

PRESCRIPTION DRUGS

I. Prescription

- a physician's written or verbal order to dispense a drug to a patient
- a verbal order may be given to a pharmacist or nurse (in person or by telephone)

II. Elements of a Prescription

- physician's name, address, phone number, and DEA number (if a prescription is for a controlled substance)
- patient's name and address
- date of the prescription
- name of the drug (generic or brand)
- dosage form (caps, tabs, syrup, injectable (IV, IM, or SQ), patch, spray, inhaler, etc...)
- dose (strength of the drug usually expressed in mg, mcg, gm, mg/ml, etc...)
- amount (quantity of the drug, e.g., number of tablets, volume of solution, etc...)
- directions for use (also abbreviated as "sig")
- number of refills
- labeling instructions (whether the name of the drug should appear on the label)
- generic drug substitution (brand vs generic substitution; DNS or DAW)
- physician's signature (required for schedule II drugs - triplicate Rx forms)

III. Elements of a Prescription Label

- name, address, and phone number of the pharmacy
- prescription number
- physician's name
- date when the Rx was filled
- patient's name
- drug name (if generic, name of manufacturer)
- directions for use (dosage, frequency, specific instructions, etc...)
- expiration date (medication potency decreases after expiration date)
- number of refills allowed (if any)

IV. Sources of Drug Information

A. Pharmacy

(1) auxiliary labels: warnings or precautions on Rx container or package

examples:

- Tylenol with Codeine #3 → may cause drowsiness; alcohol may intensify the effects of the medication;
- Pyridium → may discolor urine (red-orange color)
- Motrin → take with food or after meals

(2) patient package inserts (example: birth control pills)

(3) patient counseling (required by law for new prescriptions; may be waived by patient)

(4) pharmacist → drug information source at any time (retail or hospital)

B. Physician's Office

(1) patient counseling (by MD or RN)

(2) patient package insert

C. References

(1) PDR (Physician's Desk Reference)

(2) Drug Package Insert

(3) USP Dispensing Information for the Patient (designed for the lay person)

(4) Facts and Comparisons (updated monthly)

(5) Drug Information 2000 (published annually with quarterly updates) → most complete source of drug information

D. Los Angeles Regional Drug and Poison Information Center: (800) 825-2722

V. Top 30 Drugs of All New and Refill Prescriptions in the United States

VI. Number and Percent Distribution of Drugs by Therapeutic Classification

A. antimicrobial drugs: constitute the largest therapeutic class (16.7 %)

B. cardiovascular drugs: 14.9 % (one-third of drugs are anti-hypertensive drugs)

C. pain-relief drugs: 10.7 % (one half of drugs are anti-arthritis drugs)

D. psychopharmacologic drugs: 5.2 % (includes: anti-anxiety drugs, sedative, hypnotics, antidepressants, tranquilizers, and antipsychotic drugs)

VII. Common Prescription Drug Classes

A. Analgesics

(1) NSAIDs (Nonsteroidal Anti-inflammatory Drugs) → decrease inflammation
→ decrease pain

- examples: aspirin (ASA), Motrin or Advil (ibuprofen), Naprosyn (naproxen)

(2) Acetaminophen (APAP): Tylenol

(1) equivalent to aspirin in relieving fever (antipyretic) and mild to moderate pain such as headaches

(2) lacks anti-inflammatory properties

(3) Narcotic Analgesics → inhibit pain impulses in the CNS → decrease pain

- examples: Darvon (propoxyphene), Darvocet N-100 (propoxyphene/APAP), Tylenol w/Codeine #3, Percodan (oxycodone/ASA), Percocet (oxycodone/APAP), Demerol (meperidine), and Vicodin (hydrocodone/APAP)

B. Anti-Arthritic Drugs

- anti-inflammatory drugs used to treat joint diseases: rheumatoid arthritis and osteoarthritis
- NSAIDs and corticosteroid drugs → decrease inflammation → decrease joint swelling → decrease pain

(1) NSAIDs: Motrin (ibuprofen), Naprosyn (naproxen), etc...

(2) Corticosteroids: prednisone

C. Antihistamines

(1) antihistamines block the action of histamine → prevent allergic reactions: itching, redness, and swelling

- examples: Benadryl (diphenhydramine), Chlor-Trimeton (chlorpheniramine), Claritin (loratidine)

(2) antihistamines are also used in cold/flu preparations: Actifed (decongestant-antihistamine combination)

(3) found in OTC hypnotic (sleep) medications: Nytol (diphenhydramine)

D. Antidepressants

- (1) Tricyclic Antidepressants (TCA): Elavil (amitriptyline), Tofranil (imipramine), etc...
- (2) MAO Inhibitors: Nardil (phenelzine)
- (3) Serotonin Reuptake Inhibitors (SSRI's): Prozac (fluoxetine), Zoloft (sertraline), and Paxil (paroxetine)

E. Anti-Diarrheals

examples: OTC: Imodium (loperamide) and Rx: Lomotil (diphenoxylate/atropine)
 → reduces contractions of the intestinal system → relieves diarrhea

F. Sedative-Hypnotic Drugs

(1) hypnotics → used to induce sleep

- examples: Dalmane (flurazepam), Halcion (triazolam), and Nembutal

(2) sedatives → used to reduce tension and relieve anxiety

- examples: Ativan (lorazepam), Valium (diazepam), and Xanax (alprazolam)

G. Stimulants → used to stimulate the central nervous system (CNS)

- examples: Ritalin (methylphenidate) and Dexedrine (dextroamphetamine)
 - adults: used for ADD (attention deficit disorders) and narcolepsy (sudden attacks of sleep)
 - children: used to treat hyperkinetic syndrome (ADHD)

H. Tranquilizers → used in the management of psychological disorders

(1) antipsychotic drugs → used in the treatment of psychosis

- examples: Haldol (haloperidol) and Thorazine (thioridazine)

(2) anxiolytic drugs → used in the treatment of anxiety

- examples: (Ativan) lorazepam, Xanax (alprazolam), and Valium (diazepam)

I. Anorexiant → used for weight loss

- examples: phentermine (Fastin), fenfluramine (Pondimin), dexfenfluramine (Redux), and Phen-Fen (phentermine-fenfluramine)
 - reduce appetite → reduce caloric intake → weight loss