

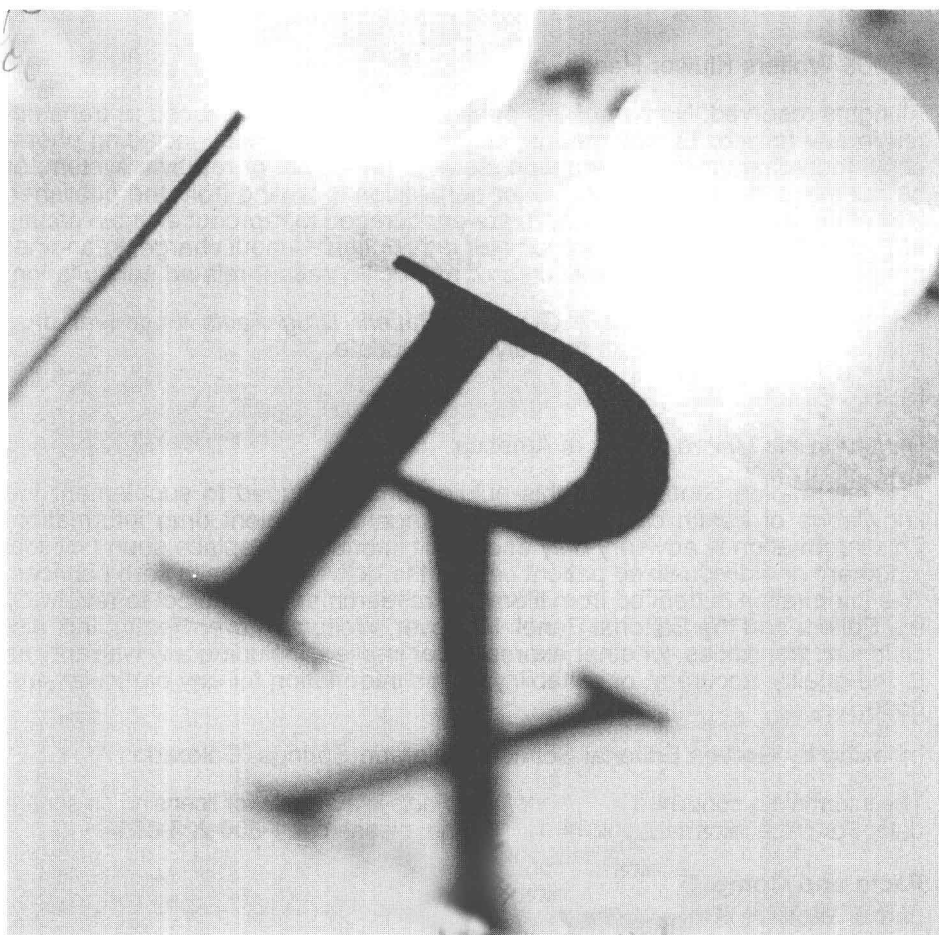
# Patient Drug Facts 2006

Helping Patients Become Partners in Their Care



Facts & Comparisons

a Wolters Kluwer business



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# Patient Drug Facts, Fourth Edition

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## Preface

The contemporary health care landscape is changing rapidly. The focus on quality of care and improved health outcomes is growing in intensity. Payers of health care goods and services are experiencing sticker shock, and they expect more value for each dollar spent on health care. Thus, managed care and managed cost are increasingly pervasive elements on one's professional life.

Drugs are the "best buy" in American health care. The total annual expenditure for drug therapy represents 7% to 10% of the total health care expenditure; however, 85% to 90% of patients with acute or chronic diseases get well or better because of drug therapy. The return-on-investment with regard to drug therapy is profound and irrefutable.

Drugs are truly two-edged swords. They have the potential to not only do great good but also great harm if used inappropriately. Providers of health care are being increasingly challenged to do the following:

- Promote safe, appropriate, effective, and economical drug use.
- Assist in producing optimal therapeutic outcomes by fostering precision in drug therapy management.
- Foster the evolution and delivery of highly cognitive, interactive, problem-based, outcome-oriented pharmaceutical care that maximizes the benefit of drug therapy while operating to prevent, identify, and resolve drug-related problems and therapeutic misadventures.

