



OVERVIEW

BIG IDEA

The purpose and risks posed by a medication must be evaluated to determine the access level for patients.

OBJECTIVE

8.3: Differentiate between types of medications obtained at a pharmacy.

AGENDA

1. Risks of Medication
2. Types of Medication
3. Reading
4. Drug Category Comparisons

HOMEWORK

Find a drug that can be used to treat or cure a disease you are interested and determine which type of medication it is, along with other background information.

LESSON 8.3

Types of Medications

SUMMARY:

Students will engage in an analysis of the classifications of medicines in this lesson. They will start by considering risks posed by medication use, then read about the three classes of medications. They will be charged with finding key information about each class, through the reading and any additional background research.

STANDARDS:

NHES 3.12.3: Determine the accessibility of products and services that enhance health.



MODULE 8: PHARMACY LESSON 8.3

Types of Medications

Obj. 8.3: Differentiate between types of medications obtained at a pharmacy.

DO NOW **Risks of Medication**

Today we have over 6,000 different drugs available to treat our illnesses and medical issues. Obviously, medications offer us great benefit and save lives everyday. But medications also come with risks. In the space below, list dangers or risks involved in medication.

Risks:

DISCUSS **Types of Medicines**

You are probably familiar with many of the medication types below. With a partner, work together to organize the medications below into groups based on common characteristics. You may use the box to brainstorm and/or group the medicines.

- Tylenol
- Asthma inhaler
- Blood pressure medicine
- Sudafed
- Penicillin
- Antacids
- Morning After Pill (Plan B)
- Eye drops
- Methadone
- Claritin
- Laxative
- Birth control pill
- Vitamins
- Morphine

DO NOW: Possible answers: 1) overdose (accidental or intentional); 2) someone else gets ahold of it—children; mentally disabled; teens stealing, etc. 3) negative side effects; 4) could be used as a crutch (i.e. someone on high blood pressure medication doesn't worry about sodium intake b/c she/he is on the med), etc.

DISCUSS: This will probably be CHALLENGING for students and they will not be likely to decide on the categories of OTC, prescription, pharmacist (unless they look ahead!), but the categories they do come up with can start some great dialogue about the types of medicines humanity has at its disposal



Types of Medicines

The medicines you just tried to sort out can be classified into three levels based on their level of access to patients. Review the definitions below and examine how each of the medicines would be categorized.

Prescription-only medicines (POMs)

- To obtain one needs a prescription issued by a general practitioner (GP) or other qualified healthcare professional.
- The prescription can be sent or brought to a pharmacy to be filled.
- *Examples:* Blood pressure medicine, morphine, etc.

Pharmacy medicines (P)

- Available from a pharmacy without a prescription, but under the supervision of a pharmacist.
- One would need to ask staff at the pharmacy for this type of medicine because it is kept 'behind the counter' and is not available on the pharmacy shelves.
- The pharmacist will check the medicine is appropriate for you and your health problem. They will ask you questions to ensure there is no reason why you should not use the medicine.
- *Examples:* Sudafed (a decongestant), some sleep aids, etc.

Over-the-Counter (OTC) medicines

- Can be bought from pharmacies, supermarkets and other retail outlets without the supervision of a pharmacist.
- Are also sometimes referred to as 'over-the-counter' (OTC) medicines.
- Include medicines that treat minor, self-limiting complaints, which people may feel are not serious enough to see their GP or pharmacist about.
- *Examples:* ibuprofen, dandruff shampoo, Tylenol

Over-the-Counter Medicines (OTC)	Pharmacy Only Medicines (P)	Prescription Only Medicines (POM)
Tylenol	Emergency contraceptive pill (Ella)*	Methadone
Laxatives	Claritin	Asthma inhalers
Vitamins	Eye Drops	Blood pressure medicine
Antacids	Sudafed	Birth control
Eye Drops		Morphine
		Penicillin

**Plan B One-Step emergency contraceptive pill is available OTC*



In what instances, if any, do you think a pharmacist could refuse to sell pharmacy-only (P) medication to a customer who is requesting it?

NEW INFO: Ask students, "What are the drawbacks of the **prescription** method of obtaining a drug?" (i.e., reliance upon insurance, time required to process and fill, etc.)

NEW INFO: Ask students, "What are the drawbacks to the **over-the-counter** drug system?" (i.e., patient needs to figure out appropriate dosing; can sometimes be confusing knowing which medicine will work best for symptoms; insurance does not cover, etc.)



More Information

Over-the-Counter Medicines

Also called: Non-prescription drugs, OTC medicines

Over-the-counter (OTC) medicines are drugs you can buy without a prescription at the counter of any retail/drug store. Some OTC medicines relieve aches, pains and itches. Some prevent or cure diseases, like tooth decay and athlete's foot. Others help manage recurring problems, like migraines. Usually these medicines are not extremely pricy and because of their easy access they can be easily abused.

In the United States, the Food and Drug Administration decides whether a medicine is safe enough to sell over-the-counter. Taking OTC medicines still has risks. Some interact with other medicines, supplements, foods or drinks. Others cause problems for people with certain medical conditions. If you're pregnant, talk to your health care provider before taking any medicines.

