A pharmacist is an important medical worker who aids physicians, dentists and veterinarians by dispensing appropriate medications to patients. Some pharmacists may also specialize in pharmaceutical research, or in marketing and sales of particular medications for a company. Many in this field work in drug, department or retail store settings, and many more work in hospital settings. They are specialists in their knowledge of medications, and must always be furthering their education in this area since new medications are developed all the time.

What Does A Pharmacist Do?

Pharmacists distribute drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. They advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications. Pharmacists must understand the use, clinical effects, and composition of drugs, including their chemical, biological, and physical properties. Most pharmacists work in a community setting, such as a retail drugstore, or in a health care facility, such as a hospital, nursing home, mental health institution, or neighborhood health clinic.

Pharmacists in community and retail pharmacies counsel patients and answer questions about prescription drugs, including questions regarding possible side effects or interactions amongst various drugs. They also may give advice about the patient’s diet, exercise, or stress management, or about durable medical equipment and home health care supplies. Some community pharmacists provide specialized services to help patients manage conditions such as diabetes, asthma, smoking cessation, or high blood pressure.

Pharmacists in healthcare facilities dispense medications and advise the medical staff on the selection and effects of drugs. They may make sterile solutions to be administered intravenously. They also plan and monitor drug programs or regimens. Pharmacists counsel hospitalized patients on the use of drugs and on their use at home when the patients are discharged. Pharmacists also may evaluate drug-use patterns and outcomes for patients in hospitals or managed-care organizations.

Pharmacists who work in home health care monitor drug therapy and prepare infusions—solutions that are injected into patients—and other medications for use in the home.

Most pharmacists keep confidential computerized records of patients’ drug therapies to prevent harmful drug interactions. Pharmacists are responsible for the accuracy of every prescription that is filled, but they often rely upon pharmacy technicians and pharmacy aides to assist them in the dispensing process. The pharmacist may delegate prescription-filling and administrative tasks and supervise their completion. Pharmacists also frequently oversee pharmacy students serving as interns in preparation for graduation and licensure.

Increasingly, pharmacists are pursuing nontraditional pharmacy work. Some are involved in research for pharmaceutical manufacturers, developing new drugs and therapies and testing their effects on people. Others work in marketing or sales, providing expertise to clients on a drug’s use, effectiveness, and possible side effects. Some pharmacists work for health insurance companies, developing pharmacy benefit packages and carrying out cost-benefit analyses on certain drugs. Other pharmacists work for the government, public health care services, the armed services, and pharmacy associations. Finally, some pharmacists are employed full time or part time as college faculty, teaching classes and performing research in a wide range of areas.
Why Should I Talk To My Pharmacist?

Pharmacists cannot diagnose medical conditions, but your pharmacist can answer many questions about medicines, recommend nonprescription drugs, and discuss side effects of specific medications. And some pharmacists can also provide blood sugar and blood pressure monitoring and offer advice on home monitoring tests. Most pharmacists who graduated in the 1980s received 5-year bachelor's degrees. Recently, it has become required for pharmacists to receive a doctor of pharmacy degree. This 6-year program, with an optional 1-2 years for residency, requires pharmacists to have 5 years of classes and one year of rotation in which they train to go on hospital rounds with doctors and be there when decisions are made to begin drug use. These skills are particularly useful for pharmacists who operate within hospital settings. Pharmacists are required to stay up-to-date on the changing world of medicine. Every 2 years, U.S. law requires your pharmacist to complete 30 credits of continuing education classes on drug therapy.

What Questions Should I Ask The Pharmacist?

A typical question is about allergies. Make sure that your pharmacist knows exactly what allergies you have and what medications you are already taking. This will help the pharmacist protect against possible drug interactions that could potentially be harmful. Once you have received your medication, always look at it carefully before you leave the pharmacy. Read the instructions to be sure you understand how to take it. Even if the medication is a refill, check to make sure the drug is the same size and shape that you are used to receiving. If anything doesn't look right, ask. Consider the following additional questions for your pharmacist:

- Does this medication require special storage conditions (for example, room temperature or refrigeration)?
- How many times a day should it be given? Should it be given with food? Without food?
- Should my child avoid certain foods (such as dairy products) when taking this medication?
- Are there special side effects that I should look for? What should I do if I notice any of these side effects?
- Should I take special precautions, such as avoiding exposure to sunlight, when taking this medication?
- What should I do if I skip a dose?
- Is it OK to cut pills in half or crush them to mix into foods?
Which Tips does a Pharmacist Usually Offer?