Optimal pharmacotherapy is central to the quest for disease management quality. System failures in drug therapy management are abundant, and there is much room for improvement.

Selected evidence of system failures in drug therapy management is included below:

- Approximately 30% to 50% of the 1.8 to 2 billion prescriptions dispensed annually are not taken properly by the patient.
- Approximately 7% to 8% of diagnosed patients never get their prescription(s) filled – the ultimate noncompliance error.
- The annual *direct* cost of therapeutic noncompliance and drug-induced morbidity and mortality is estimated to be \$50 billion to \$80 billion. The *indirect* cost (eg, lost productivity, lost wages) is estimated to be an additional \$50 billion per year.<sup>1,2</sup>
- The economic consequences of managing the complications of inappropriate or mismanaged drug therapy exceeds the annual cost of all diabetes care (\$45.2 billion in 1994) and approaches the cost of managing all cardiovascular disease (\$117 billion to \$154 billion in 1994).

- As many as 28% of hospital admissions (more than 8 million per year) at a cost in excess of \$47 billion annually appear to be due to drug-related morbidity and mortality.<sup>2</sup>
- It is estimated that 115 million physician visits per year (17.3% of all physician office visits), at an annual cost of approximately \$7.5 billion, are due to drug-induced problems and therapeutic misadventures.<sup>2,3</sup>
- Approximately 140,000 Americans die annually from failure to consume drugs properly.
- Approximately 23% of nursing home admissions result from the inability of patients to manage medication use in the home.
- The compliance rate to prescribed antihypertensive therapy in patients diagnosed for at least 3 years is approximately 32%.
- The compliance rate to immunosuppressant therapy in outpatient organ transplant recipients is only 82%.
- Approximately 24% to 66% of antibiotic use in hospitals is either inappropriate or unnecessary as judged by expert panels of infectious disease physicians.
- Noncompliance of prescribed drug therapy produces a loss of more than 20,000,000 workdays per year.

These facts dramatically reveal, and place into perspective, the need for application of information included in *Patient Drug Facts*. This publication is designed to serve as a clear, concise, and current reference source and information tool for health care providers in optimizing pharmacotherapy, improving health outcomes, and minimizing drug-induced adverse events. The format and language of *Patient Drug Facts* is designed to present drug information in a user-friendly format.

*Patient Drug Facts* contains vital information on the most frequently prescribed and consumed prescription and nonprescription drugs. The hundreds of monographs provide product information on over 6,500 generic and brand name drugs. Proper use of this reference has contributed – and will continue to contribute – to improved drug therapy management and health outcomes.

Timothy R. Covington, PharmD, MS  
Associate Editor

<sup>1</sup> Noncompliance with Medications: An Economic Tragedy With Important Implications for Health Care Reform. Baltimore, MD: The Task Force for Compliance, 1993.

<sup>2</sup> Johnson JA, Bootman JL. Drug-Related Morbidity and Mortality – A Cost-of-Illness Model. *Arch Intern Med* 1995;155(Oct 9):1949-1956.

<sup>3</sup> Schappert SM. National Ambulatory Medical Care Survey: 1991 Summary. Hyattsville, MD: National Center for Health Statistics, 1993 (No. 230).

# Introduction

Patient drug information provides a dilemma. The health care community wishes to inform – not scare – and wants to spend quality time with patients. Whether the learning process takes place in a classroom, counseling session, or at the prescription counter, *Patient Drug Facts* can be instrumental.

Communication courses and teaching courses tell us we must set the stage for learning and remembering with our audience. The same is true for patient counseling. First, we must tell the patient what it is that we plan to discuss (state our objectives). Second, we must tell them what they need to know (provide instructions) and allow time for their questions and feedback. Lastly, we must repeat what we told them (restate the objectives). Ideally, the next time we see the patient we can ask them questions and reinforce the learning process.

## Our Objectives for *Patient Drug Facts* are:

1. To provide information for health care providers to tell patients what they need to know about their medications.
2. To provide a standardized, concise format for patient instruction and learning in a classroom, patient counseling session, or at the prescription counter.

