes mix the medication. Then, they prepare the prescription labels, select the type of prescription container, and affix the prescription and auxiliary labels to the container. Once the prescription is filled, technicians price and file the prescription, which must be checked by a pharmacist before it is given to a patient. Technicians may establish and maintain patient profiles, prepare insurance claim forms, and stock and take inventory of prescription and over-the-counter medications.



Pharmacy technicians help to ensure that patients get necessary medication.

In hospitals, technicians have added responsibilities. They read patient charts and prepare and deliver the medicine to patients. The pharmacist must check the order before it is delivered to the patient. The technician then copies the information about the prescribed medication onto the patient's profile. Technicians also may assemble a 24-hour supply of medicine for every patient. They package and label each dose separately. The package is then placed in the medicine cabinet of each patient until the supervising pharmacist checks it for accuracy. It is then given to the patient.

Working Conditions

Pharmacy technicians work in clean, organized, well-lighted, and well-ventilated areas. Most of their workday is spent on their feet. They may be required to lift heavy boxes or to use stepladders to retrieve supplies from high shelves.

Technicians work the same hours as pharmacists. This may include evenings, nights, weekends, and holidays. Because some hospital and retail pharmacies are open 24 hours a day, technicians may work varying shifts. As their seniority increases, technicians often have increased control over the hours they work. There are many opportunities for part-time work in both retail and hospital settings.

Employment

Pharmacy technicians held about 190,000 jobs in 2000. Two-thirds of all jobs were in retail pharmacies, either independently owned or part of a drug store chain, grocery store, department store, or mass retailer. More than 2 out of 10 jobs were in hospitals and a small number were in mail-order and Internet pharmacies, clinics, pharmaceutical wholesalers, and the Federal Government.

Training, Other Qualifications, and Advancement

Although most pharmacy technicians receive informal on-the-job training, employers favor those who have completed formal training and certification. However, there are currently few State and no Federal requirements for formal training or certification of pharmacy technicians. Employers who can neither afford, nor have the time to give, on-the-job training often seek formally educated pharmacy technicians. Formal education programs and certification emphasize the technicians' interest in and dedication to the work to potential employers. In addition to the military, some hospitals, proprietary schools, vocational or technical colleges, and community colleges offer formal education programs.

Formal pharmacy-technician education programs require classroom and laboratory work in a variety of areas, including medical and pharmaceutical terminology, pharmaceutical calculations, pharmacy recordkeeping, pharmaceutical techniques, and pharmacy law and ethics. Technicians also are required to learn medication names, actions, uses, and doses. Many training programs include internships, in which students gain hands-on experience in actual pharmacies. Students receive a diploma, certificate, or an associate degree, depending on the program.

Prospective pharmacy technicians with experience working as an aide in a community pharmacy or volunteering in a hospital may have an advantage. Employers also prefer applicants with strong customer service and communication skills and with experience managing inventories, counting, measuring, and using computers. Technicians entering the field need strong mathematics, spelling, and reading skills. A background in chemistry, English, and health education also may be beneficial. Some technicians are hired without formal training, but under the condition that they obtain certification within a specified period to retain employment.

The Pharmacy Technician Certification Board administers the National Pharmacy Technician Certification Examination. This exam is voluntary and displays the competency of the individual to

act as a pharmacy technician. Eligible candidates must have a high school diploma or GED, and those who pass the exam earn the title of Certified Pharmacy Technician (CPhT). The exam is offered several times per year at various locations nationally. Employers, often pharmacists, know that individuals who pass the exam have a standardized body of knowledge and skills.

Certified technicians must be recertified every 2 years. Technicians must complete 20 contact hours of pharmacy-related topics within the 2-year certification period to become eligible for recertification. Contact hours are awarded for on-the-job training, attending lectures, and college coursework. At least 1 contact hour must be in pharmacy law. Contact hours can be earned from several different sources, including pharmacy associations, pharmacy colleges, and pharmacy technician training programs. Up to 10 contact hours can be earned when the technician is employed under the direct supervision and instruction of a pharmacist.