Pharmacists usually offer the following advice:

**Do not keep medicine in the medicine cabinet.** The medicine cabinet in a steamy, moist bathroom is not the best place to keep any medication. The room's moisture can make medications less potent. It's best to keep medicines in a hall closet or on a high shelf in the kitchen.

**What if you take the wrong dosage?** Call the pharmacist or doctor right away, and follow his or her instructions.

**Never repackage medications.** Keep them in their original childproof containers so that you'll have the expiration date and instructions on hand.

**If medications need to be refrigerated, make sure you keep them cool while traveling.** Freezer packs in coolers work fine. If you can, take the entire medicine bottle. That way, you won't have any reason to forget the prescription dosage and if something happens to the medication, you can get a refill. And never mix two different drugs in the same pillbox – it is easy to get the two confused.

**Remember to keep prescription and nonprescription medications out of the reach of children.**

**Toss medications when they have expired** (usually 1 year for pills or sooner for liquids - check the prescription label for the expiration date) or the doctor has told you that you should stop taking them.

**Though most liquid medications are now flavored, some may not be very palatable to a young child.** Some medicines can be mixed with chocolate or maple syrup to encourage children to take the entire dosage. Check with your pharmacist to see what would work best with which drug. However, pharmacists discourage putting liquid medication into a bottle for babies; if they don't finish the bottle, they won't get all the medication.

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**Know Your Medical History**

It's important to keep a comprehensive record of your health information nearby. In many cases, this information can help a medical professional make quicker diagnoses and decisions during an emergency, when each second counts.

If you have diabetes, some pharmacies can demonstrate glucose monitors and help to guide you on which model works best for you. Some pharmacies are now offering the ability to download the readings from your diabetes monitor and print them out for you. This service can help you and your doctor better control your diabetes.

When you're checking out the facility make sure that there is convenient parking and notice if there is handicap parking close if that applies to you or any family members that may use the pharmacy.

Communication and being able to talk freely with your potential pharmacist is of paramount importance. The pharmacist should listen to your needs and concerns and answer any questions you may have. After you have consulted a few pharmacists you should have a good idea about which one you felt most comfortable with and who best answered your questions.
Education And Licensing Requirements

People seeking to become pharmacists must complete a pre-pharmacy undergraduate program. This program consists of a minimum of 60-70 semester of undergraduate coursework in basic and advanced sciences (chemistry, biology, zoology, physics, and anatomy); however, many students go on to complete a four-year program leading to a Bachelor of Science degree in biology, chemistry, or a similar field. In addition, a high PCAT (Pharmacy College Admission Test) score is required at most colleges and schools of pharmacy.

After admission, a student will complete a four-year pharmacy program and will be awarded the Doctor of Pharmacy (PharmD) degree upon graduation.

A pharmacy graduate must complete internship requirements and pass the North American Pharmacist Licensure Examination, or NAPLEX, and an additional state exam before they can acquire a license to practice pharmacy in that state. The National Association of Boards of Pharmacy (NABP) created the NAPLEX.

A pharmacist can become certified in recognized specialty practice areas by passing an examination administered by the Board of Pharmaceutical Specialties. There are five specialties in which a pharmacist can become Board-certified. The Pharmacotherapy specialty also has two subspecialties, as follows:

- Nuclear Pharmacy
- Nutrition Support Pharmacy
- Oncology Pharmacy
- Pharmacotherapy
- Cardiology
- Infectious Disease
- Psychiatric Pharmacy

Areas of graduate study include pharmaceutics and pharmaceutical chemistry (physical and chemical properties of drugs and dosage forms), pharmacology (effects of drugs on the body), toxicology and pharmacy administration. Prospective pharmacists should have scientific aptitude, good communication skills, and a desire to help others. They also must be conscientious and pay close attention to detail, because the decisions they make affect human lives.
The Future of Pharmacy

In the coming decades, pharmacists are expected to become more integral within the health care system. Rather than simply dispensing medications, pharmacists expect to be paid for their cognitive skills. Many universities are altering their programs to increase emphasis in fields such as pharmaco therapeutics, clinical pharmacy, nuclear pharmacy, disease state management, etc.