The National Council on Patient Information and Education (NCPIE) has set guidelines to help patients “get the answers.” These guidelines provide us with the groundwork for our first objective. *Patient Drug Facts* provides the answers for the NCPIE questions and much more.

### NCPIE Questions

1. What is the name of the drug and what is it supposed to do?  
Is this the brand or generic name? Is a generic version available?  
**Type of Drug, How the Drug Works, Uses**
2. How and when do I take it – and for how long?  
**Guidelines for Use** (and prescription on product label)
3. What foods, drinks, other medicines, dietary supplements, or activities should I avoid while taking this drug?  
**Precautions, Drug Interactions, Guidelines for Use**
4. Are there any side effects, and what do I do if they occur?  
**Precautions, Side Effects, Guidelines for Use**
5. When should I expect this drug to begin to work, and how will I know if it's working?  
**Guidelines for Use**
6. Will this drug work safely with other drugs I am taking?  
**Precautions, Drug Interactions, Guidelines for Use**
7. Is there any written information available about this drug?  
**PDF monographs** can be copied and highlighted for an individual patient in the course of specific patient-related consultation.



In addition to answering the NCPIE questions, *Patient Drug Facts* contains an appendix for quick reference on necessary household medicines, oral dosage forms that should not be crushed or chewed, an international system of units, normal laboratory values, FDA pregnancy categories, the poison center hotline, and drug names that look alike and sound alike.

Our second objective is to provide a standard, concise format for patient education and learning in a classroom or patient counseling session or at the prescription counter. The monographs are grouped together by therapeutic class. The product listings are located at the beginning of the monographs, which allows the reader to immediately make an association between the trade name and the generic name of the drug. Common dosage forms and dosage strengths available to consumers are listed. Generic availability is also indicated. After the product list, the standardized presentation of information includes the following sections: Type of Drug, How the Drug Works, Uses, Drug Interactions, Side Effects, and Guidelines for Use.

The format is important in providing a guide for patient counseling. The *Patient Drug Facts* format outlines information for a brief patient encounter in a clear, concise manner. It provides the name of the drug, how it works, what it is used for, when it cannot be used, and guidelines for proper use. The information provided in the monographs reminds the patient counselor of important and unique characteristics of a particular drug or drug group (eg, the drug causes the urine to turn yellow or the undissolved capsule may appear in the stool).

We feel we have met our goal to develop a tool for health care providers to use during patient drug information counseling. *Patient Drug Facts* is adaptable for use in the classroom or at the prescription counter. As always, we are interested in your comments and suggestions for future updates and additions.

# Guidelines For Use

*Patient Drug Facts* is a comprehensive drug information compendium organized by therapeutic class. A general table of contents, detailed chapter table of contents, a comprehensive alphabetical index, and cross references enable the reader to quickly locate needed information. The following pages explain in detail the organization and contents of *Patient Drug Facts*. All readers are urged to review this information to ensure efficient and effective use of *Patient Drug Facts*.

## Editorial Overview

The core of information for monographs in *Patient Drug Facts* is based on the Facts and Comparisons database. We have included information on prescription and over-the-counter medications that are predominantly used in an outpatient environment (ie, drugs used specifically in a hospital environment are not included).

General prescribing information is presented in a standardized format and the technical language has been translated to assist the health care provider in effective communication with, and counseling of, patients.

Because the material has been written with the patient in mind, a monograph can be photocopied, highlighted, and used as a tool with an individual patient in the course of a specific patient-related consultation.

## Editorial Panel

The Editorial Panel for *Patient Drug Facts* is an interdisciplinary group of established and respected clinicians and educators. The panel includes recognized experts in the fields of pharmacology, pharmacy practice, and drug information. These experts provide direction for *Patient Drug Facts*, as well as write and review monograph material.

The *Drug Facts and Comparisons* Editorial Advisory Panel consists of physicians, pharmacologists, and pharmacists. This panel reviews monographs and provides editorial direction for the entire Facts and Comparisons database.

## Organization

*Patient Drug Facts* is divided into chapters. The first page of each chapter has a detailed Table of Contents of the information presented in that chapter. Each chapter is divided into therapeutic groups and subgroups according to the use of the drug. Products similar in content or use are listed together.

