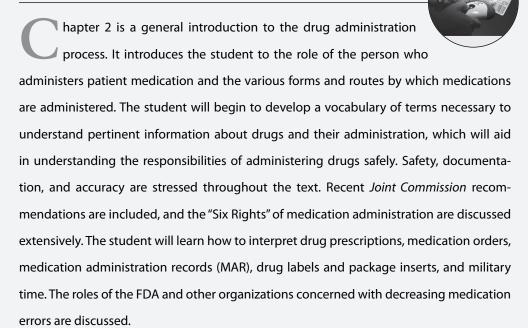
## Chapter



# Safe and Accurate Drug Administration

# **Chapter Overview**



## **Instructor's Notes**

- The PowerPoint slides are particularly useful in presenting the material in this chapter. Slides of drug prescriptions, medication orders, medication administration records, drug labels, and package inserts can be projected as the instructor explains their various components.
- Demonstrate actual examples of various forms of drugs (inhalers, tablets, capsules, patches, suppositories), if available.
- Students who have learned this material in other courses may review this chapter quickly.
- Discuss the abbreviations to be avoided in medication orders and documentation (the "Do Not Use List").

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- Emphasize the importance of the need to be vigilant regarding drugs that "Look Alike-Sound Alike."
- The Nurse Alert newsletter of the Institute of Safe Medication Practice is a good reference for medication safety issues; see Appendix B.
- Interpreting a drug order is very important for the rest of the course and should be stressed.
- If the Internet is accessible in the classroom, pharmaceutical company Web sites can be used to view actual package inserts (prescribing information) for drugs.

## **Key Terms**

Institute for Safe automated medication prescriber Medication Practice prescription dispensing cart (ADC) A.M./P.M. (ISMP) prn bar code intracardiac (IC) q.i.d. b.i.d. intradermal (ID) registration body surface area (BSA) intramuscular (IM) symbol (®) buccal intrathecal route capsule intravenous (IV) safe dose range computerized local/systemic side effect physician order lot number standing order entry (CPOE) medication controlled substance administration subcutaneous delayed-release record (MAR) (subcut) (DR) medication order sublingual (SL) dosage strength metered dose inhaler suspension dry powder inhaler (MDI) sustained release (SR) (DPI) meters squared (m<sup>2</sup>) syrup elixir military time tablet national drug code enteral t.i.d. enteric-coated (NDC) topical epidural nebulizer trade name oral (PO) trademark (TM) extended release (XL) Federal Drug package insert transdermal Administration parenteral unit dose (FDA) pharmacist **United States** Physician's Desk generic name Pharmacopoeia inhalation Reference (PDR) (USP)

## **Answers to Chapter 2 Additional Exercises**

- 1. montelukast
- 2. Zocor
- 3. 100 mL

- 4. 200 mg/5 mL
- 5. 80 mg/20 mg per mL

6. (a) Anusol supp

(b) 6 A.M.

7. (a) Omnicef & Glucophage

(c) 4

- (b) 4
- (d) Bonivar, Humulin N, Humulin R
- (c) 25 mg/h, transdermal

(e) December 16

(d) by mouth (e) 2

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- 8. (a) milnacipran HCl, tablets
  - (b) fibromyalgia
  - (c) 12.5 milligrams
  - (d) No, Savella is not approved for use in pediatrics
  - (e) 200 milligrams daily

Standard Time	Military Time
7:30 a.m.	0730h
5:43 P.M.	1743h
12 midnight.	2400h
8:20 P.M.	2020h
12:57 р.м.	1257h
10:30 р.м.	2230h
3:32 P.M.	1532h
4:15 a.m.	0415h
12:04 A.M.	0004h
9:12 a.m.	0912h

- 10. (a) Administer Norvasc (amlodipine) ten milligrams by mouth daily. Do not administer if the systolic blood pressure is less than 100.
  - (b) Administer morphine sulfate five milligrams subcutaneously every four hours as needed for moderate to severe pain.
  - (c) Administer Methergine (methylergonovine maleate) two-tenths milligram intramuscularly immediately, then administer two-tenths milligram by mouth every six hours for six doses.
  - (d) Administer Ceftin (cefuroxime axetil) one and five-tenths grams by intravenous piggyback thirty minutes before surgery, then administer seven hundred fifty milligrams by intravenous piggyback every eight hours for twenty-four hours.
  - (e) Administer heparin five thousand units subcutaneously every twelve hours.
- 11. (a) Route