When it comes to medicines, more does not necessarily mean better. You should never take OTC medicines longer or in higher doses than the label recommends. Although they are not extremely strong by themselves they can be in high dosages. If your symptoms don't go away, it's a clear signal that it's time to see your healthcare provider.

Source: <http://www.nlm.nih.gov/medlineplus/overthecountermedicines.html>

Prescription Drugs

Prescription drugs are:

- Prescribed by a doctor
- Bought at a pharmacy
- Prescribed for and intended to be used by one person

The FDA regulates these drugs through the New Drug Application (NDA) process. This is the formal step a drug sponsor takes to ask that the FDA consider approving a new drug for marketing in the United States. An NDA includes all animal and human data and analyses of the drug, as well as information about how the drug behaves in the body and how it is manufactured. Because there are many steps for approval, as well as the large costs spent to develop, these drugs often cost much more than other types of drugs. As a result of the high costs, and at times the high need of these drugs for patient health, insurance companies often times will cover either a portion or all of the cost for insured patients. Lastly, prescription drugs have been monitored more closely as the rate of prescription drug abuse has increased over the years. Because these drugs are strong they have the possibility to do damage if not taken properly.

Source: <http://www.fda.gov/Drugs/ResourcesForYou/Consumers/QuestionsAnswers/ucm100101.html>

Pharmacist Only Medicines

Pharmacist only medicines (also known as Restricted medicines) are a relatively small group of medicines that can be purchased from a pharmacist without a doctor's prescription. They are not available for self-selection from the pharmacy shelves, and a pharmacist must make the sale. When selling these medicines, pharmacists must fulfill some special requirements designed to make sure you are properly informed about the safety and correct use of your medicine. They are required to do this because of both the strength of the medicine and possible abuse that individuals may use these medicines for. You should use pharmacist only medicines only for the purpose recommended by the pharmacist or included in the printed information. Pharmacist only medicines should not be shared with other people.

Where do I find Pharmacist Only Medicines? Pharmacist only medicines are usually stored behind a counter or in the dispensary, to prevent consumers from buying the medicine for the wrong purpose or without the proper advice.



Who can sell Pharmacist Only Medicines? Only a qualified pharmacist is allowed to sell a pharmacist only medicine. If you ask for a particular pharmacist only medicine, or request treatment for a condition that requires the use of a pharmacist only medicine, the sales assistant will ask the pharmacist to speak to you. The pharmacist's expertise is required to ensure you get the right medicine for the right condition and that you know how to use it safely.

What should I expect when I make a purchase? Your pharmacist will ask you a number of questions before selling you a pharmacist only medicine. Don't be embarrassed or annoyed by the questions. The pharmacist needs to confirm what the problem is and suggest an appropriate treatment, in a similar way to a doctor prescribing a medicine. You should expect the pharmacist to take you to a part of the pharmacy that is private before asking these questions. Many pharmacies now have consultation rooms for this purpose. You will be asked your name and address so the pharmacist can keep a record of the sale.

What questions should I be asked? You will be asked about your symptoms, other medicines you are using, any medical conditions, possible pregnancies, and allergies. If your pharmacist thinks it is necessary, you will be advised to see your doctor. You may also be given advice on how to help the problem without taking a medicine. The pharmacist may choose not to sell you a pharmacist only medicine, even if you have specifically requested it. The decision rests with the pharmacist.

Source: <http://www.medsafe.govt.nz/consumers/PharmOnly.asp>



Drug Category Comparisons

Use the information from the reading and any additional information from class notes or your own research to fill in the table below.

Question	Over-the-Counter Medicines (OTC)	Pharmacy Only Medicines (P)	Prescription Only Medicines (POM)
1. How does one obtain these medications?			
2. Who can use these medications?			
3. How much to these medications cost?			
4. Where are these medications are stored/kept?			
5. Which type of medication is the riskiest? Least risky? <small>1=VERY RISKY</small>			
6. Name at least 2 examples of each type.			

THINK: A key is located in the resource files for lesson 8.3.



Check Your Understanding

1. The type of medicine you can buy without a prescription and without the assistance of a pharmacist is:
 - a) Over-the-Counter
 - b) Pharmacist Only
 - c) Prescription
 - d) A and B

2. What type of medicine requires the approval of a pharmacist but not a prescription?
 - a) Over-the-Counter
 - b) Pharmacist Only
 - c) Prescription
 - d) A and B

3. What types of medicines are Tylenol, Aspirin, and Ibuprofen?
 - a) Prescription
 - b) Pharmacist Only
 - c) Over-the-counter
 - d) A and B



Medication Background Research

Choose a disease you are interested in and look up one medication that can be used to treat it. Research the following information:

- a. Type of medication (Explain how you know)

- b. Illnesses or conditions it is used for

- c. Does it cure or treat? How does it work in the body?

- d. Method of administration

- e. Possible side effects?

- f. Drug interactions or restrictions

ASSESS:

1. OTC
2. Pharmacy
3. OTC

HOMEWORK: The purpose of this assignment is to have students classify another example drug as OTC, Pharm, or Prescrip. But they will also go deeper by looking up other background information about the drug, thus expanding their knowledge base about the intricacies of medication as it is used to cure and treat disease.