## Index

The alphabetical index lists drugs by their generic name, brand name, and therapeutic group names. Additionally, many synonyms and therapeutic uses for agents are included.

## Appendix

The appendix provides supplementary listing for quick reference on the following topics:

*The Home Medicine Cabinet* – A suggested listing of the basic medicines and equipment patients should keep in their medicine chests.

*Oral Dosage Forms That Should Not be Crushed or Chewed* – A listing of drugs that must be swallowed whole to be effective.

*International System of Units – SI* is a modernized version of the metric system designed to revise the present confused measurement system and to improve test-result communications.

*Normal Laboratory Values* – Guidelines for normal laboratory values.

*FDA Pregnancy Categories*– Five categories that indicate the potential of a systemically absorbed drug for causing birth defects.

*Poison Center Hotline* – National toll-free poison center hotline information.

*Drug Names That Look Alike and Sound Alike* – A listing of drug names that can easily be confused because of similar spellings or pronunciations.

## Product Listings

Tables of individual products are found at the beginning of each monograph. Most of the products listed are protected by patent and their names are trademarked and registered. Listing of specific products is only an indication of availability on the market and does not constitute an endorsement or recommendation. Prescription products that contain identical amounts of active ingredients are listed together for comparison. **Listing of products together does not imply that they are therapeutically equivalent or legally interchangeable.** Drug product interchange is regulated by state law. Caution is particularly advised when comparing sustained-release, timed-release, or repeat-action dosage forms.

The format and components of the product listings are discussed below and illustrated on the opposite page.

- ① The therapeutic class and/or the generic titles appear at the beginning of the monograph. All drugs in a therapeutic class are listed in alphabetical order.
- ② Generic product availability is indicated in the last column.
- ③ Generic names of the products are indicated by bold-face print.

- ④ Brand name examples of the products are indicated in italics. The listing of brand name products has been included to provide examples of common names of products to help the patient identify the drug he/she is taking. While we have made a sincere attempt to include as many brand names as possible, we do not purport this listing as comprehensive. Brand name products that are identical in formulation are listed together in alphabetical order. Products most similar in formulation are listed next to each other. This format makes it easy to compare identical, similar, or related products.
- ⑤ Products are grouped by dosage form. Available strengths of the product are included.
- ⑥ Distribution status of products is indicated as *Rx* (prescription or legend), controlled substance status (*c-II*, *c-III*, etc.) or *otc* (nonprescription or over-the-counter).

*Cough* is a normal protective reflex. It helps clear mucus, irritants and other foreign matter from the throat, trachea, and lungs. Caution is advised in attempting to suppress a productive cough (mucus is coughed up). The productive cough is essential to the removal of foreign debris. If mucus is not removed from the lungs, it may support growth of bacteria and make breathing more difficult. Moderate cough suppression may be used to reduce discomfort and allow sleep, but do not attempt to completely suppress a productive cough.

The dry, nonproductive cough is a good candidate for therapeutic cough suppression. If such coughs are persistent, bothersome, or sleep disrupting, they may respond well to treatment with antitussives. <sup>②</sup>