Successful pharmacy technicians are alert, observant, organized, dedicated, and responsible. They should be willing and able to take directions. They must enjoy precise work—details are sometimes a matter of life and death. Although a pharmacist must check and approve all their work, they should be able to work on their own without constant instruction from the pharmacist. Candidates interested in becoming pharmacy technicians cannot have prior records of drug or substance abuse.

Strong interpersonal and communication skills are needed because there is a lot of interaction with patients, coworkers, and healthcare professionals. Teamwork is very important because technicians are often required to work with pharmacists, aides, and other technicians.

Job Outlook

Good job opportunities are expected for full-time and part-time work, especially for technicians with formal training or previous experience. Job openings for pharmacy technicians will result from the expansion of retail pharmacies and other employment settings, and from the need to replace workers who transfer to other occupations or leave the labor force.

Employment of pharmacy technicians is expected to grow much faster than the average for all occupations through 2010 due to the increased pharmaceutical needs of a larger and older population, and to the greater use of medication. The increased number of middle-aged and elderly people—who, on average, use more prescription drugs than do younger people—will spur demand for technicians in all practice settings. With advances in science, more medications are becoming available to treat more conditions.

Cost-conscious insurers, pharmacies, and health systems will continue to emphasize the role of technicians. As a result, pharmacy technicians will assume responsibility for more routine tasks previously performed by pharmacists. Pharmacy technicians also will need to learn and master new pharmacy technology as it surfaces. For example, robotic machines are used to dispense medicine into containers; technicians must oversee the machines, stock the bins, and label the containers. Thus, while automation is increasingly incorporated into the job, it will not necessarily reduce the need for technicians.

Almost all States have legislated the maximum number of technicians who can safely work under a pharmacist at a time. In some States, increased demand for technicians has encouraged an expanded ratio of technicians to pharmacists. Changes in these laws could directly affect employment.

Earnings

Median hourly earnings of pharmacy technicians in 2000 were \$9.93. The middle 50 percent earned between \$8.12 and \$12.26; the lowest

10 percent earned less than \$7.00, and the highest 10 percent earned more than \$14.56. Median hourly earnings in the industries employing the largest numbers of pharmacy technicians in 2000 were as follows:

Hospitals	\$11.44
Grocery stores	10.57
Drugs, proprietaries, and sundries	10.09
Drug stores and proprietary stores	9.00
Department stores	8.75

Certified technicians may earn more. Shift differentials for working evenings or weekends also can increase earnings. Some technicians belong to unions representing hospital or grocery store workers.

Related occupations

This occupation is most closely related to pharmacists and pharmacy aides. Workers in other medical support occupations include dental assistants, licensed practical and licensed vocational nurses, medical transcriptionists, medical records and health information technicians, occupational therapist assistants and aides, physical therapist assistants and aides, secretaries and administrative assistants, and surgical technologists.

Sources of Additional Information

For information on certification and a National Pharmacy Technician Certification Examination Candidate Handbook, contact:

► Pharmacy Technician Certification Board, 2215 Constitution Ave. NW., Washington DC 20037. Internet: <http://www.ptcb.org>

Radiologic Technologists and Technicians

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Significant Points

- Faster-than-average growth will arise from an increase in the number of middle-aged and older persons who are the primary users of diagnostic procedures
- Although hospitals will remain the primary employer of radiologic technologists and technicians, a greater number of new jobs will be found in offices and clinics of physicians, including diagnostic imaging centers.
- Radiologic technologists and technicians with cross training in nuclear medicine technology or other modalities will have the best prospects.

Nature of the Work

Radiologic technologists and technicians take x rays and administer nonradioactive materials into patients' blood streams for diagnostic purposes. Some specialize in diagnostic imaging technologies such as computed tomography (CT) and magnetic resonance imaging (MRI).

In addition to radiologic technologists and technicians, others who assist in diagnostic imaging procedures include cardiovascular technologists and technicians, diagnostic medical sonographers, and nuclear medicine technologists. (Each is discussed elsewhere in the *Handbook*.)

Radiologic technologists and technicians, also referred to as *radiographers*, produce x-ray films (radiographs) of parts of the human body for use in diagnosing medical problems. They prepare