- 12. (a) 60 mg
- (b) Frequency

- (b) 60 mg
- (c) Dose and frequency
- (c) 60 mg

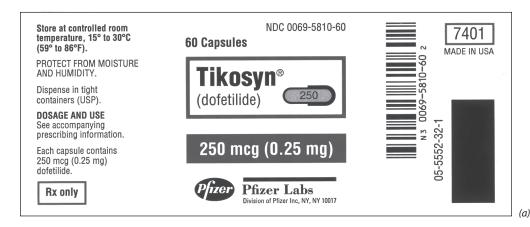
(d) Frequency

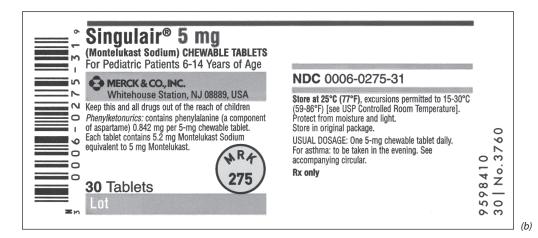
- (d) 20 mg
- (e) Dose and frequency

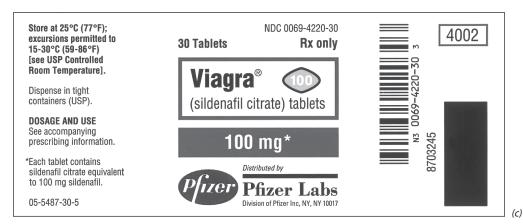
### **Chapter 2 Examination Questions**

Study the drug labels shown in • Figure 2.1 and supply the following information:









#### • Figure 2.1

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#### Drug Labels for Questions 1-5.

- 1. What is the generic name of Viagra?
- 2. How many capsules are in the Tikosyn container?
- 3. What is the strength of the Singulair tablets?

- 4. What is the route of administration for dofetilide?
- 5. What is the dosage strength for the drug whose NDC number is 0069 5810 60?

Study the portion of a MAR in • Figure 2.2 and answer questions 6–10 below.

Order	time	18	19	20	21
nifedipine 20 mg po b.i.d.	0900h	AD	AD	AD	AD
	1700h	ВК	ВК	ВК	ВК
digoxin 0.25 mg po daily	0900h	Х	AD	AD	AD
sucralfate 1 g po q.i.d.	0900h	AD	AD	AD	AD
	1300h	ВК	ВК	ВК	ВК
	1700h	ВК	ВК	ВК	ВК
	2100h	WW	WW	WW	WW

- Figure 2.2
- 6. How many drugs were administered at 1 P.M. on the 18th?
- 7. On what date and time was the digoxin first administered?
- 8. What are the initials of the nurse who administered the nifedipine at 5:00 P.M. on the 20th?
- 9. What was the route of administration of the sucralfate?
- 10. How many doses of nifedipine were administered on the 19th?

# **DECLOMYCIN®**

# DEMECLOCYCLINE HYDROCHLORIDE FOR ORAL USE

Adults: Usual daily dose, four divided doses of 150 mg each or two divided doses of 300 mg each.

For children above eight years of age: Usual daily dose, 3–6 mg per pound body weight per day, depending on the severity of the disease, divided into two to four doses.

Gonorrhea patients sensitive to penicillin may be treated with demeclocycline administered as an initial oral dose of 600 mg followed by 300 mg every 12 hours for four days to a total of 3 grams.

#### **HOW SUPPLIED**

DECLOMYCIN® demeclocycline hydrochloride capsules. 150 mg are two-tone, coral colored, soft gelatin capsules, printed with LL followed by 09 on the light side in blue ink, are supplied as follows:

NOC 0005-9208-23 - Bottle of 100

• Figure 2.3

Portion of a package insert for questions 11–12.





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Answers to Chapter 2 Examination Questions 9

11.	What is the generic name of the drug?				
12.	What is the form of the drug?				
13.	Interpret the following order: Precose (acarbose) 75 mg po b.i.d.				
14.	What is missing from the following order: Paxil (paroxetine) 50 mg daily				
15.	Order: Zyvox (linezolid) 600 mg po q12h. How many mg will you administer:				
	the partial orders in questions 16–2 ald administer.	0, indicate how many milliliters you			
16.	60 mL daily				
17.	60 mL b.i.d.				
18.	60 mL t.i.d.				
19.	60 mL daily in two divided doses				
20.	60 mL q12h				
An	swers to Chapter 2 Examinat	ion Questions			
1.	sildenafil citrate	2. 60 capsules			
3.	5 mg per tablet	4. By mouth			
5.	250 mcg per capsule or 0.25 mg per capsule				

12. Capsule

8. BK

10. 2

6. 1 (sucralfate)

13. Administer Precose (acarbose) 75 mg by mouth two times a day

14. Route of administration

15. 600 mg

7. 19th at 9:00 A.м.

11. Demeclocycline HCl

9. By mouth

16. 60 mL

17. 60 mL

18. 60 mL

19. 30 mL

20. 60 mL