

# The Problem

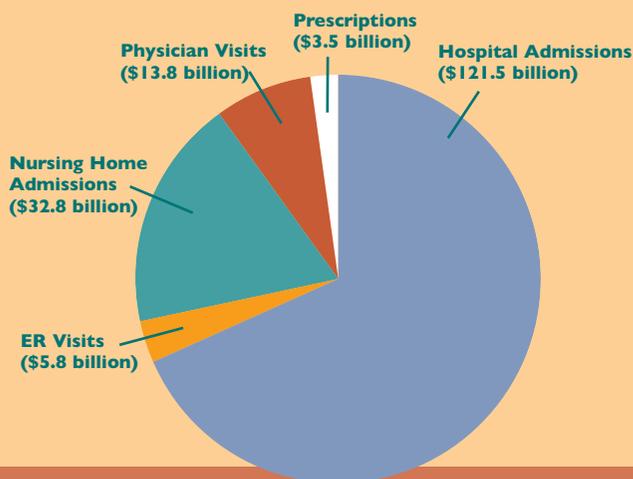
Most Americans can look into the medicine cabinet and find multiple prescription and over-the-counter (OTC) medications. While medications can help keep you healthy, they also can cause serious problems when used incorrectly. A large percentage of adults in the United States (U.S.) are taking too many medications, not taking their medications properly, or both.

In any given week, four out of every five U.S. adults will use prescription medicines, OTC drugs, or dietary supplements. And nearly one-third of all adults will take five or more different medications each day.

The more medications you take, the more chance there is for those drugs to interact negatively with each other. There also is a greater risk of forgetting to take medications, taking them at the wrong time, or taking too much or too little.

Taking medications the wrong way is an extremely costly and dangerous problem. It increases the chances of severe medical complications or even death. A recent study estimated that in one year, incorrect use of medications resulted in more than 9 million hospital admissions and more than 18 million emergency room visits.

## Annual U.S. Costs Due to Incorrect Use of Medications (\$177.4 billion)\*



\* Ernst FR, Grizzle AJ. Drug-related morbidity and mortality: updating the cost of illness model. *J Am Pharm Assoc.* 2001;41:192-199

# Pharmacist's Role

It is clear that something needs to be done about the increasing problem of medications being taken incorrectly. Finding solutions will require patients to work in cooperation with all of their healthcare providers.

The pharmacy profession is committed to bringing greater attention to this serious problem, and is working with other members of the healthcare team to come up with solutions.

Your local pharmacists can serve as a valuable resource. See the box below for suggestions on how your pharmacist can help you take your medications safely.

## TALK TO YOUR PHARMACIST

The more information you have, the better able you will be to use your medications correctly, prevent errors, and protect your health. Check with your pharmacist about:

- When and how you should take your medication
- What to do if you miss a dose
- Any potential side effects
- How your medications might interact with other drugs you are taking
- How to safely dispose of unused medications



# America's Medicine Cabinet: Use Medicines Safely

## THE GROWING PROBLEM OF UNINTENTIONAL MEDICATION MISUSE



Produced by the Institute for Safe Medication Practices (ISMP) with support from the Community Pharmacy Foundation.



# The Facts

## Ways Medications Are Not Used Correctly

**IMPROPER USE** happens when consumers do not understand or follow directions for taking medications, and often results in serious consequences. For example, many Americans use non-steroidal anti-inflammatory drugs (NSAIDs), including aspirin and ibuprofen for pain, and do not realize that improper use of these medications can lead to kidney failure or gastrointestinal bleeding.

**OVERUSE** happens when too much or the wrong strength of a medication is taken. For example, most people do not benefit from taking antibiotics for colds and other respiratory problems, but more than 23 million prescriptions a year are given to patients for these conditions. Overuse of antibiotics can lead to drug-resistant strains of bacteria and potentially life-threatening infections.

**UNDERUSE** happens when a prescribed medication is not taken when it should be. Skipping doses of a medication or taking the wrong medication can ultimately lead to hospitalization or other serious consequences. This is a growing problem, especially among children. The majority of medication errors reported in schools are due to children missing doses.

## Reasons for the Problem

There are many factors that contribute to consumers taking their medications the wrong way, including:

**INCREASING NUMBER OF MEDICATIONS.** The number of prescription and OTC medications is growing rapidly, making medication use more complicated and mistakes in use more likely. For example, shelves are becoming filled with different brands of the same drug, and many have different instructions for use. If you do not look closely at product labels, you could accidentally take too much or too little of a medication, or take the wrong medication.

**MORE POWERFUL MEDICATIONS AVAILABLE OVER THE COUNTER.** More than 700 medications that formerly required a prescription are now available over the counter in pharmacies and supermarkets. While this has given you more opportunities to decide on your own medication therapy, these medications are not without risk. Even drugs like acetaminophen for headaches and pains can cause problems if not taken correctly.

Unintentional medication misuse  
can lead to patient harm  
and additional healthcare costs.

**GREATER USE OF “NATURAL” PRODUCTS.** More than 40% of Americans have tried alternative medicines or dietary supplements, but many do not tell their healthcare providers they are taking them unless they are asked. Just because a medication is called “natural” or available without a prescription does not mean it is safe. Many individuals taking supplements and herbal medicines experience side effects or adverse reactions, especially when they are taking other medications at the same time.

**RISE OF ADVERTISING DIRECTED AT CONSUMERS.** Pharmaceutical companies and retail stores are increasingly relying on direct appeals to the general public, including television, print, and Internet ads, to sell their products. An advertised drug may not be right for your particular condition or illness, leading you to take medications you don't really need.



## ELDERLY, CHILDREN AFFECTED

Adults aged 65 and older are more prone to taking medications incorrectly. They are more likely to use multiple medications, and may have declining vision, hearing, and memory that makes handling medications and interpreting instructions more difficult.

Children also are vulnerable to mistakes in taking medications. Parents and caregivers administering medications can easily be confused by different instructions for use based on the child's age, weight, and other medical conditions. One study found parents gave their children an incorrect dose of OTC fever medicine close to 50% of the time.