Generic Name — <sup>③</sup> Brand Name Examples		Supplied As	Generic Available
Rx	<b>Benzonatate</b> <i>Tessalon Perles</i>	<b>Capsules:</b> 100 mg	No
otc	<b>Dextromethorphan HBr</b> <i>Mediquell</i> <i>Hold, Screts Cough Control</i> <i>Benylin DM<sup>1</sup>, Congespirin for Children, Cremacoat 1<sup>1</sup>, DM <sup>⑤</sup></i> <i>Cough<sup>1</sup>, Pedia Care 1, Pertussin<sup>1</sup>, St. Joseph Cough</i> <i>Delsym<sup>1</sup></i>	<b>Chewy squares:</b> 15 mg <b>Lozenges:</b> 5mg <b>Syrup:</b> 5 mg/tsp, 7.5 mg/tsp, 10 mg/tsp, 15 mg/tsp <b>Liquid, sustained action:</b> Equivalent to 30 mg dextromethorphan HBr/tsp	No No No No
⑥	<b>Diphenhydramine HCl</b> otc <i>Beldin<sup>1</sup>, Benylin Cough<sup>1</sup>, Bydramine Cough<sup>1</sup>, Diphen Cough, Gen-D-phen<sup>1</sup>, Hydramine Cough<sup>1</sup>, Nordryl Cough<sup>1</sup></i>	<b>Syrup:</b> 12.5 mg/tsp, 13.3 mg/tsp	Yes
	Rx <i>Hydramyn<sup>1</sup>, Tusstat<sup>1</sup>, Valdrene<sup>1</sup></i>	<b>Syrup:</b> 12.5 mg/tsp, 13.3 mg/tsp	Yes
<b>Nonnarcotic Antitussive Combinations</b>			
otc	<i>Spec-T<sup>2</sup></i>	<b>Lozenges:</b> 10 mg dextromethorphan HBr and 10 mg benzocaine	No
otc	<i>Formula 44 Cough Control Disks</i>	<b>Lozenges:</b> 5 mg dextromethorphan HBr and 1.25 mg benzocaine	No
otc	<i>Vick's Cough Silencers<sup>2</sup></i>	<b>Lozenges:</b> 2.5 mg dextromethorphan HBr and 1 mg benzocaine	No

<sup>1</sup> Contains alcohol.

<sup>2</sup> Contains the dye tartrazine.

#### Type of Drug:

Cough medicine; cough suppressants.

# Drug Monographs

Patient counseling information is presented in the text of the drug monographs. General information on a group of closely related drugs may be presented in a group monograph (eg, Antibiotics — Cephalosporins). Information relating to a particular drug is presented in an individual monograph under the generic name of the drug (eg, Antianxiety — Meprobamate). All monographs are divided into sections identified with bold titles for ease in locating the desired information.

## Drug Class

A brief statement describing the class of the drug or drugs represented in the monographs can be found in the **Drug Class** section. When appropriate, slang terms often used by patients may be included (eg, diuretics, “water pills”).

## How the Drug Works

This section briefly describes, in simplified language, the mechanism of action of the drug(s) represented in the monograph. This section tells the patient how the drug works in the body. For detailed information on mechanisms of action, pharmacology, and pharmacokinetics, refer to *Drug Facts and Comparisons*.

## Uses

The Food and Drug Administration’s (FDA’s) approved indications for the drug or drugs represented in the monograph are listed.

Occasionally, a drug may be prescribed by the doctor for a use not officially recognized by the FDA. These unofficial uses are listed under *Unlabeled Uses*.

## Precautions

This section contains brief statements in simplified language derived from the Contraindications, Warnings, and Precautions sections of appropriate drug literature.

Two important statements found in this section list conditions in which the drug or drugs in the monograph should be used with caution or not at all.

*Do not use in the following situations:*

This list specifies those disease states and conditions in which the drug should NOT be used. If the patient has one of the conditions listed, contact his or her doctor.

Use with caution in the following situations:

This list specifies conditions in which the use of the drug may be hazardous to the patient. Consider contacting the patient's doctor if the patient has one of the conditions listed.

Examples of other items covered in the Precautions section include:

breast-feeding	photosensitivity
children	pregnancy
diabetic patients	sulfite sensitivity
elderly patients	superinfection
lab tests	tartrazine

## Drug Interactions

A list of potential drug-drug and drug-food interactions is provided. Drugs are listed by drug class or generic name. An example drug product is provided.

clarithromycin ( <i>Biaxin</i> ). . . . .	generic name (only brand name available)
phenytoin (eg, <i>Dilantin</i> ). . . . .	generic name (one example of the brand name products available)
tricyclic antidepressants (eg, amitriptyline). . . . .	drug class (one example of a generic drug in this drug class)

## Side Effects

Side effects that have been reported are listed by organ system (eg, Digestive Tract, Nervous System). Occasionally, side effects specific to a drug or drug class are listed.

## Guidelines for Use

This boxed section includes Patient Information available in drug literature. The statements included in this list should reflect standard "Caution Label" ("sticker") language. The guidelines section also highlights other significant information that is important to verbally communicate to the patient.

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